

4.3.3 XRP-II (Baseline Manager)

XRP-II is a commercially available manufacturing management system specially configured to serve as the ECS Baseline Manager.¹ It helps the M&O staff at the DAACs, EOC, and SMC maintains records that describe what comprises baselined operational system configurations. These records identify baselined versions of hardware and software items as well as their assembly structures and interdependencies. XRP-II keeps chronological histories of baseline changes and traceability of items to predecessor versions and system releases.

XRP-II does this primarily by maintaining a catalog of version-controlled items, called control items, along with data about how they relate. Control items encompass physical resources such as software packages and hardware devices assembled to form an operational system, as well as logical artifacts such as baselines, configuration items, processing strings, and logical disk partitions. They are designated to relate system entities directly to discrete responsibilities and actions associated with configuration management of the system. XRP-II's catalog of control items is called Control Item Master.

The most significant relationship maintained among control items is product structure. Product structure is the XRP-II term for the parent-component pairings that define the ingredients – or bill of material -- for an assembly. Product structures have corresponding active and inactive dates that establish the timeframe during which the pairing is in effect, and they can reference engineering change notices. XRP-II's engineering change notices enable product structure changes to be grouped, reported, checked, and approved before they go into effect. They also facilitate tracking control item changes by a related configuration change request and/or trouble ticket. Sections 1.6.2 and 4.1 of the XRP-II Product Information Manual discuss product structures in more detail.

XRP-II is installed as a separate system at each ECS site, where it manages baseline data about resources deployed to and established at that site. At the SMC, it also offers a consolidated view of baseline data system-wide. XRP-II generates a variety of reports that can be viewed, printed, or saved in a file. These reports draw on data stored at the site where the report is run. The DAACs, EOC, and SMC can export and electronically exchange baseline records among the sites via formatted files. Additionally, each site can generate sets of resource configuration records that can be used to seed Planning Subsystem databases for resource planners. XRP-II uses the UNIFY RDBMS bundled in the product, "ACCELL Integrated Development System."

Table 4.3.3-1 summarizes the operator functions that XRP-II supports. The sections that follow present how to use XRP-II features that were customized for ECS baseline management. Refer to the following manuals for a full understanding of XRP-II itself:

¹ Baseline Manager employs and extends a subset of XRP-II's standard, product information capabilities described in Section 1 of the XRP-II Product Information Manual. Added features include use of configuration management-related terminology and item classifications in describing parts and assemblies of parts; maintenance of item dependency and implementation status data; and synchronizing of databases across ECS sites to form a consolidated, system baseline view. Baseline Manager omits XRP-II's cost accounting, stock location, and part planning features; they are not required for baseline management.

- *XRP-II System Reference Manual* - presents an overview of XRP-II and describes system-related functions associated with using it.
- *XRP-II Product Information Manual* - presents a full description of XRP-II's product information module in context of XRP-II's integrated set of manufacturing-oriented applications.
- *XRP-II Datalook/Datarite Reference Manual* - presents a technical reference for the on screen database editor (DATALOOK) and report generator (DATARITE) incorporated in XRP-II for creating custom screens and reports.
- *XRP-II Tools, Techniques, and Conventions Manual* - presents a description of methods and utilities an XRP-II support engineer would use to perform low-level maintenance on XRP-II's database, screens, and reports.
- *UNIFY Developer's Reference* - presents a guide with examples for using UNIFY's tools for developing database applications and interacting directly with the database. It also describes many UNIFY messages.
- *UNIFY Direct HLI Programmer's Manual* - presents a technical reference for programmers of UNIFY RDBMS applications. It contains a summary of UNIFY's error log file and common error messages.
- *UNIFY Developer's Tutorial* - a practical tutorial and functional reference for using UNIFY.
- *ACCELL Publication Package* – describes how to install ACCELL.
- *ACCELL Release Notes* – describes software changes that occurred after the ACCELL and UNIFY manuals were printed.

Refer to ESDIS and ECS configuration management plans and procedures for definitions of such terms as baseline, configuration item, control item, and configured article used in this document.

**Table 4.3.3-1. Common ECS Operator Functions Performed with XRP-II
(1 of 3)**

Operating Function	Character-based User Interface	Description	When and Why to Use
Catalog control items (section 4.3.3.2.1)	Control Item Master menu; Implementation Status Maintenance screen	Operators select and use a data entry screen to update records identifying individual control items and to identify the sites at which each is (to be) deployed.	Used whenever a new control item is to be added or deleted, or when the characterization of an existing one needs changing.

**Table 4.3.3-1. Common ECS Operator Functions Performed with XRP-II
(2 of 3)**

Operating Function	Character-based User Interface	Description	When and Why to Use
Define/Update what comprises baselines and other control item assemblies (section 4.3.3.2.2)	Bill Of Material menu	Operators select and use data entry screens to record engineering change notices and maintain product structure records for control.	Used whenever the component structure of a control item has to be defined or changed.
Query Control Item Records (section 4.3.3.2.8)	Query menu	Operators browse and print a variety of baseline data records.	Used to retrieve information about control items, product structures, and change histories, primarily by operators not authorized to change it.
Generate Pre-defined Reports (section 4.3.3.2.9)	Report menu	Operators run pre-defined reports using record selection criteria they specify.	Used whenever a hard or soft copy of a report is desired.
Perform baseline management master files maintenance (section 4.3.3.2.10)	Utilities menu	Operators maintain data that supports local Baseline Manager operation.	Used primarily when changes are needed to reference files for baseline management and to force recalculation of certain underlying codes and dates.
Update dependencies among control items (section 4.3.3.2.7)	Control Item Interdependency Maint screen	Operators maintain records that define operator-specifiable relationships between any two controlled items.	Used primarily to identify resources that are version-dependent and to correlate documents with the resources they describe.
Maintain control item implementation status data (section 4.3.3.2.10.3)	Implementation Status screen	Operators maintain records describing the implementation status and installation dates of control items at a site.	Used whenever the installation date or implementation status of a control item is established or changed. (Note: Records in the bill of materials for site "production" baselines are used by Resource Planning to maintain its resource inventory).

**Table 4.3.3-1. Common ECS Operator Functions Performed with XRP-II
(3 of 3)**

Operating Function	Character-based User Interface	Description	When and Why to Use
Perform XRP-II master files maintenance (section 4.3.3.2.11)	System Utilities menu	Operators maintain data and generate files that sustain XRP-II operations system-wide.	Used whenever changes are needed to parameters that affect multiple XRP-II functional areas; also used when exporting or importing baseline data being exchanged with other sites.
Distribute baseline change records for a release (section 4.3.3.2.11.8)	Export Release Records screen	Operators select one or more control items and initiate creation of formatted files which they can ftp to one or more sites. The files contain all appropriate, related records.	Used whenever a baseline change is to be released from one site for distribution to others.
Incorporate release records at a site (section 4.3.3.2.11.7)	Import Data screen	Operators at the sites import data from tar files ftp'ed from the SMC (or other site).	Used any time an XRP-II formatted file containing database updates is available at a site.
Provide site baseline change records to the SMC (section 4.3.3.2.11.9)	Export Site-Unique Changes screen	Operators at the sites create files containing site-unique records changed since the last data export, and can ftp the files to the SMC (and other sites if desired).	Used as required so the SMC can maintain a current, consolidated database of what comprises operational site baselines system-wide.
Incorporate site baseline change records at the SMC (section 4.3.3.2.11.7)	Import Data screen	Operators at the sites import data from tar files transferred via File Transfer Protocol from a site.	Used any time an XRP-II formatted file containing database updates is available at the SMC.
Perform XRP-II system and database administration (section 4.3.3.2.12)	System Tools menu	Operators regulate user access, administer the database and, if necessary, customize XRP-II.	Used whenever changes are needed to screens, menus, printers, and user permissions or when data must be dumped or loaded in bulk.

4.3.3.1 Quick Start Using XRP-II (Baseline Manager)

XRP-II has a character-based user interface that employs screens for data entry and report generation, and menus for navigating to the screens. Data is entered via the keyboard in fields that are traversed from left to right row-by-row. On data entry screens, labels for fields whose values can be modified while viewing the screen are displayed in upper case; labels for the remaining fields are displayed in initial caps. The database is updated every time a field's value changes, and a record of that change is written to a transaction log. The System Reference Manual describes how to use XRP-II's menus and screens.

Most data entry screens have a form and a table view. Form views offer full screen layouts of a data record's fields, whereas table views offer rows of records in a window that is panned to see columns of fields. Some screens' table views, however, contain fewer fields than their corresponding form views, most often due to system limitations on a table view's panes.

Data entry screens can perform numerous functions. Commands available to an operator are screen-dependent and are listed near the bottom of each screen (hence their name: bottom-line commands). The **More** command helps the operator cycle through them. Most bottom-line functions are described in the System Reference Manual and Product Information Manual. Any that were added for Baseline Manager are described in the sections below along with the screens to which they pertain.

It is important to note that the UNIFY relational database management system XRP-II uses does not support rules requiring entries in specific fields. Baseline Manager attempts some enforcement via the data entry screens, either by establishing default values where feasible when new records are created, or by blocking an operator from cursoring past a null field when in Add or Insert modes. However, database updates can occur in ways that bypass these mechanisms, so operators must ensure required data gets entered. The sections below identify the few fields, which require entries.

4.3.3.1.1 Invoking XRP-II (Baseline Manager) from the Command Line

To run Baseline Manager from the command line prompt, type either:

a) `<principal_dir_name>/scripts/pcs [<terminal_id> [<terminal_type>]]`

where *principal_dir_name* is the directory at which XRP-II is accessed (nominally, /usr/ecs/OPS/COTS/xrp)

or,

b) `pcs [<terminal_id> [<terminal_type>]]`

if XRP's scripts directory has been added to your path.

The "terminal_id" argument identifies the IP address or host name at which XRP-II menus and screens are to be displayed. The address, which is only needed only in an X-windows environment, must not include a ":0.0" suffix. XRP-II prompts the operator for an address if the argument is not provided. The "terminal_type" argument specifies terminal configurations (e.g.,

ansi, xterm, ddtterm, and vt100). If the argument is not present, XRP-II checks the TERM environment variable to determine the terminal type and whether or not the product supports it.

The “pcs” script determines the operator’s terminal type, prompts for a terminal id, and reads a configuration file to establish a Baseline Manager operating environment. The script then starts XRP-II, passing it the operator’s userid, which it obtains from the system.

Upon invoking XRP-II, ECS operators see a menu screen, which one depending on the “entry menu” and “screen group” the operator was assigned. These assignments, made by someone with XRP administrator privileges, are discussed in Sections 4.3.3.2.12.2 - 4.3.3.2.12.4.

XRP-II menus are similar in appearance and function the same way. Only the titles and selections vary. Selections can vary for different operators using the same menu. This too would be due to the screen groups they are assigned.

Figure 4.3.3-1 depicts the hierarchy of menus and screens for Baseline Manager. By convention, XRP-II uses the term “screen” when referring to a window containing a data entry form or table. Other windows, like the one depicted in Figure 4.3.3-2, are called “menus” and are navigation paths to the screens. A Character-based User Interface (CHUI) is a screen where a user enters data to create/update records for the storage to or retrieval of information from the XRP-II baseline database.

Read the *XRP-II System Reference Manual* to familiarize you with using the menus and screens before proceeding to the material in Section 4.3.3.2.

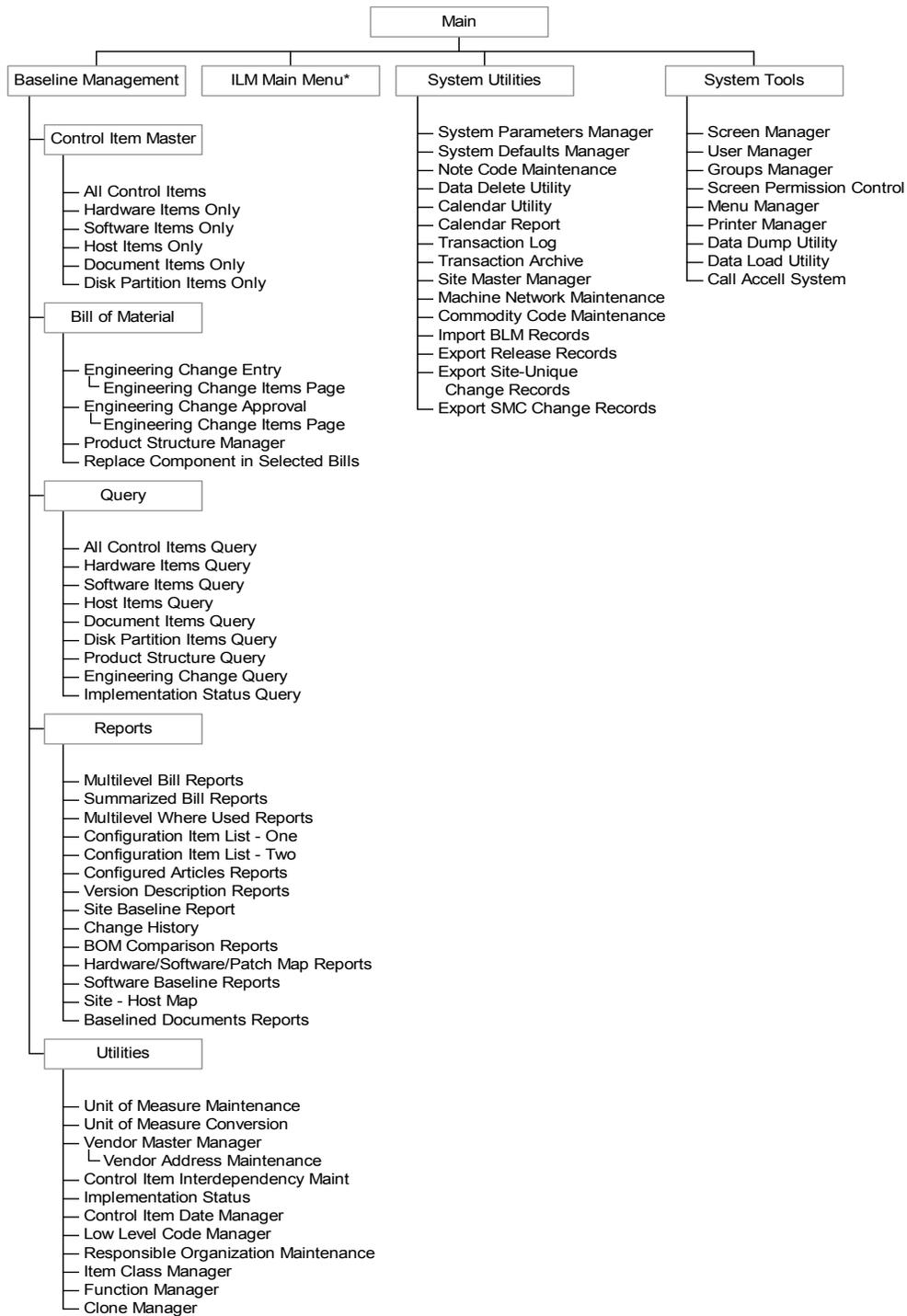


Figure 4.3.3-1. ECS Baseline Management System Menu Structure

* ILM Main Menu is discussed in Section 4.3.4.2.

4.3.3.2 XRP-II Main Screen

XRP-II's top-level menu for ECS is the ECS Management System Main Menu (Figure 4.3.3-2), or just Main Menu for short. It lets operators navigate to the following submenus:

- Baseline Management menu - provides access to XRP-II functions for maintaining control item and bill of material information;
- ILM Main menu - provides access to XRP-II functions for maintaining inventory, logistics, and maintenance information;
- System Utilities menu - provides access to XRP-II functions for maintaining system information that spans functional domains;
- System Tools menu - provides access to aids for registering XRP-II users, assigning permissions, customizing data entry screens and menus, and performing general-purpose database dumps and loads.

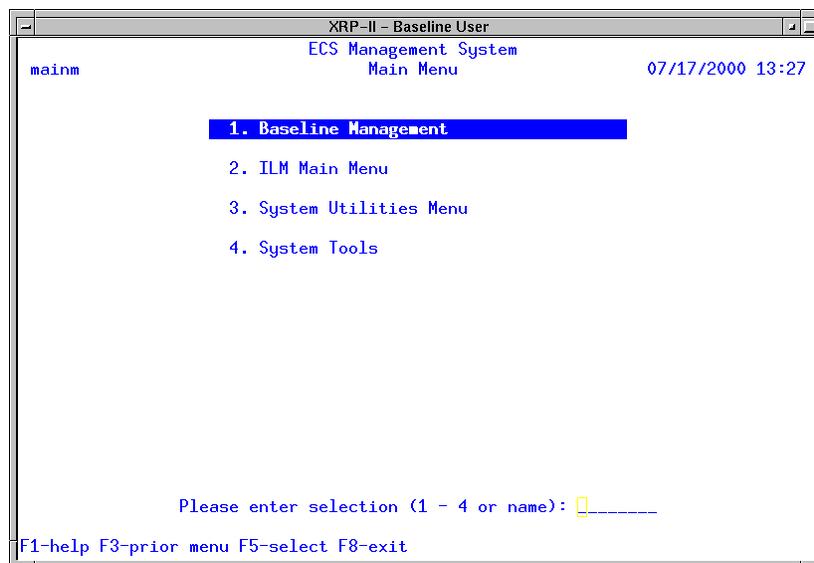


Figure 4.3.3-2. ECS Management System Main Menu

These submenus, in turn, reference others that lead to the data entry screens. For example, the Baseline Management submenu (Figure 4.3.3-3) is a waypoint to all the menus and screens that an operator needs for updating baseline data. Its Control Item Master submenu is used for adding, deleting, and modifying information in XRP-II's catalog of control items, while Bill of Material is for defining which components comprise an assembly or baseline. The Query and Reports submenus are used for retrieving baseline information from the database. Screens for performing other, corollary functions are grouped under the Utilities submenu. Operators select an option by using the cursor keys or entering an option number to designate a choice, then hitting either the <ENTER> or <F5> keys to process the selection.

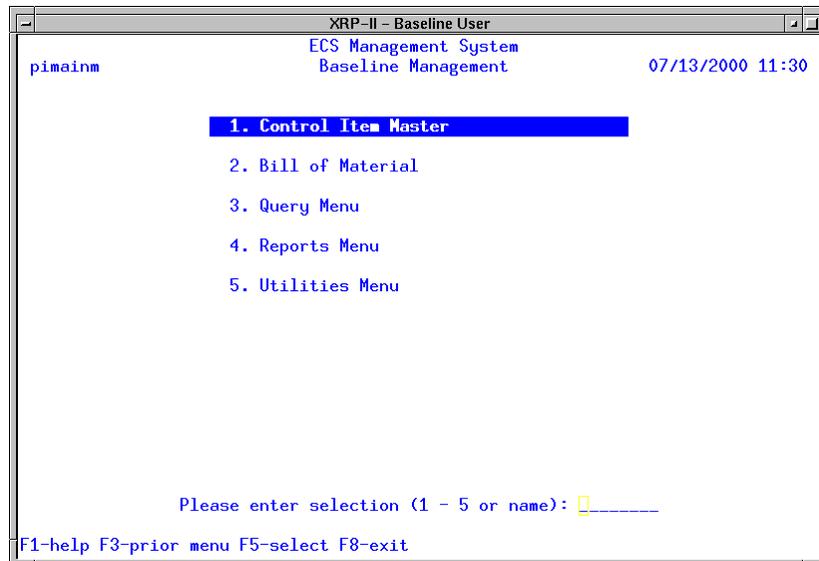


Figure 4.3.3-3. Baseline Management Menu

4.3.3.2.1 Control Item Master Menu (Catalog the Control Items)

Data about one or more control items can be added, modified, or deleted by selecting an appropriate data entry screen from the Control Item Master menu (Figure 4.3.3-4). These screens modify the control item master file, Baseline Manager's control item "catalog". This is the XRP-II file that describes individual control items. Each screen accesses a particular set of records and contains a unique set of fields corresponding to a control item's class. However, all screens function the same, and all but one has identical bottom-line commands.

Control item master screens are Baseline Manager equivalents of the Part Master Maintenance screen described in Section 3.4 of the Product Information Manual. Their fields are tailored for baseline management, and the following bottom-line commands are added:

- **Bom** - navigates the operator to a Product Structure Component Query screen for the current item. There, an operator can examine the historical bill of material (BOM) record of first-level components for the item, then exit back to the previous screen.
- **Where** - navigates the operator to a Product Structure Parent Query screen for the current control item. There, an operator can determine where the item (or any other item) is used in any bill of material, then exit back to the All Control Items screen.
- **Ec** - navigates the operator to an Engineering Change Query screen for the current item, where an operator can view each historical engineering change recorded for the item.

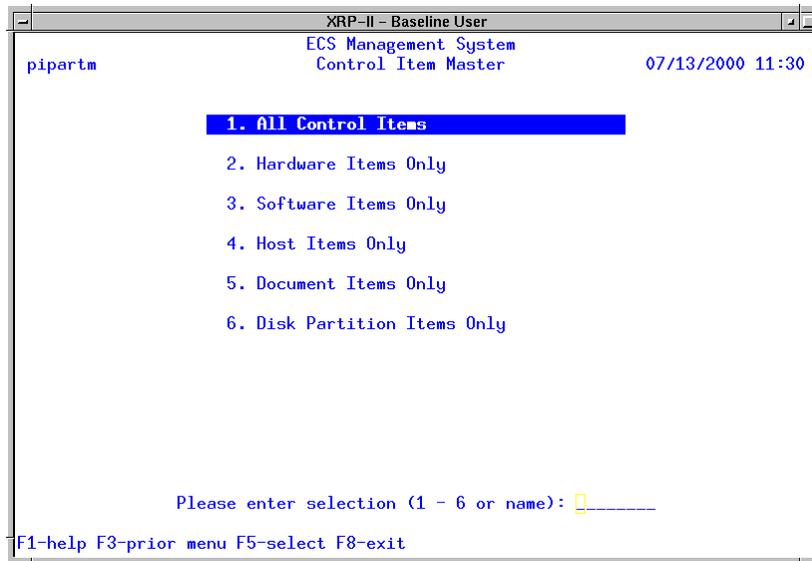


Figure 4.3.3-4. Control Item Master Menu

Using control item master screens, operators can add or modify control item data at any time, without affecting any bills of materials. However, these screens cannot delete an item if the item is referenced by another database record; the Data Delete utility must be used instead (see section 6.12 of the System Reference Manual).

Note: XRP-II can take a minute or more to select and arrange Baseline Manager records the first time a session accesses a control item master screen.

Most fields in a control item's master record are for information only. However, the following play a role in XRP-II processing.

- Control item identifier - Every item in the catalog has its own record and must have a unique identifier. By convention, core and site-specific control items – those centrally developed and/or maintained on behalf of one or more sites -- are assigned designators of the form “bnnnnnnnnn”; site-unique control items (those established by a site or on behalf of a site) are given a 3-character site prefix. XRP-II relies on this differentiation when synchronizing site baseline changes with the database at the SMC (see Sections 4.3.3.2.5, 4.3.3.2.6, and 4.3.3.5). The “b” in control item identifiers is a convention that stands for “baseline”. The convention helps operators visually distinguish between identifiers used for baseline and inventory items, which are otherwise similar and both stored in the same XRP-II database.
- Item class - as previously mentioned, the class to which a control item is assigned determines the set of characteristics or details that can be recorded about the item and the screens to be used to update and view the data (see Section 4.3.3.2.10.6).
- Planning resource - items marked as planning resources are reported when Baseline Manager receives requests from resource planners for resource configuration data.

- Config article - items marked as configuration articles form the basis for several custom ECS reports, including the Configured Articles List and the Version Description Report.
- Implementation status - implementation status data recorded for a control item influences:
 - The contents of several ECS custom reports, which use deployment site data for selecting and ordering data;
 - the data that is reported to resource planners about resources that comprise operational baselines whose implementation status is “production”.

The next few sections describe specific XRP-II screens and fields an operator would use when updating the control item catalog.

4.3.3.2.1.1 All Control Items Screen

The All Control Items screen (Figure 4.3.3-5) adds, modifies, and deletes general identification information about individual control items. It accesses every control item record, but does not contain fields describing an item’s detailed characteristics. Details are handled by class-specific data entry screens described in Sections 4.3.3.2.1.1- 4.3.3.2.1.6.

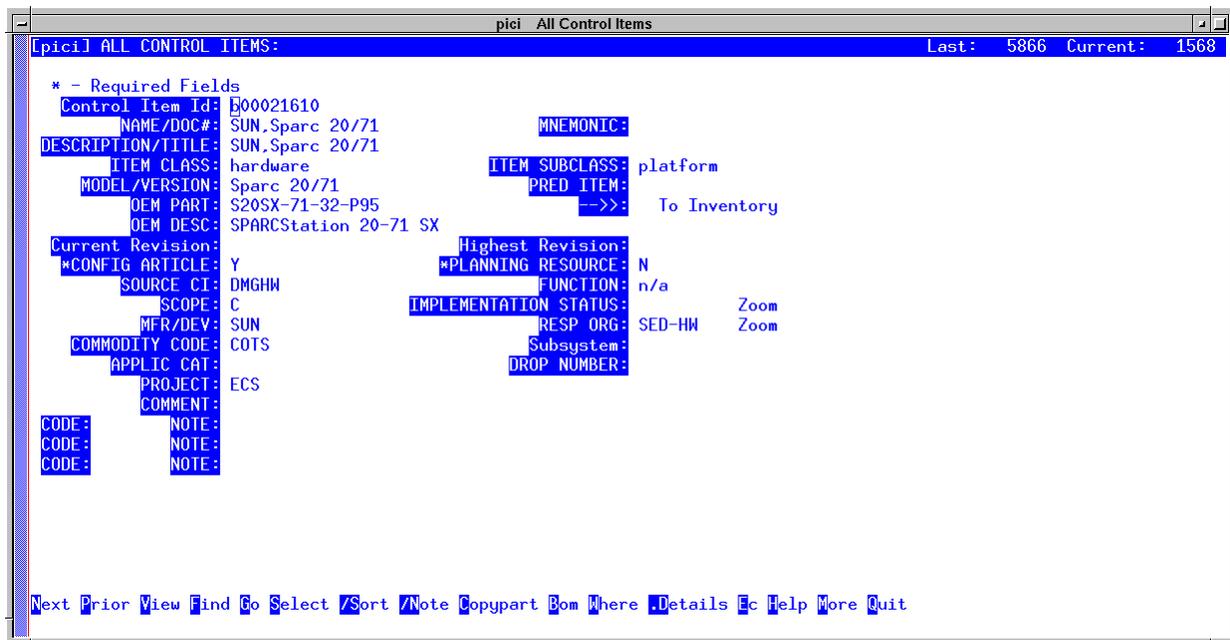


Figure 4.3.3-5. All Control Items CHUI

Fields on this screen serve as a template for all control item master screens, and are described in Table 4.3.3-2. The following bottom-line command, however, is unique to this screen:

- **.Details** - navigates the operator to a control item update screen where details can be recorded about the current control item record. Detail screens are available only for hardware, software, document, host, and disk partition classes of control items.

Use bottom-line commands such as **Select**, **Find**, **Next**, and **Prior** to locate a record, and use **/Add**, **/Insert**, **/Modify**, and **/Delete** to switch to an update mode. Then edit the catalog via the keyboard, or use the **/Zoom** command (on fields where it is active) to pick values from a list; XRP-II updates the database automatically when the cursor leaves a field, eliminating the need to “save” your work. To save time, use **Copypart** to create a new control item with data from some existing one, and use **/Copy** to replicate data fields over a range of control item records. When finished, type **<F3>** to exit database update mode. Then either proceed to other records or type **“Q”** (quit) or **<F3>** to exit the screen.

Note: The Config Article field must be set to “Y” if the control item is to appear in a Configured Article List or a Version Description Report.

Note: The Planning Resource field must be set to “Y” if the control item is to be included in formatted files of production baseline data generated for resource planners.

Note: The Item Class field must be set to either “host”, “string”, “hardware”, “software”, or “partition” if a control item marked as a planning resource is to be included in formatted files of production baseline data generated for resource planners.

Table 4.3.3-2. All Control Items Field Description (1 of 3)

Field Name	Data Type	Size	Entry	Description
Control item ID	String	20	Required	Unique code for a version- or configuration-controlled item.
Name/doc #	String	24	Optional	Name by which a specific control item is known.
Mnemonic	String	8	Optional	Code (or short name) by which item is referenced (e.g., MLCI).
Description/title	String	54	Optional	Textual characterization of an entity.
Item class	String	16	Optional; zoom to select from a list of valid classes.	Link to the group name for control items having common attribute types (e.g., software, hardware, design, document, host, network, site, baseline, partition, project, other).
Item subclass	String	16	Optional	Group name that distinguishes among types of control items within a class.
Model/version	String	24	Optional	Textual identifier for a level of functional capability for a control item.
Pred item	String	20	Optional	Identifier of the previous version of a control item.
OEM part	String	34	Optional; zoom to select from a list of numbers maintained in inventory.	Manufacturer’s part number for an item.

Table 4.3.3-2. All Control Items Field Description (2 of 3)

Field Name	Data Type	Size	Entry	Description
>>	N/A		Optional; zoom to a list of EIN records for the part named in field "OEM part."	Link to a set of XRP-II records related to the current record.
OEM description	String	40	Optional; defaults to inventory description for item named in "OEM part."	Manufacturer's description of an item.
Current revision	String	3	System supplied	Identifier for the currently active revision level of the item's product structure.
Highest revision	String	3	System supplied	Identifier for a control item's latest product structure revision.
Config article	String	1	Required; Y, N	Code for distinguishing between control items that are configured articles and those that are not.
Planning resource	String	1	Required; Y, N	Code for distinguishing between control items that are reportable for PDPS resource planning and those that are not.
Source CI	String	8	Optional	Mnemonic of the HWCI or CSCI that owns the control item.
Function	String	30	Optional; zoom to select from a list of standard functions.	Name for the primary job of the control item.
Scope	String	1	Optional; c, s, u	Code indicating whether an item is core, site-specific or site-unique.
Implementation status	N/A		Optional; zoom to add or update implementation status records.	Link to the control item implementation status table containing the list of sites to which a control item is deployed together with the installation date and implementation status of the control item at each site.
Mfr/dev	String	3	Optional; zoom to select from a list of manufacturer and developer codes.	Coded name of the company/organization that produced a hardware control item.

Table 4.3.3-2. All Control Items Field Description (3 of 3)

Field Name	Data Type	Size	Entry	Description
Resp org	String	6	Optional; zoom to select from a list of organizations.	Code of the organization responsible for the item.
Commodity code	String	8	Optional; zoom to select from a list of standard codes.	Classification for how the item was produced or obtained (e.g., COTS, custom, mod-COTS, GFE, shareware, freeware, other).
Subsystem	String	24	System-supplied	Name of the subsystem that owns the item; namely, the parent of the item's source CI.
Project	String	10	Optional; defaults to "ECS"	Name of the principal project under which the item was procured or developed.
Applic cat	String	2	Optional	Code categorizing where or when the item is used (e.g., all hosts, hardware-dependent, etc.).
Drop number	String	16	Optional	Identifier for the incremental baseline/release in which the item was delivered from development.
Comment	String	60	Optional	Miscellaneous information specific to the control item.
Code	String	2	Optional	Identifier for a type or category of message that can be associated with a control item.
Note	String	30	Optional	A message, used in conjunction with a code, which can be associated with a control item.

4.3.3.2.1.2 Hardware Items Only Screen

The Hardware Items Only screen (Figure 4.3.3-6) adds, modifies, and deletes information that identifies and characterizes hardware control items. These would typically be processor units, tape drives, disk systems, CD-ROM drives, and other similar system and network equipment. Only those catalog records whose Item Class field contains the value "hardware" are accessed.

Fields on this screen that identify a control item correspond to the fields on the All Control Items screen discussed in Section 4.3.3.2.1.1. Additional fields store detailed characteristics applicable only to hardware items.

Use this screen the same way as described earlier for the All Control Items screen.

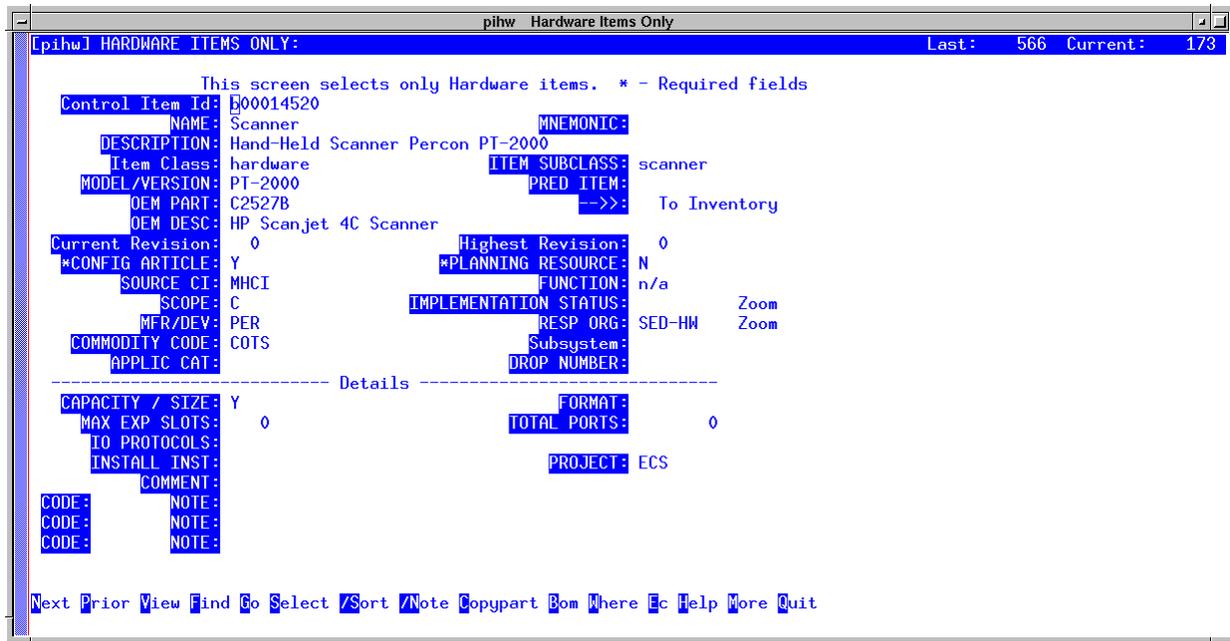


Figure 4.3.3-6. Hardware Items Only CHUI

Table 4.3.3-3 describes the fields on the Hardware Items Only screen.

Table 4.3.3-3. Hardware Items Only Field Description

Field Name	Data Type	Size	Entry	Description
Mfr	String	6	Optional; zoom to list of manufacturers and developers.	Coded name of the company/ organization that produced a hardware control item.
Capacity/size	String	10	Optional	Total capacity (e.g., storage) for a control item.
Format	String	10	Optional	Classification that distinguishes hardware control items according to some technical specification.
Max exp slots	Numeric	4	Optional	Number of expansion slots an item contains.
Total ports	Numeric	8	Optional	Number of ports (e.g., serial ports, network connections) a control item has.
Io protocols	String	60	Optional	List of protocols a hardware control item supports.
Install inst	Text	N/A	Optional	Text containing/specifying where to find instructions for installing the control item.

4.3.3.2.1.3 Software Items Only Screen

The screen depicted in Figure 4.3.3-7 adds, modifies, and deletes information that identifies and characterizes software control items. These would typically be application clients, application servers, databases, and patches whether custom or COTS. It accesses only those catalog records whose Item Class field contains the value “software.”

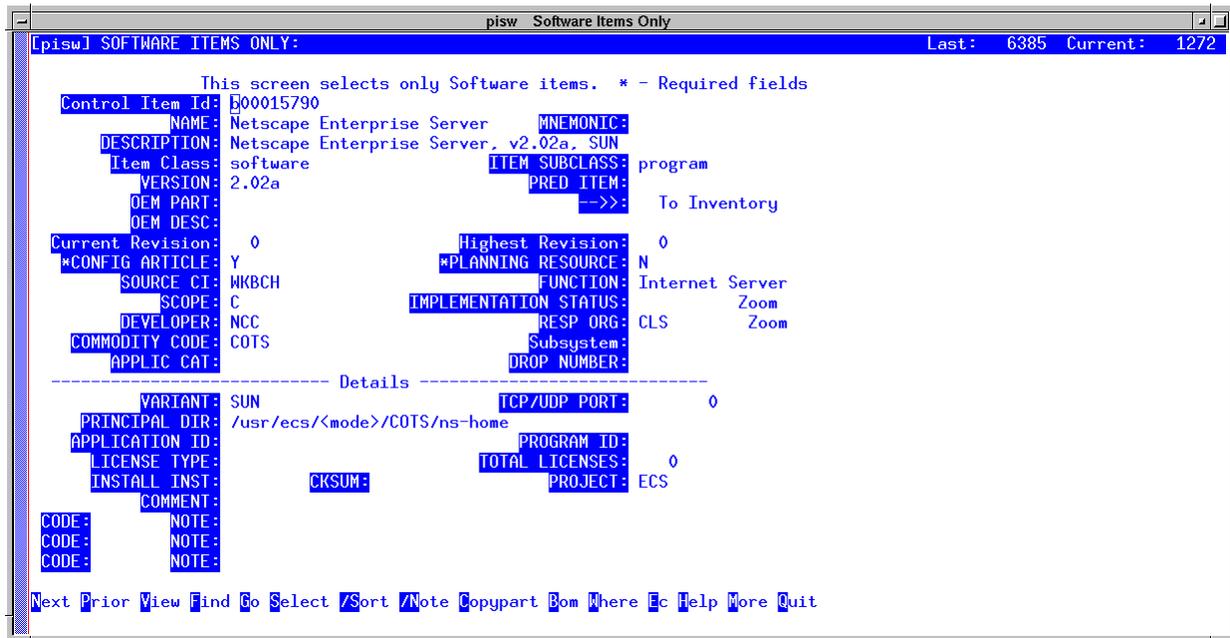


Figure 4.3.3-7. Software Items Only CHUI

Fields on this screen that identify a control item correspond to the fields on the All Control Items screen discussed in Section 4.3.3.2.1.1. Additional fields store detailed characteristics applicable only to software items and are described in Table 4.3.3-4.

Use this screen the same way as described earlier for the All Control Items screen.

Note: The installation instructions field is a text field. It is displayed in a text box window via the /Zoom command, which appears on the bottom-line command list whenever the cursor is at a text field. The “T” shown in Figure 4.3.3-7 indicates that data exists in the text box.

Table 4.3.3-4. Software Items Only Field Description

Field Name	Data Type	Size	Entry	Description
Variant	String	4	Optional	Name of the type of computer on which a software control item has been built to run.
Tcp/udp port	Numeric	8	Optional	Numeric identifier of port used for communicating with control item.
Principal dir	String	50	Optional	Pathname(s) at which the item is stored.
Application id	String	8	Optional	Designator used for monitoring and controlling a family of software programs during execution.
Program id	String	8	Optional	Designator used for monitoring and controlling a software program during execution.
License type	String	10	Optional	Software licenses are assigned by method (floating, user, machine, site...).
Total licenses	Numeric	4	Optional	Number of seats, computers, or persons authorized to use a COTS application concurrently.
Install inst	Text	N/A	Optional	Text containing, or specifying where to find, instructions for installing the control item.
Cksum	String	8	Optional	Value of the checksum for the file contents of the item.

4.3.3.2.1.4 Host Items Only Screen

The Host Items Only screen (Figure 4.3.3-8) adds, modifies, and deletes information that identifies and characterizes control items that are system hosts. These would be assemblies of processors, software and peripherals such as fully configured servers and workstations, but can include other network-addressable resources for which the data fields on this screen are suited, including routers and switches. The screen accesses only those catalog records whose Item Class field contains the value “host”.

Fields on this screen that identify a control item correspond to the fields on the All Control Items screen discussed in Section 4.3.3.2.1.1. Additional fields store detailed characteristics applicable only to host items.

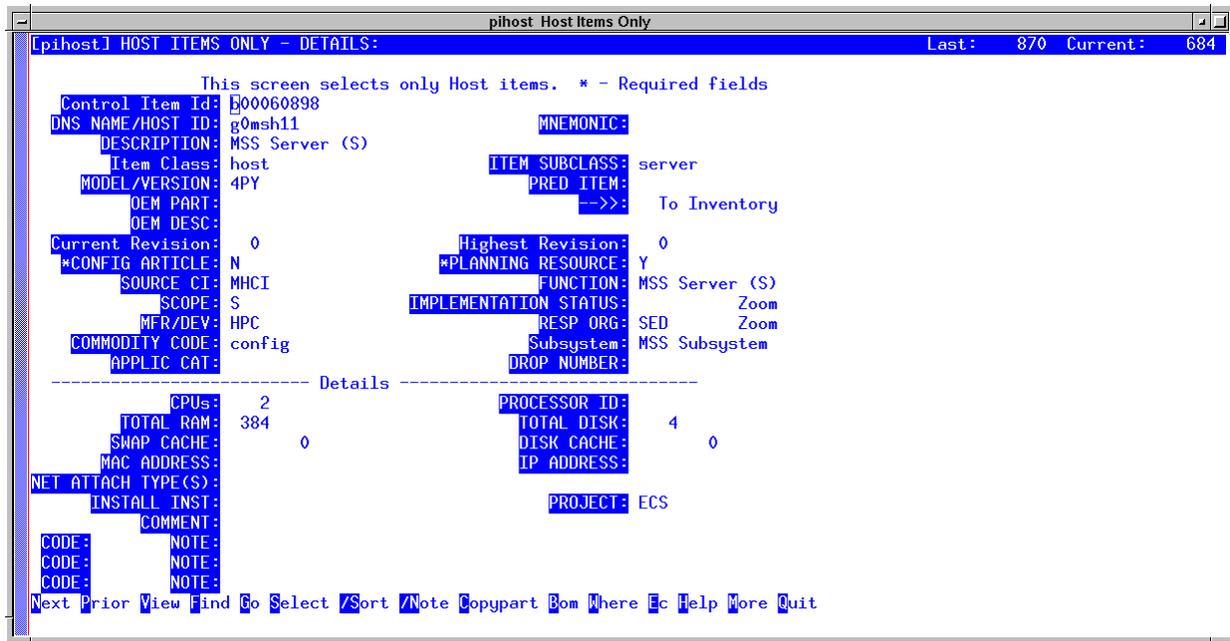


Figure 4.3.3-8. Host Control Items Only CHUI

Use this screen the same way as described earlier for the All Control Items screen. Table 4.3.3-5 describes the fields on the Host Items Only screen.

Table 4.3.3-5. Host Items Only Field Description (1 of 2)

Field Name	Data Type	Size	Entry	Description
DNS name/host id	String	24	Optional	Local name by which a host is accessed; its Domain Name System name.
# Cpu's	Numeric	4	Optional	Number of CPUs in a host.
Processor id	String	20	Optional	Vendor-provided name for a family of processors.
Total ram	Numeric	4	Optional	Amount of main memory (in MB) a host contains.
Total disk	Numeric	4	Optional	Amount of usable disk space (in GB) for a host.
Swap cache	Numeric	8	Optional	Total swap space (in blocks) allocated on a host.
Disk cache	Numeric	8	Optional	Total disk cache (in blocks) for a host.
MAC address	String	17	Optional	Machine's Media Access Control number.
IP address	String	15	Optional	Network address for a host.

Table 4.3.3-5. Host Items Only Field Description (2 of 2)

Field Name	Data Type	Size	Entry	Description
IO ports	String	60	Optional	List of ports and associated services on a host.
Install inst	Text	N/A	Optional	Text containing, or specifying where to find, instructions for installing the control item.

4.3.3.2.1.5 Document Items Only Screen

The Document Items Only screen (Figure 4.3.3-9) adds, modifies, and deletes information that identifies and characterizes baselined documents, such as specifications, manuals, and version-controlled forms. The screen accesses only catalog records whose Item Class field contains the value “document”.

Fields on this screen that identify a control item correspond to the fields on the All Control Items screen discussed in Section 4.3.3.2.1.1. Additional fields store detailed characteristics applicable only to document items.

Use this screen the same way as described earlier for the All Control Items screen.

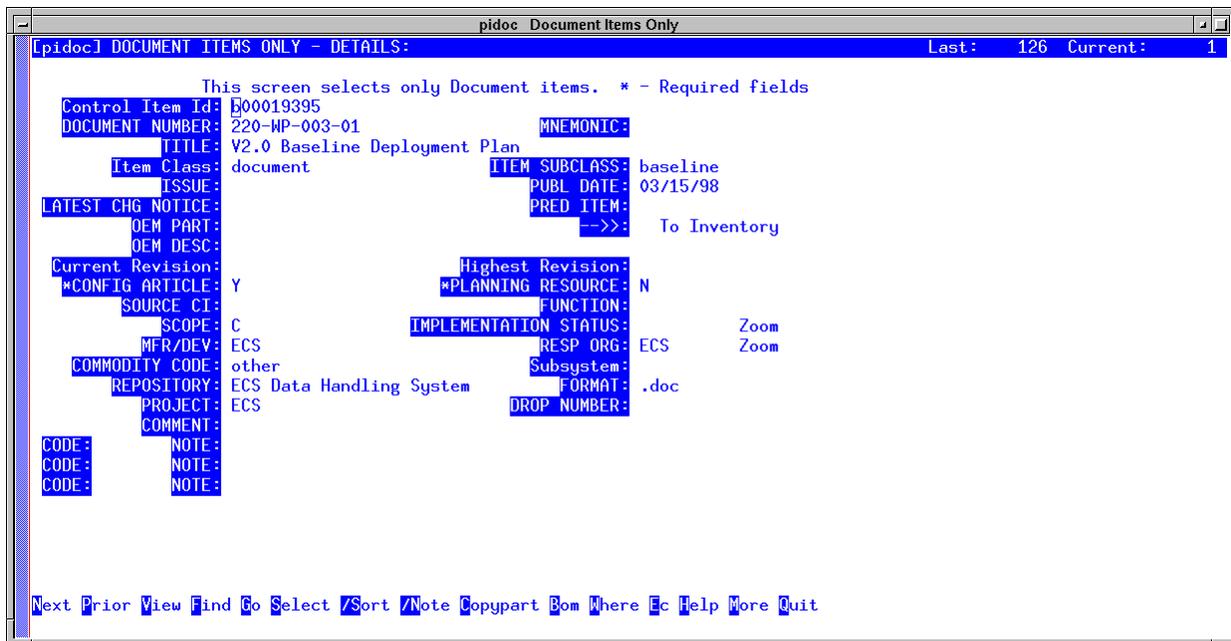


Figure 4.3.3-9. Document Items Only CHUI

Table 4.3.3-6 describes the fields on the Document Items Only screen.

Table 4.3.3-6. Document Items Only Field Descriptions

Field Name	Data Type	Size	Entry	Description
Title	String	54	Optional	Nomenclature used to identify document volumes.
Document number	String	24	Optional	Code by which a document is known.
Issue	String	8	Optional	Nomenclature used to distinguish among versions of a single edition of a document (e.g., draft, final, ...).
Publ date	Date	N/A	Optional	Date associated with a document.
Latest chg notice	String	6	Optional	The most recent change notice or the list of change notices issued for a document.
Refs	N/A	N/A	Optional; zoom to a list of related control items.	List of other, associated control items.
Repository	String	32	Optional	Name for the location where the document is officially kept.
Format	String	10	Optional	Nomenclature for the protocol used to encode the document.

4.3.3.2.1.6 Disk Partition Items Only Screen

The Disk Partition Items Only screen (Figure 4.3.3-10) adds, modifies, and deletes information that identifies and characterizes boot and data disk partitions associated with a host computer. It accesses only those catalog records whose Item Class field contains the value “partition”.

Fields on this screen that identify a control item correspond to the fields on the All Control Items screen discussed in Section 4.3.3.2.1.1. Additional fields store detailed characteristics applicable only to disk partition items.

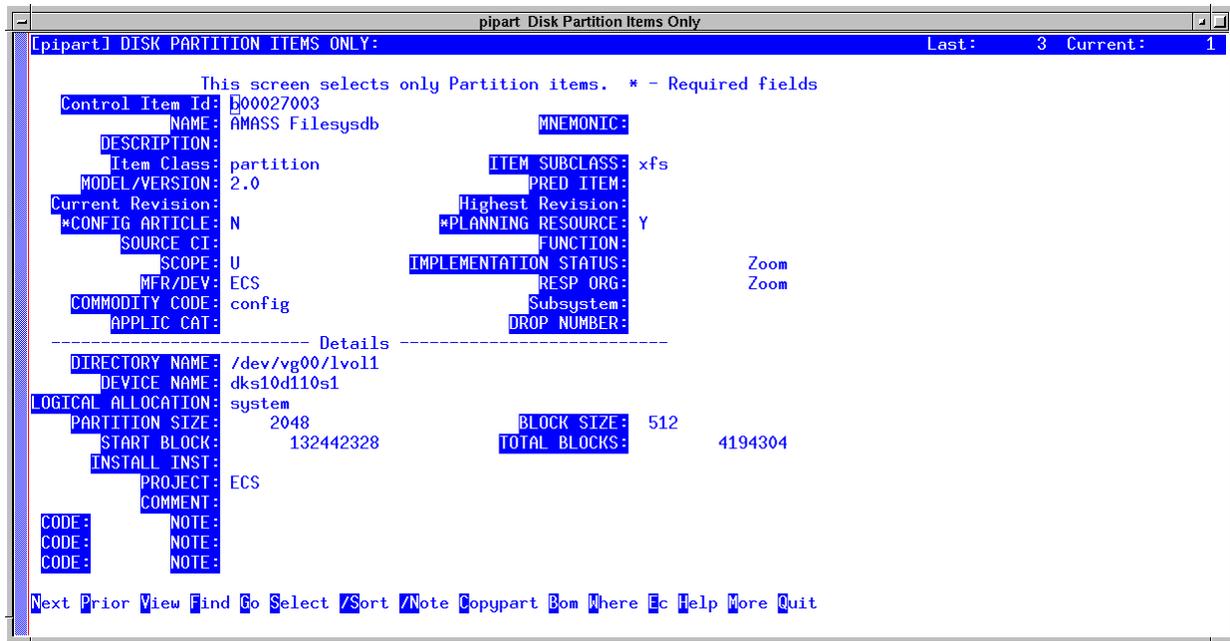


Figure 4.3.3-10. Partition Items Only CHUI

Use this screen the same way as described earlier for the All Control Items screen. Table 4.3.3-7 describes the fields on the Partition Items Only screen.

Table 4.3.3-7. Partition Items Only Field Descriptions

Field Name	Data Type	Size	Entry	Description
Directory name	String	50	Optional	Logical name(s) used to access a device.
Device name	String	32	Optional	Physical name used by a machine to access the device.
Logical allocation	String	32	Optional; usually either "system" or "user"	Classification that distinguishes between disk partitions used by the system and those available for use by applications.
Partition size	Numeric	8	Optional	Number of blocks or MBs for a device.
Block size	Numeric	4	Optional	Size of a block (in bytes) on a device.
Start block	Numeric	15	Optional	Block at which the partition starts.
Total blocks	Numeric	15	Optional	Total number of blocks in the partition.
Install inst	Text	N/A	Optional	Text containing, or specifying where to find, instructions for installing the control item.

4.3.3.2.2 Bill of Material Menu (Define/Update What Comprises Baselines and Other Control Item Assemblies)

Baselines are control items that consist of other control items. They are logical assemblies.

XRP-II uses product structure records to describe assemblies. Each such record defines a single parent-component control item pair and contains data pertinent to the pairing, such as its effective dates and the quantity of the component needed to form the parent.

Product structure records are the basis for XRP-II's bill of material processing. They are used to generate most ECS reports, to extract data for resource planning, and to select control item records to distribute when a baseline change is released. Once the component structure of a baseline (or other configuration assembly) has been recorded, operators can generate multilevel bill of material reports to determine what comprised the baseline on any given date.

In XRP-II, changing a baseline entails making product structure changes. XRP-II's construct for doing this is the engineering change. An engineering change defines for a control item either an initial set of first-level components or a change in the quantity, unit of measure, or effective dates for one or more of the item's components. One engineering change can affect many control items' product structures, and the product structure of any control item can be affected by many engineering changes.

Operators create one engineering change record for each affected assembly. Operators can associate a revision code with an engineering change to an item. Unlike version codes (which connote a level of form, fit, and function and thus remain unchanged once assigned to a control item), revision codes help distinguish among changes in the composition of a control item that do not warrant defining a new item. Operators also can associate a configuration change request and/or trouble ticket number with an engineering change in order to document the basis for implementing it. Engineering changes can be recorded in Baseline Manager at any time, but they must be marked "approved" before any effective dates can be recorded.

The four data entry screens operators use to maintain product structure data are each accessed from the Bill of Material menu shown in Figure 4.3.3-11. Three of the four are presented in the sections below. The Product Structure Manager screen is described in Section 4.4 of the Product Information Manual.

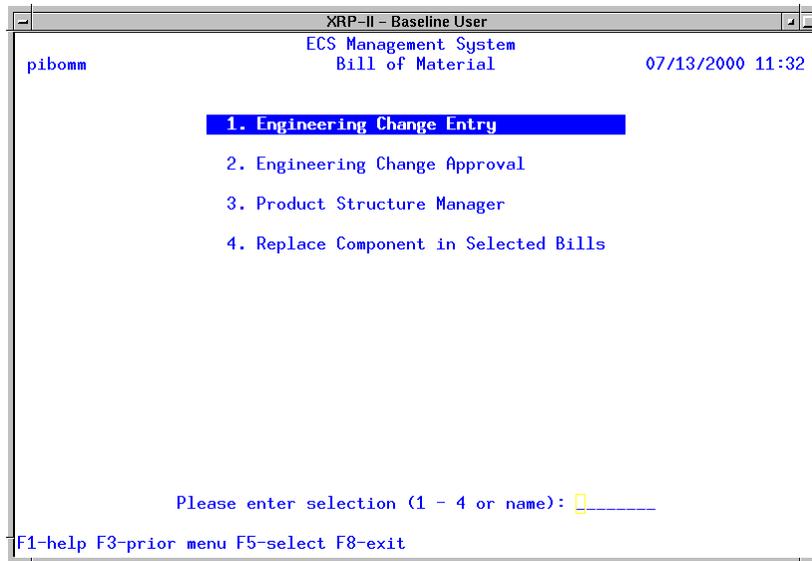


Figure 4.3.3-11. Bill of Material Menu

Note: Each engineering change to a control item can redefine more than one of the pairings between it and a component but can include only one new definition per component. Each definition specifies a contiguous timespan during which the affected relationship is in effect. XRP-II adjusts all previously defined dates for any pairings with which the new definitions conflict.

Note: A revision code reflects the set of component-level changes to a control item that are associated with a specific engineering change. If revision codes are also to be used to differentiate all the bills of material for the control item over time, each engineering change for the item must define at most one new bill. This happens only when all the component changes it defines for the item carry the same effective dates.

Note: XRP-II uses two fields -- Active Date and Inactive Date -- to represent effectivity dates for individual product structure records. Valid values for these fields include the code “**/**/**” and the dates Jan 1, 1920 through Dec 31, 2019. XRP-II interprets the code “**/**/**” as first system date when it is used as a product structure’s Active Date, and as last system date when it is used as an Inactive Date.

Note: Site-unique engineering changes should be assigned numbers having the site’s designated 3-character prefix so the changes can be exported for consolidation at the SMC (see Section 4.3.3.2.11.9).

4.3.3.2.2.1 Engineering Change Entry Screen

Operators use the screen shown in Figure 4.3.3-12 whenever an engineering change for a control item is to be defined or modified but has not yet been approved. It allows new product structures to be created but prevents processing of effectivity dates. Consequently, bills of material for

approved assemblies remain unaffected. The screen is similar to the Engineering Change Maintenance screen described in the Section 4.3 of the Product Information Manual, differs as follows:

- Fields for project, CCR #, TT, baseline/release and approval date appear in lieu of certain other fields not pertaining to baseline management. Each is an information only field that is described in Table 4.3.3-8.
- Values for the approval code and date and for the active and inactive dates are system supplied by the system; they can only be changed via the Engineering Change Approval screen (see Section 4.3.3.2.2.2). This allows operators to record new product structure data without causing premature adjustments to effective dates of existing bills of material. Active and inactive dates default to the last system date: December 31, 2019.
- The Items bottom-line command can be used irrespective of the approval code's value.

Enter information about an engineering change using Table 4.3.3-8 as a guide, then use the Items bottom-line command to create or modify the list of components for the parent control item's product structure. The Items page (Figure 4.3.3-12) is the same as that described in Section 4.3 of the Product Information Manual, but without the "offset" field, which is not used in Baseline Manager. Be sure to enter an appropriate quantity for each component. Components having zero quantity do not appear in their parent's bill of materials.

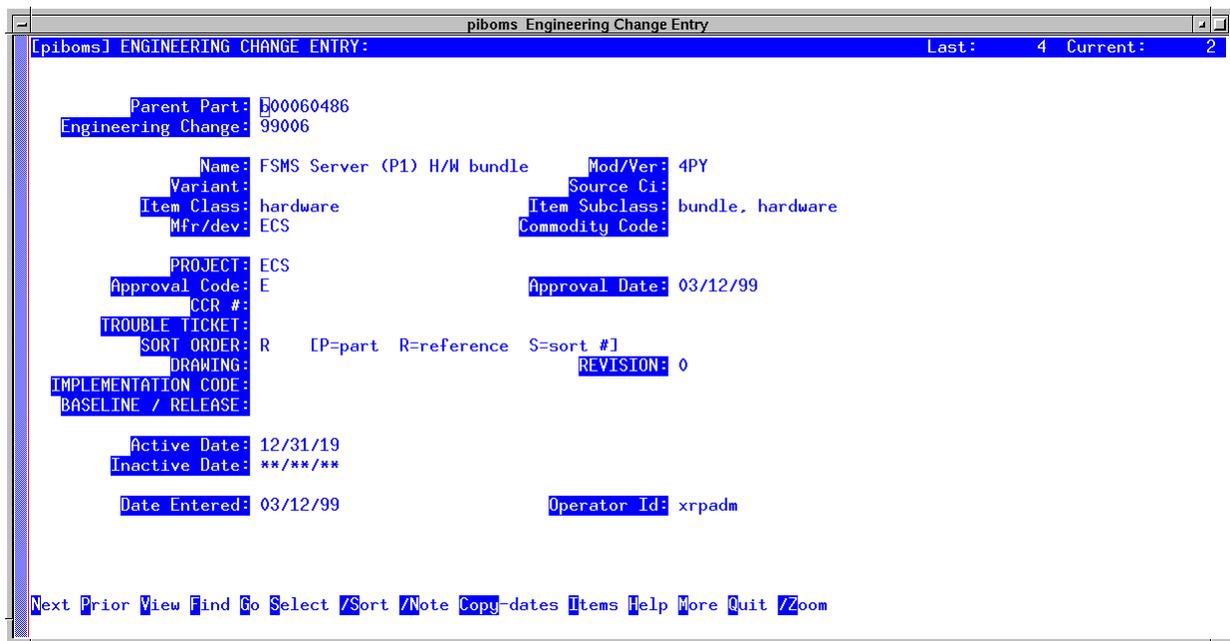


Figure 4.3.3-12. Engineering Change Entry CHUI

Table 4.3.3-8 describes the fields on the Engineering Change Entry screen.

Table 4.3.3-8. Engineering Change Entry Field Descriptions (1 of 2)

Field Name	Data Type	Size	Entry	Description
Parent part	String	20	Required; zoom to a list of control items.	Identifier of the control item associated with the engineering change.
Engineering change	String	8	Required	Number that uniquely identifies every product structure change action.
Name	String	24	System supplied	Name by which a specific control item is known.
Model/version	String	24	System supplied	Textual identifier for a level of functional capability for a control item.
Variant	String	4	Optional	Name of the type of computer on which a software control item has been built to run.
Source CI	String	8	Optional	Mnemonic of the HWCI or CSCI that owns the control item.
Item class	String	16	Optional; zoom to select from a list of valid classes.	Link to the group name for control items having common attribute types (e.g., software, hardware, design, document, host, network, site, baseline, partition, project, other).
Item subclass	String	16	Optional	Group name that distinguishes among types of control items within a class.
Mfr/dev	String	3	Optional; zoom to select from a list of manufacturer and developer codes.	Coded name of the company/organization that produced a hardware control item.
Commodity code	String	8	Optional; zoom to select from a list of standard codes.	Classification for how the item was produced or obtained (e.g., COTS, custom, mod-COTS, GFE, shareware, freeware, other).
Project	String	10	Optional; defaults to "ECS"	Name of the principal project under which the item was procured or developed.
Approval code	String	1	System supplied; defaults to "E" for entered	Code that distinguishes among lifecycle stages for engineering changes; must be "A" (approved) for active date to be set.
Approval date	Date	N/A	System supplied	An approval authority formally sanctions date an engineering change takes effect.
Ccr #	String	30	Optional	Reference to the CCR authorizing the configuration change.
Tt	String	15	Optional	Reference to the trouble ticket authorizing the configuration change.

Table 4.3.3-8. Engineering Change Entry Field Descriptions (2 of 2)

Field Name	Data Type	Size	Entry	Description
Sort order	String	1	Optional; P, R, or S	Code that specifies how component parts are to be sorted on an engineering change screen's items page.
Drawing	String	20	Optional	Control item identifier of a drawing associated with a control item and engineering change.
Revision	String	3	Optional	Change level for a control item that has undergone a product structure change.
Implementation code	String	2	Optional	Code that distinguishes between permanent and temporary changes.
Baseline/release	String	24	Optional	Name, version, description, or identifier of a baseline with which an engineering change is associated.
Active date	Date	N/A	System supplied	Date on which a product structure relationship between two control items is effective.
Inactive date	Date	N/A	System supplied	Date on which the subject product structure becomes obsolete or replaces a previous structure.
Date entered	Date	N/A	System supplied	Date that the ECN was created.
Operator id	String	N/A	System supplied	Identifier of the operator who created the ECN.

4.3.3.2.2 Engineering Change Approval Screen

Operators use the Engineering Change Approval screen to define or update approved engineering changes or to upgrade the status of a previously entered one to “approved”. As shown in Figure 4.3.3-14, this screen is the same as the Engineering Change Entry screen, except that it can modify the approval code and date. Changing the approval code to “A” for approved enables active and inactive date fields, allowing operators to set effectivity dates for new product structures.

Enter the new approval code and optional approval date, then add an active and inactive date. These active and inactive entries are used as defaults on the Items page (Figure 4.3.3-13) when adding records to the parent’s component list. The Copy-dates bottom-line command, described in Section 4.3.9.1 of the *XRP-II Product Information Manual*, can be used to propagate active and inactive dates to component items already in the list.

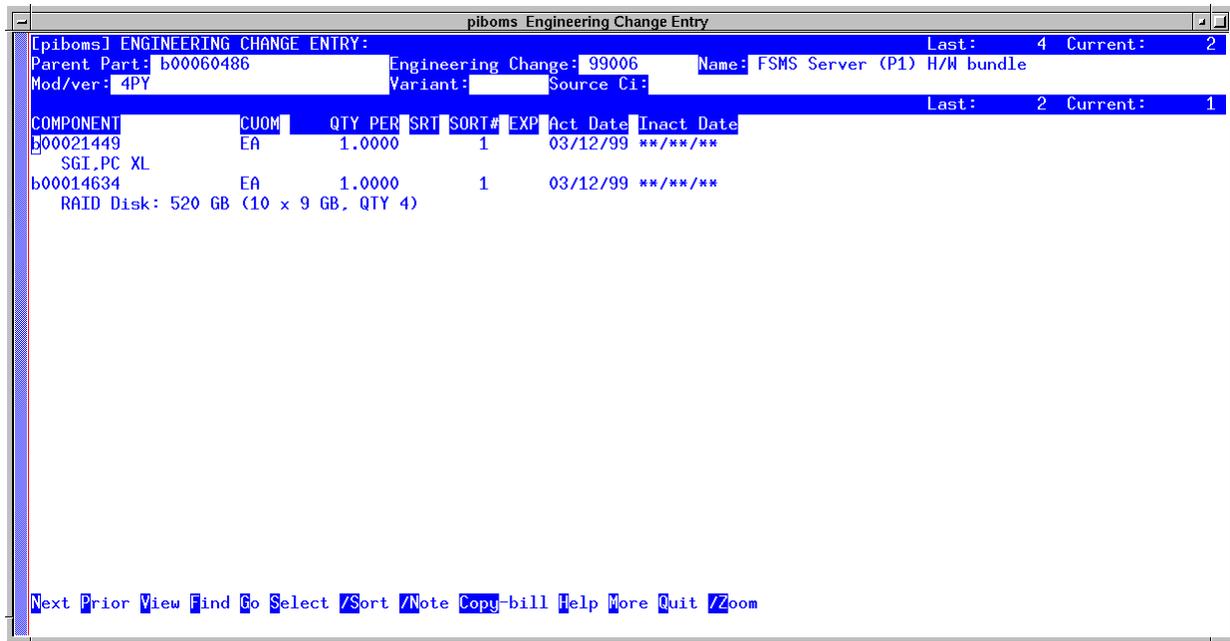


Figure 4.3.3-13. Engineering Change Entry's Items CHUI

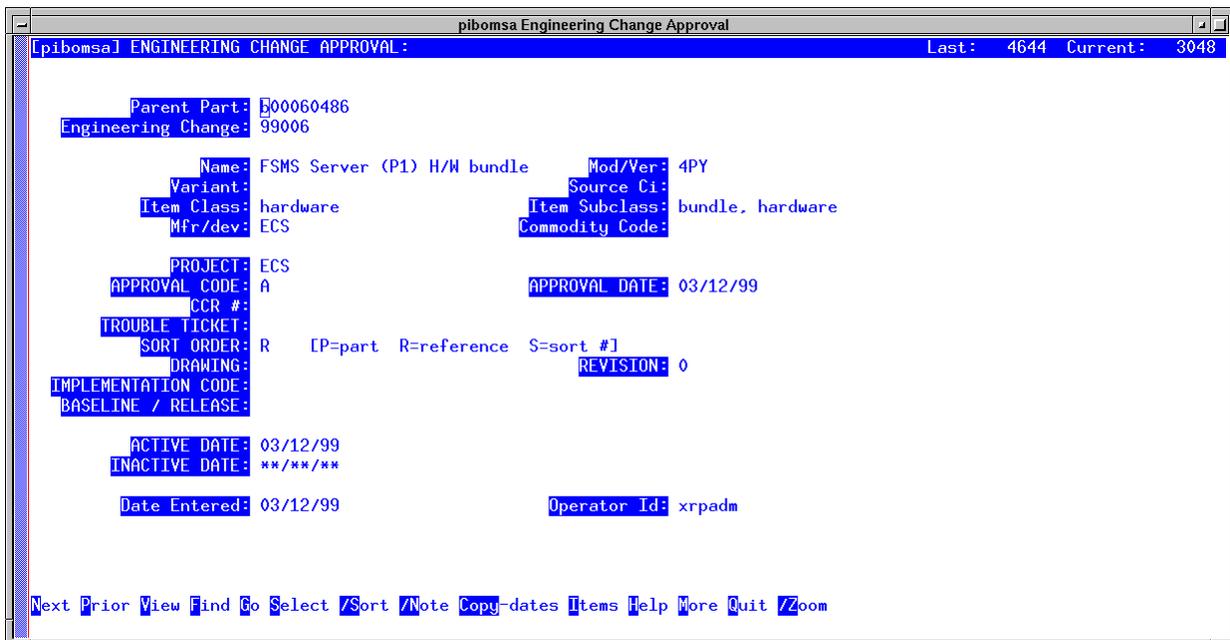


Figure 4.3.3-14. Engineering Change Approval CHUI

Table 4.3.3-9 describes the fields on the Engineering Change Approval screen.

Table 4.3.3-9. Engineering Change Approval Field Descriptions (1 of 2)

Field Name	Data Type	Size	Entry	Description
Parent part	String	20	Required	Identifier of the control item associated with the engineering change.
Engineering change	String	8	Required	Number that uniquely identifies every product structure change action.
Name	String	24	System supplied	Name by which a specific control item is known.
Model/version	String	24	System supplied	Textual identifier for a level of functional capability for a control item.
Variant	String	4	Optional	Name of the type of computer on which a software control item has been built to run.
Source CI	String	8	Optional	Mnemonic of the HWCI or CSCI that owns the control item.
Item class	String	16	Optional; zoom to select from a list of valid classes	Link to the group name for control items having common attribute types (e.g., software, hardware, design, document, host, network, site, baseline, partition, project, other).
Item subclass	String	16	Optional	Group name that distinguishes among types of control items within a class.
Mfr/dev	String	3	Optional; zoom to select from a list of manufacturer and developer codes	Coded name of the company/organization that produced a hardware control item.
Commodity code	String	8	Optional; zoom to select from a list of standard codes	Classification for how the item was produced or obtained (e.g., COTS, custom, mod-COTS, GFE, shareware, freeware, other).
Pproject	String	10	Optional; defaults to "ECS"	Name of the principal project under which the item was procured or developed.
Approval date	Date	10	Optional	An approval authority formally sanctions date an engineering change takes effect.

Table 4.3.3-9. Engineering Change Approval Field Descriptions (2 of 2)

Field Name	Data Type	Size	Entry	Description
Approval code	String	1	Optional; default is "E" (entered)	Code that distinguishes among lifecycle stages for engineering changes; must be "A" (approved) for active date to be set.
Ccr #	String	30	Optional	Reference to the CCR authorizing the configuration change.
Tt	String	15	Optional	Reference to the trouble ticket authorizing the configuration change.
Sort order	String	1	P, R, or S	Code that specifies how component parts are to be sorted on an engineering change screen's items page.
Drawing	String	20	Optional	Control item identifier of a drawing associated with a control item and engineering change.
Revision	String	3	Optional	Change level for a control item that has undergone a product structure change.
Implementation code	String	2	Optional	Code that distinguishes between permanent and temporary changes.
Baseline/release	String	24	Optional	Name, version, description, or identifier of a baseline with which an engineering change is associated.
Active date	Date	N/A	Optional; default is the latest specifiable system date.	Date on which a product structure relationship between two control items is effective. The code **/**/** means first system date when used with this field.
Inactive date	Date	N/A	Optional; default is last system date (**/**/**).	Date on which the subject product structure is to be obsoleted or superseded. The code **/**/** means last system date when used with this field.
Operator ID	String	8	System supplied	Identifier of the operator who created the ECN.
Date entered	Date	N/A	System supplied	Date that the ECN was created.

4.3.3.2.2.3 Product Structure Manager

This function is a standard XRP-II function. It is described in the documentation referenced in Section 4.3.3, where it is referred to as Product Structure Maintenance.

4.3.3.2.2.4 Replace Component in Selected Bills

Operators use the Replace Component in Selected Bills screen (Figures 4.3.3-15 through 4.3.3-17) to substitute one component for another in bills of material for control item assemblies, effective on a specified date. This is particularly useful when upgrading an item in a baseline to a new version. An interactive script that guides operators through transactions using a series of system prompts supports the screen. Pressing <Enter> submits a response, evoking an

informational message and the next prompt. The shell's interrupt key -- often <Cntrl-C> or -- exits the screen on demand. Table 4.3.3-10 describes the fields for this function.

The screen supports multiple transactions per session. When invoked, it asks for the components and the effective date for the transaction, then for the list of assemblies affected. It next generates and displays the data records to effect the change, giving operators a chance to review them before the database is updated. When the transaction is complete, operators can choose to perform another.

To perform a transaction after invoking the screen, first enter the control item identifier of the item to replace, then the effective date for the change and the identifier for the replacement item (Figure 4.3.3-15). Note that the system suggests the current date as default. Just press <Enter> to use it.

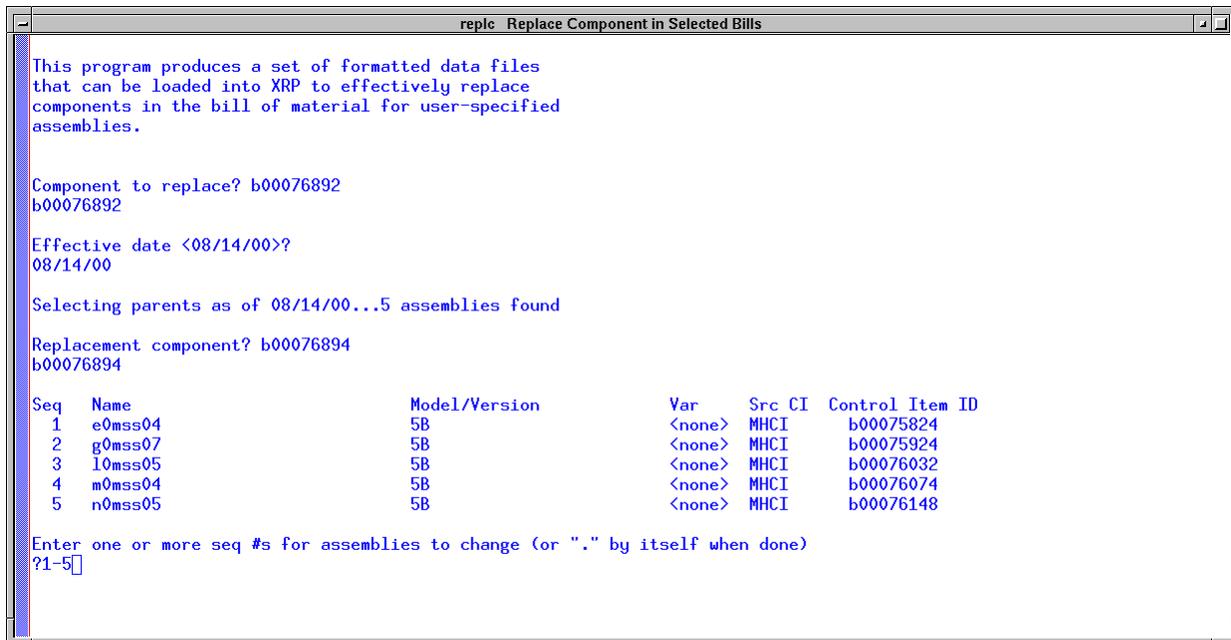


Figure 4.3.3-15. Replace Component in Selected Bills CHUI (1 of 3)

Next, XRP-II lists the assemblies having the component-to-replace in their bills of material for the effective date. Select which assemblies to update by typing a series of sequence numbers then pressing <Enter>. Numbers can be separated by a space or comma, and can include ranges such as "1-3", "4-", and "-22". XRP-II then presents the list again. This time, lines containing the assemblies selected so far are marked on the right with an asterisk. Enter additional sequence numbers to select more assemblies, or repeat previously entered ones to de-select them.

When finished choosing which assemblies to update, type a period (.) as the sole response to the selection prompt, then press <Enter> (Figure 4.3.3-16). The system generates and displays

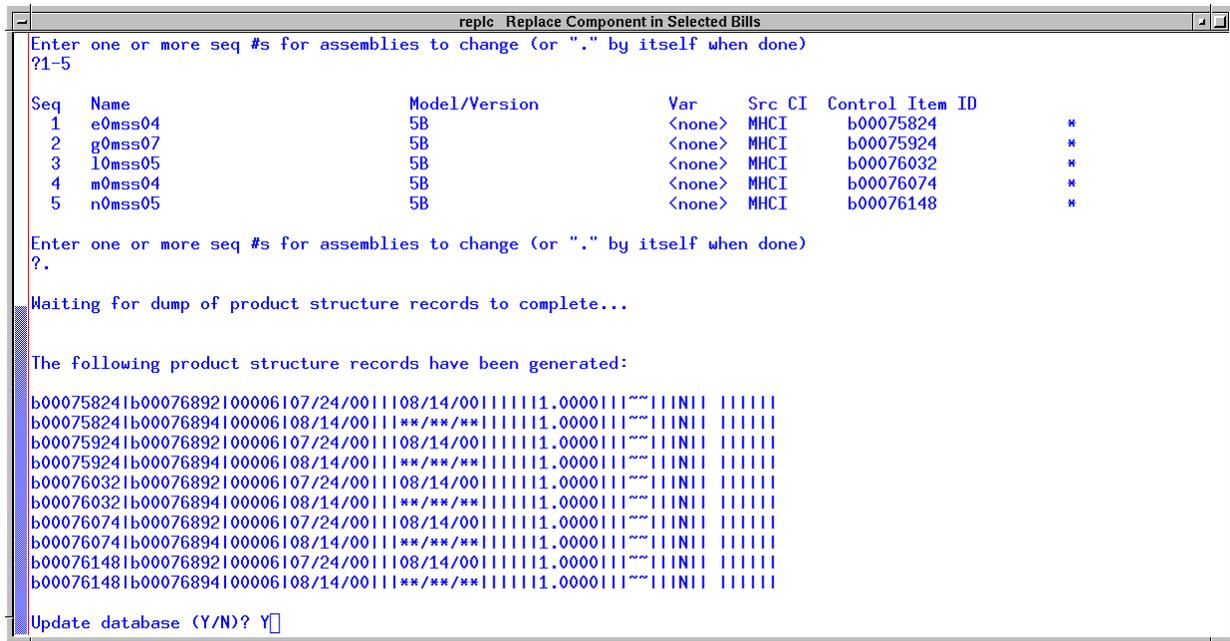


Figure 4.3.3-16. Replace Component in Selected Bills CHUI (2 of 3)

for review the formatted product structure records to make the replacements. Each replacement takes two records: one to “obsolete” the old component from the bill for an assembly, the other to add its replacement. A pipe symbol (|) separates the fields in each record. The first two fields represent assembly and component identifiers, respectively. The fourth and seventh fields represent the active and inactive dates for the parent-child relation.

After examining the records, type “Y” at the prompt to update the database or “N” to discard them (Figure 4.3.3-17) and press <Enter>. Then, answer “Y” at the next prompt to process another replacement or “N” to exit the function and close the screen.

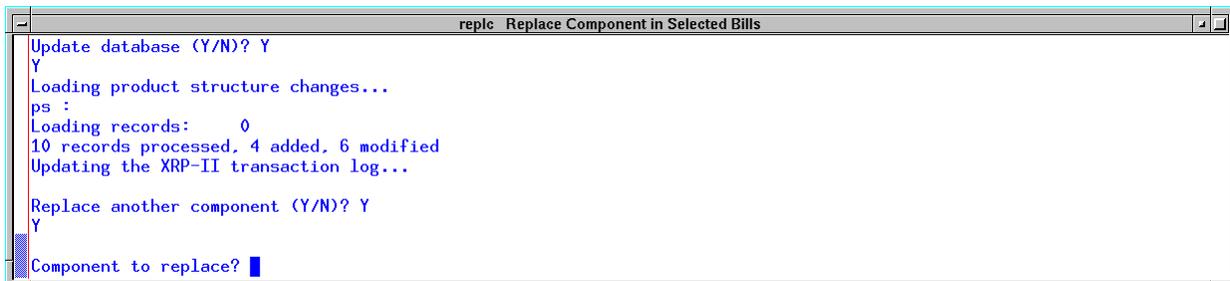


Figure 4.3.3-17. Replace Component in Selected Bills CHUI (3 of 3)

Table 4.3.3-10 describes the fields that are used to reply to these screens’ prompts.

Table 4.3.3-10. Replace Component in Selected Bills

Field Name	Data Type	Size	Entry	Description
Component to replace	String	20	Required	Identifier of the control item to be rendered inactive in an assembly's bill of material.
Effective date	Date	2	Required	Date the configuration change is to take effect (<u>not</u> the date of the database change).
Replacement component	String	20	Required	Identifier of the control item to be made active in an assembly's bill of material.
Seq	String	3	System supplied	Identifier for a line in the list of first-level assemblies in which the component to replace is active as of the effective date.
Name	String	24	System supplied	Name by which a specific control item is known.
Model/version	String	24	System supplied	Textual identifier for a level of functional capability for a control item.
Var	String	4	System supplied	Name of the type of computer on which a software control item has been built to run.
Src CI	String	8	System supplied	Mnemonic of the HWCI or CSCI that owns the control item.
Control item id	String	20	System supplied	Unique code of the version- or configuration-controlled item listed as an assembly.
Enter one or more seq #s for assemblies to change	String	N/A	Required	List of sequence #s that selects (or de-selects if corresponding items had already been selected previously) which assemblies the replacement is to affect.
The following product structure records have been generated	String	N/A	System supplied	Formatted records which, when loaded, implement the desired replacements. Each selected assembly requires two records -- one for removing the old component and one for adding the new. Fields 1, 2, 4, and 7 in each record are particularly significant, representing the assembly's identifier, the component's identifier, the active date for the parent-child relation, and the inactive date for the relation, respectively.
Update database	String	1	Required; Y/N	Code indicating whether the system is to use the generated records to update the database or to discard them.
Loading records	String	N/A	System supplied	Count of formatted records as they are being processed, in multiples of 100.
Records processed, added, modified	String	N/A	System supplied	Message providing final count of formatted records read for loading, how many caused new records to be added, and how many caused existing records to be updated.
Replace another component	String	1	Required; Y/N	Code indicating whether the system is to exit the screen or process another replacement transaction.

4.3.3.2.8 Query Control Item Records

Operators granted read only permissions to Baseline Manager can retrieve, sort, filter and generate ad hoc reports of XRP-II database records using nine screens accessed from the Query menu (Figure 4.3.3-18). The six “items” screens closely mirror database update screens described earlier (Section 4.3.3.1.3), except each has an added field to display an item’s local implementation status. The menu also has three screens for querying product structure, engineering change, and implementation status records, respectively.

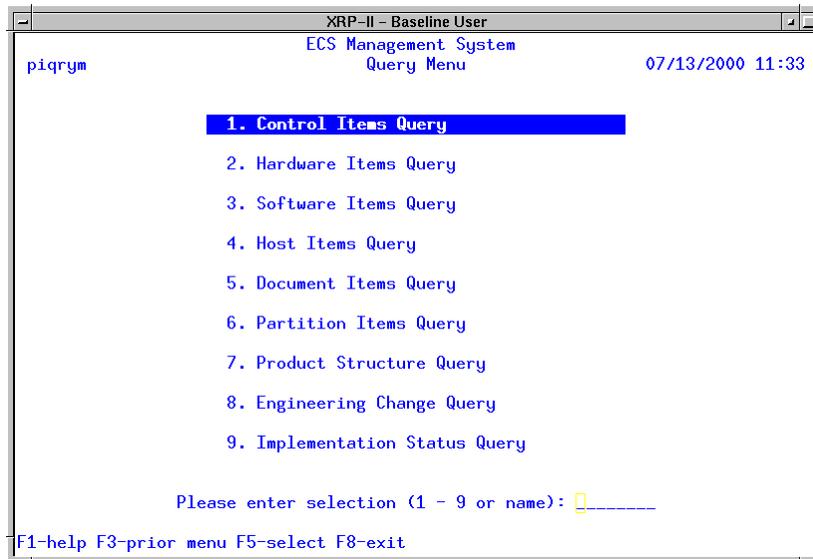


Figure 4.3.3-18. Query Menu

Use the Control Items Query screen to browse the entire control item catalog minus its configuration details. To view full configuration details, use the individual query screens designed specially for hardware, software, document, host, and disk partition items.

Use the Product Structure Query screen to browse historical product structure records and display information about any parent-component control item pair. This is helpful, for example, when trying to determine why a control item is not appearing in a bill of materials as expected. Descriptions of this screen’s fields can be found in Section 4 of the *XRP-II Product Information Manual*.

Use the Engineering Change Query screen to browse the chronology of changes to a particular control item and examine which control items were affected by each engineering change. The fields on this screen match those on the Engineering Change Entry screen. Refer to Section 4 of the *XRP-II Product Information Manual* and Section 4.3.3.1.4.1 above for descriptions of these fields.

Use the Implementation Status Query screen to obtain information describing where control items are deployed. For example, sort the records by status and name and select those for a site to see a list of site items by life cycle state.

4.3.3.2.9 Reports Menu (Generate Pre-defined Reports)

XRP-II produces several reports specifically tailored to support ECS configuration management activities. All reports contain information derived from records stored only in the XRP-II database on the host where the report is requested. For ECS, reports can be written to the operator's display (CRT), a file, or one or more virtual print drivers that control pitch and orientation of output destined for the operator's default printer device. The printer device is determined from the operator's environment settings when XRP-II is started.

Some report screens accept a range of control items on which to report. Ranges are specified the same way as when using the Select and Find bottom-line commands on data entry screens. Section 3.4.5 in the *XRP-II System Reference Manual* explains how to enter range selection specifications.

All pre-defined reports available to the operator are accessed via XRP-II's Report menu (Figure 4.3.3-19). Screens for generating multilevel bill, summarized bill, and multilevel where-used reports are fully described in Sections 6.5, 6.7, and 6.9 of the *XRP-II Product Information Manual*. The remaining reports are described in the sections below. Section 4.3.3.8.1 contains samples.

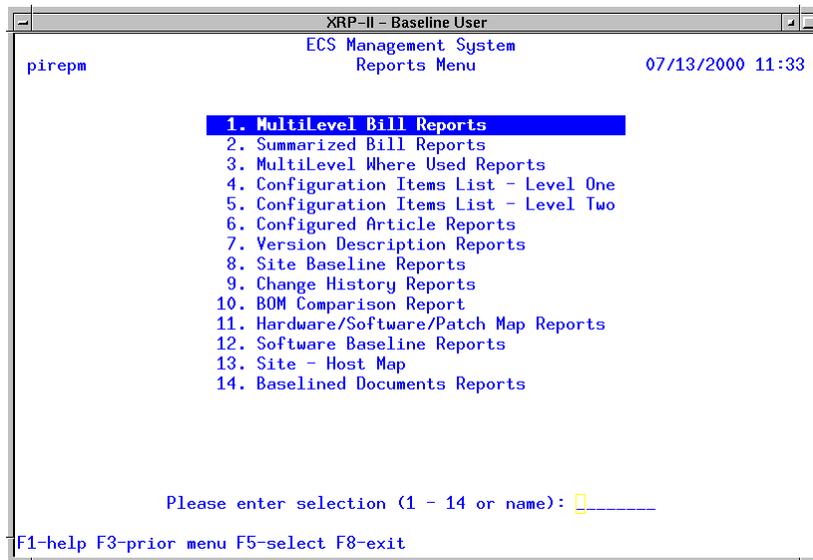


Figure 4.3.3-19. Reports Menu

4.3.3.2.9.1 Configuration Items List - Level One Screen

Operators use the screen depicted in Figure 4.3.3-20 to produce a list of ECS hardware and computer software configuration items (HWCI and CSCIs) grouped by subsystem. Table 4.3.3-11 describes the screen's fields.

Specify a site or range of sites, a date for the configuration, and the number of copies of the report wanted. Then enter "E" for execute. XRP-II reports all ECS configuration items active and deployed at the specified sites as of the specified date.

Note: An implementation status record corresponding to the specified site or sites must exist in order for a HWCI or CSCI control item to appear in the report.

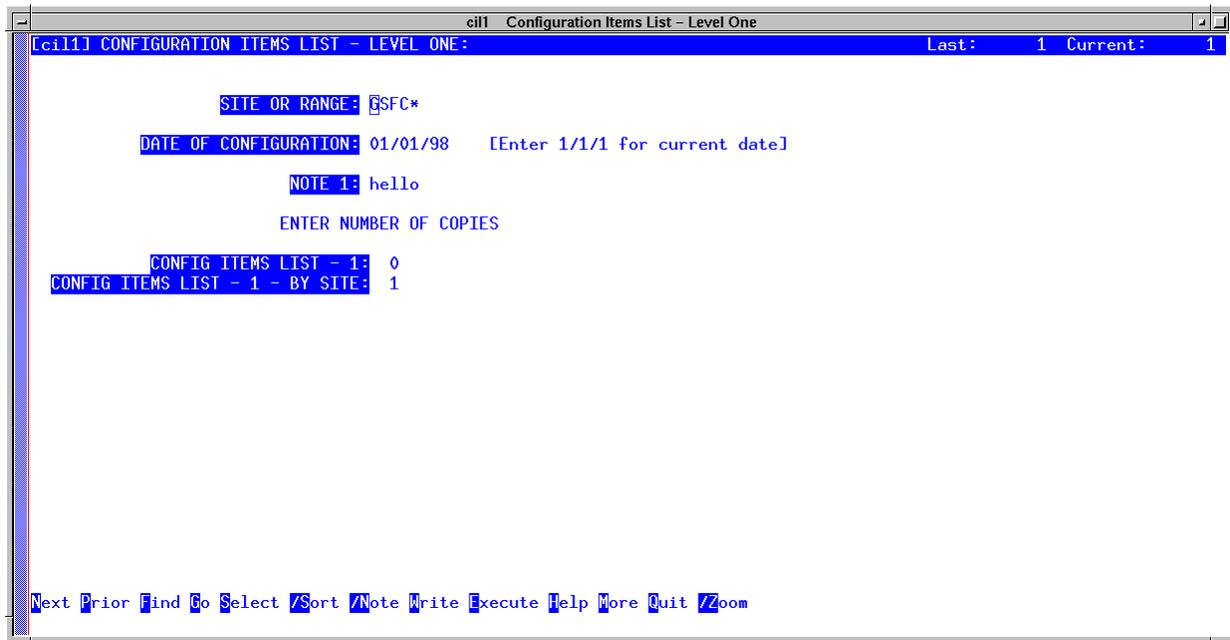


Figure 4.3.3-20. Configuration Items List - Level One CHUI

Table 4.3.3-11 describes the fields on the Configuration Items List screen.

Table 4.3.3-11. Configuration Items List - Level One Field Descriptions

Field Name	Data Type	Size	Entry	Description
Site or range	String	16	Required; zoom to select from a list of sites.	Short name for an ECS site.
Date of configuration	Date	N/A	Required	“As of “ date used in selecting records from the configuration history of the site(s).
Note 1 2	String	40	Optional	Textual information to be added to the header of the report.
Config items list-1	Numeric	2	Required	Number of copies wanted.
Config items list-1-by site	Numeric	2	Required	Number of copies wanted.

4.3.3.2.9.2 Configuration Items List - Level Two Screen

Operators use the screen in Figure 4.3.3-21 to produce a consolidated list of the ECS HWCI and CSCI design components deployed at a specified site(s). Components are grouped by subsystem and configuration item that owns them.

This screen’s fields are the same as those used to generate the Configuration Items List - One report, except the label for the number of copies reflects the name of this report. Table 4.3.3-11 above describes the fields.

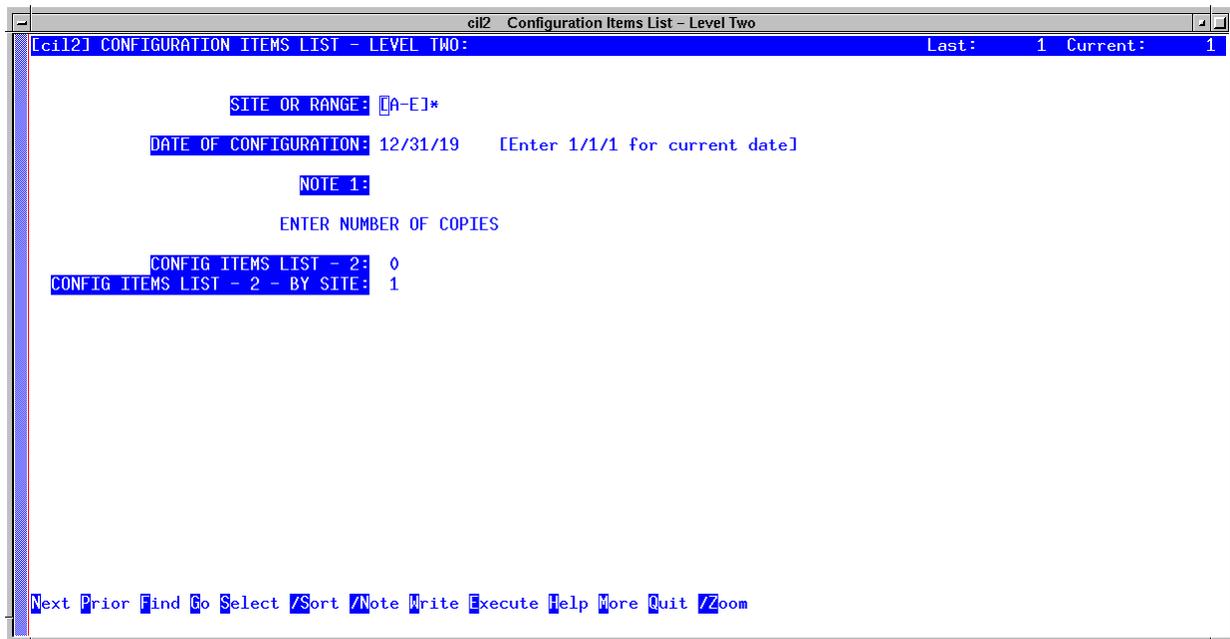


Figure 4.3.3-21. Configuration Items List - Level Two CHUI

Specify a site or range of sites, a date for the configuration, and the number of copies of the report wanted. Then enter “E” for execute. XRP-II reports all ECS design components active and deployed at the specified sites as of the specified date.

Note: An implementation status record corresponding to the specified site or sites must exist in order for a component to appear in the report.

4.3.3.2.9.3 Configured Articles Reports Screen

This screen (Figure 4.3.3-22) generates a list of the approved set of ECS configured articles in effect on a specified date at a specified site or sites, grouping the articles by parent configuration item. Its fields are the same as those used to generate the Configuration Items List - One report, except the label for the number of copies reflects the name of this report. Table 4.3.3-11 above describes the fields.

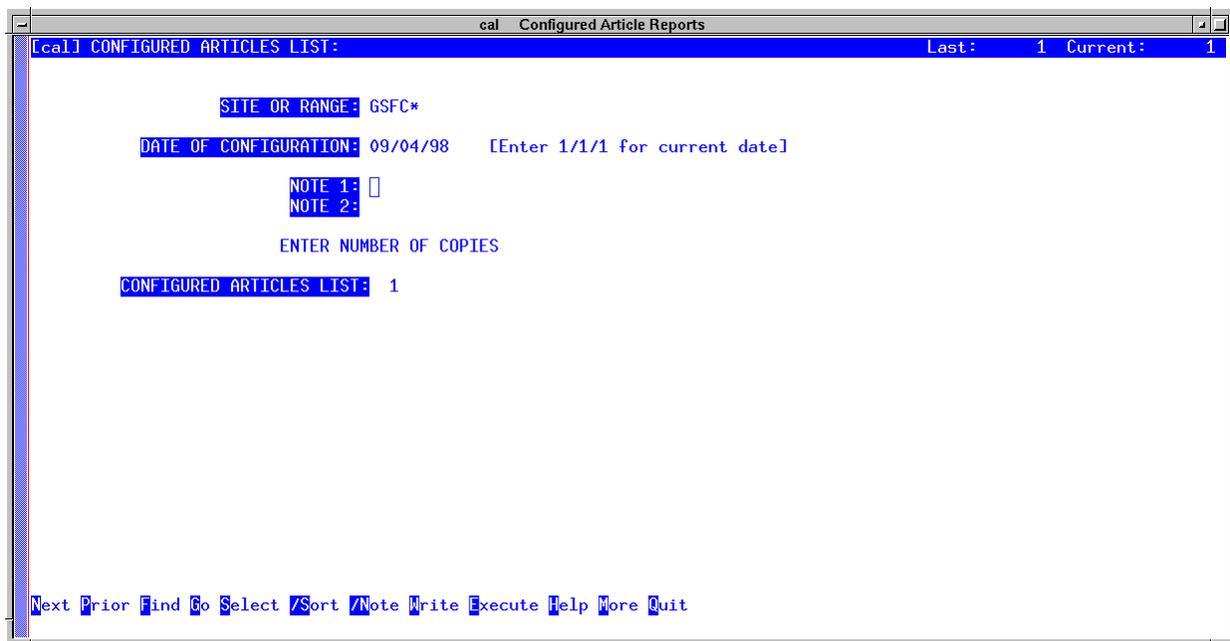


Figure 4.3.3-22. Configured Articles Reports CHUI

Specify a site or range of sites, a date for the configuration, and the number of copies of the report wanted. Then enter “E” for execute. XRP-II reports all active ECS configured articles for the specified sites as of the specified date.

Note: A corresponding implementation status record must exist in order for a configured article to appear in the list of articles for a site.

4.3.3.2.9.4 Version Description Reports Screen

The Version Description Reports screen (Figure 4.3.3-23) is used to generate a summarized bill of the approved set of ECS configured articles for a specified configuration item, subsystem, or release. This screen's fields are the same as those used to generate the Configuration Items List - One report, except the label for the number of copies reflects the name of this report. Table 4.3.3-11 above describes the fields.

Specify a site or range of sites, a date for the configuration, and the number of copies of the report wanted. Then enter "E" for execute. XRP-II reports all active ECS configured articles for the specified sites as of the specified date.

Note: A corresponding implementation status record must exist in order for a configured article to appear in the list of articles for a site.

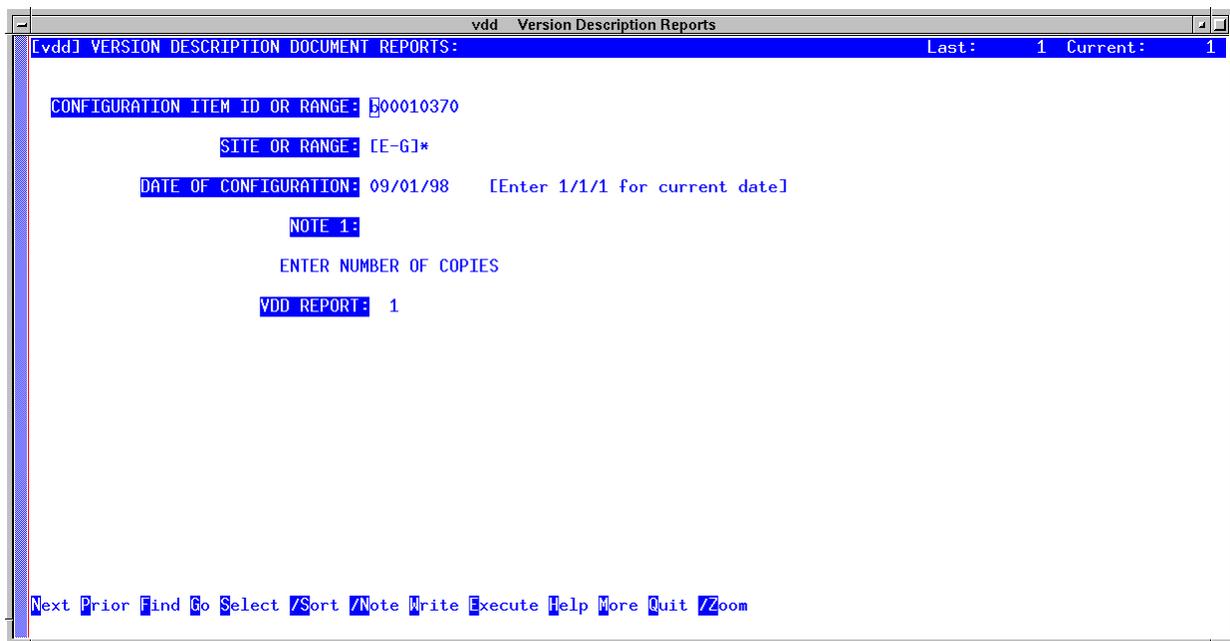


Figure 4.3.3-23. Version Description Reports CHUI

4.3.3.2.9.5 Site Baseline Reports Screen

Operators use the Site Baseline Report screen shown in Figure 4.3.3-24 to produce an indented bill of materials that lists what comprises one or more sites' operational baselines down to the configured article level. The screen works the same as the multilevel bill screen described in Section 6.5 of the *XRP-II Product Information Manual*, except it rejects identifiers for items that are not members of class "baseline".

Using Table 4.3.3-12 as a guide, specify the identifier of the baseline control item and date of bill, then set the remaining parameters for the report. Enter “E” for execute. XRP-II reports all ECS configured articles active and deployed as part of the specified baseline.

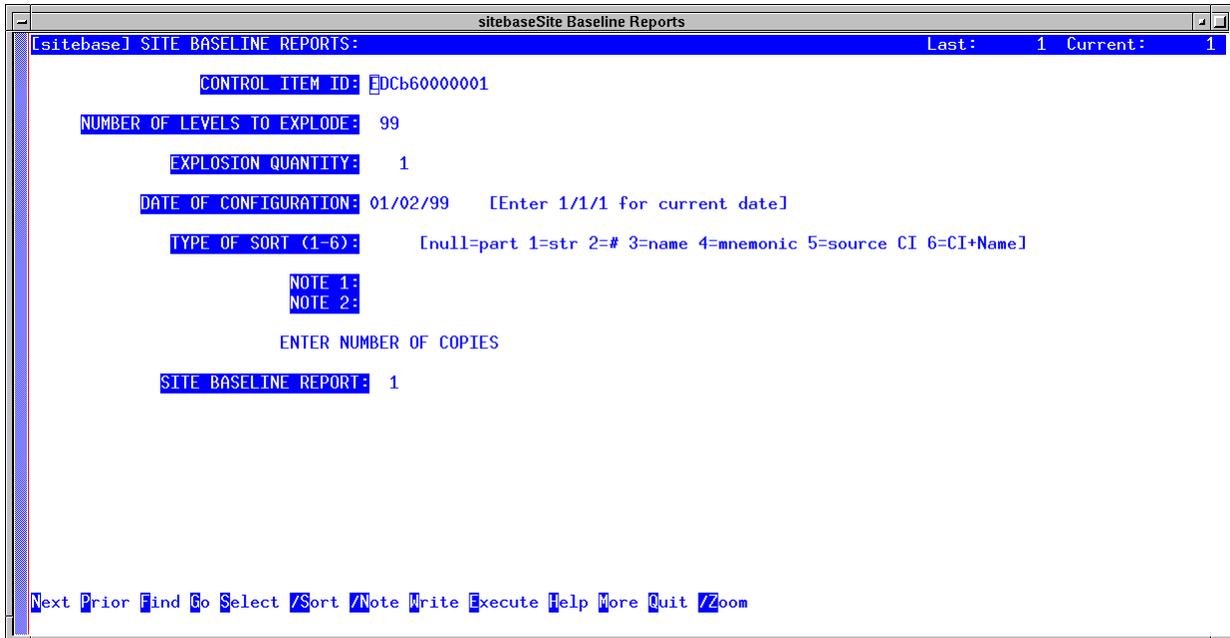


Figure 4.3.3-24. Site Baseline Reports CHUI

Table 4.3.3-12 describes the fields on the Site Baseline Reports screen.

Table 4.3.3-12. Site Baseline Reports Field Descriptions (1 of 2)

Field Name	Data Type	Size	Entry	Description
Control item id	String	20	Required; zoom to select from a list of control items.	Unique code for a version- or configuration-controlled item.
Number of levels to explode	Numeric	3	Optional	Component levels to include in the report (1=one level of components, 2=two levels of components, etc.).
Explosion quantity	Numeric	4	Optional	Multiplier used to calculate extended quantities. Should always be “1.”
Date of configuration	Date	N/A	Required	“As of “ date used in selecting records from the configuration history of the control item.

Table 4.3.3-12. Site Baseline Reports Field Descriptions (2 of 2)

Field Name	Data Type	Size	Entry	Description
Type of sort (1-6)	String	1	Optional	Code that specifies the field(s) to be used in sorting the data for the report.
Note 1, 2	String	40	Optional	Textual information to be printed as a note in the header of the report.
Site baseline report	Numeric	2	Required	Number of copies wanted.

4.3.3.2.9.6 Change History Reports Screen

The Change History Reports screen (Figure 4.3.3-25) generates a list containing the revision history of an ECS control item.

Specify the control item’s identifier, then enter “E” for execute. XRP-II reports all versions and product structure revisions for the specified item together with details associated with each change.

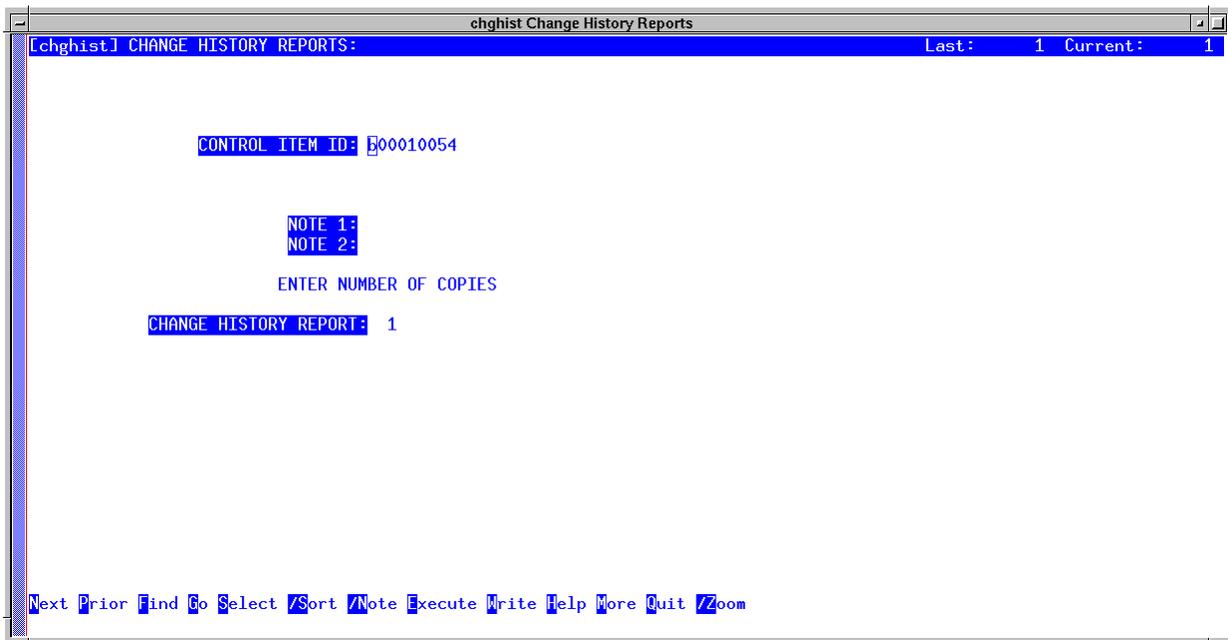


Figure 4.3.3-25. Change History Reports CHUI

Table 4.3.3-13 describes the fields on the Change History Reports screen.

Table 4.3.3-13. Change History Reports Field Descriptions

Field Name	Data Type	Size	Entry	Description
Control item id	String	20	Required; zoom to select from a list of control items.	Unique code for a version- or configuration-controlled item.
Note 1, 2	String	40	Optional	Textual information to be added to the header of the report.
Change history report	Numeric	2	Required	Number of copies wanted.

4.3.3.2.9.7 BOM Comparison Reports Screen

The BOM Comparison Reports screen (Figure 4-3.3-26) generates a list of the differences in the bills of material for any two controlled items. Operators use it, for example, to determine how approved operational baselines at two sites differ.

Specify identifiers for the two controlled items whose bills are to be compared. Next, indicate a bill of materials date for the comparison and the number of report copies wanted. Then enter “E” for execute, and XRP-II produces a four-part report. For each of the two control items, XRP-II first lists all the control items that are in its bill and in the other’s, then all the control items in its bill that are not in the other’s.

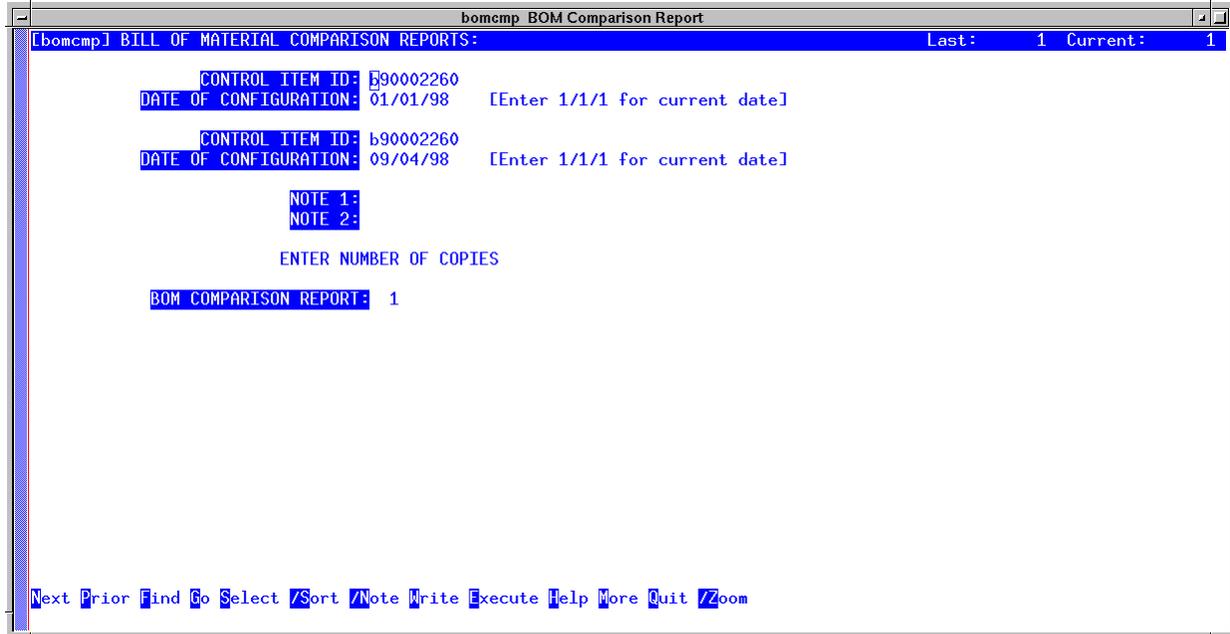


Figure 4.3.3-26. BOM Comparison Reports CHUI

Table 4.3.3-14 describes the fields on the BOM Comparison Reports screen.

Table 4.3.3-14. BOM Comparison Reports Field Descriptions

Field Name	Data Type	Size	Entry	Description
Control item id	String	20	Required; zoom to select from a list of control items.	Unique code for a version- or configuration-controlled item.
Date of configuration	Date	N/A	Required	“As of “ date used in selecting records from the configuration history of the control item.
Note 1, 2	String	40	Optional	Textual information to be added to the header of the report.
BOM comparison report	Numeric	2	Required	Number of copies wanted.

4.3.3.2.9.8 Hardware/Software/Patch Map Reports Screen

The Hardware/Software/Patch Map Reports screen (Figure 4-3.3-27) is used to produce special lists of the control items needed for each host in a specified baseline. Selections are available for generating lists of hardware items, software programs, and software patches. For software programs, operators can choose from among three formats, two of which include program version information and identify “bundles” in which functionally identical hosts’ programs are grouped. Operators also have options for sorting the items in a report -- the sort is applied to components by assembly -- but current report layouts assume items are sorted by name.

Specify the control item identifier and date of bill for the baseline or assembly of interest. Next, specify “3” (name) for type of sort and a document number and/or note to be included on each page. Specify the number of report copies wanted, then enter “E” for execute. XRP-II reports, by subsystem and host, all software and firmware the host should contain.

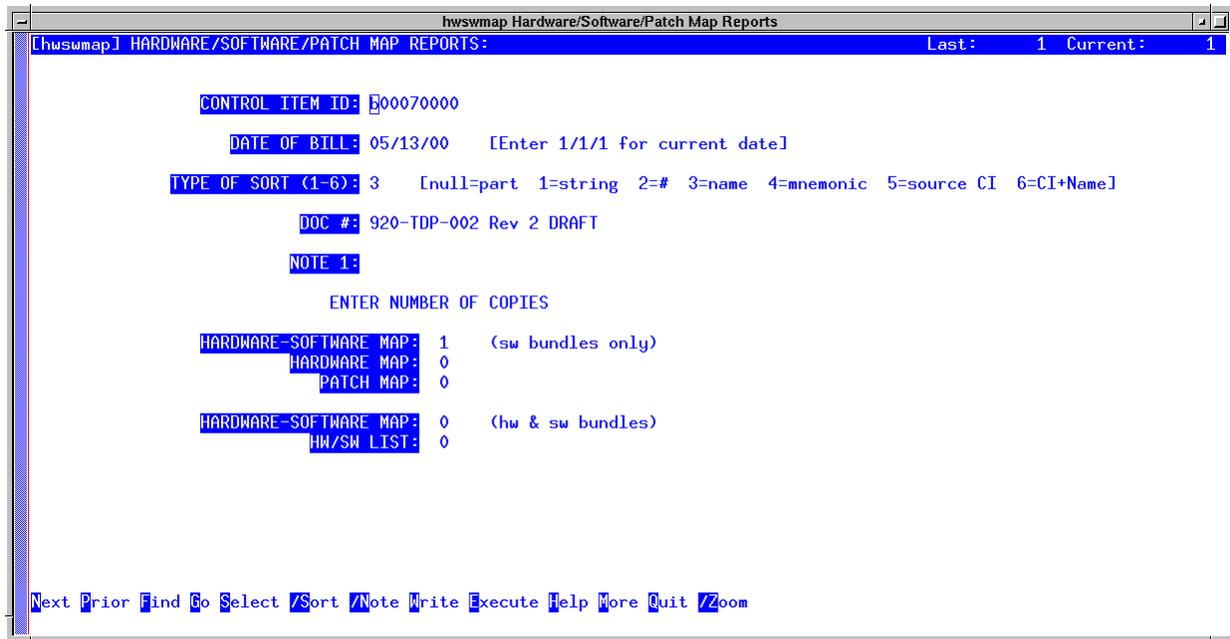


Figure 4.3.3-27. Hardware/Software/Patch Map Reports CHUI

Table 4.3.3-15 describes the fields on the Hardware/Software/Patch Map Reports screen.

Table 4.3.3-15. Hardware/Software/Patch Map Reports Field Descriptions (1 of 2)

Field Name	Data Type	Size	Entry	Description
Control item id	String	20	Required; zoom to select from a list of control items.	Unique code for a version- or configuration-controlled item.
Date of bill	Date	10	Required	“As of “ date used in selecting records from the configuration history of the control item.
Type of sort (1-6)	String	1	Optional	Code that specifies the field(s) to be used in sorting the data for the report.
Doc #	String	40	Optional	Textual information to be printed as the document number in the header of the report.
Note 1	String	40	Optional	Textual information to be printed as a note in the header of the report.
Hardware - software map	Numeric	2	Required	Number of copies wanted.
Hardware map	Numeric	2	Required	Number of copies wanted.

**Table 4.3.3-15. Hardware/Software/Patch Map Reports
Field Descriptions (2 of 2)**

Field Name	Data Type	Size	Entry	Description
Patch map	Numeric	2	Required	Number of copies wanted.
HW/SW list	Numeric	2	Required	Number of copies wanted.

4.3.3.2.9.9 Software Baseline Reports Screen

Operators use the Software Baseline Reports screen (Figure 4.3.3-28) to generate lists of the software items in a specified baseline or assembly. The COTS Software Version Baseline report lists COTS programs, while the Patch Baseline report lists patches. These reports list items according to function the item performs and provides key details about the item.

Specify the control item identifier and date of bill for the baseline or assembly of interest. Add a document number and/or note to be included on each page, as well as the number of report copies wanted. Enter “E” for execute, and XRP-II reports all the software and firmware items in the baseline or assembly.

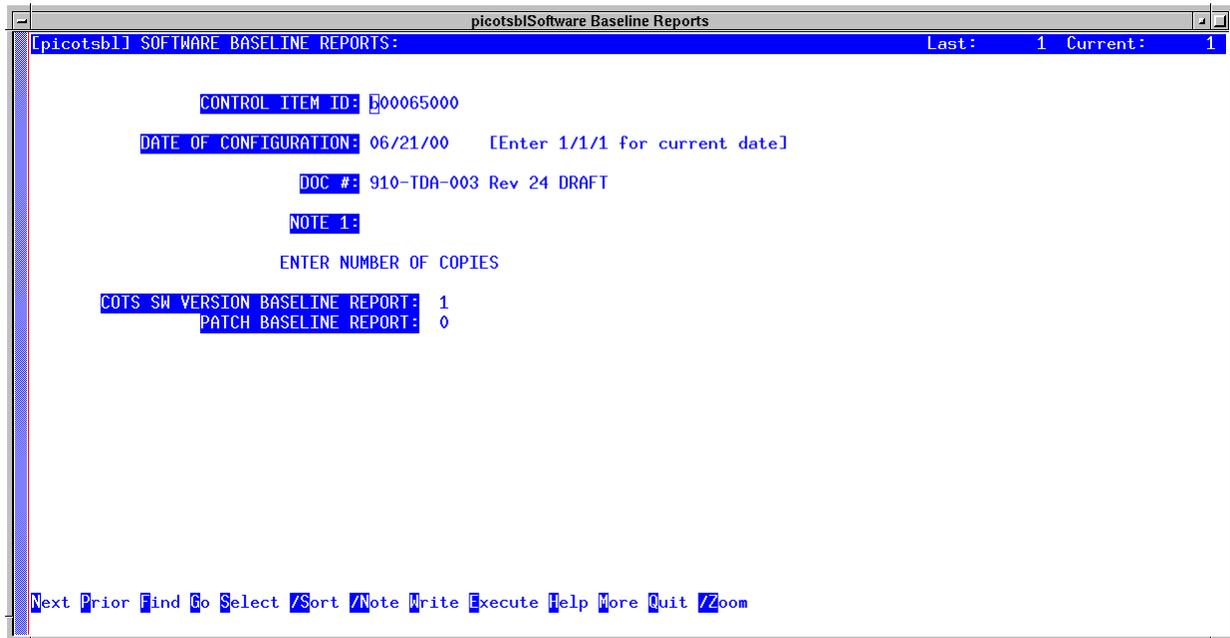


Figure 4.3.3-28. Software Baseline Reports CHUI

Table 4.3.3-16 describes the fields on the Software Baseline Reports screen.

Table 4.3.3-16. Software Baseline Reports Field Descriptions

Field Name	Data Type	Size	Entry	Description
Control item id	String	20	Required; zoom to select from a list of control items.	Unique code for a version- or configuration-controlled item.
Date of bill	Date		Required	“As of “ date used in selecting records from the configuration history of the control item.
Doc #	String	40	Optional	Textual information to be printed as the document number in the header of the report.
Note	String	40	Optional	Textual information to be added to the header of the report.
COTS SW version baseline report	Numeric	2	Required	Number of copies wanted.
Patch baseline report	Numeric	2	Required	Number of copies wanted.

4.3.3.2.9.10 Site - Host Maps Screen

Operators use the Site - Host Maps screen (Figure 4-3.3-29) to generate reports that identify which hosts at different ECS sites perform the same primary function in a specified baseline. Two report formats are available: one lists hosts for the operational sites, while the other includes hosts at select EDF facilities as well.

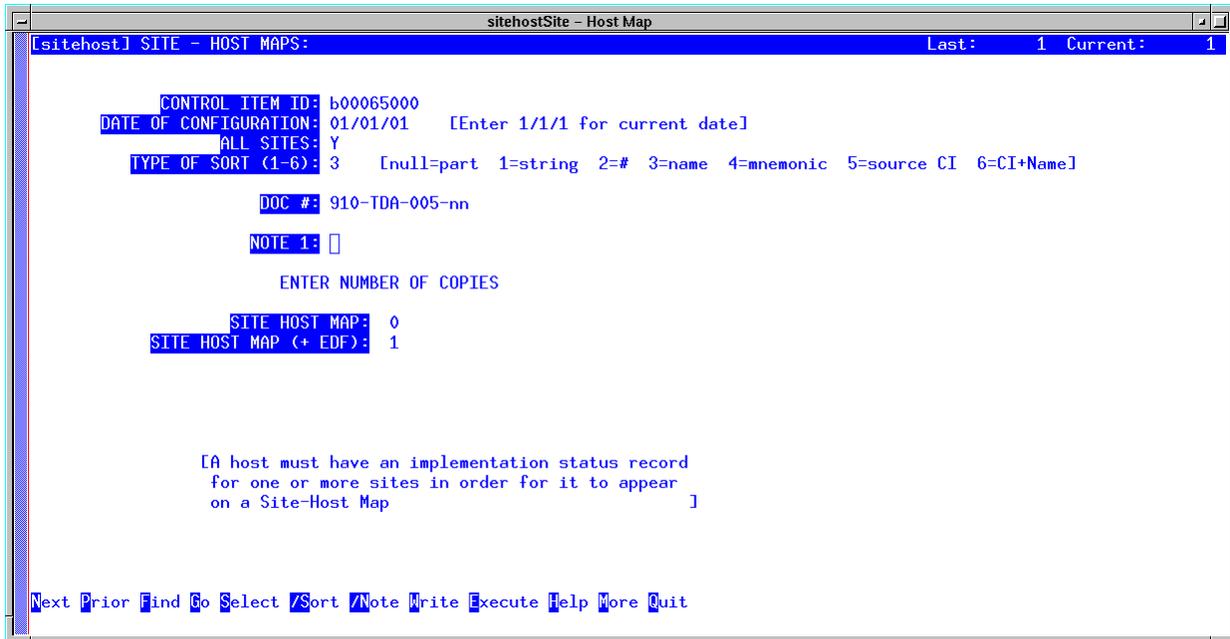


Figure 4.3.3-29. Site - Host Maps CHUI

Specify the control item identifier and date of bill for the baseline or assembly of interest, then specify whether data is to be retrieved for all sites for which there is data or just the local site. Next, enter “3” for the type of sort and, if desired, add a document number and/or note to be included in the header for each page in the report. Enter the number of copies for the desired report, then hit “E” for execute. XRP-II lists -- by subsystem, source CI, and function -- the hosts at each site that perform a given function.

Note: For a host to appear in the report, the database must contain at least one implementation status record designating a site at which the host is deployed.

Note: The screen allows the operator to specify an order in which data is to be presented. However, the report’s layout is best suited to reporting by name.

Table 4.3.3-17 describes the fields on the Site – Host Maps screen.

Table 4.3.3-17. Site - Host Maps Field Descriptions

Field Name	Data Type	Size	Entry	Description
Control item id	String	20	Required; zoom to select from a list of control items.	Unique code for a version- or configuration-controlled item.
Date of bill	Date	10	Required	“As of “ date used in selecting records from the configuration history of the control item.
All sites	String	1	Optional; Y or N; defaults to “N”	Code that specifies whether to report information about all sites or just the local site.
Type of sort (1-6)	String	1	Optional	Code that specifies the field(s) to be used in sorting the data for the report.
Doc #	String	40	Optional	Textual information to be printed as the document number in the header of the report.
Note 1	String	40	Optional	Textual information to be added to the header of the report.
Site - host map	Numeric	2	Required	Number of copies wanted.
Site - host map (+ EDF)	Numeric	2	Required	Number of copies wanted.

4.3.3.2.9.11 Baseline Documents Reports Screen

The Baseline Documents Reports screen (Figure 4-3.3-30) is used to list the documents that define a specific baseline. Presently, the relationship between a baseline and a set of baseline documents is implemented in XRP-II via its product structure feature. That is, a baseline is represented as a control item whose components include documents as well as hardware, software, and other system resources. A baseline documents report, therefore, is a specially formatted list of the documents in the bill of material for a baseline. Two reports are available, one sorted by document numbers and one sorted by title.

Specify the control item identifier and date of bill for the baseline or assembly of interest. Add a document number and/or note to be included on each page, as well as the number of copies of each report wanted. Enter “E” for execute, and XRP-II compiles the requested list of documents together with key details about each.

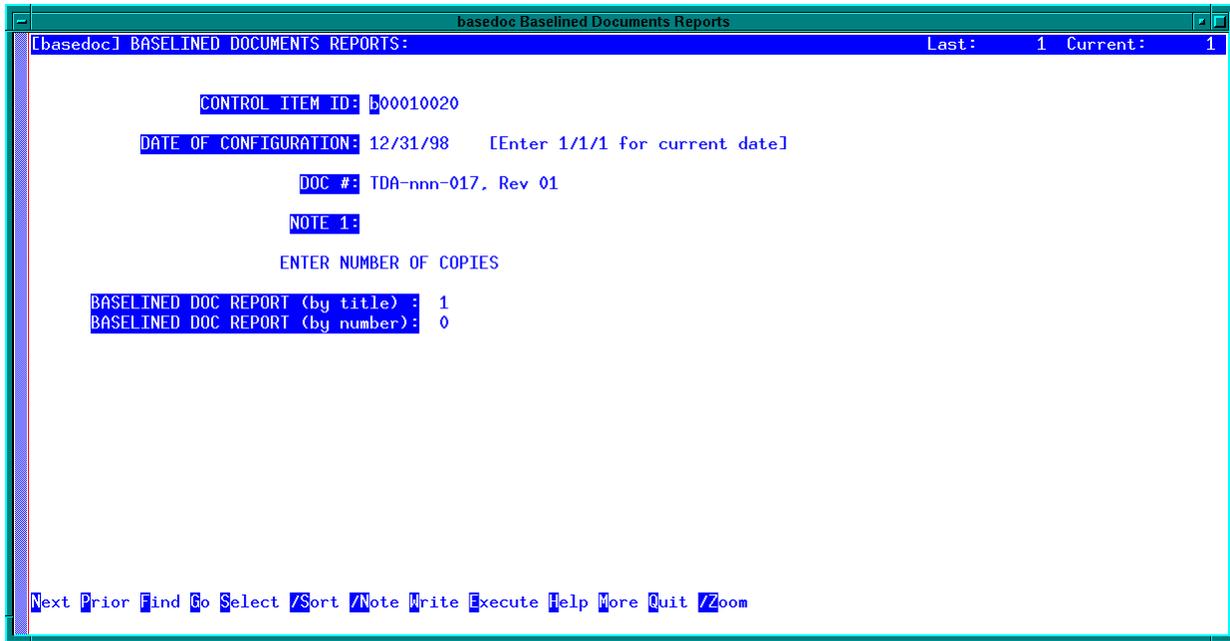


Figure 4.3.3-30. Baseline Documents Reports CHUI

Table 4.3.3-18 describes the fields on the Baseline Documents Reports screen.

Table 4.3.3-18. Baseline Documents Reports Field Descriptions

Field Name	Data Type	Size	Entry	Description
Control item id	String	20	Required; zoom to select from a list of control items.	Unique code for a version- or configuration-controlled item.
Date of configuration	Date	10	Required	“As of “ date used in selecting records from the configuration history of the control item.
Doc #	String	40	Optional	Textual information to be printed as the document number in the header of the report.
Note 1	String	40	Optional	Textual information to be added to the header of the report.
Baseline report (by title; by number)	Numeric	2	Required	Number of copies wanted.

4.3.3.2.10 Utilities (Perform Baseline Management Master Files Maintenance)

XRP-II groups together several programs that help standardize values for certain baseline management data, support product structure administration, and manage types of data for which a separate menu is not warranted. The screens supporting these programs are accessed via the Utilities menu (Figure 4.3.3-31), except for the following, which are described in the XRP-II manuals:

- Unit of Measure Maintenance - maintains codes and descriptions for Baseline Manager's units of measure. These codes are used on bill of material data entry screens, which can access them via "zoom" command to facilitate data entry and promote data consistency. The screen is described in Section 3.2 of the *XRP-II Product Information Manual*.
- Unit of Measure Conversion - maintains factors used for converting between units of measure. This standard XRP-II capability, not used by Baseline Manager, is retained for use with inventory, logistics, and maintenance management functions scheduled for delivery in Version 2.0. It is described in Section 3.3 of the *XRP-II Product Information Manual*.
- Control Item Date Manager - supports a utility that is functionally equivalent to the Part Master Date Maintenance utility described in section 4 of the *XRP-II Product Information Manual*. The utility cycles through product structure and product history files, determining the earliest and latest dates on which each control item is employed as a parent or component, and updates the active and inactive dates in the control item records accordingly. This utility should be run periodically (perhaps monthly), but need only be run if any product structures have been (or may have been) deleted, or if the bill of material screen "Replace a Component in All Bills" has been used. This utility is described in Section 7.2 of the *XRP-II Product Information Manual*.

The sections that follow describe other Utility menu screens.

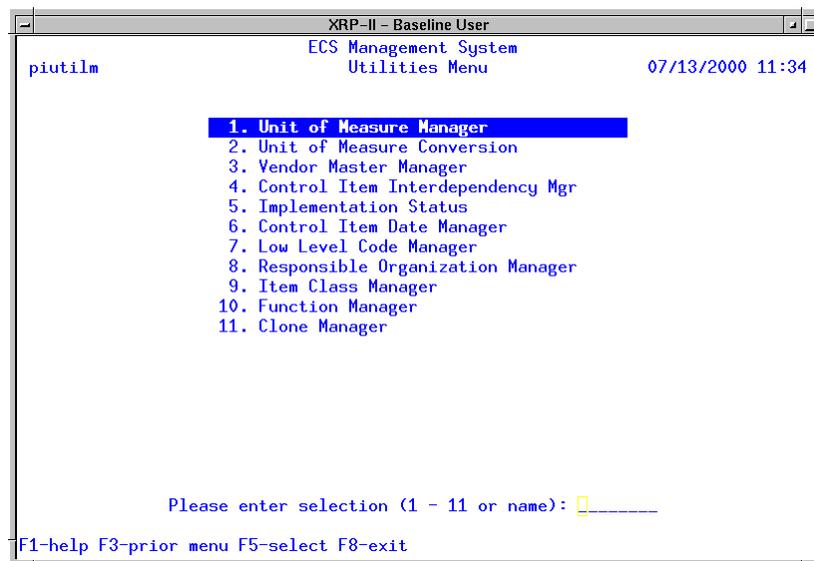


Figure 4.3.3-31. Utilities Menu CHUI

4.3.3.2.10.1 Vendor Master Manager Screen

This screen (Figure 4-3.3-32) maintains a list of companies to facilitate entering manufacturer and developer codes for control items and to promote data consistency across control item records. An operator updating the control item catalog can select manufacturer/developer codes from this list via the /ZOOM command on control item master screens (see Section 4.3.3.1.3).

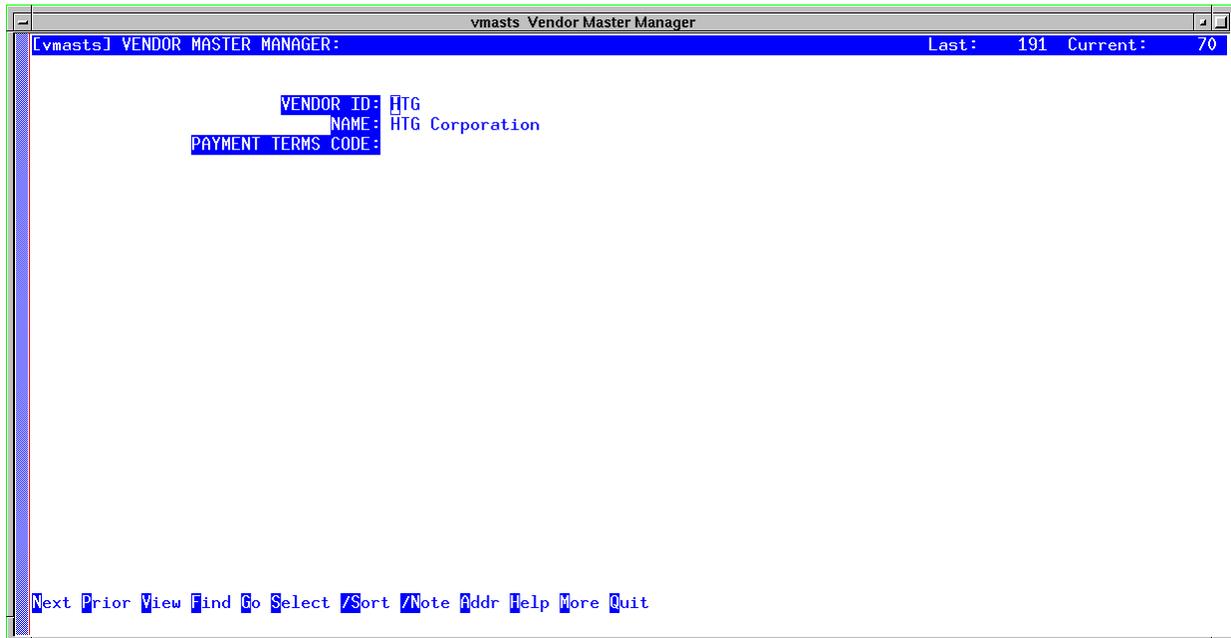


Figure 4.3.3-32. Vendor Master Manager CHUI

Use this screen to update the list of manufacturers or developers, giving each a unique identification number. Then use the bottom-line command **Addr** to navigate to the Vendor Address Maintenance screen (Figure 4.3.3-33), which can record one or more addresses for the company. Fill out the address form, entering or letting XRP-II assign a new sequence number for each distinct address record being added. (XRP-II recognizes sequence number “0” as the company’s default or principal address.) When done, exit the address screen, and either edit another vendor record or exit to the Utilities menu.

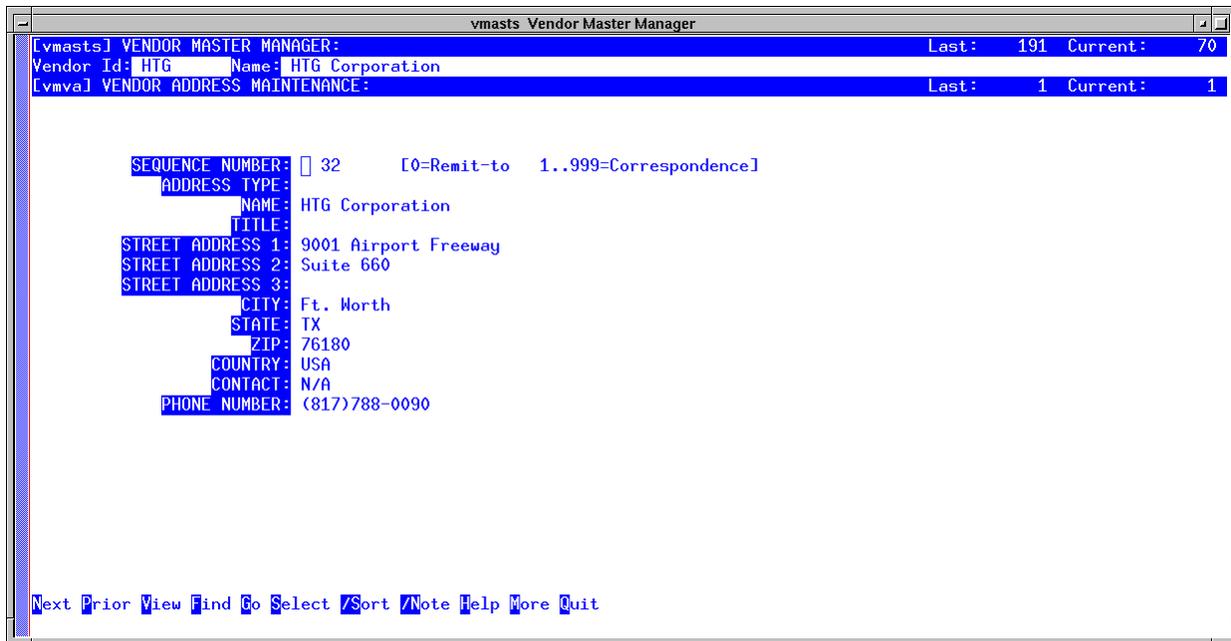


Figure 4.3.3-33. Vendor Address Maintenance CHUI

Tables 4-3.3-19 and 4.3.3-20 describe the fields for the Vendor Master Manager and Vendor Address Maintenance screens, respectively.

Table 4.3.3-19. Vendor Master Manager Field Descriptions

Field Name	Data Type	Size	Entry	Description
Vendor id	String	6	Required	Coded name of the company/organization that produced a control item.
Name	String	30	Optional	Name by which a specific manufacturer or developer is known.
Payment terms code	String	2	Optional	Code identifying the default payment terms for the vendor's invoices. The code must exist in the terms/conditions table, accessed via the Sales/Purchase Terms Maintenance data entry screen.

Table 4.3.3-20. Vendor Address Maintenance Field Description

Field Name	Data Type	Size	Entry	Description
Sequence number	Numeric	3	Mandatory	Number that uniquely identifies each address for a company. The value "0" is interpreted as the default.
Address type	String	2	Optional	Code that distinguishes among purposes for which the address is used.
Name	String	30	Optional	Company name or individual's name that appears as the first line of the address.
Title	String	20	Optional	Title of an individual.
Street address 1,2,3	String	30	Optional	Address for the vendor.
City	String	20	Optional	Name of the city in which the vendor is located.
State	String	2	Optional	Abbreviation for the state in which the vendor is located.
Zip	String	10	Optional	Postal code used by the vendor.
Country	String	16	Required	Country in which the vendor is located.
Contact	String	30	Optional	Name of a contact at the address.
Phone number	String	18	Optional	Telephone number of the contact.

4.3.3.2.10.2 Control Item Interdependency Maintenance Screen (Update Dependencies among Control Items)

Individual control items can have relationships -- or interdependencies -- among each other that need to be tracked. For example, application software needs certain operating system versions in order to function correctly, specification documents are associated with specific subsystems and configuration items, certain manuals describe particular configured articles, and each operational baseline derives from a specific release baseline.

XRP-II correlates interdependent pairs of control items via the Control Item Interdependency Maintenance screen. The screen is accessible from the Utilities menu and is described along with other baseline management utilities within Section 4.3.3.2.10.

This screen (Figure 4.3.3-34) maintains information about dependencies between any two controlled items. Any control item pair can have multiple dependency relationships; however, each of the control items must exist in the control item catalog. Dependency types are operator-specified and non-constrained. Baseline Manager does not maintain an on-line chronological history of dependencies or dependency changes for a control item, but records can be both downloaded and printed so they can be saved for historical purposes.

Use this screen to add, delete, modify, or browse dependency records. When a control item identifier is entered, XRP-II displays its description, version, name, and revision.

The table view is particularly well suited for displaying lists of all dependencies associated with a given control item. Placing the cursor on either of the control items activates the bottom-line commands "Where" and "Bom". Use **where** to view product structure records in which the

control item is a component in some other item's bill of material. Use **Bom** to view product structure records in which the control item is a parent with a bill containing other control items.

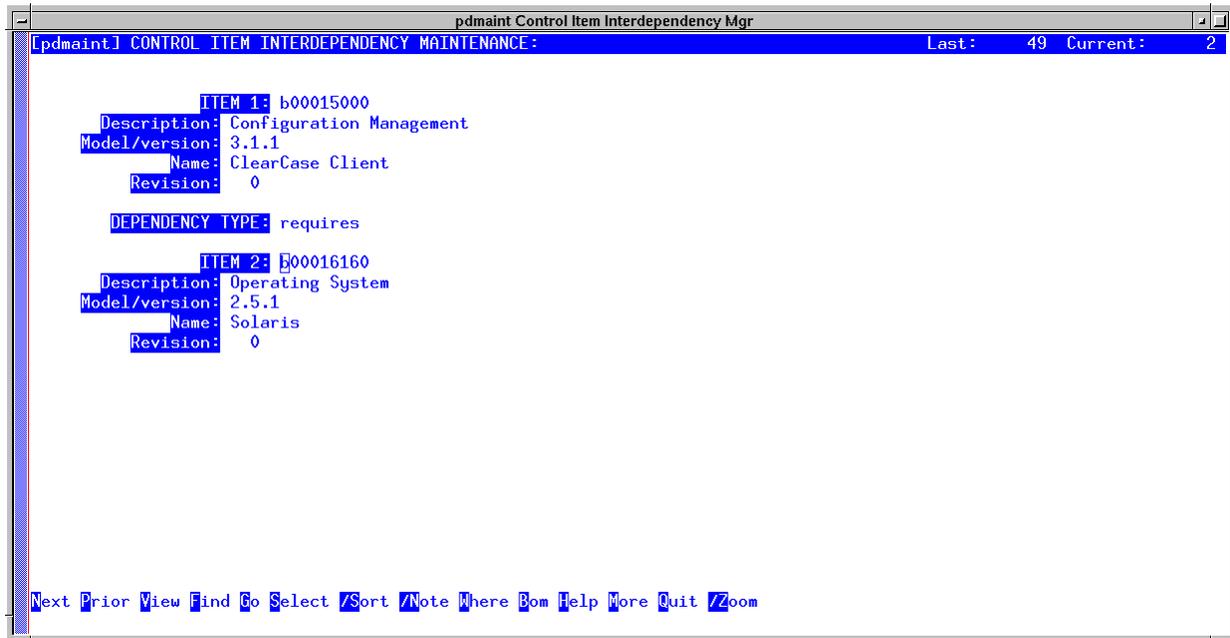


Figure 4.3.3-34. Control Item Interdependency Maintenance CHUI

Table 4.3.3-21 describes the fields on the Control Item Interdependency Maintenance screen.

Table 4.3.3-21. Control Item Interdependency Maintenance Field Descriptions

Field Name	Data Type	Size	Entry	Description
Item 1	String	20	Required; zoom to select from control items list.	Unique code for a version- or configuration-controlled item (normally, a control item id) that is the subject of the dependency relationship.
Description	String	54	System supplied	Textual characterization of an entity.
Model/version	String	24	System supplied	Textual identifier for a level of functional capability for a control item.
Name	String	24	System supplied	Name by which a specific item, engineer, or vendor is known.
Revision	String	3	System supplied	Identifier for the currently active revision level of the item's product structure.
Item 2	String	20	Required; zoom to select from control items list.	Unique code for a version- or configuration-controlled item (normally, a control item id) that is the object of the dependency relationship.
Dependency type	String	20	Required	Code or nomenclature describing the relationship between two control items.

4.3.3.2.10.3 Implementation Status Screen (Maintain Control Item Implementation Status Data)

Baseline Manager can maintain status information about the implementation of control items. For each item, an operator can create a record for a site and specify its implementation status and installation date. Deployment records about core and site-specific control items would normally be maintained at the SMC and distributed whenever a set of release records is shipped to the sites. The implementation status of these items is maintained at the sites, as are like records about site-unique control items (those established at a site). Status updates for the site-unique control items are shipped to the SMC whenever site-unique changes are reported (see Sections 4.3.3.2.5 and 4.3.3.2.11.9). However, status updates that the sites make locally to release records maintained centrally by the SMC remain at the sites so that SMC deployment data is preserved.

Operators must maintain implementation status records because several Baseline Manager functions depend on them. For example, reports that list control items according to site are generated using these records to determine the site(s) under which the item should appear. This includes the Configuration Item List reports, the Configured Article List report, and the Version Description report. Also, the resource configuration file created for resource planners is built using these records to determine which of the site's operational baseline records has "production" status.

Operators use the Implementation Status Maintenance data entry screen to create and update these records. This screen can be accessed via the Utilities menu and is described in Section 4.3.3.2.10.3.

The screen shown in Figure 4.3.3-35 maintains information about the deployment and implementation of control items system-wide. One record can be created for each control item for each site. The control item must exist in the control item catalog, and the site must exist in the site list (see Section 4.3.3.2.11.8). Baseline Manager does not maintain a chronological history of implementation status data or implementation status data changes for a control item or site.

The following bottom-line command is unique to this screen:

- **.Create** - creates an implementation status record for an operator-specified control item and site, and for each component in the control item's bill of materials. This function does not create or modify a record if it finds that the record already exists.

Use this screen to maintain and browse all control item implementation status records. Table view can display comprehensive lists of the sites to which a control item is (being) deployed and of the control items (being) deployed to a site. Whenever a set of implementation status records is needed for a new control item, type **".C"** and answer XRP-II's prompts for data values to be used when creating the records.

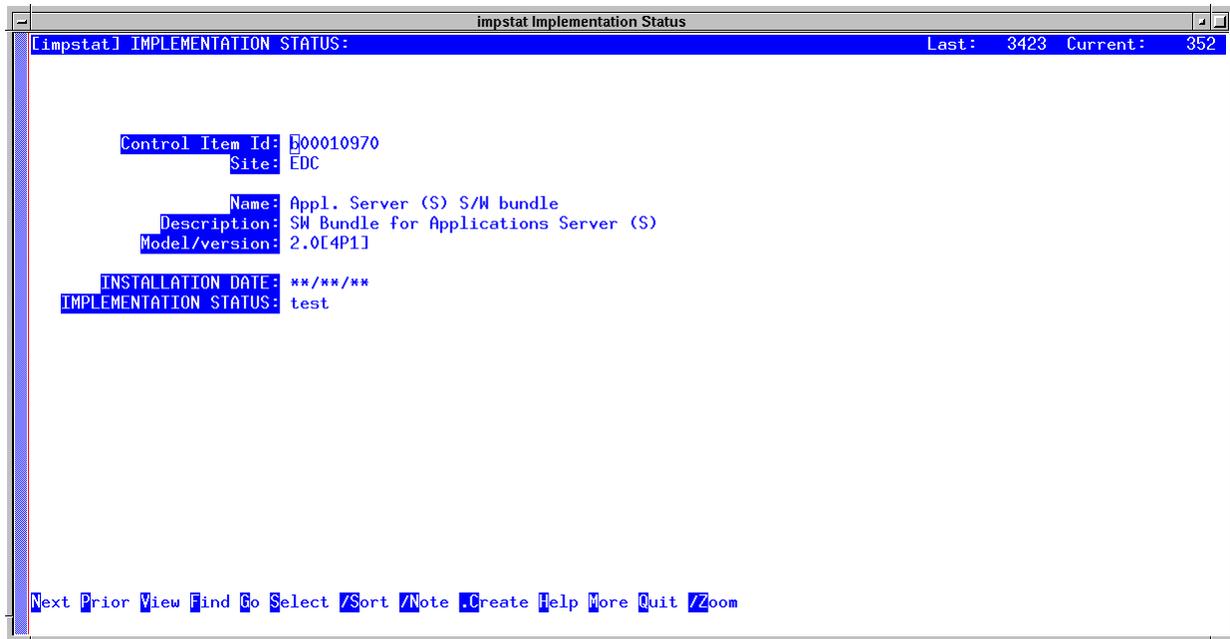


Figure 4.3.3-35. Implementation Status CHUI

Note: The field “Implementation Status” has special significance in extracting resource profiles for resource planners. Control records are selected only if the items they describe are in the bill of materials of site operational baselines whose implementation status is “production”.

Note: A control item must have at least one implementation status record in order to be listed properly in reports whose data are sorted by site.

Table 4.3.3-22 describes the fields on the Implementation Status screen.

Table 4.3.3-22. Implementation Status Field Descriptions (1 of 2)

Field Name	Data Type	Size	Entry	Description
Control item id	String	20	Required; zoom to select from control items list.	Unique code for a version- or configuration-controlled item.
Site	String	6	Required; zoom to select from a list of sites.	Mnemonic or short name for an ECS site.
Name	String	54	System supplied	Name by which a specific control item is known.
Description	String	54	System supplied	Textual characterization of an entity.

Table 4.3.3-22. Implementation Status Field Descriptions (2 of 2)

Field Name	Data Type	Size	Entry	Description
Model/version	String	24	System supplied	Textual identifier for a level of functional capability for a control item.
Installation date	Date	N/A	Optional	Designated date a control item is to be or was installed at a site.
Installation date	Date	N/A	Optional	Designated date a control item is to be or was installed at a site.
Installation date	Date	N/A	Optional	Designated date a control item is to be or was installed at a site.
Implementation status	String	20	Optional	Classification of a control item according to operational life cycle state (e.g., projected, installed, production, test, maintenance, inactive).

4.3.3.2.10.4 Low Level Code Manager Screen

This utility (Figure 4.3.3-36) is equivalent to the Low Level Code Maintenance utility described in Section 4 of the *XRP-II Product Information Manual*, except options not yet described in the manual are now available for specifying a subset of records to process. It regenerates low-level codes maintained in the control item master file by the system logic to improve the efficiency of certain XRP-II processing (see Section 4.2 of the *XRP-II Product Information Manual*). Low level codes do not affect Baseline Manager functions; however, they appear in the headers of bill of material and where-used reports, where they identify the deepest level at which a subject control item is found in any recorded product structure tree.

This utility should be run periodically (perhaps monthly), but need only be run if any product structure records have been (or may have been) deleted. The data entry screen explains the options operators have.

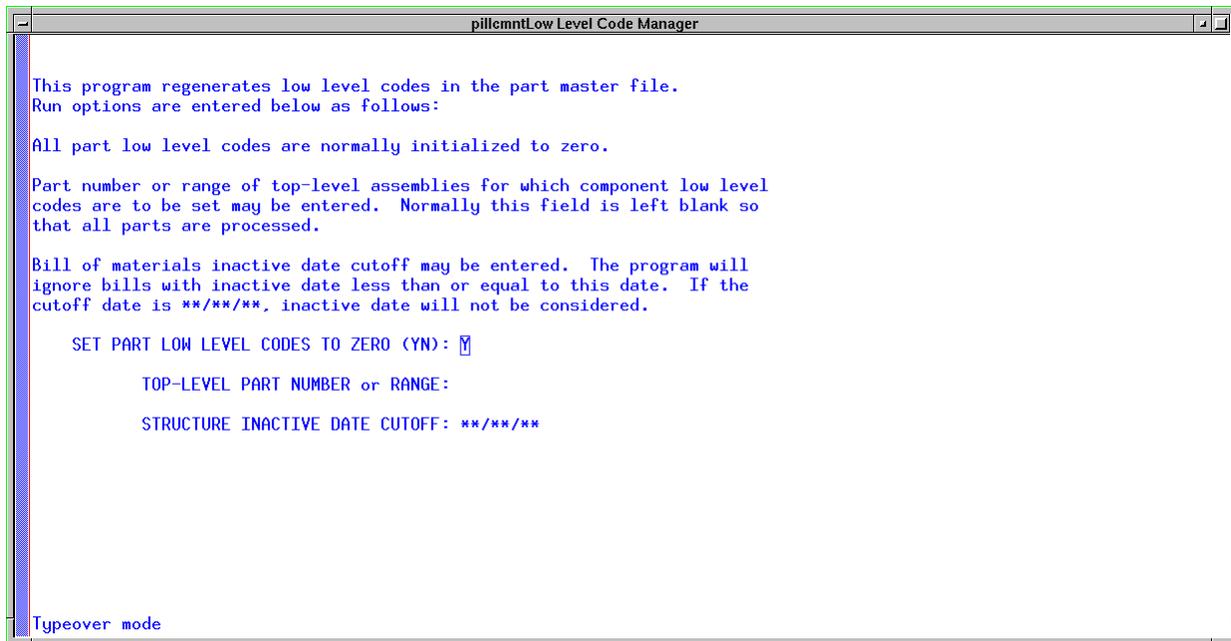


Figure 4.3.3-36. Low Level Code Manager CHUI

4.3.3.2.10.5 Responsible Organization Maintenance Screen

This screen (Figure 4.3.3-37) maintains data about individuals in order to facilitate identifying points of contact for individual control items. An operator updating the control item catalog can select a code for an engineer from this list via the */Zoom* command on control item master screens.

Use this screen to update the list of organizations responsible for control items.

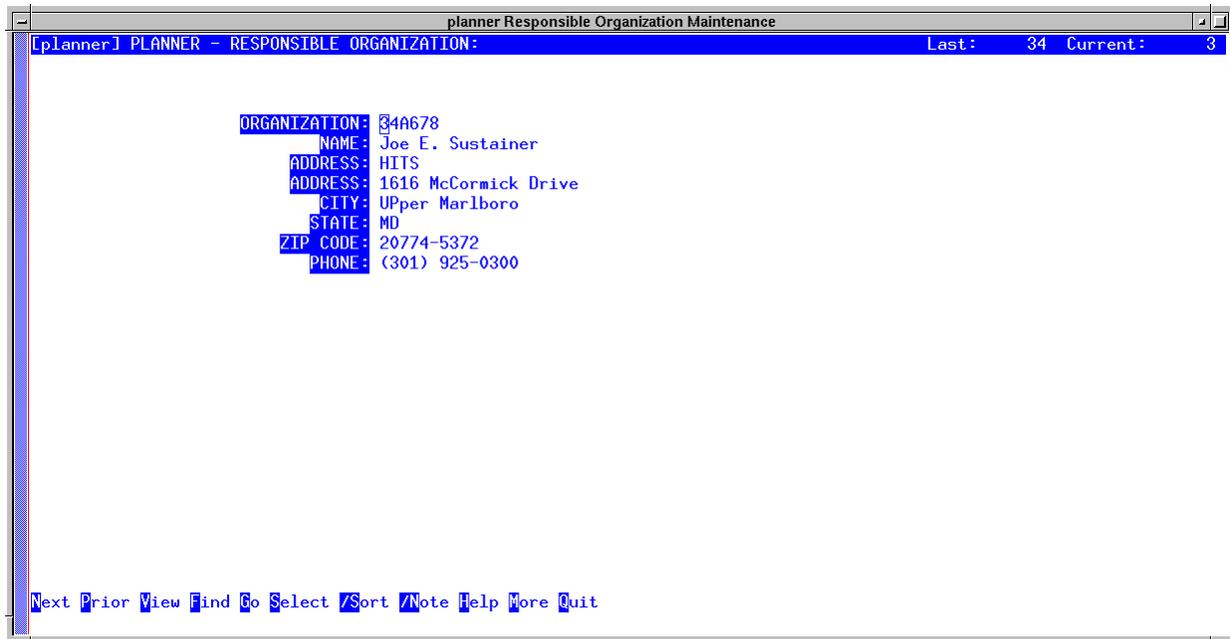


Figure 4.3.3-37. Responsible Organization CHUI

Table 4.3.3-23 describes the fields on the Responsible Organization screen.

Table 4.3.3-23. Responsible Organization Field Descriptions

Field Name	Data Type	Size	Entry	Description
Organization	String	6	Required	Organization or task code of an engineer assigned responsibility for a control item.
Name	String	30	Optional	Name of the responsible engineer.
Address	String	30	Optional	Street address where the responsible engineer is located.
City	String	20	Optional	Name of the city in which the responsible engineer is located.
State	String	2	Optional	Name of the state in which the responsible engineer is located.
Zip	String	10	Optional	Postal code where the responsible engineer is located.
Phone	String	18	Optional	Phone number for the responsible engineer.

4.3.3.2.10.6 Item Class Manager Screen

The Item Class Manager screen (Figure 4.3.3-38) maintains a list of names used to classify control items. Operators use the names for grouping and sorting records, while XRP-II uses them to determine which records to display for the various Control Item Master and Query screens. The names can be selected from a pick list on Control Item Master screens via a /Zoom command on Item Class fields.

Use the standard bottom-line commands to add, modify, delete, or browse item class records.

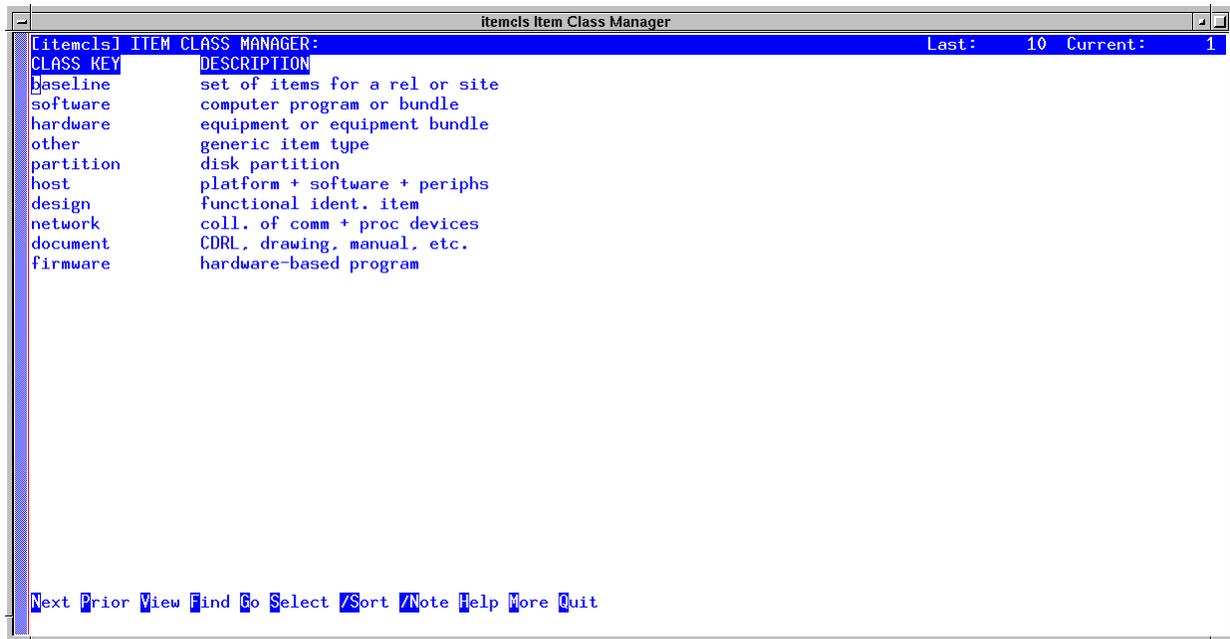


Figure 4.3.3-38. Item Class Manager CHUI

Table 4.3.3-24 describes the fields on the Item Class Manager screen.

Table 4.3.3-24. Item Class Manager Field Descriptions

Field Name	Data Type	Size	Entry	Description
Class key	String	16	Required	Identifier for a type of control item (e.g., baseline, hardware, software, documents, etc.).
Description	String	30	Optional	Textual characterization of a control item class.

4.3.3.2.10.7 Function Manager Screen

Operators use the Function Manager screen (Figure 4.3.3-39) to maintain a list of functions that control items perform. Operators use the names for grouping and sorting records, especially host records. The names are available to the Function field on Control Item Master screens to facilitate data entry and promote standardization.

Use the standard bottom-line commands to add, modify, delete, or browse function records.

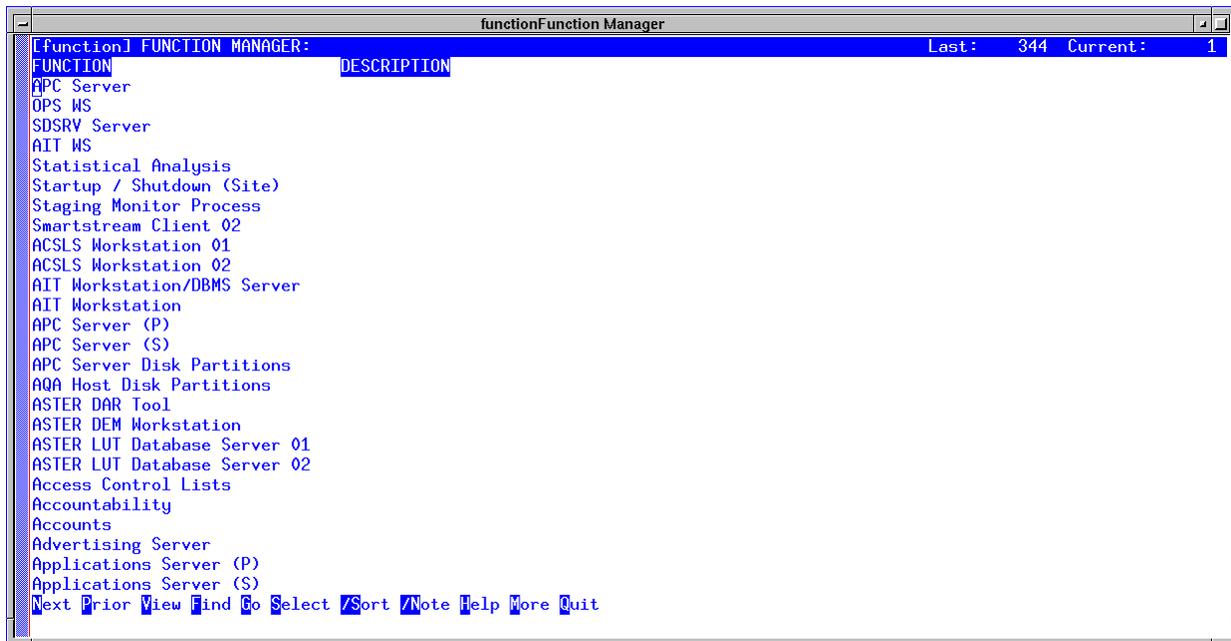


Figure 4.3.3-39. Function Manager CHUI

Table 4.3.3-25 describes the fields on the Function Manager screen.

Table 4.3.3-25. Function Manager Field Descriptions

Field Name	Data Type	Size	Entry	Description
Function	String	30	Required	Name of the primary job of a control item.
Description	String	30	Optional	Textual characterization of a control item class.

4.3.3.2.10.8 Clone Manager

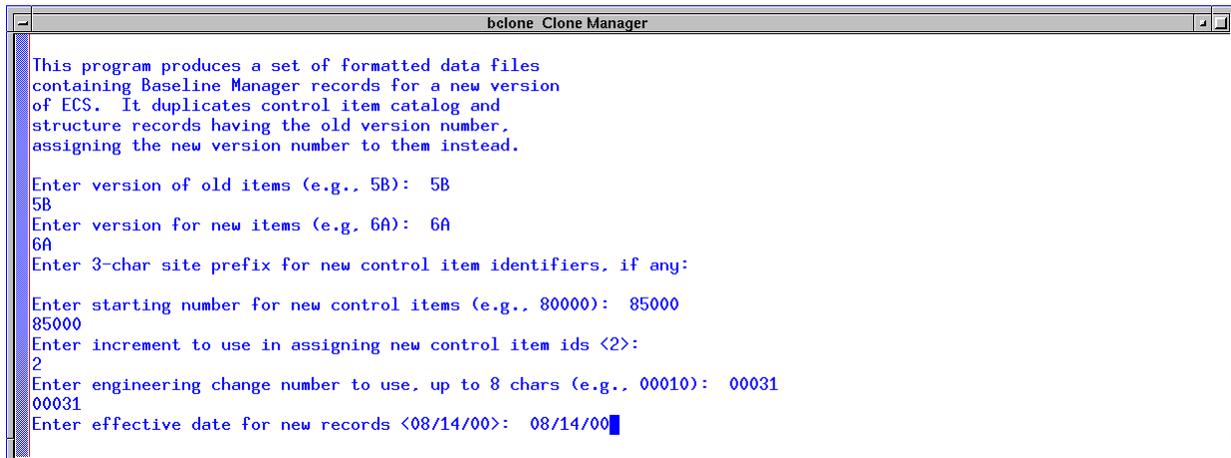
Operators use the Clone Manager screen (Figures 4.3.3-40 through 4.3.3-42) to generate a set of Baseline Manager records for a new system release based on the records for a prior one. The screen duplicates control item and product structure records for the earlier release, substituting a new version identifier in records having the version identifier of the old release. An interactive

script that guides operators through transactions using a series of system prompts supports the screen. Pressing <Enter> submits a response, evoking an informational message and the next prompt. The shell's interrupt key -- often <Ctrl-C> or -- exits the screen on demand. Table 4.3.3-26 describes the screen's fields.

The screen supports multiple transactions per session. When invoked, it asks for the components and the effective date for the transaction, then for the list of assemblies affected. It next generates and displays the data records to effect the change and offers operators a choice of reports they can review and/or print to help them decide whether or not to update the database. When the transaction is complete, operators can choose to perform another.

To perform a transaction after invoking the screen, first enter the input parameters (Figure 4.3.3-40). These include the:

- String of characters that defines the version of the release to clone. A new control item is defined for the items in the current control item catalog that have the string embedded in their version identifiers
- String of characters that defines the version of the new release. This string replaces the cloned release's string in clone records
- Prefix, starting number, and increment to use for generating identifiers for new control items. Three character prefixes are used to identify control item records owned by a local site rather than the central data manager (see section 4.3.3.5). Starting numbers are often batched in groups of 5000 to facilitate associating the numbers themselves with a particular release. And, an increment "2" typically keeps identifiers reasonably short while preserving an ability to insert additional items in close proximity to others that can be related.
- Engineering change number to associate with the new configuration (see section 4.3.3.2.2)



```
bclone Clone Manager

This program produces a set of formatted data files
containing Baseline Manager records for a new version
of ECS. It duplicates control item catalog and
structure records having the old version number,
assigning the new version number to them instead.

Enter version of old items (e.g., 5B): 5B
5B
Enter version for new items (e.g., 6A): 6A
6A
Enter 3-char site prefix for new control item identifiers, if any:

Enter starting number for new control items (e.g., 80000): 85000
85000
Enter increment to use in assigning new control item ids <2>:
2
Enter engineering change number to use, up to 8 chars (e.g., 00010): 00031
00031
Enter effective date for new records <08/14/00>: 08/14/00
```

Figure 4.3.3-40. Clone Manager CHUI (1 of 3)

- Effective date of the change. This is the date the product structure for all new baselines and assemblies become active. (Note that the system suggests the current date as the default. Just press <Enter> to use it.)

After all parameters have been entered, the system generates the clone records then present a menu of reports operators can run before the database is updated (Figure 4.3.3-41). The menu offers three reports that list the cloned items sorted by old ID numbers, name and new ID numbers, respectively. (Section NN has a sample of each.) Each report can be displayed on screen or directed to the printer. At the prompt to “Enter type of report...”, enter the appropriate number for the desired report, and press <Enter>. Next, enter “h” for hardcopy or “d” for display. Hardcopy reports print on the default print device as defined by the operator’s operating environment at the time the XRP-II session was started.

```

bclone Clone Manager
Enter effective date for new records <08/14/00>: 08/15/00
08/15/00

Dumping control item records from database...
Dumping pm records: 44600 44617 records dumped
Identifying control items to clone...1472 items qualify
Generating numbers for new control items...
Creating new control item master records...wrote 1473 records (incl. header and multi-rec items) to /usr/tmp/pm.ascn
Creating new engineering change records...wrote 1473 records (including header) to /usr/tmp/ec.ascn
Dumping product structure records from database...
Dumping ps records: 25200 25209 records dumped
Creating product structure records for 6A...wrote 8386 records (incl. header and multi-rec items) to /usr/tmp/ps.ascn

You can choose to run one or more of the following
Clone Manager reports:

    1. List by Old Numbers
    2. List by Name
    3. List by New Numbers

Enter type of report to run or ^c^ to continue: 1
1

Enter ^h^ for hardcopy or ^d^ for display <d>: h
h

request id is mango-6513 (standard input)

```

Figure 4.3.3-41. Clone Manager CHUI (2 of 3)

When satisfied that release records were cloned as expected, type “Y <Enter>” at the prompt to update the database (Figure 4.3.3-42), and the system reports progress and exits the screen when done. However, if a problem is detected when examining the reports, type “N <Enter>” to abandon the records and quit instead.

```

bclone Clone Manager
request id is mango-6514 (standard input)

You can choose to run one or more of the following
Clone Manager reports:

    1. List by Old Numbers
    2. List by Name
    3. List by New Numbers

Enter type of report to run or ^c to continue: c
c

Update database (Y/N)? Y
Y
Loading clone records...
pm :
Loading records: 1400
1472 records processed, 1472 added, 0 modified
ec :
Loading records: 1400
1472 records processed, 1472 added, 0 modified
ps :
Loading records: 8100
8178 records processed, 8178 added, 0 modified
Finished.

```

Figure 4.3.3-42. Clone Manager CHUI (3 of 3)

Table 4.3.3-26 describes the fields on the Clone Manager screen.

Table 4.3.3-26. Clone Manager (1 of 2)

Field Name	Data Type	Size	Entry	Description
Component to replace	String	20	Required	Identifier of the control item to be rendered inactive in an assembly's bill of material.
Effective date	Date	2	Required	Date the configuration change is to take effect (<u>not</u> the date of the database change).
Replacement component	String	20	Required	Identifier of the control item to be made active in an assembly's bill of material.
Seq	String	3	System supplied	Identifier for a line in the list of first-level assemblies in which the component to replace is active as of the effective date.
Name	String	24	System supplied	Name by which a specific control item is known.
Model/version	String	24	System supplied	Textual identifier for a level of functional capability for a control item.
Var	String	4	System supplied	Name of the type of computer on which a software control item has been built to run.
Src CI	String	8	System supplied	Mnemonic of the HWCI or CSCI that owns the control item.

Table 4.3.3-26. Clone Manager (2 of 2)

Field Name	Data Type	Size	Entry	Description
Control item id	String	20	System supplied	Unique code of the version- or configuration-controlled item listed as an assembly.
Enter one or more seq #s for assemblies to change	String	N/A	Required	List of sequence numbers that selects (or de-selects if corresponding items had already been selected previously) which assemblies the replacement is to affect.
The following product structure records have been generated	String	N/A	System supplied	Formatted records which, when loaded, implement the desired replacements. Each selected assembly requires two records -- one for removing the old component and one for adding the new. Fields 1, 2, 4, and 7 in each record are particularly significant, representing the assembly's identifier, the component's identifier, the active date for the parent-child relation, and the inactive date for the relation, respectively.
Update database	String	1	Required; Y/N	Code indicating whether the system is to use the generated records to update the database or to discard them.
Loading records	String	N/A	System supplied	Count of formatted records as they are being processed, in multiples of 100.
Records processed, added, modified	String	N/A	System supplied	Message providing final count of formatted records read for loading, how many caused new records to be added, and how many caused existing records to be updated.
Replace another component	String	1	Required; Y/N	Code indicating whether the system is to exit the screen or process another replacement transaction.

4.3.3.2.11 System Utilities Menu (Perform XRP-II Master File Maintenance)

XRP-II groups together several programs that help standardize values for all of XRP-II and support inter-site exchange of Baseline Manager data. The screens supporting these programs are accessed via the System Utilities menu (Figure 4-3.3-43). The System Defaults Manager, Note Code Maintenance, Data Delete Utility, and [Shop] Calendar Utility, and [Shop] Calendar Report screens are fully described in the *XRP-II System Reference Manual*. The remaining utilities are discussed in the sections that follow.

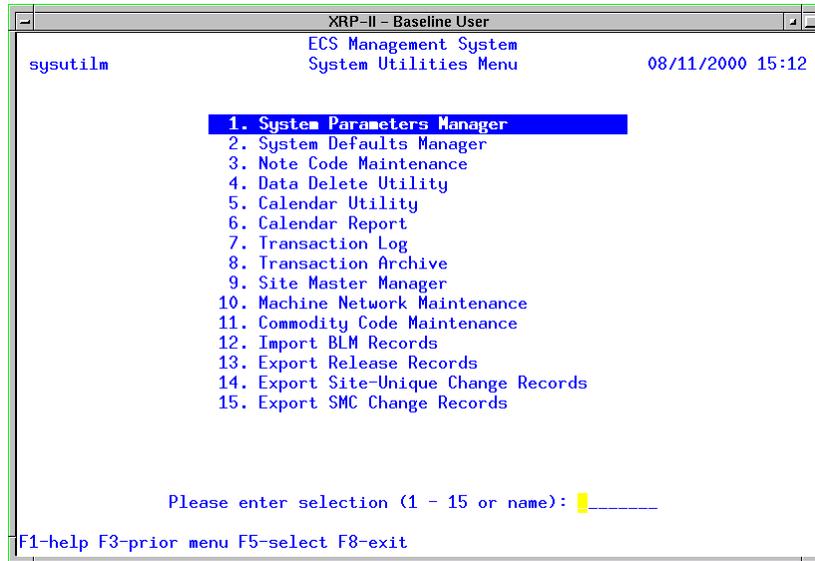


Figure 4.3.3-43. System Utilities Menu CHUI

4.3.3.2.11.1 System Parameters Manager Screen

The screen shown in Figure 4.3.3-44 maintains XRP-II parameters that can affect Baseline Manager and Inventory, Logistics, Maintenance Manager functionality. It is used primarily when first installing the system. Since Baseline Manager uses only a subset of the full XRP-II capabilities, this is a scaled down version of the screen described in Section 6 of the *XRP-II System Reference Manual*. It contains only the fields needed to tailor the system to the site at which it operates.

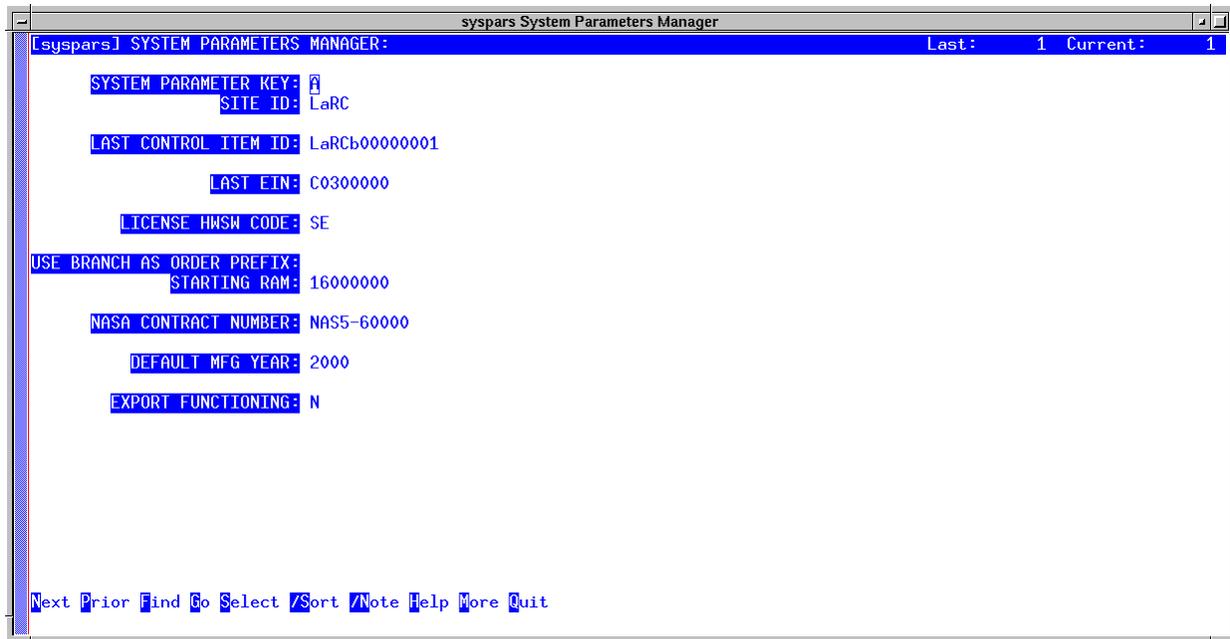


Figure 4.3.3-44. System Parameters Manager CHUI

Use the data entry screen's /M(odify) bottom-line command to change system parameters as needed. When making changes, use the field descriptions in Table 4.3.3-27 and the following as a guide:

- The system parameter key is the key field of the system parameter file. The value "A" designates the active record, which is set when the database is created.

Note: An active record must always be present in order for XRP-II to function.

- In the site identifier field, enter the code for the ECS site where the copy of XRP-II that the operator is using is installed. This data is used primarily in report headers and file names that XRP-II creates.

Note: The site identifier field must have an entry in order for Baseline Manager's data export processing to work properly.

- In the last control item identifier field, enter a value XRP-II is to use in determining the next available identifier when an operator requests a default for a new item being added or inserted in the control item catalog. The value must end in a numeral, which XRP-II automatically increments. This identifier should always have the site's designated prefix: the first three characters of the site identifier.
- The last EIN field is similar to the last control item identifier field, except it supports creating EIN records rather than control item records.

- Increase the value of the starting RAM field if XRP-II reports it cannot allocate sufficient memory when performing functions that process large bills of material.

Table 4.3.3-27 describes the fields on the System Parameters Manager screen.

Table 4.3.3-27. System Parameters Manager Field Descriptions

Field Name	Data Type	Size	Entry	Description
System parameter key	String	1	Required	Code that designates the active record in XRP-II's system parameter table.
Site id	String	6	Optional; zoom to select from a list of sites.	Code that identifies an ECS site.
Last control item id	String	20	Optional	Code used in determining the next sequentially available identifier when assigning control item identifiers automatically.
Last ein	String	14	Optional	Code used in determining the next sequentially available identifier when assigning ein numbers automatically.
License hws code	String	10	Optional	Code used as the default HDWSFT value when creating license entitlement records.
Use branch as order prefix	String	1	Optional; Y	Code that, if "Y", causes all purchase orders, work orders, and sale orders to be prefixed with the site code of the user or, if null, the default site code.
Starting RAM	Numeric	8	Optional	Initial amount of memory XRP-II is to use.
NASA contract number	String	60	Optional	Code that is used by NASA to identify the ECS contract and is attached to all property records.
Default mfg year	Numeric	4	Optional	Year used as default to identify when an item was built.
Export functioning	String	1	System supplied (but must be set to "N" manually when a data export attempt aborts); Y, N	Code that indicates if an XRP-II data "export" function is in progress; used to prevent multiple export routines being run concurrently.

4.3.3.2.11.2 Transaction Log Screen

The screen shown in Figure 4.3.3-45 allows operators to browse, and maintain if necessary, the database transaction log file. Values for all fields on this screen are system-supplied. When a

Note: Use Transaction Archive (Section 4.3.3.2.11.3) to remove obsolete transaction records. Transaction Archive preserves records that export utilities still need, and it saves a historical copy of the records it deletes.

Table 4.3.3-28 describes the fields on the Transaction Log screen.

Table 4.3.3-28. Transaction Log Field Descriptions

Field Name	Data Type	Size	Entry	Description
Transaction key	Numeric	5	System supplied	Number that uniquely identifies each update transaction.
Field number	Numeric	8	System supplied	Numerical identifier for the XRP-II field affected by the transaction.
Table name	String	10	System supplied	Name of the XRP-II table affected by the update transaction.
Operator id	String	8	System supplied	Userid of the operator making the update transaction.
Date	Date	N/A	System supplied	Date of the update transaction.
Time	Time	N/A	System supplied	Time of the update transaction.
Transaction type	String	1	System supplied	Code for the type of transaction: A (add), M (modify), or D (delete).
Transferred	String	1	System supplied	Code that indicates that the transaction has been analyzed by an export utility. "T" means the corresponding control item record has been exported, while "X" means it did not need to be exported.
Record location	Numeric	8	System supplied	Identifier for the relative record within the XRP-II table affected by the update transaction.
ILM	String	1	System supplied; Y, <NULL>	Code that distinguishes between ILM- and BLM-related log entries; "Y" signifies ILM.

4.3.3.2.11.3 Transaction Archive Screen

Control item data update transactions should periodically be deleted from the database after changed records have been exported. This makes room to log new transactions.

The Transaction Archive screen shown in Figure 4.3.3-46 copies to a named file the records of transactions that occurred on or prior to a specified cutoff date. It then deletes the records from the database.

Specify the date of the last transaction to archive and the name of a file in which to store the data.

Note: XRP-II only archives a transaction log record if its Transferred field contains the value “T” or “X”. The presence of a “T” or “X” means the record has been analyzed by a program for exporting records about control item changes to other sites (see Sections 4.3.3.2.11.8 and 4.3.3.2.11.9). Deleting unanalyzed transaction log records can cause incomplete data exchanges.

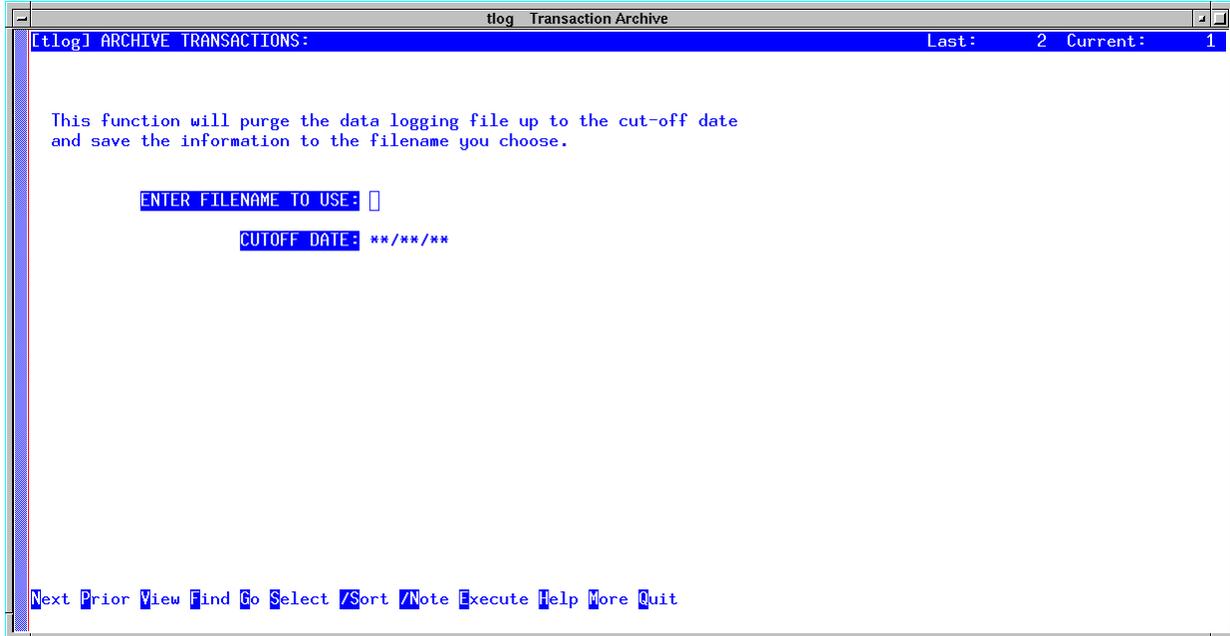


Figure 4.3.3-46. Transaction Archive CHUI

Table 4.3.3-29 describes the fields on the Transaction Archive screen.

Table 4.3.3-29. Transaction Archive CHUI Field Descriptions

Field Name	Data Type	Size	Entry	Description
File name	String	8	Required	Name of the file in which to store transaction records being archived.
Cutoff date	Date	N/A	Required	Date of the most recent transaction to be archived.

4.3.3.2.11.4 Site Master Manager Screen

The Site Master Manager screen (Figure 4.3.3-47) lets operators maintain an index of ECS-related sites. This index, which identifies details about each site, also serves as a pick list to facilitate entering control item implementation status data and report generation parameters on other screens. This screen is identical to the Branch Master Maintenance screen described in Section 6.8 of the *XRP-II System Reference Manual*, except that the term “site” is used in lieu of “branch” and the tax code field has been deleted. Baseline Manager does not implement the

organizational branch processing described in the *XRP-II System Reference Manual*. Rather, it uses site identifiers during data export operations to determine if a control item identifier or engineering change number is site-unique.

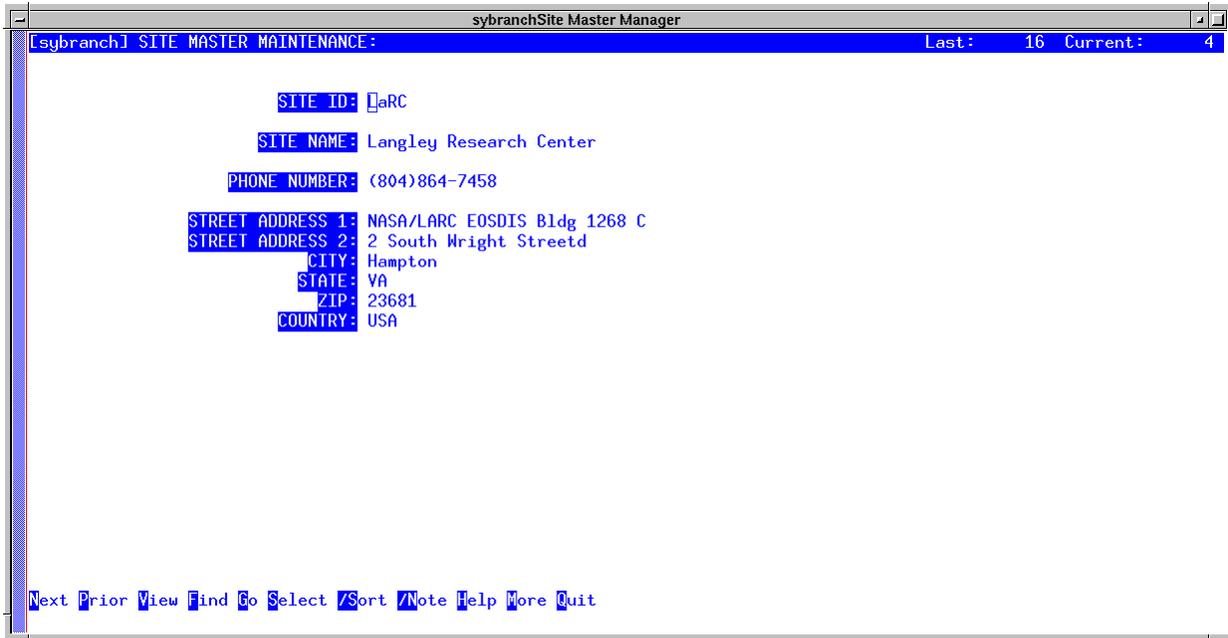


Figure 4.3.3-47. Site Master Manager CHUI

Table 4.3.3-30 describes the Site Master Manager fields that were tailored for ECS.

Table 4.3.3-30. Site Master Manager Field Descriptions

Field Name	Data Type	Size	Entry	Description
Site id	String	6	Required	Code that uniquely identifies an ECS site.
Site name	String	46	Optional	Full name of an ECS site.
Phone number	String	8	Optional	Phone number of a point of contact at the site.
Street address	String	30	Optional	Address for the site.
City	String	20	Optional	Name of the city in which the site is located.
State	String	2	Optional	Abbreviation for the state in which the site is located.
Zip	String	10	Optional	Postal code for the site.
Country	String	16	Optional	Code for the country in which the site is located.

4.3.3.2.11.5 Machine Network Maintenance Screen

Operators use the Machine Network Maintenance screen (Figure 4.3.3-48) to keep a list of MSS CM Server hosts to which Baseline Manager records are usually shipped. The three data entry screens that export Baseline Manager data use the list (see Sections 4.3.3.2.11.8 - 10). The list is not required; it exists primarily to support /Zoom commands that help operators specify a target host(s) to which exported Baseline Manager records are to be sent.

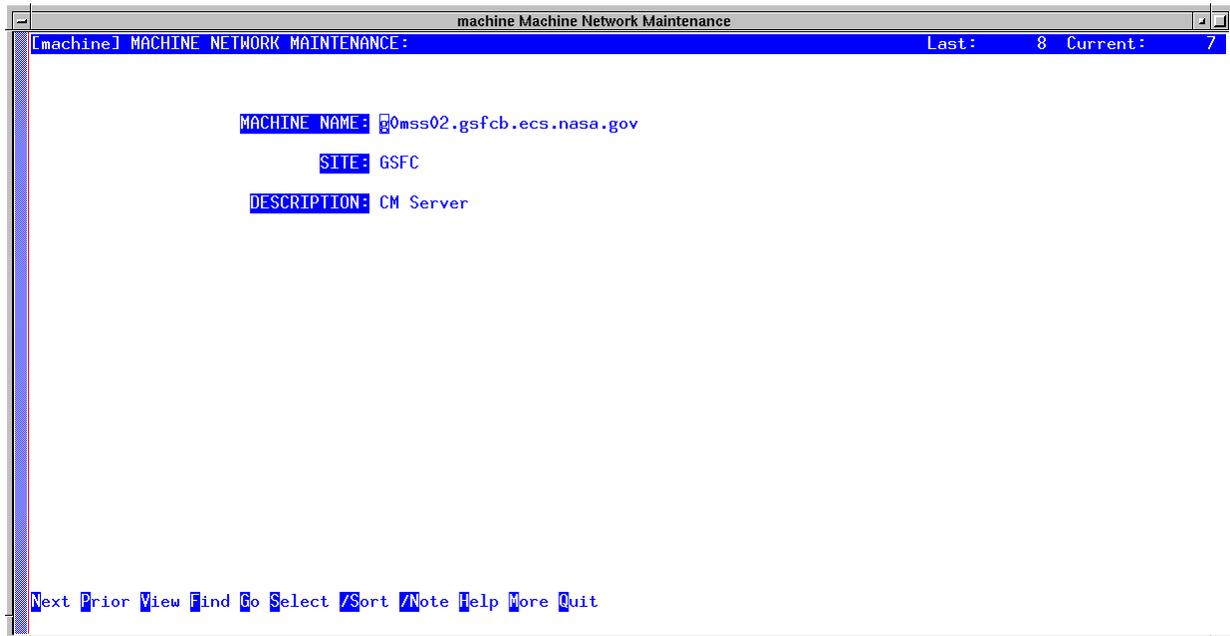


Figure 4.3.3-48. Machine Network Maintenance CHUI

Table 4.3.3-31 describes the Machine Network Maintenance fields that were tailored for ECS.

Table 4.3.3-31. Machine Network Maintenance Field Descriptions

Field Name	Data Type	Size	Entry	Description
Machine name	String	32	Required	Full, network-addressable name of a host.
Site	String	6	Optional; zoom to select from a list of sites.	Code that uniquely identifies an ECS site.
Description	String	30	Optional	Textual characterization of a host machine.

4.3.3.2.11.6 Commodity Code Maintenance Screen

The Commodity Code Maintenance screen (Figure 4.3.3-49) maintains standard codes and names that are used to classify a control item according to how it was procured or obtained for a project. This data, used as a pick list by control item update screens, promotes data standardization and facilitates recording control item data.

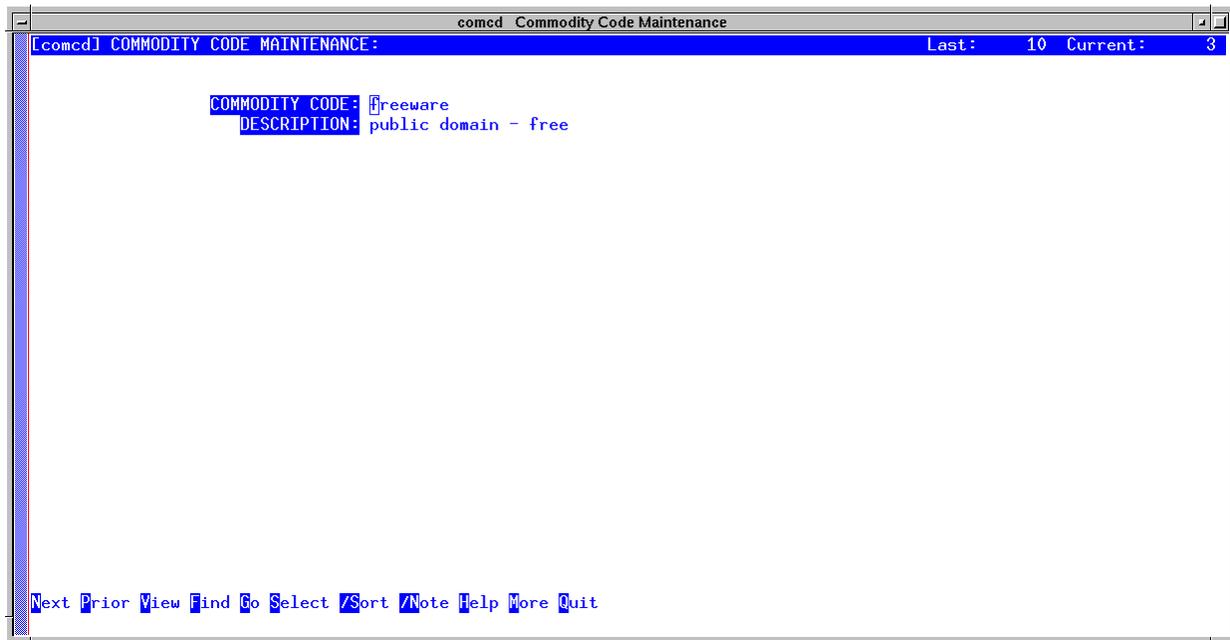


Figure 4.3.3-49. Commodity Code Maintenance CHUI

Use this screen to update the list of commodity codes to use for control items. Table 4.3.3-32 describes its data entry fields.

Table 4.3.3-32. Commodity Code Maintenance Field Descriptions

Field Name	Data Type	Size	Entry	Description
Commodity code	String	8	Required	Classification for how a control item was produced or obtained (e.g., COTS, heritage, GFE, custom, mod-COTS, shareware, freeware, etc.).
Description	String	20	Optional	Full name for the commodity type.

4.3.3.2.11.7 Import BLM Records Screen (Incorporate Release/Baseline Change Records Into XRP-II)

Occasionally, Baseline Manager data is exchanged among ECS sites in support of a new release being distributed to the sites or a consolidation of site baseline changes at the SMC. XRP-II's Import BLM Records utility is designed to load data from tar files that had been created and forwarded using either of XRP-II's two Baseline Manager data export utilities (see sections 4.3.3.2.11.8 and 4.3.3.2.11.9).

The screen shown in Figure 4.3.3-50 initiates the import process. Entering "Y" at the prompt causes XRP-II to process all files in the directory named in the IMPORTPATH environment variable. Import tar files -- whose names indicate the date and time they were made -- are processed in chronological order as determined from their file names. Upon completion, the original files are moved to an archive directory named in the IMPORTARC environment variable.

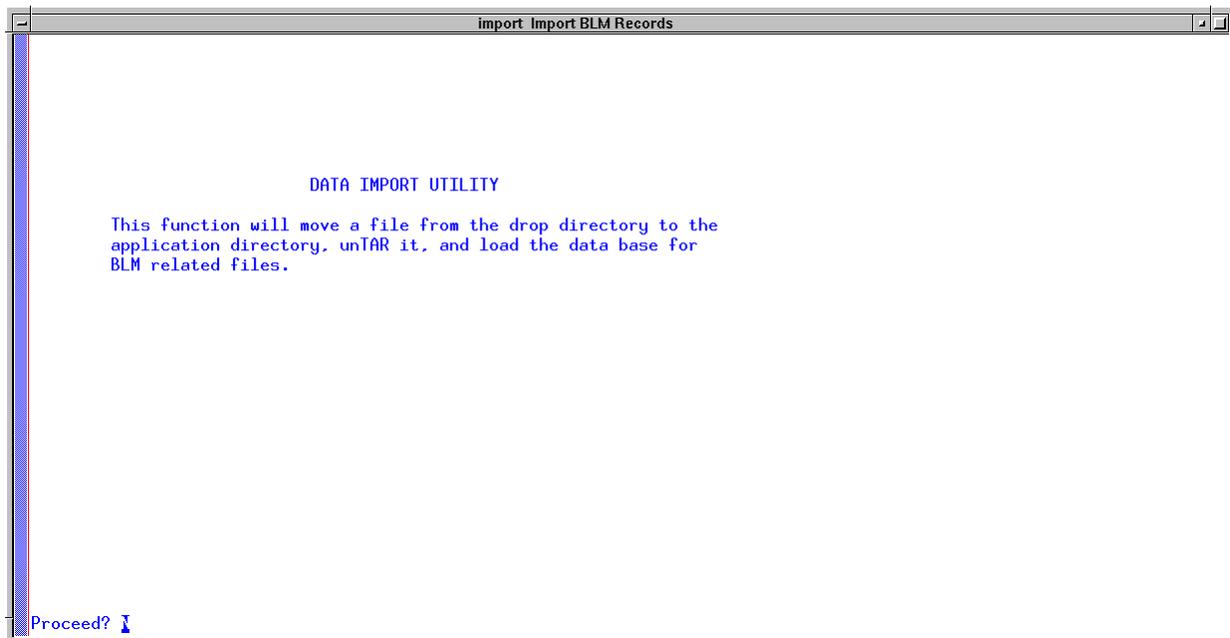


Figure 4.3.3-50. Import BLM Records CHUI

4.3.3.2.11.8 Export Release Records Screen (Distribute Baseline Change Records for a Release)

Appropriate baseline management data can be distributed to affected sites whenever a new baseline, configuration item, or other control item is released. This data includes control item catalog, product structure, engineering change, and implementation status records pertaining to the control item being released and all the items in its bill of materials.

The Export Release Records utility generates and tars formatted files that can be shipped to any ECS site for loading into XRP-II there. Operators use the screen in Figure 4.3.3-51 to produce files for distribution that contain records associated with the release of a specified baseline, configuration item, or other control item. Via a SEND NOW feature, operators can opt to have XRP-II transfer the files via ftp to as many as nine remote hosts.

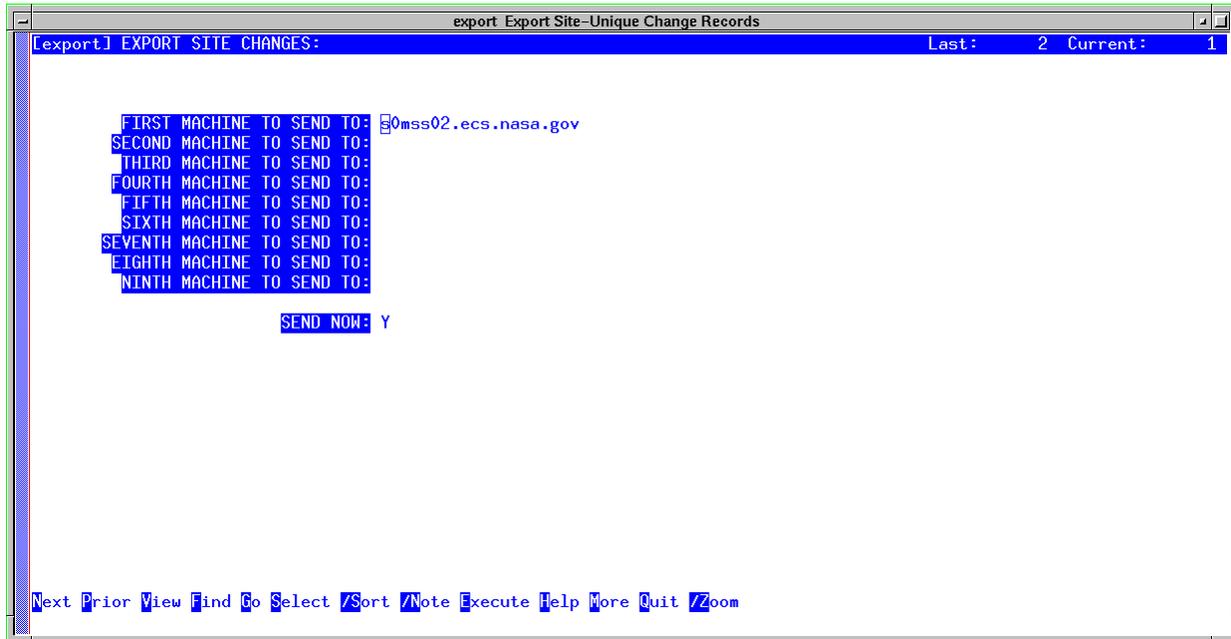


Figure 4.3.3-51. Export Release Records CHUI

The process entails extracting data about a specified item and all other items in its bill of materials as of a given date. XRP-II copies appropriate records from control item master, product structure, engineering change, interdependency, and implementation status tables and stores them in a file whose format is compatible with the Import Data utility. One tar file is created for each destination and is given a name that identifies the machine to which the file is to be sent, the origination site, the file's type, and the identifier and effective date of the control item whose records are being released. If the SEND NOW feature is used, XRP-II transfers the files via ftp then moves them from the export directory to an archive directory. Otherwise, the files remain in the export directory to be transferred manually.

Note: Export files that are transferred manually to a destination machine must also be moved manually to the archive directory.

Note: The export directory and its corresponding export archive directory are configuration parameters named via program environment variables. See Section 4.3.3.2.3.

Using Table 4.3.3-33 as a guide, enter the identifier of one or more control items, and specify the name of one or more hosts to receive the data. (Include domain names, or use IP addresses.

Machine names can be selected from a managed list by using the /Zoom command.) Next, enter an effective date to use for the item’s bill, and indicate whether or not XRP-II is to ftp the files now. Begin data extraction by using the Execute command and, if prompted, provide a login account and a password for the ftp. As processing progresses, XRP-II displays informational messages; including some that contain the names of the tar files that are created. Messages that terminate with the symbol “>” require an operator response. Hit any key and processing continues. XRP-II returns to the System Utilities menu when done.

Table 4.3.3-33. Export Release Records Field Descriptions

Field Name	Data Type	Size	Entry	Description
Control item ID	String	20	Required; zoom to select from a control item list.	Unique code for a version- or configuration-controlled item.
Machine to send to	String	40	Required; zoom to select from a list of machines.	Full, network-addressable name of a host.
Date of configuration	Date	N/A	Required	“As of” date used in selecting records from the configuration history of a control item.
Send now	String	1	Y or N	Code that indicates whether or not to ship files immediately.

4.3.3.2.11.9 Export Site-Unique Change Records Screen

The Baseline Manager at the SMC can maintain consolidated records about operational baselines system-wide. Records created at local sites can be exported and shipped to the SMC where they can be added to records that were centrally created. For ECS, baseline records about only site-unique items are to be exported. To help distinguish them, identifiers for these items are given a 3-character site prefix.

Baseline Manager’s Export Site-Unique Change Records utility supports this customized export process. It generates a formatted data file containing site-unique records changed but not previously exported, and optionally transfers the file via ftp to one or more remote sites (e.g., the SMC). Operators at the remote site use the Import BLM Records utility (see section 4.3.3.2.11.7) to load the data into Baseline Manager there.

The screen in Figure 4.3.3-52 initiates the export process. XRP-II analyzes the transaction log to determine what data changed since the last time the function was used and which site-unique control items were affected. Control item master, product structure, engineering change, interdependency, and implementation status records for these control items are copied and stored in files compatible with XRP-II’s Import BLM Records utility. These files are, in turn, converted to tar format, one per destination host the operator specifies. Each tar file is given a name that identifies the date and time the export was done, the origination site, the file’s type, and the machine to which the file is to be sent. If the SEND NOW feature is used, XRP-II

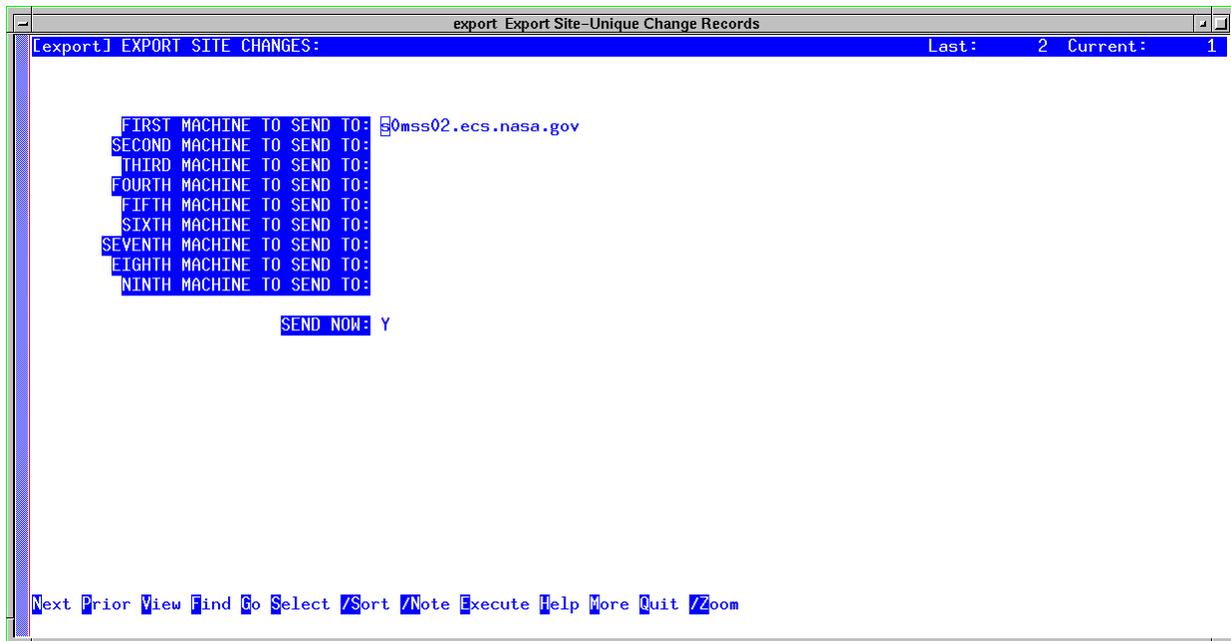


Figure 4.3.3-52. Export Site-Unique Change Records CHUI

transfers the files via ftp then moves them from the export directory to an archive directory. Otherwise, the files remain in the export directory to be transferred manually.

Note: Export files that are transferred manually to a destination machine must also be moved manually to the export archive directory.

Note: Site-unique control items have identifiers containing the local site's designated prefix. Baseline Manager requires that the site prefix be the first three characters of the identifier for the site specified in the system parameters table. See Section 4.3.3.1.13.1.

Note: The export directory and its corresponding export archive directory are configuration parameters named via program environment variables. See Section 4.3.3.2.3.

Using Table 4.3.3-34 as a guide, enter the name of one or more machines to receive the data (using their domain names or IP addresses), and choose whether or not to ftp the data files immediately after they are created. Names can be selected from a managed list by using XRP-II's /Zoom command. Use Execute to begin data extraction and, if prompted, provide a login account and a password for the ftp. As processing progresses, XRP-II displays informational messages, including some that contain the names of the tar files that are created. Messages that terminate with the symbol ">" require an operator response. Hit any key and processing continues. XRP-II returns to the System Utilities menu when done.

Table 4.3.3-34. Export Site-Unique Change Records Field Descriptions

Field Name	Data Type	Size	Entry	Description
Machine to send to	String	40	Required; zoom to select from a list of machines	Full domain name or network address of the host to receive the exported data file(s).
Send now	String	1	Y or N	Code that indicates whether or not to ship files immediately.

4.3.3.2.11.10 Export SMC Change Records Screen

The screen in Figure 4.3.3-53 extracts, and distributes to remote sites, copies of records about centrally managed control items changed since the last time this function was used. XRP-II can ftp the files to up to nine remote hosts specified by the operator.

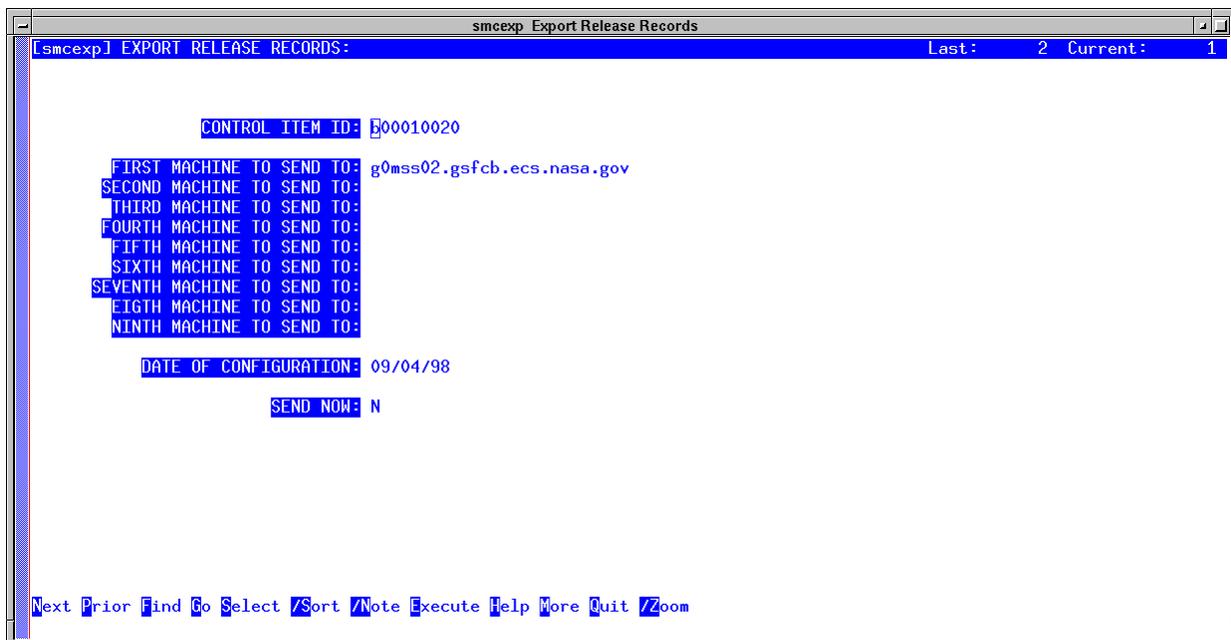


Figure 4.3.3-53. Export SMC Change Records CHUI

Note: Centrally managed control items have identifiers whose 3-character prefix is other than the first three characters of any site's code.

XRP-II analyzes the transaction log to determine what data changed and which centrally managed control items were affected. Control item master, product structure, engineering change, interdependency, and implementation status records for these control items are copied and stored in files compatible with XRP-II's Import Data utility. These files are, in turn, converted to tar format, one per destination host the operator specifies. Each tar file is given a name that identifies the date and time the export was done, the origination site, the file's type, and the machine to which the file is to be sent. If the SEND NOW feature is used, XRP-II

attempts to transfer the files via ftp then moves them from the export directory to an archive directory. Otherwise, the files remain in the export directory to be transferred manually.

Note: Export files that are transferred manually to a destination machine must also be moved manually to the archive directory.

Note: The export directory and its corresponding export archive directory are configuration parameters named via program environment variables. See Section 4.3.3.2.3.

Using Table 4.3.3-35 as a guide, enter the name of one or more hosts to receive the data (using either domain names or IP addresses), and choose whether or not to ftp the data files immediately after they are created. Names can be selected from a list of servers (see Section 4.3.3.2.11.5) by using the **/Zoom** command. Use **Execute** to begin data extraction and, if prompted, provide a login account and a password for the ftp. As processing progresses, XRP-II displays informational messages; including some that contain the names of the tar files that are created. Messages that terminate with the symbol “>” require an operator response. Hit any key and processing continues. XRP-II returns to the System Utilities menu when done.

Table 4.3.3-35. Export SMC Change Records Field Descriptions

Field Name	Data Type	Size	Entry	Description
Machine to send to	String	40	Required; zoom to select from a list of machines	Full domain name or network address of the host to receive the exported data file(s).
Send now	String	1	Y or N	Code that indicates whether or not to ship files immediately.

4.3.3.2.12 System Tools Menu (Perform XRP-II System and Database Administration)

XRP-II provides several programs for controlling user access, maintaining the database, and customizing the user interface. Many of the programs are supported by data entry screens accessed via XRP-II's System Tools menu (Figure 4.3.3-54). These programs are described in Sections 4.3.3.2.12.1-4.3.3.2.12.9. The rest are supported by UNIFY data entry screens or are run from the command line. These programs are described in Sections 4.3.3.2.12.10-4.3.3.2.12.15. Table 4.3.3-36 is an index to the functions addressed in this section.

Note: The System Tools menu moves control of menus, screens, and user access from ASCII files to the database and brings to the menu handler functions previously available only at the command line. Vendor manuals do not reflect this menu or its associated set of screens.

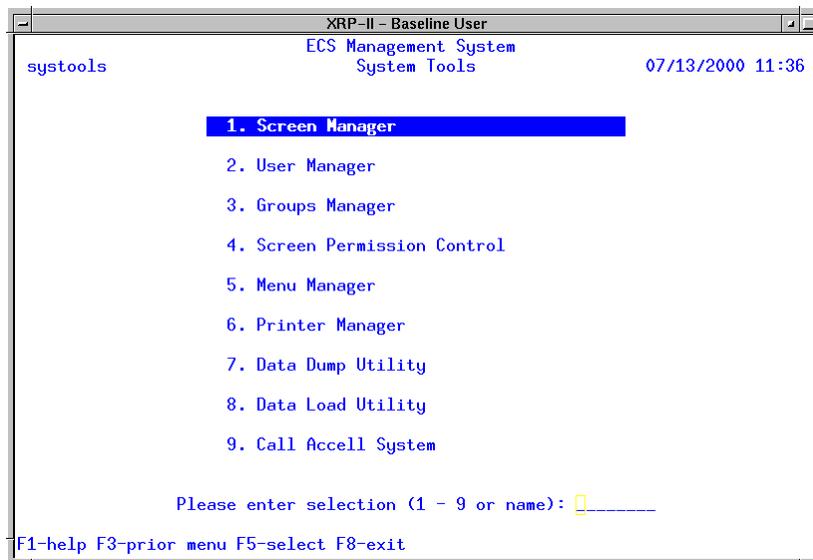


Figure 4.3.3-54. XRP-II System Tools CHUI

Table 4.3.3-36. Index of System/Database Administration Functions

Category	Function	Program	Section
User access control	Userid maintenance	User Manager	4.3.3.2.12.2
	Groups definition	Groups Manager	4.3.3.2.12.3
	Screen privileges maintenance	Screen Permission Control	4.3.3.2.12.4
Printers management	Printers definition	Printers Management	4.3.3.2.12.6
Database administration	Database dump	Data Dump Utility	4.3.3.2.12.7
	Database load	Data Load Utility	4.3.3.2.12.8
	Access ACCELL/UNIFY	ACCELL	4.3.3.2.12.9
	B-tree maintenance	Add, Drop B-Tree Indexes	4.3.3.2.12.10
	Database backups	Write Data Base Backup	4.3.3.2.12.11
	Database restore	Read Data Base Backup	4.3.3.2.12.12
	UNIFY transaction log control	Transaction Logging Status	4.3.3.2.12.13
User interface customization	Data entry screen maintenance	Screen Manager Screen Reset (dvset)	4.3.3.2.12.1 4.3.3.2.12.14
	Menu maintenance	Menu Manager	4.3.3.2.12.5
	Report maintenance	Report Reset (rpset)	4.3.3.2.12.15

4.3.3.2.12.1 Screen Manager Screen

Operators use the Screen Manager screen (Figure 4.3.3-55) to define XRP-II's menus and Datalook data entry screens. Once defined, any screen or menu can be positioned in XRP-II's menu hierarchy via the Menu Manager (Section 4.3.3.2.12.5), and be made accessible for use via Screen Permission Control (Section 4.3.3.2.12.4). Appendix D of the *XRP-II System Reference Manual* and the first six chapters of the *XRP-II Datalook/Datarite Reference Manual* provide pertinent insights into Datalook screens and how they relate to the XRP-II menu handler.

Every XRP-II menu and screen has a name or code by which it is referenced. By convention, names are lower case, and the first two characters usually correspond to the XRP-II module the entity supports (e.g., "pi" for Product Information). XRP-II screens and menus are supported by executables that perform data retrieval and manipulation. By convention, executables are named in uppercase. A specification file that defines the screen supports every data entry screen, including those used to produce reports.

Use the standard bottom-line commands to add, delete, modify, or browse screen and menu records. Table 4.3.3-37 describes the Screen Manager fields. The special command, **Editscreen**, is for creating or changing specifications for a screen. **Editscreen** opens a Vi session for a specification file named "<screen code>.dv" located in the \$MSPATH/mms/local directory. When Vi is exited, **Editscreen** automatically compiles the file and resets all XRP-II screens. See Chapters 1-6 of the *XRP-II Datalook/Datarite Reference Manual* for details about screen specifications

Note: Do not alter any of the standard screen script files in directory \$MSPATH/mms/dvspec.

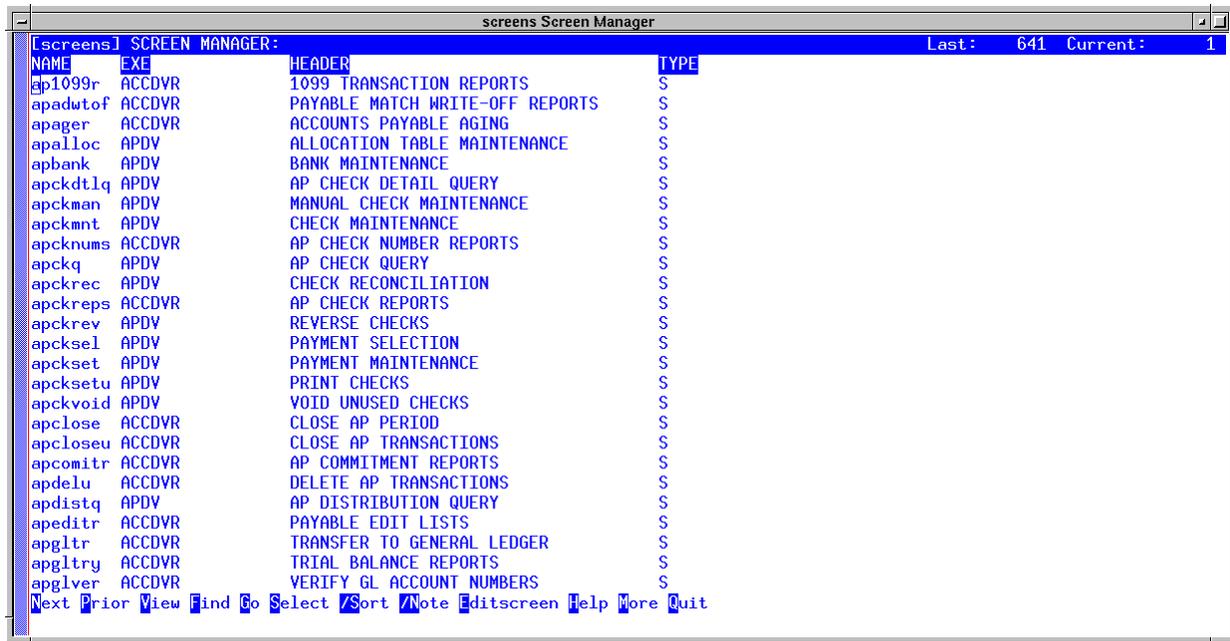


Figure 4.3.3-55. Screens Manager CHUI

Table 4.3.3-37 describes the fields on the Screen Manager display.

Table 4.3.3-37. Screen Manager Field Descriptions

Field Name	Data Type	Size	Entry	Description
Name	String	8	Required	Identifier (short name) that XRP-II programs use in referencing an XRP-II screen or menu (e.g., pici).
EXE	String	16	Optional	Name of the executable driving a data entry screen.
Header	String	36	Optional	Name of the heading or title for the data entry screen or menu.
Type	String	1	Optional; S, M, E	Code for distinguishing between records identifying screens (S), menus (M), and executables (E).

4.3.3.2.12.2 User Manager Screen

Operators use the User Manager screen (Figure 4.3.3-56) to register the Unix userids of individuals authorized to run XRP-II. Individuals are assigned a group of menus and screens that can be accessed and a specific entry menu. As part of logon processing, XRP-II's menu handler obtains an individual's Unix userid from the system and verifies it against those that have been registered.

Use this screen to add, delete, modify or browse XRP-II user records.

Note: Consistent with the single login philosophy of ECS, XRP-II prompts the user for neither a userid nor a password when the ECS standard Baseline Manager startup script “ pcs” is used. The script passes XRP-II the operator’s userid as an argument based on results of a “whoami” command and access is controlled via screen permissions rather than passwords.

Note: Unix file permissions govern data access for operators running XRP-II executables from the command line rather than the menu handler.

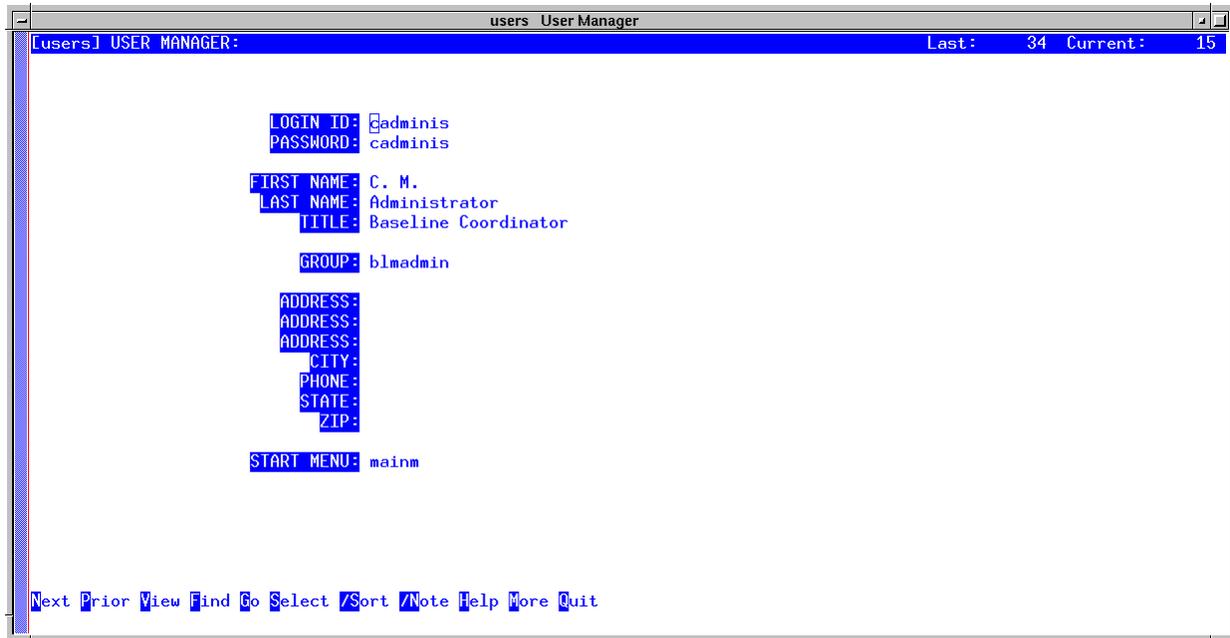


Figure 4.3.3-56. User Manager CHUI

Table 4.3.3-38 describes the fields on the User Manager screen.

Table 4.3.3-38. User Manager Field Descriptions

Field Name	Data Type	Size	Entry	Description
Login id	String	32	Required	Full, network-addressable name of a host.
Password	String	6	Optional; zoom to select from a list of sites	Code that uniquely identifies an ECS site.
First name	String	30	Optional	First name of the user.
Last name	String	30	Optional	Surname of the user.
Title	String	20	Optional	Name of the user's position or job.
Group	String	8	Optional; zoom to select from a list of groups.	Name for a collection of XRP-II data entry screens and menus. These are the default screens and menus the user can access. Deviations can be specified via Screen Permission Control.
Address	String	30	Optional	Street address where the responsible engineer is located.
City	String	20	Optional	Name of the city in which the responsible engineer is located.
Phone	String	18	Optional	Phone number for the responsible engineer.
State	String	2	Optional	Name of the state in which the responsible engineer is located.
Zip	String	10	Optional	Postal code where the responsible engineer is located.
Start menu	String	8	Optional; zoom to select from a list.	Name or code of the menu initially presented to the user at login.

4.3.3.2.12.3 Groups Manager Screen

Operators use the Groups Manager screen (Figure 4.3.3-57) to maintain a list of XRP-II user group names. Groups are collections of userids having common access privileges. Access to XRP-II menus and screens can be assigned by group as well as by user. A userid can be a member of at most one XRP-II group.

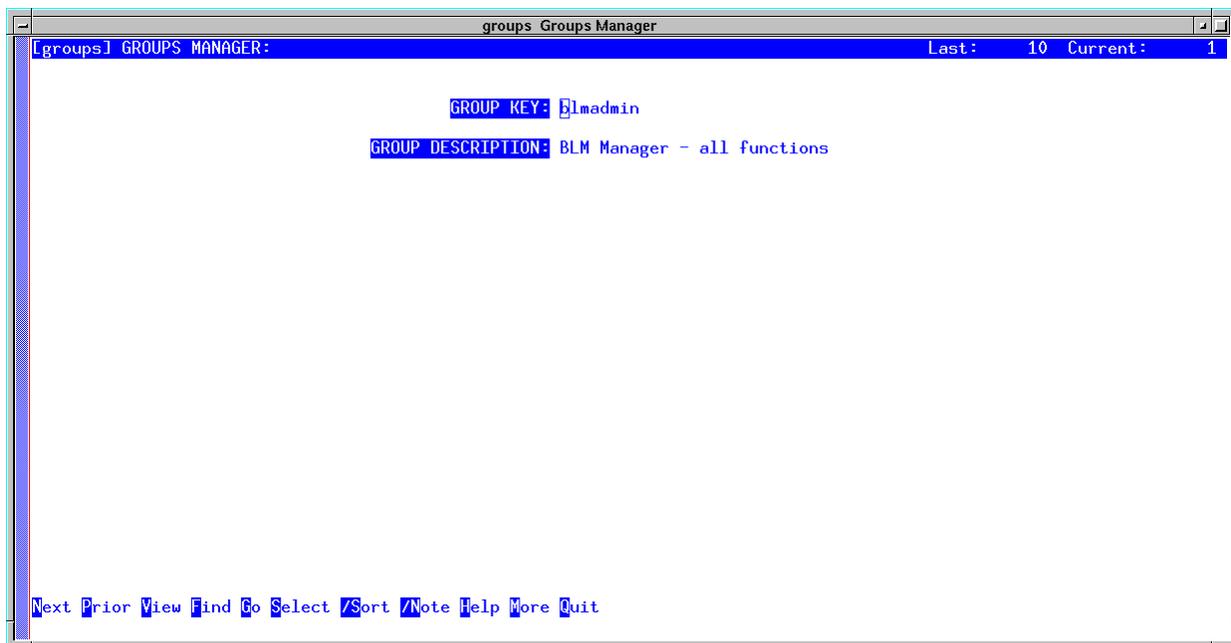


Figure 4.3.3-57. Groups Manager CHUI

XRP-II is delivered to the site with the following nine user groups pre-defined. The super user has access and full privileges to all XRP-II menus and screens.

- xrpadmin - for the XRP-II super user.
- Blmadin - for the Baseline Manager focal point. Has access with full privileges to all BLM menus and screens and to system utilities and system tools. Has access with inquiry privileges to selected ILM menus and screens.
- Blmupdt - for those performing Baseline Manager data entry. Has access with full privileges to all BLM menus and screens. Has access with inquiry privileges to selected ILM menus and screens.
- Blmquery - for those restricted to Baseline Manager data retrieval. Has access to BLM query and report menus and screens. Has access with inquiry privileges to selected ILM menus and screens.
- Ilmadmin - for the Inventory, Logistics, Maintenance Manager focal point. Has access with full privileges to all ILM menus and screens and to system utilities and system tools. Has access to BLM query and report menus and screens.
- Ilmuser - for those performing inventory data entry. Has access with full privileges to all inventory menus and screens. Has access to BLM query and report menus and screens.
- Ilmquery - for those restricted to ILM data retrieval only. Has access with inquiry privileges to ILM menus and screens. Has access to BLM query and report menus and screens.
- Ilmmaint - for the Maintenance Engineer. Has access to Maintenance menus and screens. Has access to BLM query and report menus and screens.

- IImlog - for the Logistics Manager. Has access to the Logistics menus and screens. Has access to BLM query and report menus and screens.

Use the Groups Manager data entry screen to add, delete, modify or browse XRP-II group records.

Note: User Manager assigns userids to groups (see Section 4.3.3.2.12.2), and Screen Permission Control Manager assigns privileges to groups (see Section 4.3.3.2.12.4). A group must have been defined before it can have members or be given screen privileges.

Table 4.3.3-39 describes the fields on the Groups Manager screen.

Table 4.3.3-39. Groups Manager Field Descriptions

Field Name	Data Type	Size	Entry	Description
Group key	String	8	Required	Name that classifies XRP-II users according to access required to menus and screens.
Group description	String	30	Optional	Textual characterization of a user group.

4.3.3.2.12.4 Screen Permission Control Screen

Screen Permission Control (Figure 4-3.3-58) lets operators specify the XRP-II menus and data entry screens a user or user group can access and the data manipulation permissions the user or group are granted when accessing a screen. It replaces reliance on the “users” and “groups” files discussed in Sections 5 and D.5 of the *XRP-II System Reference Manual*, however the concept of access and privileges by group and user is the same.

Use this screen to browse, add to, or edit existing screen permission control records. Each record renders a menu or data entry screen accessible to some user or group. For data entry screens, it also assigns to the user or group the privilege to query (inquire), add, modify, and/or delete records via the screen. A privilege is assigned by placing a “Y” in the appropriate privilege field. Similarly, a privilege is removed by placing an “N” in the appropriate privilege field.

Consider the following when modifying screen permissions:

- Privileges specified for a user take precedence over privileges specified for the user’s group
- A user or group is granted access to a menu or screen only if a privilege is assigned.
- Assignment of All Privilege overrides other privileges specified in the record
- Privileges specified in the record do not override permission restrictions coded into specifications for the screen (e.g., no user can update the database via a screen marked for querying the database only, regardless the privileges the user is given for the screen.)

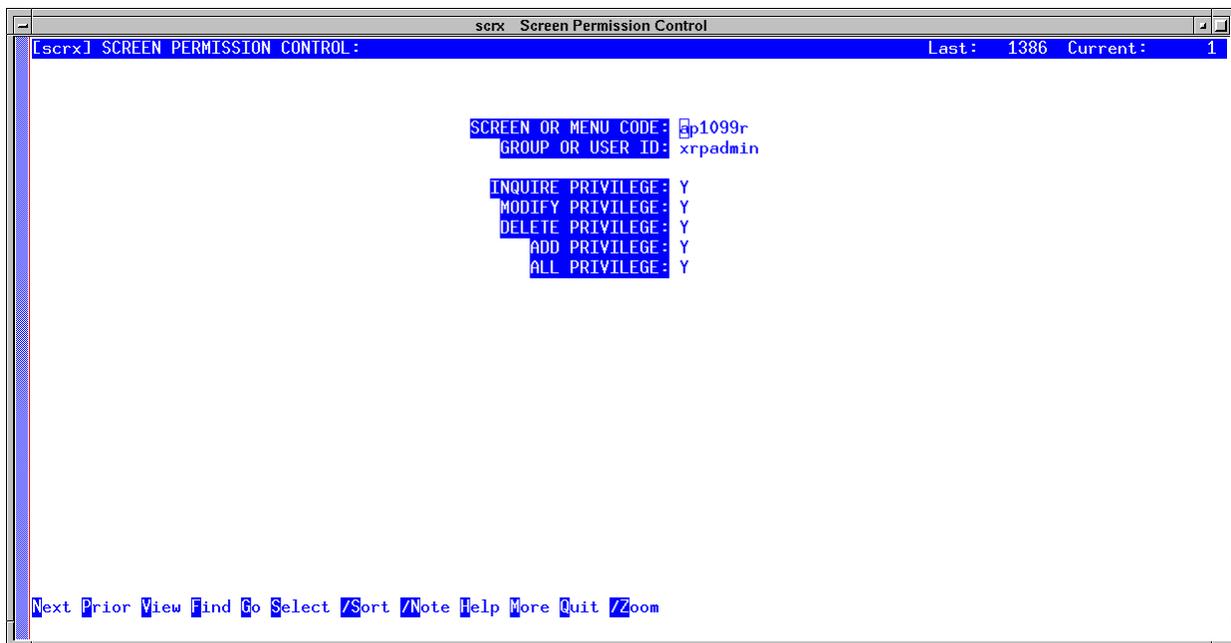


Figure 4.3.3-58. Screen Permission Control CHUI

Baseline Manager is delivered with a default set of user groups and associated screen permissions (see Section 4.3.3.3.2). Example ways an operator might extend this set include:

- Making a screen available to a group - add a record that names the screen and group, then assign at least one privilege for the group
- Making a screen accessible to only certain users - add a record for each user. Name the screen and the user, and assign at least one privilege for the user. Then find and delete any records that make the screen accessible to groups other than any established for the system administrator
- Increasing a screen's privileges for a member of a group - add a record that names the screen and the user, and assign the extra privilege for the user
- Restricting a screen's privileges for a member of a group - add a record that names the screen and the user, and remove the privilege(s) for the user

Table 4.3.3-40 describes the fields on the Screen Permission Control display.

Table 4.3.3-40. Screen Permission Control Field Descriptions

Field Name	Data Type	Size	Entry	Description
Screen or menu code	String	8	Required	Identifier (short name) that XRP-II programs use in referencing an XRP-II screen or menu (e.g., pici).
Group or user id	String	8	Required	Name that classifies XRP-II users according to access required to menus and screens, or an individual's Unix userid.
Inquire privilege	String	1	Optional; Y, N	Code indicating if the group or user can: a) read database records via the named screen; or b) can access the named menu
Modify privilege	String	1	Optional; Y, N	Code indicating if the group or user can: a) modify database records via the named screen; or b) can access the named menu
Delete privilege	String	1	Optional; Y, N	Code indicating if the group or user can: a) delete database records via the named screen; or b) can access the named menu
Add privilege	String	1	Optional; Y, N	Code indicating if the group or user can: a) add database records via the named screen; or b) can access the named menu
All privilege	String	1	Optional; Y, N	Code indicating if the group or user can: a) read, modify, delete, and add database records via the named screen; or, b) can access the named menu

4.3.3.2.12.5 Menu Manager Screen

Operators use the Menu Manager screen (Figure 4.3.3-59) to customize XRP-II's hierarchy of menus. The screen maintains records that prescribe which submenus and data entry screens are available for selection from each menu and the order in which choices appear. Menus and screens must be defined via Screen Manager before they can be included in the hierarchy. The headers specified in screen manager records are the text used for displaying menu choices, in turn.

Use this screen to add, delete, or modify menu structure records.

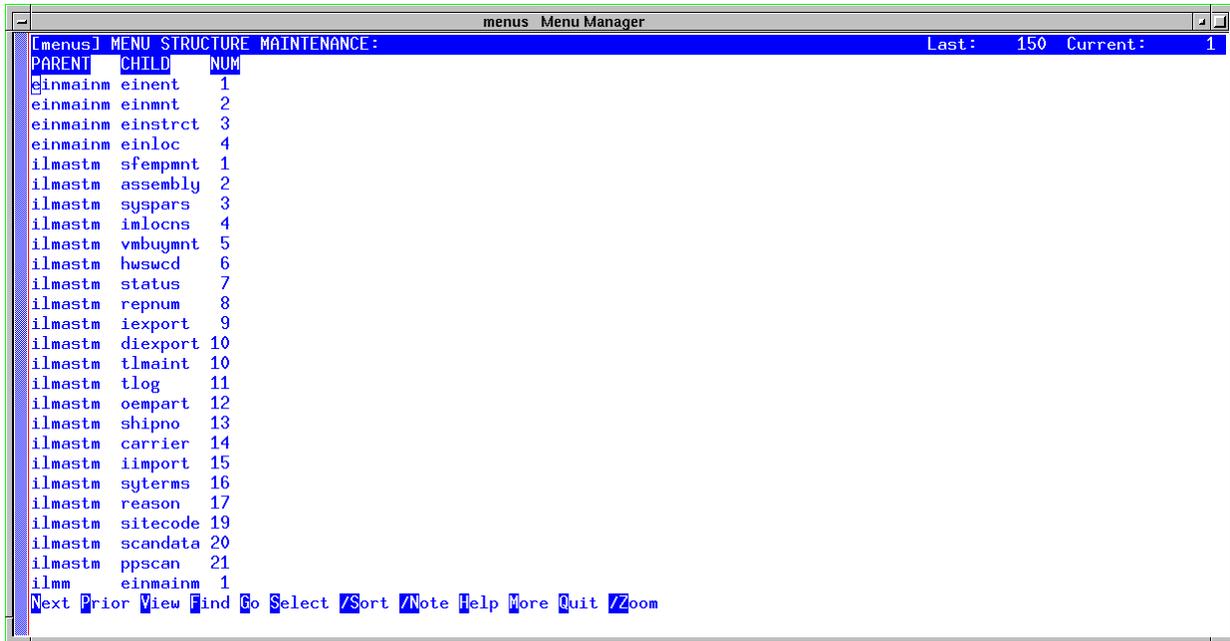


Figure 4.3.3-59. Menu Manager CHUI

Note: Menu structure records govern what choices **can** appear on a given menu. The choice appears for a user only if screen permission control has a record that: 1) associates the screen or menu with either that user or that user’s group; and 2) at least one access privilege is assigned.

Table 4.3.3-41 describes the fields on the Menu Manager screen.

Table 4.3.3-41. Menu Manager Field Descriptions

Field Name	Data Type	Size	Entry	Description
Parent	String	8	Required; zoom to select from a list of screens, menus and executables.	Full, network-addressable name of a host.
Child	String	8	Optional; zoom to select from a list of screens, menus and executables.	Code that uniquely identifies an ECS site.
NUM	Numeric	2	Optional	Sequence number of the child screen or menu in the selection list on the parent menu.

4.3.3.2.12.6 Printer Manager Screen

The Printer Manager screen (Figure 4.3.3-60) provides access to XRP-II's list that defines printer selections and options available for generating both custom and ad hoc reports. The list is

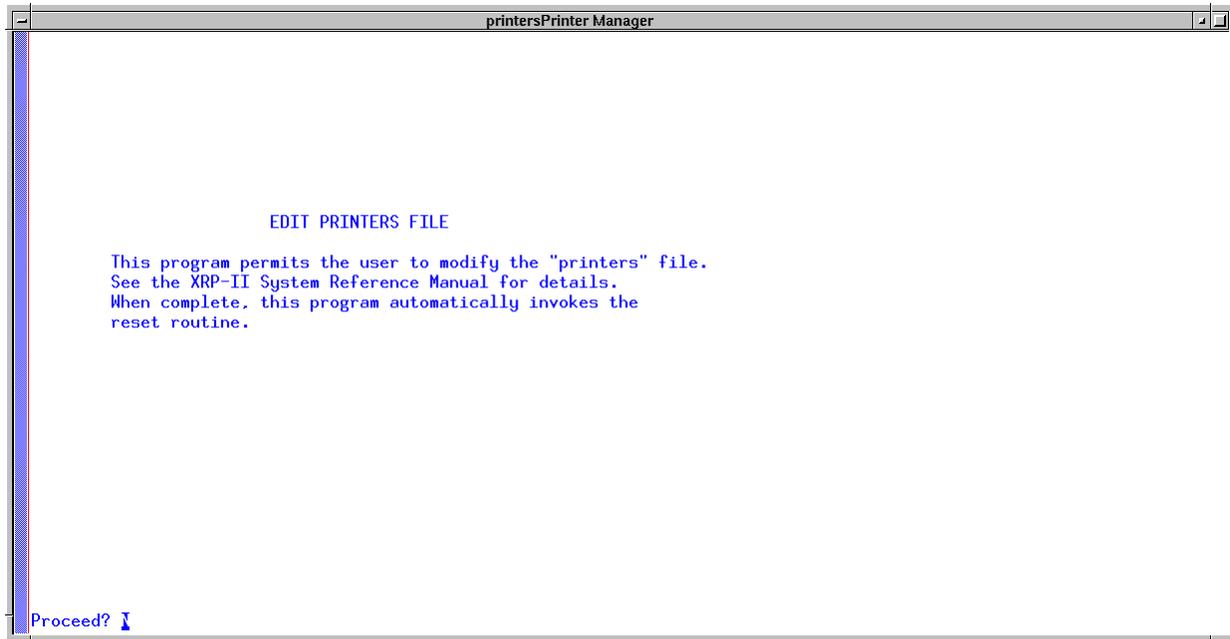


Figure 4.3.3-60. Printer Manager CHUI

contained in an “msprinters” configuration file, which is described in Section 8.1.4 of the *XRP-II System Reference Manual*.

Enter “Y” to confirm that XRP-II should proceed. XRP-II runs the vi Editor and open the “msprinters” file. Edit the file, then exitvi. XRP-II recompiles printer configuration binaries, making the new printer definitions available to all XRP-II operators.

4.3.3.2.12.7 Data Dump Utility Screen

Operators use the Data Dump Utility screen (Figure 4.3.3-61) to bulk dump one or more XRP-II database tables into specially formatted data files. A file is created for each database table, and it contains all fields for all records in the table. Fields are separated by pipe symbols (|). The first line in each file identifies the field ordering. See the XRP Tools, Techniques, and Conventions Manual, Sections 1.5 and 1.6, for file format conventions XRP-II uses.

Enter Modify mode and, using Table 4.3.3-42 as a guide, specify which tables to dump and whether to archive the resulting data files. Return to Inquiry mode, then enter “E” to initiate the dump and “Y” at the confirmation prompt. XRP-II creates the requested data files and returns to the System Tools menu.

Note: If a tar file is named, XRP-II archives all formatted data files it finds regardless whether the corresponding database table was part of the current dump.

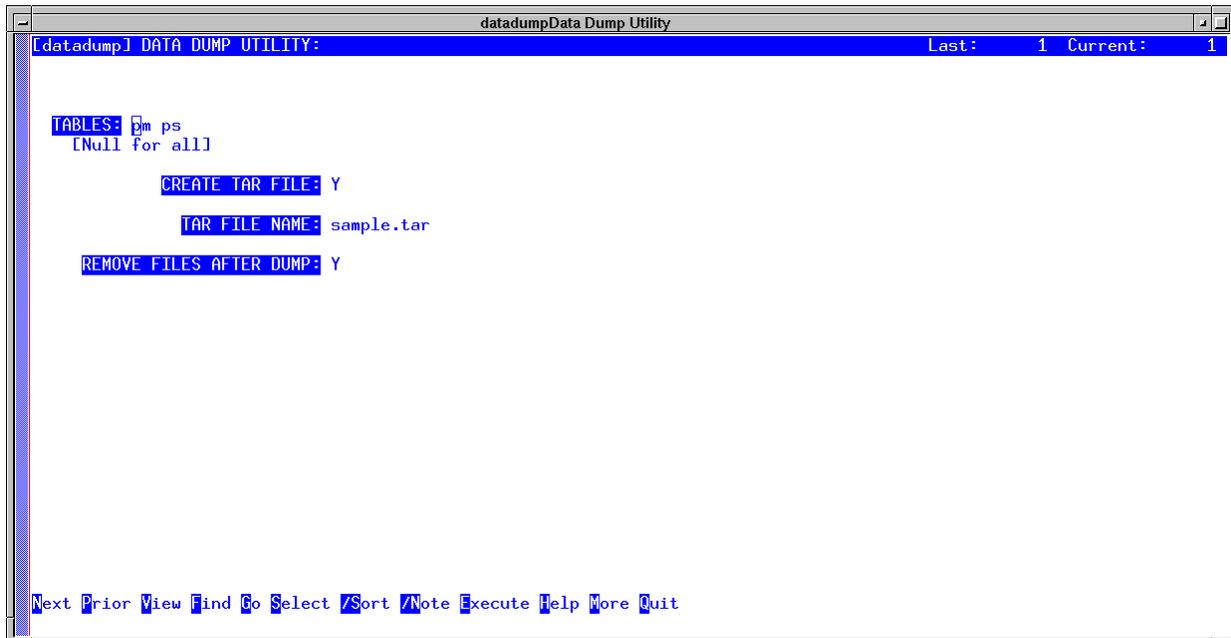


Figure 4.3.3-61. Data Dump Utility CHUI

Table 4.3.3-42 describes the fields on the Data Dump Utility screen.

Table 4.3.3-42. Data Dump Utility Field Descriptions

Field Name	Data Type	Size	Entry	Description
Tables	String	60	Optional	List of tables to dump (e.g., pm, ec, etc.). A null field causes all tables to be dumped. Section 4.3.3.4.1 describes how to obtain a list of XRP-II table names.
Create Tar File	String	1	Optional; Y, N	Code indicating whether or not to tar the data tables that were dumped.
Tar file name	String	40	Optional	Pathname for the tar file in, or relative to, the database directory specified in environment variable \$DBPATH.
Remove Files after Dump	String	1	Optional; Y, N	Code indicating whether to delete the files (not the tar files) after they have been archived to tape.

4.3.3.2.12.8 Data Load Utility Screen

Operators use the Data Load Utility screen (Figure 4.3.3-62) to bulk load specially formatted data into one or more XRP-II database tables. The data must be in files that conform to XRP-II data conventions (see the XRP-II System Tools, Techniques, and Conventions Manual) or in an archive of such files.

Enter Modify mode and, using Table 4.3.3-43 as a guide, specify which tables to load and whether the data should be read from an archive. Return to Inquiry mode, then enter “E” to initiate the dump and “Y” at the confirmation prompt. XRP-II creates the requested data files

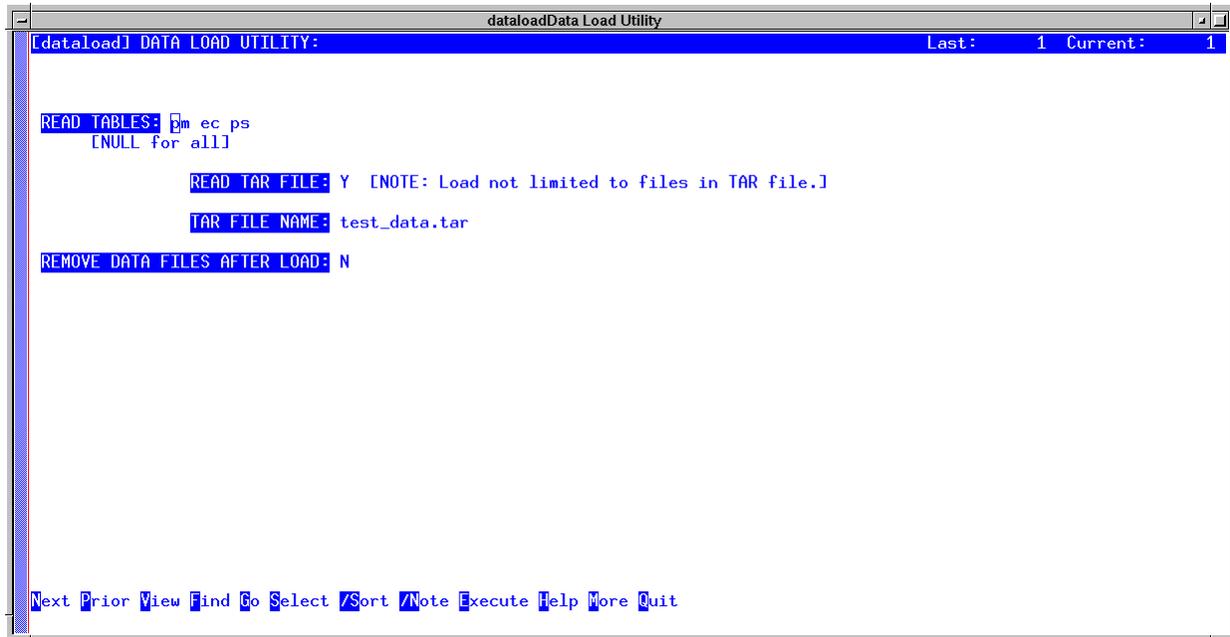


Figure 4.3.3-62. Data Load Utility CHUI

and return to the System Tools menu.

Note: If no table names are specified on the data entry screen, XRP-II attempts to load data for tables, whether or not corresponding formatted data files are present.

Note: If a tar file is named, XRP-II expands the entire archive before loading any tables. If no table names are specified on the data entry screen, XRP-II loads from all formatted data files it finds regardless whether they had been part of the named archive.

Table 4.3.3-43 describes the fields on the Data Load Utility screen.

Table 4.3.3-43. Data Load Utility Field Descriptions

Field Name	Data Type	Size	Entry	Description
Read tables	String	60	Optional	List of tables to load (e.g., pm, ec, etc.). A null field causes all tables to be loaded. Section 4.3.3.4.1 describes how to obtain a list of XRP-II table names.
Read Tar File	String	1	Optional; Y, N	Code indicating whether or not the data to be loaded should be read from a tar file.
Tar file name	String	40	Optional	Pathname of a tar file in, or relative to, the database directory specified in environment variable \$DBPATH.
Remove data files after load	String	1	Optional; Y, N	Code indicating if the formatted files (not the tar file) containing the data being loaded should be deleted after loading has finished.

4.3.3.2.12.9 Call Accell System Screen

This screen is used to invoke the menu system for the COTS product ACCELL and its UNIFY RDBS. To invoke ACCELL, select **Call Accell System** from XRP's System Tools menu, then type "Y" at the resulting prompt (see Figure 4.3.3-63). The menus, detailed in Chapter 3 of the UNIFY Developer's Reference manual, provide access to several database maintenance utilities referred to in earlier sections. When done, type <F5> to exit.

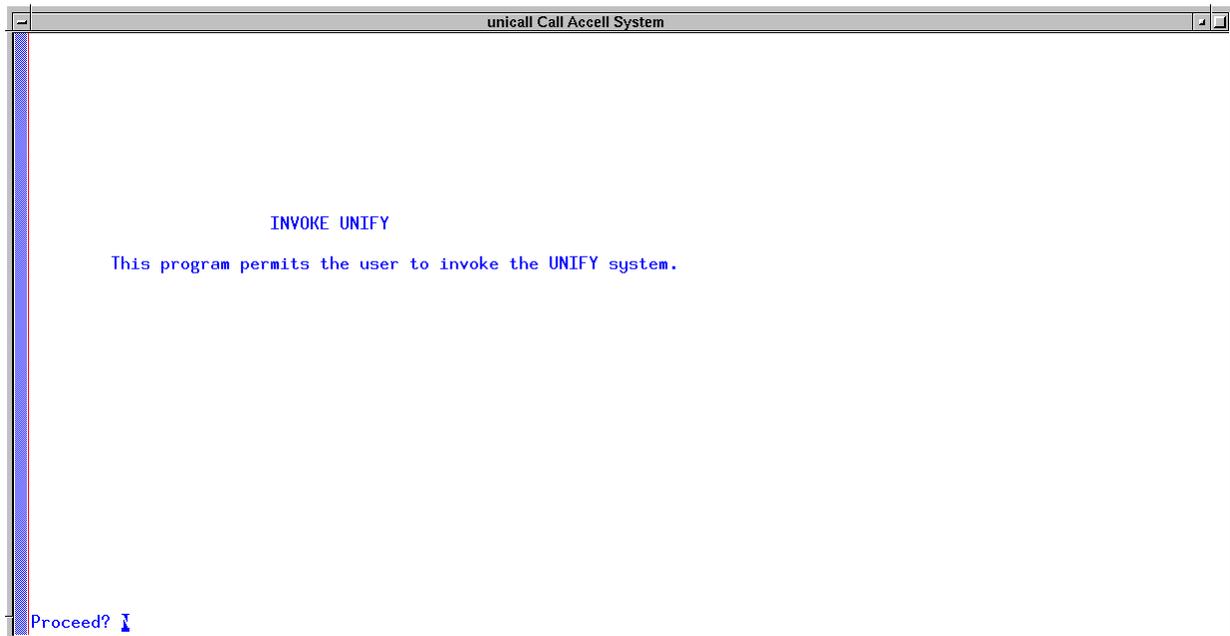


Figure 4.3.3-63. Call Accell System CHUI

4.3.3.2.12.10 B-tree Index Maintenance

XRP-II uses B-tree indexes to speed up data retrieval. All indexes should be reset at least monthly to reduce their size and improve system performance. Use UNIFY's Add, Drop B-Tree Indexes data entry screen to rebuild XRP-II B-trees.

To reset B-trees via the UNIFY menu handler, type **unify** from a command line prompt or invoke **Call Accell System** from the XRP-II's System Tools Menu. Navigate to the Add, Drop B-Tree Indexes data entry screen by selecting **ACCELL/DBMS, System Administration, Data Base Maintenance**, then **Add, Drop B-tree Indexes** menu choices, in turn. From there, follow instructions contained in Section 8.5 of the UNIFY Developer's Reference. The section also contains a description of the data entry screen.

To access the B-trees program from the command line directly, set appropriate XRP-II environment variables, change to the database directory (\$DBPATH), and invoke program IDXMNT:

```
source /usr/ecs/OPS/COTS/xrp/scripts/xrp_csh_env.cfg
cd $DBPATH           Changes to the database directory
IDXMNT              Invokes the Unify index program
cls                 Clears the display
Y <Enter>           Confirms no one is using the database
R <Enter>           Selects [R]ebuild B-trees
<Enter> <Enter>     Skips non-pertinent data entry fields
Y <Enter>           Confirms intent to rebuild all indexes
<Enter> <Ctrl-U> <Ctrl-U> Exits the data entry screen
```

Note: No one should be logged on XRP-II when B-trees are being reset.

Note: Do not modify standard B-tree indexes defined in file "\$MSPATH/mms/base.dd". Custom B-tree indexes, if any, are defined in file "\$MSPATH/mms/nasa/nasa.dd". If the custom ".dd" file is modified, the Unify data dictionary should be reset by running 'mnset -a base nasa' from the database directory, \$DBPATH.

4.3.3.2.12.11 Database Backup

Operators can write a checkpoint of the XRP-II database by using UNIFY's Write Data Base Backup program, BUDB. The program saves a copy of the database, B-tree indexes, and data dictionary to a diskette drive, a cartridge, a 9-track tape drive, or a file named in the BUDEV environment variable (see Appendix A).

Note: Operators must use this program in order to take advantage of UNIFY's transaction logging feature (see Section 4.3.3.2.12.13).

Note: Ensure no one is using the database when doing the backup.

To backup the database via the UNIFY menu handler, type **unify** from a command line prompt or invoke **Call Accell System** from the XRP-II's System Tools Menu. Navigate to the Write Data Base Backup data entry screen by selecting **ACCELL/DBMS, System Administration,**

Data Base Maintenance, then **Write Data Base Backup** menu choices, in turn. From there, follow instructions contained in Section 9.1 of the UNIFY Developer's Reference.

To access the backup program from the command line, set appropriate XRP-II environment variables, change to the database directory (\$DBPATH), and type invoke program BUDB:

```
source /usr/ecs/OPS/COTS/xrp/scripts/xrp_csh_env.cfg
setenv BUDEV $MSPATH/bu.uni    Identifies database backup file
cd $DBPATH                    Changes to the database directory
cls                            Clears the display
BUDB                           Invokes the Write Data Base Backup program
Y <Enter>                       Confirms operator has checked for database in use
Y <Enter>                       Confirms variable BUTAPESZ need not be set
Y <Enter>                       Confirms backup device has been mounted
<Enter><Enter><Enter>           Acknowledges various backup notifications
```

4.3.3.2.12 Database Restore

Operators restore a check-pointed XRP-II database by using UNIFY's Read Data Base Backup program. The program loads a database, B-tree indexes, and data dictionary (previously saved by UNIFY's Write Data Base Backup program) from a diskette drive, a cartridge, or a 9-track tape drive named in the BUDEV environment variable. It also offers the operator options to replay the transaction log to roll forward the database and to re-saves the database. See Section 9.2 of the UNIFY Developer's Reference Manual for details, including information about replaying the transaction log and handling of errors.

Note: If transactions are rolled forward, transaction logging is forced OFF until the next backup is performed.

Note: Ensure no one is using the database when doing the restore.

To access the restore program via the UNIFY menu handler, type **unify**. Navigate to the Read Data Base Backup data entry screen by selecting **ACCELL/DBMS**, **System Administration**, **Database Maintenance**, then **Read Data Base Backup** menu choices, in turn. From there, follow instructions in Section 9.2 of the UNIFY Developer's Reference.

To access the restore program from the command line, set appropriate XRP-II environment variables change to the database directory, \$DBPATH, and invoke program REDB:

```
source /usr/ecs/OPS/COTS/xrp/scripts/xrp_csh_env.cfg
setenv BUDEV $MSPATH/bu.uni    Identifies database backup file
cd $DBPATH                    Changes to the database directory (see Appendix A)
cls                            Clears the display
REDB                           Invokes the Read Data Base Backup program
Y <Enter>                       Confirms operator has checked for database in use
Y <Enter>                       Confirms backup device has been mounted
<Enter><Enter><Enter>           Acknowledges various restore notifications
```

4.3.3.2.12.13 UNIFY Transaction Logging Control

The UNIFY relational database management system can log database transactions so they can be rolled forward in the event of hardware or software failure to recover database updates made since the last database checkpoint. Operators use the Transaction Logging Status data entry screen to set and display logging parameters. Section 12.1 of the UNIFY Developer's Reference Manual describes transaction logging in detail.

To access the transaction logging status program via the UNIFY menu handler, type **unify**. Select the **ACCELL/DBMS, System Administration**, then **Transaction Logging Status** menu choices, in turn. From there, follow instructions in Section 12.1 of the UNIFY Developer's Reference.

To access the transaction logging status program from the command line, set appropriate XRP-II environment variables, change to the database directory (\$DBPATH), and invoke program TXCONF:

cd \$DBPATH	Changes to the database directory (see Appendix A)
TXCONF	Invokes the Transaction Logging Status program

From there, follow instructions in Section 12.1 of the UNIFY Developer's Reference.

4.3.3.2.12.14 Screen Reset

XRP-II's Datalook data entry screens need to be "reset" whenever their specification files are changed. Although this happens automatically when a change is made via Screen Manager's Editscreen command, these ASCII text files can be altered or replaced other ways as well.

Use program **dvset** when necessary to reset a screen manually. It must be run from the XRP-II install directory, which is named in the environment variable MSPATH. See Section 3.3 of the Datalook/Datarite Reference Manual for a description of the Datalook screen development process and how to use **dvset**.

4.3.3.2.12.15 Report Reset

XRP-II's report scripts need to be "reset" whenever their report specification files are changed. Like Datalook data entry screen specifications, report scripts are also stored in files as ASCII text.

Use program **rpset** as necessary to reset a report manually. It must be run from the XRP-II database directory, which is named in the environment variable DBPATH. See Sections 8.2 and 8.3 of the Datalook/Datarite Reference Manual for details about how to use **rpset**.

4.3.3.3 Required Operating Environment

For all COTS packages, appropriate information on operating environments, tunable parameters, environment variables, and a list of vendor documentation can be found in a CM controlled document for each product. To find the documentation for XRP Baseline Manager, refer to the ECS Baseline Information System web page, URL <http://cmdm.east.hitc.com/>.

4.3.3.4 Databases

XRP-II stores control item data in a relational database managed by “UNIFY”, a COTS relational database management system marketed under the product name “Accell”. The database consists of a collection of tables in a single file (.../mms/bin/file.db) in the XRP-II principal directory. The vendor, HTG Corporation, wholly maintains the structure of the database and file in which it is stored.

Refer to the XRP-II *System Reference Manual*, Appendix B, for a discussion of XRP-II data structures and to the XRP-II Tools, Techniques, and Conventions Manual, Chapter 1, for discussions of utilities available for listing data dictionary and data record contents.

4.3.3.4.1 Database Schema

The standard XRP-II database schema was extended to implement the Baseline Manager and Inventory, Logistics, Maintenance Manager applications for ECS. The ECS database contains 173 tables and more than 2,200 fields. Data dictionary information is helpful and sometimes necessary for loading and dumping the database, troubleshooting, and customizing XRP-II screens and reports.

UNIFY can generate a Data Dictionary Report, but in hardcopy only (100+ pages). It contains a complete schema listing, a field list, a table list, and a list of table relationships; but it does not contain the field prompts and column headings seen on BLM and ILM screens and reports. These are known only to XRP-II. The Data Dictionary Report is described in Section 11.1 of the UNIFY Developer’s Reference.

XRP-II provides two utilities, schemout and fldrep, that are run from the command line and can be more helpful because both write to standard output, making the data accessible for use with standard Unix redirection and utilities. Schemout produces a schema listing similar to the one generated by UNIFY’s Data Dictionary Report. Fldrep produces a listing of database fields that includes the field prompts/column headings seen on XRP-II screens and reports together with each field’s characteristics. Schemout and fldrep are discussed in Sections 1.15 and 1.13.3 of the Tools, Techniques and Conventions Reference Manual, respectively.

To obtain a UNIFY Data Dictionary Report from any XRP-II menu, type:

shell	Obtains a command line prompt
cd \$UNIFY/..	Changes working directory to the Accell principal directory
accell	Invokes the Accell main menu
2 <Enter>	Invokes the Accell/DBMS menu
7 <Enter>	Invokes the System Administration menu
7 <Enter>	Invokes the Data Dictionary Reports menu
1 <Enter>	Executes the Print Data Base Design program
<F5>	Exits Accell
exit	Returns to the XRP-II menu

To run schemout from any XRP-II menu, type:

shell	Obtains a command line prompt
schemout	Executes the schemout program
or	
schemout grep -v “^..... [A-z]” grep “[A-z]” sort	Obtains a list of table names only
exit	Returns to the XRP-II menu

To run fldrep from any XRP-II menu, type:

shell	Obtains a command line prompt
fldrep	Executes the fldrep program
exit	Returns to the XRP-II menu

Note: Any of these programs can be run without first logging onto XRP-II. In a C-shell, start at the XRP-II database directory (typically, /usr/ecs/OPS/.COTS/xrp/mms/bin), source the XRP-II configuration file (typically /usr/ecs/OPS/COTS/xrp/scripts/xrp_csh_env.cfg), and omit the “shell” and “exit” commands.

4.3.3.5 Special Constraints

The ECS environment imposes the following constraints on how XRP-II is used:

- Control item identifiers - XRP-II uses centralized database technology and is separately installed at each ECS site. This necessitates a special scheme for assigning identifiers to control items so that sites can safely exchange database records. For example, the SMC must be able to distribute centrally maintained release records to multiple sites without interfering with records the sites locally maintain there. Similarly, the SMC must be able to absorb copies of site-maintained records forwarded by the sites to form the consolidated picture of system-wide baselines without contaminating centrally maintained data. To distinguish between centrally maintained and site-maintained records, Baseline Manager expects that identifiers of site-maintained control items have a unique 3-character prefix that matches the first three characters of the site’s code (see Section 4.3.3.2.11.1). In addition, to preclude confusion with inventory records that share XRP-II database tables with baseline records, control item identifiers typically contain the letter “b” after any site prefix but before the string of characters forming the rest of the identifier.
- Database schemas - The XRP-II database schema must be identical at all ECS sites so that database records can be exchanged uniformly among them.
- Data entry screens - Table view driver programs cannot handle the number and size of fields used in the form view of many Baseline Manager data entry screens. Where limitations exist, fields that appear in table view were chosen either because they help identify control items or because they are likely to be used in multi-record operations.
- Import file directories - XRP-II uses the name contained in the IMPORTPATH environment variable as a destination when transferring exported data records (via the File Transfer Protocol (FTP) service) to other sites. Consequently, the directory that is used to receive the data should have the same name at each site.

4.3.3.6 Outputs

XRP-II is a database application whose principal outputs as Baseline Manager are formatted data files. These files are used to exchange records among XRP-II systems, to describe production baseline configurations for resource planners, and to store copies of reports. Other, ancillary files are occasionally produced in the course of processing, but they are for XRP-II's internal use and generally of no interest to operators. Table 4.3.3-44 lists and describes each of the above types of outputs.

Table 4.3.3-44. Outputs

Output	Description and Format
Export/import tar files	Produced by XRP-II's "export" utilities, these are archives containing one or more .dasc files. (See Sections 4.3.3.2.3 and 4.3.3.2.5 above.)
.dasc files	Transient, ASCII files produced by XRP-II's "export" utilities and used by its import utility. Each file contains a header record followed by one or more detail records from a particular XRP-II database table. Each detail record contains values for a single database record, separated by pipe symbols. The header record contains the specification of the dump, identifying the database table and the names of the fields that correspond to values in the detail records. (See Section 1.6 of the XRP-II Tools, Techniques and Conventions Manual.)
.dspc files	Transient, ASCII files produced by XRP-II's import and export utilities. Each file identifies the name of a database file (table) and the names of fields in that file in the order required to load data in the database. Data is separated by pipe symbols. (See Section 1.6 of the XRP-II Tools, Techniques and Conventions Manual.)
Print files	ASCII text files that contain reports requested via XRP-II data entry and report generation screens. These files are stored in the operator's home directory.
Temporary files	Various working files XRP-II creates for its own internal use. These are stored in directory /usr/tmp on the MSS CM Server but not deleted by XRP-II.

4.3.3.7 Event and Error Messages

XRP-II issues both status and error messages. UNIFY manuals discuss common messages an operator can encounter, but no listing of standard XRP-II messages is provided in the COTS documentation. Messages are generally self-explanatory; however, some refer operators to log files, which, in many cases, are intended for XRP-II programmers and require special training to interpret.

XRP-II has several event logs. One, located at file "xrp.log" within the XRP-II log subdirectory¹, contains a record of each user attempt to log into XRP-II via the menu handler. It identifies the user id, date, and time of an event, and indicates whether the attempt succeeded or

¹ The XRP-II principal directory is named in the MSPATH environment variable (see Section 4.3.3.2.3).

failed. Other event logs, maintained in files in XRP's \$MSPATH/log subdirectory, capture a chronology of XRP datadump, dataload, data export, and data import processing.

XRP-II also maintains a Transaction Log to identify database records that have been added or modified, and by whom. This log, stored in the database, can be browsed via the Transaction Log screen (see Section 4.3.3.2.11.2) to determine the date, time, operator, and type of change for each update to a database field. The transaction log does not contain messages, per se, and is not monitored or used by ECS' system management applications.

Many errors XRP-II reports result from an error returned by the Unify RDBMS. Details about fatal errors are written to the error log files at the following pathnames relative to the XRP-II principal directory:

- ./bin/errlog
- ./def/errlog
- ./dicty/errlog
- ./bin/dbrbld.err
- ./bin/uniload.err
- ./dicty/uniload.err

These files generally do not contain the actual messages displayed to the operator, and they are meaningful mainly to the system administrator or XRP-II programmer. Appendix E of the UNIFY Direct HLI Programmer's reference manual describes some of the common messages written to the logs.

4.3.3.8 Reports

XRP-II can generate the pre-defined reports listed in Table 4.3.3-45. Each can be routed to the operator's display, a named file, or a printer. The reports are drawn on an as-required basis to meet operational needs.

XRP-II can make several printers available for a particular report. These printers often represent formatting choices rather than specific devices. Reports directed to a printer that does not correspond to a specific device are printed on the operator's default printer device.

All of the pre-defined reports are generated according to specifications that are "compiled" using XRP-II's Datarite report writer. Authorized operators can develop custom specifications. See Section 8 of the Datalook/Datarite Reference Manual for details.

Table 4.3.3-45. Reports (1 of 3)

Report Type	Report Description	Example
Bill of Materials	A list that identifies and describes an assembly's constituent control items.	Figure 4.3.3-64
Indented Bill of Materials	A list that identifies and depicts the full assembly structure of a control item.	Figure 4.3.3-65
Summarized Bill Report	A list that identifies the control items in an assembly along with the quantity of each.	Figure 4.3.3-66

Table 4.3.3-45. Reports (2 of 3)

Report Type	Report Description	Example
Multi-level Where Used Display	A list that identifies and describes the assemblies in which a specified control item is used.	Figure 4.3.3-67
Multi-level Where Used Report	A list that identifies and describes the assemblies in which a specified control item is used together with the effectivity dates for each.	Figure 4.3.3-68
ECS Configuration Items List - Level One	A list of all ECS configuration items active and deployed at the specified sites as of a specified date.	Figure 4.3.3-69
ECS Configuration Items List - Level Two	A list of all ECS design components active and deployed at the specified sites as of a specified date.	Figure 4.3.3-70
ECS Configured Articles List	A list of all active ECS configured articles for specified sites as of a specified date.	Figure 4.3.3-71
Version Description Document	A list of all active ECS configured articles for specified sites as of a specified date.	Figure 4.3.3-72
Site Baseline	A list of all ECS configured articles active and deployed as part of a specified baseline.	Figure 4.3.3-73
Change History Report	A list of all versions and product structure revisions for the specified item together with details associated with the item change.	Figure 4.3.3-74
Bill Of Material Comparison Report	A list that identifies the control items that two bills have in common as well as the control items in one that are not in the other.	Figure 4.3.3-75
Hardware Software Map (SW bundles only)	A list of software control items in a specified baseline as of a specified date. Items are listed by subsystem then host. Software items in hardware/software bundles are not reported.	Figure 4.3.3-76 Figure 4.3.3-79
Hardware Map	A list of hardware control items in a specified baseline as of a specified date. Items are listed by subsystem then host.	Figure 4.3.3-77
Hardware-Patch Map	A list of the patches and patch bundles in a specified baseline as of a specified date. Patch items are listed by subsystem then host.	Figure 4.3.3-78
Hardware-Software Map (HW/SW bundles)	A list of software control items in a specified baseline as of a specified date. Items are listed by subsystem then host. Software items in hardware and software bundles are reported.	Figure 4.3.3-79
Hardware-Software Data List	A list of all control items and additional functions mapped to a host. This report is typically written to a file and compared via script to earlier reports to identify host-mapping changes that have been applied over time.	Figure 4.3.3-80
COTS Software Version Baseline Report	Descriptions of the software control items in a specified baseline as of a specified date.	Figure 4.3.3-81
Patch Baseline Report	Descriptions of the patches in a specified baseline as of a specified date.	Figure 4.3.3-82

Table 4.3.3-45. Reports (3 of 3)

Report Type	Report Description	Example
Site - Host Map Report	A matrix presenting the names of the ECS hosts performing corresponding functions for a specified baseline as of a specified date. Two formats are available. The first lists hosts at the DAACs and the SMC. The second includes EDF facilities as well.	Figure 4.3.3-83 Figure 4.3.3-84
Baseline Documents (Title Order) Report	A list of documents sorted by title for a specified baseline as of a specified date.	Figure 4.3.3-85
Baseline Documents (Number Order) Report	A list of documents sorted by number for a specified baseline as of a specified date.	Figure 4.3.3-86
List by Old Numbers	A list of new control items created by Clone Manger together with their corresponding cloned items, sorted by cloned (old) control item ID.	Figure 4.3.3-87
List by Name	A list of new control items created by Clone Manger together with their corresponding cloned items, sorted by item name.	Figure 4.3.3-88
List by New Numbers	A list of new control items created by Clone Manger together with their corresponding cloned items, sorted by clone (new) control item ID.	Figure 4.3.3-89

4.3.3.8.1 Sample Reports

The figures that follow contain samples of Baseline Manager’s pre-defined reports. One sample is provided for each report listed in Table 4.3.3-45.

(pibomr0)
 System Monitoring and Coordination Center BILL OF MATERIALS
 Control Items IDs: b00009071
 Explosion quantity: 1

DATE: 04/13/99 TIME: 14:33
 PAGE: 1
 Number of levels: 99
 Date of bill: 04/13/99

 Control Item ID: b00009071 Project: ECS
 ECS-wide Subsystem Baseline, Drop 4PX uom: EA Resp. Org.: ECS
 Current Revision: Version: 4PX

LVL	CONTROL ITEM ID	DESCRIPTION	QUANTITY PER	CUOM
===	=====	=====	=====	=====
1	b00010011	ECS Operational Subsystem Baseline, Drop 4PX	1.0000	EA
2	b00010041	EDC Operational Subsystem Baseline, Drop 4PX	1.0000	EA
3	b00010126	EDC ASTER Subsystem	1.0000	EA
4	b00047430	ASTER LUT Database Server 01	1.0000	EA
5	b00048520	HW Bundle for ASTER LUT DB Server 01	1.0000	EA
6	b00014139	DISK-Pak (6x4.2GB)	2.0000	EA
6	b00021670	SUN,Ultra 170	1.0000	EA
5	b00051162	e0ass01 Hardware Dependent Patch Bundle	1.0000	EA
6	b00050296	Ultra 1 (non-E) Standalone Flash PROM Update	1.0000	EA
4	b00046620	ASTER LUT Database Server 02	1.0000	EA
5	b00047960	HW Bundle for ASTER LUT Database Server 02	1.0000	EA
6	b00014139	DISK-Pak (6x4.2GB)	2.0000	EA
6	b00021760	SUN,Ultra 2/1170	1.0000	EA
5	b00051164	e0ass02 Hardware Dependent Patch Bundle	1.0000	EA
6	b00050194	Ultra 2 Standalone Flash PROM Update	1.0000	EA
6	b00050200	/kernel/drv/hme	1.0000	EA
6	b00050254	fixes in handling multicast addresses	1.0000	EA
6	b00050312	POINT PATCH for BSI chip error and nf_snmd bugs	1.0000	EA
4	b00047420	ASTER DEM Workstation	1.0000	EA
5	b00048510	HW Bundle for ASTER DEM Workstation	1.0000	EA
6	b00014130	Multi-Pak (2x9GB)	1.0000	EA
6	b00021740	SUN,Ultra 2	1.0000	EA
5	b00051166	e0ass03 Hardware Dependent Patch Bundle	1.0000	EA
6	b00050194	Ultra 2 Standalone Flash PROM Update	1.0000	EA
6	b00050200	/kernel/drv/hme	1.0000	EA

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There are 26471 components in this bill.

Figure 4.3.3-64. Bill of Materials Report

(pibomr1)
 System Monitoring and Coordination Center
 Control Item IDs: b00009071
 Explosion quantity: 1

INDENTED BILL OF MATERIALS

DATE: 04/13/99 TIME: 13:50
 PAGE: 1
 Number of levels: 99
 Date of bill: 04/13/99

 Assembly: b00009071 Project: ECS uom: EA
 ECS-wide Subsystem Baseline, Drop 4PX Low level code: 0 Responsible Organization: ECS
 Active date: 10/05/98 Inactive date: **/**/**

LEVEL	CONTROL ITEM ID	NAME	MODEL/VERSION	MFR/DEV	ITEM CLASS	ITEM SUBCLASS	ACTIVE DATE	INACTIVE DATE	CFG ART	RES PLN
1	b00010011	ECS Operational Subsystem B/L	4PX	ECS	baseline	ecs-op, subsystem	10/05/98	**/**/**	N	N
.2	b00010041	EDC Operational Subsystem B/L	4PX	ECS	baseline	site, subsystem	10/05/98	**/**/**	N	Y
..3	b00010126	EDC AST Subsystem	4PX	ECS	other	subsystem	10/06/98	**/**/**	N	N
...4	b00047430	e0ass01	4PX	SUN	host	server	10/07/98	**/**/**	N	Y
		Note: SW baseline managed by DAAC								
...5	b00048520	ASTER LUT DB Svr 01 H/W bundle	4PX	ECS	hardware	bundle, hardware	09/28/98	**/**/**	N	N
....6	b00014139	DISK-Pak (6x4.2GB)		SUN	hardware	DISK	11/06/98	**/**/**	Y	Y
....6	b00021670	SUN, Ultra 170	Ultra 170	SUN	hardware	platform	09/28/98	**/**/**	Y	N
....5	b00051162	e0ass01 H/W Depend Patch Bundl	2.5.1	SUN	software	bundle, patch	02/19/99	**/**/**	Y	N
....6	b00050296	104881-05		SUN	software	patch	02/19/99	**/**/**	Y	N
...4	b00046620	e0ass02	4PX	SUN	host	server	10/07/98	**/**/**	N	Y
		Note: SW Baseline managed by DAAC								
...5	b00047960	ASTER LUT DB Svr 02 H/W bundle	4PX	ECS	hardware	bundle, hardware	09/28/98	**/**/**	N	N
....6	b00014139	DISK-Pak (6x4.2GB)		SUN	hardware	DISK	11/06/98	**/**/**	Y	Y
....6	b00021760	SUN, Ultra 2/1170	Ultra 2/1170	SUN	hardware	platform	09/28/98	**/**/**	Y	Y
...5	b00051164	e0ass02 H/W Depend Patch Bundl	2.5.1	SUN	software	bundle, patch	02/19/99	**/**/**	Y	N
....6	b00050194	104169-06		SUN	software	patch	02/19/99	**/**/**	Y	N
....6	b00050200	104212-12		SUN	software	patch	02/19/99	**/**/**	Y	N
....6	b00050254	104572-07		SUN	software	patch	02/19/99	**/**/**	Y	N
....6	b00050312	104967-05		SUN	software	patch	02/19/99	**/**/**	Y	N
...4	b00047420	e0ass03	4PX	SUN	host	server	10/07/98	**/**/**	N	Y
		Note: SW Baseline managed by DAAC								
...5	b00048510	ASTER DEM WS H/W bundle	4PX	ECS	hardware	bundle, hardware	09/28/98	**/**/**	N	N
....6	b00014130	Multi-Pak (2x9GB)		SUN	hardware	tape drive	11/06/98	**/**/**	Y	Y
....6	b00021740	SUN, Ultra 2	Ultra 2	SUN	hardware	platform	09/28/98	**/**/**	Y	N
...5	b00051166	e0ass03 H/W Depend Patch Bundl	2.5.1	SUN	software	bundle, patch	02/19/99	**/**/**	Y	N
....6	b00050194	104169-06		SUN	software	patch	02/19/99	**/**/**	Y	N
....6	b00050200	104212-12		SUN	software	patch	02/19/99	**/**/**	Y	N
....6	b00050254	104572-07		SUN	software	patch	02/19/99	**/**/**	Y	N
....6	b00050312	104967-05		SUN	software	patch	02/19/99	**/**/**	Y	N
..3	b00010151	EDC CLS Subsystem	4PX	ECS	other	subsystem	10/06/98	**/**/**	N	N
..3	b00010161	EDC CSS Subsystem	4PX	ECS	other	subsystem	10/06/98	**/**/**	N	N
...4	b00046610	e0css02	4PX	SUN	host	server	10/07/98	**/**/**	N	Y
		Note: DCE Master Server (Name Srvr, Secy Srvr, Global Dir Srvr) Note: DNS Master (Primary) Server, Domain 1 Note: DCE Global Time Server Note: FlexLM License Server 1 Note: NIS Master (Primary) Server								
...5	b00047950	CSS Server H/W bundle	4PX	ECS	hardware	bundle, hardware	09/28/98	**/**/**	N	N
....6	b00014120	1x2GB External Disk		SUN	hardware	disk, external	09/28/98	**/**/**	Y	Y

There are 26471 components in this bill.

Figure 4.3.3-65. Indented Bill of Materials Report

(pisumr)
 System Monitoring and Coordination Center
 Control Item ID: b00009071

SUMMARIZED BILL REPORT

DATE: 04/13/99 TIME: 12:47
 PAGE: 1
 Date of Configuration: 04/13/99

ASSEMBLY	DESCRIPTION	NAME	CLASS		
b00009071	ECS-wide Subsystem Baseline, Drop 4PX	ECS-wide Subsystem B/L	baseline		
COMPONENT	DESCRIPTION	NAME	CLASS	UOM	QUANTITY
b00010011	ECS Operational Subsystem Baseline, Drop 4PX	ECS Operational Subsystem B/L	baseline	EA	1.000
b00010023	EDF Subsystem Baseline, Drop 4PX	EDF Subsystem B/L	baseline	EA	1.000
b00010024	EDF Subsystem Baseline, Ver.2.0, Drop 4PX	EDF Subsystem B/L	baseline	EA	1.000
b00010026	VATC Subsystem Baseline, Ver.2.0, Drop 4P1	VATC Subsystem B/L	baseline	EA	1.000
b00010027	Mini-DAAC SMC Subsystem B/L, Drop 4PX	Mini-DAAC SMC Subsystem B/L	baseline	EA	2.000
b00010028	VATC-SMC Subsystem B/L, Ver.2.0, Drop 4P1	VATC-SMC Subsystem B/L	baseline	EA	1.000
b00010031	GSFC Operational Subsystem Baseline, Drop 4PX	GSFC Operational Subsystem B/L	baseline	EA	1.000
b00010032	SMC Operational Subsystem Baseline, Drop 4PX	SMC Operational Subsystem B/L	baseline	EA	1.000
b00010033	VATC Subsystem Baseline, Drop 4PX	VATC Subsystem B/L	baseline	EA	2.000
b00010034	EDF Mini-DAAC Subsystem Baseline, Ver.2.0, Drop 4PX	EDF Mini-DAAC Subsystem B/L	baseline	EA	1.000
b00010035	NSIDC Operational Subsystem Baseline, Drop 4PX	NSIDC Operational Subsystem BL	baseline	EA	1.000
b00010036	Mini-DAAC SMC Subsystem B/L, Ver.2.0, Drop 4PX	Mini-DAAC SMC Subsystem B/L	baseline	EA	1.000
b00010037	VATC-SMC Subsystem B/L, Drop 4PX	VATC-SMC Subsystem B/L	baseline	EA	2.000
b00010041	EDC Operational Subsystem Baseline, Drop 4PX	EDC Operational Subsystem B/L	baseline	EA	1.000
b00010049	LaRC Operational Subsystem Baseline, Drop 4PX	LaRC Operational Subsystem B/L	baseline	EA	1.000
b00010051	EDF Mini-DAAC Subsystem Baseline, Drop 4PX	EDF Mini-DAAC Subsystem B/L	baseline	EA	2.000
b00010056	GSFC ASTER Subsystem	GSFC AST Subsystem	other	EA	1.000
b00010061	GSFC Data Server Subsystem	GSFC DSS Subsystem	other	EA	1.000
b00010071	GSFC Data Processing Subsystem	GSFC DPS Subsystem	other	EA	1.000
b00010076	GSFC Client Subsystem	GSFC CLS Subsystem	other	EA	1.000
b00010081	GSFC Communications Subsystem	GSFC CSS Subsystem	other	EA	1.000
b00010091	GSFC Data Management Subsystem	GSFC DMS Subsystem	other	EA	1.000
b00010101	GSFC Ingest Subsystem	GSFC INS Subsystem	other	EA	1.000
b00010111	GSFC System Management Subsystem	GSFC MSS Subsystem	other	EA	1.000
b00010113	GSFC Internetworking Subsystem	GSFC ISS Subsystem	other	EA	1.000
b00010116	GSFC Interoperability Subsystem	GSFC IOS Subsystem	other	EA	1.000
b00010121	GSFC Planning Subsystem	GSFC PLS Subsystem	other	EA	1.000
b00010126	EDC ASTER Subsystem	EDC AST Subsystem	other	EA	1.000
b00010131	EDC Data Server Subsystem	EDC DSS Subsystem	other	EA	1.000
b00010141	EDC Data Processing Subsystem	EDC DPS Subsystem	other	EA	1.000
b00010151	EDC Client Subsystem	EDC CLS Subsystem	other	EA	1.000
b00010161	EDC Communications Subsystem	EDC CSS Subsystem	other	EA	1.000

There are 2096 parts in this summarized bill.

Figure 4.3.3-66. Summarized Bill Report

```

(piwurl)                                DATE: 10/04/96   TIME: 09:43
ECS Development Fac                      PAGE: 1
Components: b0101412                     Number of levels: 99
-----
                                MULTI-LEVEL WHERE-USED DISPLAY
-----
Component: b0101412      Clearcase Client for Sun Solaris 2.5.1
Project: ECS

LEVEL          CONTROL ITEM ID          CMDTY          QUANTITY          CUOM
=====
1              b0101410          Other          1.0000          EA
              TRMM Release of SCM
.2             b0101400          Other          1.0000          EA
              TRMM Release of MLCI
..3            b0100001          Other          1.0000          EA
              TRMM Release of MSS
...4           b0000001          Other          1.0000          EA
              EOSDIS Core System for TRMM
1              b01200           Other          1.0000          EA
              SPRE4SUN Software
.2             b01000           Other          1.0000          EA
              QUEUING Workstation
..3            b010             Other          1.0000          EA
              TRMM with Extension for ...
..3            b011             Other          1.0000          EA
              TRMM with Extension for ...
..3            b0100           Other          1.0000          EA
              Science Processing String
...4           b010             Other          1.0000          EA
              TRMM with Extension for ...
There are 16 assemblies using this component.
-----

```

Figure 4.3.3-67. Multi-level Where-Used Display

(piwur)
 System Monitoring and Coordination Center
 Components: b00015000

MULTI-LEVEL WHERE-USED REPORT

DATE: 04/13/99 TIME: 12:24
 PAGE: 1
 Number of levels: 2
 Date of Configuration: 04/13/99

 Component: b00015000 Project: ECS uom: EA
 Configuration Management Low level code: 6 Resp. Org.: MSS
 Active date: 07/21/98 Inactive date: **/**/**

LEVEL	CONTROL ITEM ID	NAME	MODEL/VERSION	CUOM	EXTENDED QUANTITY	ACTIVE DATE	INACTIVE DATE
1	b00041380	Planning/Mgmt WS 01 S/W bundle	4PX	EA	1.0	09/28/98	**/**/**
.2	b00045000	tlsms10	4PX	EA	1.0	01/22/99	**/**/**
.2	b00045110	tlpls02	4PX	EA	1.0	09/28/98	**/**/**
.2	b00046020	l0pls02	4PX	EA	1.0	09/28/98	**/**/**
.2	b00047360	e0pls03	4PX	EA	1.0	09/28/98	**/**/**
.2	b00045690	n0pls02	4PX	EA	1.0	09/28/98	**/**/**
.2	b00045490	m0mss12	4PX	EA	1.0	09/28/98	**/**/**
.2	b00046220	g0pls01	4PX	EA	1.0	09/28/98	**/**/**
1	b00040850	PDPS DBMS Server S/W bundle	4PX	EA	1.0	09/28/98	**/**/**
.2	b00045120	tlpls01	4PX	EA	1.0	09/28/98	**/**/**
.2	b00046030	l0pls01	4PX	EA	1.0	09/28/98	**/**/**
.2	b00046480	e0pls02	4PX	EA	1.0	09/28/98	**/**/**
.2	b00045700	n0pls01	4PX	EA	1.0	09/28/98	**/**/**
.2	b00046210	g0pls02	4PX	EA	1.0	09/28/98	**/**/**
1	b00040860	Planning/Mgmt WS 02 S/W bundle	4PX	EA	1.0	09/28/98	**/**/**
.2	b00046490	e0pls01	4PX	EA	1.0	09/28/98	**/**/**
.2	b00045680	n0pls03	4PX	EA	1.0	09/28/98	**/**/**
.2	b00046200	g0pls03	4PX	EA	1.0	09/28/98	**/**/**
1	b00040870	CM Server S/W bundle	4PX	EA	1.0	09/28/98	**/**/**
.2	b00045040	tlsms05	4PX	EA	1.0	09/28/98	**/**/**
.2	b00045160	tlmss03	4PX	EA	1.0	09/28/98	**/**/**
.2	b00046050	l0mss01	4PX	EA	1.0	09/28/98	**/**/**
.2	b00046530	e0mss02	4PX	EA	1.0	09/28/98	**/**/**
.2	b00045740	n0mss02	4PX	EA	1.0	09/28/98	**/**/**
.2	b00045510	m0mss02	4PX	EA	1.0	09/28/98	**/**/**
.2	b00046270	g0mss02	4PX	EA	1.0	09/28/98	**/**/**
1	b00061440	CM Server S/W bundle	4PY	EA	1.0	03/12/99	**/**/**
.2	b00061216	tlsms05	4PY	EA	1.0	03/12/99	**/**/**
.2	b00061196	tlmss03	4PY	EA	1.0	03/12/99	**/**/**
.2	b00061106	n0mss02	4PY	EA	1.0	03/12/99	**/**/**

There are 150 assemblies affected by this component.

Figure 4.3.3-68. Multi-level Where-Used Report

(c111)
ECS Development Fac
SITE: GSFC

ECS CONFIGURATION ITEMS LIST - LEVEL ONE

DATE: 08/19/96 TIME: 19:26
PAGE: 1
Date of bill: 05/30/96

Subsystem: MSS Management Subsystem

CI MNEMONIC	CI NAME	CI CONTROL ITEM ID	CI DESCRIPTION	CI MODEL/VERSION	CI SCOPE
MACI	Management Agent	b0101100	Management Agent CSCI	A.IT.01	core
MCI	Management Software	b0101200	Management Software CSCI	A.IT.01	core
MHCI	Management Hardware	b0101300	Management Hardware CI	A.IT.01	core
MLCI	Management Logistics	b0101400	Management Logistics CSCI	A.IT.01	core

Subsystem: CSS Communication Subsystem

CI MNEMONIC	CI NAME	CI CONTROL ITEM ID	CI DESCRIPTION	CI MODEL/VERSION	CI SCOPE
DCCI	Distr Computing Software	b0102100	Distributed Computing Sof	A.IT.01	core
DCHCI	Distr Computing Hardware	b0102200	Distributed Computing Har	A.IT.01	core

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Figure 4.3.3-69. ECS Configuration Items List - Level One

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(cil2)
ECS Development Facility          ECS CONFIGURATION ITEMS LIST - LEVEL TWO      DATE: 08/19/96   TIME: 19:48
Site or range: EDF                                     PAGE: 1
                                                    Date of bill: 05/30/96

Subsystem: MSS      : Management Subsystem      Version: A.IT.01
  CI Item: MHCI     : Management Hardware       Version: A.IT.01

COMPONENT
MNEMONIC  COMPONENT NAME      COMPONENT
          =====
          CONTROL ITEM ID  COMONENT DESCRIPTION  COMPONENT MODEL/VERSION  COMP SCOPE
          =====
Enterprise Mgmt Svr b0101310            TRMM Release of EMC Server  A.IT.01                  core
Local Sys Mgmt Svr  b0101320            TRMM Release of LSM Server  A.IT.01                  core
Enterprise Mgmt Wks b0101330            TRMM Release of EMC Wkstation A.IT.01                  core
Local Sys Mgmt Wks  b0101340            TRMM Release of LSM Wkstation A.IT.01                  core
Management Printer b0101350            TRMM Release of MSS Printer  A.IT.01                  core

CI Item: MLCI      Management Logistics CSCI  Version: A.IT.01
          .
          .
          .

```

Figure 4.3.3-70. ECS Configuration Items List - Level Two

(cal7)
ECS Development Fac
Site(s): EDF

ECS CONFIGURED ARTICLES LIST

DATE: 08/19/96 TIME: 20:12
PAGE: 1
Date of Configuration: 05/30/96

CONFIGURATION ITEM: Management Logistics CSCI CONTROL ITEM ID: b0101400

CONFIGURED ARTICLE NAME	MOD/VER	CONTROL ITEM ID	IMPL STATUS	ITEM SUBCLASS	CMDTY CD	SCOPE
=====	=====	=====	=====	=====	=====	=====
ClearCase Client	2.1	b0101412	production	appl-client	COTS	core
ClearCase Server	2.0.2	b0101414	production	appl-server	COTS	core
ClearCase Scripts	A.IT.01	b0101416	production	appl-scripts	custom	core

CONFIGURATION ITEM: Management Sftware CSCI CONTROL ITEM ID: b010120

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Figure 4.3.3-71. ECS Configured Articles List

(vdd)
 ECS Development Fac
 Control Item ID: b0000001
 Site: EDF

VERSION DESCRIPTION DOCUMENT

DATE: 09/05/96 TIME: 08:47
 PAGE: 1
 Date of Configuration: 06/03/96

SITE: EDF : ECS Development Fac

Subsystem: MSS : Management Subsystem Control Item ID: b0100001

Configuration Item: MLCI : Management Logistics Control Item ID: b0101400

Component: SCM : Software Change Mgr Control Item ID: b0101410

CONTROL ITEM NAME	MODEL/VERSION	CONTROL ITEM ID	MFR/DEV	CLASS	SUB CLASS	NUM LIC	ACTIVE DATE	INACTIVE DATE	CMDTY CODE	SCOPE
ClearCase Scripts	A.IT.01	b0101616	ECS	software	appl-scripts	99999	05/23/96	**/**/**	custom	Core
ClearCase Server	2.0.2	b0101414	ATR	software	appl-server	75	05/23/96	**/**/**	COTS	Core
ClearCase Client	2.1	b0101412	ATR	software	appl-client	75	05/23/96	**/**/**	COTS	Core
ClearCase DDTs Integrati	2	b0101418	ATR	software	appl-scripts	75	05/23/96	**/**/**	COTS	Core

Component: CRM : Change Request Mgr Control Item ID: 0101420

CONTROL ITEM NAME	MODEL/VERSION	CONTROL ITEM ID	MFR/DEV	CLASS	SUB CLASS	NUM LIC	ACTIVE DATE	INACTIVE DATE	CMDTY CODE	SCOPE
Dist Defect Track'g Sys	A.IT.01	b0101422	PUR	software	application	250	05/23/96	**/**/**	COTS	Core

Component: BLM : Basseline Manager Control Item ID: 0101430

CONTROL ITEM NAME	MODEL/VERSION	CONTROL ITEM ID	MFR/DEV	CLASS	SUB CLASS	NUM LIC	ACTIVE DATE	INACTIVE DATE	CMDTY CODE	SCOPE
XRP-II	3.0	b0101432	HTG	software	application	50	05/23/96	**/**/**	COTS	Core
UNIFY DBMS	5.0.7.2.0	b0101434	UNI	software	application	50	05/23/96	**/**/**	COTS	Core

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 .
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Figure 4.3.3-72. Version Description Document

(sitebase)
ECS Development Fac
All Control Items

SITE BASELINE REPORT

DATE: 08/19/96 TIME: 20:22
PAGE: 1
Number of levels: 99
Date of configuration: 05/30/96

Baseline: bLAR010
TRMM Baseline with LaRC extenstions for ...

LEVEL	CONTROL ITEM ID	DESCRIPTION	MFR/DEV	MODEL/VER	ACTIVE DATE	INACTIVE DATE
1	bLAR01000	Queuing Server		A...	05/01/96	**/**/**
.2	bLAR73005	Queuing Server boot partition	ECS	A...	05/23/96	**/**/**
.2	bLAR73006	Queuing Server user partition	ECS	A...	05/23/96	**/**/**
.2	bLAR1100	spr17sun Hardware		A...	05/23/96	**/**/**
.3	b01101	SUN SPARCSTATION SX 20/71	SUN	SPARCSTATION SX 20/71	05/23/96	**/**/**
.3	b01102	20 INCH COLOR MONITOR	SUN		05/23/96	**/**/**
.3	b01103	EXPANDED 101 KEYBOARD	SUN		05/23/96	**/**/**
.3	b01104	3 BUTTON TRACKBALL MOUSE	SUN		05/23/96	**/**/**
.3	b01105	64 MB EXP MEM MODULE	SUN		05/23/96	**/**/**
.3	b01107	IBM 1.05GB INTERNAL DISK DRIVE	IBM		05/23/96	**/**/**
.3	b01109	SBUS FAST SCSI-2 ETHERNET CARD	SUN		05/23/96	**/**/**
.3	b01112	INTERNAL CD ROM	SUN	Ultra 2	05/23/96	**/**/**
.2	b01200	spr17sun Software	ECS	A...	05/23/96	**/**/**
.3	b0101414	ClearCase Server for Sun Solar	ATR	2.0.2	05/23/96	**/**/**
.3	b0101416	ClearCase Scripts for TRMM	ATR	A	05/23/96	**/**/**
.3	b01201	SOLARIS OS	SUN	Solaris 2.4	05/23/96	**/**/**
		.				
		.				
		.				

Figure 4.3.3-73. Site Baseline Report

(bomcmp)
ECS Development Fac

BILL OF MATERIAL COMPARISON REPORT

DATE: 10/04/96 TIME: 11:33
PAGE: 1

Control Item One: b0101400 Control Item Two: b0101400
Version: 0 Version: 0
Description: TRMM Release of MLCI Description: TRMM Release of MLCI
Revision: 0 Revision: 1
Date of Configuration: 09/08/96 Date of Configuration: 10/04/96

Items in b0101400 found in: b0101400
Cfg Date: 09/08/96 Cfg Date: 10/04/96

CONTROL ITEM ID	DESCRIPTION	MFR/DEV	MODEL/VERSION	CLASS	SUBCLASS
b0101410	TRMM Release of SCM	ECS	A.IT.01	design	CSC
b0101420	TRMM Release of CRM	ECS	A.IT.01	design	CSC
b0101430	TRMM Release of BM	ECS	A.IT.01	design	CSC
b0101412	Clearcase Client for Sun Solaris 2.4	ATR	2.1	software	appl-client
b0101416	ClearCase Scripts for TRMM	ATR	A.IT.01	software	appl-scripts

Items in b0101400 NOT found in: b0101400
Cfg Date: 09/08/96 Cfg Date: 10/04/96

CONTROL ITEM ID	DESCRIPTION	MFR/DEV	MODEL/VERSION	CLASS	SUBCLASS
b0101414	ClearCase Server for Sun Solaris 2.4	ATR	2.0.2	software	appl-server

Items in b0101400 found in: b0101400
Cfg Date: 10/04/96 Cfg Date: 09/08/96

CONTROL ITEM ID	DESCRIPTION	MFR/DEV	MODEL/VERSION	CLASS	SUBCLASS
b0101410	TRMM Release of SCM	ECS	A.IT.01	design	CSC
b0101420	TRMM Release of CRM	ECS	A.IT.01	design	CSC
b0101430	TRMM Release of BM	ECS	A.IT.01	design	CSC
b0101412	Clearcase Client for Sun Solaris 2.4	ATR	2.1	software	appl-client
b0101416	ClearCase Scripts for TRMM	ATR	A.IT.01	software	appl-scripts

Items in b0101400 NOT found in: b0101400
Cfg Date: 10/04/96 Cfg Date: 09/08/96

CONTROL ITEM ID	DESCRIPTION	MFR/DEV	MODEL/VERSION	CLASS	SUBCLASS
b0101415	ClearCase Server for Sun Solaris 2.4	ATR	3.0	software	appl-server

Figure 4.3.3-75. Bill Of Material Comparison Report

(hswsmap)
 ECS Development Facility
 Baseline Item ID: b00010041
 Doc #: 920-TDG-nnn Rev 0

HARDWARE-SOFTWARE MAP
 EDC Operational Subsystem Baseline, Drop 4PX

DATE: 03/22/00 TIME: 15:04
 PAGE: 1
 Date of bill: 04/12/99

 EDC DMS Subsystem

** e0dmh01 ** DMGHW Sybase Backup Server b00047230

```

- - > Sybase Backup Svr S/W bundle b00041260 < - - - - -
-
- COTS/FREE/SHARE PRODUCT NAME CUSTOM SW NAME MODEL/VERSION ITEM SUBCLASS CONTROL ITEM ID RC CSCI ORG
- -----
- .EcCsCommon.pkg 4PX package b00040712 MSS/MACI
- .EcCsCommon.iu 4PX installable unit b00042640 DCCI ECS
- EcSeAuthnProg 4PX program b00042880 DCCI IDG
- EcSeLoginProg 4PX program b00042870 DCCI IDG
- EcUtCopyExec 4PX program b00042872 STMGT DSS
- ftp_popen 4PX program b00042868 STMGT DSS
- .EcDbDDM.pkg 4PX package b00040432 MCI ECS
- .EcDbDDM.iu 4PX installable unit b00040434 MCI ECS
- (No Executables) 4PX program b00042902 ECS
- Anlpassword 2.3 program b00014751 MCI MSS
- DBTools.h++ 2.1.1 program b00015051 DCCI IDG
- DCE Cell Manager Host Agent 1.6.2 program b00015173 DCCI IDG
- DCE Client 1.5 program b00015072 DCCI IDG
- Flare Code (RAID Controller) 8.61 program b00015284 AQAHW SED-HW
- Gnu Unzip 1.2.4 program b00015413 A DCCI IDG
- Gnu Zip 1.2.4 program b00015412 A DCCI IDG
- HP-UX 10.20 OS b00015492 DCCI IDG
- Kerbnet 1.0 program b00015664 DCCI MSS
- Legato Networker Client 5.5 program b00015684 MCI MSS
- Net.h++ 7.0.2 program b00015771 DCCI IDG
- Open Client/C (isql & bcp) 10.0.4 program b00015840 DCCI DDM
- Open Client/C (no isql, bcp) 11.1.0 program b00015831 DCCI DDM
- PERL 5.003 program b00015931 A DCCI IDG
- RAID PROM 1.63 program b00016045 AQAHW SED-HW
- Replication Server 11.0.3 program b00016070 SDSRV DDM
- SQL Server 11.0.3.3 11.0.3.3 program b00016206 P DCCI DDM
- TCL/Tk: Expect 5.22.0 program b00015417 A MCI MSS
- TCL/Tk: Expectk 5.22.0 program b00015418 A MCI MSS
- TCL/Tk: Tclsh 7.6p2 program b00016282 A MCI MSS
- TCP Wrappers 7.4 program b00016311 MCI MSS
- Tivoli Client: Admin 3.0 program b00016331 MCI MSS
- Tivoli Client: Courier 3.0 program b00016335 MCI MSS
- Tivoli Client: Ent Console Log 3.0 program b00016344 MCI MSS
- Tivoli Client: Mgt Platform 3.1 program b00016340 MCI MSS
- Tivoli Client: Sentry 3.0 program b00016365 MCI MSS
  
```

Ref Codes: A = automounted; I = remotely installed; P = platform; R = RAID (switchable); r = RAID (other)

EDC DMS Subsystem: e0dmh01

Figure 4.3.3-76. Hardware-Software Map (SW bundles only)

```

(hwmap)
System Monitoring and Coordination Center
Baseline Item ID: b00060014
Doc #: 920-TDG-nnn Rev 0
                                HARDWARE MAP
                                GSFC Operational Subsystem Baseline, Drop 4PY
DATE: 04/16/99   TIME: 12:17
                                PAGE: 1
                                Date of bill: 12/30/99
                                GSFC DSS Subsystem
-----
1 GSFC DSS Subsystem
-----
2 ** g0acg01 ** APC Server (P)          ACMHW   b00060840
Class:   host          Total RAM: 2000   # CPUs: 10   Net Attach Type(s):
Subclass: server      Total Disk: 6     Proc Id:
3 APC Server (P) H/W bundle             b00060430
-----
      QTY PER  HARDWARE ITEM NAME          ITEM SUBCLASS  MFR/
      =====  =====
      4       3.00  90 GB Raid                RAID          SGI
      4       1.00  SGI,PC XL                platform      SGI
      4       1.00  Wyse Terminal                terminal      WYE
      =====  =====
      CAPACITY/  FORMAT  CONTROL ITEM ID  RESP ORG
      SIZE
      =====  =====
      Y          b00013990        SED-HW
      Y          b00021440        SED-HW
      Y          b00014030        SED-HW
-----
2 ** g0acg05 ** APC Server (S)          ACMHW   b00060842
Class:   host          Total RAM: 2000   # CPUs: 10   Net Attach Type(s):
Subclass: server      Total Disk: 6     Proc Id:
3 APC Server (S) H/W bundle             b00060434
-----
      QTY PER  HARDWARE ITEM NAME          ITEM SUBCLASS  MFR/
      =====  =====
      4       1.00  SGI,PC XL                platform      SGI
      4       1.00  Wyse Terminal                terminal      WYE
      =====  =====
      CAPACITY/  FORMAT  CONTROL ITEM ID  RESP ORG
      SIZE
      =====  =====
      Y          b00021440        SED-HW
      Y          b00014030        SED-HW
-----
2 ** g0acs02 ** Operations WS 01        ACMHW   b00060844
Class:   host          Total RAM: 64    # CPUs: 1    Net Attach Type(s):
Subclass: server      Total Disk: 4    Proc Id:
3 Operations WS 01 H/W bundle           b00060528
-----
      QTY PER  HARDWARE ITEM NAME          ITEM SUBCLASS  MFR/
      =====  =====
      4       1.00  SUN,Ultra 170E            platform      SUN
      =====  =====
      CAPACITY/  FORMAT  CONTROL ITEM ID  RESP ORG
      SIZE
      =====  =====
      b00021710        SED-HW
      :
      :
      :
-----
                                GSFC DSS Subsystem: g0acs02

```

Figure 4.3.3-77. Hardware Map

hwpatmap)
 System Monitoring and Coordination Center
 Baseline Item ID: b00010041
 Doc #:

HARDWARE-PATCH MAP
 EDC Operational Subsystem Baseline, Drop 4FX

DATE: 03/10/99 TIME: 18:50
 PAGE: 40
 Date of bill: 12/30/99
 EDC DSS Subsystem

 EDC DSS Subsystem

** e0acg01 ** ACMHW APC Server (P) b00048110 <----- b00047020
 - - > APC Server (P) H/W bundle b00048110 <-----
 (No reportable patch items in bundle)

- - > APC Server (P) S/W bundle b00041070 <-----

PATCH ITEM NAME	DESCRIPTION	ITEM SUBCLASS	MODEL/VERSION	CONTROL ITEM ID	ORG
ClearCase IRIX64 Patch Bundle	Clearcase Patches for Irix64 6.2	bundle, patch	6.2	b00048857	-
3.1.1-20	Clearcase Patch 3.1.1-20 for Irix 6.2 (64 bit)	patch, appl	6.2	b00048858	IDG
3.1.1-30	Clearcase Patch 3.1.1-30 for Irix 6.2 (64 bit)	patch, appl	6.2	b00048860	IDG
3.1.1-37	Clearcase Patch 3.1.1-37 for Irix 6.2 (64 bit)	patch, appl	6.2	b00048861	IDG
3.1.1-37	Clearcase Patch 3.1.1-37 for Irix 6.2 (64 bit)	patch, appl	6.2	b00048862	IDG
3.1.1-40	Clearcase Patch 3.1.1-40 for Irix 6.2 (64 bit)	patch, appl	6.2	b00048863	IDG
3.1.1-41	Clearcase Patch 3.1.1-41 for Irix 6.2 (64 bit)	patch, appl	6.2	b00048864	IDG
SG0001503	Objectserver crash with graphics cards	patch, appl	6.2	b00048859	IDG
SG0001591	IO4prom 4.21 rollup patch for Challenge, Power Challen	patch,		b00050392	-
SG0001632	libfpe patch for 7.1 compilers on irix 6.2	patch, OS	6.2	b00048832	IDG
SG0001637	C++ Exception handling for 7.00 (and above) compilers	patch, OS	6.2	b00048833	IDG
SG0001678	Fix License Manager security hole by removing setuid p	patch,		b00050408	-
SG0001707	WorkShop 2.6.4 Patch	patch,		b00050410	-
SG0001721	MIPSpro 7.1 Fortran 77 patch for datapool element alig	patch,		b00050412	-
SG0001775	rollup - libfastm for ido7.1	patch,		b00050416	-
SG0001787	rollup - bug fixes for libm, libmx, and libm43 - for i	patch,		b00050420	-
SG0001809	SpeedShop 1.1 Patch	patch,		b00050422	-
SG0001949	c frontend patch on 7.1 / 7.1.1	patch,		b00050424	-
SG0001982	OpenGL remote rendering	patch,		b00050432	-
SG0002072	MIPSpro 7.1 Compiler Back-end rollup #3	patch,		b00050440	-
SG0002102	c++ frontend rollup #3 for 7.1	patch,		b00050444	-
SG0002312	libftn rollup for 6.2 and 7.1 compilers on irix 6.2	patch,		b00050468	-
SG0002371	InfiniteReality (Onyx) Diagnostics Fifth Release, Augu	patch,		b00050480	-
SG0002373	Showcase for 6.2 fix for printing of 3D objects	patch,		b00050482	-
SG0002435	Fcom with -g, structure alignment, and namelist proble	patch,		b00050492	-

EDC DSS Subsystem: e0acg01

Figure 4.3.3-78. Hardware-Patch Map

(hwsmap)
 System Monitoring and Coordination Center
 Baseline Item ID: b00010041
 Doc #: 920-TDG-nnn Rev 0

HARDWARE-SOFTWARE MAP
 EDC Operational Subsystem Baseline, Drop 4PX

DATE: 04/13/99 TIME: 10:04
 PAGE: 1
 Date of bill: 04/12/99
 EDC DMS Subsystem

 EDC DMS Subsystem

** e0dmh01 ** DMGHW Sybase Backup Server b00047230

- - > Sybase Backup Svr H/W bundle b00048300 < -----
 (No reportable software items in bundle)

- - > Sybase Backup Svr S/W bundle b00041260 < -----

COTS/FREE/SHARE	PRODUCT NAME	CUSTOM SW NAME	MODEL/VERSION	ITEM SUBCLASS	CONTROL ITEM ID	RC	CSCI	ORG
-		.EcCsCommon.pkg	4PX	package	b00040712		MSS/MACI	-
-		.EcCsCommon.iu	4PX	installable unit	b00042640		DCCI	ECS
-		EcSeAuthnProg	4PX	program	b00042880		DCCI	IDG
-		EcSeLoginProg	4PX	program	b00042870		DCCI	IDG
-		EcUtCopyExec	4PX	program	b00042872		STMGT	DSS
-		ftp_popen	4PX	program	b00042868		STMGT	DSS
-	Anlpassword		2.3	program	b00014751		MCI	MSS
-	DBTools.h++		2.1.1	program	b00015051		DCCI	IDG
-	DCE Cell Manager Host Agent		1.6.2	program	b00015173		DCCI	IDG
-	DCE Client		1.5	program	b00015072		DCCI	IDG
-	Flare Code (RAID Controller)		8.61	program	b00015284		AQAHW	SED-HW
-	Gnu Unzip		1.2.4	program	b00015413	A	DCCI	IDG
-	Gnu Zip		1.2.4	program	b00015412	A	DCCI	IDG
-	HP-UX		10.20	OS	b00015492		DCCI	IDG
-	Kerberos		1.0	program	b00015664		DCCI	MSS
-	Legato Networker Client		5.5	program	b00015684		MCI	MSS
-	Legato Networker Client		4.2.3	program	b00015681		MCI	MSS
-	Net.h++		7.0.2	program	b00015771		DCCI	IDG
-	Open Client/C (isql & bcp)		10.0.4	program	b00015840		DCCI	DDM
-	Open Client/C (no isql, bcp)		11.1.0	program	b00015831		DCCI	DDM
-	PERL		5.003	program	b00015931	A	DCCI	IDG
-	RAID PROM		1.63	program	b00016045		AQAHW	SED-HW
-	Replication Server		11.0.3	program	b00016070		SRSRV	DDM
-	SQL Server 11.0.3.3		11.0.3.3	program	b00016206	P	DCCI	DDM
-	TCL/Tk: Expect		5.22.0	program	b00015417	A	MCI	MSS
-	TCL/Tk: Expectk		5.22.0	program	b00015418	A	MCI	MSS
-	TCL/Tk: Tclsh		7.6p2	program	b00016282	A	MCI	MSS
-	TCP Wrappers		7.4	program	b00016311		MCI	MSS
-	Tivoli Client: Admin		3.0	program	b00016331		MCI	MSS
-	Tivoli Client: Courier		3.0	program	b00016335		MCI	MSS
-	Tivoli Client: Ent Console Log		3.0	program	b00016344		MCI	MSS
-	Tivoli Client: Mgt Platform		3.1	program	b00016340		MCI	MSS

Ref Codes: A = automounted; I = remotely installed; P = platform; R = RAID (switchable); r = RAID (other)

EDC DMS Subsystem: e0dmh01

Figure 4.3.3-79. Hardware-Software Map Report (HW & SW bundles)

(hswslst)
 ECS Development Facility
 Baseline Item ID: b00060014

HARDWARE-SOFTWARE MAP DATA LIST
 GSFC Operational Subsystem Baseline, Drop 4PY

DATE: 08/25/00 TIME: 14:29
 PAGE: 1
 Date of bill: 12/30/99

HOST NAME	COMPONENT	MODEL/VERSION	ITEM CLASS	ITEM SUBCLASS	CONTROL ITEM ID
g0css02	has additional function DCE Master Server (Name Srvr, Secy Srvr, Global Dir Srvr)				
g0css02	has additional function DNS Master (Primary) Server, Domain 1				
g0css02	has additional function DCE Global Time Server				
g0css02	has additional function FlexLM License Server 1				
g0css02	has additional function NIS Master (Primary) Server				
g0css02	CSS Server H/W bundle	4PY	hardware	bundle, hardware	b00060454
g0css02	Multi-Pak (1x9GB)		hardware	DISK	b00014132
g0css02	SUN,Sparc 20/712	Sparc 20/712	hardware	platform	b00021640
g0css02	CSS Server S/W bundle	4PY	software	bundle, software	b00061444
g0css02	Anlpassword	2.3	software	program	b00014750
g0css02	CDE	1.0.2	software	program	b00014970
g0css02	DBTools.h++	2.1.1	software	program	b00015050
g0css02	DCE Cell Manager Host Agent	1.6.2	software	program	b00015171
g0css02	DCE Client	1.1	software	program	b00015090
g0css02	DCE Server	1.1	software	program	b00015175
g0css02	EMACS	19.28.1	software	program	b00015240
g0css02	FLEXlm	6.1	software	program	b00015301
g0css02	Gnu Unzip	1.2.4	software	program	b00015411
g0css02	Gnu Zip	1.2.4	software	program	b00015410
g0css02	JetAdmin	D.02.10	software	program	b00015622
g0css02	Kerbnnet	1.0	software	program	b00015663
g0css02	Legato Networker Client	5.5	software	program	b00015685
g0css02	PERL	5.005_03	software	program	b00015930
g0css02	SUN Common OS Patch Bundle	2.5.1	software	bundle, patch	b00050092
g0css02	103461-24		software	patch	b00050108
g0css02	103558-11		software	patch	b00050110
g0css02	103566-34		software	patch	b00050112
g0css02	103582-16		software	patch	b00050114
g0css02	103594-15		software	patch	b00050116
g0css02	103597-04		software	patch	b00050118
g0css02	103603-09		software	patch	b00050120
g0css02	103612-41		software	patch	b00050122
g0css02	103622-11		software	patch	b00050124
g0css02	103627-01		software	patch	b00050126
g0css02	103630-10		software	patch	b00050128
g0css02	103640-20		software	patch	b00050130
g0css02	103663-13		software	patch	b00050132
g0css02	103680-02		software	patch	b00050136
g0css02	103686-02		software	patch	b00050138

Figure 4.3.3-80. Hardware-Software Map Data List

(picotabl)
 System Monitoring and Coordination Center
 Control Item ID: b00010011
 Doc #: 910-TDA-nm Rev n

COTS SOFTWARE VERSION BASELINE REPORT
 ECS Operational Subsystem Baseline, Drop 4PX

DATE: 04/13/99 TIME: 10:25
 PAGE: 1
 Date of Configuration: 04/12/99

ECS NAME	* RESP ORG	VARIANT	MFR/DEV NAME	VERSION	PRINCIPAL DIRECTORY	CONTROL ITEM ID	COMMENT
Bar Code Software							
Zebra Bar-One Platinum	DSS	PC	Platinum Technology	3.3.20	(c:) barone/bin	b00016500	Product sw/hw. A small plug that must be attached to the PC.
Zebra Bar-One Platinum	DSS	PC	Platinum Technology	4.3	(c:) barone/bin	b00016501	For EDC only
Compilers, C							
MIPSpro C Compiler	IDG	SGI	Silicon Graphics Inc	7.2.1	/usr/bin/cc	b00014872	Y
Compilers, C++							
MIPSpro C++ (C++)	IDG	SGI	Silicon Graphics Inc	7.2.1	/usr/lib/cpp	b00014922	Y
Compilers, FORTRAN							
FORTRAN 77 Compiler	IDG	SUN	SUN Microsystems Inc	4.0	/opt/SUNWpro	b00015360	
MIPSpro FORTRAN 77 Compiler	IDG	SGI	Silicon Graphics Inc	7.2.1	/usr/Workshop/usr/bin	b00015352	Only on Sci. Processors
MIPSpro FORTRAN 90 Compiler	IDG	SGI	Silicon Graphics Inc	7.2.1	/usr/Workshop/usr/bin	b00015382	Only on Science Processors
Compilers, FORTRAN Checker							
FORCHECK	IDG	SUN	Computerware Inc	12.30	/usr/ecs/<mode>/COTS/forcheck	b00015310	
Compilers, Java Devel							
jre	F CLS	SUN	SUN Microsystems Inc	1.1.5	/usr/ecs/<mode>/COTS/jre	b00015640	
Compression Tool							
Gnu Unzip	F IDG	HP	Freeware	1.2.4	/tools/bin	b00015413	
Gnu Unzip	F IDG	SUN	Freeware	1.2.4	/tools/bin	b00015411	
Gnu Zip	F IDG	HP	Freeware	1.2.4	/tools/bin	b00015412	
Gnu Zip	F IDG	SUN	Freeware	1.2.4	/tools/bin	b00015410	
Configuration Management							
ACCELL	MSS	SUN	Unify Corp	2.0.7.2.0	/usr/ecs/<mode>/COTS/accell	b00014660	Includes the Unify RDBS
ClearCase	MSS	SGI	Rational Software Corp	3.1.1	/usr/atria	b00015004	cl./svr. Deploy/CCS owns in the EDF; Dev/MSS at the sites
ClearCase	MSS	SUN	Rational Software Corp	3.1.1	/usr/atria	b00015000	cl./svr. Deploy/CCS owns in the EDF; Dev/MSS at the sites
ClearCase Lic./Registry Host	MSS	SUN	Rational Software Corp	3.1.1	/usr/atria	b00015006	
DDTS	MSS	SUN	Rational Software Corp	4.1	/usr/ecs/<mode>/COTS/ddts	b00050080	
XRP II	MSS	SUN	HTG Corporation	3.1 (patch 1)	/usr/ecs/<mode>/COTS/xrp	b00016471	
DCE							
DCE App. Develop. Tool Kit	IDG	HP	Hewlett Packard Corp	1.5	/usr/lib	b00015140	
DCE App. Develop. Tool Kit	IDG	SUN	Transarc Corporation	1.1	/usr/lib	b00015160	
DCE Cell Manager Host Agent	IDG	HP	Chisolm Technology	1.6.2	/opt/cellmgr/bin	b00015173	Client component
DCE Cell Manager Host Agent	IDG	SGI	Chisolm Technology	1.6.2	/opt/cellmgr/bin	b00015172	Client component
DCE Cell Manager Host Agent	IDG	SUN	Chisolm Technology	1.6.2	/opt/cellmgr/bin	b00015171	Client component
DCE Cell Manager Mgmt. Agent	IDG	HP	Chisolm Technology	1.6.2	/opt/cellmgr/bin	b00015170	Reside in MDS Server: Server Component
DCE Client	IDG	HP	Hewlett Packard Corp	1.4.2	/opt/dce/local	b00015070	Equivalent to OSP Version 1.1. For HP-UX 10.10.
DCE Client	IDG	HP	Hewlett Packard Corp	1.5	/opt/dce/local	b00015072	Equivalent to OSP Version 1.1. patch PHSS_10565, PHSS_10566.
DCE Client	IDG	SGI	Silicon Graphics Inc	1.1C	/opt/dce/local	b00015080	Equip; OSP v1.1, patch 2912 & 2913; includes App Dev Toolkit
DCE Client	IDG	SUN	Transarc Corporation	1.1	/opt/dce/local	b00015090	Equivalent to OSP Version 1.1. CPLI patch.
DCE Server	IDG	SUN	Transarc Corporation	1.1	/opt/dce/local	b00015175	Equivalent to OSP Version 1.1. CPLI patch.
ODCE	IDG	SUN	EOSDIS Core System	4.4	/opt/dce/local	b00015811	Static libraries for development
Development Suite							
IMAKE	IDG	SGI	Silicon Graphics Inc	TBD	TBD	b00015521	
IMAKE	IDG	SUN	SUN Microsystems Inc	Source code vers. 1.7	/usr/openwin/bin/	b00015520	Source code version
ProDev Workshop	IDG	SGI	Silicon Graphics Inc	2.7	/usr/CaseVision	b00015990	Includes cvd debugger. (Formerly CaseVision). No Compilers
SoftBench for C++	IDG	HP	Hewlett Packard Corp	5.2.5	/usr/ecs/<mode>/COTS/softbench	b00016150	Includes C/C++ Compilers
Visual Workshop	IDG	SUN	SUN Microsystems Inc	2.1.4	/usr/Workshop	b00016391	
Development Suite, GUI							
BuilderXcessory	MSS	HP	Integrated Computer Solutions	3.5.1	/tools/bx	b00014842	
BuilderXcessory	MSS	SGI	Integrated Computer Solutions	3.5.1	/tools/bx	b00014844	
BuilderXcessory	MSS	SUN	Integrated Computer Solutions	3.5.1	/tools/bx	b00014840	
Epak/graphPak	IDG	HP	Integrated Computer Solutions	2.5	/tools/bx/epak25/doc	b00015252	
Epak/graphPak	IDG	SGI	Integrated Computer Solutions	2.5	/tools/bx/epak25/doc	b00015251	
Epak/graphPak	IDG	SUN	Integrated Computer Solutions	2.5	/tools/bx/epak25/doc	b00015250	
Development Suite, GUI, TCL							
TCL/Tk: Expect	F MSS	SGI	Freeware	5.22.0	/tools/bin	b00015416	Y
TCL/Tk: Expect	F MSS	SUN	Freeware	5.22.0	/tools/bin	b00015417	Y
TCL/Tk: Expectk	F MSS	SGI	Freeware	5.22.0	/tools/bin	b00015419	Y
TCL/Tk: Expectk	F MSS	SUN	Freeware	5.22.0	/tools/bin	b00015418	Y
TCL/Tk: Incr Tcl (iTcl)	F MSS	SUN	SUN Microsystems Inc	2.2.2patch 2	/tools/bin	b00015544	OOP for Tcl/Tk
TCL/Tk: Tcl-DP	F MSS	SUN	Freeware	3.5b3	/tools/bin	b00016294	Distributed Internet TCL programming
TCL/Tk: TclX	F MSS	SUN	Freeware	7.6	/tools/bin	b00015304	Allows more control of unix commands
TCL/Tk: Tclsh	F MSS	HP	Freeware	7.6p2	/tools/bin	b00016282	
TCL/Tk: Tclsh	F MSS	SGI	Freeware	7.6p2	/tools/bin	b00016283	
TCL/Tk: Tclsh	F MSS	SUN	Freeware	7.6p2	/tools/bin	b00015281	Y
TCL/Tk: Wish	F MSS	HP	Freeware	4.2p2	/tools/bin	b00016285	
TCL/Tk: Wish	F MSS	SGI	Freeware	4.2p2	/tools/bin	b00016286	
TCL/Tk: Wish	F MSS	SUN	Freeware	4.2p2	/tools/bin	b00016284	Y

* Commodity Codes: F = freeware; S = shareware

Figure 4.3.3-81. COTS Software Version Baseline Report

PATCH NAME	CAT	RESP ORG	VARIANT	MFR/DEV NAME	VERSION	DESCRIPTION	CONTROL ITEM ID	COMMENT
ClearCase Patches								
3.1.1-20	IDG	SGI		Pure Software Inc	6.2	Clearcase Patch 3.1.1-20 for Irix 6.2 (64 bit)	b00048858	
3.1.1-21	IDG	SGI		Pure Software Inc	5.5.1	Clearcase Patch 3.1.1-21 for Solaris 5.5.1	b00048897	
3.1.1-30	IDG	SGI		Pure Software Inc	6.2	Clearcase Patch 3.1.1-30 for Irix 6.2 (64 bit)	b00048860	
3.1.1-32	IDG	SGI		Pure Software Inc	5.5.1	Clearcase Patch 3.1.1-32 for Solaris 5.5.1	b00048898	
3.1.1-37	IDG	SGI		Pure Software Inc	6.2	Clearcase Patch 3.1.1-37 for Irix 6.2 (64 bit)	b00048861	
3.1.1-37	IDG	SGI		Pure Software Inc	6.2	Clearcase Patch 3.1.1-37 for Irix 6.2 (64 bit)	b00048862	
3.1.1-38	IDG	SGI		Pure Software Inc	5.5.1	Clearcase Patch 3.1.1-38 for Solaris 5.5.1	b00048899	
3.1.1-39	IDG	SGI		Pure Software Inc	5.5.1	Clearcase Patch 3.1.1-39 for Solaris 5.5.1	b00048990	
3.1.1-40	IDG	SGI		Pure Software Inc	6.2	Clearcase Patch 3.1.1-40 for Irix 6.2 (64 bit)	b00048863	
3.1.1-40	IDG	SGI		Pure Software Inc	5.5.1	Clearcase Patch 3.1.1-40 for Solaris 5.5.1	b00048991	
3.1.1-41	IDG	SGI		Pure Software Inc	6.2	Clearcase Patch 3.1.1-41 for Irix 6.2 (64 bit)	b00048864	
HP DCE PATCH								
PHSS 10565	C			Hewlett Packard Corp	1.5	HP DCE/9000 1.5 cumulative patch	b00051111	
PHSS 10566	C			Hewlett Packard Corp	1.5	Domestic HP DCE/9000 1.5 cumulative patch	b00051112	
HP OS BASE PATCHES								
PHCO 10124	C			Hewlett Packard Corp		date(1)	b00050584	
PHCO 10125	C			Hewlett Packard Corp		riog(1) co(1)	b00050586	
PHCO 10175	C			Hewlett Packard Corp		libc_year2000 white paper	b00050588	
PHCO 10272	C			Hewlett Packard Corp		Cumulative fixes for vipw.	b00050590	
PHCO 10295	C			Hewlett Packard Corp		Allows unmounting a disabled vxfs snapshot FS	b00050592	
PHCO 10576	C			Hewlett Packard Corp		cumulative sar(1) patch.	b00050594	
PHCO 10578	C			Hewlett Packard Corp		extends hfs fix for very large file systems	b00050596	
PHCO 10615	C			Hewlett Packard Corp		cumulative fix for SAM convert/unconvert	b00050598	
PHCO 10663	C			Hewlett Packard Corp		HP-UX cut (1) cumulative patch.	b00050600	
PHCO 10752	C			Hewlett Packard Corp		Installation docs for B180L, C200 systems	b00050602	
PHCO 10848	C			Hewlett Packard Corp		patch to add new /usr/sbin/mc command	b00050604	
PHCO 10868	C			Hewlett Packard Corp		Cumulative sed(1) patch	b00050606	
PHCO 10881	C			Hewlett Packard Corp		Cumulative iconv(1) methods library patch	b00050608	
PHCO 10947	C			Hewlett Packard Corp		cumulative libhours patch	b00050610	
PHCO 11214	C			Hewlett Packard Corp		pw_id_map corruption and getasup loop	b00050612	
PHCO 11342	C			Hewlett Packard Corp		cumulative Xcursor library patch	b00050614	
PHCO 11436	C			Hewlett Packard Corp		localedef(1) patch	b00050616	
PHCO 11437	C			Hewlett Packard Corp		ed(1) patch	b00050618	
PHCO 11647	C			Hewlett Packard Corp		HP-UX Upgrade Transition links patch	b00050620	
PHCO 11760	C			Hewlett Packard Corp		Cumulative make(1) patch	b00050624	
PHCO 11977	C			Hewlett Packard Corp		pax(1) cumulative patch	b00050626	
PHCO 12097	C			Hewlett Packard Corp		cumulative newgrp(1) patch	b00050628	
PHCO 12140	C			Hewlett Packard Corp		patch cleanup utility	b00050630	
PHCO 12184	C			Hewlett Packard Corp		useradd(1M) Cumulative patch	b00050632	
PHCO 12236	C			Hewlett Packard Corp		cumulative SAM trusted user patch.	b00050634	
PHCO 12332	C			Hewlett Packard Corp		Cumulative mediainit patch	b00050636	
PHCO 12355	C			Hewlett Packard Corp		acctcms(1M) patch.	b00050638	
PHCO 12405	C			Hewlett Packard Corp		HPDS and patch	b00050640	
PHCO 12435	C			Hewlett Packard Corp		fsck_hfs(1M) cumulative patch	b00050642	
PHCO 12512	C			Hewlett Packard Corp		Fixes incorrect output of ioscan.	b00050644	
PHCO 12558	C			Hewlett Packard Corp		asa(1) patch.	b00050646	
PHCO 12686	C			Hewlett Packard Corp		uucp(1) Cumulative patch	b00050648	
PHCO 12822	C			Hewlett Packard Corp		Fixes handing of >2GB dump areas.	b00050650	
PHCO 12833	C			Hewlett Packard Corp		Cumulative SAM Patch.	b00050652	
PHCO 12834	C			Hewlett Packard Corp		ttab(6) cumulative patch	b00050654	
PHCO 12923	C			Hewlett Packard Corp		fsck_vxfs(1M) cumulative patch	b00050656	depends on PHKL_14568, PHKL_12339
PHCO 13079	C			Hewlett Packard Corp		cumulative PFS patch	b00050660	
PHCO 13084	C			Hewlett Packard Corp		awk(1) cumulative patch	b00050662	
PHCO 13198	C			Hewlett Packard Corp		dd(1) patch for Block/unblock conversion	b00050664	
PHCO 13450	C			Hewlett Packard Corp		sysdef(1M) patch	b00050666	

Patch Category: C = Core (installed on all machines) H = Hardware dependent (install where needed)
 A = Application dependent (install where needed) O = Other (install where needed)

Figure 4.3.3.82. Patch Baseline Report

(sitehost)
 Goddard Space Flight Center
 Control Item ID: b00010010
 nnn-TDA-001-nn

SITE-HOST MAP REPORT
 ECS Operational Subsystem Baseline, Ver.2.0, Drop 4P1

DATE: 09/04/98 TIME: 15:25
 PAGE: 1
 Date of configuration: 09/04/98

SUBSYSTEM	SRC CI	HOST FUNCTION	EDC	GSFC	LaRC	NSIDC	SMC
AST Subsystem	ASTHW	ASTER DEM Workstation	e0ass03				
AST Subsystem	ASTHW	ASTER LUT Database Server 01	e0ass01				
AST Subsystem	ASTHW	ASTER LUT Database Server 02	e0ass02				
Communications Subsystem	DCHCI	Bulletin Board Server					m0css02
Communications Subsystem	DCHCI	CSS Server	e0css02	g0css02	10css02	n0css02	m0css03
Communications Subsystem	DCHCI	FTP Server 01					m0css05
Communications Subsystem	DCHCI	FTP Server 02					m0css04
DMS Subsystem	AITHW	AIT Workstation/DBMS Server				n0ais01	
DMS Subsystem	AQAHW	QA Workstation 02				n0spg01	
DMS Subsystem	AQAHW	QA Workstation 03				n0spg02	
DMS Subsystem	INTHW	Interface Server (P)	e0ins02	g0ins02	10ins02	n0ins02	
DMS Subsystem	INTHW	Interface Server (S)	e0ins01	g0ins01	10ins01	n0ins01	
Data Mgmt Subsystem	DMGHW	DBA Operations Workstation	e0dmh02	g0dmh01	10dmh02	n0dmh02	
Data Mgmt Subsystem	DMGHW	Data Spec Workstation 01	e0dms03	g0dms03	10dms01	n0dms03	
Data Mgmt Subsystem	DMGHW	Data Spec Workstation 02	e0dms04	g0dms04	10dms04	n0dms04	
Data Mgmt Subsystem	DMGHW	Data Spec Workstation 03		g0dms05	10dms05		
Data Mgmt Subsystem	DMGHW	Sybase Backup Server	e0dmh01	g0dmh02	10dmh03	n0dmh01	
Data Process Subsystem	AITHW	AIT Workstation	e0ais02	g0ais05	10ais09		
Data Process Subsystem	AITHW	AIT Workstation/DBMS Server		g0ais01	10ais01		
Data Process Subsystem	AITHW	SSI&T AIT Server	esais01	gsais01			
Data Process Subsystem	SPRHW	Queuing Server	e0sps04	g0sps06	10sps03	n0sps08	
Data Process Subsystem	SPRHW	Science Processor 01	e0spg01	g0spg01	10spg01	n0spg03	
Data Process Subsystem	SPRHW	Science Processor 02			10spg05	n0spg09	
Data Process Subsystem	SPRHW	Science Processor 03	e0spg05	g0spg07	10spg06		
Data Server Subsystem	ACMHW	APC Server (P)	e0acg01	g0acg01	10acg02	n0acg01	
Data Server Subsystem	ACMHW	APC Server (S)	e0acg02	g0acg05	10acg05	n0acg02	
Data Server Subsystem	ACMHW	EMASS Manager 01		g0drp05			
Data Server Subsystem	ACMHW	Operations WS 01	e0acs03	g0acs02	10acs01	n0acs03	
Data Server Subsystem	ACMHW	Operations WS 02	e0acs04	g0acs06	10acs06	n0acs06	
Data Server Subsystem	ACMHW	SDSRV Server (P)	e0acs05	g0acs03	10acs03	n0acs04	
Data Server Subsystem	ACMHW	SDSRV Server (S)	e0acs06	g0acs04	10acs04	n0acs05	
Data Server Subsystem	AITHW	AIT Workstation/DBMS Server	e0ais03				
Data Server Subsystem	AQAHW	Disk/RAID Driver	e0aqq01	g0aqq01	10aqq02		
Data Server Subsystem	AQAHW	QA Workstation 01	e0aqq02	g0aqq02	10aqq01		
Data Server Subsystem	DIPHW	Distribution Server (P)	e0dis02	g0dis02	10dis02	n0dis02	
Data Server Subsystem	DIPHW	Distribution Server (S)	e0dis01	g0dis01	10dis01	n0dis01	
Data Server Subsystem	DIPHW	Scanner Host PC	e0dip05	g0dip03	10dip03	n0dip04	
Data Server Subsystem	DRPHW	ACSLs Workstation 01	e0drs03	g0drs03	10drs02	n0drs03	

Figure 4.3.3-83. Site-Host Map Report

(sitehost1)
 ECS Development Facility
 Control Item ID: b00075000
 Doc #: 910-TDA-005 Rev 19

SITE-HOST MAP REPORT
 ECS-wide Subsystem Baseline, Drop 5B

DATE: 08/28/00 TIME: 17:32
 PAGE: 1
 Date of configuration: 08/28/00

SUBSYSTEM	SRC CI	HOST FUNCTION	EDC	GSFC	LaRC	MDAAC	NSIDC	PVC	SMC	VATC	VSMC
AST Subsystem	ASTHW	ASTER DEM Workstation	e0ass03								
AST Subsystem	ASTHW	ASTER LUT Database Server 01	e0ass01					p0ass01			
AST Subsystem	ASTHW	ASTER LUT Database Server 02	e0ass02								
CSS Subsystem	DCHCI	Bulletin Board Server							m0css02		
CSS Subsystem	DCHCI	CSS Server	e0css02	g0css02	10css02		n0css02	p0css02	m0css03	t1css01	
CSS Subsystem	DCHCI	FTP Server 01							m0css05		
CSS Subsystem	DCHCI	FTP Server 02							m0css04		
DMS Subsystem	DMGHW	DBA Operations Workstation	e0dmp02	g0dmp01	10dmp02		n0dmp02	p0dmp03		t1dmp03	
DMS Subsystem	DMGHW	Data Spec Workstation 01	e0dms03	g0dms03	10dms01			p0dms01		t1dms02	
DMS Subsystem	DMGHW	Data Spec Workstation 02	e0dms04	g0dms04	10dms04		n0dms04	p0dms02			
DMS Subsystem	DMGHW	Data Spec Workstation 03		g0dms05	10dms05						
DMS Subsystem	INTHW	Interface Server 01	e0ins02	g0ins02	10ins02		n0ins02	p0ins02		t1ins01	
DMS Subsystem	INTHW	Interface Server 02	e0ins01	g0ins01	10ins01		n0ins01	p0ins01		t1ins02	
DPS Subsystem	AITHW	AIT Workstation	e0ais02	g0ais05	10ais09			p0ais05		t1ais03	
DPS Subsystem	AITHW	AIT Workstation/DBMS Server	e0ais03	g0ais01	10ais01			p0ais01		t1ais01	
DPS Subsystem	AQAHW	Disk/RAID Driver	e0aag01	g0aag01	10aag02		n0aag01	p0aag01		t1aag01	
DPS Subsystem	AQAHW	MODAPS		g0mog01							
DPS Subsystem	AQAHW	QA Workstation 01	e0aag02	g0aag02	10aag01		n0aag02	p0aag02		t1aag02	
DPS Subsystem	SPRHW	Queueing Server	e0sps04	g0sps06	10sps03		n0sps08	p0sps06		t1sps02	
DPS Subsystem	SPRHW	Sci Proc 01 (Irix 6.5 disks)								t1sps01	
DPS Subsystem	SPRHW	Science Processor 01	e0spg01	g0spg01	10spg01		n0spg03	p0spg01		t1spg01	
DPS Subsystem	SPRHW	Science Processor 02		g0spg07	10spg05					t1spg03	
DPS Subsystem	SPRHW	Science Processor 03	e0spg05	g0spg10	10spg06			p0spg07			
DPS Subsystem	SPRHW	X-Term Server	e0ais06								
DPS Subsystem	SPRHW	X-term Server			10ais10						
DPS Subsystem	SPRHW	Xrunner/loadrunner Server	e0ais07				n0ais05				
DSS Subsystem	ACMHW	AMU 01		g0drp05							
DSS Subsystem	ACMHW	APC Server (P)	e0acg01	g0acg01	10acg02		n0acg01	p0acg01		t1acg01	
DSS Subsystem	ACMHW	APC Server (S)	e0acg02	g0acg05	10acg05		n0acg02	p0acg05		t1acg04	
DSS Subsystem	ACMHW	Operations WS 01	e0acs03	g0acs02	10acs01		n0acs03	p0acs02		t1acs02	
DSS Subsystem	ACMHW	Operations WS 02	e0acs04	g0acs06	10acs06		n0acs06			t1acs05	
DSS Subsystem	ACMHW	SDSRV Server (P)	e0acs05	g0acs03	10acs03		n0acs04	p0acs03		t1acs03	
DSS Subsystem	ACMHW	SDSRV Server (S)	e0acs06	g0acs04	10acs04		n0acs05	p0acs04		t1acs06	
DSS Subsystem	DIPHW	Distribution Server (P)	e0dis02	g0dis02	10dis02		n0dis02	p0dis02		t1dps01	
DSS Subsystem	DIPHW	Distribution Server (S)	e0dis01	g0dis01	10dis01		n0dis01	p0dis01		t1dps04	
DSS Subsystem	DIPHW	Scanner Host PC	e0dip05	g0dip03	10dip03		n0dip04	p0dip04		t1dpp02	
DSS Subsystem	DRPHW	ACSLs Workstation 01	e0drs03	g0drs03	10drs02		n0drs03	p0drs03		t1drs02	
DSS Subsystem	DRPHW	ACSLs Workstation 02	e0drs04	g0drs04				p0drs05			
DSS Subsystem	DRPHW	ACSLs Workstation 03		g0drs15	10drs05						
DSS Subsystem	DRPHW	FSMS Server (P1)	e0drg01	g0drg01	10drg01		n0drg01	p0drg01		t1drg01	
DSS Subsystem	DRPHW	FSMS Server (P2)	e0drg02	g0drg02				p0drg04		t1drg03	
DSS Subsystem	DRPHW	FSMS Server (S)	e0drg05	g0drg07	10drg03		n0drg02				
DSS Subsystem	DRPHW	Performance Monitor		g0drg06							
DSS Subsystem	WKSHW	AMU 02	e0wkp02								
DSS Subsystem	WKSHW	Wkg Stor Host (Irix 6.5 disks)						p0wkg01		t1wkg01	
DSS Subsystem	WKSHW	Working Storage Host	e0wkg01							t1wkg01	
INS Subsystem	ICLHW	Ingest PC		g0icp04							
INS Subsystem	ICLHW	Ingest Server (P)	e0icg01	g0icg01	10icg01		n0icg01	p0icg01		t1icg01	
INS Subsystem	ICLHW	Ingest Server (S)	e0icg02	g0icg02	10icg02					t1icg03	
MSS Subsystem	MHCI	Applications Server (P)	e0mss21	g0mss21	10mss21		n0mss21	p0mss21	m0mss16	t1mss06	
MSS Subsystem	MHCI	Applications Server (S)	e0mss20	g0mss20	10mss20		n0mss20	p0mss20	m0mss15	t1mss07	

Figure 4.3-84. Site-Host Map Report

(basedoc1)
 System Monitoring and Coordination Center
 Control Item ID: b00010020
 Doc #: 910-TDA-000, Rev n

BASELINED DOCUMENTS (TITLE ORDER) REPORT
 ECS Product Baseline, Ver.2.0, Drop 4P1

DATE: 04/13/99 TIME: 10:23
 PAGE: 1
 Date of Configuration: 12/31/98

TITLE	DOCUMENT NUMBER	CONTROL ITEM ID	ISSUE	MFR/DEV	PUB DATE	REPOSITORY	FORMAT	COMMENT
AIT Server Disk Partitions	922-TDE-021-00	b00022030		ECS	03/03/98	ECS Baseline Home Page	.ppt	
AIT Server Disk Partitions	922-TDL-021-00	b00022040		ECS	05/05/98	ECS Baseline Home Page	.ppt	
APC Server Disk Partitions	922-TDE-001-00	b00022060		ECS	12/04/97	ECS Baseline Home Page	.ppt	
APC Server Disk Partitions	922-TDG-001-00	b00019720		ECS	09/05/97	ECS Baseline Home Page	.ppt	
APC Server Disk Partitions	922-TDL-001-00	b00022070		ECS	12/09/97	ECS Baseline Home Page	.ppt	
AQA Host Disk Partitions	922-TDG-003-00	b00019730		ECS	03/04/97	ECS Baseline Home Page	.ppt	
AQA Host Disk Partitions	922-TDL-003-00	b00022090		ECS	06/11/97	ECS Baseline Home Page	.ppt	
Access Control Lists	910-TDA-006-00	b00019460		ECS	03/03/98	ECS Baseline Home Page	.doc	
Accounts	910-TDA-011-00	b00019490		ECS	06/26/98	ECS Baseline Home Page	.doc	
Build Plan (4P and 4P1)	N/A	b00019940		ECS	06/30/98	ECS Baseline Home Page	.doc	
COTS License Mapping	910-TDA-tbd	b00019510		ECS	**/**/**	TBD	TBD	No doc number assigned by CM Publication date TBD
CSS Server Disk Partitions	922-TDE-005-00	b00022170		ECS	02/18/97	ECS Baseline Home Page	.pdf	
CSS Server Disk Partitions	922-TDG-005-00	b00019740		ECS	04/03/97	ECS Baseline Home Page	.pdf	
CSS Server Disk Partitions	922-TDL-005-00	b00022180		ECS	04/03/97	ECS Baseline Home Page	.pdf	
Cable Management Plan	920-TDE-005-05	b00022120		ECS	01/23/98	ECS Baseline Home Page	.pdf	
Cable Management Plan	920-TDG-005-04	b00019590		ECS	04/20/98	ECS Baseline Home Page	.pdf	
Cable Management Plan	920-TDL-005-01	b00022130		ECS	02/17/98	ECS Baseline Home Page	.pdf	
Core Metadata Model	420-TP-015-02	b00019440		ECS	05/24/98	ECS Data Handling system	.doc	
DIP Server #2 Disk Partitions	922-TDE-019-01	b00022240		ECS	05/06/98	ECS Baseline Home Page	.ppt	
DIP Server #2 Disk Partitions	922-TDG-019-01	b00019860		ECS	12/03/97	ECS Baseline Home Page	.ppt	
DIP Server #2 Disk Partitions	922-TDL-019-00	b00022250		ECS	12/09/97	ECS Baseline Home Page	.ppt	
DIP Server Disk Partitions	922-TDE-006-02	b00022270		ECS	05/05/98	ECS Baseline Home Page	.ppt	
DIP Server Disk Partitions	922-TDG-006-01	b00019750		ECS	12/31/97	ECS Baseline Home Page	.ppt	
DIP Server Disk Partitions	922-TDL-006-00	b00022280		ECS	12/09/97	ECS Baseline Home Page	.ppt	
DRP Server Disk Partitions	922-TDE-007-02	b00022320		ECS	03/03/98	ECS Baseline Home Page	.ppt	
DRP Server Disk Partitions	922-TDG-007-00	b00019760		ECS	12/23/97	ECS Baseline Home Page	.ppt	
DRP Server Disk Partitions	922-TDL-007-00	b00022330		ECS	12/09/97	ECS Baseline Home Page	.ppt	
Database Design and Database Schema Specifications	311-CD-10x-0x	b00019410		ECS	06/11/98	ECS Data Handling System	.doc	
Databases Configuration Listing	920-TDG-010	b00019620		ECS	**/**/**	TBD	TBD	Publication date TBD
Delivered Archive Data	TBD	b00019950		ECS	**/**/**	TBD	TBD	Document not yet available
Descriptor File Template	916-TDA-001-01	b00019550		ECS	02/13/98	ECS Baseline Home Page	.doc	
Directory Structures	910-TDA-009-01	b00019480		ECS	06/12/98	ECS Baseline Home Page	.ppt	
Drop 4 Pl Domains and Baseline Data	910-TDA-015-00	b00019500		ECS	07/01/98	ECS Baseline Home Page	.xls	
Dual-Homed Host Static Routes	921-TDG-005-00	b00019700		ECS	10/22/97	ECS Baseline Home Page	.xls	
ECS Domain Name Server Data File Content	923-TDE-0xx	b00022360		ECS	04/24/98	ECS Baseline Home Page	.doc	
ECS Domain Name Server Data File Content	923-TDG-0xx	b00019870		ECS	04/24/98	ECS Baseline Home Page	.doc	
ECS Domain Name Server Data File Content	923-TDL-0xx	b00022370		ECS	04/24/98	ECS Baseline Home Page	.doc	
ECS Domain Name Service Structure	913-TDA-001-00	b00019530		ECS	04/24/98	ECS Baseline Home Page	.ppt	
ECS Internal ICDs	313-CD-006-04	b00019420		ECS	05/29/98	ECS Data Handling System	.doc	
ECS Overall System Acceptance Test Procedures	411-CD-002-01	b00019430		ECS	09/20/96	ECS Data Handling System	.doc	Latest version published on Web
ECS Overall System Acceptance Test Report	412-CD-10x-0x	b00019930		ECS	**/**/**	TBD	TBD	Document to be available at RRR
ESDT Definition	N/A	b00019960		ECS	**/**/**	ECS RTM Home Page	TBD	No doc number assigned by CM
ESDT To Volume Group Mapping	920-TDG-tbd	b00019650		ECS	**/**/**	TBD	TBD	Document not yet available
Engineering Records	910-TDA-tbd	b00019520		ECS	**/**/**	TBD	TBD	Document not yet available
Floor Plan	920-TDE-004-01	b00022460		ECS	01/23/98	ECS Baseline Home Page	.pdf	
Floor Plan	920-TDG-004-05	b00019580		ECS	06/06/98	ECS Baseline Home Page	.pdf	
Floor Plan	920-TDL-004-01	b00022470		ECS	11/24/97	ECS Baseline Home Page	.pdf	
Hardware Network Diagram	921-TDE-002-05	b00022490		ECS	01/30/98	ECS Baseline Home Page	.pdf	
Hardware Network Diagram	921-TDG-002-04	b00019670		ECS	01/30/98	ECS Baseline Home Page	.pdf	
Hardware Network Diagram	921-TDL-002-03	b00022500		ECS	01/30/98	ECS Baseline Home Page	.pdf	
Host IP Assignments	921-TDG-003-03	b00022530		ECS	10/22/97	ECS Baseline Home Page	.pdf	
Host IP Assignments	921-TDG-003-04	b00019680		ECS	10/22/97	ECS Baseline Home Page	.pdf	
Host IP Assignments	921-TDG-003-05	b00022520		ECS	10/22/97	ECS Baseline Home Page	.pdf	
I/O Ports	910-TDA-002-02	b00019450		ECS	05/08/98	ECS Baseline Home Page	.doc	
ICL Server Disk Partitions	922-TDE-008-01	b00022560		ECS	07/23/98	ECS Baseline Home Page	.ppt	
ICL Server Disk Partitions	922-TDG-008-01	b00019770		ECS	07/23/98	ECS Baseline Home Page	.ppt	
ICL Server Disk Partitions	922-TDL-008-01	b00022570		ECS	07/23/98	ECS Baseline Home Page	.ppt	
Ingest Host Static Routes	921-TDE-006-01	b00022590		ECS	10/22/97	ECS Baseline Home Page	.xls	
Ingest Host Static Routes	921-TDG-006-00	b00019710		ECS	10/22/97	ECS Baseline Home Page	.xls	
Ingest Host Static Routes	921-TDL-006-00	b00022600		ECS	10/22/97	ECS Baseline Home Page	.xls	
Interface Server Disk Partitions	922-TDE-009-01	b00022620		ECS	03/03/98	ECS Baseline Home Page	.ppt	
Interface Server Disk Partitions	922-TDG-009-00	b00019780		ECS	12/23/97	ECS Baseline Home Page	.ppt	
Interface Server Disk Partitions	922-TDL-009-00	b00022630		ECS	12/09/97	ECS Baseline Home Page	.ppt	
MSS File-CM Server Disk Partitions	922-TDE-011-01	b00022680		ECS	03/03/98	ECS Baseline Home Page	.pdf	

Figure 4.3.3-85. Baselined Documents (Title Order) Report

(basedoc2)
 System Monitoring and Coordination Center
 Control Item ID: b00010020
 Doc #: 910-TDA-nnn, Rev n

BASELINED DOCUMENTS (NUMBER ORDER) REPORT
 ECS Product Baseline, Ver.2.0, Drop 4P1

DATE: 04/13/99 TIME: 10:23
 PAGE: 1
 Date of Configuration: 12/31/98

DOCUMENT NUMBER	TITLE	CONTROL ITEM ID	ISSUE	MFR/DEV	PUB DATE	REPOSITORY	FORMAT	COMMENT
220-WP-003-01	V2.0 Baseline Deployment Plan	b00019395		ECS	03/15/98	ECS Data Handling System	.doc	
305-CD-100-02	Segment/Design Specifications	b00019400		ECS	05/29/98	ECS Data Handling System	.doc	Final version: 11/09/98
311-CD-10x-0x	Database Design and Database Schema Specifications	b00019410		ECS	06/11/98	ECS Data Handling System	.doc	
313-CD-006-04	ECS Internal ICDs	b00019420		ECS	05/29/98	ECS Data Handling System	.doc	
411-CD-002-01	ECS Overall System Acceptance Test Procedures	b00019430		ECS	09/20/96	ECS Data Handling System	.doc	Latest version published on Web
412-CD-10x-0x	ECS Overall System Acceptance Test Report	b00019930		ECS	**/**/**	TBD	TBD	Document to be available at RRR
420-TP-015-02	Core Metadata Model	b00019440		ECS	05/24/98	ECS Data Handling system	.doc	
910-TDA-002-02	I/O Ports	b00019450		ECS	05/08/98	ECS Baseline Home Page	.doc	
910-TDA-006-00	Access Control Lists	b00019460		ECS	03/03/98	ECS Baseline Home Page	.doc	
910-TDA-007-01	Program Register	b00019470		ECS	05/14/98	ECS Baseline Home Page	.doc	
910-TDA-009-01	Directory Structures	b00019480		ECS	06/12/98	ECS Baseline Home Page	.ppt	
910-TDA-011-00	Accounts	b00019490		ECS	06/26/98	ECS Baseline Home Page	.doc	
910-TDA-015-00	Drop 4 Fl Domains and Baseline Data	b00019500		ECS	07/01/98	ECS Baseline Home Page	.xls	
910-TDA-tbd	COS License Mapping	b00019510		ECS	**/**/**	TBD	TBD	Publication date TBD
910-TDA-tbd	Engineering Records	b00019520		ECS	**/**/**	TBD	TBD	Document not yet available
913-TDA-001-00	ECS Domain Name Service Structure	b00019530		ECS	04/24/98	ECS Baseline Home Page	.ppt	
915-TDA-001-00	System Startup/Shutdown procedures Common	b00019540		ECS	**/**/**	TBD	TBD	Document not yet available
916-TDA-001-01	Descriptor File Template	b00019550		ECS	02/13/98	ECS Baseline Home Page	.doc	
920-TDE-003-00	System Infrastructure	b00023020		ECS	05/16/97	ECS Baseline Home Page	.doc	
920-TDE-004-01	Floor Plan	b00022460		ECS	01/23/98	ECS Baseline Home Page	.pdf	
920-TDE-005-05	Cable Management Plan	b00022120		ECS	01/23/98	ECS Baseline Home Page	.pdf	
920-TDE-007-00	Vendor Documentation	b00023190		ECS	11/15/97	ECS Baseline Home Page	.xls	
920-TDE-008-05	Mount Points	b00022650		ECS	01/21/98	ECS Baseline Home Page	.pdf	
920-TDE-011	Sybase Logging Mapping	b00022960		ECS	**/**/**	TBD	TBD	Not available on the Web
920-TDE-012-00	SCSI Cable Management Plan	b00022880		ECS	01/27/98	ECS Baseline Home Page	.doc	
920-TDG-003-00	System Infrastructure	b00019570		ECS	05/22/97	ECS Baseline Home Page	.doc	
920-TDG-004-05	Floor Plan	b00019580		ECS	06/06/98	ECS Baseline Home Page	.pdf	
920-TDG-005-04	Cable Management Plan	b00019590		ECS	04/20/98	ECS Baseline Home Page	.pdf	
920-TDG-007-00	Vendor Documentation	b00019600		ECS	10/10/97	ECS Baseline Home Page	.xls	
920-TDG-008-05	Mount Points	b00019610		ECS	**/**/**	ECS Baseline Home Page	.pdf	
920-TDG-008-06	Mount Points	b00022640		ECS	01/21/98	ECS Baseline Home Page	.pdf	
920-TDG-010	Databases Configuration Listing	b00019620		ECS	**/**/**	TBD	TBD	Publication date TBD
920-TDG-011	Sybase Logging Mapping	b00019630		ECS	**/**/**	TBD	TBD	Not available on the Web
920-TDG-012-02	SCSI Cable Management Plan	b00019640		ECS	02/17/98	ECS Baseline Home Page	.doc	
920-TDG-tbd	ESDT To Volume Group Mapping	b00019650		ECS	**/**/**	TBD	TBD	Document not yet available
920-TDL-003-00	System Infrastructure	b00023030		ECS	05/16/97	ECS Baseline Home Page	.doc	
920-TDL-004-01	Floor Plan	b00022470		ECS	11/24/97	ECS Baseline Home Page	.pdf	
920-TDL-005-01	Cable Management Plan	b00022130		ECS	02/17/98	ECS Baseline Home Page	.pdf	
920-TDL-007-00	Vendor Documentation	b00023200		ECS	02/17/98	ECS Baseline Home Page	.xls	
920-TDL-008-03	Mount Points	b00022660		ECS	01/21/98	ECS Baseline Home Page	.pdf	
920-TDL-011	Sybase Logging Mapping	b00022970		ECS	**/**/**	TBD	TBD	Not available on the Web
920-TDL-012-00	SCSI Cable Management Plan	b00022890		ECS	02/17/98	ECS Baseline Home Page	.doc	
921-TDE-002-05	Hardware Network Diagram	b00022490		ECS	01/30/98	ECS Baseline Home Page	.pdf	
921-TDE-004-02	Network IP Assignments	b00022740		ECS	10/22/97	ECS Baseline Home Page	.xls	
921-TDE-006-01	Ingest Host Static Routes	b00022590		ECS	10/22/97	ECS Baseline Home Page	.xls	
921-TDG-001-00	Network Overview Diagram [LAN Topology]	b00019660		ECS	11/26/97	ECS Baseline Home Page	.ppt	
921-TDG-002-04	Hardware Network Diagram	b00019670		ECS	01/30/98	ECS Baseline Home Page	.pdf	
921-TDG-003-03	Host IP Assignments	b00022530		ECS	10/22/97	ECS Baseline Home Page	.pdf	
921-TDG-003-04	Host IP Assignments	b00019680		ECS	10/22/97	ECS Baseline Home Page	.pdf	
921-TDG-003-05	Host IP Assignments	b00022520		ECS	10/22/97	ECS Baseline Home Page	.pdf	
921-TDG-004-00	Network IP Assignments	b00019690		ECS	10/22/97	ECS Baseline Home Page	.xls	
921-TDG-005-00	Dual-Homed Host Static Routes	b00019700		ECS	10/22/97	ECS Baseline Home Page	.xls	
921-TDG-006-00	Ingest Host Static Routes	b00019710		ECS	10/22/97	ECS Baseline Home Page	.xls	
921-TDL-002-03	Hardware Network Diagram	b00022500		ECS	01/30/98	ECS Baseline Home Page	.pdf	
921-TDL-004-00	Network IP Assignments	b00022750		ECS	10/22/97	ECS Baseline Home Page	.xls	
921-TDL-006-00	Ingest Host Static Routes	b00022600		ECS	10/22/97	ECS Baseline Home Page	.xls	
922-TDE-001-00	APC Server Disk Partitions	b00022060		ECS	12/04/97	ECS Baseline Home Page	.ppt	
922-TDE-005-00	CSS Server Disk Partitions	b00022170		ECS	02/18/97	ECS Baseline Home Page	.pdf	
922-TDE-006-02	DIP Server Disk Partitions	b00022270		ECS	05/05/98	ECS Baseline Home Page	.ppt	
922-TDE-007-02	DRP Server Disk Partitions	b00022320		ECS	03/03/98	ECS Baseline Home Page	.ppt	
922-TDE-008-01	ICL Server Disk Partitions	b00022560		ECS	07/23/98	ECS Baseline Home Page	.ppt	

Figure 4.3.3-86. Baselined Documents (Number Order) Report

Old Control Item	Name	Version	New Control Item
=====	=====	=====	=====
b00065000	ECS-wide Subsystem B/L	5A	b00075000
b00065002	EDF Subsystem B/L	5A	b00075002
b00065004	ECS Operational Network B/L	5A	b00075004
b00065006	ECS Operational Subsystem B/L	5A	b00075006
b00065008	ECS Product Baseline	5A	b00075008
b00065010	EDC Operational Subsystem B/L	5A	b00075010
b00065012	EDF Mini-DAAC Subsystem B/L	5A	b00075012
b00065014	GSFC Operational Subsystem B/L	5A	b00075014
b00065016	LaRC Operational Subsystem B/L	5A	b00075016
b00065018	Mini-DAAC SMC Subsystem B/L	5A	b00075018
b00065020	NSIDC Operational Subsystem BL	5A	b00075020
b00065022	SMC Operational Subsystem B/L	5A	b00075022
b00065024	VATC Subsystem B/L	5A	b00075024
b00065026	VATC-SMC Subsystem B/L	5A	b00075026
b00065028	Advertising Service CSCI	5A	b00075028
b00065030	Algorithm I&T CSCI	5A	b00075030
b00065032	Data Dictionary CSCI	5A	b00075032
b00065034	Data Dist Service CSCI	5A	b00075034
b00065036	Desktop CSCI	5A	b00075036
b00065038	Dist Comp Software CSCI	5A	b00075038
b00065040	Dist Info Manager CSCI	5A	b00075040
b00065042	Document Data Svr CSCI	5A	b00075042
b00065044	Ingest Services CSCI	5A	b00075044
b00065046	Local Info Manager CSCI	5A	b00075046
b00065048	Mgmt Agents CI	5A	b00075048
b00065050	Mgmt Logistics CI	5A	b00075050
b00065052	Mgmt Software CI	5A	b00075052
b00065054	Processing CSCI	5A	b00075054
b00065056	Production Planning CSCI	5A	b00075056
b00065058	SDP Toolkit CSCI	5A	b00075058
b00065060	Science Data Server CSCI	5A	b00075060
b00065062	Storage Mgmt CSCI	5A	b00075062
b00065064	Ver 0 Int Gtwy CSCI	5A	b00075064
b00065066	Workbench CSCI	5A	b00075066
b00065068	ASTER Hardware HWCI	5A	b00075068
b00065070	Acc Ctrl and Mgmt HWCI	5A	b00075070
b00065072	Advertising Service HWCI	5A	b00075072
b00065074	Alg Int and Test HWCI	5A	b00075074
b00065076	Alg Qual Assur HWCI	5A	b00075076
b00065080	Data Mgmt HWCI	5A	b00075078
b00065082	Data Repository HWCI	5A	b00075080
b00065084	Dist Comm HW CI	5A	b00075082
b00065086	Dist and Ing Periph HWCI	5A	b00075084
b00065088	Document Data Svr HWCI	5A	b00075086
b00065090	Ingest Client HWCI	5A	b00075088
b00065092	Interface Hardware	5A	b00075090
b00065094	Internetworking Hardware	5A	b00075092
b00065096	Planning HWCI	5A	b00075094
b00065098	Science Processing HWCI	5A	b00075096
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	.		

Figure 4.3.3-87. List by Old Numbers

Name	Old Control Item	New Control Item
=====	=====	=====
e0acg01	b00065744	b00075750
e0acg02	b00065746	b00075752
e0acs03	b00065748	b00075754
e0acs04	b00065750	b00075756
e0acs05	b00065752	b00075758
e0acs06	b00065754	b00075760
e0ais02	b00065756	b00075762
e0ais03	b00065758	b00075764
e0ais06	b00067887	b00075766
e0ais07	b00067892	b00075768
e0aqq01	b00065706	b00075710
e0aqq02	b00065760	b00075770
e0ass01	b00065762	b00075772
e0ass02	b00065764	b00075774
e0ass03	b00065766	b00075776
e0css02	b00065768	b00075778
e0dip05	b00065638	b00075642
e0dis01	b00065770	b00075780
e0dis02	b00065772	b00075782
e0dmh01	b00065774	b00075784
e0dmh02	b00065776	b00075786
e0dmp02	b00065641	b00075788
e0dms03	b00065778	b00075790
e0dms04	b00065780	b00075792
e0drg01	b00065782	b00075794
e0drg02	b00065784	b00075796
e0drg05	b00065786	b00075798
e0drs03	b00065788	b00075800
e0drs04	b00065790	b00075802
e0icg01	b00065792	b00075804
e0icg02	b00065794	b00075806
e0icg03	b00065796	b00075808
e0ins01	b00065798	b00075810
e0ins02	b00065800	b00075812
e0msh03	b00065802	b00075814
e0msh11	b00065804	b00075816
e0msp07	b00065640	b00075644
e0msp07	b00065642	b00075646
e0msp07	b00065743	b00075818
e0msp08	b00065644	b00075648
e0msp08	b00065646	b00075650
e0mss01	b00065806	b00075820
e0mss02	b00065808	b00075822
e0mss04	b00065810	b00075824
e0mss20	b00065812	b00075826
e0mss21	b00065814	b00075828
	.	
	.	
	.	

Figure 4.3.3-88. List by Name

New Control Item	Name	Old Control Item
-----	-----	-----
b00075000	ECS-wide Subsystem B/L	b00065000
b00075002	EDF Subsystem B/L	b00065002
b00075004	ECS Operational Network B/L	b00065004
b00075006	ECS Operational Subsystem B/L	b00065006
b00075008	ECS Product Baseline	b00065008
b00075010	EDC Operational Subsystem B/L	b00065010
b00075012	EDF Mini-DAAC Subsystem B/L	b00065012
b00075014	GSFC Operational Subsystem B/L	b00065014
b00075016	LaRC Operational Subsystem B/L	b00065016
b00075018	Mini-DAAC SMC Subsystem B/L	b00065018
b00075020	NSIDC Operational Subsystem BL	b00065020
b00075022	SMC Operational Subsystem B/L	b00065022
b00075024	VATC Subsystem B/L	b00065024
b00075026	VATC-SMC Subsystem B/L	b00065026
b00075028	Advertising Service CSCI	b00065028
b00075030	Algorithm I&T CSCI	b00065030
b00075032	Data Dictionary CSCI	b00065032
b00075034	Data Dist Service CSCI	b00065034
b00075036	Desktop CSCI	b00065036
b00075038	Dist Comp Software CSCI	b00065038
b00075040	Dist Info Manager CSCI	b00065040
b00075042	Document Data Svr CSCI	b00065042
b00075044	Ingest Services CSCI	b00065044
b00075046	Local Info Manager CSCI	b00065046
b00075048	Mgmt Agents CI	b00065048
b00075050	Mgmt Logistics CI	b00065050
b00075052	Mgmt Software CI	b00065052
b00075054	Processing CSCI	b00065054
b00075056	Production Planning CSCI	b00065056
b00075058	SDP Toolkit CSCI	b00065058
b00075060	Science Data Server CSCI	b00065060
b00075062	Storage Mgmt CSCI	b00065062
b00075064	Ver 0 Int Gtwy CSCI	b00065064
b00075066	Workbench CSCI	b00065066
b00075068	ASTER Hardware HWCI	b00065068
b00075070	Acc Ctrl and Mgmt HWCI	b00065070
b00075072	Advertising Service HWCI	b00065072
b00075074	Alg Int and Test HWCI	b00065074
b00075076	Alg Qual Assur HWCI	b00065076
b00075078	Data Mgmt HWCI	b00065080
b00075080	Data Repository HWCI	b00065082
b00075082	Dist Comm HW CI	b00065084
b00075084	Dist and Ing Periph HWCI	b00065086
b00075086	Document Data Svr HWCI	b00065088
b00075088	Ingest Client HWCI	b00065090
b00075090	Interface Hardware	b00065092
b00075092	Internetworking Hardware	b00065094
b00075094	Planning HWCI	b00065096
b00075096	Science Processing HWCI	b00065098
	.	
	.	
	.	

Figure 4.3.3-89. List by New Numbers

4.3.4 XRP-II (Inventory, Logistics and Maintenance {ILM} Manager)

ILM Manager, or just ILM, helps the M&O staffs at the DAACs, EOC, and SMC maintain records that describe all inventory components, as well as their assembly structures, repair histories, and locations. The system keeps chronological histories (a record of the transactions) of receipt, installation, relocation, transfer, archiving and relocation of inventory items. The Procurement, Property Management, Maintenance, and Logistics teams in managing the tangible property of NASA's EOSDIS project use the ILM Manager.

ILM is a heavily customized application of the commercially available manufacturing management system, XRP-II, particularly its Product Information, Inventory Management, Purchasing Management, and Work Order Processing modules. The customizations adapt the product to the ILS processes used for ECS. Since XRP-II supports managing ECS baseline data too, ILS operators have access to the Baseline Manager's data query screens and reports as well (see Section 4.3.3).

XRP-II is a legacy-based application. It has a character-based (non-GUI) system of menus and data entry screens (so it can support dumb terminals) and an embedded COTS database (UNIFY). The vendor has tailored many of the original displays, making them ECS-specific, and has added and changed numerous functions to facilitate ECS property and maintenance management. The system provides a transaction-oriented environment for data input and modification. While an operator is logged into the XRP-II program, he is engaged in a database session.

ILM menus and screens take into account how business rules and logistics concepts are applied on the ECS project. This document does not address these considerations in detail, but the following general introduction should help.

A unique Equipment Inventory Number (EIN) identifies each inventory item. In the case of hardware items, an EIN corresponds to a silver sticker affixed to the item. The most significant relationship maintained among inventory items is EIN structure. EIN structure is ILM's implementation of XRP-II's product structure; that is, the parent-component pairings that define the ingredients -- or bill of material -- for an assembly. Product structures have active and inactive dates that establish the timeframe during which the pairing is in effect. Sections 1.6.2 and 4.1 of the *XRP-II Product Information Manual* discuss product structures in more detail. For tracking and auditing purposes, inventory items -- especially hardware -- get allocated to ECS "parent" machines, and some of the items are shipped to sites and installed. Others such as consumables are issued but not installed. After a period, some items may be transferred to other locations or relocated for use with other parent machines. Items are archived when no longer needed or serviceable.

Table 4.3.4-1 summarizes the operator functions that XRP-II supports. The sections that follow present how to use XRP-II features that were customized for ECS inventory, logistics, and maintenance management. Refer to the following manuals for an understanding of the original XRP-II product and for descriptions of functions and features that were not customized:

- *XRP-II System Reference Manual* - presents an overview of XRP-II and describes system-related functions associated with using it.
- *XRP-II Product Information Manual* - presents a full description of XRP-II's product information module in context of XRP-II's integrated set of manufacturing-oriented applications.
- *XRP-II Datalook/Datarite Reference Manual* - presents a technical reference for the on screen database editor (DATALOOK) and report generator (DATARITE) incorporated in XRP-II and used to create custom screens and reports.
- *XRP-II Tools, Techniques, and Conventions Manual* - presents a description of methods and utilities an XRP-II support engineer would use to perform low-level maintenance on XRP-II's database, screens, and reports.
- *XRP-II Purchasing Management Reference Manual* - describes how to use XRP-II for management of requisitions, purchase orders and delivery of materials.
- *UNIFY Developer's Reference* - presents a guide with examples for using UNIFY's tools to develop database applications. It also describes many UNIFY messages.
- *UNIFY Direct HLI Programmer's Manual* - presents a technical reference for programmers of UNIFY RDBMS applications and contains a summary of UNIFY's error log file and common error messages.
- *UNIFY Developer's Tutorial* - a practical tutorial and functional reference for using UNIFY.
- *ACCELL Publication Package* - describes how to install ACCELL.
- *ACCELL Release Notes* - describes software changes that occurred after the ACCELL and UNIFY manuals were printed.

Section 4.3.3 XRP-II (Baseline Manager) also discusses XRP-II. Readers not familiar with XRP-II should read through that section, including Sections 4.3.3.2.11 (System Utilities) and 4.3.3.2.12 (System Tools), which discuss functions, needed and used to support ILM.

Refer to EOSDIS and ECS configuration management plans and procedures for definitions of such terms as baseline, configuration item, control item, and configured article used in this document.

Table 4.3.4-1. Common ECS Operator Functions Performed with ILM

Operating Function	Character-based User Interface	Description	When and Why to Use
ILM function selection	ILM Main Menu from ECS Management System Main Menu	Start XRP-II and navigate to appropriate screens.	To access any of ILM functions for property management, inventory ordering, purchase order processing, property maintenance, or system management configuration.
Property Management	EIN Menu, EIN Transactions, or ILM Report Menu from ILM Main Menu	Maintain information about property items accountable, their product structures, and inter-relationships.	To maintain information that specifies the identity, source, location, transfer, relocation, and installation of procured inventory items.
Inventory Ordering	Inventory Ordering Menu from ILM Main Menu	Define and manage ordering information for the inventory items.	To establish order points and to monitor inventory levels.
Purchase Order Processing	PO / Receiving Menu from ILM Main Menu	Purchase order preparation and monitoring receipt of inventory items.	To generate purchase orders and record receipt of inventory.
Property Maintenance	Maintenance Menu from ILM Main Menu	Manage information for required repairs and preventive maintenance.	To predefine and monitor scheduled maintenance activities
License Management	License Menu from ILM Main Menu	Manage entitlements, licenses, and license allocations for licensed COTS software.	To track the receipt, movement, and consumption of software licenses and their associated rights-to-use.
ILM Configuration	ILM Master Menu from ILM Main Menu	Manage configuration information for ILM.	To define parameters required to run ILM, maintain user information, and export and import ILM data.

4.3.4.1 Quick Start Using XRP-II (ILM)

ILM was designed to assist in the tracking of government property items, for each site individually and in a consolidated manner for the SMC. It is a character-based, menu-driven system whose user interface was inherited from the XRP-II product. It employs screens for entering data, processing transactions, and generating reports. Menus are used for navigating to the screens. Figure 4.3.4-1 depicts the hierarchy of menus and screens for ILM. XRP-II provides the capability to modify screens and menus and to develop new, custom reports to meet changing requirements.

All XRP-II menus are similar in appearance and function the same way. Only the titles and selections vary. Selections may vary for different operators using the same menu. This happens if each has different permissions.

Data is entered via the keyboard. On data screens, fields are usually traversed from left to right, then row by row. Labels for fields whose values can be modified are displayed in upper case. The database is updated at the time a field's value is changed, and records of changes are written to transaction logs.

Most data entry screens have form and table views for displaying data records but some have neither view, having been designed solely to initiate processes. Form views offer full screen layouts of a data record's fields, whereas table views offer rows of records in a window that is panned to see columns of fields. Some table views have fewer fields than their corresponding form views, either by design or to accommodate system limitations. Screens are usually displayed in INQUIRY mode, which precludes changing any values. Operators must enter ADD, INSERT, DELETE, or MODIFY mode in order to update the database.

XRP-II menus and screens provide simple and quick one or two keystroke commands that support various navigation, data entry, and processing functions. Functions are screen-dependent, so XRP-II uses a menu near the bottom on each display to list which commands are available. On data entry screens, the menu differs according to mode. The list for INQUIRY mode has three parts due to its size. (Using the **M**ore command cycles through them). Table 4.3.4-2 summarizes the "bottom-line" commands used in ILM. More detailed descriptions can be found in the *XRP-II System Reference Manual*, Section 2.6, and the other ILM-related XRP manuals such as the *XRP-II Work Order Processing Manual*.

XRP-II also provides online help, which can be entered by pressing <F1>. Help superimposes on the display a textual description of a field, screen, or command. Help is controlled using its own set of bottom-line commands. If no help is available for the topic selected, a "No help for ..." message appears on the status (last) line of the display. The Help command has to be exited by using the **Q**uit command or <F3>.

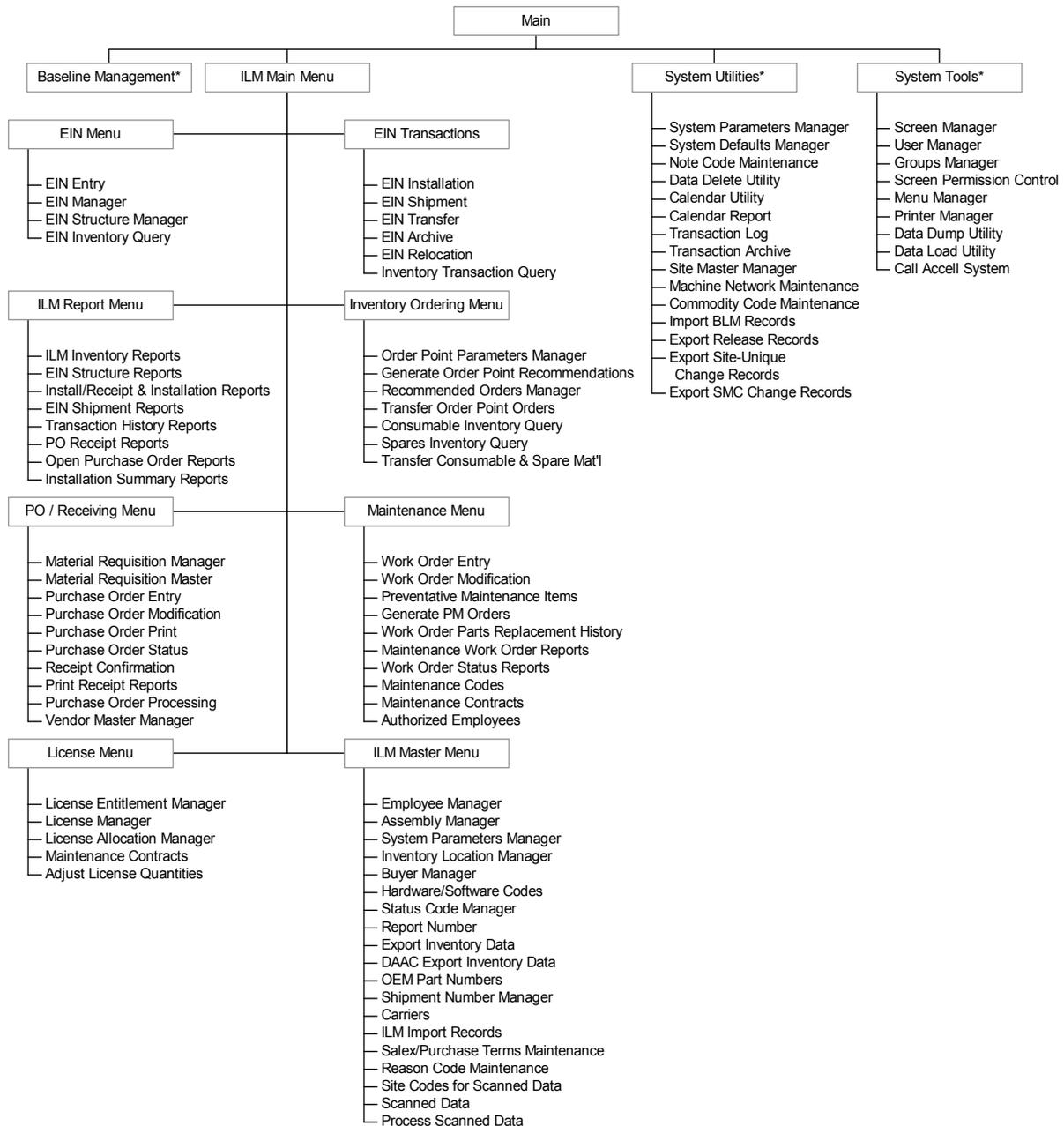


Figure 4.3.4-1. ECS ILM Management System Menu Structure

- The Baseline Management, System Utilities, and System Tools menus are discussed in Section 4.3.3.2.

Table 4.3.4-2. XRP-II's Bottom Line Commands for ILM (1 of 3)

Commands	Description
Commands used with ILM menus	
<F1>	Displays a description for the highlighted option.
<F3>	Moves back to the previous menu.
<F5>	Selects the highlighted option.
<F8>	Exit XRP-II.
Commands used with ILM screens	
<F1>	Invokes online help and displays a submenu for identifying the help target. Same as the H elp command.
<F2>	Clears the value from the field.
<F3>	Exits the screen or function. Same as the Q uit command.
<F5>	Starts a sort, select, find, or ad hoc report function after entry of parameters is completed.
<F7>	Copies data into or from a block of text.
<F9>	Tags and returns values when executing a zoom command.
.Adjust_qty	Updates how many of a license entitlement's node and user rights-to-use are allocated and remaining.
.Cartons	Invokes the cartons page on the EIN Shipment screen so the number and sizes of cartons in a shipment can be recorded.
.Entitlements	Activates an items page for identifying the license entitlements associated with a specific software license.
.Licenses	Activates an items page for identifying the software licenses associated with a specific license entitlement.
.Process_Changes	Updates property records based on parameters specified in the line items for a Maintenance Work Order.
/Add	Invokes ADD mode so new records can be added (created) in the database. New records are placed after the current record.
/Copy	Copies values from "tagged" fields to corresponding fields in other records. If no values are tagged, copies -- to the field in which the cursor resides -- the value from the corresponding field in the preceding record.
/Delete	Deletes the displayed record from the database.
/Insert	Invokes ADD mode such that new records can be inserted (created) in the database. New records are placed ahead of the current record.
/Modify	Invokes MODIFY mode so an existing database record can be updated.
/Note	Enables free-form text to be associated with a data entry screen for a user.
/Report	Invokes ad hoc report processing for the set of records currently selected on a screen.
/Sort	Allows the current set of selected records to be sorted according to operator-specified sort criteria.
/Zoom	Allows a set of records related to the current record to be displayed. Tagging any field in one of those records causes a value from that record to be returned and entered in the field at which the command was invoked.

Table 4.3.4-2. XRP-II's Bottom Line Commands for ILM (2 of 3)

Commands	Description
Addr	Invokes the vendor address maintenance screen so multiple addresses for a vendor can be recorded.
Bom	Invokes a screen to display the Bill of Material (i.e., list of first-level components) for an item, if any.
Changes	Displays the record of changes logged for a purchase order line item.
Check	Validates certain data entered for a batch of inventory transactions prior to the transactions being processed.
Copy-bill	Adds to an EIN's Bill of Material (BOM) the BOM from another.
Copy-dates	Copies active and inactive dates -- defined for an EIN's structure in its structure manager record -- into the product structure records for the EIN's children.
Copyein	Creates a new item by copying all the fields except the EIN Number from another item.
Copypart	Creates a new item by copying all the fields except the EIN Number from another item.
Duplicate	Creates copies of a purchase order line item to support multiple deliveries on different dates.
Execute	Starts the processing of a major, supporting function attached to the screen.
Find	Locates and displays the first record having field values the operator specifies. Repeating the Find command without changing the search criteria locates the next record that qualifies.
Go	Locates and displays a record having a specified sequence number. The format is "ng", where <i>n</i> is the number.
Help	Invokes online help and displays a submenu for identifying the help target.
Items	Invokes the items page of a data entry screen so a set of related records can be attached to the current record. Examples of related records include the line items for a purchase order and the components of a parent EIN.
Items_Addl	Invokes the items page of the License Allocation data screen so allocated licenses can be mapped to backup/redundant servers without being included in computations of rights-to-use consumed.
Items_Allocation	Activates an items page that lists the host machines and sites to which a license has been allocated. The license's rights-to-use must have first been mapped to at least one entitlement before the license can be allocated.
Justify	Used with table view, places the column the cursor is in next to the column(s) of record key data at the left edge of the screen.
Left	Shifts the data window to the left for displays that cannot fit all fields in one window.
More	Displays more bottom-line commands. In general, XRP-II provides three menus of bottom-line commands for screens, since all commands available to a screen cannot fit on one line. This command cycles through these menus.
Next	Moves the display "forward" to the next record (in form view) or next page of records (in table view).
Prior	Moves the display "back" to the prior record (in form view) or prior page of records (in table view).

Table 4.3.4-2. XRP-II's Bottom Line Commands for ILM (3 of 3)

Commands	Description
Quit	Exits the current screen or function. (This command is not available when in ADD, INSERT, or MODIFY modes, as it would be mistaken for a character being entered in a field.)
Right	Shifts the data window to the right for displays that cannot fit all fields in one window.
Select	Invokes query-by-example record filtering and displays a submenu for specifying the criteria to be used. See <i>XRP-II System Reference Manual</i>
Tag	Identifies a specific record and field whose value is to be used when adding new records or copying data. Tagged values are highlighted on the screen.
Untag	Removes the "Tag" from all fields on the screen.
View	Toggles between "form" or record display and "table" or list display.
Where	Invokes a screen to display the first-level parents or assemblies having the EIN-controlled item as a component.
Write	Saves the current record to a file designated by the operator.
Commands used in ADD, INSERT, and MODIFY modes	
<F1>	Invokes online help and displays a submenu for identifying the help target.
<F2>	Erases the character string in the field.
<F3>	Exits the mode.
<F4>	Switches among typeover, insert, and replace modes for data entry.
<F6>	Enters the default value for the field.
Commands used in DELETE mode	
H	Invokes online help and displays instructions on how to use the Delete command.
L	Invokes the line-by-line method for deleting records.
n	Specifies the number of records to delete starting with the current record.
Q	Exits the mode.
Commands used with online help	
C	Display help for bottom-line commands available to the screen. Commands are listed on the bottom-line menu, and the More command can be used to cycle through them. Type any highlighted keys to display the help text for those keys.
F	Display help for the screen field on which the cursor has landed.
Q	Exit online help.
S	Display help for the screen.

When entering data in XRP-II screens, operators should keep the following in mind:

- XRP-II is case sensitive. It interprets data exactly as it is entered, taking the case of your input string into account.
- Each menu and screen has a set of "bottom line" commands, so named because the command menu appears in a menu at the lower part of the display. The menu uses boldface to indicate which keystroke(s) invokes each command.
- The record counters Last and Current appear on the topmost line of screens that display multiple data records. Last corresponds to the total number of records in the display; while Current indicates which of those records the cursor is on.

- Most screens are presented in INQUIRY (i.e., query) mode. Operators must enter ADD or INSERT mode in order to add new records, MODIFY mode to change existing values, and DELETE mode to remove one or more records. Exit back to INQUIRY mode by pressing <F3>.
- After entering a new value in a data field, operators must move the screen's cursor from the field in order to save the value in the database. This allows a change to be cancelled or revised before it is stored. The cursor can be moved by pressing the <ENTER>, <TAB>, or any of the cursor keys.
- Since XRP-II has a character-based user interface (not GUI), navigation, item selection, and cursor movement is handled using the keyboard. A terminal's mouse has limited utility. There is no placing the mouse pointer on an item and double clicking, and there is no dragging and dropping. However, your windowing system may allow you to use your mouse to cut and paste.
- The /Zoom command often appears at the right of the bottom-line menu when the cursor is at a field having corresponding data in a related database table. This indicates that a ZOOM screen is available to help you select the data value to enter. To operate a ZOOM screen do the following:
 - Enter /Z in as the first two characters in the field. A pick list appears in a box with your cursor positioned at the top of the list.
 - To select an item, use appropriate keys and available commands to move the cursor to the desired record, then press <T> for Tag. XRP-II highlights the value you've selected.
 - Press <Q> or <F3> to return to the data entry screen. Your selection now appears in the data entry field.

It is important to note that the relational database management system XRP-II uses, UNIFY, does not support rules requiring entries in specific fields. ILM attempts some enforcement via the data entry screens, either by establishing default values where feasible when new records are created, or by blocking an operator from advancing the cursor past a null field when in ADD, INSERT, or MODIFY modes. However, database updates can occur in ways that bypass these mechanisms, so operators must ensure required data is entered.

4.3.4.1.1 Invoking XRP-II (ILM) from the Command Line

In order to use ILM, an operator must be logged in on XRP's host server and his userid registered in XRP with appropriate privileges. The userid must also be a member of the Unix file system group owning the XRP-II files, which is typically "xrp".

To run ILM from the command line prompt, type either:

a) **<principal dir name>/scripts/ilmusr** [**<terminal_id>** [**<terminal_type>**]]

where principal dir name is the directory at which XRP-II is accessed (nominally, /usr/ecs/OPS/COTS/xrp)

or

b) **ilmusr** [**<terminal_id>** [**<terminal_type>**]]

if XRP's scripts directory has been added to your path.

The "terminal_id" argument identifies the IP address or host name at which XRP-II menus and screens are to be displayed. The address, which is only needed only in an X-windows environment, must not include a ":0.0" suffix. XRP-II prompts the operator for an address if the argument is not provided. The "terminal_type" argument specifies terminal configurations (e.g., ansi, xterm, dterm, and vt100). If the argument is not present, XRP-II checks the TERM environment variable to determine the terminal type and whether or not the product supports it.

The "ilmusr" script determines the operator's terminal type, prompts for a terminal id if necessary, and reads the ILM configuration file to establish the right operating environment. The script then starts XRP-II, passing it the operator's userid, which it obtains from the system.

Upon invoking XRP-II, ECS operators see a menu screen, which one depending on the "entry menu" and "screen group" the operator was assigned. Assignments are based on the operator's role, and they affect the screens and functions the operator can invoke. Made by someone with XRP administrator privileges, assignments are discussed in the Baseline Manager part of this document (see Sections 4.3.3.2.12.2 - 4.3.3.2.12.4). The following are ILM-related roles XRP-II is deployed pre-configured to support:

- ilmadmin - full privileges to all operator and system administrator functions within ILM;
- ilmuser - all ILM operator privileges only;
- ilmlog - logistics management data update privileges only;
- ilmmain - maintenance management data update privileges for central ILS managers;
- ilmadmnd - full privileges to all operator and system administrator functions within ILM for a site's local maintenance coordinator;
- ilmmtnd - maintenance management data update privileges for a site's local maintenance coordinator;
- ilmquery - ILM data query privileges only;
- ilmupdt - (Reserved);
- licuser - license management data update privileges for software license administrators;
- xrpadmin - all privileges (both ILM- and BLM-related) for whomever is responsible for sustaining the application.

The sections below discuss all ILM's menus and screens. The order of presentation follows the menu hierarchy. Read the XRP-II System Reference Manual to familiarize you with using the menus and screens before proceeding to the material in Section 4.3.4.2.

4.3.4.2 XRP-II Main Screen

The initial display an operator sees upon invoking XRP-II is typically the ECS Management System Main Menu (Figure 4.3.4-2), or just Main Menu for short. It helps operators navigate to the following submenus:

- Baseline Management Menu – provides access to XRP-II functions for maintaining control item and bill of material information;
- ILM Main Menu – provides access to XRP-II functions for maintaining inventory, logistics, and maintenance information;

- System Utilities Menu – provides access to XRP-II functions for maintaining system information that spans functional domains;
- System Tools Menu – provides access to aids for registering XRP-II users, assigning permission, customizing data entry screens and menus, and performing general-purpose database dumps and loads.

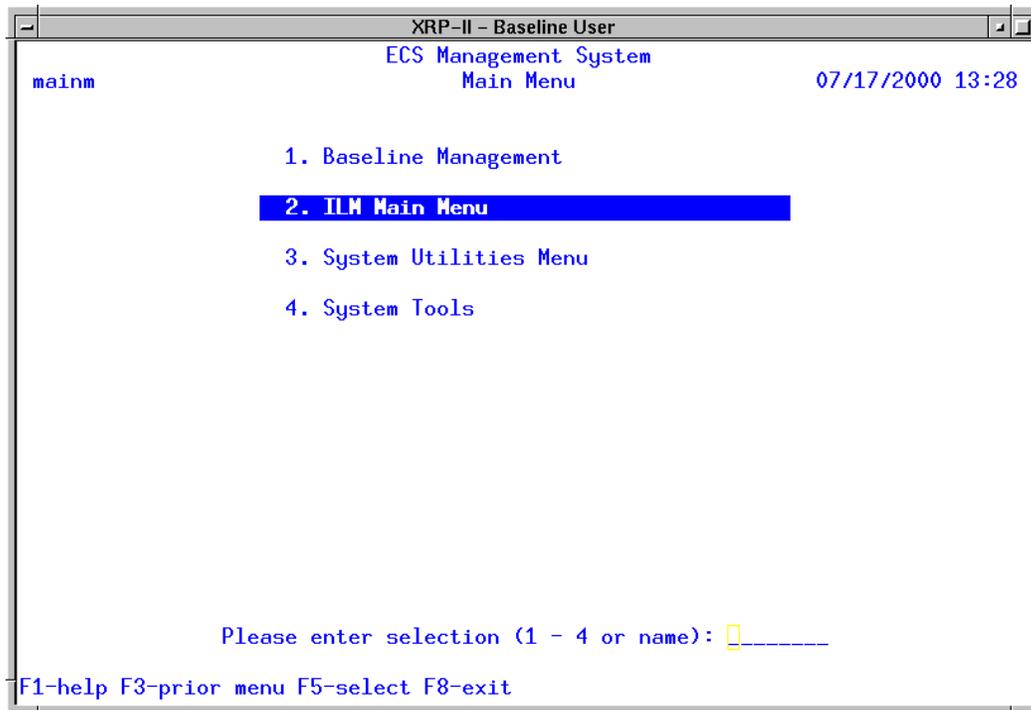


Figure 4.3.4-2. ECS Management System Main Menu

Operators select from XRP-II menus either by typing an option number and pressing <Enter>, or by moving the cursor to the option to highlight it then pressing <Enter> or <F5>. For the experienced operator, XRP-II provides a shortcut that bypasses the menu hierarchy. Each XRP-II menu and screen is identified by a name at its top left corner. Operators familiar with these names can just type a name at any menu to navigate directly to the desired display.

Note: While navigating by name bypasses the menu hierarchy, it does not circumvent access restrictions. That is, operators cannot access menus and screens for which they have no permissions.

The submenu ILM operators most often select is the ILM Main Menu (Figure 4.3.4-3). It helps them navigate to the following, additional submenus containing screens grouped according to major operating function:

- EIN Menu - for managing the catalog of EIN-controlled items;

- EIN Transactions - for processing transactions about EIN installations, shipments, transfers, and relocations;
- ILM Report Menu - for producing pre-defined reports available to all operators;
- Inventory Ordering Menu - for managing consumable items and spare parts;
- PO / Receiving Menu - for processing procurement requisitions, orders, and receipts;
- Maintenance Menu - for managing maintenance actions and data;
- License Menu – for managing licenses for commercial-off-the-shelf (COTS) software;
- ILM Master Menu - for managing ILM parameters and reference information.

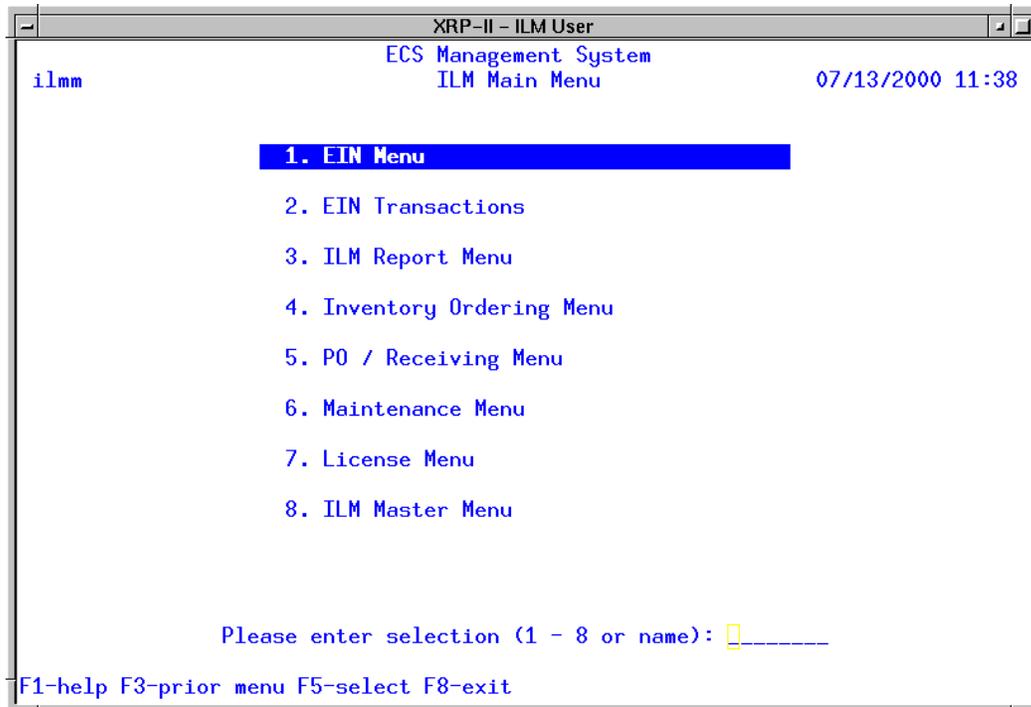


Figure 4.3.4-3. ILM Main Menu

The following sections focus on the functions and features of the ILM Main Menu. Other ECS Management Main Menu selections were discussed in the XPR-II (Baseline Manager) section of this document and are not repeated here.

4.3.4.2.1 EIN Menu

Options provided on this menu (Figure 4.3.4-4) allow the operator to navigate to a set of screens for managing and accessing information about EIN-controlled items. These include:

- EIN Entry – for adding records about new, EIN-controlled inventory items;
- EIN Manager (EDF) – for updating the data describing any EIN in the system;
- EIN Structure Manager (EDF) – for manually associating EINs with a system machine (i.e., its parent EIN)

- EIN Inventory Query (EDF) – for displaying inventory locations for all ILM related items;
- EIN Manager – for browsing data describing EINs at the local site.
- EIN Structure Manager – for browsing EIN structures for items at the local site;
- EIN Inventory Query – for browsing EIN records;

The following subsections describe these screens.

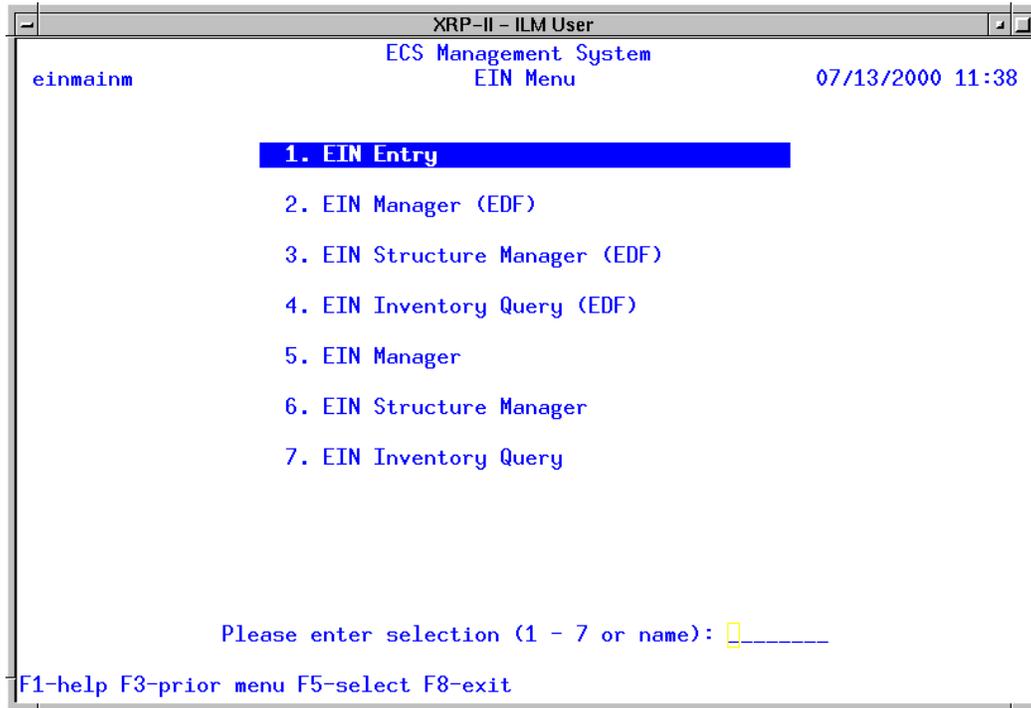


Figure 4.3.4-4. EIN Menu

4.3.4.2.1.1 EIN Entry Screen

The EIN Entry screen (Figure 4.3.4-5) is designed to enter records identifying EIN-controlled inventory items into the database. It is presented to the operator automatically when XRP-II's Receipt Confirmation screen is used for entering items at the receiving dock. It can also be invoked from the EIN Menu to allow entry of items outside the receiving process. This screen is presented to the operator in ADD mode. Records for all EIN-controlled inventory items – especially consumables -- should be created through this screen.

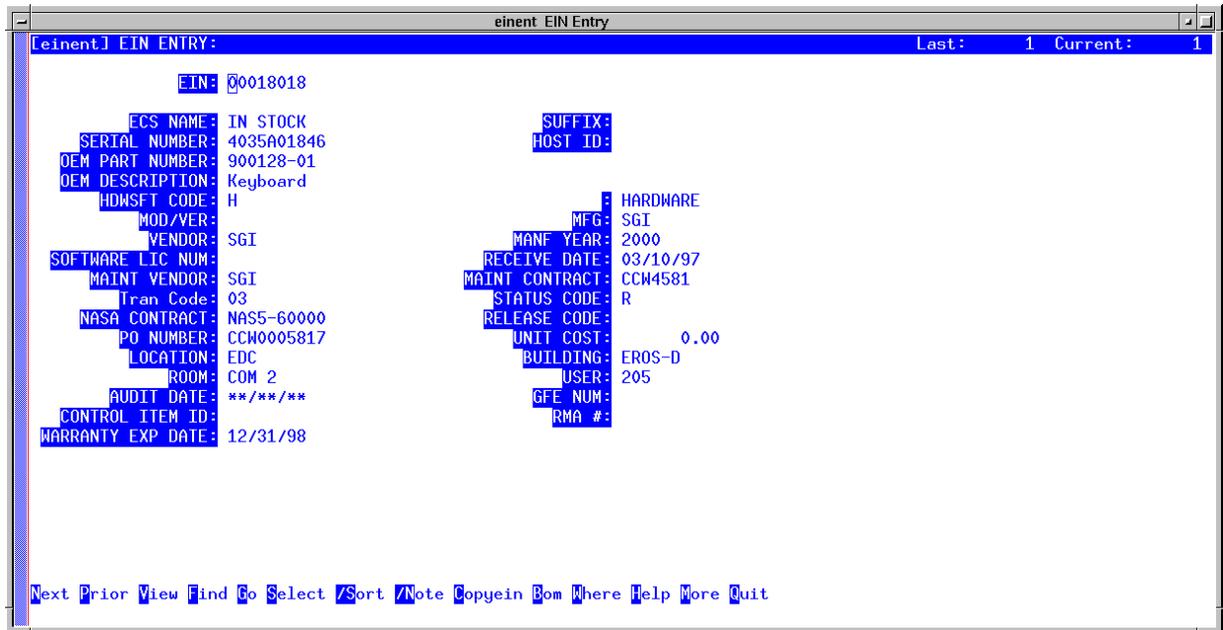


Figure 4.3.4-5. EIN Entry CHUI

Table 4.3.4-3 describes the fields on EIN Entry screen.

Table 4.3.4-3. EIN Entry Field Descriptions (1 of 3)

Field Name	Data Type	Size	Entry	Description
EIN	String	20	Required	Identifier for an EIN-controlled inventory item. This field is for the entry of the actual silver tag numbers attached to each item. If an item must be controlled by ILM but does not receive a silver tag, operators can press RETURN at the field prompt to have the system assign the next sequential number available based on the value for Last EIN in the System Parameters file. This number, whether entered or assigned, must be used for all machine configuration operations as well as reporting and maintenance functions.
ECS NAME	String	30	Optional	Name of the machine with which the item is associated.
SUFFIX	String	3	Optional	Code which when used as a suffix to ECS Name forms an identifier (RMA ID) for equipment subject to RMA reporting.
SERIAL NUMBER	String	30	Optional	Serial number of the item.
HOST ID	String	20	Optional	Hexadecimal identifier of the host machine obtained when the "hostid" Unix shell command is run.
OEM PART NUMBER	String	34	Optional	Manufacturer's or vendor's part number. The operator may zoom to the OEM Parts table and choose the number, if it had been entered there previously. (See the section on OEM Part Numbers.)
OEM DESCRIPTION	String	40	Optional	Manufacturer or vendor's description for the item. This field reflects the description of the OEM PART NUMBER entered in the field above, but provides the ability for the operator to modify it in the EIN file.
HDWSFT CODE	String	10	Optional	Code for classifying inventory items by type. The operator may zoom to the Hardware/Software Codes file and choose the code, if it had been entered there previously. (See the Hardware/Software Codes section.)
MOD/VER	String	24	Optional	Model or Version of the item. If the operator had chosen a known OEM Part, this field is written with the information from that file.
MFG	String	6	Optional	Code used for the manufacturer.
VENDOR	String	6	Optional	Code for the vendor from whom the item was purchased. The operator may zoom to the Vendor data file and pick the desired code if it had been entered there previously. (See the Vendor Master Manager section.)

Table 4.3.4-3. EIN Entry Field Descriptions (2 of 3)

Field Name	Data Type	Size	Entry	Description
MANF YEAR	String	4	Optional	Year (4-digit) the item was manufactured. This field defaults to the year specified in the systems parameter data file. (See the System Parameters Manager section.)
SOFTWARE LIC NUM	String	10	Optional	License number for a software type license item.
RECEIVE DATE	String	8	Optional	Date item was received from vendor.
MAINT VENDOR	String	6	Optional	Code for the item's maintenance vendor. The operator may zoom to the Vendor data file and choose the appropriate code if it had been entered there previously. (See the Vendor Master Manager section.)
MAINT CONTRACT	String	15	Optional	Identifier for the Maintenance Contract under which the item is covered. The operator may zoom to the Contract data file and choose the desired contract number if it had been entered there previously. (See the Maintenance Contracts section.)
TRAN CODE	Numeric	3	System-supplied	Code designating the transaction type. The value is always set to '03' and is not modifiable by the operator.
STATUS CODE	String	1	Optional	Code that designates the status of the item. The following values are set when processing transactions: R = Received; S = Shipped; I = Installed; X = Archived;
NASA CONTRACT	String	11	Optional	Identifier designating the government contract used for this item. This information is automatically assigned and cannot be changed.
RELEASE CODE	String	10	Optional	Code for distinguishing the release status of the item.
PO NUMBER	String	10	Optional	Identifier of the purchase order against which the item was received. The system sets the value during Receipt Confirmation processing.
UNIT COST	Numeric	10	Optional	Price of each item.
LOCATION	String	8	Optional	Identifier that designates an inventory location. The operator may zoom to the Inventory Locations table and choose the code, if it had been entered there previously. (See Inventory Location Manager.) The system sets the value during all EIN transaction processing. (See the EIN Transactions section.)
BUILDING	String	6	Optional	Identifier for the building where the item can be found.
ROOM	String	6	Optional	Identifier for the room where the item can be found.

Table 4.3.4-3. EIN Entry Field Descriptions (3 of 3)

Field Name	Data Type	Size	Entry	Description
USER	String	8	Optional	Code for the person who has the item. The operator may zoom to the Employee table and choose the code, if it had been entered there previously. (See the Employee Maintenance section.)
AUDIT DATE	Date	2	Optional	Date the item was physically inventoried last.
GFE NUM	String	8	Optional	Identifier assigned by the Government to an item of government furnished equipment.
CONTROL ITEM ID	String	20	Optional	Identifier of a corresponding, version-controlled item in the BASELINE MANAGEMENT system. The operator may enter the ID if known, or perform a zoom to the baseline data file.
RMA #	String	16	Optional	Reference to the return material authorization number assigned to an item.
WARRANTY EXP DATE	Date	2	Optional	Date the warranty on the item ends. This field defaults to 365 days from the date of entry.

4.3.4.2.1.2 EIN Manager (EDF) Screen

The EIN Manager (EDF) screen (Figure 4.3.4-6) is designed to view or modify all EIN-controlled inventory items. Although operators may modify most fields on the screen, they should rely on ILM's transaction processing functions for this as much as possible. The functions set standardized values for many of the fields and ensure values in corresponding records are set at the same time. Only operators thoroughly trained in XRP-II's data interdependencies should use this screen.

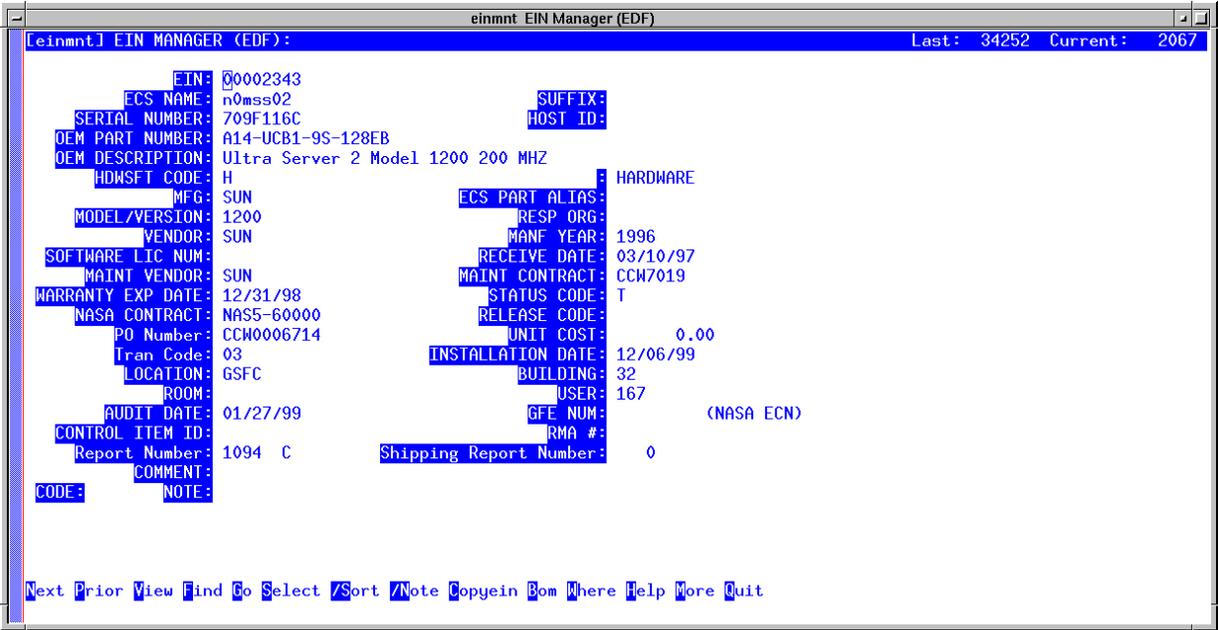


Figure 4.3.4-6. EIN Manager (EDF) CHUI

Table 4.3.4-4 describes the fields on the EIN Manager screen.

Table 4.3.4-4. EIN Manager (EDF) Field Description (1 of 3)

Field Name	Data Type	Size	Entry	Description
EIN	String	20	Required	Identifier for an EIN-controlled inventory item. This field is for the entry of the actual silver tag numbers attached to each item. If an item must be controlled by ILM but does not receive a silver tag, operators can press RETURN at the field prompt to have the system assign the next sequential number available based on the value for Last EIN in the System Parameters file. This number, whether entered or assigned, must be used for all machine configuration operations as well as reporting and maintenance functions.
ECS NAME	String	30	Optional	Name of the machine with which the item is associated.
SUFFIX	String	3	Optional	Code which when used as a suffix to ECS Name forms an identifier (RMA ID) for equipment subject to RMA reporting.
SERIAL NUMBER	String	30	Optional	Serial number of the item.
HOSTID	String	20	Optional	Hexadecimal identifier of the host machine obtained when the "hostid" Unix shell command is run.
OEM PART NUMBER	String	34	Optional	Manufacturer's or vendor's part number. The operator may zoom to the OEM Parts table and choose the number, if it had been entered there previously. (See OEM Part Numbers.)
OEM DESCRIPTION	String	40	Optional	Manufacturer or vendor's description for the item. This field reflects the description of the OEM PART NUMBER entered in the field above, but provides the ability for the operator to modify it in the EIN file.
HDWSFT CODE	String	10	Optional	Code for classifying inventory items by type. The operator may zoom to the Hardware/Software Codes file and choose the code, if it had been entered there previously. (See the Hardware/Software Codes section.)
MFG	String	6	Optional	Code used for the manufacturer.
ECS PART ALIAS	String	40	Optional	Common name used in ECS for a product and all its versions and variants.
MODEL/VERSION	String	24	Optional	Model or version of the item. If the operator had chosen a known OEM Part, this field is written with the information from that file.
RESP ORG	String	6	Optional	Code of the organization responsible for the item.
VENDOR	String	6	Optional	Code for the Vendor from whom the item was purchased. The operator may zoom to the Vendor data file and pick the desired code, if it had been entered there previously. (See the Vendor Master Manager section.)

Table 4.3.4-4. EIN Manager (EDF) Field Description (2 of 3)

Field Name	Data Type	Size	Entry	Description
MANF YEAR	String	4	Optional	Year (4-digit) the item was manufactured. This field defaults to the year specified in the system parameters data file.
SOFTWARE LIC NUM	String	10	Optional	License number for a software type license item.
RECEIVE DATE	String	8	Optional	Date item was received from vendor.
MAINT VENDOR	String	6	Optional	Code for the item's maintenance vendor. The operator may zoom to the Vendor data file and choose the appropriate code if it had been entered there previously. (See the Vendor Master Manager section.)
MAINT CONTRACT	String	15	Optional	Identifier for the Maintenance Contract under which the item is covered. The operator may zoom to the Contract data file and choose the desired contract number if it had been entered there previously. (See the Maintenance Contracts section.)
WARRANTY EXP DATE	Date	2	Optional	Date the warranty on the item ends. This field defaults to 365 days from the date of entry.
STATUS CODE	String	1	Optional	Code that designates the status of the item. The following values are set when processing transactions: R = Received; S = Shipped; I = Installed; X = Archived;
NASA CONTRACT	String	11	System-supplied	Identifier designating the government contract used for this item. This information is automatically assigned and cannot be changed.
RELEASE CODE	String	10	Optional	Code for distinguishing the release status of the item.
Po Number	String	10	Optional	Identifier of the purchase order against which the item was received. The system sets the value during Receipt Confirmation processing.
UNIT COST	Floating	10.2	Optional	Purchase cost of the item.
Tran Code	Numeric	3	System-supplied	Code designating the transaction type. The value is always set to '03' and is not modifiable by the operator.
INSTALLATION DATE	Date	2	Optional	Date the item was installed. The system sets the value during EIN Installation processing.
LOCATION	String	8	Optional	Identifier that designates an inventory location. The operator may zoom to the Inventory Locations data file to pick an appropriate code if it had been entered there previously. (See the Inventory Location Manager section.) The system sets the value during all EIN transaction processing. (See the EIN Transactions section.)

Table 4.3.4-4. EIN Manager (EDF) Field Description (3 of 3)

Field Name	Data Type	Size	Entry	Description
BUILDING	String	6	Optional	Identifier for the building where the item can be found.
ROOM	String	6	Optional	Identifier for the room where the item can be found.
USER	String	8	Optional	Code for the person who has the item. The operator may zoom to the Employee table and choose the code, if it had been entered there previously. (See Employee Maintenance)
AUDIT DATE	Date	2	Optional	Date the item was physically inventoried last.
GFE NUM	String	8	Optional	Identifier assigned by the Government to an item of government furnished equipment.
CONTROL ITEM ID	String	20	Optional	Identifier of a corresponding, version-controlled item in the BASELINE MANAGEMENT system. The operator may enter the ID if known, or perform a zoom to the baseline data file.
RMA #	String	16	Optional	Reference to the return material authorization number assigned to an item.
Report Number	Numeric	4	System-supplied	Identifier under which all installation reports for the EIN is grouped.
Shipping Report Number	Numeric	2	System-supplied	Report number assigned to the item when the item is shipped. The system sets the value during EIN Shipment processing.
COMMENT	String	60	Optional	Miscellaneous information specific to the item.
CODE	String	2	Optional	Identifier for a type or category of note associated with the item
NOTE	String	60	Optional	A message that can be associated with the item.

4.3.4.2.1.3 EIN Structure Manager (EDF) Screen

The EIN Structure Manager (EDF) screen is designed for defining a structure for a machine (i.e., assigning child items to parents manually). It consists of a header screen for identifying the structure's parent EIN and attributes about the structure (Figure 4.3.4-7) and an items page for specifying each parent's children (Figure 4.3.4-8).

The header screen is always presented to the operator in INQUIRY mode. Using the /Add bottom-line command enters ADD mode so an EIN can be defined as a parent. If desired, the operator can enter either a PO number or a vendor code. This limits the EINs the system presents whenever the ZOOM function is invoked on the screen's items page. Leaving both fields blank or null lets the ZOOM function display all EIN items. When complete, the operator exits ADD mode by typing <F3>, then uses the Items command to get to the items page for adding or changing the parent's EIN children.

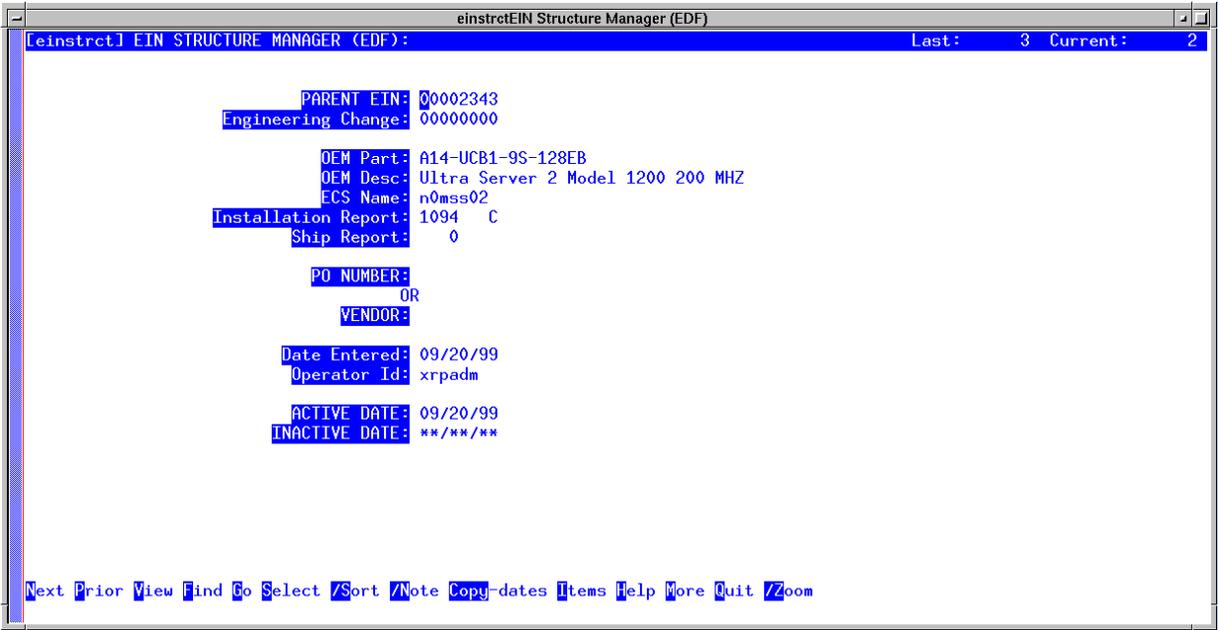


Figure 4.3.4-7. EIN Structure Manager (EDF) CHUI

Table 4.3.4-5 contains a description of the EIN Structure Manager fields.

Table 4.3.4-5. EIN Structure Manager (EDF) Field Descriptions (1 of 2)

Field Name	Data Type	Size	Entry	Description
PARENT EIN	String	20	Required	EIN for the parent item in an EIN structure. The operator may zoom to the EIN table and choose the EIN, if it had been entered there previously. (See the EIN Entry section.)
Engineering Change	String	8	Required; <ENTER>	Product structure change number assigned to the parent EIN when its EIN record was added to the database. The operator should press <ENTER> at this field to allow the system to assign the default, "00000000", when adding new records.
OEM Part	String	34	System-supplied	OEM part number for the item entered as the parent EIN.
OEM Desc	String	40	System-supplied	OEM Description for the item entered as the parent EIN.
ECS Name	String	30	System-supplied	Name of the machine with which the item is associated.

Table 4.3.4-5. EIN Structure Manager (EDF) Field Descriptions (2 of 2)

Field Name	Data Type	Size	Entry	Description
Installation Report	Numeric	4	System-supplied	Identifier under which all installation reports for the EIN is grouped.
Ship Report	Numeric	3	System-supplied	Report number assigned to the item when it is shipped.
PO NUMBER	String	10	Optional; cannot be used when Vendor field is used	Number of the purchase order against which the parent EIN item was received. The PO is used to aid item selection when adding children items to the parent. The operator may zoom to the PO table and choose the number, if it had been entered there previously. (See the Purchase Order Entry section.). If a PO Number is entered, the operator may not enter a Vendor Code in the next field.
VENDOR	String	6	Optional; cannot be used when PO Number field is used	Code for the Vendor from whom the item was purchased. The code is used to aid item selection when adding children items to the parent. The operator may zoom to the Vendor data file and pick the desired code if it had been entered there previously. (Vendor Master Manager.) If a Vendor code is entered, the operator may not enter a PO number in the field above.
Date Entered	Date	2	System-supplied	Date when this record was added to the database.
Operator ID	String	8	System-supplied	Login ID of the operator who added the EIN structure parent record to the database.
ACTIVE DATE	Date	2	Optional	Default effective date on which components are assigned to the Parent EIN. Actual dates, which can vary among components, can be set via the screen's items page and by transactions that alter EIN structures. NOTE: **/**/** = earliest system date.
INACTIVE DATE	Date	2	Optional	Default effective date on which components are no longer assigned to the Parent EIN. Actual dates, which can vary among components, can be set via the screen's items page and by transactions that alter EIN structures. NOTE: **/**/** = latest system date.

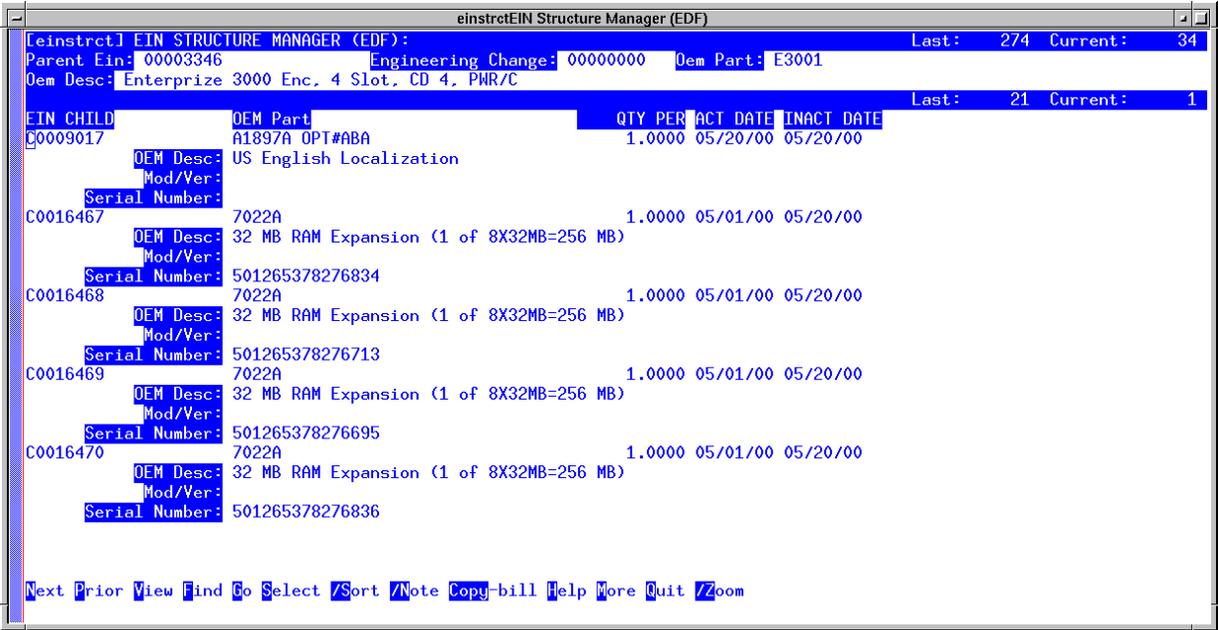


Figure 4.3.4-8. Items Page for EIN Structure Manager (EDF) CHUI

Table 4.3.4-6 describes the fields used on the Items Page for EIN Structure Manager.

**Table 4.3.4-6. Items Page for EIN Structure Manager (EDF)
Field Descriptions (1 of 2)**

Field Name	Data Type	Size	Entry	Description
EIN CHILD	String	20	Required	EIN for a child item in an EIN structure. The operator may zoom to the EIN table and choose the EIN, if it had been entered there previously. (See the EIN Entry section.)
OEM PART	String	34	System-supplied	OEM part number for the item entered as the parent EIN.
QTY PER	String	34	System-supplied	Number of items in the EIN structure for the parent.
ACTIVE DATE	Date	2	Required	Effective date on which the EIN child is assigned to the Parent EIN. NOTE: **/**/** = earliest system date.
INACTIVE DATE	Date	2	Required	Effective date on which the EIN child is no longer assigned to the Parent EIN. NOTE: **/**/** = latest system date.
OEM DESC	String	40	System-supplied	OEM Description for the item entered as the parent EIN.

**Table 4.3.4-6. Items Page for EIN Structure Manager (EDF)
Field Descriptions (2 of 2)**

Field Name	Data Type	Size	Entry	Description
MOD/VER	String	24	System-supplied	Model or version of the item. If the operator had chosen a known OEM Part, this field is written with the information from that file.
SERIAL NUMBER	String	30	System supplied	Serial number of the item.

4.3.4.2.1.4 EIN Inventory Query (EDF) Screen

The EIN Inventory Query screen (Figure 4.3.4-9) is designed to view the inventory location of EIN controlled items. The operator may sort and select by any field on the screen and then print a report of the data. This screen is displayed in INQUIRY mode only and the operator may not modify any data with this screen.

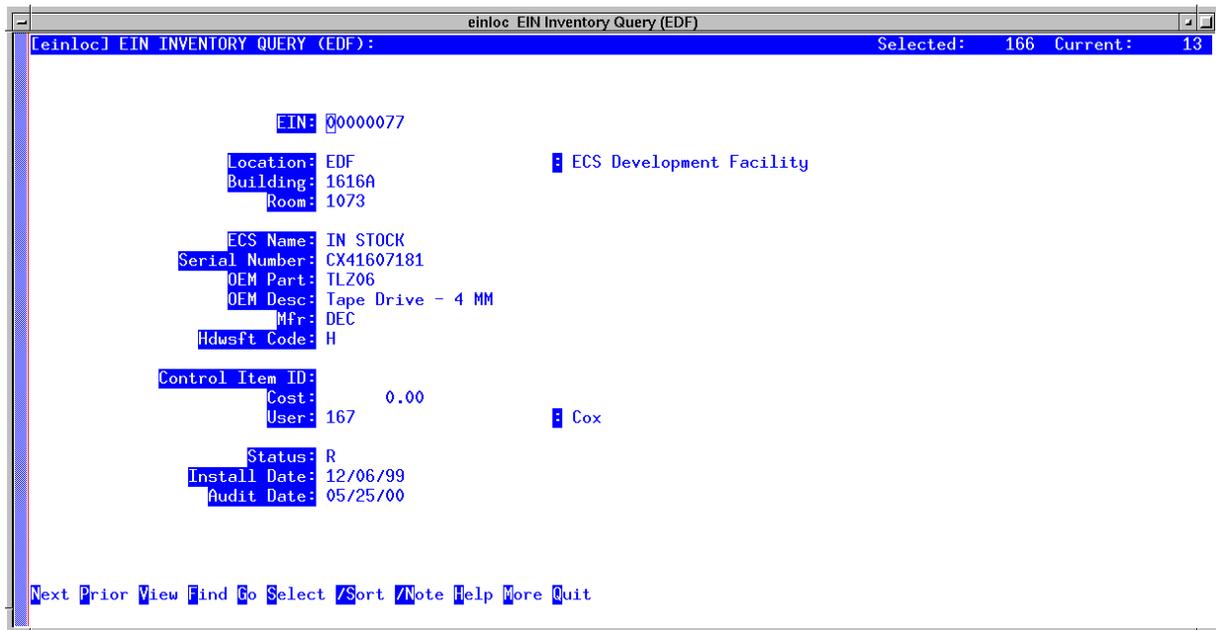


Figure 4.3.4-9. EIN Inventory Query EDF CHUI

Table 4.3.4-7 describes the fields on the EIN Inventory Query EDF screen.

Table 4.3.4-7. EIN Inventory Query (EDF) Field Descriptions

Field Name	Data Type	Size	Entry	Description
EIN	String	20	System-supplied	Identifier for an EIN-controlled inventory item.
Location	String	8	System-supplied	Identifier that designates an inventory location.
:	String	30	System-supplied	Description for the inventory location. It is obtained from the inventory location file based on the value in field Location.
Building	String	6	System-supplied	Identifier for the building where the item can be found.
Room	String	6	System-supplied	Identifier for the room where the item can be found.
ECS Name	String	30	System-supplied	Name of the machine with which the item is associated.
Serial Number	String	30	System-supplied	Serial Number of the item.
OEM Part	String	34	System-supplied	Manufacturer's or vendor's part number for the item.
OEM Desc	String	40	System-supplied	Manufacturer or vendor's description for the item.
Mfr	String	6	System-supplied	Code used for the manufacturer.
Hdwsft Code	String	10	System-supplied	Code for classifying inventory items by type.
Control Item ID	String	20	System-supplied	Identifier of a corresponding version-controlled item in the BASELINE MANAGEMENT system.
Cost	Floating	9.2	System-supplied	Cost of the item.
User	String	8	System-supplied	Code of the person who has the item.
:	String	30	System-supplied	Name of the person who has the item. It is obtained from the employee file based on the value in field User.
Status	String	1	System-supplied	Code that designates the status of the item. The following values are set when processing transactions: R = Received; S = Shipped; I = Installed; A = Archived;
Install Date	Date	2	System-supplied	Date the item was installed.
Audit Date	Date	2	System-supplied	Date the item was physically inventoried last.

4.3.4.2.1.5 EIN Structure Manager Screen

This screen is the DAAC equivalent of the EIN Structure Manager (EDF) screen. (See Section 4.3.4.2.1.3). It performs the same functions, except it accesses the EIN structure records for items located at the local DAAC only.

4.3.4.2.1.6 EIN Manager Screen

This screen is the DAAC equivalent of the EIN Manager (EDF) screen. (See Section 4.3.4.2.1.2.) It performs the same functions, except it accesses the EIN records for items located at the local DAAC only.

4.3.4.2.2 EIN Transactions

The EIN Transactions menu (Figure 4.3.4-10) lets operator navigate to a set of screens for performing transactions to install, ship, transfer, archive, and relocate inventory items. It also provides access to a screen for browsing the log of past inventory transactions. Each of these screens is described in a separate subsection that follows.

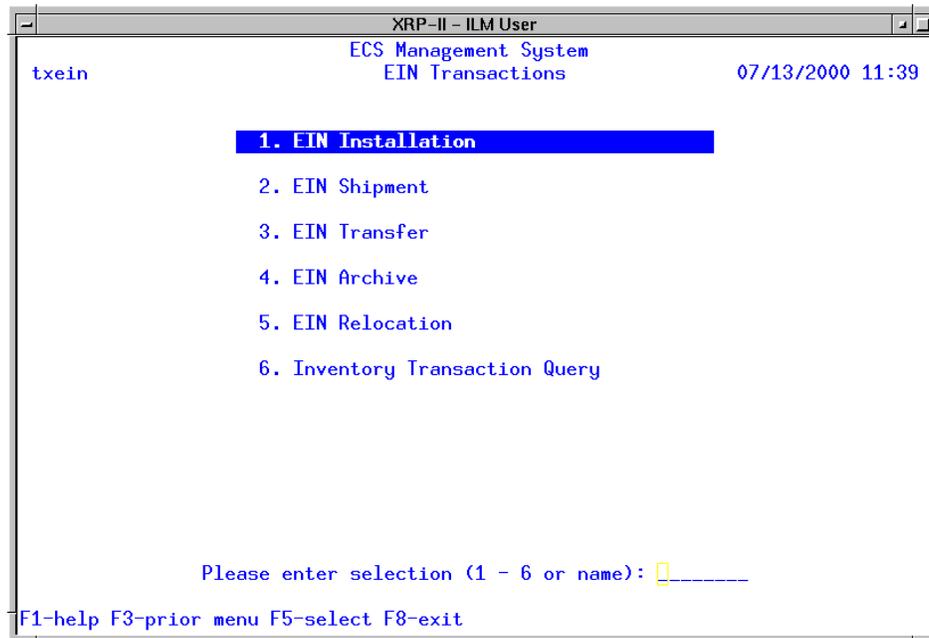


Figure 4.3.4-10. EIN Transactions Menu

4.3.4.2.2.1 EIN Installation Screen

The EIN Installation screen (Figure 4.3.4-11) is designed for updating property records to reflect installation of EIN-controlled items. It has a header screen for specifying the parent EIN involved and some installation parameters, and an items page for designating which of the

parent's children EINs are being installed. The transaction can be run only if it is initiated at the SMC or if the specified parent EIN is located at the local site.

Operators complete the fields on the header screen, using Table 4.3.4-8 as a guide, then use the **Items** command to invoke the items page (Figure 4.3.4-12 and Table 4.3.4-9). The items page lists all the parent's children EINs, displaying two lines per item. Operators choose which children are being installed by entering **MODIFY** mode and typing "Y" in the **Install** column for applicable items. They next press <F3> twice to exit both **MODIFY** mode and the items page, then type "E" at the header screen to execute the transaction and, if desired, print a report.

Upon receiving the **Execute** command, XRP-II checks if the parent EIN is already installed. If it is, the operator is asked to confirm it should be re-installed. If the response is "Y", it proceeds to check if there are also children to process; if the response is "N", the install is abandoned.

For each item being installed (parent as well as children), XRP-II updates the EIN's location and user data based on the installation parameters, sets its status to "I" and its install date to the current date, and gives the EIN an appropriate install report number and report alpha character. Children EINs that are being installed inherit the parent's ECS name as well as its install report number and alpha character. Also for each item, XRP-II adjusts inventory counts for the gaining and losing buildings and writes an "INS" record in the inventory transaction log to capture details of the event. This includes date/time of the event, operator initiating it, location changes, reason for change, and authorizing CCR or trouble ticket.

Upon completing the transaction, XRP-II generates an installation report that the operator can display on screen, print, or save to a file, or cancel by pressing <F3>.

Note: EIN Installation does not alter any EIN structure records.

Note: If the parent EIN has an installation report number, its report alpha character is incremented according to the Report Number conversion table. Otherwise, it is assigned a new report number one greater than the last used as specified in the system parameters table.

Note: The Location field must not be null, or the item does not get installed.

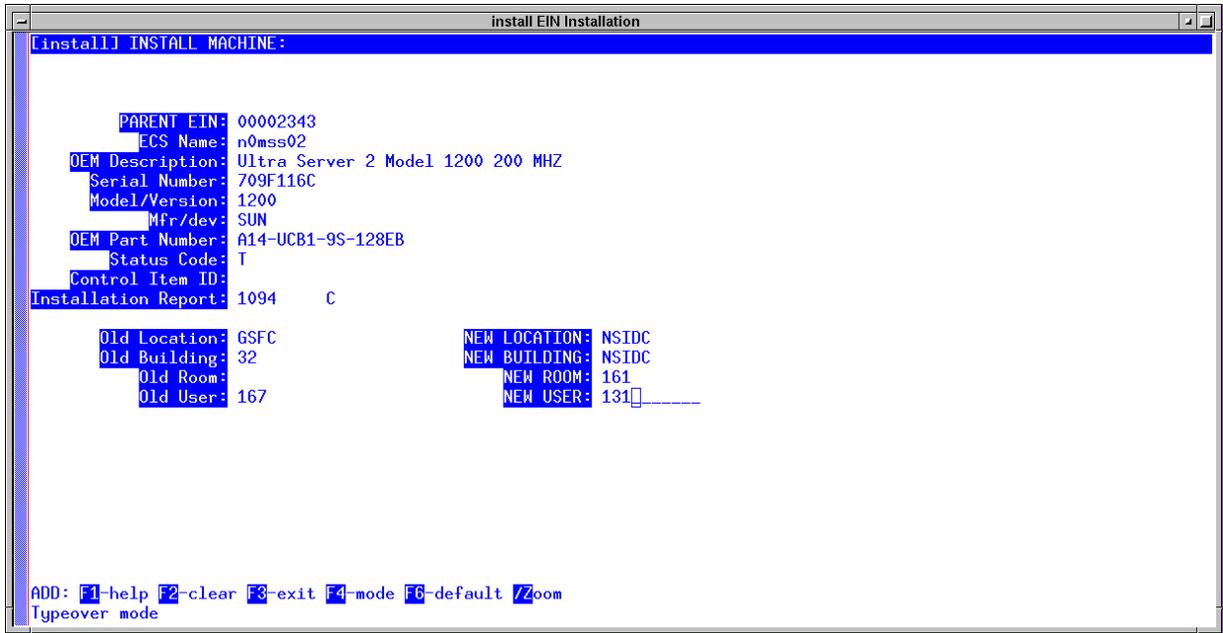


Figure 4.3.4-11. EIN Installation CHUI

Table 4.3.4-8 describes the fields on the EIN Installation screen.

Table 4.3.4-8. EIN Installation Field Descriptions (1 of 2)

Field Name	Data Type	Size	Entry	Description
PARENT EIN	String	20	Required	EIN for the parent item in an EIN structure. The operator may zoom to the EIN table and choose the EIN, if it had been entered there previously. (See the EIN Entry section.)
ECS Name	String	30	System-supplied	Name of the machine with which the item is associated.
OEM Description	String	40	System-supplied	Manufacturer or vendor's description for the item. The value is obtained from the EIN file.
Serial Number	String	30	System-supplied	Serial number of the Parent EIN. The value is obtained from the EIN file.
Model/Version	String	24	System-supplied	Model or version of the item. The value is obtained from the EIN file.
Mfr/dev	String	6	System-supplied	Code used for the manufacturer of the item. The value is obtained from the EIN file.
OEM Part Number	String	34	System-supplied	Manufacturer's or vendor's part number for the item. The value is obtained from the EIN file.
Status Code	String	1	System-supplied	Code that designates the status of the item. The value is obtained from the EIN file.

Table 4.3.4-8. EIN Installation Field Descriptions (2 of 2)

Field Name	Data Type	Size	Entry	Description
Control Item ID	String	20	System-supplied	Identifier of a corresponding, version-controlled item in the BASELINE MANAGEMENT system. The value is obtained from the EIN file.
Installation Report	Numeric	4	System-supplied	Identifier under which all installation reports for the EIN is grouped. The value is obtained from the EIN file.
Old Location	String	6	Optional	Code for the inventory location as currently recorded for the EIN. The value is obtained from the EIN file.
Old Building	String	10	Optional	Code for the building as currently recorded for the EIN. The value is obtained from the EIN file.
Old Room	String	6	Optional	Code for the room as currently recorded for the EIN. The value is obtained from the EIN file.
Old User	Numeric	4	Optional	Code for the user as currently recorded for the EIN. The value is obtained from the EIN file.
NEW LOCATION	String	6	Optional	Code for the inventory location where the EIN(s) are being installed. The operator may zoom to the Inventory Location table and choose the code, if it had been entered there previously. (See the Inventory Location Manager section.)
NEW BUILDING	String	10	Optional	Code for the building where the EIN(s) are being installed.
NEW ROOM	String	6	Optional	Code for the room where the EIN(s) are being installed.
NEW USER	Numeric	4	Optional	Code for the user of the EIN(s) being installed. The operator may zoom to the Employee table and choose the code, if it had been entered there previously. (See the Employee Manager section.)

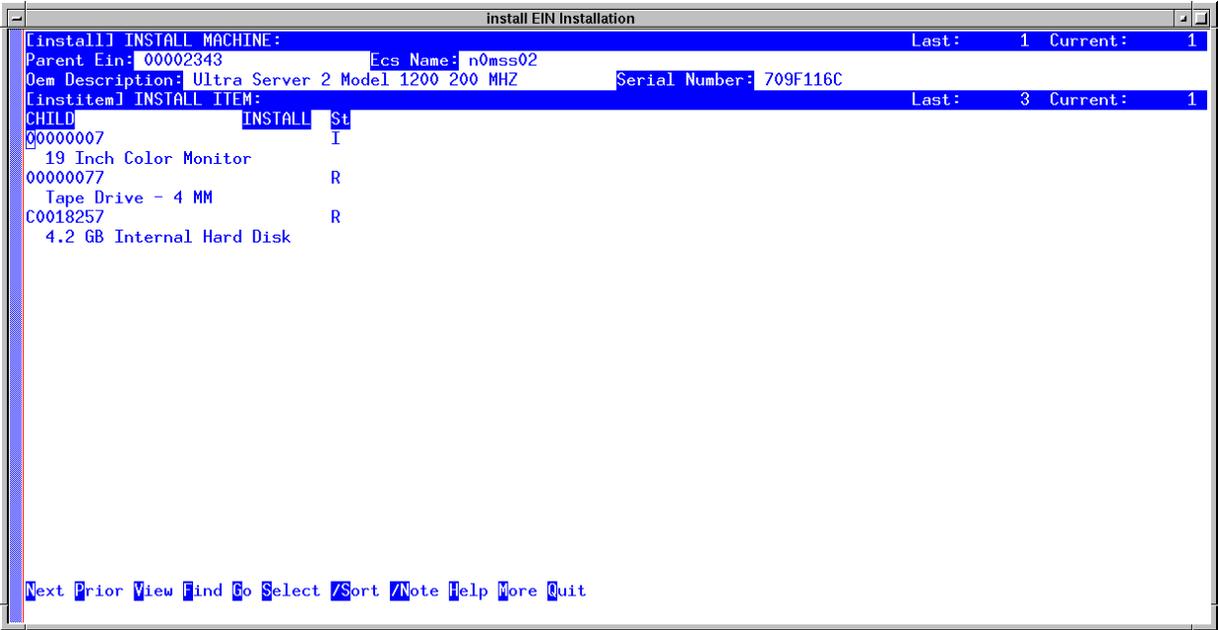


Figure 4.3.4-12. EIN Installation Items Page CHUI

Table 4.3.4-1 describes the fields on the EIN Installation Items Page.

Table 4.3.4-9. EIN Installation Items Page Field Descriptions

Field Name	Data Type	Size	Entry	Description
CHILD	String	20	Required	Identifier for an EIN-controlled inventory item that is a child of the parent EIN being installed. The system displays its OEM description on the succeeding line.
INSTALL	String	1	Optional; Y or N	Flag designating if the item is being installed.
St	String	1	System-supplied	The status of the item.

4.3.4.2.2 EIN Shipment Screen

The EIN Shipment screen (Figure 4.3.4-13 and Table 4.3.4-10) is designed for recording shipments of EIN-controlled items from one place to another. It consists of a header screen and three items pages invoked via bottom-line commands. The header screen describes the shipment itself and has two of the items pages. The first is the Cartons page for describing the cartons in a shipment (Figure 4.3.4-14 and Table 4.3.4-11). The second is the Ship EIN Parents page for listing parents being shipped (Figure 4.3.4-15 and Table 4.3.4-12). The Ship EIN Parents page has the third items page, Ship Item, which is used to list which children EINs are being shipped with its parent (Figure 4.3.4-16 and Table 4.3.4-13).

The screenshot shows a terminal window titled "shipein EIN Shipment". The top bar displays "[shipein] SHIP EIN:" on the left and "Last: 27 Current: 1" on the right. The main area contains the following fields and values:

- ILM INTERNAL SHIPMENT SEQUENCE: 68
- DESTINATION: []
- Report Number: 0 Alpha: []
- SHIP DATE: **/**/**
- ESTIMATED SHIP DATE: **/**/**
- Operator Id: ematthew
- SHIP VIA: GROUND
- BILL OF LADING: []
- Number Of Cartons: 0 Weight: 0.0
- BUILDING: [] ROOM: []
- CARRIER: []
- Status: []
- Consignee Name: []
- Address 1: []
- Address 2: []
- City: []
- State: [] Zip: []
- Phone: []
- USER: []

At the bottom, a menu bar lists: Next Prior View Find Go Select /Sort /Note Items .Cartons Execute Help More Quit.

Figure 4.3.4-13. EIN Shipment CHUI

Shipments can include one or more parent EINs and one or more children EINs for each parent, but the system does **not** track which carton contains each item. Each shipment is accorded a unique system number and reports of shipments are serialized by site. This transaction can be run only if it is initiated at the SMC or if the parent EINs are at the local site.

Operators complete the fields on the header screen stipulating the shipment's parameters, then type ".C" (the Cartons command) to invoke the Cartons page. The Cartons page is presented in ADD mode to facilitate adding records that identify the shipment's packages. Pressing <F3> twice exits ADD mode and returns to the header screen where the Items command can be invoked.

Table 4.3.4-10. EIN Shipment Field Descriptions (1 of 2)

Field Name	Data Type	Size	Entry	Description
ILM INTERNAL SHIPMENT SEQUENCE	Numeric	6	Required; <ENTER>	Internal shipment sequence number maintained by the system. The operator should always press return at this field to allow the system to assign the next internal sequence number.
DESTINATION	String	6	Optional	Code for the inventory location to receive the shipment. The operator may zoom to the Inventory Location table and choose the code, if it had been entered there previously. (See the Inventory Location Manager section.)
:	String	30	System-supplied	Description of the destination.
Report Number	String	4	System-supplied	Report number assigned to the item when the item is shipped. Each site has its own number. So, items shipped from any inventory location at the site share the same number.
Alpha	String	4	System-supplied	Code letter identifying a sequence number for the shipping reports generated by a site.
SHIP DATE	Date	2	Optional	Date the item(s) is actually shipped. The value defaults to the current date.
ESTIMATED SHIP DATE	Date	2	Optional	Date the item(s) is estimated to ship.
Operator Id	String	8	System-supplied	Login ID of the operator recording the transaction.
SHIP VIA	String	20	Optional	Method by which the item(s) is shipped.
BILL OF LADING	String	12	Optional	Identifier for the shipment's Bill of Lading.
Number of Cartons	Numeric	4	System-supplied	Number of cartons in the shipment. This value is calculated from entries on the Cartons page.
Weight	Floating	7.1	System-supplied	Total weight of the shipment. This value is calculated from entries on the Cartons page.
BUILDING	String	6	Optional	Identifier for the building to which the item is being shipped.
ROOM	String	6	Optional	Room number to which the item is being shipped.
Carrier	String	6	System-supplied	Code for the carrier handling the shipment. The operator may zoom to the Carrier data file and choose the appropriate code, if it had been entered there previously. (See the Carriers section.)
Status	String	1	System-supplied	Code that designates the status of the item. The following values are set when processing transactions: R = Received; S = Shipped; I = Installed; A = Archived.

Table 4.3.4-10. EIN Shipment Field Descriptions (2 of 2)

Field Name	Data Type	Size	Entry	Description
Consignee Name	String	30	System-supplied	Name of the consignee at the destination location. The value is obtained from the Inventory Location record for the entered Destination.
Address 1, 2	String	30	System-supplied	Address to receive the shipment. The value is obtained from the Inventory Location record for the entered Destination.
City	String	20	System-supplied	Name of the city to receive the shipment. The value is obtained from the Inventory Location record for the entered Destination.
State	String	2	System-supplied	Code for the state to receive the shipment. The value is obtained from the Inventory Location record for the entered Destination.
Zip	String	10	System-supplied	Zip code for the shipment's destination. The value is obtained from the Inventory Location record for the entered Destination.
Phone	String	18	System-supplied	Phone number for the consignee at the shipment's destination. The value is obtained from the Inventory Location record for the entered Destination.
USER	String	8	Optional	Code of the person who receives the item. The operator may choose to zoom to the Employee data file to choose the appropriate code, if it had been entered there previously. (See the Employee Manager section.)

Next, operators type “**I**” (the **I**tems command) to display the Ship EIN Parents page, which is presented in **ADD** mode, too. They enter the EIN for each parent being shipped, then press <**F3**> to exit **ADD** mode. Now they invoke this page’s **I**tems command to display the Ship Item page for any parent that they highlight with the cursor.

The Ship Item page lists each parent’s children EINs that are not already being shipped (i.e., status not equal to “**S**”). Operators type /**M** to invoke **MODIFY** mode, then place a “**Y**” in the Ship column for each child to include in the shipment. Pressing <**F3**> twice exits back to the Ship EIN Parents page so another set of children can be included. When done, typing <**F3**> on this page returns to the header screen where the transaction can be executed.

Upon receiving the **Execute** command, the EIN Shipment process changes the EIN record of every item in the shipment to reflect the shipment’s destination, building, room, and user. It sets each item’s status to “**S**” and gives it a shipping report number and alpha character appropriate for the sending site. Also for each item, XRP-II adjusts inventory counts for the gaining and losing buildings and writes an “**SHP**” record in the inventory transaction log to capture details of the event. This includes date/time of the event, operator initiating it, location changes, reason for change, and authorizing **CCR** or trouble ticket.

Note: Operators can specify children EINs on the Ship EIN Parents page in order to ship them without their parents.

Note: Using the Ship EIN Parents page to specify a parent EIN that has already been shipped so that the Ship Item page can be used to designate children causes the parent to be shipped again.

Note: Operators cannot re-ship children EINs while their status is “S”. However, they can re-ship Parent EINs in order to ship their children, but the system prompts for confirmation first.

Note: EIN Shipment does not alter EIN structure records.

Note: EIN shipment reports are numbered by site. Each site has its own shipping report number (see Shipment Number Manager section), and XRP-II automatically assigns a new alpha character for each shipment from the site. Shipping report alpha characters are incremented according to the Report Number conversion table (see Report Number section).

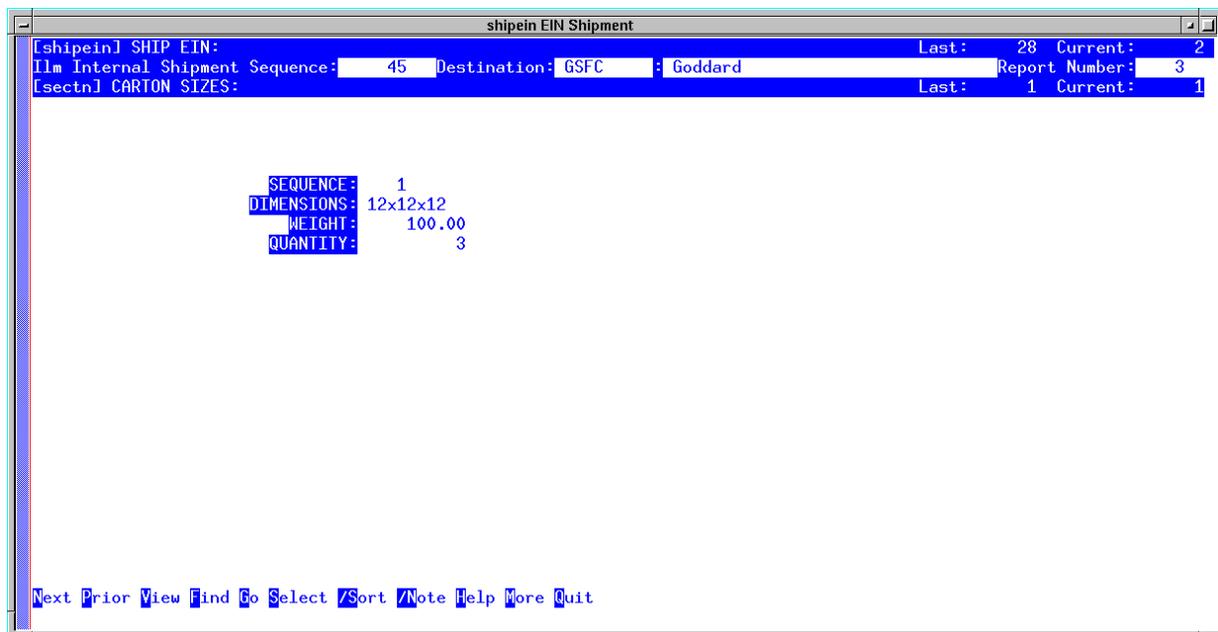


Figure 4.3.4-14. Carton Size Page for EIN Shipment

Table 4.3.4-11 describes the fields on the Carton Size Page screen.

Table 4.3.4-11. Carton Size Page for EIN Shipment Field

Field Name	Data Type	Size	Entry	Description
SEQUENCE	Numeric	4	Required	This field is the automatically assigned sequence number of the cartons data attached to the shipment header record.
DIMENSIONS	String	8	Optional	Enter the actual dimensions of the box.
WEIGHT	Floating	7.1	Optional	Enter the weight of the box.
QUANTITY	Floating	10.1	Optional	Enter the quantity of the boxes having the same dimension and weight.

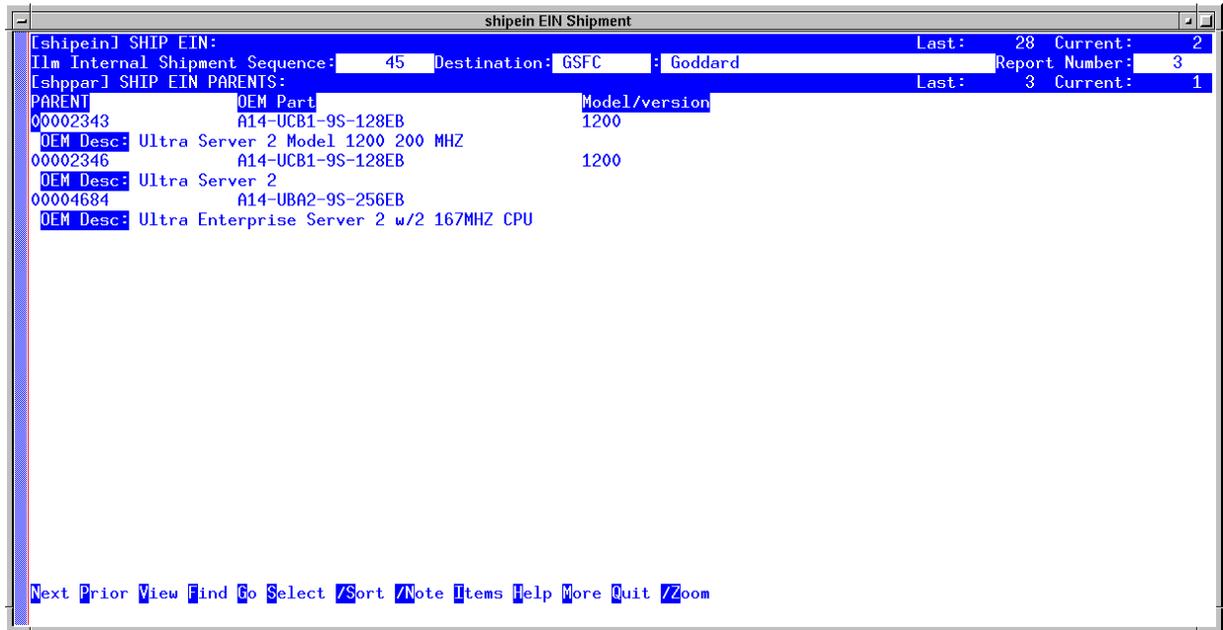


Figure 4.3.4-15. Items Page for EIN Shipment

Table 4.3.4-12 describes the fields on the Items Page for EIN Shipment.

Table 4.3.4-12. Items Page for EIN Shipment Field Descriptions

Field Name	Data Type	Size	Entry	Description
PARENT	String	20	Required	Enter the Parent EIN number to be shipped.
OEM Part	String	34	System-supplied	Manufacturers of vendor's part number for the item.
Model/version	String	24	System-supplied	Model or version of the item.
OEM Desc	String	-	System-supplied	Manufacturer or vendor's description for the item.

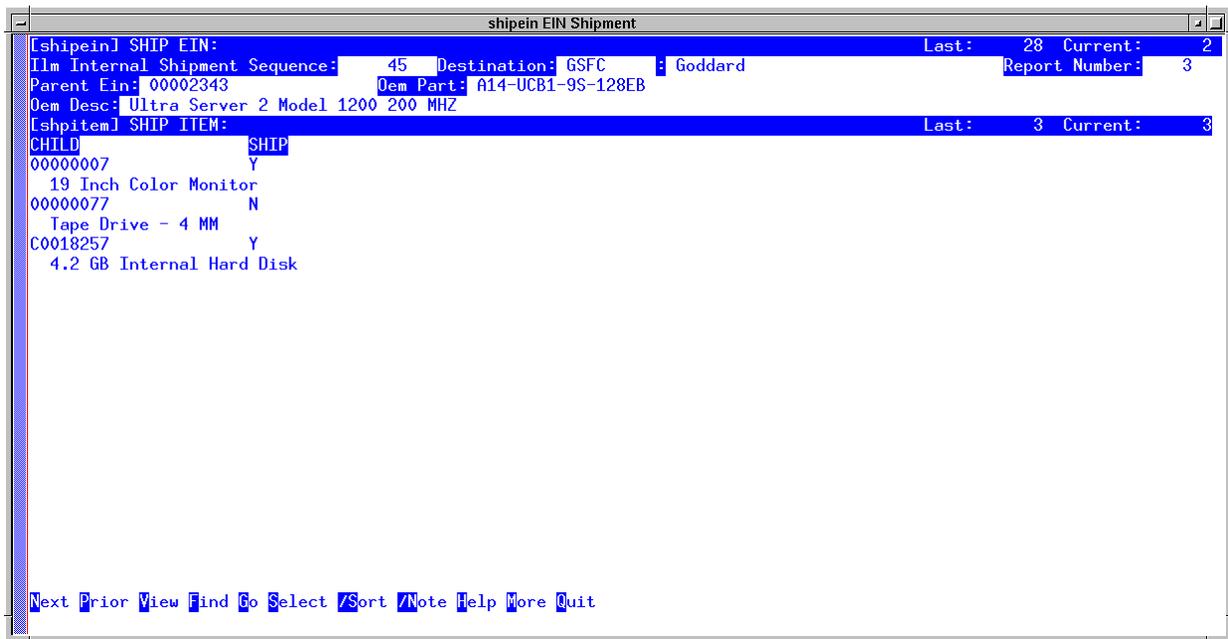


Figure 4.3.4-16. Items Structure Page for EIN Shipment

Table 4.3.4-13 describes the fields on the Items Structure Page for EIN Shipment screen.

**Table 4.3.4-13. Items Structure Page for EIN Shipment
Field Descriptions**

Field Name	Data Type	Size	Entry	Description
CHILD	String	20	Required	EIN for a component of the parent. Its description from the EIN record is displayed on the line underneath.
SHIP	String	1	Optional; Y or N	Flag designating whether the EIN is included in the shipment. A null value is the same as "N".

4.3.4.2.2.3 EIN Transfer Screen

The EIN Transfer screen (Figure 4.3.3-17) is designed for updating property records when a parent EIN and all its children are being moved from one inventory location, building, room, or user to another. The screen is presented to operators in ADD mode, so they need only identify the parent EIN, specify its new destination and user, press <F3> to exit ADD mode, and type "E" to execute the transaction. The transaction can be run only if it is initiated at the SMC or if the specified parent EIN is located at the local site. Screen fields are described in Table 4.3.4-14.

Upon receiving the **Execute** command, XRP-II checks if the specified EIN has any parents. If it does, the item is not a true parent EIN so XRP-II informs the operator to use the EIN Relocation function and terminates. If the EIN has no parents, XRP-II updates the EIN records for the parent and all its children. It stores data from the header screen, clears installation date values, assigns each item a status of “R”, and adjusts inventory counts for the gaining and losing buildings. XRP-II also writes a “TR” record in the inventory transaction log to capture details of the event for each item, including date/time of the event, operator initiating it, location change, reason for change, and authorizing CCR or trouble ticket.

Upon completing the transaction, XRP-II generates a transfer/receipt report that the operator can display on screen, print, or save to a file, or can cancel by pressing <F3>.

Note: EIN Transfer does not alter any EIN structure records.

Note: No transaction exists for assigning an EIN child to a new room or user without its parent.

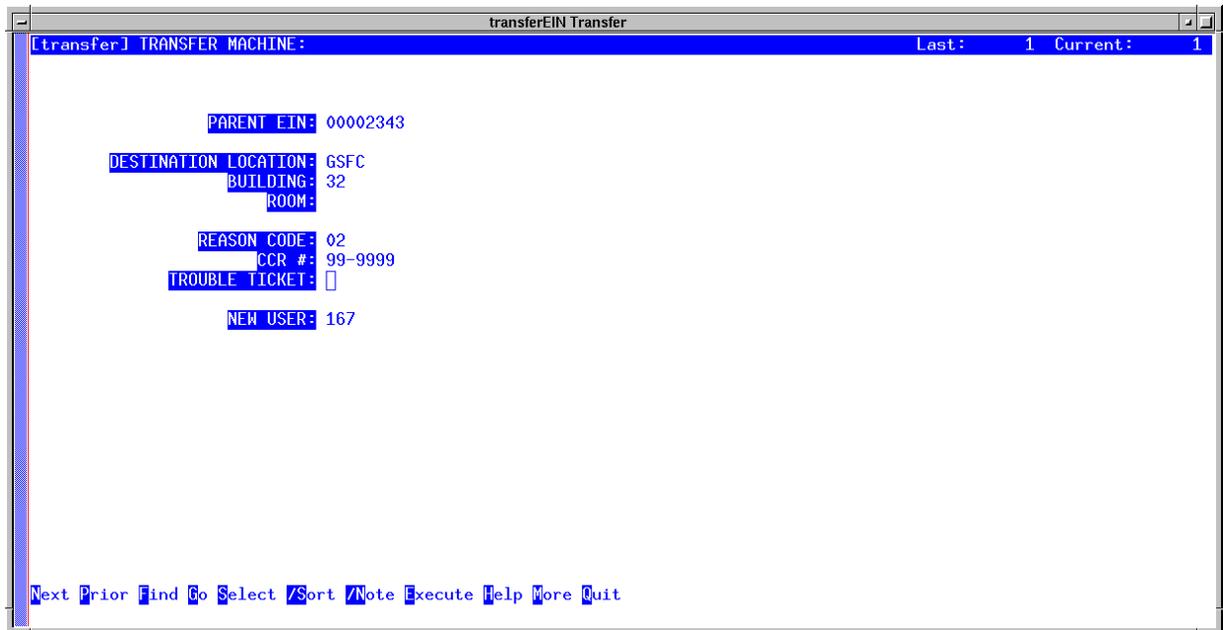


Figure 4.3.4-17. EIN Transfer CHUI

Table 4.3.4-14 describes the fields on the EIN Transfer screen.

Table 4.3.4-14. EIN Transfer Field Descriptions

Field Name	Data Type	Size	Entry	Description
PARENT EIN	String	20	Required	EIN for the parent item in an EIN structure. The operator may zoom to the EIN table and choose the EIN, if it had been entered there previously. (See the EIN Entry section.)
DESTINATION LOCATION	String	6	Optional	Code for the inventory location gaining the item. The operator may zoom to the Inventory Location table and choose the code, if it been entered there previously. (See the Inventory Location Manager section.)
BUILDING	String	6	Optional	Identifier for the building gaining the item.
ROOM	String	6	Optional	Number for the room gaining the item.
REASON CODE	String	4	Optional	Code for the reason for the transaction. The operator may zoom to the Reason Code table and choose the code, if it had been entered there previously. (See the Reason Code Maintenance section.)
CCR #	String	30	Optional	Identifier for the CCR authorizing the transaction.
TROUBLE TICKET	String	15	Optional	Identifier for the trouble ticket associated with the transaction.
NEW USER	Numeric	4	Optional	Code of the user gaining the item. The operator may zoom to the Employee data file and choose a code, if it had been entered there previously. (See the Employee Manager section.)

4.3.4.2.2.4 EIN Archive Screen

Operators use the EIN Archive screen (Figure 4.3.4-18) to transfer an EIN and/or its children to an archive location and code them as unavailable for use, such as when items have failed and cannot be repaired. It has a header screen for identifying the parent EIN involved and for specifying archiving parameters (Table 4.3.4-15), and it has an items page for designating the children EINs (Figure 4.3.4-19 and Table 4.3.4-16). The transaction can be run only if the process is initiated at the SMC or if the specified parent EIN is located at the local site.

Operators complete fields on the header screen, then use the Items command to invoke the items page. The items page lists all of the parent’s current children EINs using two lines per item. Operators select the children being archived by entering MODIFY mode and typing “Y” in the Archive column for applicable items. They next press <F3> twice to exit both MODIFY mode and the items page, then type “E” to execute the transaction and, if desired, print a report.

Upon receiving the Execute command, XRP-II first checks to ensure the Archive Parent field has been set and, if not, issues a warning and abandons the process. It then renders each designated item inactive as a child in EIN structures as of the current date, effectively de-allocating it from its parent. It updates the item’s EIN record with values from the header screen, clears its installation date, changes its status to “X” and its user to “ARC”, and adjusts inventory counts for the gaining and losing buildings. XRP-II also writes an “INS” record in the inventory transaction log to capture details of the event for each item. Log entries include date/time of the

event, operator initiating it, location change, reason for change, and authorizing CCR or trouble ticket.

Upon completing the transaction, XRP-II generates an archive report that the operator can display on screen, print, or save to a file, or can cancel by pressing <F3>.

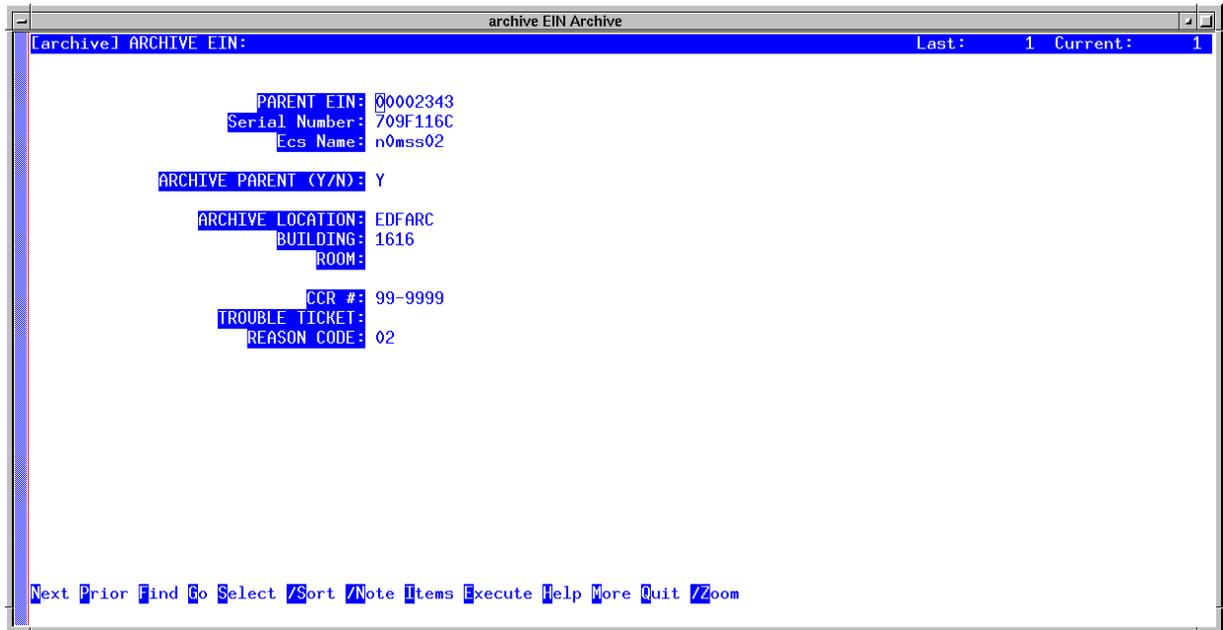


Figure 4.3.4-18. EIN Archive CHUI

Table 4.3.4-15 describes the fields on the EIN Archive screen.

Table 4.3.4-15. EIN Archive Field Descriptions (1 of 2)

Field Name	Data Type	Size	Entry	Description
PARENT EIN	String	20	Required	EIN for the parent of the item(s) being archived. The operator may zoom to the EIN table and choose the EIN, if it had been entered there previously. (See the EIN Entry Manager section.)
Serial Number	String	30	Optional	Serial number of the item.
Ecs Name	String	30	System-supplied	Name for the machine with which the item is associated. The value is obtained from the EIN record of the parent EIN.

Table 4.3.4-15. EIN Archive Field Descriptions (2 of 2)

Field Name	Data Type	Size	Entry	Description
ARCHIVE PARENT (Y/N)	String	1	Required; Y or N	Flag designating if the parent EIN is to be archived. Enter Y if parent is to be archived along with children.
ARCHIVE LOCATION	String	6	Optional; location must be of type "archive"	Code for the inventory location where the item is being archived. The operator may zoom to the Inventory Location table and choose the code, if it had been entered there previously. (See the Inventory Location Manager section.)
BUILDING	String	6	Optional	Identifier for the building gaining the item.
ROOM	String	6	Optional	Identifier for the room gaining the item.
CCR #	String	30	Optional	Identifier for the CCR authorizing the transaction.
TROUBLE TICKET	String	15	Optional	Identifier for the trouble ticket associated with the transaction.
REASON CODE	String	4	Optional	Code for the reason for the transaction. The operator may zoom to the Reason Code table and choose the code, if it had been entered there previously. (See the Reason Code Maintenance section.)

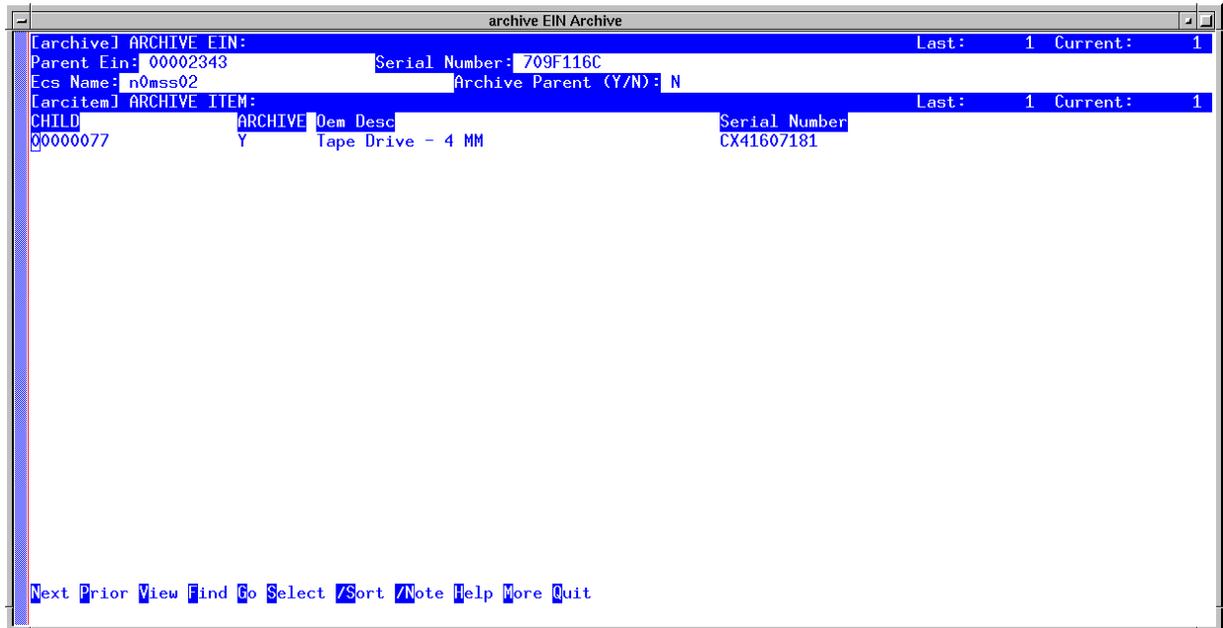


Figure 4.3.4-19. Items Page for EIN Archive CHUI

Table 4.3.4-16 describes the fields on the Items Page of EIN Archive.

Table 4.3.4-16. Items Page for EIN Archive Field Descriptions

Field Name	Data Type	Size	Entry	Description
CHILD	String	20	Required	EIN for a component of the parent. The operator may zoom to the EIN table and choose the EIN, if it had been entered there previously. (See the EIN Entry Manager section.)
ARCHIVE	String	1	Optional Y or N	Flag designating whether the EIN is to be archived. A null value is the same as "N".
Oem Desc	String	40	System supplied	Manufacturer or vendor's description for the item.
Serial Number	String	30	System-supplied	Serial number of the item.

4.3.4.2.2.5 EIN Relocation Screen

The EIN Relocation screen (Figure 4.3.4-20) is designed for updating property records when “relocating” an EIN-controlled item; that is, associating an EIN with a new parent. It consists of a header screen for specifying relocation parameters and an items page for designating which of a parent’s children EINs are relocating. The transaction can be run only if it is initiated at the SMC or if both the source and the target parent EINs are at the local site.

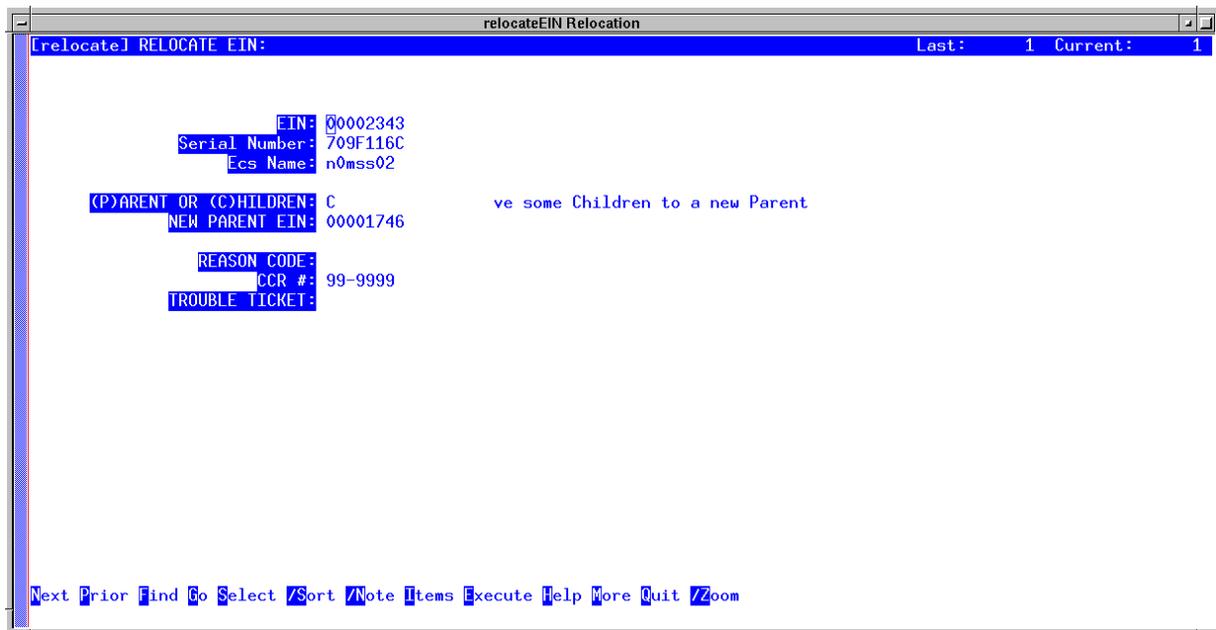


Figure 4.3.4-20. EIN Relocation CHUI

Operators can choose whether to relocate the EIN as a parent (i.e., with all of its children) or to relocate only some of its children. When relocating an EIN as a parent, XRP-II reassigns the specified EIN, as an assembly, from its current parent to its new one. When relocating only

some of the EIN's children, XRP-II reassigns only the children EINs designated on the screen's items page. Operators may not relocate a parent EIN with only some of its children, as the remaining children would become orphans.

The EIN Relocation screen is presented in ADD mode. Complete the fields on the header screen using Table 4.3.4-17 as a guide. To move a parent and all of its children, operators enter the value "P" in field Parent or Children, then type "E" to execute the transaction after exiting ADD mode. If only children are relocating, operators enter the value "C", then exit ADD mode and invoke the Items command to pick which ones. On the items page (Figure 4.3.4-21 and Table 4.3.4-18), operators type /M to enter MODIFY mode and place a "Y" in the Relocate column of each affected component. They next press <F3> twice to exit both the mode and page, and then type "E" to execute the transaction.

Upon receiving the Execute command, the EIN Relocation process first determines whether or not the parent is being relocated. If it is, XRP-II renders it inactive wherever it is active as a child in an EIN structure, then adds it to the EIN structure for the new parent. This assures it is tied to the new parent alone. If only children of the EIN are relocating, XRP-II renders each child EIN inactive as a component of the existing parent, and adds them to the EIN structure for the new parent.

XRP-II then changes the EIN record of every relocating item to reflect the ECS name and location of the new parent, a status of "R", and no installation date. XRP-II also adjusts inventory counts for the gaining and losing buildings and writes "REL" records in the inventory transaction log (one per item) to capture details of the event. The log entry includes date/time of the event, operator initiating it, location changes, reason for change, and authorizing CCR or trouble ticket.

Upon completing the transaction, XRP-II generates a relocation/receipt report that the operator can display on screen, print, or save to a file, or can cancel by pressing <F3>.

Note: Child EINs can be relocated to a new parent either by relocating the child as a parent (P) or as a child (C) of its current parent.

Note: Check the system-filled field for "Serial Number" to ensure relocating the correct item.

Table 4.3.4-17. EIN Relocation Field Descriptions (1 of 2)

Field Name	Data Type	Size	Entry	Description
EIN	String	20	Required	Identifier for an EIN-controlled inventory item. This field is for the entry of the actual silver tag numbers attached to each item. The operator may zoom to the EIN table and choose an EIN, if it had been entered there previously. (See the EIN Entry Manager section.)

Table 4.3.4-17. EIN Relocation Field Descriptions (2 of 2)

Field Name	Data Type	Size	Entry	Description
Serial Number	String	30	System-supplied	Serial number of the item.
Ecs Name	String	30	Optional	Name of the machine with which the item is associated.
(P)ARENT OR (C)HILDREN	String	1	Optional; P or C	Flag designating if the entire parent or only some children are being relocated.
NEW PARENT EIN	String	20	Required	Identifier for a parent EIN to which the item(s) is being relocated. The operator may zoom to the EIN table and choose an EIN, if it had been entered there previously. (See the EIN Entry Manager section.)
REASON CODE	String	4	Optional	Code for the reason for the transaction. The operator may zoom to the Reason Code table and choose the code, if it had been entered there previously. (See the Reason Code Maintenance section.)
CCR #	String	30	Optional	Identifier for the CCR authorizing the transaction.
TROUBLE TICKET	String	15	Optional	Identifier for the trouble ticket associated with the transaction.

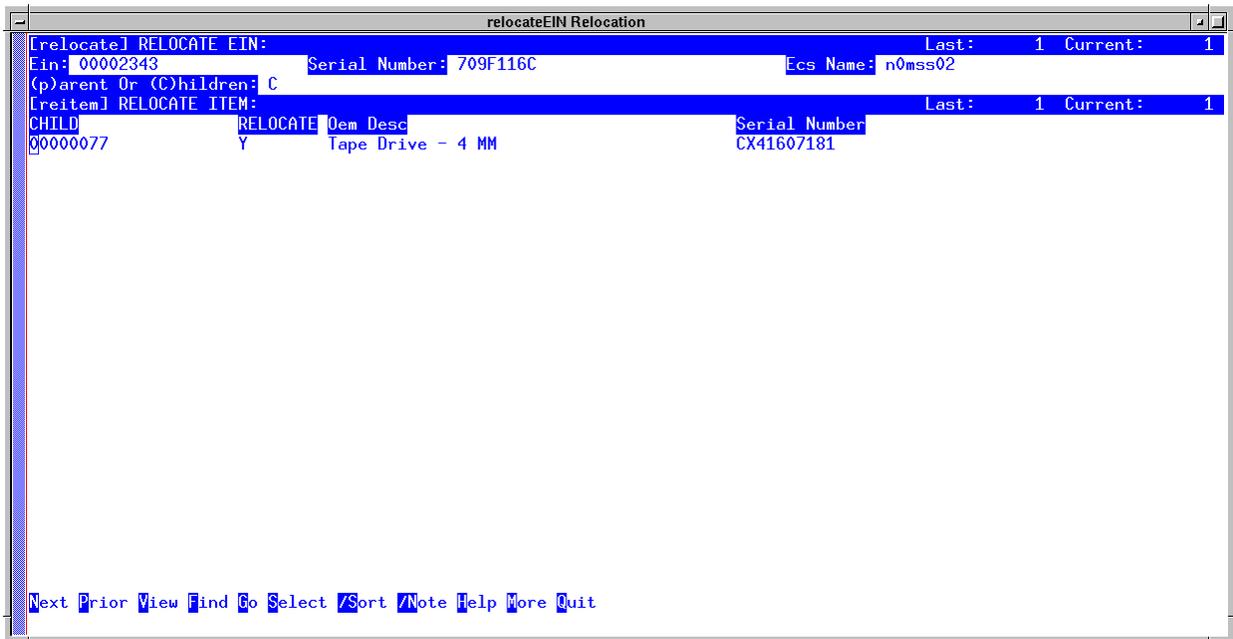


Figure 4.3.4-21. Items Page for EIN Relocation CHUI

Table 4.3.4-18 describes the fields on the Items Page for EIN Relocation screen.

Table 4.3.4-18. Items Page for EIN Relocation Field Descriptions

Field Name	Data Type	Size	Entry	Description
CHILD	String	20	Required	EIN for a component of the parent. The operator may zoom to the EIN table and choose the EIN, if it had been entered there previously. (See the EIN Entry Manager section.)
RELOCATE	String	1	Optional Y or N	Flag designating whether the EIN is to be relocated. A null value is the same as "N".
Oem Desc	String	40	System supplied	Manufacturer or vendor's description for the item.
Serial Number	String	30	System- supplied	Serial number of the item.

4.3.4.2.2.6 Inventory Transaction Query Screen

This screen (Figure 4.3.4-22) allows operators to browse the log of all inventory transactions performed on items in the database. The operator may sort and select on any field on the screen and print ad hoc reports of sorted data, if desired, using XRP-II's report command.

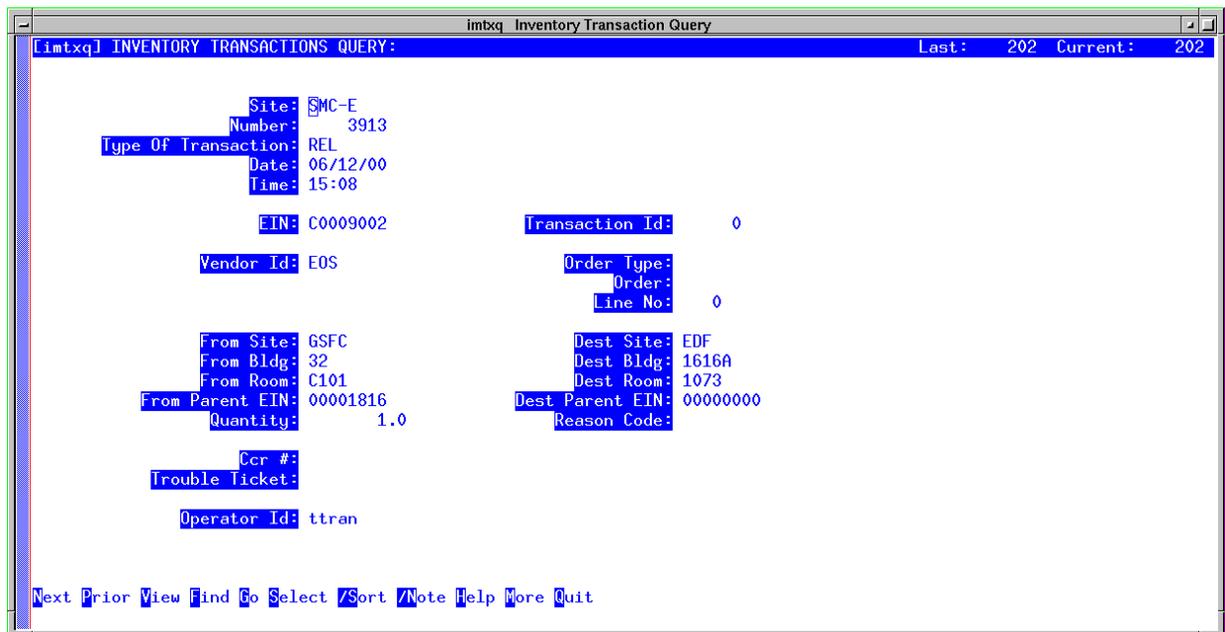


Figure 4.3.4-22. Inventory Transaction Query Screen

Table 4.3.4-19 describes the fields on the Inventory Transaction Query screen.

**Table 4.3.4-19. Inventory Transactions Query Field Descriptions
(1 of 2)**

Field Name	Data Type	Size	Entry	Description
Site	String	6	System-supplied	Code for the site that entered the transaction.
Number	Numeric	8	System-supplied	Record number of database record being observed.
Type of Transaction	String	3	System-supplied	Code assigned to the type of transaction being performed. INS – Installation; REL = Relocation; TR = Transfer; ARC = Archive; SHP = Shipment; RX = Receipt;
Date	String	2	System-supplied	Date the transaction was entered.
Time	Time	2	System-supplied	Time the transaction was entered.
EIN	String	20	System-supplied	EIN of the item involved in the transaction. The operator may zoom to the EIN table and choose an EIN, if it had been entered there previously. (See the EIN Entry Manager screen.)
Transaction Id	Numeric	6	System-supplied	Number assigned to a particular transaction.
Vendor Id	String	6	System-supplied	Code for the vendor from whom the item was purchased.
Order Type	String	2	System-supplied	Code for the type of order, if any, involved in the transaction. PO = purchase order; SO = sales order; WO = work order; VR = Return to vendor; CR = return from customer.
Order	String	6	System-supplied	Identifier for the order, if any, involved in the transaction.
Line No	Numeric	4	System-supplied	Line number of the item on the order if an order is associated with the transaction.
From Site	String	6	System-supplied	Identifier for the building losing the item.
Dest Site	String	6	System-supplied	Code for the inventory location gaining the item.
From Bldg	String	6	System-supplied	Identifier for the building losing the item.
Dest Bldg	String	6	System-supplied	Identifier for the building gaining the item.
From Room	String	6	System-supplied	Number of the room losing the item.
Dest Room	String	6	System-supplied	Number for the room gaining the item.
From Parent EIN	String	20	System-supplied	EIN of the parent item losing the item. The operator may zoom to the EIN table and choose an EIN, if it had been entered there previously. (See the EIN Entry Manager screen.)

**Table 4.3.4-19. Inventory Transactions Query Field Descriptions
(2 of 2)**

Field Name	Data Type	Size	Entry	Description
Dest Parent EIN	String	20	Supplied	EIN of the parent item gaining the item. The operator may zoom to the EIN table and choose an EIN, if it had been entered there previously. (See the EIN Entry Manager screen.)
Quantity	Floating	10.1	System-supplied	Number of items in the transaction.
Reason Code	String	4	System-supplied	Code for the reason for the transaction.
CCR #	String	30	System-supplied	Identifier for the CCR authorizing the transaction.
Trouble Ticket	String	15	System-supplied	Identifier for the trouble ticket associated with the transaction.
Operator Id	String	8	System-supplied	Login ID of the operator performing the transaction.

4.3.4.2.3 ILM Report Menu

XRP-II produces numerous ILM reports. Screens that generate most of the ones associated with inventory or logistics are accessed through the ILM Report Menu (Figure 4.3.4-23). The rest are generated when EIN transactions are processed. All contain information derived from records stored only in the XRP-II database on the host where the report is requested.

Most of the screens accept record filtering parameters and, in some cases, a range of values for them. Section 3.4.5 in the *XRP-II System Reference Manual* explains how to enter range specifications. The output that results can be written to the terminal or to a file or printer. When sending to a printer, XRP-II uses the one defined as the default in the operator's environment settings at the time the program was started.

The following screens are tied to the ILM Report menu:

- ILM Inventory Reports (EDF) - for printing all items contained within the designated location(s) by central ILS managers. A cost report is included displaying the actual cost of items selected.
- ILM Inventory Reports - for printing all items contained within the designated location(s) by local site coordinators.
- EIN Structure Reports - for printing component lists of designated EIN parents in a multi-level bill format.

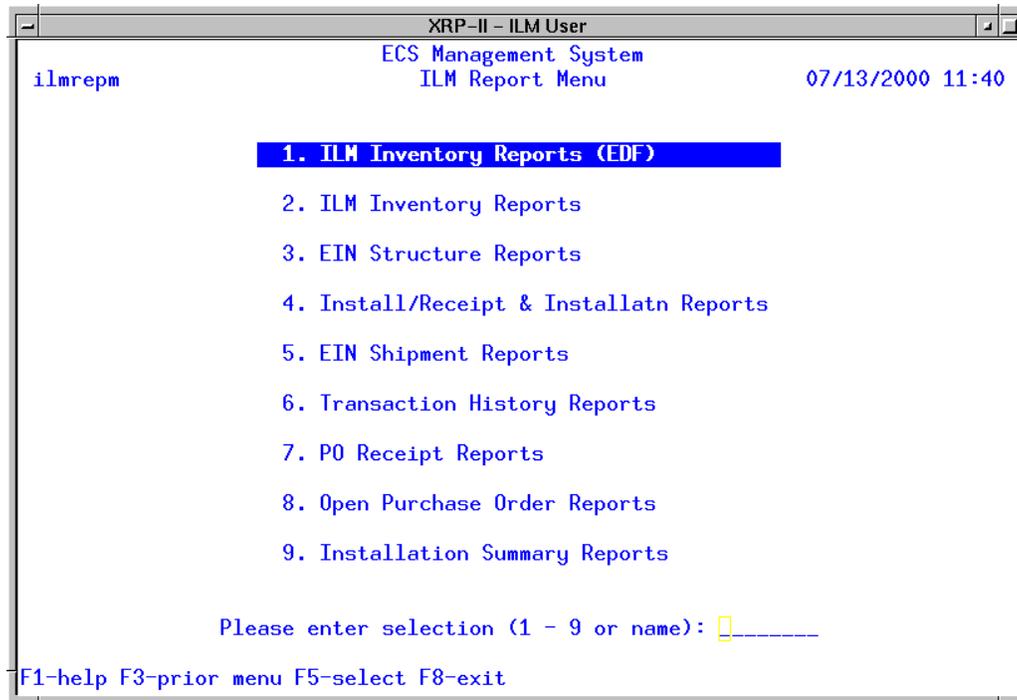


Figure 4.3.4-23. Report Menu

- Install/Receipt & Installatn Reports - for printing the component list of a parent EIN for receiving organization sign off.
- EIN Shipment Reports - for printing copies of reports about shipments performed previously.
- Transaction History Reports - for printing a history of all inventory transactions logged by the system.
- PO Receipt Reports - for printing all receipts that have occurred for designated POs, vendors, or dates.
- Open Purchase Order Reports – for printing lists of purchase orders by identifier, part, vendor and date due. A section is not written for report because there is no change from the vendor documentation. See the XRP-II Purchasing Management Reference Manual for the description.
- Installation Summary Reports - retrieves and prints a list of EINs installed during a specified timeframe.

The sections below discuss these screens, except the Open Purchase Order Reports. Sample outputs can be found in Section 4.3.4.8.1.

4.3.4.2.3.1 ILM Inventory Reports (EDF) Screen

The ILM Inventory Reports (EDF) screen (Figure 4.3.4-24) is designed to retrieve and print all items contained within designated location(s). A cost report is included for displaying the actual cost of items selected.

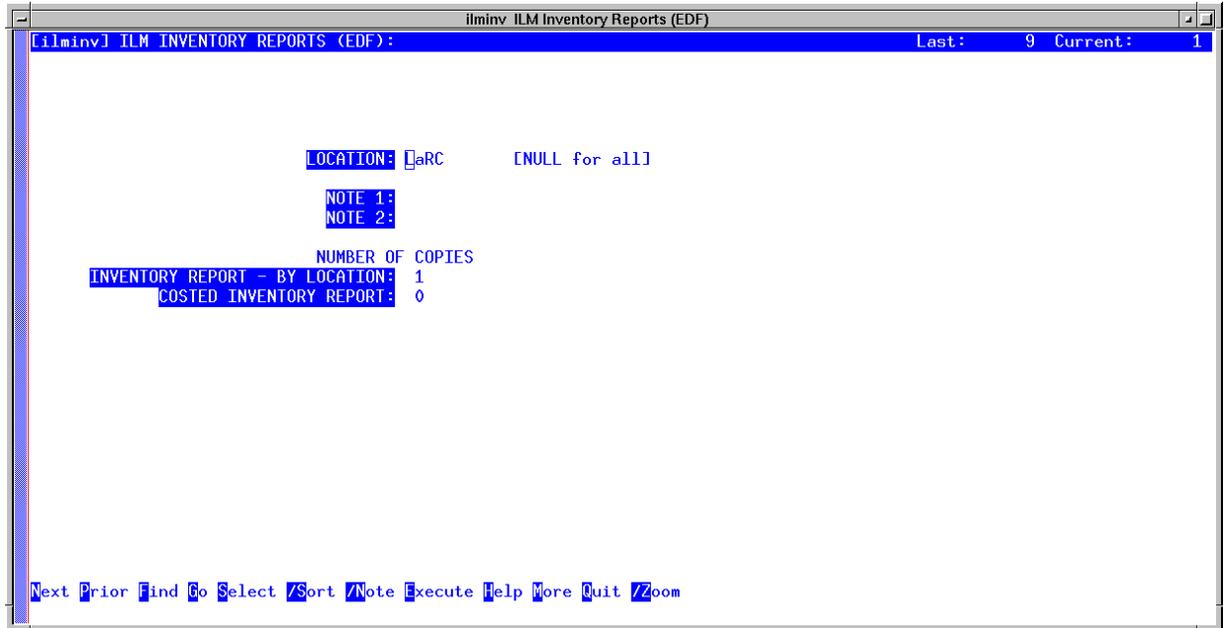


Figure 4.3.4-24. ILM Inventory Reports (EDF) CHUI

Table 4.3.4-20 describes the fields on the ILM Inventory Reports screen.

Table 4.3.4-20. ILM Inventory Reports (EDF) Field Descriptions

Field Name	Data Type	Size	Entry	Description
LOCATION	String	8	Optional	Code for an inventory location. The operator may zoom to the Inventory Location table and choose the code, if it had been entered there previously. (See the Inventory Location Manager screen.)
NOTE 1, 2	String	60	Optional	A 60-character note to include in the report.
INVENTORY REPORT – BY LOCATION	Numeric	2	Required	Number of copies of this report to generate.
COSTED INVENTORY REPORT	Numeric	1	Required	Number of copies of this report to generate.

4.3.4.2.3.2 ILM Inventory Reports Screen

This screen is identical to the ILM Inventory Reports (EDF) screen, except it lacks the Costed Inventory Report, which is not needed at the DAACs. See section 4.3.4.2.3.1 above for details about this screen.

4.3.4.2.3.3 EIN Structure Reports Screen

The EIN Structure Reports screen (Figure 4.3.4-25) is designed to retrieve and print designated parents and components in a multi-level bill format.

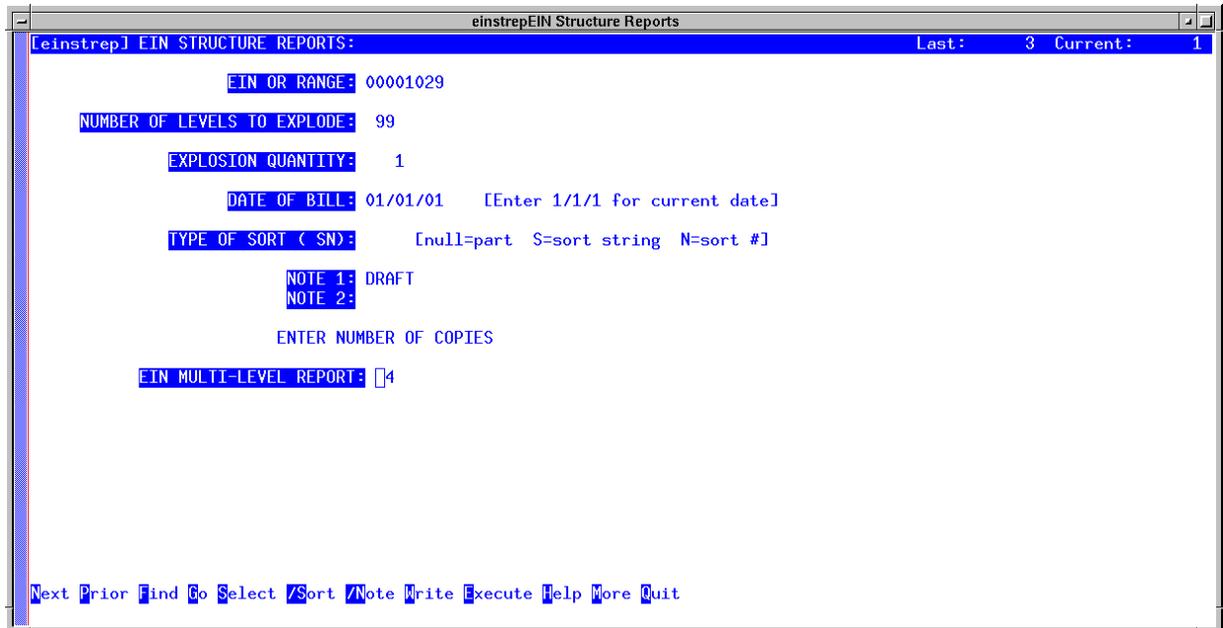


Figure 4.3.4-25. EIN Structure Reports CHUI

Table 4.3.4-21 describes the fields on the EIN Structure Reports screen.

Table 4.3.4-21. EIN Structure Reports Field Descriptions

Field Name	Data Type	Size	Entry	Description
EIN OR RANGE	String	20	Required	Identifier for an EIN-controlled inventory item, or range of such items (e.g., EDF00000000001-EDF99999999999).
NUMBER OF LEVELS TO EXPLODE	Numeric	2	Optional	Number of levels to display for a particular parent structure.
EXPLOSION QUANTITY	Numeric	2	Optional	Quantity of each EIN to reflect in the report.
DATE OF BILL	Date	2	Optional	"As of" date used in selecting records from the configuration history of the item.
TYPE OF SORT (SN)	String	1	Optional; Null, S, or N	Code that specifies the field to be used for sorting the data for the report. Null is equivalent to EIN number.
NOTE 1, 2	String	40	Optional	A 40-character note to include in the report.
EIN MULTI-LEVEL REPORT	Numeric	2	Required	Number of copies of this report to generate.

4.3.4.2.3.4 Install/Receipt & Installatn Reports Screen

This screen (Figure 4.3.4-26) is designed to allow the operator to print a report of a parent EIN configuration and send the hard copy to the receiving organization for sign off.

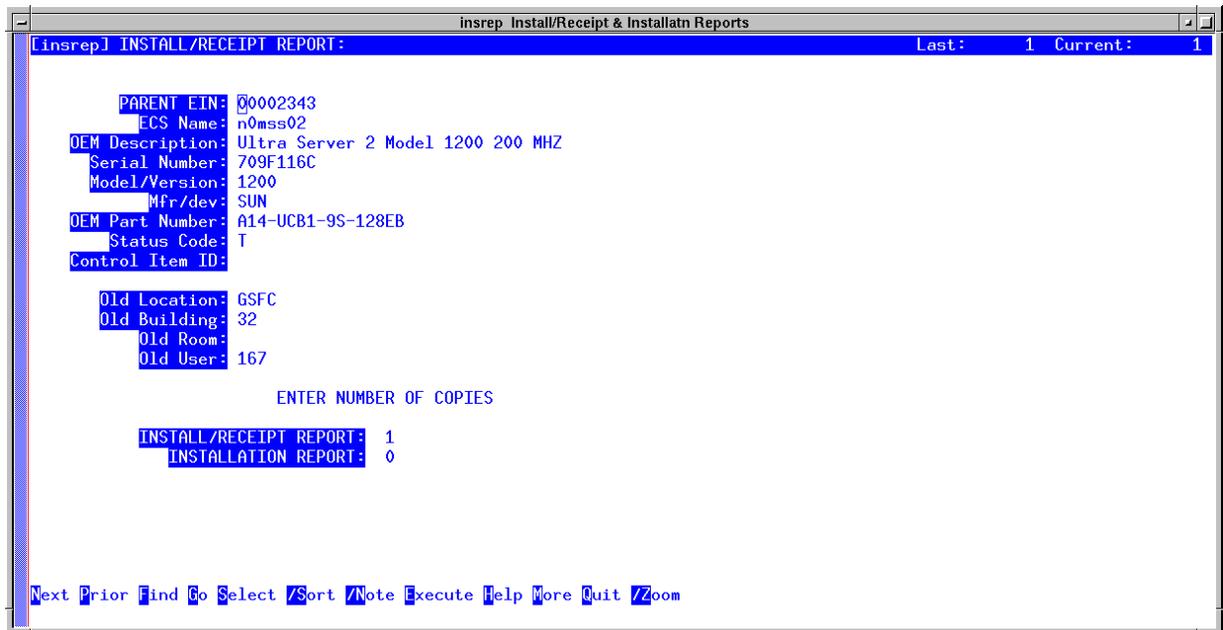


Figure 4.3.4-26. Install/Receipt & Installatn Reports CHUI

Table 4.3.4-22 describes the fields on the Install/Receipt Report screen.

Table 4.3.4-22. Install/Receipt Report Field Descriptions

Field Name	Data Type	Size	Entry	Description
PARENT EIN	String	20	Required	EIN for the parent item in an EIN structure. The operator may zoom to the EIN table and choose the EIN, if it had been entered there previously. (See the EIN Entry section.)
ECS Name	String	30	System-supplied	Name of the machine with which the item is associated.
OEM Description	String	40	System-supplied	Manufacturers of vendor's description of the item.
Serial Number	String	30	System-supplied	Serial number of the item.
Model/Version	String	24	System-supplied	Model or version of the item. If the operator had chosen a known OEM Part, this field is written with the information from this file.
Mfr/dev	String	6	System-supplied	Code for the manufacturer or developer of the item.
OEM Part Number	String	34	System-supplied	Manufacturer's or vendor's part number for the item.
Status Code	String	1	System-supplied	Code that designates the status of the item. The following values are set when processing transactions: R = Received; S = Shipped; I = Installed; X- Archived
Control Item ID	String	20	System-supplied	Identifier of a corresponding version-controlled item in the BASELINE MANAGEMENT system.
Old Location	String	6	System-supplied	Code for the current inventory location where the item can be found.
Old Building	String	6	System-supplied	Identifier for the current building where the item can be found.
Old Room	String	6	System-supplied	Number of the room where the item can be found.
Old User	String	10	System-supplied	Code of the person having the item.
INSTALL/RECEIPT REPORT	Numeric	2	Required	Number of copies of this report to generate.
INSTALLATION REPORT	Numeric	2	Required	Number of copies of this report to generate.

4.3.4.2.3.5 EIN Shipment Reports Screen

The EIN Shipment Reports screen (Figure 4.3.4-27) is designed to allow the operator to print a report of a shipment that was performed previously within the system.

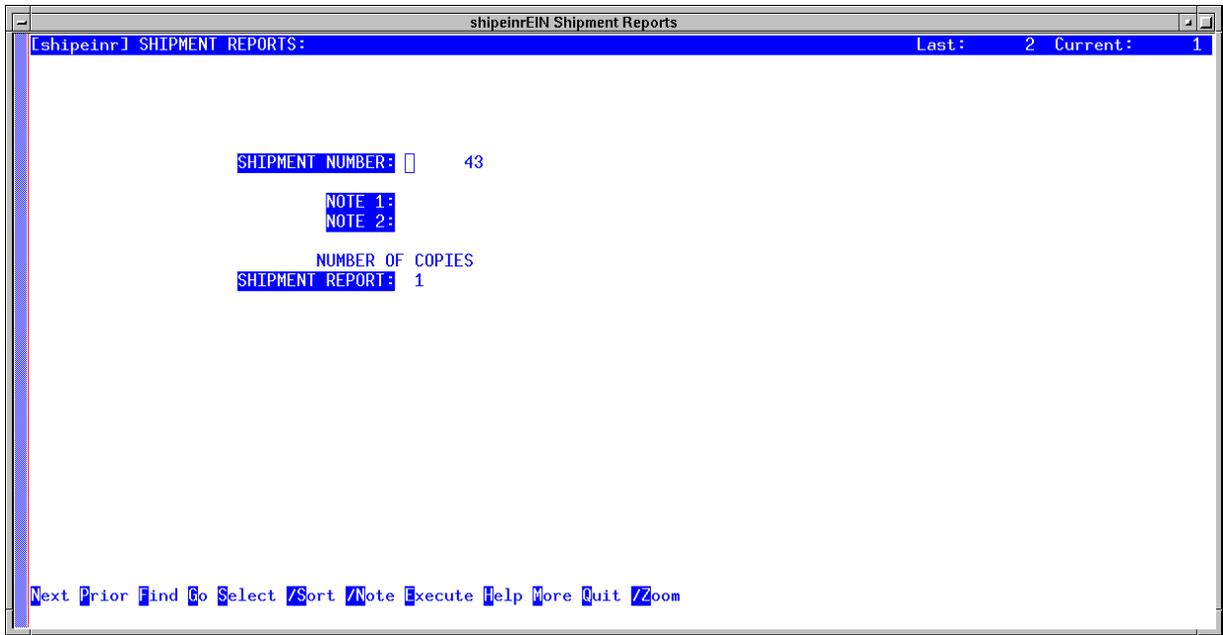


Figure 4.3.4-27. EIN Shipment Reports CHUI

Table 4.3.4-23 describes the fields on the EIN Shipment Reports screen.

Table 4.3.4-23. EIN Shipment Reports Field Descriptions

Field Name	Data Type	Size	Entry	Description
SHIPMENT NUMBER	Numeric	6	Required	Sequential number assigned to a shipment.
NOTE 1, 2	String	40	Optional	A 40-character note to include in the report.
SHIPMENT REPORT	Numeric	2	Required	Number of copies of this report to generate.

4.3.4.2.3.6 Transaction History Reports Screen

The Transaction History Reports screen (Figure 4.3.4-28) is designed to allow the operator to print a history of all transactions contained within the system.

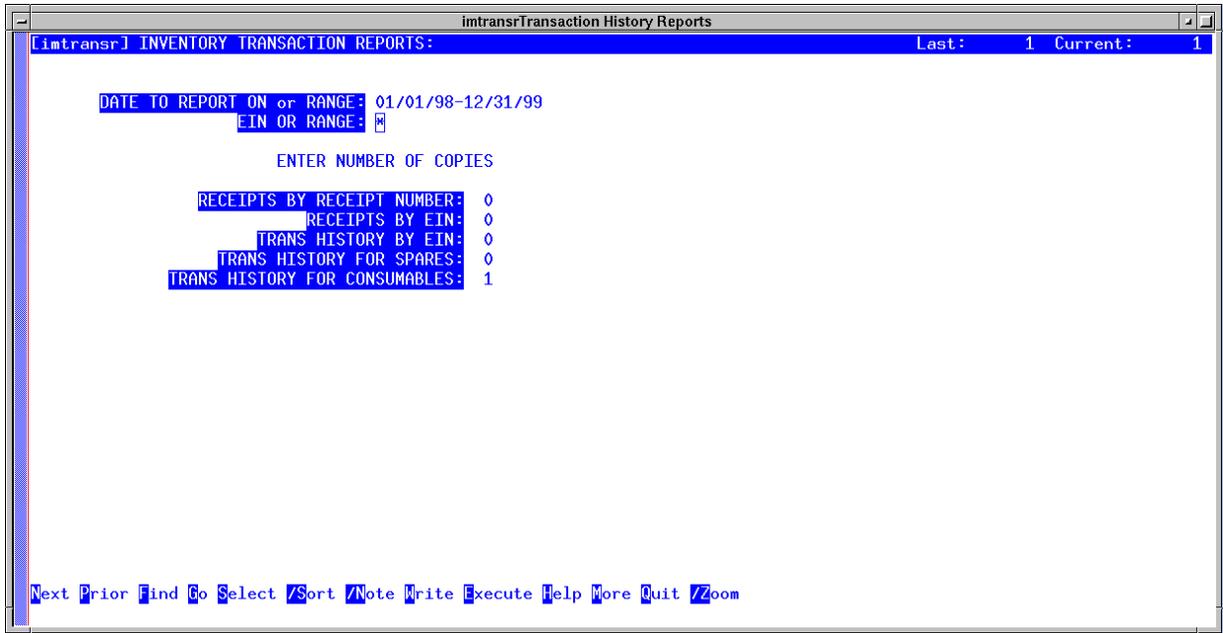


Figure 4.3.4-28. Transaction History Reports CHUI

Table 4.3.4-24 describes the fields on the Transaction History Reports screen.

Table 4.3.4-24. Transaction History Reports Field Descriptions

Field Name	Data Type	Size		Description
DATE TO REPORT ON or RANGE	Date	2	Required	Date or date range to report on.
EIN OR RANGE	String	20	Optional	Identifier for an EIN-controlled inventory item, or range of such items (e.g., EDF0000000001-EDF99999999999.)
RECEIPTS BY RECEIPT NUMBER	Numeric	2	Required	Enter number of copies of this report to generate.
RECEIPTS BY EIN	Numeric	2	Required	Enter number of copies of this report to generate.
TRANS HISTORY BY EIN	Numeric	2	Required	Enter number of copies of this report to generate.
TRANS HISTORY FOR SPARES	Numeric	2	Required	Enter number of copies of this report to generate.
TRANS HISTORY FOR CONSUMABLES	Numeric	2	Required	Enter number of copies of this report to generate.

4.3.4.2.3.7 PO Receipt Reports Screen

The PO Receipt Reports screen (Figure 4.3.4-29) is designed to retrieve and print all receipts that have occurred for the designated vendor during a specified time interval.

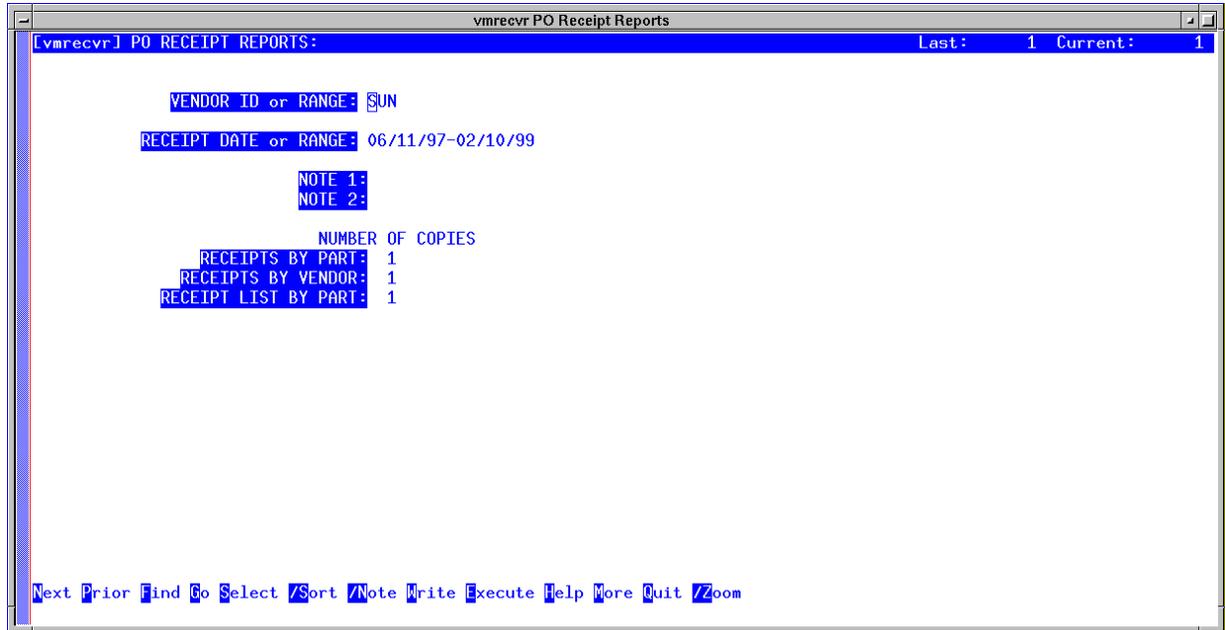


Figure 4.3.4-29. PO Receipt Reports CHUI

Table 4.3.4-25 describes the fields on the PO Receipt Reports screen.

Table 4.3.4-25. PO Receipt Reports Field Descriptions

Field Name	Data Type	Size	Entry	Description
VENDOR ID or RANGE	String	6	Optional	Code or range of codes of the vendor(s) to report.
RECEIPT DATE or RANGE	Date	2	Optional	Receipt date(s) to report.
NOTE 1, 2	String	40	Optional	A 40-character note to include in the report.
RECEIPTS BY PART	Numeric	2	Required	Number of copies of this report to generate.
RECEIPTS BY VENDOR	Numeric	2	Required	Number of copies of this report to generate.
RECEIPT LIST BY PART	Numeric	2	Required	Number of copies of this report to generate.

4.3.4.2.3.8 Installation Summary Reports Screen

The Installation Summary Reports screen (Figure 4.3.4-30) is designed to retrieve and print a list of EINs installed during a specified timeframe.

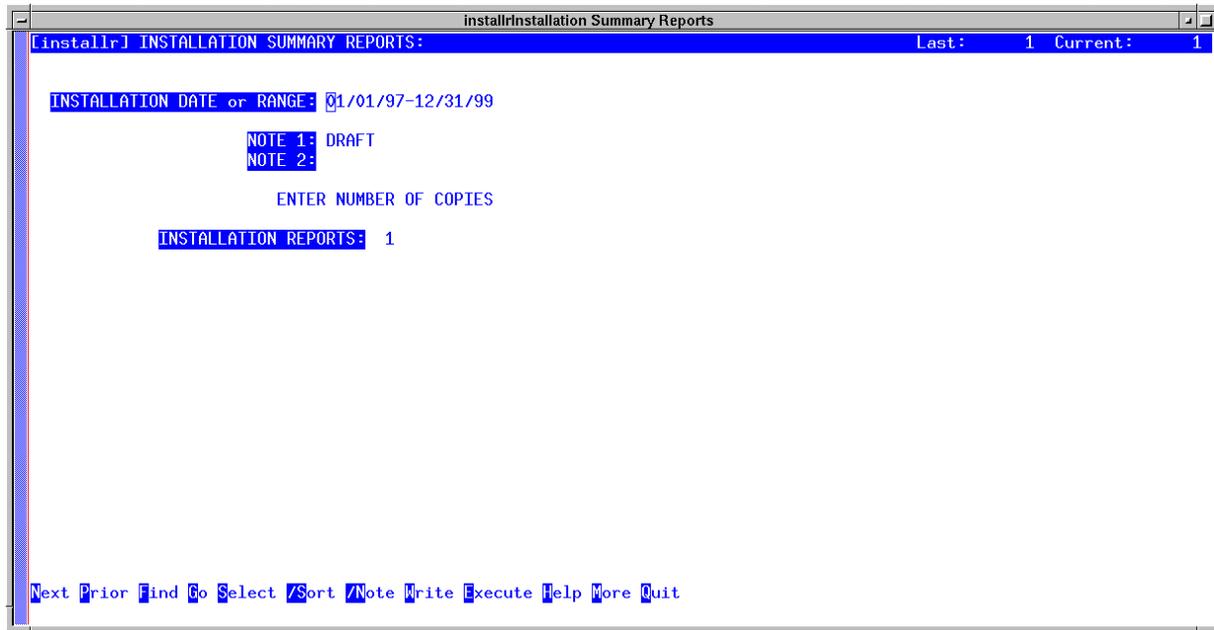


Figure 4.3.4-30. Installation Summary Reports CHUI

Table 4.3.4-26 describes the fields on the Installation Summary Reports screen.

Table 4.3.4-26. Installation Summary Reports Field Descriptions

Field Name	Data Type	Size	Entry	Description
INSTALLATION DATE or RANGE	Date	2	Optional	Date or range of dates on which installation(s) occurred.
NOTE 1, 2	String	40	Optional	A 40-character message to include in the report.
INSTALLATION REPORTS	Numeric	4	Required	Number of copies of this report to generate.

4.3.4.2.4 Inventory Ordering Menu

ILM allows operators to designate individual OEM parts for order point control. Order point processing takes advantage of XRP-II features that monitor parts' inventory levels and automatically generates recommendations for orders. ILM can readily convert to purchase requisitions those recommendations an operator approves.

Access to order point-processing routines is through the ILM Inventory Ordering menu (Figure 4.3.4-31). The menu helps the operator to navigate to the following screens:

- Order Point Parameters Manager – for identifying items to be order point-controlled and specifying control parameters for each.
- Generate Order Point Recommendations - for examining all items designated for order point control and generating a “recommended order” for each item whose inventory quantity has fallen below the control values.
- Recommended Orders Manager - for changing the status to “T” for each item to be transferred to the requisition or work order files.
- Transfer Order Point Orders - for transferring all recommendations whose status has been set to “T” to the Requisition file (if the item is coded as a Buy item) or to the Work Order file (if the item is coded as a Make item).
- Consumable Inventory Query - for viewing information about inventory items designated as consumables.
- Spares Inventory Query - for viewing information about inventory items designated as spares.
- Transfer Consumable & Spare Mat'l - for transferring items designated as consumable or spare from one inventory location to another based on the location of a designated machine (parent EIN) with which the item is to be associated.

These screens are described in the sections below.

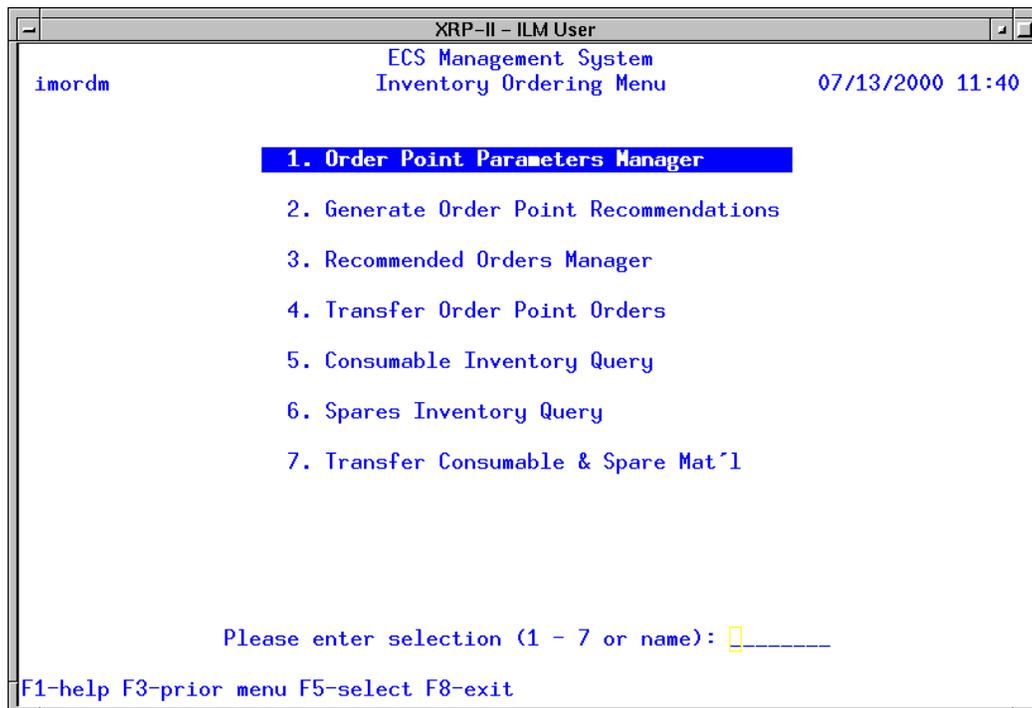


Figure 4.3.4-31. Inventory Ordering Menu

4.3.4.2.4.1 Order Point Parameters Manager Screen

This screen (Figure 4.3.4-32) allows operators to designate items to be order point-controlled and to define the parameters XRP-II is to use in determining when a new part should be ordered and in what quantity.

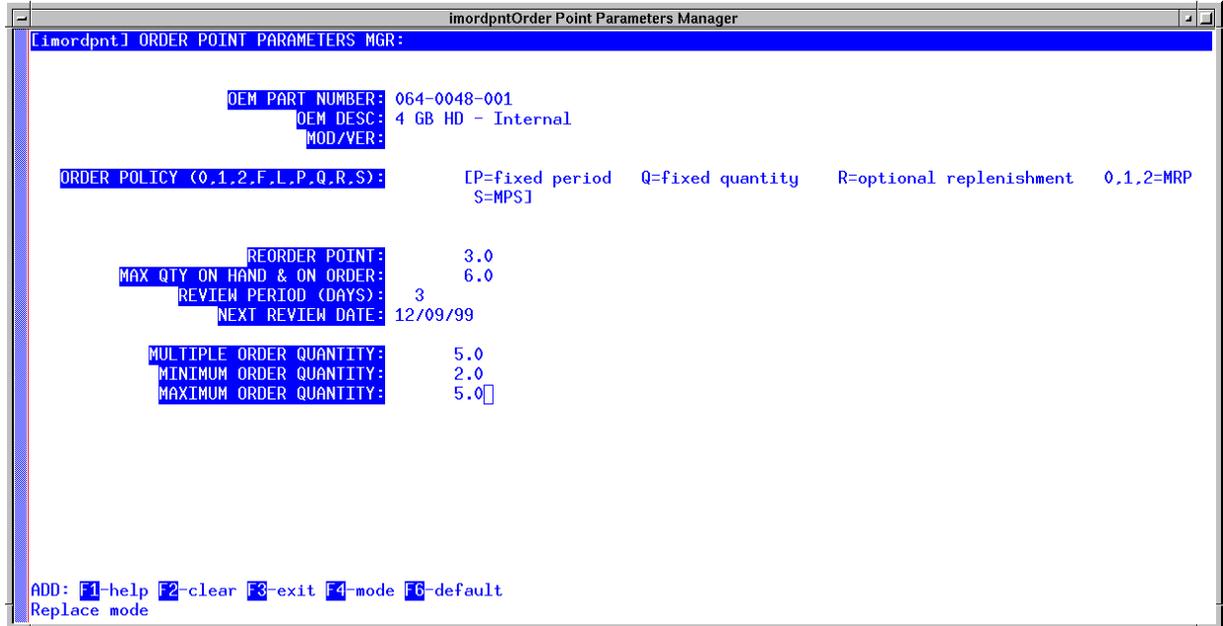


Figure 4.3.4-32. Order Point Parameters Manager CHUI

Table 4.3.4-27 describes the fields on the Order Point Parameters Manager screen.

Table 4.3.4-27. Order Point Parameters Manager Field Descriptions (1 of 2)

Field Name	Data Type	Size	Entry	Description
OEM PART NUMBER	String	34	Required	Manufacturer's or vendor's part number. The operator may zoom to the OEM Part table and choose the number, if it had been entered there previously. (See the OEM Part Numbers section.)
OEM DESC	String	40	System-supplied	Manufacturer or vendor's description for the part.
MOD/VER	String	24	System-supplied	Model or version of the part.
ORDER POLICY	String	1	Optional; 0, 1, 2, P, Q, R, or S	Type of ordering policy such as P = Fixed period, Q = Fixed quantity etc.
REORDER POINT	Floating	10.1	Optional	Quantity at which reorder of the part should occur.

**Table 4.3.4-27. Order Point Parameters Manager Field Descriptions
(2 of 2)**

Field Name	Data Type	Size	Entry	Description
MAX QTY ON HAND & ON ORDER	Floating	10.1	Optional	Maximum number of items in stock plus the number on order.
REVIEW PERIOD (DAYS)	Numeric	3	Optional	Number of days in the order interval. Applicable only if the order policy is P, Q, or 2.
NEXT REVIEW DATE	Date	2	Optional	Date the system is to next evaluate whether to recommend placing an order for the part.
MULTIPLE ORDER QUANTITY	Floating	9.1	Optional	Number of items to include in a multiple parts/items order.
MINIMUM ORDER QUANTITY	Floating	9.1	Optional	Minimum number of items to order or reorder.
MAXIMUM ORDER QUANTITY	Floating	9.1	Optional	Maximum number of items to order or reorder.

4.3.4.2.4.2 Generate Order Point Recommendations Screen

Operators use the Generate Order Point Recommendations screen (Figure 4.3.4-33) to generate recommendations to order parts whose inventory levels have fallen below their respective control values. Control values are set via the Order Point Parameters Manager (see Section 4.3.4.2.5.1). Type “Y” at the prompt on the screen to initiate the process.

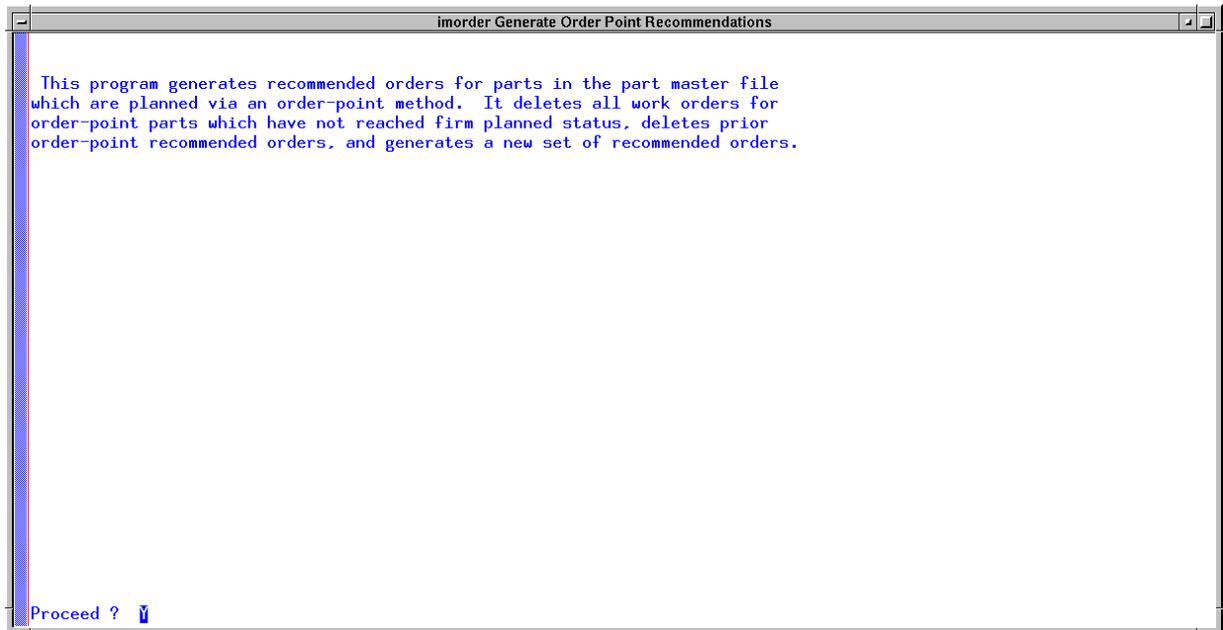


Figure 4.3.4-33. Generate Order Point Recommendations CHUI

4.3.4.2.4.3 Recommended Orders Manager Screen

This screen (Figure 4.3.4-34) is designed to permit operators to review system-generated recommendations for ordering order point-controlled parts and to designate which ones are to be transferred to the requisition or work order files for action. Recommended orders have status “R”. Changing a status to “T” approves the order for transfer, which is done via the Transfer Order Point Orders screen (see Section 4.3.4.2.4.4). Changing it to “X” causes it to be deleted the next time order point recommendations are generated.

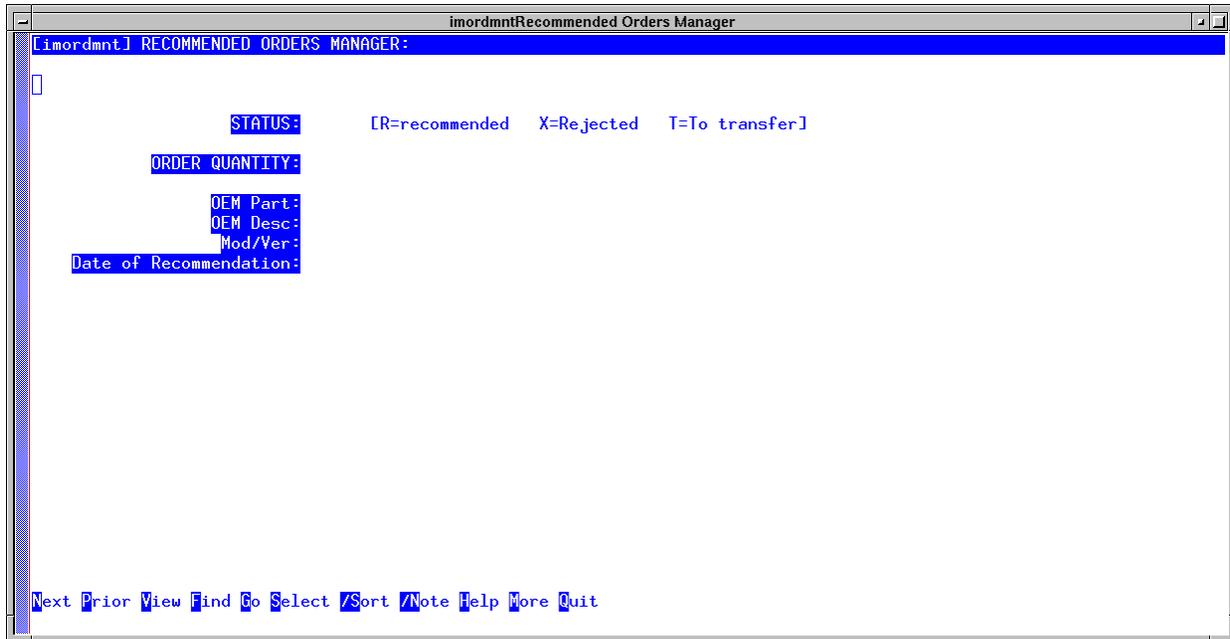


Figure 4.3.4-34. Recommended Orders Manager CHUI

Table 4.3.4-28 describes the fields on the Recommended Orders Manager screen.

**Table 4.3.4-28. Recommended Orders Manager Field Descriptions
(1 of 2)**

Field Name	Data Type	Size	Entry	Description
STATUS	String	1	Optional; R, X, or T	Code for the status of the recommended order. R = recommended; X = rejected; T = to transfer.
ORDER QUANTITY	Floating	9.1	Optional	Quantity to order.
OEM Part	String	34	System-supplied	Manufacturer or vendor’s identifier for an item.
OEM Desc	String	40	System-supplied	Manufacturer or vendor’s description for an item.

**Table 4.3.4-28. Recommended Orders Manager Field Descriptions
(2 of 2)**

Field Name	Data Type	Size	Entry	Description
Mod/Ver	String	24	System-supplied	Model or version of the item.
Date of Recommendation	Date	2	System-supplied	Date the recommendation was generated.

4.3.4.2.4.4 Transfer Order Point Orders Screen

The Transfer Order Point Orders screen (Figure 4.3.4-35) is designed to transfer order recommendations whose status had been set to “T” to a material requisition file. Orders for to be purchased (i.e., coded as “B” for buy part in the EIN file) get transferred to the purchase order requisition file, while parts to be manufactured (i.e., coded as “M” for make part in the EIN files) get transferred to the work order file. Type “Y” in response to the prompt on the screen to initiate the process.

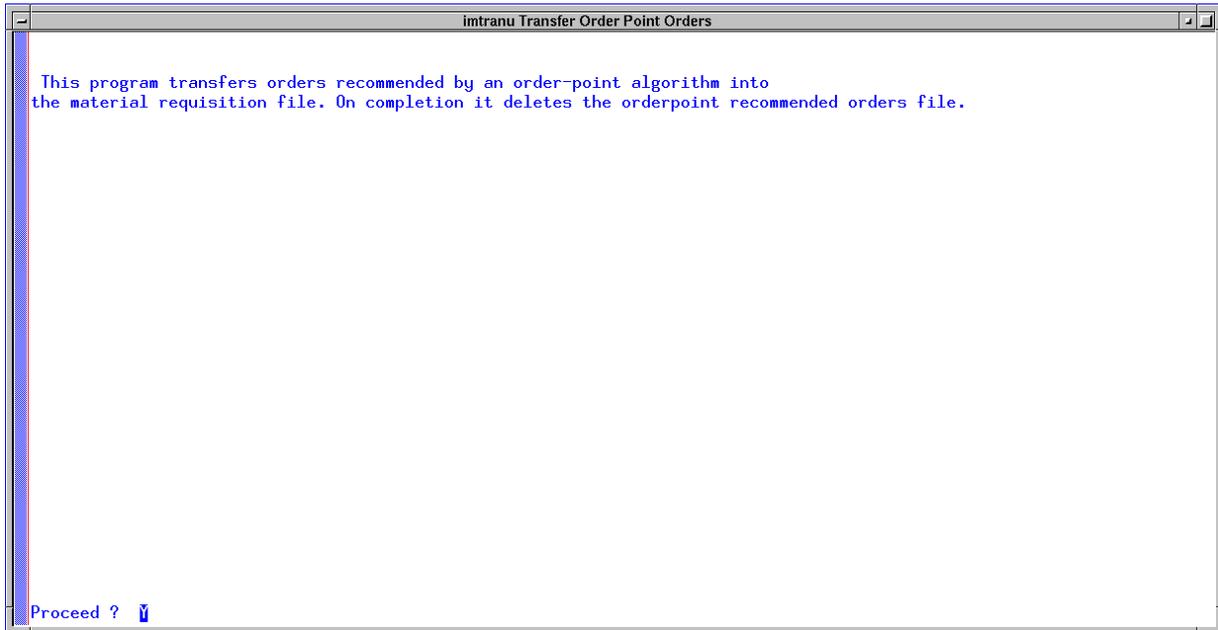


Figure 4.3.4-35. Transfer Order Point Orders CHUI

4.3.4.2.4.5 Consumable Inventory Query Screen

The Consumable Inventory Query screen (Figure 4.3.4-36) allows the operator to view the inventory for only those items designated as consumable and, at the DAACs, for only those items at the local DAAC’s inventory locations.

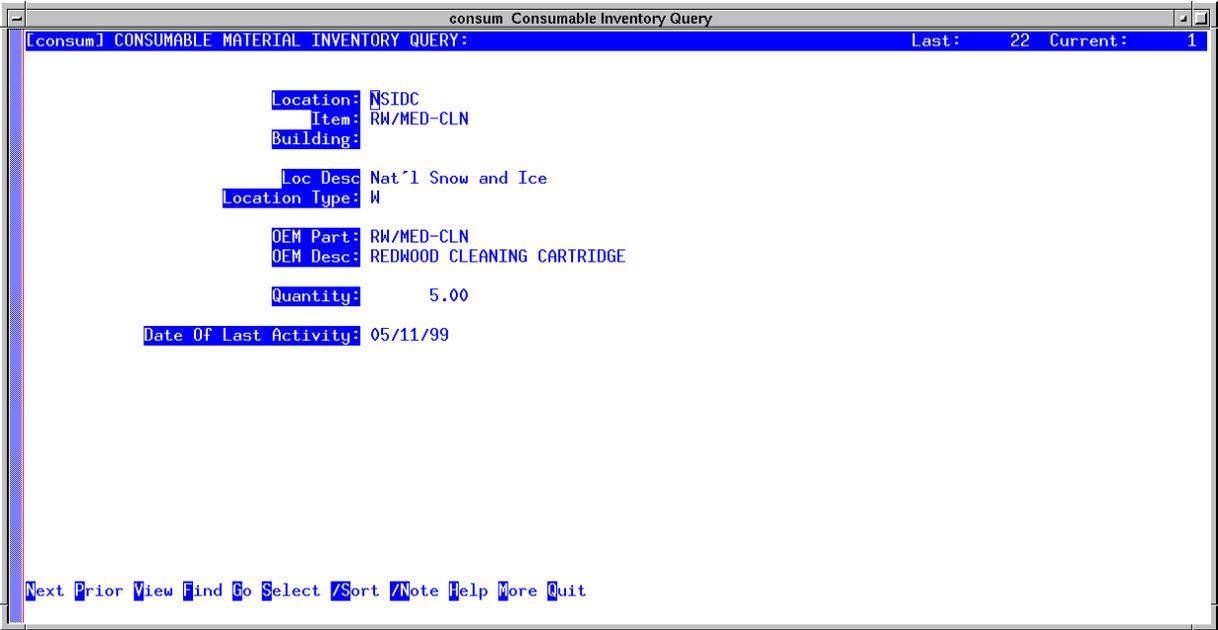


Figure 4.3.4-36. Consumable Inventory Query CHUI

Table 4.3.4-29 describes the fields on the Consumable Inventory Query screen.

Table 4.3.4-29. Consumable Inventory Query Field Descriptions (1 of 2)

Field Name	Data Type	Size	Entry	Description
Location	String	8	System-supplied	Code for the inventory location where the item can be found.
Item	String	34	System-supplied	EIN for the consumable item. This value is obtained from stock location file where it had been stored during receiving and/or transfer processing. The value corresponds to the EIN of the part in the EIN file, which, for consumables, should be the same as the OEM part number for the item.
Building	String	6	System-supplied	Identifier for the building where the item can be found.
Loc Desc	String	30	System-supplied	Name of the inventory location where the item can be found.

Table 4.3.4-29. Consumable Inventory Query Field Descriptions (2 of 2)

Field Name	Data Type	Size	Entry	Description
Location Type	String	1	System-supplied	Code that distinguishes among inventory locations according to purpose or function. Null or S = stock, R = received material, N = non-nettable material, W = work center, A = archive.
OEM Part	String	34	System-supplied	Manufacturer or vendor's identifier for an item. For consumable items, this value should be the same as Item above.
OEM Desc	String	40	System-supplied	Manufacturer or vendor's description of the item.
Quantity	Floating	10.1	System-supplied	Quantity of the items for the inventory location at the building.
Date of Last Activity	Date	2	System-supplied	Date of last transaction performed for the item at the inventory location and building.

4.3.4.2.4.6 Spares Inventory Query Screen

Operators use the Spares Inventory Query screen (Figure 4.3.4-37) to browse inventory records of spare items.

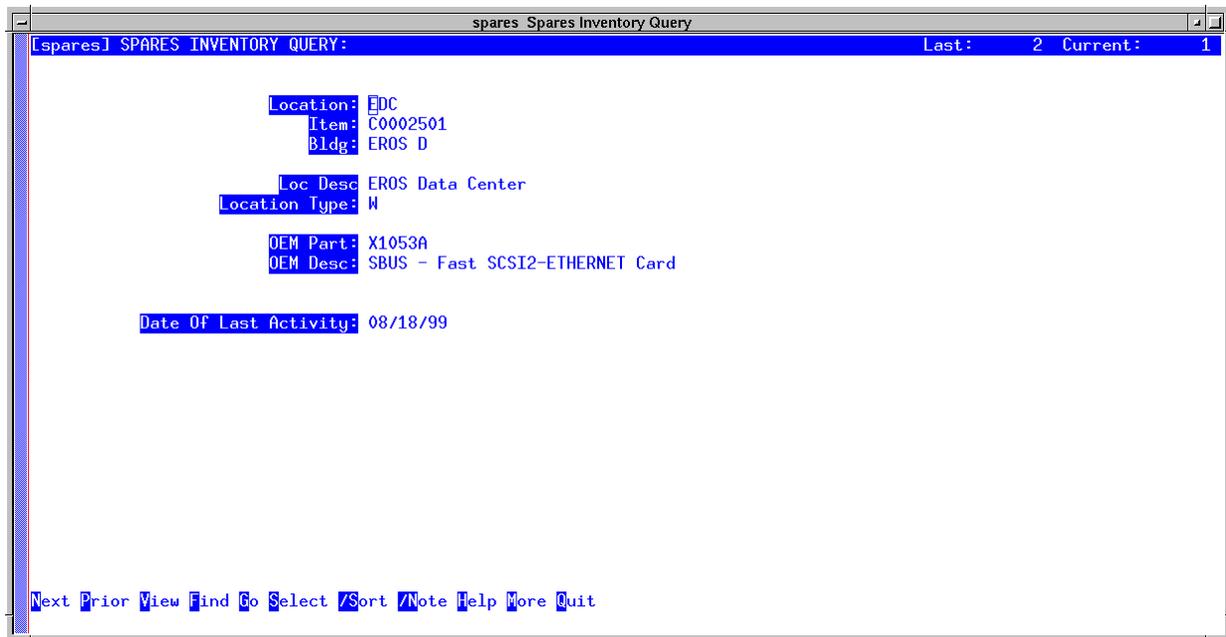


Figure 4.3.4-37. Spares Inventory Query CHUI

Table 4.3.4-30 describes the fields on the Spares Inventory Query screen.

Table 4.3.4-30. Spares Inventory Query Field Description

Field Name	Data Type	Size	Entry	Description
Location	String	8	System-supplied	Code for the inventory location where the item can be found.
Item	String	34	System-supplied	EIN for the spare item. This value is obtained from stock location file where it had been stored during receiving and/or transfer processing. The value corresponds to the EIN of the part in the EIN file.
Bldg	String	6	System-supplied	Identifier for the building where the item can be found.
Loc Desc	String	30	System-supplied	Name of the inventory location where the item can be found.
Location Type	String	1	System-supplied	Code that distinguishes among inventory locations according to purpose or function. Null or S = stock, R = received material, N = non-nettable material, W = work center, A = archive.
OEM Part	String	34	System-supplied	Manufacturer or vendor's identifier for an item. For consumable items, this value should be the same as Item above.
OEM Desc	String	40	System-supplied	Manufacturer or vendor's description of the item.
Date of Last Activity	Date	2	System-supplied	Date of last transaction performed for the item at the inventory location and building.

4.3.4.2.4.7 Transfer Consumable & Spare Mat'l Screen

This screen (Figure 4.3.4-38) is designed to allow the operator to transfer a quantity of an item designated as consumable or spare to the inventory location, building, and room of an operator-specified parent EIN, effectively issuing or transferring the item(s) from one location to another.

After entering values that define the transaction, type “C” to check it, then “E” to process it. Checking causes XRP-II to validate that needed information is not missing and to warn if either inventory levels are insufficient at the specified location and building or if the transaction establishes the building as a new stock location. Processing causes XRP-II to add the item(s) to the configuration of the parent EIN and adjust item counts at both the losing and gaining inventory locations. It also records the event in the inventory transaction log. (See the Inventory Transaction Query section, 4.3.4.2.2.6).

Note: This screen does not change the status of the item transferred.

Note: Consumables transferred to a parent EIN are not listed on EIN structure screens since consumables are not considered EINs.

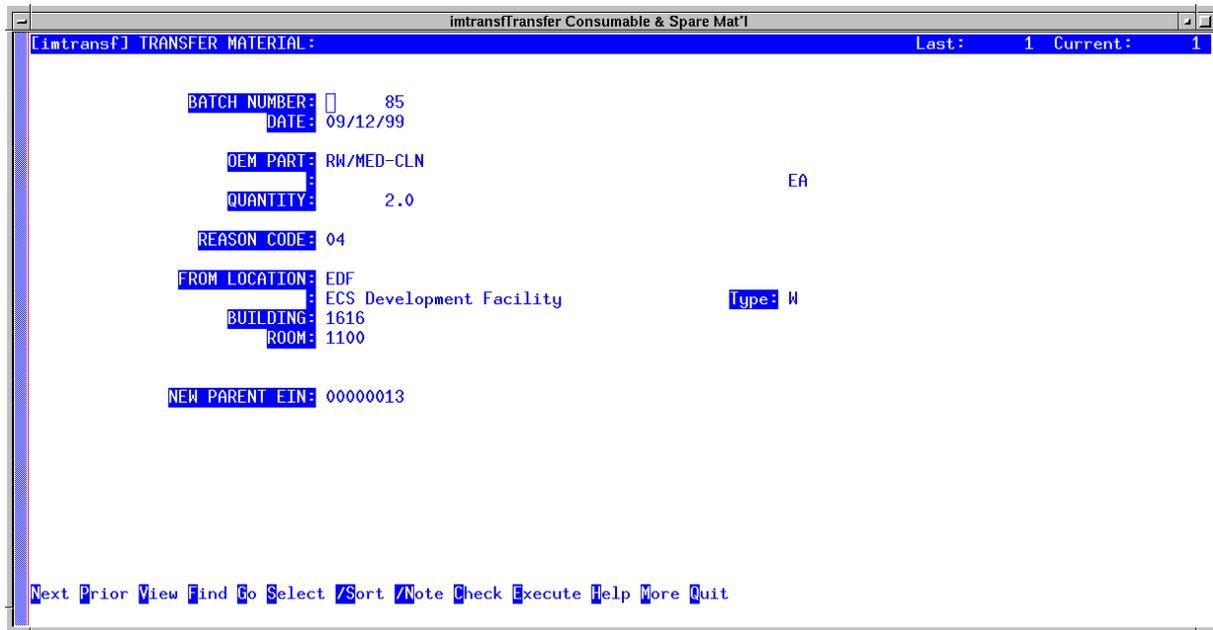


Figure 4.3.4-38. Transfer Consumable & Spare Mat'l CHUI

Table 4.3.4-31 describes the fields on the Transfer Consumable & Spare Mat'l screen.

Table 4.3.4-31. Transfer Consumable & Spare Material Field Descriptions (1 of 2)

Field Name	Data Type	Size	Entry	Description
BATCH NUMBER	Numeric	8	Required	Identifier for the transaction. Type <RETURN> to let the system assign the next number in sequence.
DATE	String	2	Optional; defaults to current date	Date of the transaction.
OEM PART	String	34	Optional	Manufacturers or vendor's part number for the consumable or spare item(s) being transferred.
QUANTITY	Floating	10.1	Optional; defaults to 0.0	Quantity of the item to transfer.
REASON CODE	String	4	Optional	Code for the reason for the transfer. The operator may zoom to the Reason Code table and choose the code, if it had been entered there previously. (See the Reason Code Maintenance section.)

**Table 4.3.4-31. Transfer Consumable & Spare Material
Field Descriptions (2 of 2)**

Field Name	Data Type	Size	Entry	Description
FROM LOCATION	String	6	Required	Code for the inventory location where the item can be found. The operator may zoom to the Inventory Location and choose the code, if it had been entered there previously. (See the Inventory Location Manager section.)
:	String	40	System-supplied	Inventory location name.
Type	String	1	System-supplied	Code that distinguishes among inventory locations according to purpose or function. Null or S = stock, R = received material, N = non-nettable material, W = work center, A = archive.
BUILDING	String	6	Optional	Identifier for the building where the item can be found.
ROOM	String	6	Optional	Room number where the item can be found.
NEW PARENT EIN	String	20	Required	EIN for the parent item whose inventory location, building, and room number is to be used as the destination for the transfer.

4.3.4.2.5 PO/Receiving Menu

ILM's PO/Receiving functions support procurement and receipt of property against purchase orders (PO's). The PO/Receiving menu (Figure 4.3.4-39) helps operators navigate to the following set of screens:

- Material Requisition Manager – for initiating the process of requisitioning consumables or spares. Requisitions require approval of the procurement manager before they can be added to a purchase order.
- Material Requisition Master – for buyers to examine all manual and system-generated requisitions for placing purchase orders with vendors.

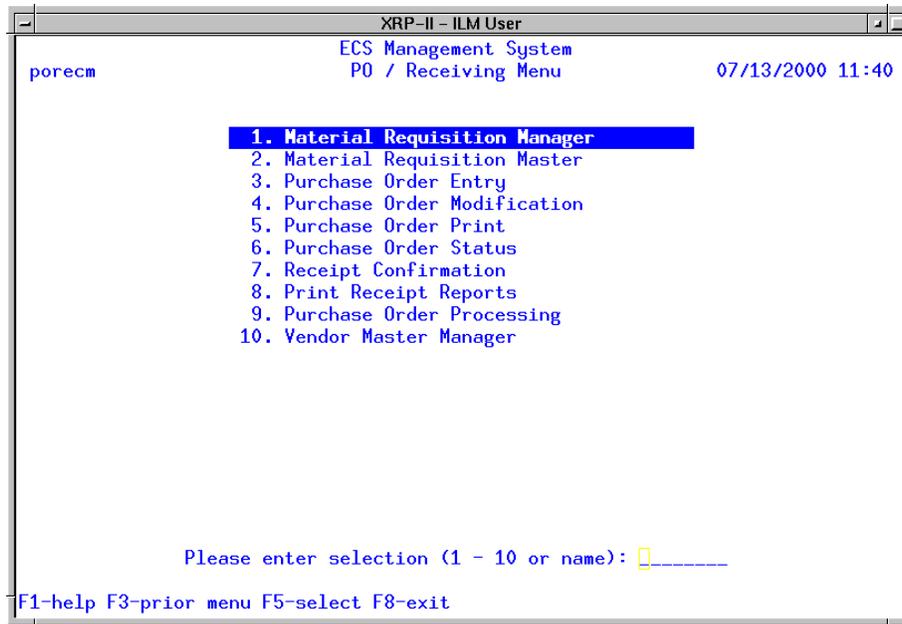


Figure 4.3.4-39. PO/Receiving Menu

- Purchase Order Entry – for entering new purchase orders.
- Purchase Order Modification – for updating information about a purchase order and its line items.
- Purchase Order Print – for printing a purchase order document for subsequent mailing to the vendor and/or copies for the receiving dock.
- Purchase Order Status – for browsing information about any purchase order.
- Receipt Confirmation – for recording receipt of materials against a purchase order. (This is the primary means of adding items to the EIN catalog.)
- Print Receipt Reports – for printing copies of past receipt reports.
- Purchase Order Processing – for closing open PO's that meet established criteria.
- Vendor Master Manager – for maintaining a reference list of vendors and their addresses.

These screens are described in the sections below.

4.3.4.2.5.1 Material Requisition Manager Screen

The Material Requisition Manager screen (Figure 4.3.4-40) allows operators to create requisitions manually for items to be purchased. Operators designated as authorized buyers can subsequently use the requisitions when adding line items on purchase orders. (See Section 4.3.4.2.5.3.) The screen displays for an operator only those requisitions that have been entered by that operator.

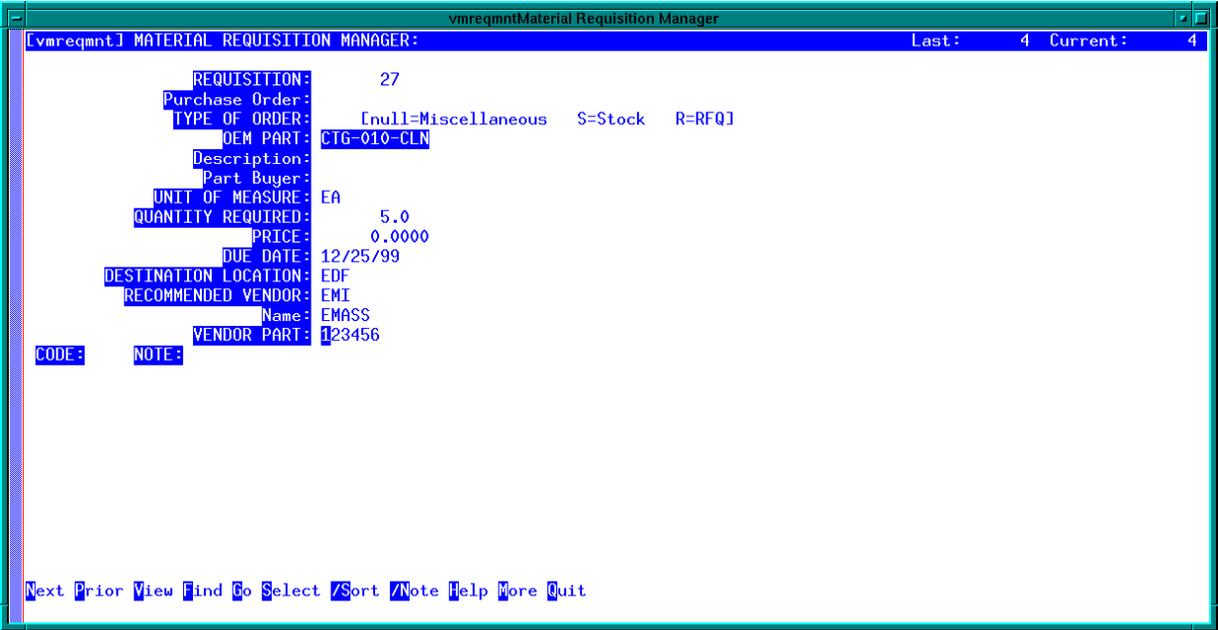


Figure 4.3.4-40. Material Requisition Manager CHUI

Table 4.3.4-32 describes the fields on the Material Requisition Manager screen.

Table 4.3.4-32. Material Requisition Manager Field Descriptions (1 of 2)

Field Name	Data Type	Size	Entry	Description
REQUISITION	Numeric	8	Required	This field is the requisition number assigned to this Material Requisition. It automatically generated when the operator presses the <ENTER> key.
Purchase Order	String	10	System-supplied	Identifier for the purchase order to which the requisition has been transferred.
TYPE OF ORDER	String	1	Required; null, S, or R	Code that distinguishes among purchase orders according to purpose. Null = Misc.; S = Stock; R = RFQ
OEM PART	String	34	Required	Manufacturer's or vendor's part number for the item. The operator may zoom to the OEM part table and choose the identifier, if it had been entered there previously. (See the OEM Part Numbers section.)
Description	String	40	System-supplied	Manufacturer or vendor's description of the item.

Table 4.3.4-32. Material Requisition Manager Field Descriptions (2 of 2)

Field Name	Data Type	Size	Entry	Description
UNIT OF MEASURE	String	2	Optional	Purchase unit of measure used for buying the item. The operator may zoom to the UOM table and choose the unit of measure, if it had been entered there previously. (See the UOM Manager section.)
QUANTITY REQUIRED	Floating	9.1	Optional	Number of item to order.
PRICE	Floating	11.4	Optional	Expected item price.
DUE DATE	Date	2	Optional; default is “**/**/**”	Date by which the item is required. By convention, the value “**/**/**” is interpreted as, “as soon as possible”.
DESTINATION LOCATION	String	6	Optional	Code for the inventory location where the item is to be added to stock. The operator may zoom to the Inventory Locations table and choose the code, if it had been entered there previously. (See the Inventory Location Manager section.)
RECOMMENDED VENDOR	String	6	Optional	Code identifying the preferred vendor. Use the /Zoom screen to assist your selection. ILM fills in the name fields for you when you make this selection.
Name	String	30	System-supplied	Name of the vendor. The value is obtained from the Vendor Master record corresponding to the recommended vendor’s code.
VENDOR PART	String	16	Optional	Vendor’s part number if it differs from the OEM part number entered earlier on this screen.
CODE	String	2	Optional	Identifier for a type or category of note associated with the item.
NOTE	String	60	Optional	A 60-character note associated with the item.

4.3.4.2.5.2 Material Requisition Master Screen

The Material Requisition Master screen (Figure 4.3.4-41) allows operators to browse, delete, and update all requisitions in the system, as well as to add new ones. Accordingly, its use is often restricted to certain employees, such as buyers.

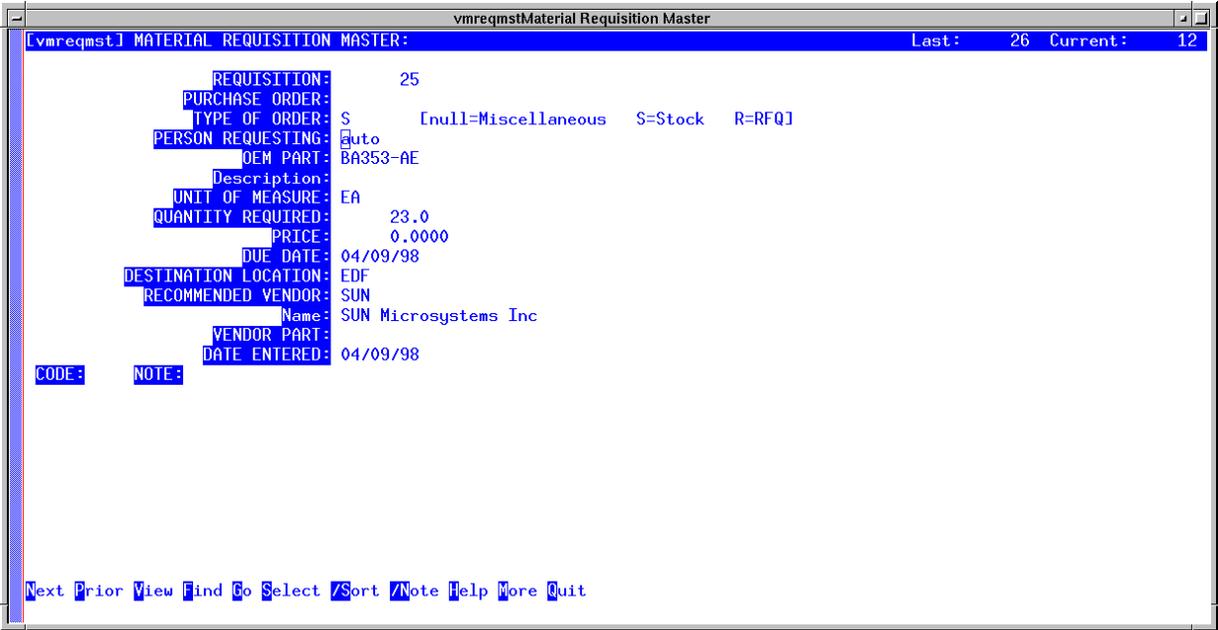


Figure 4.3.4-41. Material Requisition Master CHUI

Table 4.3.4-33 describes the fields on the Material Requisition Master screen.

Table 4.3.4-33. Material Requisition Master Field Descriptions (1 of 2)

Field Name	Data Type	Size	Entry	Description
REQUISITION	Numeric	8	Required	The requisition number assigned to this Material Requisition. It is automatically generated when the operator presses the <ENTER> key.
PURCHASE ORDER	String	10	System-supplied	Identifier for the purchase order to which the requisition has been transferred. The field may be modified only if the new value has been entered previously in the Purchase Order file.
TYPE OF ORDER	String	1	Optional; null, S, or Q	Code that distinguishes among purchase orders according to purpose. Null = Misc.; S = Stock; R = RFQ
PERSON REQUESTING	String	8	System-supplied	Name of person completing the requisition. Automatically filled in from the operator's login ID.
OEM PART	String	34	Optional	Manufacturer's or vendor's part number for the item. The operator may zoom to the OEM part table and choose the identifier, if it had been entered there previously. (See the OEM Part Numbers section.)

Table 4.3.4-33. Material Requisition Master Field Descriptions (2 of 2)

Field Name	Data Type	Size	Entry	Description
Description	String	40	System-supplied	Manufacturer or vendor's description of the item.
UNIT OF MEASURE	String	2	Optional	Purchase unit of measure used for buying the item. The operator may zoom to the UOM table and choose the unit of measure, if it had been entered there previously. (See the UOM Manager section.)
QUANTITY REQUIRED	Floating	9.1	Optional	Number of item to order.
PRICE	Floating	11.4	Optional	Expected item price.
DUE DATE	Date	2	System-supplied	Date by which the item is required. By convention, the value "***/**/**" is interpreted as, "as soon as possible."
DESTINATION LOCATION	String	6	Optional	Code for the inventory location where the item is to be added to stock. The operator may zoom to the Inventory Locations table and choose the code, if it had been entered there previously. (See the Inventory Location Manager section.)
RECOMMENDED VENDOR	String	6	Optional	Code identifying the preferred vendor. The operator may zoom to the Vendor table and choose the code, if it had been entered there previously. (See the Vendor Master Manager section.) ILM fills in the name field for you when you make this selection.
Name	String	30	System-supplied	Name of the vendor. The value is obtained from the Vendor Master record corresponding to the recommended vendor's code.
VENDOR PART	String	16	Optional	Vendor's part number if it differs from the OEM part number entered earlier on this screen.
DATE ENTERED	Date	2	System-supplied	Date the requisition was created.
CODE	String	2	Optional	Identifier for a type or category of note associated with the item.
NOTE	String	60	Optional	A 60-character note associated with the item.

4.3.4.2.5.3 Purchase Order Entry Screen

The Purchase Order Entry screen (Figure 4.3.4-42) is used to create new purchase orders. As such, it is always presented to the operator in ADD mode when invoked. Enter data to identify and describe the purchase order itself, using Table 4.3.4-34 as a guide. Then, use the Items command to invoke the screen's items page (Figure 4.3.4-43) in order to specify the items to purchase. The items page too is presented in ADD mode.

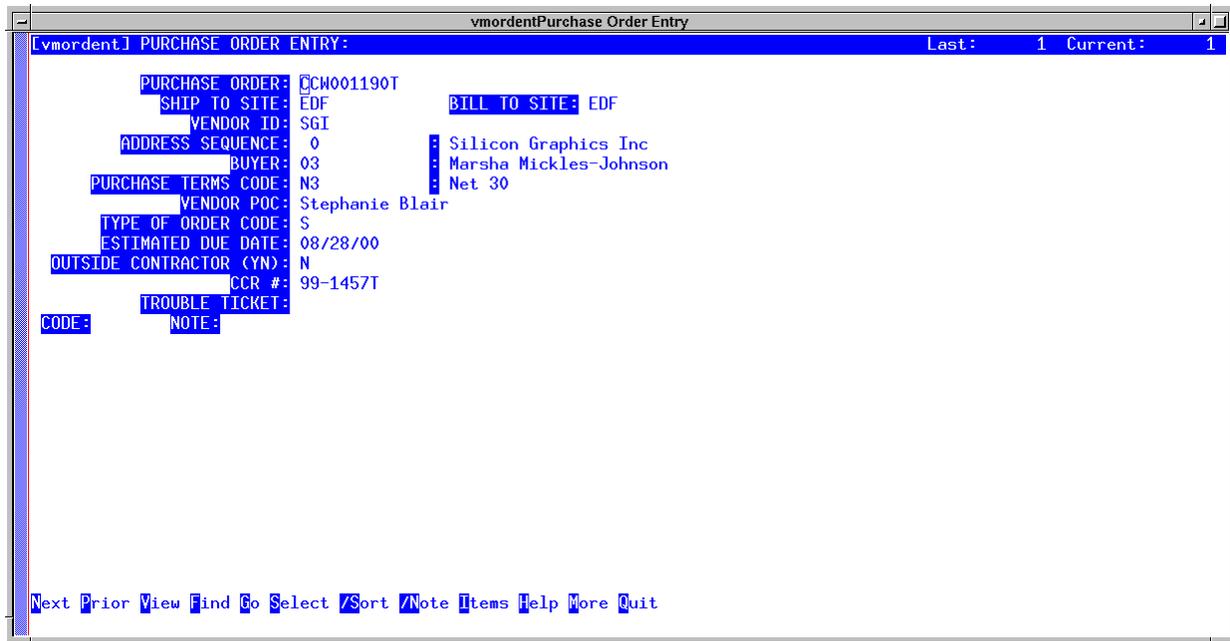


Figure 4.3.4-42. Purchase Order Entry CHUI

Table 4.3.4-34 describes the fields on the Purchase Order Entry screen.

Table 4.3.4-34. Purchase Order Entry Field Descriptions (1 of 2)

Field Name	Data Type	Size	Entry	Description
PURCHASE ORDER	String	10	Required	Identifier for the purchase order. Press <RETURN> to have the system provide the next available number.
SHIP-TO SITE	String	6	Optional; defaults to the local site	Code for the site to which the material is to be shipped. The default is the local site. The operator may zoom to the Site Code table to choose the code, if it had been entered there previously. (See the Site Master Manager section.)
BILL-TO SITE	String	6	Optional	Code for the site, which the vendor is to bill. The default is the local site. The operator may zoom to the Site Code table and choose the code, if it had been entered there previously. (See the Site Master Manager section.)
VENDOR ID	String	6	Optional	Code for the vendor from whom items are being purchased.

Table 4.3.4-34. Purchase Order Entry Field Descriptions (2 of 2)

Field Name	Data Type	Size	Entry	Description
ADDRESS SEQUENCE	Numeric	2	Optional	Code designating which of the vendor's addresses to use.
BUYER	String	6	Optional	Code for a person authorized to purchase the item. The operator may zoom to the Buyer table and choose the code, if it had been entered there previously. (See the Buyer Manager section.)
PURCHASE TERMS CODE	String	2	Optional	Code for the terms under which the purchase is being made. The operator may zoom to the Purchase Terms table and choose the code, if it had been entered there previously. (See the Sales/Purchase Terms Maintenance section.)
VENDOR POC	String	30	Optional	Name of the person designated as the point of contact at the vendor facility.
TYPE OF ORDER CODE	String	1	Optional; defaults to "S"	Code that distinguishes among purchase orders according to purpose. This field should always be left at the default of 'S'.
ESTIMATED DUE DATE	Date	2	Optional; defaults to 45 days past the current date	Date the material being ordered is expected.
OUTSIDE CONTRACTOR (Y/N)	String	1	Optional; "Y"	Flag indicating if the vendor is an outside contractor. This field should always be set to "Y".
CCR #	String	30	Optional	Identifier for the CCR authorizing the purchase.
TROUBLE TICKET	String	15	Optional	Identifier for the trouble ticket associated with the purchase order.
CODE	String	2	Optional	Identifier for a type or category of note associated with the item.
NOTE	String	60	Optional	A 60-character note associated with the item.

When adding a line item to a purchase order, pressing <ENTER> at the sequence number field lets XRP-II assign the next number available, and entering a requisition number automatically inserts the item's OEM part number, destination location, due date, quantity, and price values from the requisition file. Line item data appears on purchase order reports and is used later by the Receiving process.

The items page itself has an **Items** bottom-line command and two other commands not found on most screens. This **Items** command invokes a Material Requisition Query screen (Figure 4.3.4-44) for browsing the records in the requisitions file. A **Duplicate** command lets operators conveniently add additional copies of a line item for which different delivery dates are desired. A **Changes** command lets operators view the log of any changes that may have been made to the line item's quantity or price via the Purchase Order Modification screen (see Section 4.3.4.2.5.4).

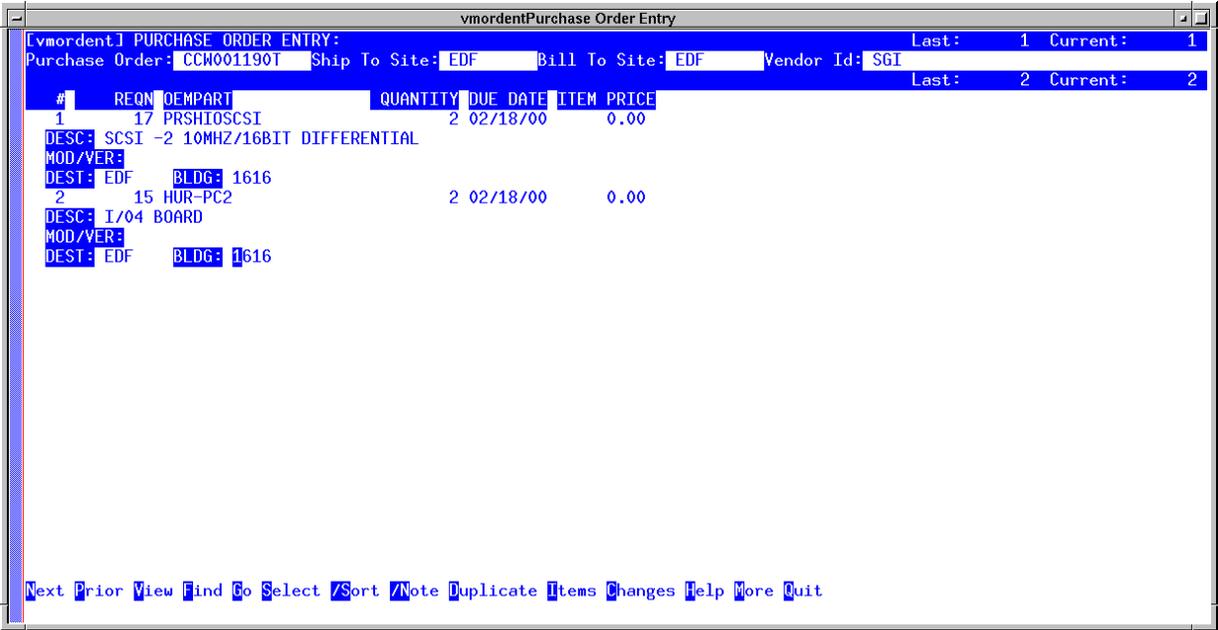


Figure 4.3.4-43. Items Page for Purchase Order Entry CHUI

Table 4.3.4-35 describes the fields on the Items Page for Purchase Order Entry.

Table 4.3.4-35. Items Page for Purchase Order Entry Field Descriptions (1 of 2)

Field Name	Data Type	Size	Entry	Description
#	Numeric	4	Required	Sequence number for the purchase order's line items.
REQN	Numeric	8	Optional	Number identifying the requisition satisfied by this line item.
OEM PART	String	34	Required	The manufacturer's part number of the item(s) you are ordering. The field, DESC, is automatically filled with the selected part's description when you make this selection. The operator may zoom to the OEM Part table and choose the number, if it had been entered there previously. (See the OEM Part Numbers section.)
QUANTITY	Floating	10.1	Required; default is "1"	Number of items on order.

Table 4.3.4-35. Items Page for Purchase Order Entry Field Descriptions (2 of 2)

Field Name	Data Type	Size	Entry	Description
DUE DATE	Date	2	Optional; default is 45 days past the current date	Date the item is due to be received.
ITEM PRICE	Floating	11.4	Optional; default is the cost from the OEM Part table	Purchase cost of the item. Same as COST.
DESC	String	40	Optional	A description of the item. If a value for OEM part number had been entered, the system supplies the manufacturer or vendor's description if one is available.
MOD/VER	String	24	Optional	Model or Version of the item.
DEST	String	6	Optional; default is the PO's value for Ship-to Branch	Code for the inventory location where the item is to be shipped. The operator may zoom to the Inventory Location table and choose the code, if it had been entered there previously. (See the Inventory Location Manager section.)
BDLG	String	6	System-supplied	Identifier for the building where the item is to be shipped.

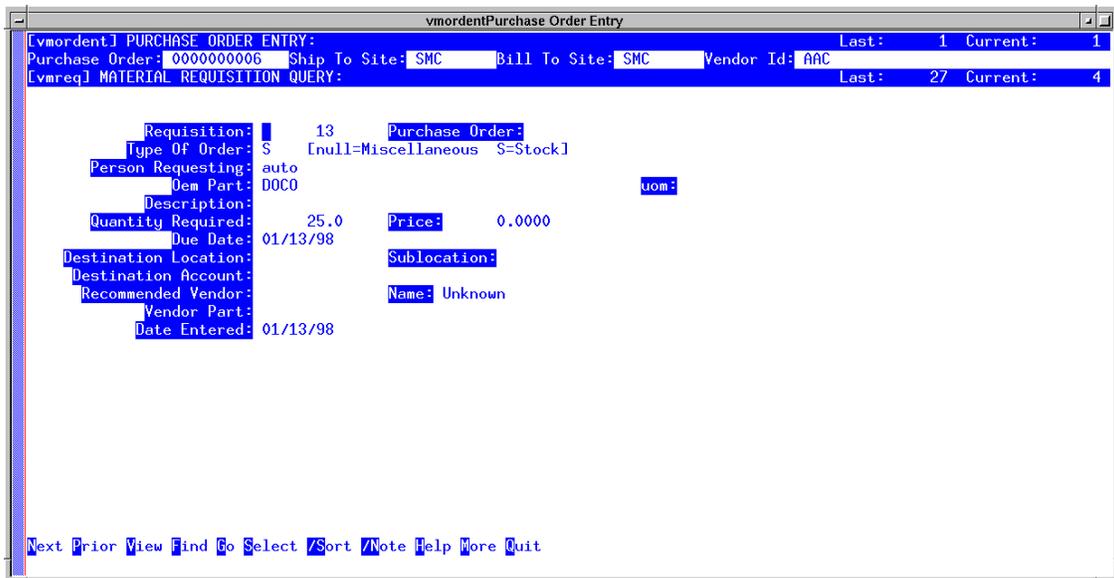


Figure 4.3.4-44. Material Requisition Query Page for Purchase Order Entry CHUI

Table 4.3.4-36 describes the fields on the Material Requisition Query Page for the Purchase Order Entry CHUI.

Table 4.3.4-36. Material Requisition Query Page Field Descriptions

Field Name	Data Type	Size	Entry	Description
Requisition	Numeric	8	System-supplied	The requisition number assigned to this Material Requisition.
Purchase Order	String	10	System-supplied	Identifier for the purchase order to which the requisition has been transferred.
Type of Order	String	1	System-supplied	Code that distinguishes among purchase orders according to purpose. Null = Misc.; S = Stock; R = RFQ
Person Requesting	String	8	System-supplied	Name of person completing the requisition.
OEM Part	String	34	System-supplied	Manufacturer's or vendor's part number for the item.
Description	String	40	System-supplied	Manufacturer or vendor's description of the item.
uom	String	2	System-supplied	Purchase unit of measure used for buying the item.
Quantity Required	Floating	9.1	System-supplied	Number of item to order.
Price	Floating	11.4	System-supplied	Expected item price.
Due Date	Date	2	System-supplied	Date by which the item is required. By convention, the value "***/**/**" is interpreted as, "as soon as possible".
Destination Location	String	6	System-supplied	Code for the inventory location where the item is to be added to stock.
Sublocation	String	6	System-supplied	Identifier for the building where the item is to be added to stock.
Destination Account	String	6	System-supplied	Identifier for the financial account for the requisition.
Recommended Vendor	String	6	System-supplied	Code identifying the preferred vendor.
Name	String	30	System-supplied	Name of the vendor. The value is obtained from the Vendor Master record corresponding to the recommended vendor's code.
Vendor Part	String	16	System-supplied	Vendor's part number if it differs from the OEM part number entered earlier on this screen.
Date Entered	Date	2	System-supplied	Date the requisition was created.

4.3.4.2.5.4 Purchase Order Modification Screen

The Purchase Order Modification screen (Figure 4.3.4-45) is used to update existing, open purchase orders; that is, orders with their status code “blank” (Active) or “R” (Released). Changing the quantity of a line item, its price, or expected date are common reasons to use this screen, as is adding a new line item to the purchase order. Changing the order’s status to “C” (Complete) or “X” (Cancelled) causes the status to change in each line item. It also renders the order closed. Closed orders can be viewed through the Purchase Order Status screen only. This screen functions in much the same way as the Purchase Order Entry screen discussed in the previous section, but it includes a feature that tracks the history of changes to the quantity or price of a line item, viewable via the Changes bottom-line command.

Table 4.3.4-37 describes this screen’s fields, while Figure 4.3.4-46 and Table 4.3.4-38 describe its items page. The Material Requisition Query screen, available from this screen’s item page, is the same as the one for Purchase Order Entry’s item page. See Section 4.3.4.2.5.3 for the description.

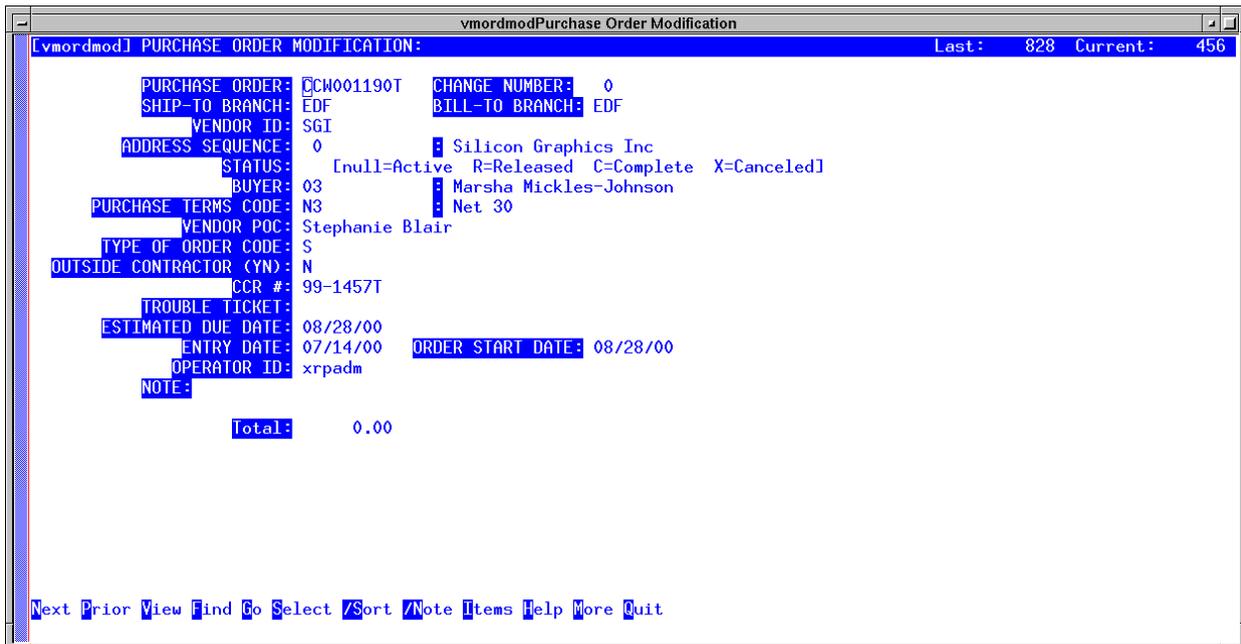


Figure 4.3.4-45. Purchase Order Modification CHUI

Table 4.3.4-37 describes the fields on the Purchase Order Modification screen.

Table 4.3.4-37. Purchase Order Modification Field Descriptions (1 of 2)

Field Name	Data Type	Size	Entry	Description
PURCHASE ORDER	String	10	Required	Identifier for the purchase order.
CHANGE NUMBER	Numeric	3	Optional	Number identifying the revision level for the PO.
SHIP-TO BRANCH	String	6	Optional	Code for the site to which the material is to be shipped. The default is the local site. The operator can zoom to the Site Code table and choose the code, if it had been entered there previously. (See the Site Master Manager section.)
BILL-TO BRANCH	String	6	Optional	Code for the site the vendor is to bill. The default is the local site. The operator can zoom to the Site Code table and choose the code, if it had been entered there previously. (See the Site Master Manager section.)
VENDOR ID	String	6	Optional	Code for the vendor from whom items are being purchased.
ADDRESS SEQUENCE	Numeric	2	Optional	Code designating which of the vendor's addresses to use.
:	String	30	System-supplied	Vendor name.
STATUS	String	1	Optional; null, R, C, or X	Code for the status of the purchase order. Null = Active; R = Released; C = Completed; X = Cancelled. NOTE: The system updates the status to "C" automatically when certain criteria are met. See the Purchase Order Processing section for details.
BUYER	String	6	Optional	Code for a person authorized to purchase the item. The operator can zoom to the Buyer table and choose the code, if it had been entered there previously. (See the Buyer Manager section.)
:	String	30	System-supplied	Buyer name.
PURCHASE TERMS CODE	String	2	Optional	Code for the terms under which the items are being purchased. The operator can zoom to the Sales/Purchase Terms Code file and choose the code, if it had been entered there previously. (See the Sales/Purchase Terms Manager section.)
:	String	20	System-supplied	Description of purchase terms.
VENDOR POC	String	30	Optional	Name of the person designated as the point of contact at the vendor facility.

Table 4.3.4-37. Purchase Order Modification Field Descriptions (2 of 2)

Field Name	Data Type	Size	Entry	Description
TYPE OF ORDER CODE	String	1	Optional	Code that distinguishes among purchase orders according to purpose. This field should always be left at the default of 'S'.
OUTSIDE CONTRACTOR (YN)	String	1	Optional; Y or N	Flag indicating if the vendor is an outside contractor. This field should always be set to "Y".
CCR #	String	30	Optional	Identifier for the CCR authorizing the purchase.
TROUBLE TICKET	String	15	Optional	Identifier for the trouble ticket associated with the purchase order.
ESTIMATED DUE DATE	Date	2	Optional	Date the material being ordered is expected.
ENTRY DATE	Date	2	Optional	Date the purchase order was created.
ORDER START DATE	Date	2	Optional	Date the purchase order should be released in order for the material to be received when due.
OPERATOR ID	String	8	Optional	Login ID of the operator who added this order to the database.
NOTE	String	60	Optional	A 60-character note attached to the PO.
Total	Numeric	10	System-supplied	Value of the order.

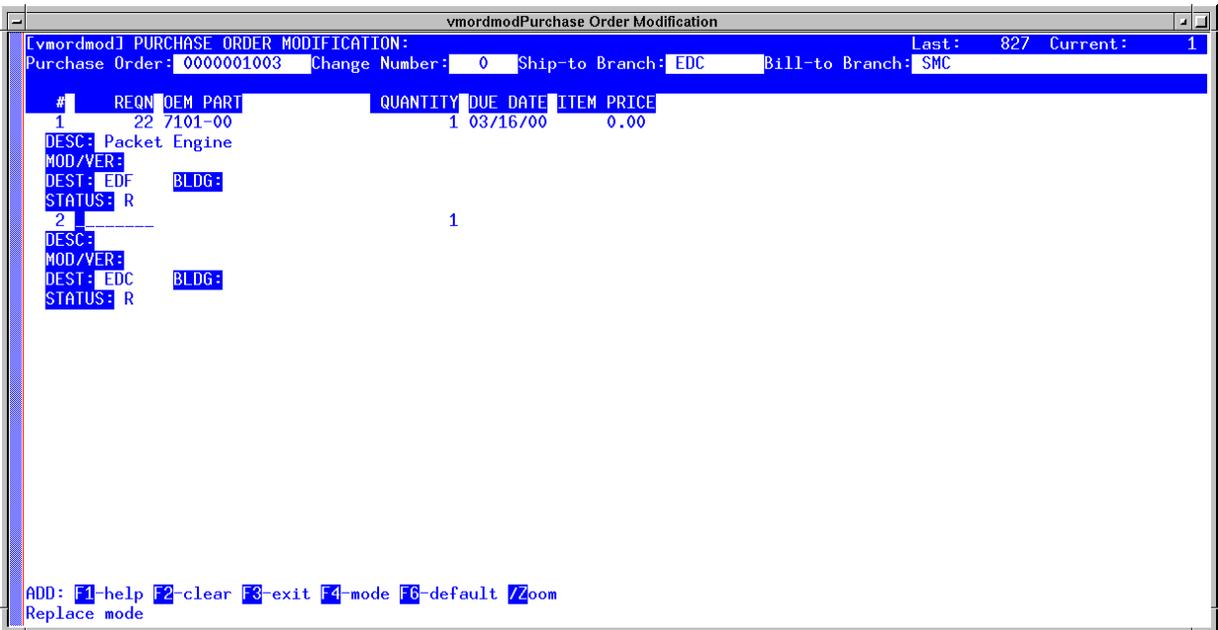


Figure 4.3.4-46. Items Page for Purchase Order Modification CHUI

Table 4.3.4-38 describes the fields on the Items Page for Purchase Order Modification screen.

Table 4.3.4-38. Items Page for Purchase Order Modification Field Descriptions

Field Name	Data Type	Size	Entry	Description
#	Numeric	4	Required	Sequence number for the purchase order's line items.
REQN	Numeric	8	Optional	Number identifying the requisition satisfied by this line item.
OEM PART	String	34	Required	The manufacturer's part number of the item(s) you are ordering. The field, DESC, is automatically filled with the selected part's description when you make this selection. The operator can zoom to the OEM Part table and choose the number, if it had been entered there previously. (See the OEM Part Numbers section.)
QUANTITY	Floating	10.1	Required; default is "1"	Number of items on order.
DUE DATE	Date	2	Optional; default is 45 days past the current date	Date the item is due to be received.
ITEM PRICE	Floating	11.4	Optional; default is the cost from the OEM Part table	Purchase cost of the item. Same as COST.
DESC	String	40	Optional	A description of the item. If a value for OEM part number had been entered, the system supplies the manufacturer's or vendor's description if one is available.
MOD/VER	String	24	Optional	Model or Version of the item.
DEST	String	6	Optional; default is the PO's value for Ship-to Branch	Code for the inventory location where the item is to be shipped. The operator can zoom to the Inventory Location table and choose the code, if it had been entered there previously. (See the Inventory Location Manager section.)
BDLG	String	6	System-supplied	Identifier for the building where the item is to be shipped.
STATUS	String	1	Optional	Code for the status of the item. Null = Inactive; F = Firm planned; R = Released; C= Complete; X = Cancelled

4.3.4.2.5.5 Purchase Order Print Screen

The Purchase Order Print screen (Figure 4.3.4-47) prints user-specified Purchase Orders for mailing to the vendor or providing copies to the receiving dock. The system prints “active” purchase orders only (i.e., those having a null status code), unless the operator had specified to include orders previously released.

Enter values to be used as criteria for selecting which purchase orders to print, then invoke the Execute bottom-line command.

Note: Printing an active purchase order in effect releases it, and causes the system to change its status to “R”.

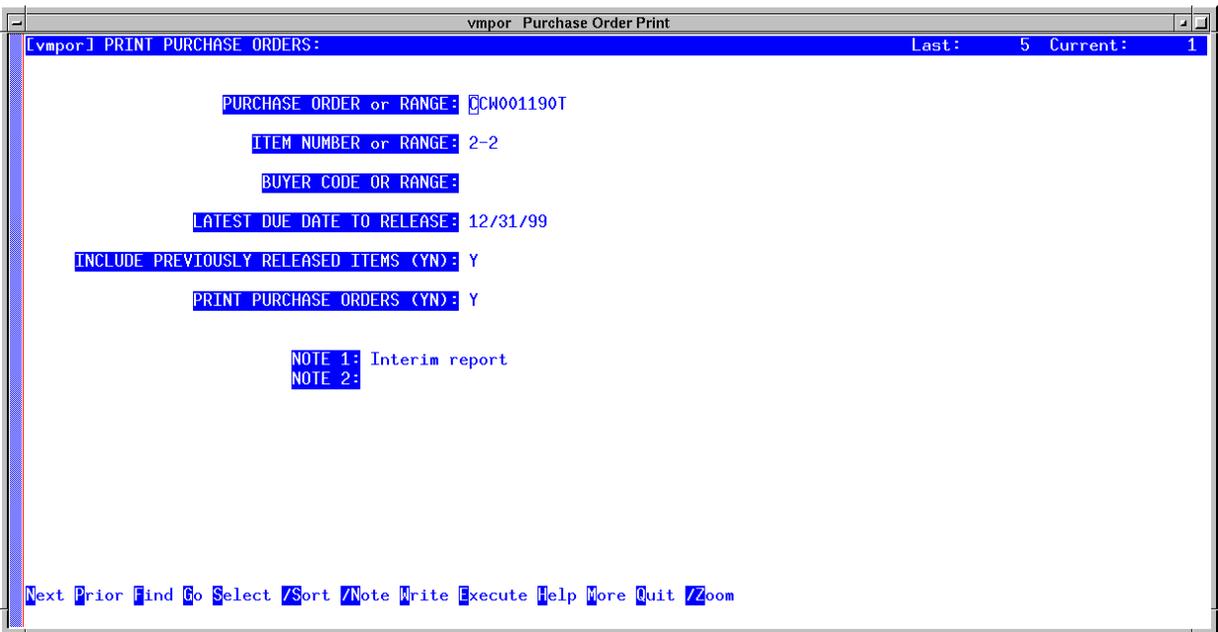


Figure 4.3.4-47. Purchase Order Print CHUI

Table 4.3.4-39 describes the fields on the Purchase Order Print screen.

Table 4.3.4-39. Purchase Order Print Field Descriptions

Field Name	Data Type	Size	Entry	Description
PURCHASE ORDER or RANGE	String	10	Required	Identifier for the purchase order. The operator can zoom to the Purchase Order table and choose an identifier, if it had been entered there previously. (See the Purchase Order entry section.)
ITEM NUMBER or RANGE	String	8	Optional	Item number(s) to report.
BUYER CODE OR RANGE	String	2	Optional	Code used to identify the buyer. The operator can zoom to the Buyer table and choose the code, if it had been entered there previously. (See the Buyer Manager section.)
LATEST DUE DATE to RELEASE	String	8	Optional	Date beyond which a purchase order must not be due. This entry keeps purchase orders from being printed, and thereby released, too early.
INCLUDE PREVIOUSLY RELEASED ITEMS (YN)	String	1	Optional; Y or N	Flag designating whether to include in the report any purchase orders previously released. If set to "N", only "active" PO's are printed.
PRINT PURCHASE ORDERS (YN)	String	1	Required; Y or N	Flag designating whether to print PO's that are currently "active" (i.e., having a null status code). Entering "Y" prints these PO's and sets their status to "R". If set to "N", the system only prints labels.
NOTE 1, 2	String	40	Optional	A 40-character message to include in the report.

4.3.4.2.5.6 Purchase Order Status

The Purchase Order Status screen (Figure 4.3.4.48) lets operators browse all purchase order records, including those that have been closed or cancelled. No updates are allowed. The items bottom-line command is available and is the same as the Purchase Order Modification screen's (refer to Section 4.3.4.2.6.5.4), except it does not allow updates either.

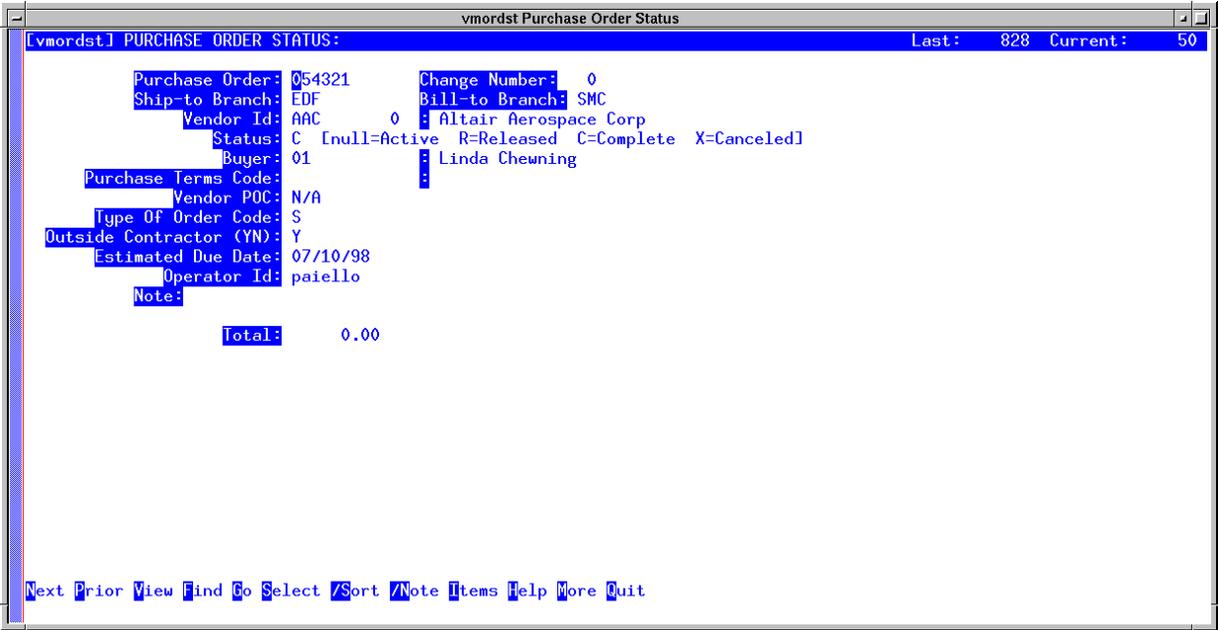


Figure 4.3.4-48. Purchase Order Status CHUI

Table 4.3.4-40 describes the fields on the Purchase Order Status screen.

Table 4.3.4-40. Purchase Order Status Field Descriptions (1 of 2)

Field Name	Data Type	Size	Entry	Description
Purchase Order	String	10	System-supplied	Identifier for the purchase order.
Change Number	Numeric	3	System-supplied	Number identifying the revision level for the PO.
Ship-To Branch	String	6	System-supplied	Code for the site to which the material is to be shipped.
Bill-To Branch	String	6	System-supplied	Code for the site the vendor is to bill.
Vendor Id	String	6	System-supplied	Code for the vendor from whom items are being purchased.
:	String	30	System-supplied	Vendor name.
Status	String	1	System-supplied	Code for the status of the purchase order. Null = Active; R = Released; C = Completed; X = Cancelled.
Buyer	String	6	System-supplied	Code for a person authorized to purchase the item.

Table 4.3.4-40. Purchase Order Status Field Descriptions (2 of 2)

Field Name	Data Type	Size	Entry	Description
:	String	30	System-supplied	Buyer name.
Purchase Terms Code	String	2	System-supplied	Code for the terms under which the items are being purchased.
:	String	20	System-supplied	Description of the purchase terms.
Vendor Poc	String	30	System-supplied	Name of the person designated as the point of contact at the vendor facility.
Type Of Order Code	String	1	System-supplied	Code that distinguishes among purchase orders according to purpose. This field should always be left at the default of 'S'.
Outside Contractor (YN)	String	1	System-supplied	Flag indicating if the vendor is an outside contractor. This field should always be set to "Y."
Estimated Due Date	Date	2	System-supplied	Date the material being ordered is expected.
Operator Id	String	8	System-supplied	The login ID of the operator who added this item to the database.
Note	String	60	System-supplied	A 60-character note attached to the purchase order.
Total	Numeric	10	System-supplied	The system calculated value of the order.

4.3.4.2.5.7 Receipt Confirmation Screen

The Receipt Confirmation screen (Figure 4.3.4-49) handles receiving of materials obtained through purchase orders. It is the primary means of adding to the catalog of EINs in the system and adjusting inventory records to account for new items, including consumables and spares.

Received items are tied to receipts, a receipt being a list of items received against the same purchase order. Although multiple purchase orders cannot use the same receipt, a purchase order can use multiple receipts as long as at most one of the receipts is open at a time. That is, operators can accumulate items in an open receipt until all the purchase order's items have been received, or they can close a receipt as they wish and open new ones as needed for the order's remaining items. Closing all receipts each day permits tracking how many items were received each day.

When items arrive, create a new receipt, if necessary, always letting the system assign the next, sequential number for an identifier. Enter the purchase order number and other details. If a receipt is already open for that PO, the system warns you to use it instead. It won't be hard to locate since the screen displays only "open" receipts. (Using table view or the Find command on

the purchase order field should help.) Table 4.3.4-41 describes the Receipt Confirmation screens fields.

Use the Items command to add the new items to the receipt. The items page (Figure 4.3.4-50) displays all of the order's line items regardless of status and quantity due. Enter in this screen the actual quantities of each line item received and then exit. Upon exit, the system asks to process the transaction and, if the response is yes, attempt to determine for each item received whether it is a consumable, or spare. Consumables are processed automatically, but an EIN Entry Manager screen is invoked for each spare and other EIN received so the items can be properly catalogued. The system also asks to close the receipt if it determines no more items are due against the purchase order. Table 4.3.4-42 describes the items page's fields.

Note: Consider listing the same part as different items on a receipt if the items were received at different locations.

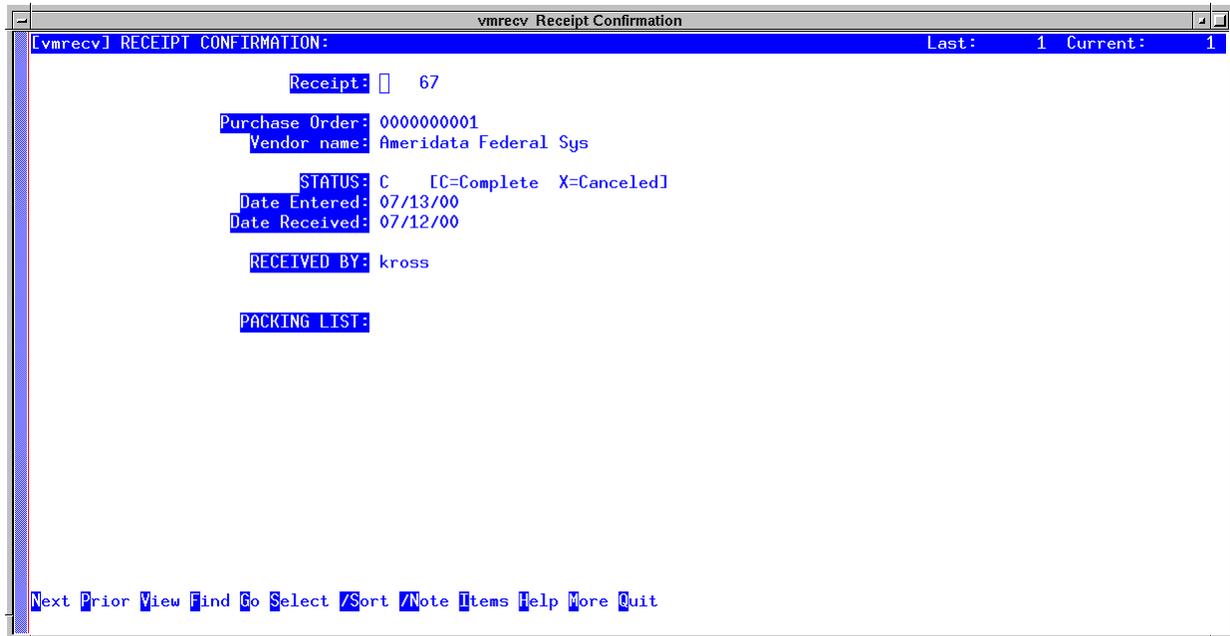


Figure 4.3.4-49. Receipt Confirmation CHUI

Table 4.3.4-41 describes the fields on the Receipt Confirmation screen.

Table 4.3.4-41. Receipt Confirmation Field Descriptions

Field Name	Data Type	Size	Entry	Description
Receipt	Numeric	6	Required	Number assigned to order during receipt process.
Purchase Order	String	10	Optional	Identifier for the PO associated with this receipt.
Vendor name	String	35	Optional	Name of the vendor fulfilling the PO.
STATUS	String	1	Optional	Code for status of the receipt. Null = Open; C = Complete; X = Cancelled
Date Entered	Date	2	System-supplied	Date the receipt was created.
Date Received	Date	2	System supplied	Date the item was received.
RECEIVED BY	String	4	Optional	Identifier for the operator entering this receipt.
PACKING LIST	String	20	Optional	Tracking Identifier/ ID of the packing list included in the received shipment.

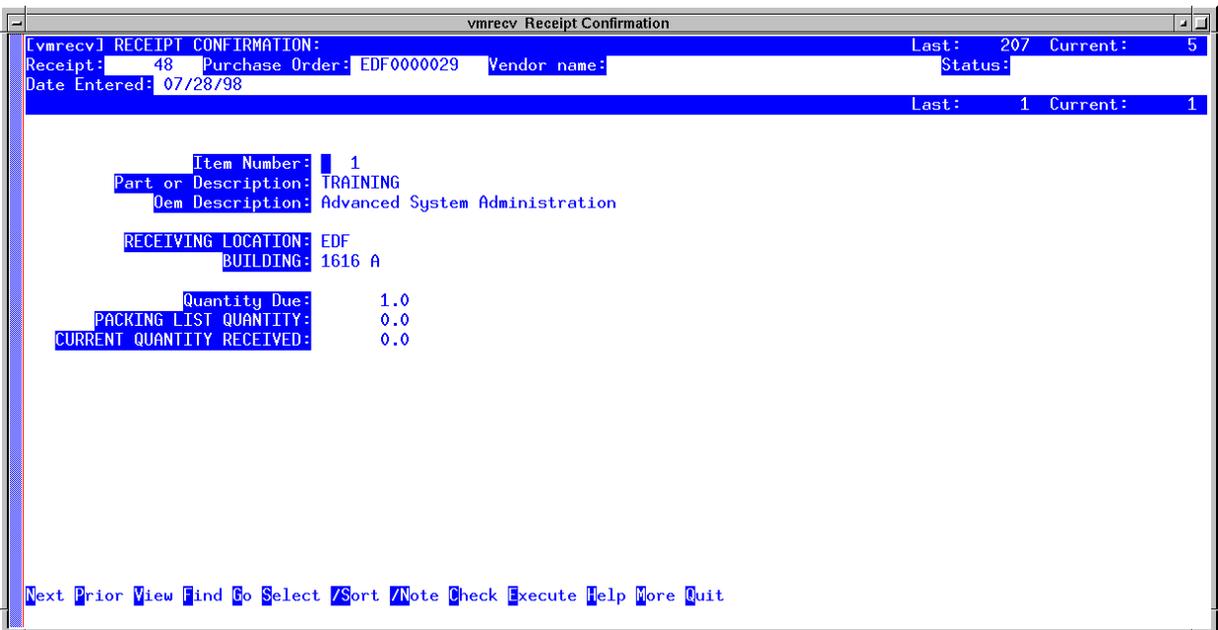


Figure 4.3.4-50. Items Page for Receipt Confirmation CHUI

Table 4.3.4-42 describes the fields on the Items Page for Receipt Confirmation screen.

Table 4.3.4-42. Items Page for Receipt Confirmation Field Descriptions

Field Name	Data Type	Size	Entry	Description
Item Number	Numeric	4	System-supplied	Sequence number for the item on the item page.
Part or Description	String	10	Optional	Manufacturer's or vendor's part number for the item.
Oem Description	String	35	Optional	Manufacturer or vendor's description of the item.
RECEIVING LOCATION	String	1	Optional; default is the destination from the purchase order line item's record	Code for the inventory location receiving the item.
BUILDING	Date	2	Optional; default is the building from the purchase order line item's record	Identifier for the building where the item is to be delivered.
Quantity Due	Floating	9.1	System-supplied	Quantity of the item still due: the sum of the original order quantity, plus the quantity authorized for return to the vendor, minus the quantity received to date.
PACKING LIST QUANTITY	Floating	9.1	Optional	Quantity shown by the vendor on the packing list.
CURRENT QUANTITY RECEIVED	Floating	9.1	Required	Quantity of the item received this transaction.

4.3.4.2.5.8 Print Receipt Reports Screen

The Print Receipt Reports screen (Figure 4.3.4-51) provides the ability to print past receipt reports. Enter record selection criteria and the number of copies required as indicated by Table 4.3.4-43, then invoke the Execute bottom-line command. Respond to the report processing prompts as appropriate.

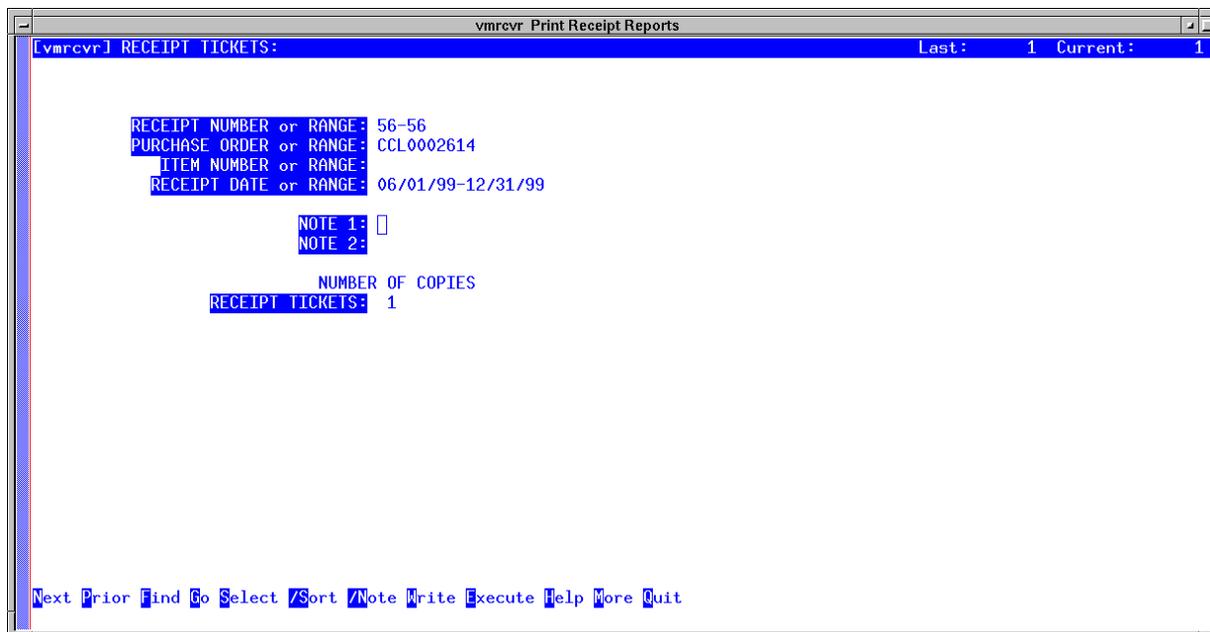


Figure 4.3.4-51. Print Receipt Reports CHUI

Table 4.3.4-43 describes the fields on Print Receipt Reports screen.

Table 4.3.4-43. Print Receipt Reports Field Descriptions

Field Name	Data Type	Size	Entry	Description
RECEIPT NUMBER or RANGE	String	6	Required	Receipt tracking number(s) to report. The operator can zoom to the Receipts table and choose the number, if it had been entered there previously. (See the Receipt Confirmation section.)
PURCHASE ORDER or RANGE	String	10	Optional	Identifier or range of identifiers for one or more purchase orders. The operator can zoom to the Purchase Order table and choose the number, if it had been entered there previously. (See the Purchase Order Entry section.)
ITEM NUMBER or RANGE	String	8	Optional	Item number(s) to report.
RECEIPT DATE or RANGE	Date	2	Optional	Receipt date(s) to report.
NOTE 1 and NOTE 2	String	40	Optional	A 40-character message to include in the report.
RECEIPT TICKETS	String	1	Required	Number of copies of the report to print.

4.3.4.2.5.9 Purchase Order Processing Screen

Operators use the Purchase Order Processing screen (Figure 4.3.4-52) to close all open PO's that meet established criteria: namely, the percentage of completion of each item and the number of days without any activity in the order. Values for these parameters are preset in the System Parameters table to "0" and are not modifiable via data entry screen in the ILM configuration deployed. As is, running this program automatically closes all PO's not modified since the previous day.

Enter "F", "B" or "A" in response the screen's prompt to run the program in the foreground, run it in the background, or reject running it at all, respectively.

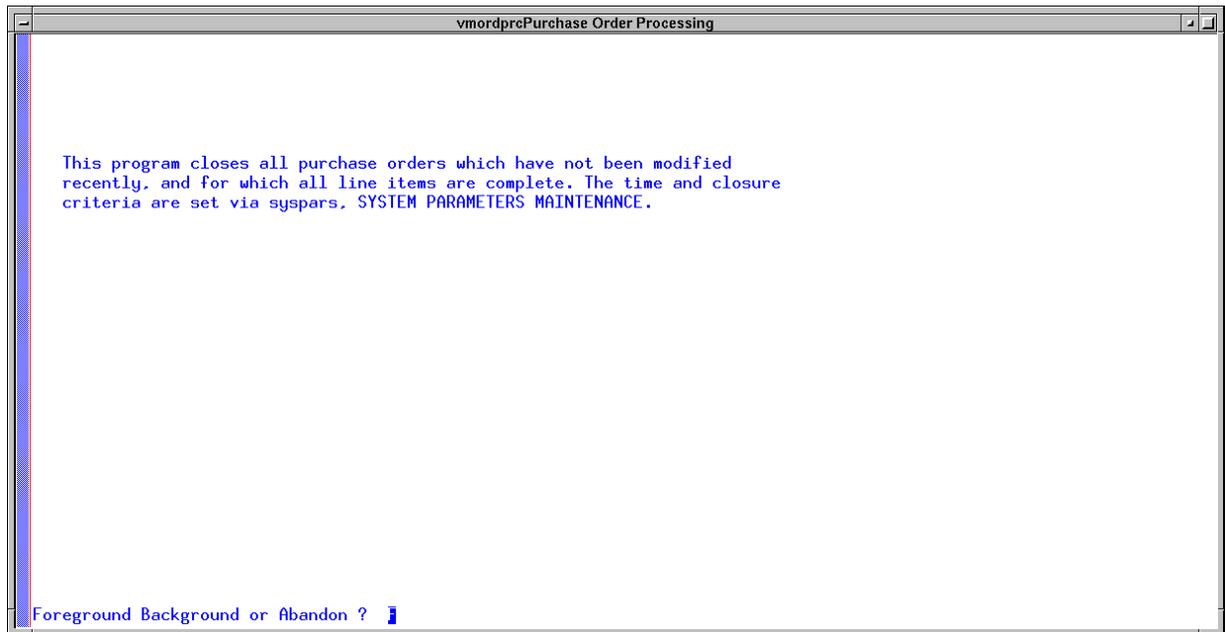


Figure 4.3.4-52. Purchase Order Processing CHUI

4.3.4.2.5.10 Vendor Master Manager Screen

The Vendor Master Manager screen (Figure 4.3.4-53) permits the entry and modification of vendors and address data to the system. The operator enters or modifies the fields for this screen as required (see Table 4.3.4-44), then uses the screen's Addr command to invoke the address page (Figure 4.3.4-54) to update address data for the vendor (see Table 4.3.4-45).

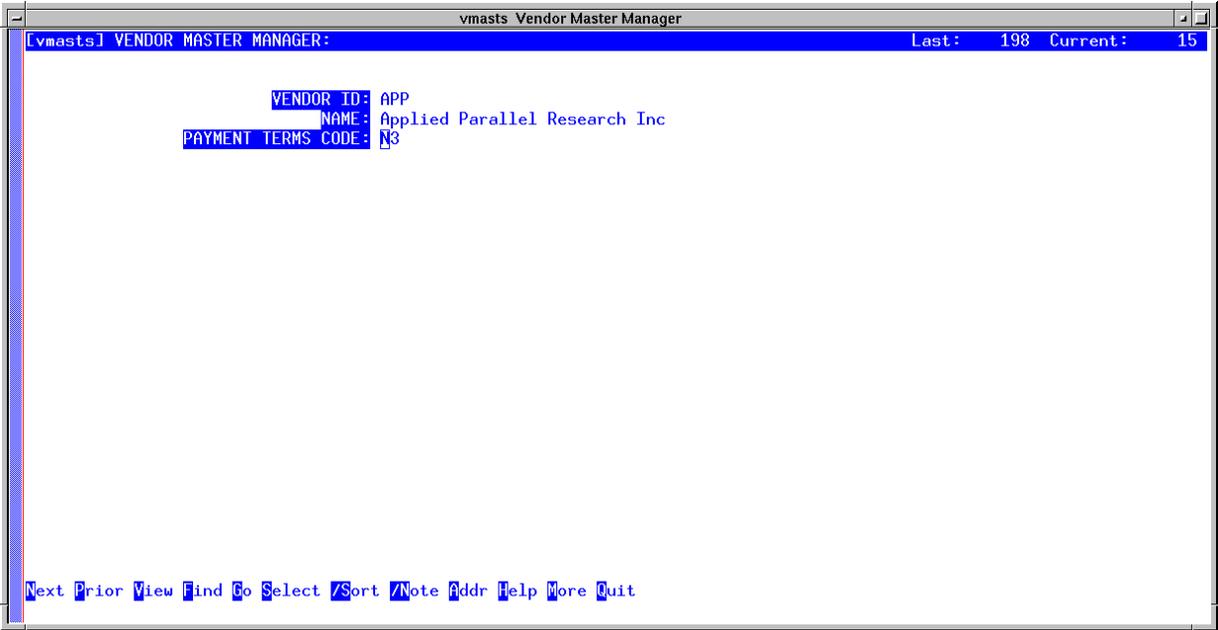


Figure 4.3.4-53. Vendor Master Manager CHUI

Table 4.3.4-44 describes the fields on the Vendor Master Manager screen.

Table 4.3.4-44. Vendor Master Manager Field Descriptions

Field Name	Data Type	Size	Entry	Description
VENDOR ID	String	6	Required	Code for a vendor from whom items are purchased.
NAME	String	30	Optional	Full name of a vendor from who items are purchased.
PAYMENT TERMS CODE	String	2	Optional	Code for the default payment terms for invoices for the vendor. The operator can zoom to the Payment Terms table to choose the code, if it had been entered there previously. (See the Sales/Purchase Terms Maintenance section.)

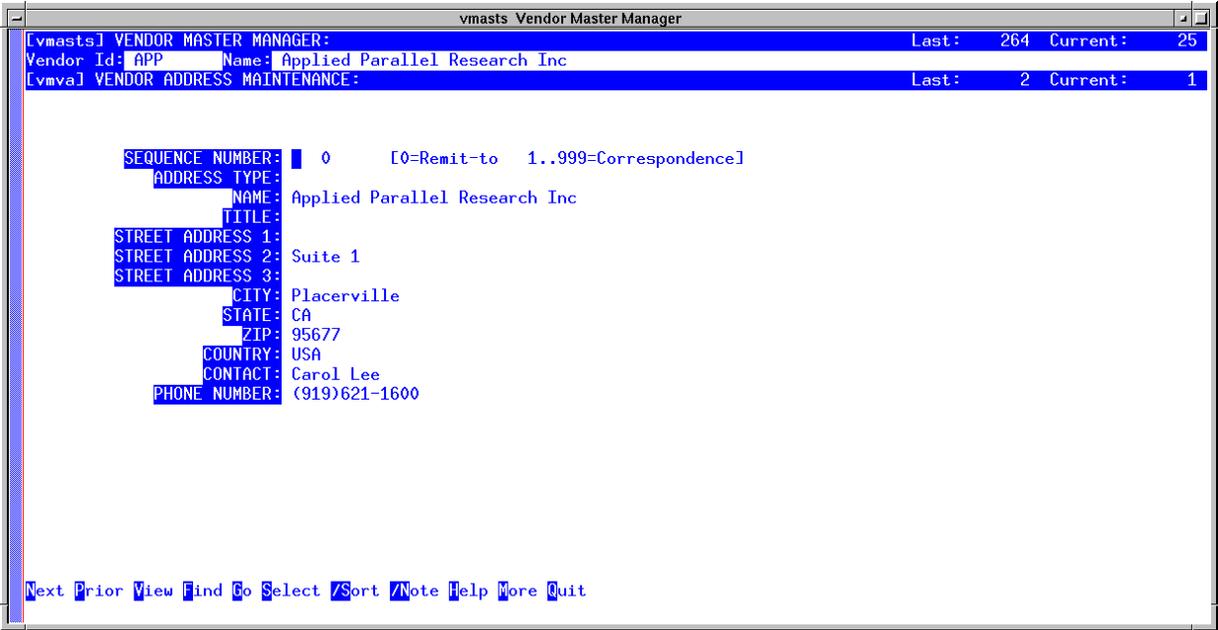


Figure 4.3.4-54. Address Page for Vendor Master Manager CHUI

Table 4.3.4-45 describes the fields on the Address Page for Vendor Master Manager screen.

**Table 4.3.4-45. Address Page for Vendor Master Manager
Field Descriptions**

Field Name	Data Type	Size	Entry	Description
SEQUENCE NUMBER	Numeric	3	Required	Number that uniquely identifies each address for a company. The value "0" is interpreted as the default.
ADDRESS TYPE	String	2	Optional	Code that distinguishes among purposes for which the address is used.
NAME	String	30	Optional	Company name or individual's name that appears as the first line of the address.
TITLE	String	20	Optional	Title of an individual at the company.
STREET ADDRESS 1, 2, 3	String	30	Optional	Address for the vendor.
CITY	String	20	Optional	City part of address.
STATE	String	2	Optional	State 2-character abbreviation of address.
ZIP	String	10	Optional	Zip code of address.
COUNTRY	String	16	Optional	Country in which the vendor is located.
CONTACT	String	30	Optional	Name of a contact at the address.
PHONE	String	18	Optional	Telephone number of address.

4.3.4.2.6 Maintenance Menu

The ILM Maintenance Menu (Figure 4.3.4-55) helps operators navigate to data entry screens used to record and track maintenance oriented data, generate and track Work Orders for maintenance actions, and schedule preventative maintenance for appropriate items. These screens, which are discussed in the subsections below, include:

- Work Order Entry - for entering work orders for repairs.
- Work Order Modification (EDF) - for updating of work orders by central ILS managers as maintenance activity proceeds.
- Work Order Modification - for updating work orders by local maintenance coordinators as maintenance activity proceeds.
- Preventative Maintenance Items - for designating which items in the EIN file require preventative maintenance.
- Generate PM Orders - for generating work orders for items needing preventative maintenance.
- Work Order Parts Replacement History - for reporting items replaced under one or more work orders.
- Maintenance Work Order Reports - for reporting about maintenance activity on selected machines.
- Work Order Status Reports - for reporting the status of work orders.
- Maintenance Codes - for defining failure codes to be used when describing repairs and replacements.
- Maintenance Contracts - for managing information about maintenance contracts with vendors and suppliers.
- Authorized Employees - for identifying employees permitted access to vendors for repair notification.
- Work Order Line Item Query - for browsing line item records across multiple maintenance work orders.

Maintenance Work Orders (MWOs) are the heart of XRP-II's Maintenance Management functionality. They are used for collecting downtime information against equipment subject to Reliability, Maintainability, and Availability (RMA) reporting as well as to identify equipment that has failed and/or been replaced during system maintenance. By way of a special feature available to the Work Order Modification screen, operators can have the system update property records automatically based on the maintenance activities a work order describes.

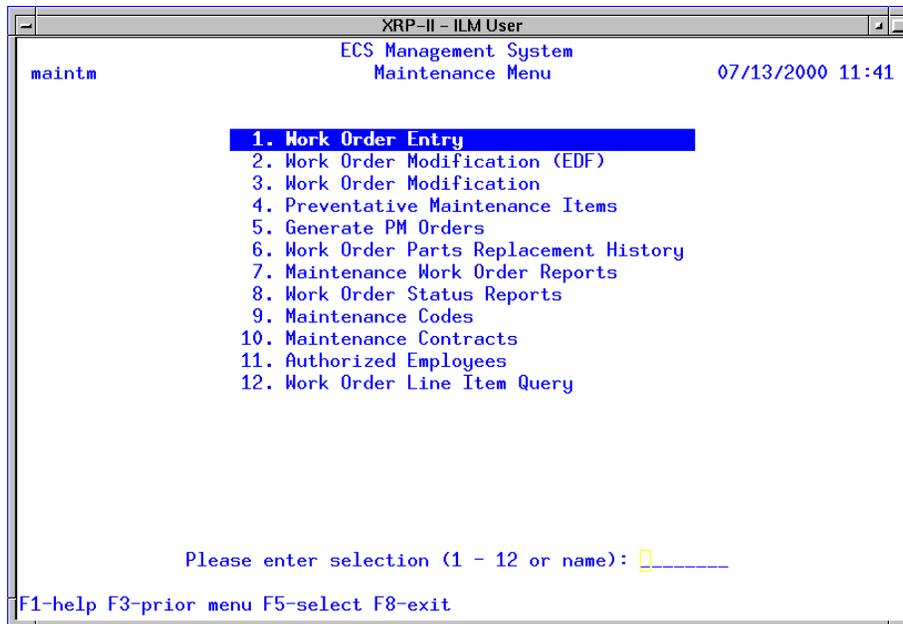


Figure 4.3.4-55. Maintenance Menu

4.3.4.2.6.1 Work Order Entry Screen

Operators use the Work Order Entry screen to create a maintenance work order (MWO) -- a work order for repairs. It consists of the header screen depicted in Figure 4.3.4-56 and a two-part items page. The header screen records key information about the system under maintenance, which is usually a parent item in an EIN structure for which failure and downtime data is being collected. The items page describes the maintenance actions performed on individual components that have failed, been replaced, or been added new.

The header screen is always presented in ADD mode to facilitate data entry. Table 4.3.4-46 describes this screen's fields. To create a maintenance work order, complete the required fields then exit ADD mode by pressing <F3>. Next, use the Items bottom-line command to add work order line items detailing the work performed on individual components. Line items can be added at the time the work order is created, or at some later time using the Work Order Modification screen. The items page is described in Section 4.3.4.2.6.2 since it is the same as the one attached to the Work Order Modification screen, where it is used most often. Press <F3> to exit the page and <F3> again to exit Work Order Entry.

Note: The Work Order Entry screen displays only those work orders created during the current session. After exiting Work Order Entry, newly created work orders can be viewed only by using the Work Order Modification screen. (See section 4.3.4.2.6.2 below.)

Note: When creating multiple MWOs, cursor down at the last field on the header screen instead of exiting ADD mode. XRP-II re-positions the cursor to the top of the screen and prepares to accept another record. Press <F3> to exit ADD mode when done.

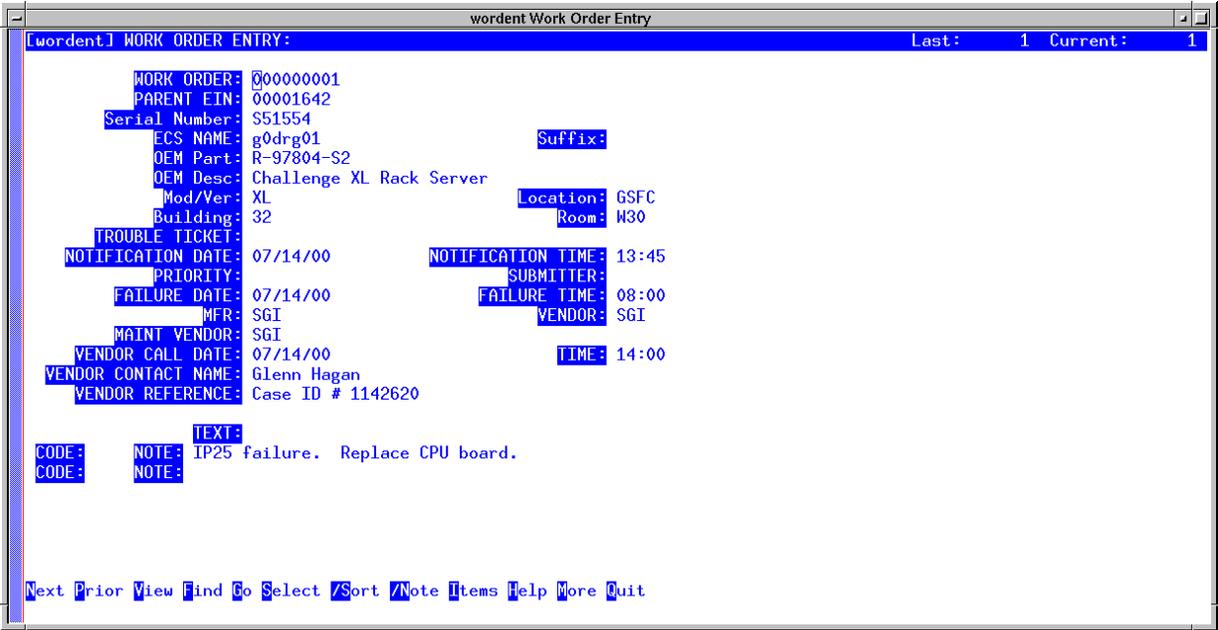


Figure 4.3.4-56. Work Order Entry CHUI

Table 4.3.4-46 describes the fields on the Work Order Entry screen.

Table 4.3.4-46. Work Order Entry Field Descriptions (1 of 3)

Field Name	Data Type	Size	Entry	Description
WORK ORDER	String	10	Required; <RETURN>	Identifier for the work order. The operator should always press RETURN. It causes the system to assign the next sequential number available based on the value for last work order number in file last.wo.x in the XRP database directory. The value typically has the first 3 characters of the site's code as a prefix.
PARENT EIN	String	20	Optional	EIN for the parent item in an EIN structure. The operator can zoom to the EIN table and choose the EIN, if it had been entered there previously. (See the EIN Entry section.)
Serial Number	String	30	System-supplied	Serial number of the item entered as parent EIN.
ECS NAME	String	30	System-supplied, but modifiable	Name of the machine with which the item is associated.

Table 4.3.4-46. Work Order Entry Field Descriptions (2 of 3)

Field Name	Data Type	Size	Entry	Description
Suffix	String	3	System supplied	Code which when used as a suffix to ECS Name forms an identifier (RMA ID) for equipment subject to RMA reporting.
OEM Part	String	34	System-supplied	Manufacturer's part number for the item entered as Parent EIN.
OEM Desc	String	30	System-supplied	Manufacturer's description for the item entered as Parent EIN.
Mod/Ver	String	24	System-supplied	Model or version of the item entered as Parent EIN.
Location	String	8	System-supplied	Designator for the inventory location of the item entered as Parent EIN.
Building	String	6	System-supplied	Building where the item entered as Parent EIN is situated.
Room	String	6	System-supplied	Room where the item entered as Parent EIN is situated.
TROUBLE TICKET	String	15	Optional	Identifier for the trouble ticket associated with the work order.
NOTIFICATION DATE	Date	2	Optional	Date notification of the failure was made.
NOTIFICATION TIME	Time	2	Optional	Time notification of the failure was made.
PRIORITY	String	1	Optional	Priority assigned to the work.
SUBMITTER	String	10	Optional	Code of the employee who submitted the problem and caused the work order to be opened. The operator can zoom to the Employee table to choose the code, if it had been entered there previously. (See the Employee Manager section.)
FAILURE DATE	Date	2	Optional	Date that the failure occurred.
FAILURE TIME	String	2	Optional	Time that the failure occurred.
MFR	String	6	Optional	Code for the manufacturer or developer of the item. The operator can zoom to the Vendor table and choose the code, if it had been entered there previously. (See the Vendor Master Manager section.)
VENDOR	String	6	Optional	Code for the vendor from whom the item was procured. The operator can zoom to the Vendor table and choose the code, if it had been entered there previously. (See the Vendor Master Manager section.)

Table 4.3.4-46. Work Order Entry Field Descriptions (3 of 3)

Field Name	Data Type	Size	Entry	Description
MAINT VENDOR	String	6	Optional	Code for the item's maintenance vendor. The operator can zoom to Vendor table and choose the code, if it had been entered there previously. (See the Vendor Master Manager section.)
VENDOR CALL DATE	Date	2	Optional	Date the vendor was called and informed of the problem.
TIME	Time	2	Optional	Time the vendor was called and informed of the problem.
VENDOR CONTACT NAME	String	30	Optional	Name of the vendor point of contact.
VENDOR REFERENCE	String	20	Optional	Identifier to be referenced when contacting the vendor about the problem with the item.
TEXT	String	N/A	Optional	A block of free form text for describing maintenance-related activities.
CODE 1, 2	String	2	Optional	Identifier for a type or category of note associated with the item.
NOTE 1, 2	String	60	Optional	A 60-character note that can be associated with this item.

4.3.4.2.6.2 Work Order Modification (EDF) Screen

The Work Order Modification (EDF) screen provides the ability to update maintenance work orders as maintenance activity proceeds and as additional information about the repair becomes known. It also has a special feature that updates property records on demand based on events and data described in a work order's line items.

Work Order Modification (EDF) consists of a two-part header screen for recording failure and downtime for the system under maintenance and a two-part items page for describing work performed on the system's components. It functions much the same as Work Order Entry (see Section 4.3.4.2.6.1) except it can accept more information, can be used to view all work orders pertinent to the site, and can process work order line items to update property records based on line item information. The following bottom-line command is unique to the header screen, and is discussed later in this section:

- **.Process_Changes** - updates EIN property records based on information in the line item records for the Maintenance Work Order.

When Work Order Modification (EDF) is invoked, XRP-II presents the header screen's left (main) page. The operator can enter or modify information in fields that allow it. Use of the Right command presents the header screen's right (chargeable hours) page on which cumulative downtime data can be recorded. Figures 4.3.4-57 and 4.3.4-58 depicts these pages, and Tables 4.3.4-47 and 4.3.4-48 describe their fields.

The header screen's Items command provides access to the items page for adding or accessing data about components involved in individual maintenance actions. In general, a line item would be created for each EIN-controlled component that has failed, been replaced, or been added new. Line items can be created even if an EIN record does not exist for the component, and operators can record observed details about a repair item even if the details conflict with what is currently contained in the EIN record for the item. Like the header screen, the items page has left and right pages (Figures 4.3.4-59 and 4.3.4-60).

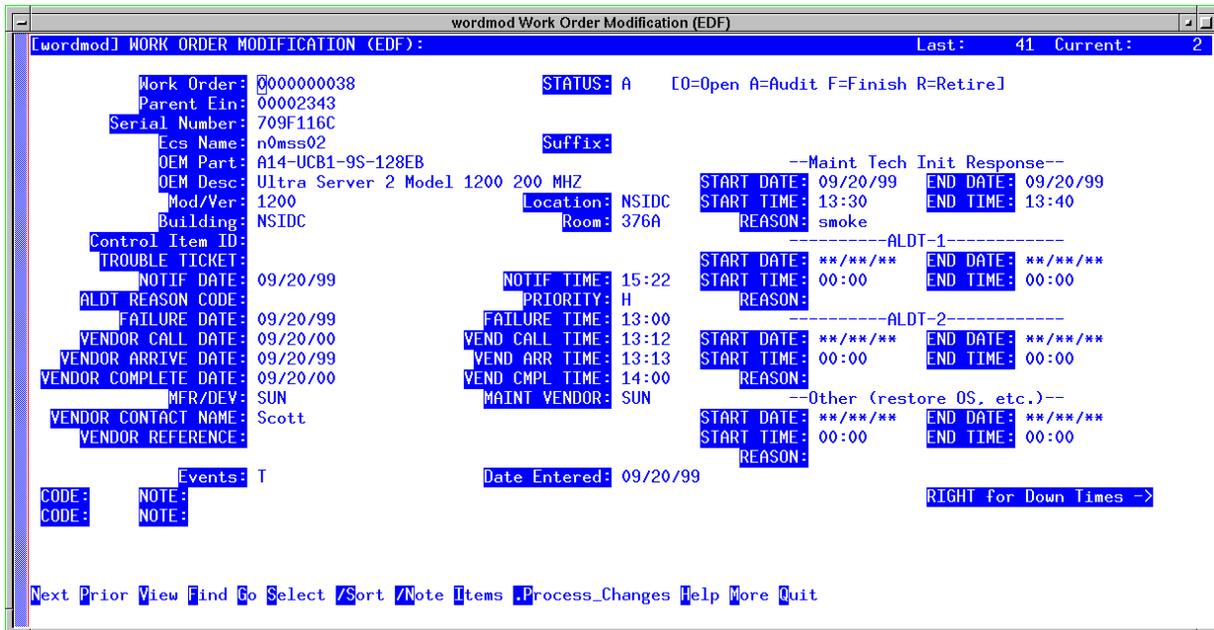


Figure 4.3.4-57. Work Order Modification (EDF) Screen

Table 4.3.4-47 describes the fields on the Work Order Modification screen.

Table 4.3.4-47. Work Order Modification (EDF) Field Descriptions (1 of 4)

Field Name	Data Type	Size	Entry	Description
Work Order	String	10	System-supplied	Identifier for the work order.
STATUS	String	1	Optional; O, A, F, or R	Code for the status of the work order. O = Open; A = Audit; F=Finish; R = Retired.
Parent Ein	String	20	Optional	EIN for the parent item in an EIN structure. The operator can zoom to the EIN table and choose the EIN, if it had been entered there previously. (See the EIN Entry section.)
Serial Number	String	30	System-supplied from EIN record	Serial number of the item entered as Parent EIN.

Table 4.3.4-47. Work Order Modification (EDF) Field Descriptions (2 of 4)

Field Name	Data Type	Size	Entry	Description
Ecs Name	String	30	System-supplied from EIN record	Name of the machine with which the item is associated.
Suffix	String	3	System supplied	Code which when used as a suffix to ECS Name forms an identifier (RMA ID) for equipment subject to RMA reporting.
OEM Part	String	34	System-supplied from EIN record	Manufacturer's part number for the item entered as Parent EIN.
OEM Desc	String	30	System-supplied from EIN record	Manufacturer's description for the item entered as Parent EIN.
Mod/Ver	String	24	System-supplied	Model or version number of the item entered as Parent EIN.
Location	String	8	System-supplied from EIN record	Designator for the location where the item entered as Parent EIN is situated.
Building	String	6	System-supplied from EIN record	Building in which the item entered as Parent EIN is situated.
Room	String	6	System-supplied from EIN record	Room in which the item entered as Parent EIN is situated.
Control Item ID	String	30	System-supplied from EIN record	Baseline control item id for the item entered as Parent EIN.
TROUBLE TICKET	String	15	Optional	Identifier for the trouble ticket associated with the work order.
NOTIFICATION DATE	Date	2	Optional	The date problem was reported. This field is initialized with the current date but can be modified.
NOTIFICATION TIME	Time	2	Optional	The time problem was reported. This field is initialized with the current time but can be modified.
ALDT REASON CODE	String	10	Optional	Code for the maintenance action's administrative logistic delay time (ALDT).
PRIORITY	String	1	Optional	Code for the priority assigned to the work.
FAILURE DATE	Date	2	Optional	Date that the failure occurred.
FAILURE TIME	Time	2	Optional	Time that the failure occurred.
ALDT	Floating	9.1	Optional	Duration, in hours, of any administrative logistic delays due the failure (i.e., delays, after repair has started, that prevent the "system" from returning to an available state).

Table 4.3.4-47. Work Order Modification (EDF) Field Descriptions (3 of 4)

Field Name	Data Type	Size	Entry	Description
VENDOR CALL DATE	Date	2	Optional	The date the maintenance vendor was called.
VENDOR CALL TIME	Time	2	Optional	The time the maintenance vendor was called.
VENDOR ARRIVE DATE	Date	2	Optional	The date the maintenance vendor actually arrived to perform the repairs.
VENDOR ARRIVE TIME	Time	2	Optional	The time the vendor actually arrived to perform the repairs.
VENDOR COMPLETE DATE	Date	2	Optional	Date the repair was completed.
VENDOR COMPLETE TIME	Time	2	Optional	Time the repair was completed.
MFR/DEV	String	6	Optional; default is value from EIN record	Code identifying the manufacturer or developer of the specified parent EIN. The operator can zoom to the appropriate data file and pick the desired code. NOTE: This data must be previously entered with screen Vendor Master Manager (vmasts).
MAINT VENDOR	String	6	Optional; default is value from EIN record	Code identifying the maintenance vendor for the specified parent EIN. The operator can zoom to the Vendor data file and choose the appropriate code. NOTE: This information must be previously entered using screen Vendor Master Manager (vmasts).
VENDOR CONTACT NAME	String	30	Optional	Vendor point of contact.
VENDOR REFERENCE	String	20	Optional	Operator has option to enter any information in reference to the vendor.
Events	Text	N/A	Optional	Free form field for describing maintenance-related activities.
Date Entered	Date	2	System supplied	Date the record was created.
CODE 1,2	String	2	Optional	The administrator can set up codes for their specific needs if desired.
NOTE 1,2	String	60	Optional	This field is used to enter a 60-character note attached to this item.
START DATE (Maint Tech Init Response)	Date	2	Optional	The date a delay in repairing the system began.
START TIME (Maint Tech Init Response)	Time	2	Optional	The time a delay in repairing the system began.

Table 4.3.4-47. Work Order Modification (EDF) Field Descriptions (4 of 4)

Field Name	Data Type	Size	Entry	Description
Reason (Maint Tech Init Response)	String	4	Optional	A code for the reason a delay was encountered.
END DATE (Maint Tech Init Response)	Date	2	Optional	The date a delay in repairing the system ended.
END TIME (Maint Tech Init Response)	Time	2	Optional	The time a delay in repairing the system ended.
REASON (Maint Tech Init Response)	String	4	Optional	A code for the reason a delay was encountered.
START DATE (ALDT-1)	Date	2	Optional	The date a delay in repairing the system began.
START TIME (ALDT-1)	Time	2	Optional	The time a delay in repairing the system began.
Reason (ALDT-1)	String	4	Optional	A code for the reason a delay was encountered.
END DATE (ALDT-1)	Date	2	Optional	The date a delay in repairing the system ended.
END TIME (ALDT-1)	Time	2	Optional	The time a delay in repairing the system ended.
REASON (ALDT-1)	String	4	Optional	A code for the reason a delay was encountered.
START DATE (ALDT-2)	Date	2	Optional	The date a delay in repairing the system began.
START TIME (ALDT-2)	Time	2	Optional	The time a delay in repairing the system began.
Reason (ALDT-2)	String	4	Optional	A code for the reason a delay was encountered.
END DATE (ALDT-2)	Date	2	Optional	The date a delay in repairing the system ended.
END TIME (ALDT-2)	Time	2	Optional	The time a delay in repairing the system ended.
REASON (ALDT-2)	String	4	Optional	A code for the reason a delay was encountered.
START DATE (Other)	Date	2	Optional	The date a delay in repairing the system began.
START TIME (Other)	Time	2	Optional	The time a delay in repairing the system began.
Reason (Other)	String	4	Optional	A code for the reason a delay was encountered.
END DATE (Other)	Date	2	Optional	The date a delay in repairing the system ended.
END TIME (Other)	Time	2	Optional	The time a delay in repairing the system ended.
REASON (Other)	String	4	Optional	A code for the reason a delay was encountered.

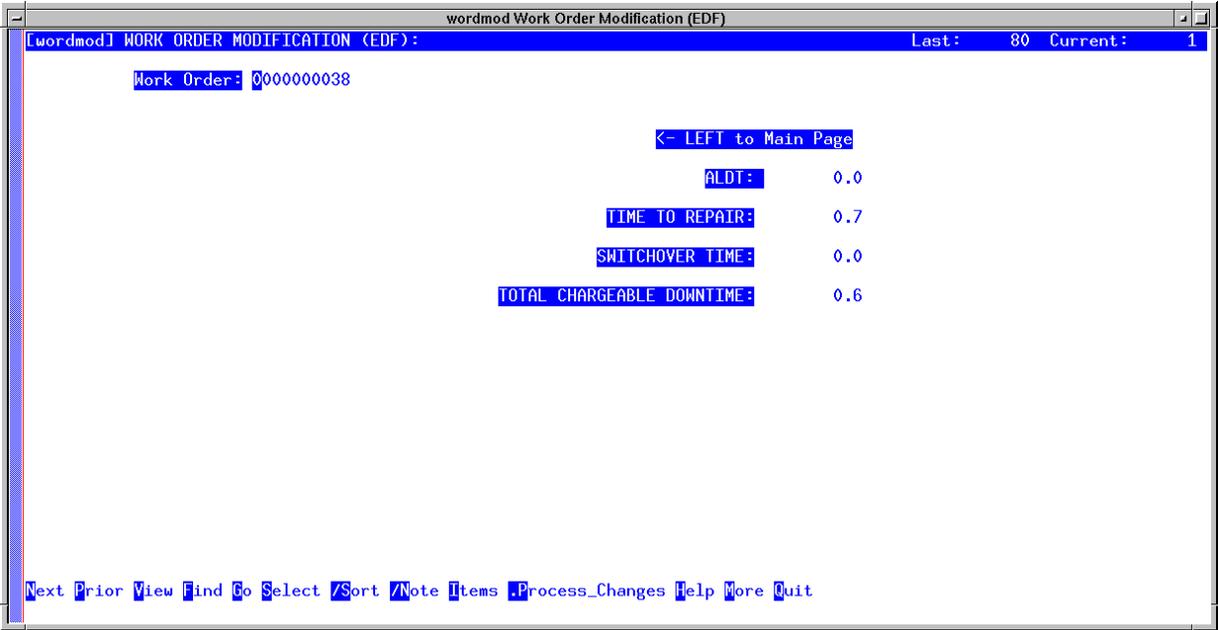


Figure 4.3.4-58. Chargeable Hours Page for Work Order Modification (EDF) CHUI

Table 4.3.4-48 describes the fields on the Chargeable Hours Page for Work Order Modification screen.

Table 4.3.4-48. Chargeable Hours Page for Work Order Modification (EDF) Field Descriptions

Field Name	Data Type	Size	Entry	Description
Work Order	String	10	System-supplied	Identifier for the work order.
ALDT	Floating	10.1	Optional	Administrative logistic delay time (ALDT) Specified in hours.
TIME TO REPAIR	Floating	10.1	Optional	Time required to effect the repair. Specified in hours.
SWITCHOVER TIME	Floating	10.1	Optional	Time required for system switchover. Specified in hours.
TOTAL CHARGEABLE DOWNTIME	Floating	10.1	Optional	Time to be charged for downtime. Specified in hours.

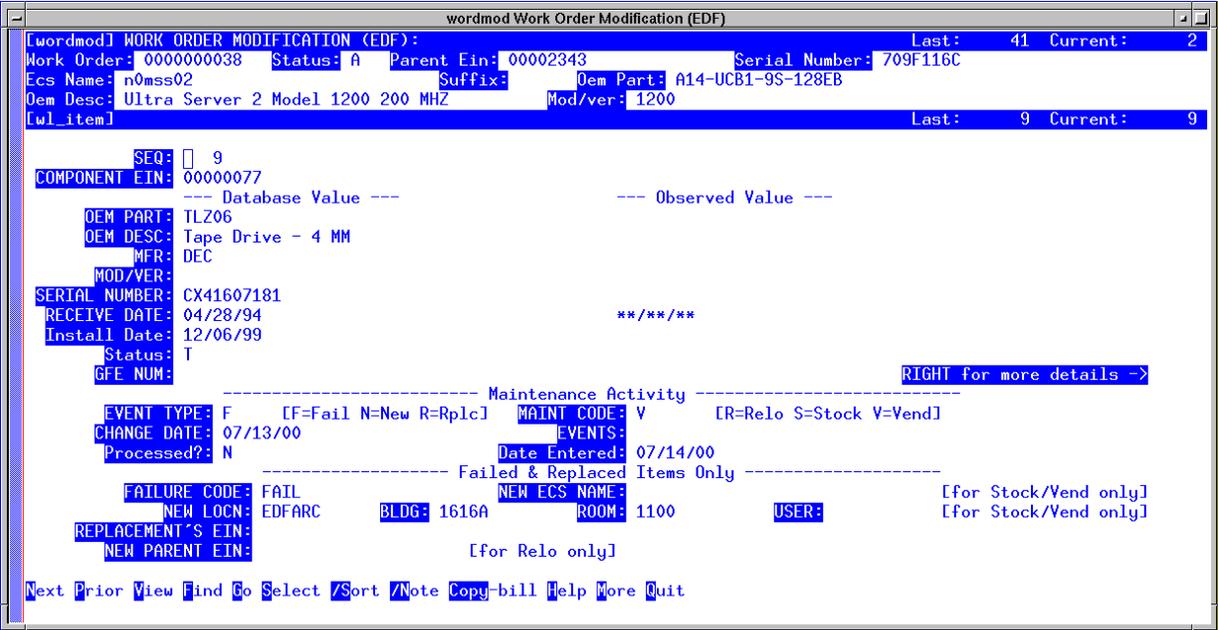


Figure 4.3.4-59. Items Page (Left) for Work Order Modification (EDF) CHUI (1 of 2)

Table 4.3.4-59 describes the fields on the Items Page (Left) for Work Order Modification screen.

Table 4.3.4-49. Items Page (Left) for Work Order Modification (EDF) Field Descriptions (1 of 3)

Field Name	Data Type	Size	Entry	Description
SEQ	Numeric	4	Required	Number used to distinguish among the line items of a Maintenance Work Order.
COMPONENT EIN	String	20	Optional	Identifier for an EIN-controlled items that is a child (component) of a parent EIN and the target of the maintenance event. The operator can zoom to the EIN table to choose an identifier, if it had been entered there previously (see the EIN Entry section). If the field is left null or blank, the system creates an inventory number with a C-prefix for it automatically when the line item is processed.
OEM Part	String	34	System-supplied from EIN record	Manufacturer's or vendor's part number for the item. The operator can zoom to the OEM Parts table to choose a number, if it had been entered there previously (see the OEM Parts section).

**Table 4.3.4-49. Items Page (Left) for Work Order Modification (EDF)
Field Descriptions (2 of 3)**

Field Name	Data Type	Size	Entry	Description
OEM Desc	String	40	System-supplied from EIN record	Manufacturer's or vendor's description of the item. The operator can zoom to the OEM Parts table to choose a description, if it had been entered there previously (see the OEM Parts section).
MFR	String	6	Optional	Code used for the manufacturer of the item. The operator can zoom to the Vendor table to choose a code, if it had been entered there previously (see the Vendor Master section).
MOD/VER	String	24	Optional	Model or Version of the item.
SERIAL NUMBER	String	30	Optional	Serial number of the item.
RECEIVE DATE	Date	2	Optional; default is the date from the item's EIN record	Date the item was received.
Install Date	Date	2	Optional	Date the item was installed.
Status	String	1	Optional	Code that designates the status of the item. The following values are set when processing transactions: R = Received; S = Shipped; I = Installed; X = Archived.
GFE NUM	String	8	Optional	Government Furnished Equipment (GFE) number for the item.
EVENT TYPE	String	1	Required	Code identifying a type of maintenance event (N=new item installed; F=failed item replaced; R=serviceable item replaced).
MAINT CODE	String	3	Required	Code designating the item's disposition. Property records are updated differently depending on the value entered.
CHANGE DATE	Date	2	Required	Effective date of the configuration change.
EVENTS				A block of free form text for describing maintenance-related activities. Press /Z ...
Processed?	String	1	System supplied	Flag signifying whether or not the line item has been processed by the Work Order's .P(rocess_Changes) bottom-line command. The command updates the Component EIN's property records.
Date Entered	Date	2	System supplied	Date the line item was created.
FAILURE CODE	String	2	Optional	Code designating the cause of failure. This code is only used with failed items (i.e., Event Type="F".) The operator can zoom to the Maintenance Codes table and choose the code, if it had been entered there previously. (See the Maintenance Codes section.)

**Table 4.3.4-49. Items Page (Left) for Work Order Modification (EDF)
Field Descriptions (3 of 3)**

Field Name	Data Type	Size	Entry	Description
NEW ECS NAME	String	30	Optional	ECS name to be recorded in the item's property record. This code is only applicable to items that have failed or are being replaced.
NEW LOCN	String	6	Optional	Code for the new inventory location to which the item is to be assigned. This field is used for items that have failed or are being replaced (i.e., Event Type="F" or Event Type="R") and are being returned to stock or to a maintenance vendor. The operator can zoom to the Inventory Locations table to choose a code, if it had been entered there previously (see the Inventory Locations section).
BLDG	String	6	Optional	New building where the item is to be installed. This field is used for items that have failed or are being replaced (i.e., Event Type="F" or Event Type="R") and are being returned to stock or to a maintenance vendor. The operator can zoom to the Inventory Locations table to choose a code, if it had been entered there previously (see the Inventory Locations section).
ROOM	String	6	Optional	Room where the item is to be installed. This field is used for items that have failed or are being replaced (i.e., Event Type="F" or Event Type="R") and are being returned to stock or to a maintenance vendor.
USER	String	10	Optional	New user to which the item is to be assigned. This field is used for items that have failed or are being replaced (i.e., Event Type="F" or Event Type="R") and are being returned to stock or to a maintenance vendor.
REPLACEMENT'S EIN		–		Identifier of the new item being used as a replacement. This field is used only for items that have failed or that are being replaced (i.e., Event Type="F", or Event Type="R").
NEW PARENT EIN	String	30	Required	EIN of the item to which the Component EIN is to be re-assigned. This field is applicable only to components that have failed or are being replaced (Event Type="F" or "R"), and are being relocated (Maint Code="R"). <i>The value must be supplied or the item does not get processed.</i> The operator can zoom to the EIN table to choose an identifier, if it had been entered there previously (see the EIN Entry section).

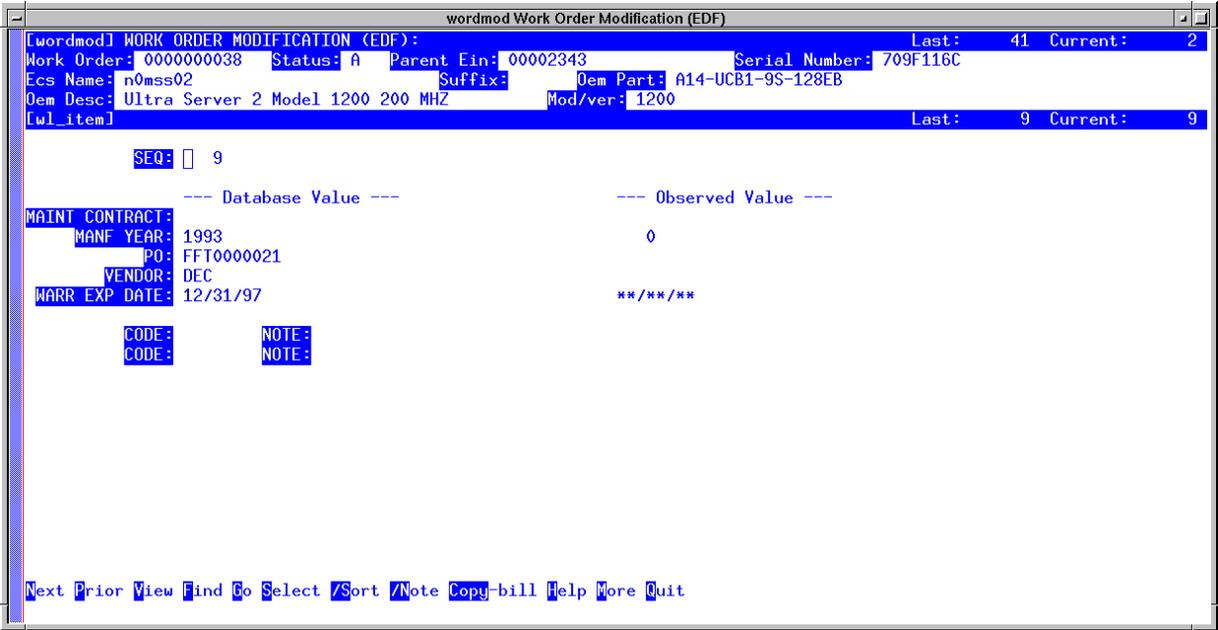


Figure 4.3.4-60. Items Page (Right) for Work Order Modification (EDF) CHUI (2 of 2)

Table 4.3.4-50 describes the fields on the Items Page (Right) for Work Order Modification screen.

Table 4.3.4-50. Items Page (Right) for Work Order Modification (EDF) Field Descriptions (1 of 2)

Field Name	Data Type	Size	Entry	Description
SEQ	Numeric	4	Required	Number used to distinguish among the line items of a Maintenance Work Order.
MAINT CONTRACT	String	15	Optional	Identifier for the maintenance contract as assigned by Purchasing or provided by the vendor. The operator can zoom to the Maintenance Contracts table and choose an identifier, if it had been entered there previously. (See the Maintenance Contracts screen.)
MANF YEAR	Numeric	4	Optional	Date the item was manufactured.
PO	String	10	Optional	Identifier for the purchase order against which the item was received. The operator can zoom to the Purchase Order table and choose an identifier, if it had been entered there previously. (See the Purchase Order Entry section.)

**Table 4.3.4-50. Items Page (Right) for Work Order Modification (EDF)
Field Descriptions (2 of 2)**

Field Name	Data Type	Size	Entry	Description
VENDOR	String	6	Optional	Code for the vendor from which the item was purchased. The operator can zoom to the Vendor data file and pick the desired code. NOTE: This data must be previously entered using screen Vendor Master Manager (vmasts).
WARR EXP DATE	Date	2	Optional	Date the warranty period ends.
CODE 1, 2	String	2	Optional	Identifier for a type or category of note associated with the item.
NOTE 1, 2	String	60	Optional	A 60-character note that can be associated with this item.

The Process_Changes command provides a convenient, reliable, and efficient means for updating ILM property records based on information contained in MWO line items. New EIN records are created as necessary, as are corresponding OEM part, engineering change, and EIN structure records. Processing adds new items to the ECS inventory, archives those that have failed or been returned to the vendor, and re-assigns any that have been relocated or returned to stock. Additionally, items returned to a vendor are rendered obsolete with respect to their parent EINs and, of those that had failed, costs are transferred to their replacements.

If XRP-II is to update property records based on MWO line item data, line item records must specify values for Event Type and Maint Code. They determine the type of property record changes to be made. (See Table 4.3.4.2-51) Additionally, operators must supply a value for New Parent EIN if an item is designated for relocation. Other line item fields, such as Component EIN, Change Date, Replacement's EIN, New Locn, and New Bldg, have special significance as well in that they influence which database records actually change.

**Table 4.3.4-51. Effects on Property Records by
MWO Line Item Processing (1 of 8)**

Event Type	Maint Code	Property Record Updates
<p align="center">F (Failed)</p>	<p align="center">R (Relocate)</p>	<p>EIN records:</p> <ul style="list-style-type: none"> • Creates a record if one doesn't exist for the specified component EIN • For the specified component EIN: <ul style="list-style-type: none"> • Clears its installation date • Sets status to "R" • Sets audit date to the Change Date • Sets ECS name to the name of the new parent EIN • Sets location, building, room, and user to that of the new parent EIN <p>OEM part records:</p> <ul style="list-style-type: none"> • Creates an OEM Part record if "observed values" for OEM Part, MFR, and Mod/Ver are specified and the part record doesn't already exist <p>EIN structure records:</p> <ul style="list-style-type: none"> • Obsoletes the specified component EIN in parent EINs where it is active. The structure is rendered inactive as of the specified Change Date • Adds the EIN as a component of the item specified as New Parent EIN or, if none, as a component of the MWO's Parent EIN. The structure is rendered active as of the specified Change Date <p>Stock location records:</p> <ul style="list-style-type: none"> • Sets the count for the EIN at the losing inventory location to 0 • Sets the count for the EIN at the gaining inventory location to 1 <p>Inventory transaction records:</p> <ul style="list-style-type: none"> • Creates an entry for event of type "FAI" for the specified component

**Table 4.3.4-51. Effects on Property Records by
MWO Line Item Processing (2 of 8)**

Event Type	Maint Code	Property Record Updates
<p align="center">F (Failed)</p>	<p align="center">S (Stock)</p>	<p>EIN records:</p> <ul style="list-style-type: none"> • Creates a record if one doesn't exist for the specified component EIN • For the specified component EIN: <ul style="list-style-type: none"> • Clears its installation date • Sets status to "F" • Sets audit date to the Change Date • Sets ECS name to New ECS Name value, if specified • Sets location, building, room, and user to new values, if specified <p>OEM part records:</p> <ul style="list-style-type: none"> • Creates an OEM Part record if "observed values" for OEM Part, MFR, and Mod/Ver are specified and the part record doesn't already exist <p>EIN structure records:</p> <ul style="list-style-type: none"> • Obsoletes the specified component EIN in parent EINs where it is active. The structure is rendered inactive as of the specified Change Date <p>Stock location records:</p> <ul style="list-style-type: none"> • Sets the count for the EIN at the losing inventory location to 0 • Sets the count for the EIN at the gaining inventory location to 1 <p>Inventory transaction records:</p> <ul style="list-style-type: none"> • Creates an entry for event of type "FAI" for the specified component

**Table 4.3.4-51. Effects on Property Records by
MWO Line Item Processing (3 of 8)**

Event Type	Maint Code	Property Record Updates
F (Failed)	V (Vendor)	<p>EIN records:</p> <ul style="list-style-type: none"> • Creates a record if one doesn't exist for the specified component EIN • For the specified component EIN: <ul style="list-style-type: none"> • Clears its installation date • Sets status to "X" • Sets audit date to the Change Date • Sets ECS name to New ECS Name value, if specified • Sets location, building, room, and user to new values, if specified <p>OEM part records:</p> <ul style="list-style-type: none"> • Creates an OEM Part record if "observed values" for OEM Part, MFR, and Mod/Ver are specified and the part record doesn't already exist <p>EIN structure records:</p> <ul style="list-style-type: none"> • Obsoletes the specified component EIN in parent EINs where it is active. The structure is rendered inactive as of the specified Change Date <p>Stock location records:</p> <ul style="list-style-type: none"> • Sets the count for the EIN to 0 at inventory locations having record of it <p>Inventory transaction records:</p> <ul style="list-style-type: none"> • Creates an entry for event of type "FAI" for the specified component

**Table 4.3.4-51. Effects on Property Records by
MWO Line Item Processing (4 of 8)**

Event Type	Maint Code	Property Record Updates
<p align="center">N (New)</p>	<p align="center">S (Stock)</p>	<p>EIN records:</p> <ul style="list-style-type: none"> • Creates a record if one doesn't exist for the specified component EIN • For the specified component EIN: <ul style="list-style-type: none"> • Sets installation date to the Change Date • Sets status to "I" • Sets audit date to the Change Date • Sets ECS name to that of the Parent EIN specified for the MWO itself • Sets location, building, room, and user values to that of the replaced item or, if none, to that of the Parent EIN specified for the MWO itself <p>OEM part records:</p> <ul style="list-style-type: none"> • Creates an OEM Part record if "observed values" for OEM Part, MFR, and Mod/Ver are specified and the part record doesn't already exist <p>EIN structure records:</p> <ul style="list-style-type: none"> • Obsoletes the specified component EIN in parent EINs where it is active, if any. The structure is rendered inactive as of the specified Change Date • Adds the EIN as a component of the item specified as New Parent EIN or, if none, as a component of the MWO's Parent EIN. The structure is rendered active as of the Change Date specified <p>Stock location records:</p> <ul style="list-style-type: none"> • Sets the count for the EIN to 0 at inventory locations having record of it • Sets the count for the EIN at the gaining inventory location to 1 <p>Inventory transaction records:</p> <ul style="list-style-type: none"> • Creates an entry for event of type "MTR for the specified component

**Table 4.3.4-51. Effects on Property Records by
MWO Line Item Processing (5 of 8)**

Event Type	Maint Code	Property Record Updates
N (New)	V (Vendor)	<p>EIN records:</p> <ul style="list-style-type: none"> • Creates a record if one doesn't exist for the specified component EIN • For the specified component EIN: <ul style="list-style-type: none"> • Sets installation date to the Change Date • Sets receive date to the Change Date • Sets status to "I" • Sets audit date to the Change Date • Sets ECS name to that of the Parent EIN specified for the MWO itself • Sets location, building, room, and user values to that of the replaced item or, if none, to that of the Parent EIN specified for the MWO itself • If the component is replacing an EIN specified in a separate line item as a failed item being returned to the vendor and , copies the item cost from the EIN record for the failed item to the EIN record for the new item • If another line item specifies this component as a replacement EIN • Sets item cost to that of a component being replaced if a line item exists for the replaced component and that line item designates that component as failed/returned to vendor and this component as the failed item's replacement • For a failed item being replaced by the specified component EIN: <ul style="list-style-type: none"> • Sets cost to 0 <p>OEM part records:</p> <ul style="list-style-type: none"> • Creates an OEM Part record if "observed values" for OEM Part, MFR, and Mod/Ver are specified and the part record doesn't already exist <p>EIN structure records:</p> <ul style="list-style-type: none"> • Obsoletes the specified component EIN in parent EINs where it is active, if any. The structure is rendered inactive as of the specified Change Date • Adds the EIN as a component of the item specified as New Parent EIN or, if none, as a component of the MWO's Parent EIN. The structure is rendered active as of the Change Date specified <p>Stock location records:</p> <ul style="list-style-type: none"> • Sets the count for the EIN at the gaining inventory location to 1 <p>Inventory transaction records:</p> <ul style="list-style-type: none"> • Creates an entry for event of type "MRV" for the specified component

**Table 4.3.4-51. Effects on Property Records by
MWO Line Item Processing (6 of 8)**

Event Type	Maint Code	Property Record Updates
R (Replaced)	R (Relocate)	<p>EIN records:</p> <ul style="list-style-type: none"> • Creates a record if one doesn't exist for the specified component EIN • For the specified component EIN: <ul style="list-style-type: none"> • Clears its installation date • Sets status to "R" • Sets audit date to the Change Date • Sets ECS name to the name of the new parent EIN • Sets location, building, room, and user to that of the new parent EIN <p>OEM part records:</p> <ul style="list-style-type: none"> • Creates an OEM Part record if "observed values" for OEM Part, MFR, and Mod/Ver are specified and the part record doesn't already exist <p>EIN structure records:</p> <ul style="list-style-type: none"> • Obsoletes the specified component EIN in parent EINs where it is active. The structure is rendered inactive as of the specified Change Date • Adds the EIN as a component of the item specified as New Parent EIN. The structure is rendered active as of the specified Change Date <p>Stock location records:</p> <ul style="list-style-type: none"> • Sets the count for the EIN at the losing inventory location to 0 • Sets the count for the EIN to 1 at the inventory location of the specified New Parent EIN <p>Inventory transaction records:</p> <ul style="list-style-type: none"> • Creates an entry for event of type "REP" for the specified component

**Table 4.3.4-51. Effects on Property Records by
MWO Line Item Processing (7 of 8)**

Event Type	Maint Code	Property Record Updates
R (Replaced)	S (Stock)	<p>EIN records:</p> <ul style="list-style-type: none"> • Creates a record if one doesn't exist for the specified component EIN • For the specified component EIN: <ul style="list-style-type: none"> • Clears its installation date • Sets status to "R" • Sets audit date to the Change Date • Sets ECS name to New ECS Name value, if specified • Sets location, building, room, and user to new values, if specified <p>OEM part records:</p> <ul style="list-style-type: none"> • Creates an OEM Part record if "observed values" for OEM Part, MFR, and Mod/Ver are specified and the part record doesn't already exist <p>EIN structure records:</p> <ul style="list-style-type: none"> • Obsoletes the specified component EIN in parent EINs where it is active. The structure is rendered inactive as of the specified Change Date <p>Stock location records:</p> <ul style="list-style-type: none"> • Sets the count for the EIN at the losing inventory location to 0 • Sets the count for the EIN at the gaining inventory location to 1 <p>Inventory transaction records:</p> <ul style="list-style-type: none"> • Creates an entry for event of type "REP" for the specified component

**Table 4.3.4-51. Effects on Property Records by
MWO Line Item Processing (8 of 8)**

Event Type	Maint Code	Property Record Updates
R (Replaced)	V (Vendor)	<p>EIN records:</p> <ul style="list-style-type: none"> • Creates a record if one doesn't exist for the specified component EIN • For the specified component EIN: <ul style="list-style-type: none"> • Clears its installation date • Sets status to "X" • Sets audit date to the Change Date • Sets ECS name to New ECS Name value, if specified • Sets location, building, room, and user to new values, if specified <p>OEM part records:</p> <ul style="list-style-type: none"> • Creates an OEM Part record if "observed values" for OEM Part, MFR, and Mod/Ver are specified and the part record doesn't already exist <p>EIN structure records:</p> <ul style="list-style-type: none"> • Obsoletes the specified component EIN in parent EINs where it is active. The structure is rendered inactive as of the specified Change Date <p>Stock location records:</p> <ul style="list-style-type: none"> • Sets the count for the EIN to 0 at inventory locations having record of it <p>Inventory transaction records:</p> <ul style="list-style-type: none"> • Creates an entry for event of type "REP" for the specified component

4.3.4.2.6.3 Work Order Modification Screen

This screen is identical to the Work Order Modification (EDF) screen, except it provides access only to a limited number of MWOs – namely, those for equipment at the local site, unless the local site happens to be the SMC. See section 4.3.4.2.6.2 above for details about this screen.

4.3.4.2.6.4 Preventative Maintenance Items Screen

The Preventative Maintenance Items screen (Figure 4.3.4-61) provides the ability to designate which items in the EIN file undergo preventative maintenance (PM) and to establish a maintenance timetable for each. The operator uses XRP-II's Select, Sort, and Find commands to obtain a list of items to be modified. The operator then enters a 'Y' in the set field and a frequency of maintenance in days. When a date of last maintenance is entered, XRP-II calculates when maintenance is due next.

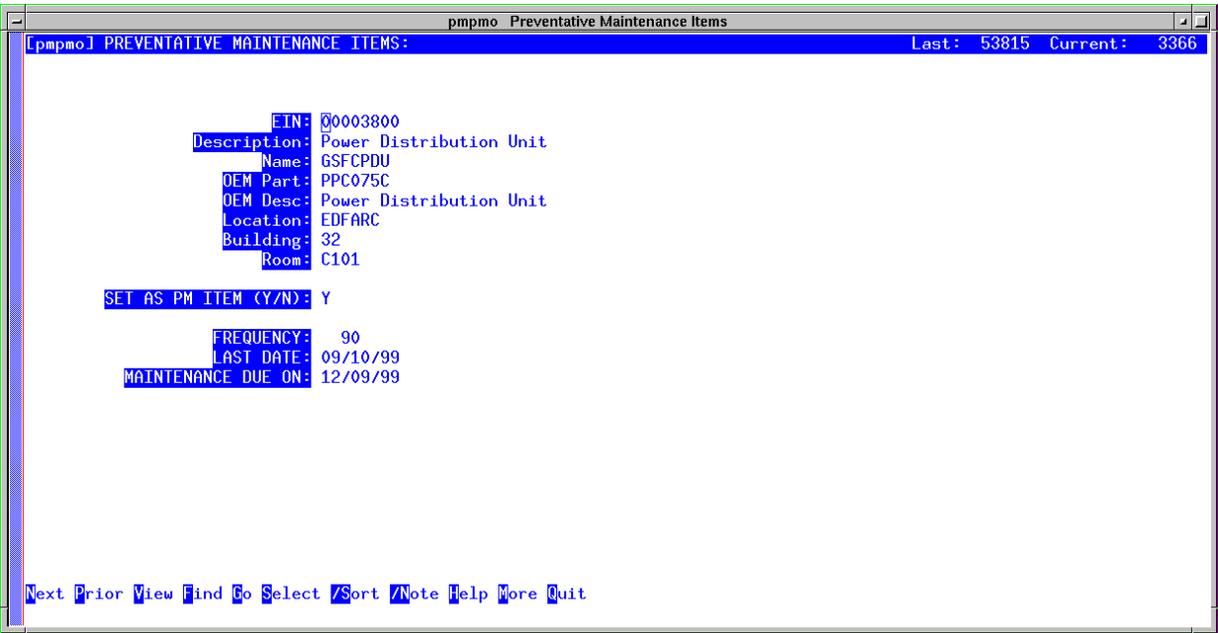


Figure 4.3.4-61. Preventative Maintenance Items CHUI

Table 4.3.4-52 describes the fields on the Preventative Maintenance screen.

**Table 4.3.4-52. Preventative Maintenance Items Field Descriptions
(1 of 2)**

Field Name	Data Type	Size	Entry	Description
EIN	String	20	Required	Identifier for an EIN-controlled inventory item.
Description	String		System-supplied	Manufacturer's description of the item.
Name	String	30	System-supplied	Name of the machine with which the item is associated.
OEM Part	String	34	System-supplied	Manufacturer's part number for the item entered as EIN.
OEM Desc	String	30	System-supplied	Manufacturer's description for the item entered as EIN.
Location	String	8	System-supplied	Code for the inventory location where the item can be found.
Building	String	6	System-supplied	Identifier for the building where the item can be found.
Room	String	6	System-supplied	Room where the item can be found.

**Table 4.3.4-52. Preventative Maintenance Items Field Descriptions
(2 of 2)**

Field Name	Data Type	Size	Entry	Description
SET AS PM ITEM (Y/N)	String	1	Optional; Y or N	Flag designating the item is to undergo preventative maintenance. Y = Yes; N = No.
FREQUENCY	Numeric	3	Optional	Number of days between PM's.
LAST DATE	Date	2	Optional	Date PM was performed for this item.
MAINTENANCE DUE ON	String	8	Optional	Date the next PM is due for this item.

4.3.4.2.6.5 Generate PM Orders Screen

This screen, depicted in Figure 4.3.4-62, generates work orders for items needing preventative maintenance. When executed, XRP-II creates orders for all items needing PM prior to the operator-specified cutoff date. It also prints a summary report of orders created.

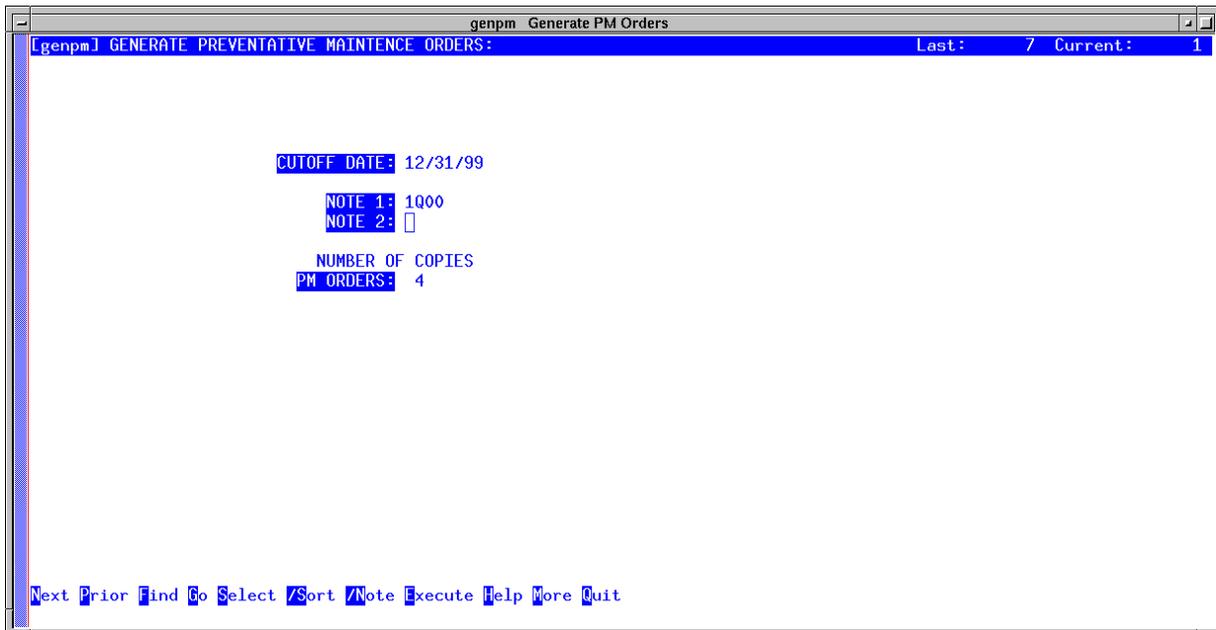


Figure 4.3.4-62. Generate PM Orders CHUI

Table 4.3.4-53 describes the fields on the Generate PM Orders screen.

Table 4.3.4-53. Generate PM Orders Field Descriptions

Field Name	Data Type	Size	Entry	Description
CUTOFF DATE	String	8	Required	Enter the last date for the system to examine PM items and generate orders.
NOTE 1, 2	String	40	Optional	A 40-character note to include in the report.
PM ORDERS	String	1	Optional	Number of copies of the report to generate.

4.3.4.2.6.6 Work Order Parts Replacement History Screen

The Work Order Parts Replacement History screen (Figure 4.3.4-63) generates reports detailing parts replaced under maintenance work orders. The operator enters a Work Order number or range of numbers and a number of copies wanted, then uses the Execute command to print the history reports.

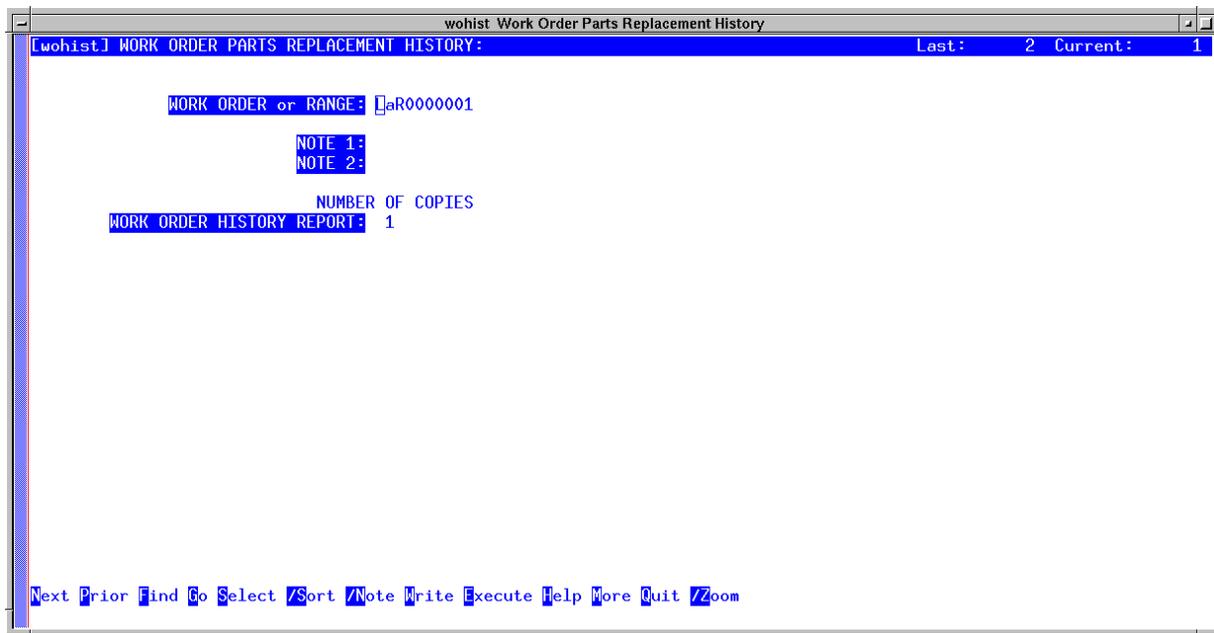


Figure 4.3.4-63. Work Order Parts Replacement History CHUI

Table 4.3.4-54 describes the fields on the Work Order Parts Replacement History screen.

Table 4.3.4-54. Work Order Parts Replacement History Field Descriptions

Field Name	Data Type	Size	Entry	Description
WORK ORDER or RANGE	String	25	Required	Identifier for a work order or range of orders.
NOTE 1, 2	String	40	Optional	A 40-character note to include in the report.
WORK ORDER HISTORY REPORT	String	1	Required	Number of copies of the report to print.

4.3.4.2.6.7 Maintenance Work Order Reports Screen

Operators use the Maintenance Work Order Reports screen (Figure 4.3.4-64) to generate reports about maintenance work done on selected machines. The operator enters record selection criteria, the number of copies wanted and then uses the Execute command to print the reports.

Note: At least one record selection criteria field must contain an entry. Otherwise, no records are included in the report.

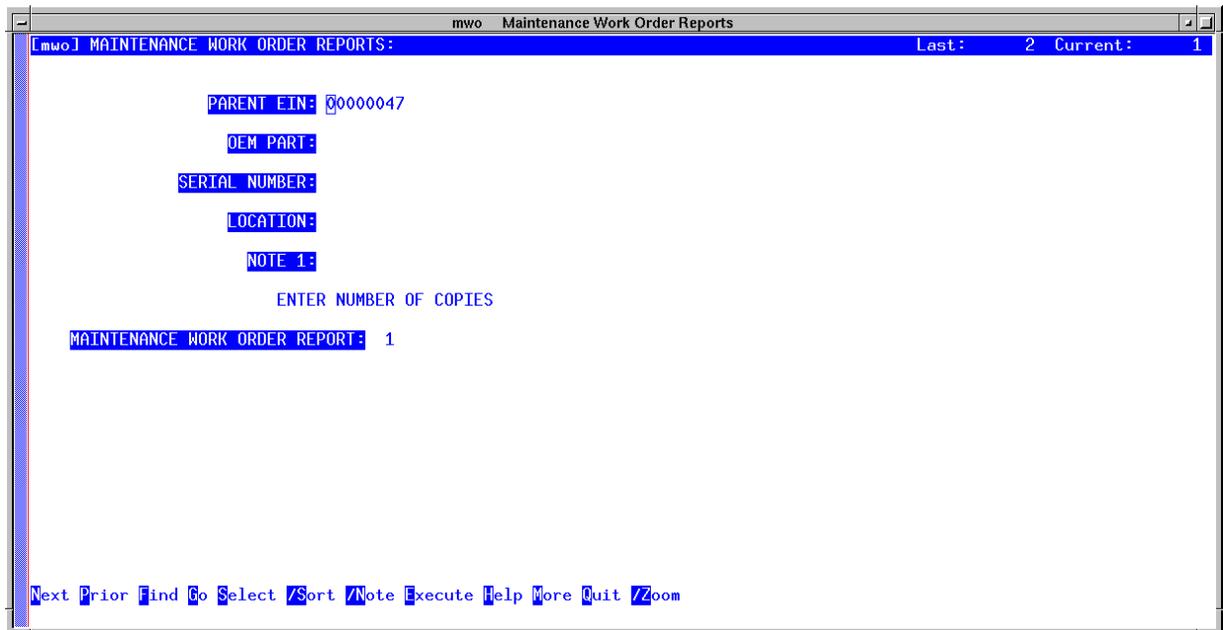


Figure 4.3.4-64. Maintenance Work Order Reports CHUI

Table 4.3.4-55 describes the fields on the Maintenance Work Order Reports screen.

Table 4.3.4-55. Maintenance Work Order Reports Field Descriptions

Field Name	Data Type	Size	Entry	Description
PARENT EIN	String	20	Optional	EIN for the parent item in an EIN structure. The operator can zoom to the EIN table and choose the EIN, if it had been entered there previously. (See the EIN Entry section.)
OEM PART	String	34	Optional	Manufacturer's part number for an item. The operator can zoom to the OEM Part file to choose the part number, if it had been entered there previously. (See the OEM Part Numbers section.)
SERIAL NUMBER	String	30	Optional	Serial number of an item. The operator can zoom to the EIN file to choose a serial number, if it had been entered there previously. (See the EIN Entry section.)
LOCATION	String	6	Optional	Code for a site at which items can be found.
NOTE 1	String	40	Optional	A 40-character message to include in the report.
MAINTENANCE WORK ORDER REPORT	Numeric	1	Required	Number of copies of the report to print.

4.3.4.2.6.8 Work Order Status Reports

The Work Order Status Reports screen (Figure 4.3.4-65) provides status reports covering selected work orders. The operator enters record selection criteria and the number of copies wanted, then uses the Execute command to print the reports.

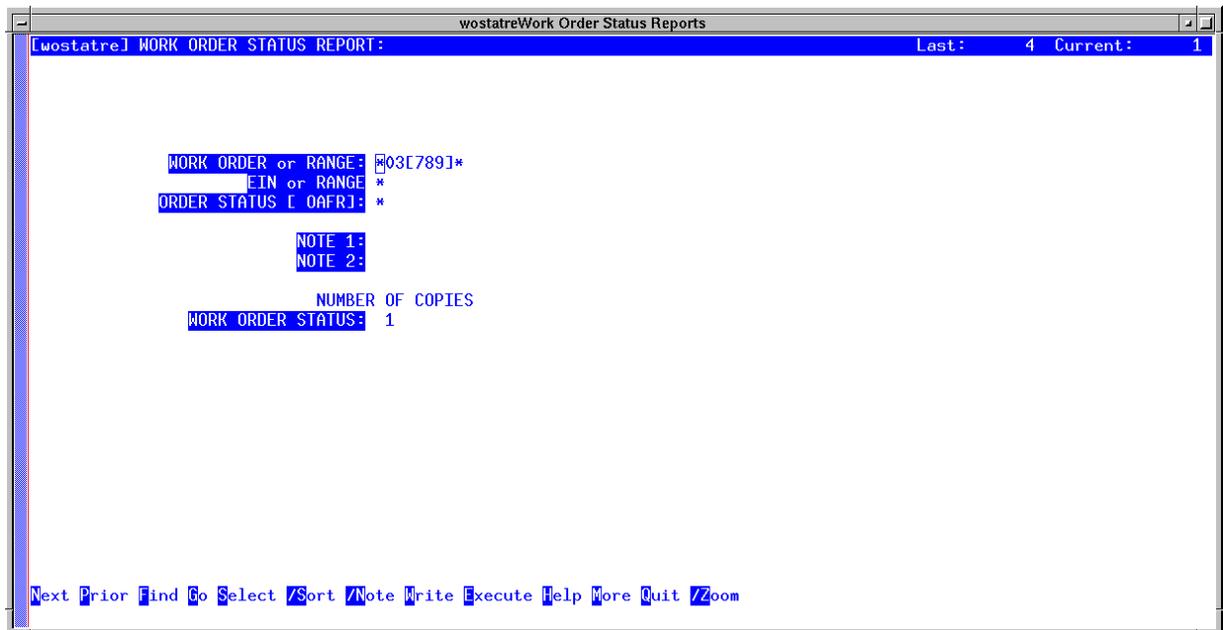


Figure 4.3.4-65. Work Order Status Reports CHUI

Table 4.3.4-56 describes the fields on the Work Order Status Reports screen.

Table 4.3.4-56. Work Order Status Reports Field Descriptions

Field Name	Data Type	Size	Entry	Description
WORK ORDER or RANGE	String	25	Optional	Identifier for a work order or a range of orders. The operator can zoom to the Work Order file to choose an identifier, if it had been entered there previously. (See the Work Order Entry section.)
EIN or RANGE	String	34	Optional	Manufacturer's part number or a range of numbers for items. The operator can zoom to the OEM Part file to choose the part number, if it had been entered there previously. (See the OEM Part Numbers section.)
ORDER STATUS [OAFR]	String	2	Optional	Code for the status of a work order.
NOTE 1, 2	String	40	Optional	A 40-character message to include in the report.
WORK ORDER STATUS	Numeric	1	Required	Number of copies of the report to print.

4.3.4.2.6.9 Maintenance Codes Screen

The Maintenance Codes screen (Figure 4.3.4-66) provides the ability to define the failure codes that can be used with descriptions of repairs and replacements. The items pages of the Maintenance Work Order Entry and Maintenance Work Order Modification screens discussed in Sections 4.3.4.2.6.1 and 4.3.4.2.6.2, respectively, reference values entered here.

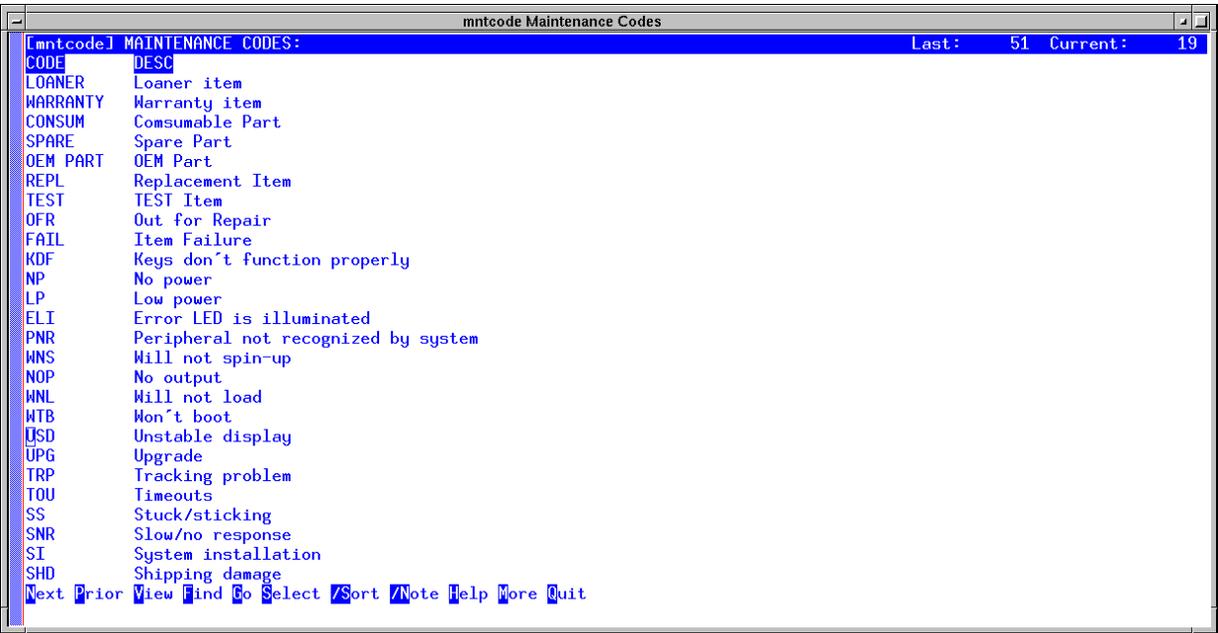


Figure 4.3.4-66. Maintenance Codes CHUI

Table 4.3.4-57 describes the fields on the Maintenance Codes screen.

Table 4.3.4-57. Maintenance Codes Field Descriptions

Field Name	Data Type	Size	Entry	Description
CODE	String	2	Required	Code that distinguishes among item failures according to their cause.
DESC	String	30	Optional	Description for the failure code.

4.3.4.2.6.10 Maintenance Contracts Screen

The Maintenance Contracts screen (Figure 4.3.4-67) provides the ability to track information about maintenance contracts in place with vendors and suppliers. The contract number is the key field and should be the actual number that Purchasing or the vendor assigns. The data entered here supports data entry for the EIN Entry and EIN Manager screens (Sections 4.3.4.2.1.1 and 4.3.4.2.1.2) as well as the Items pages of the Work Order Entry and Work Order Modification screens (Sections 4.3.4.2.6.1 and 4.3.4.2.6.2).

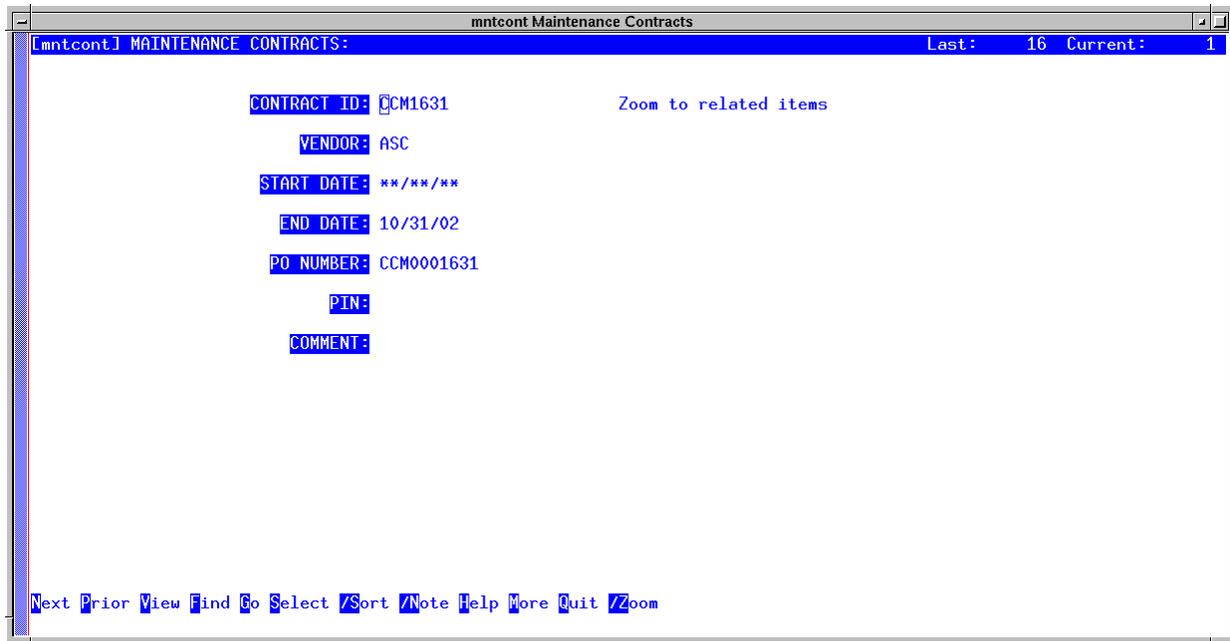


Figure 4.3.4-67. Maintenance Contracts CHUI

Table 4.3.4-58 describes the fields on the Maintenance Contracts screen.

Table 4.3.4-58. Maintenance Contracts Field Descriptions

Field Name	Data Type	Size	Entry	Description
CONTRACT ID	String	15	Required	Identifier for the maintenance contract as assigned by Purchasing or provided by the vendor.
VENDOR	String	6	Required	Code for the vendor with whom the contract is placed. The operator can zoom to the Vendor table and choose the code, if it had been entered there previously. (See the Vendor Master Manager section.)
START DATE	Date	2	Optional	Date the contract is to become effective.
END DATE	Date	2	Optional	Date the contract expires.
PO NUMBER	String	10	Optional	Identifier for the Purchase Order under which maintenance was procured.
PIN	String	20	Optional	PIN number applicable for authorization for vendor contact.
COMMENT	String	60	Optional	Miscellaneous information specific to the contract.

4.3.4.2.6.11 Authorized Employees Screen

The Authorized Employees screen (Figure 4.3.4-68) provides the ability to enter and maintain the employee codes for persons permitted to contact vendors about needed repairs. Operators create a record for each employee authorized for each contract with each vendor. This permits assigning the employee to some (but not all) the maintenance contracts with a particular vendor and to some (but not all) vendors on a particular maintenance contract. Records identifying the employees must have been entered in the Employee table first (see Section 4.3.4.2.7.1).

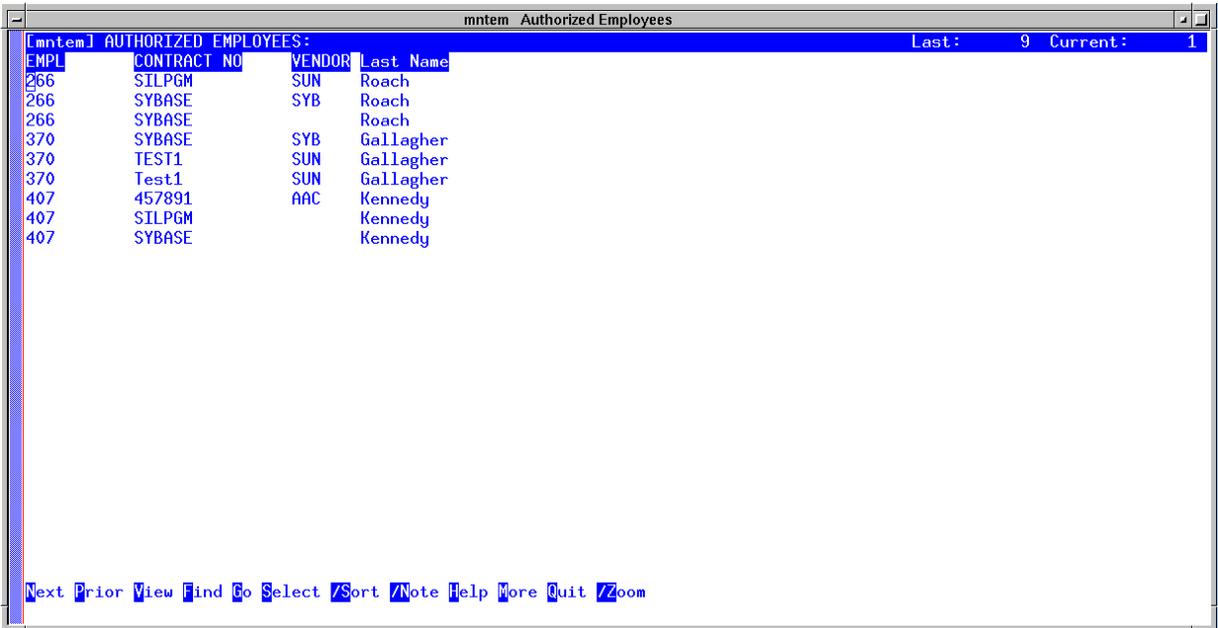


Figure 4.3.4-68. Authorized Employees CHUI

Table 4.3.4-59 describes the fields on the Authorized Employees screen.

Table 4.3.4-59. Authorized Employees Field Descriptions (1 of 2)

Field Name	Data Type	Size	Entry	Description
EMPL	String	10	Required	Identifier for an employee. The operator can zoom to the Employee table and choose the code, if it had been entered there previously. (See the Employee Manager section.)
CONTRACT NO	String	10	Required	Identifier for a maintenance contract. The operator can zoom to the Maintenance Contracts table and choose the identifier, if it had been entered there previously. (See the Maintenance Contracts Manager section.)

Table 4.3.4-59. Authorized Employees Field Descriptions (2 of 2)

Field Name	Data Type	Size	Entry	Description
VENDOR	String	6	Required	Code for the vendor with whom the contract is placed. The operator can zoom to the Vendor table and choose the code, if it had been entered there previously. (See the Vendor Master Manager section.)
Last Name	String	30	System-supplied	Last name of the employee. The value is obtained from the Employee table.

4.3.4.2.6.12 Work Order Line Item Query Screen

The Work Order Line Item Query screen provides the ability to browse line items for all Maintenance Work Orders. Operators can use this screen's Find and Select bottom-line commands to identify all work orders under which maintenance actions have been performed for specific component EINs. The screen has left and right pages (Figures 4.3.4-69 and 4.3.4-70) that are nearly identical to the items pages for Work Order Modification (EDF). Refer to Tables 4.3.4-49 and 4.3.4-50 above for the descriptions of these fields, except for field Work Order that was described in Table 4.3.4-47.

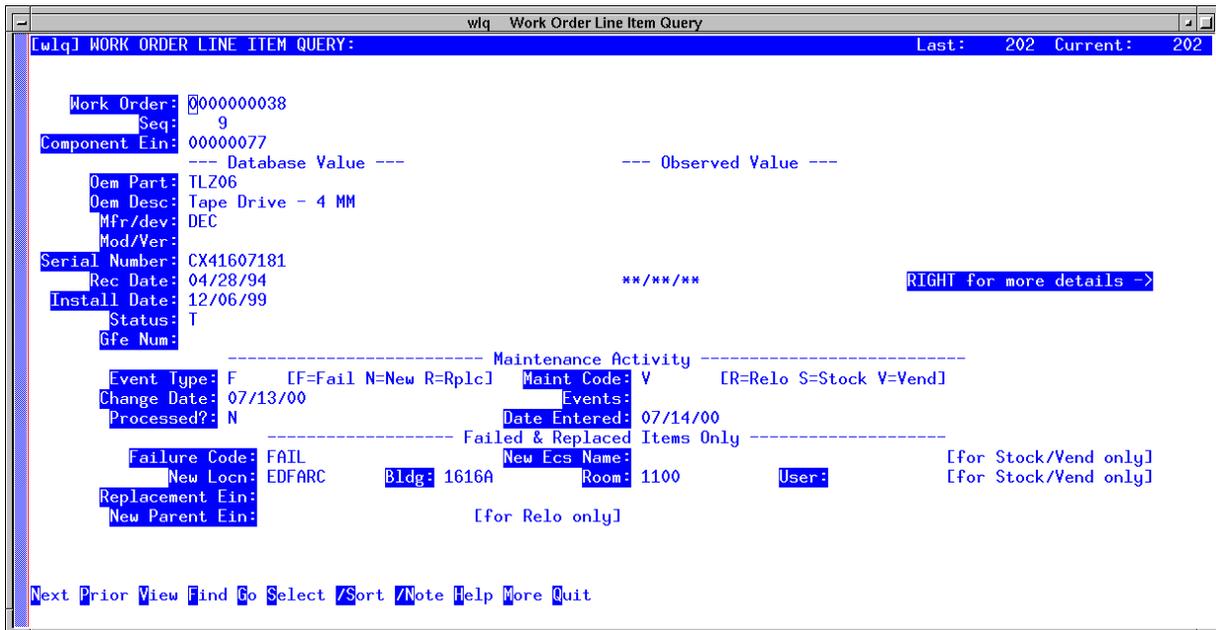


Figure 4.3.4-69. Work Order Line Item Query (Left page) CHUI

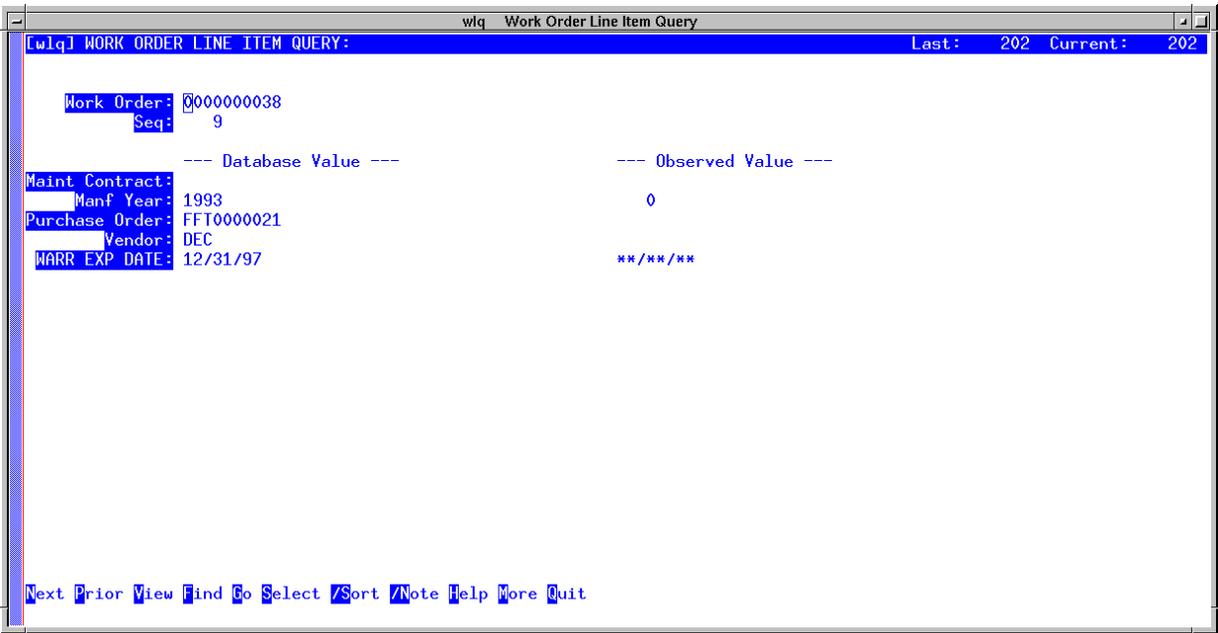


Figure 4.3.4-70. Work Order Line Item Query (Right Page) CHUI

4.3.4.2.7 License Menu

Many software products used in ECS are licensed; that is, subject to conditions of limiting how many users can run the product and where. Licenses take numerous forms. Nodelock licenses let users run the product, but only on a designated machine; counted nodelock licenses limit the number of users that can run the product on that machine. Floating licenses allow users to run a product on any machine in a network. They can limit the number of users running the product concurrently, the number of servers being used concurrently, the number of sites using the product, or any combination of the above. Licenses can apply to a named product, one or more of its features, one or more of its versions, and/or one or more types of platforms. Some vendors enforce these provisions through use of license keys, but ECS is accountable for adhering to licensing provisions whether vendors use keys or not.

The life cycle for licensed COTS software encompasses developmental and systems engineering, purchasing, receiving, stocking, distribution, installation, use, and recovery. Licenses associated with COTS products are obtained, allocated, and archived; they also expire. Allocations can be re-assigned and recovered. Licenses do not always change when the licensed product does.

When purchasing a product or obtaining an upgrade, engineering determines what licensing provisions are required. Depending on the product, license entitlements may appear as separate line items on purchase orders, but often not. (For example, purchased licensing provisions may be provided with the product; that is, not purchased separately.) License certificates (rights to certify) typically accompany software when it arrives and, in the case of operating system software, accompanies the computers themselves. These certificates describe the licensing

provisions that were purchased and may carry an associated cost. Sometimes, the certificates include a license key, but usually they represent the right to obtain keys.

Multiple licenses are sometimes obtained from the product vendor under the provisions of a single license certificate. Each license would account for part of the rights-to-use under the certificate. Conversely, individual licenses can consume rights-to-use from more than one certificate. Each unique license key implies a unique license, but not every license has a key.

Licenses are allocated to the sites and host machines where their keys are installed, and keyless licenses are allocated to where their software products are installed. This is not so much for property accounting (i.e., cost accounting), but to verify adherence to purchased licensing provisions and to identify where licenses are used in case rights-to-use must be transferred elsewhere. A single license can be allocated to multiple sites and machines, although it's unclear at present whether a machine's current location determines the license's allocation site.

ECS Property Administrators receive purchased items and must account for them against expenditures. Items they receive include software products and license certificates, even if the certificate comes bundled with the software. They assign each an inventory number, then pass software items to the custodian of the ECS COTS Software Library and license certificates to the ECS Software License Administrator.

The ECS Software License Administrator (SLA) is responsible for tracking ECS software licenses, processing requests for renewal or re-allocation of license keys, researching license-related issues, and reporting on software license status. Purchasing handles requests that require changing ECS' licensing entitlements for a product, but the SLA contacts vendors directly via phone, e-mail, and fax to request licenses covered by existing license certificates. Licenses are received by mail, e-mail, and fax and might not be routed via property administrators if no costs are involved.

License rights-to-use are counted differently depending on the type of licenses purchased. Rights for nodelock license are allocated and counted by node and are consumed at the rate of one license per node. Floating license rights are allocated and counted based on number of users on a network rather than by specific machines, where a machine on which the license is installed represents the network. Floating license rights are consumed at the rate of number of users per license. Occasionally, a purchased entitlement covers a total number of users across a limited number of machines. In this case, rights are consumed at the rate of one license per node as well as number of users per license.

The License Menu (Figure 4.3.4-71) provides access to XRP-II's capability for managing software licenses. The six data entry screen selections generally available are:

- License Entitlement Manager (EDF) - for management of purchased license entitlements by central Software License Administrators;

- License Entitlement Manager - for browsing license entitlements at the DAACs. Essentially the same as the screen above but with fewer privileges.

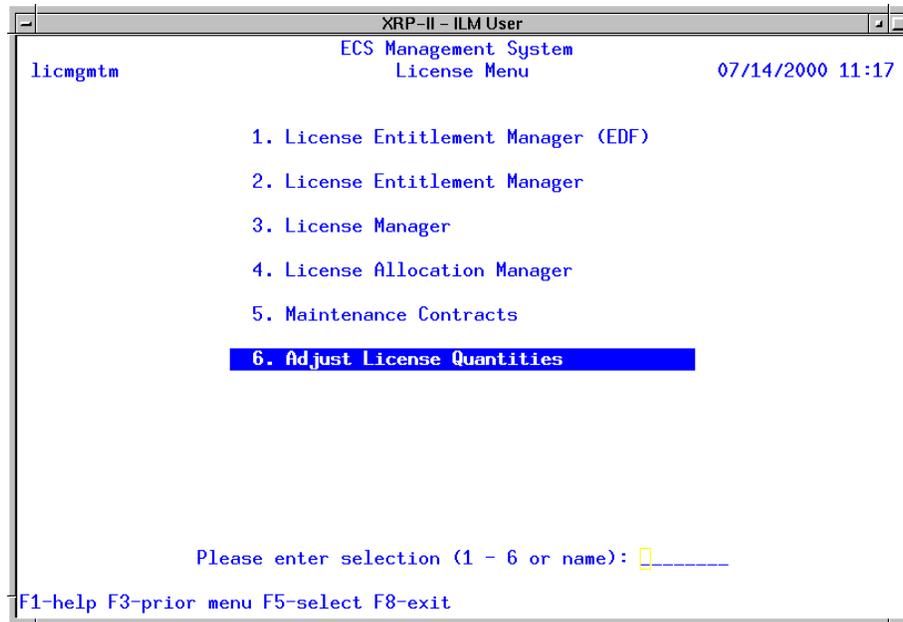


Figure 4.3.4-71. License Menu

License Manager – for tracking software license keys and keyless licenses obtained from vendors;

License Allocation Manager - for tracking license rights-to-use allocated to hosts and sites;

Maintenance Contracts - for managing information about maintenance contracts with vendors and suppliers;

Adjust License Quantities - for re-calculating rights-to-use remaining in products' license entitlement records.

The Maintenance Contracts screen was already described in Section 4.3.4.2.6.10 and is not repeated here.

4.3.4.2.7.1 License Entitlement Manager (EDF) Screen

Operators use the License Entitlement Manager (EDF) screen (Figure 4.3.4-72) to maintain records of purchased rights-to-use for licensed software, including how many node and user rights-to-use have been consumed, remain, and are under maintenance. An entitlement record usually corresponds to a line item on a purchase order much like an EIN for hardware, but it can also represent rights associated with one or more copies of a software product for which licenses are not purchased separately. A single record can accommodate a mix of both node and user rights-to-use. Rights consumed and remaining are computed automatically (and on demand) based on the licenses mapped against it.

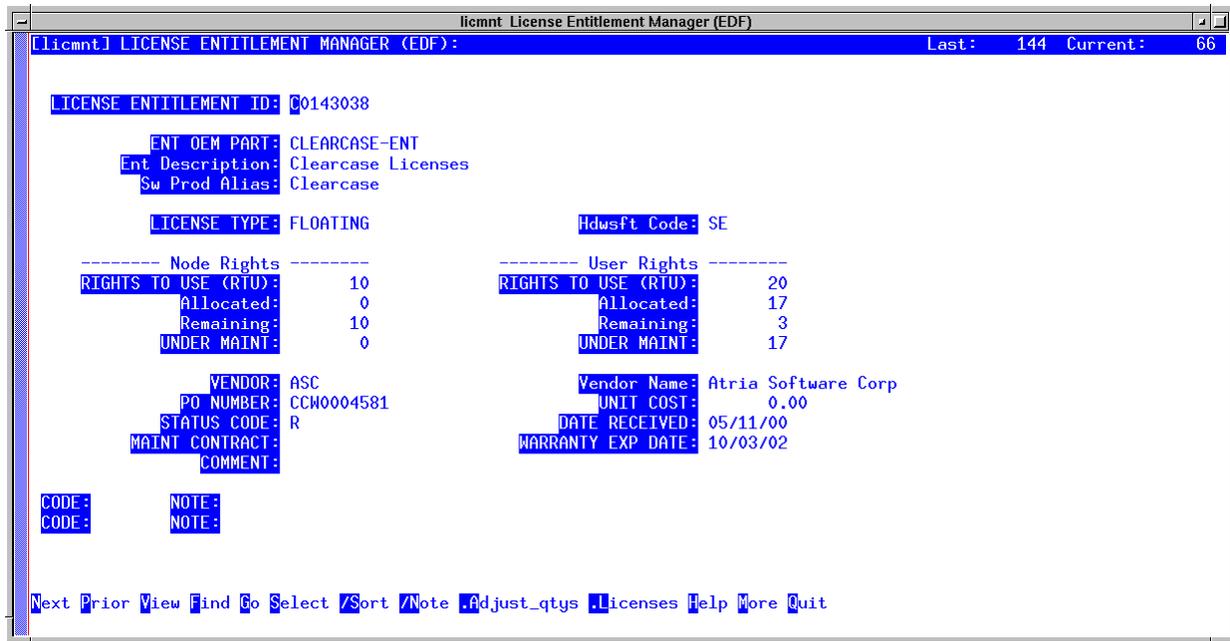


Figure 4.3.4-72. License Entitlement Manager (EDF) CHUI

The following bottom-line commands are unique to this screen:

- **.Adjust_qtys** - updates how many of the license entitlement's node and user rights-to-use are currently allocated and how many remain. This function is useful because quantities are adjusted automatically only when license allocation data is changed via the data entry screens.
- **.Licenses** - activates an items page that lists all the licenses associated with the entitlement.

Enter or modify information in fields that allow it (see Table 4.3.4-60). Use the **.A** bottom-line command to ensure calculations of rights consumed and remaining are current for the entitlement displayed. Use the **.L** command to review and/or change licenses' rights-to-use having liens against it.

Table 4.3.4-60. License Entitlement Manager (EDF) Field Descriptions (1 of 2)

Field Name	Data Type	Size	Entry	Description
LICENSE ENTITLEMENT ID	String	20	Required	Identifier for a purchased license entitlement. The equivalent of an EIN number.
ENT OEM PART	String	34	Optional	Manufacturer's or vendor's part number for the entitlement. The operator may zoom to the OEM Parts table and choose the number, if it had been entered there previously. (See the section on OEM Part Numbers.)
Ent Description	String	40	System supplied	Manufacturer's or vendor's description for the entitlement. This field reflects the description of the OEM Part Number entered in the field above.
Sw Prod Alias	String	40	Optional	Common name used in ECS for the licensed product and all its versions and variants.
LICENSE TYPE	String	16	Optional	Classification that distinguishes among licenses according to rules of use. Examples include: floating (limited number of concurrent users), nodelocked (limited to use on a single machine), user (limited to use by a certain individual), project (unlimited use anywhere by individuals working on a certain project), site (unlimited use at a single site), etc.
Hdwsft Code	String	10	System supplied	Code for classifying inventory items by type. For license entitlements, the code defaults to the value stored in field License HWSW Code on the System Parameters Manager screen (see Section 4.3.4.2.8.3).
Rights to Use (RTU)	Numeric	8	Optional	Quantity of node or user rights-to-use authorized by this purchased entitlement.
Allocated 1, 2	Numeric	8	System supplied	Quantity of node or user rights under the license entitlement currently allocated by licenses mapped to the entitlement. This value is calculated by the system and reflects the total number of active allocations of those licenses.
Remaining 1, 2	Numeric	8	System supplied	Quantity of node or user rights under a license entitlement not yet consumed by the mapping of licenses to the entitlement.
UNDER MAINT 1, 2	Numeric	8	System supplied	Quantity of node or user rights-to-use currently under maintenance.
VENDOR	String	6	Optional	Code for the vendor from whom the item was purchased.
Vendor Name	String	30	System supplied	Name of the vendor from whom the item was purchased.

Table 4.3.4-60. License Entitlement Manager (EDF) Field Descriptions (2 of 2)

Field Name	Data Type	Size	Entry	Description
PO NUMBER	String	10	Optional	Identifier of the purchase order against which the item was received.
UNIT COST	Numeric	10	Optional	Price of the entitlement.
STATUS CODE	String	1	Optional	Code that designates the status of the software product. The following values are set when processing transactions: R = Received; S = Shipped; I = Installed; X = Archived;
DATE RECEIVED	String	8	Optional	Date item was received from vendor.
MAINT CONTRACT	String	15	Optional	Identifier for the Maintenance Contract under which the item is covered. The operator may zoom to the Contract data file and choose the desired contract number if it had been entered there previously. (See the Maintenance Contracts section.)
WARRANTY EXP DATE	Date	2	Optional	Date the warranty on the entitlement ends. This field defaults to 365 days from the date of entry.
COMMENT	String	60	Optional	Miscellaneous information specific to the item.
CODE 1, 2	String	2	Optional	Identifier for a type or category of note associated with the item.
NOTE 1, 2	String	60	Optional	A message that can be associated with the item.

The **.L** command invokes the Entitlement-Licenses items page depicted in Figure 4.3.4-73. This screen and its cousin, the Licenses-Entitlement items page attached to the License Manager screen, serve the same purpose: to map licenses obtained from vendors to the entitlements whose rights-to-use they consume. Multiple licenses may be mapped to a single entitlement, and a single license may be mapped to multiple entitlements. The Node RTU Allocated and User RTU Allocated fields specify how many of each type of rights a license draws from the entitlement and are what is used by the system when calculating an entitlement's rights consumed. The screen ensures that:

- a) The rights-to-use attributed to the entitlement do not exceed the entitlement's rights remaining;
- b) The sum of the rights being attributed for a license across multiple entitlements does not exceed the rights-to-use for the license.

Use the Add command to map a license to the entitlement currently active on the License Entitlement Manager screen, or use the Modify command to change the RTUs allocated to the license from the entitlement.

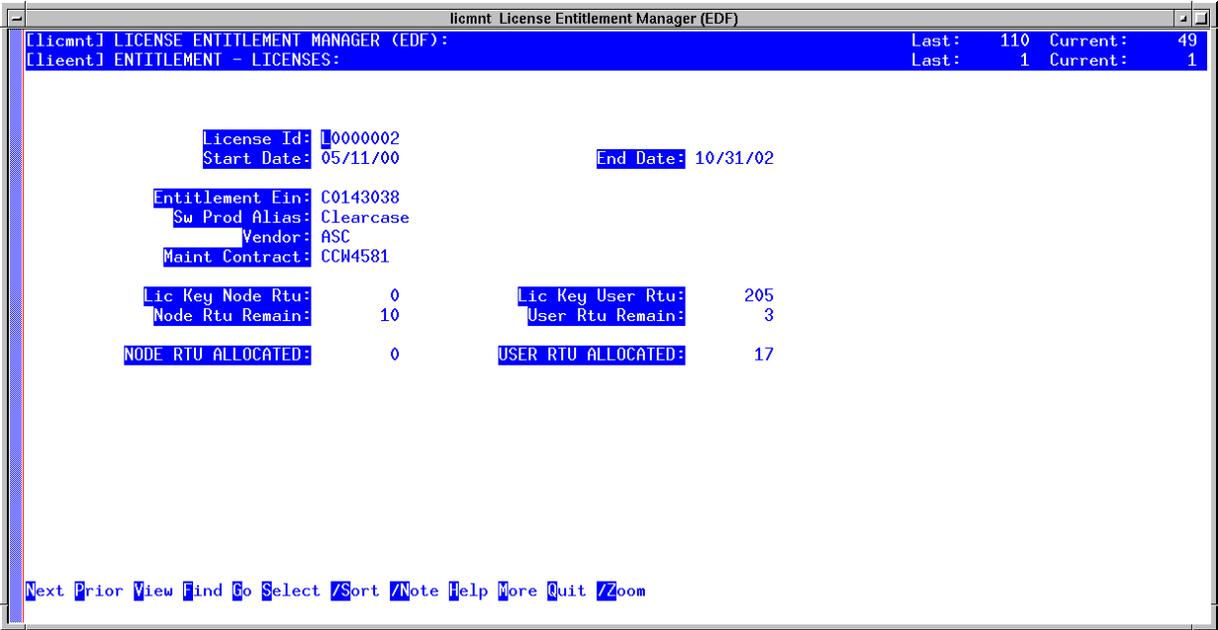


Figure 4.3.4-73. Entitlement – Licenses Page for the License Entitlement Manager (EDF) CHUI

Table 4.3.4-61 describes the fields on the ENTITLEMENT - LICENSES page for the License Entitlement Manager (EDF) Screen.

Table 4.3.4-61. Entitlement – Licenses Page Field Descriptions (1 of 2)

Field Name	Data Type	Size	Entry	Description
License Id	String	20	Required	Unique designator for a license.
Start Date	Date	2	Optional	Date on which the license record takes effect.
End Date	Date	2	Optional	Date on which the license record is rendered ineffective.
Entitlement Ein	String	20	Required	Identifier for a purchased license entitlement. The equivalent of an EIN number.
Sw Prod Alias	String	40	System supplied	Common name used in ECS for the licensed product and all its versions and variants.
Vendor	String	6	System supplied	Code for the Vendor from whom the license entitlement was purchased.
Maint Contract	String	15	System supplied	Identifier for the Maintenance Contract under which the license entitlement is covered.

Table 4.3.4-61. Entitlement – Licenses Page Field Descriptions (2 of 2)

Field Name	Data Type	Size	Entry	Description
Lic Key Node Rtu	Numeric	8	System supplied	Number of machines on which the licensed product may be run concurrently sharing the same license key, if any. This value limits how many host allocation records can be created for the license.
Lic Key User Rtu	Numeric	8	System supplied	Number of users authorized by the license to run the licensed product concurrently on a single network. This value limits the user rights-to-use that can be recorded in the license's allocation records.
Node Rtu Remain	Numeric	8	System supplied	Quantity of node rights under a license entitlement not yet consumed by the mapping of licenses to the entitlement.
User Rtu Remain	Numeric	8	System supplied	Quantity of user rights under a license entitlement not yet consumed by the mapping of licenses to the entitlement.
NODE RTU ALLOCATED	Numeric	8	Optional	Number of node rights-to-use to be counted under the entitlement as having been consumed by the license. The value may not exceed the current value plus the node rights remaining under the entitlement.
USER RTU ALLOCATED	Numeric	8	Optional	Number of user rights-to-use to be counted under the entitlement as having been consumed by the license. The value may not exceed the current value plus the user rights remaining under the entitlement.

4.3.4.2.7.2 License Entitlement Manager Screen

The License Entitlement Manager screen is for use at the DAACs. It currently looks and behaves the same as the License Entitlement Manager (EDF) screen, except cost data is not displayed. Refer to Section 4.3.4.7.1 for the description of this screen.

4.3.4.2.7.3 License Manager Screen

The License Manager screen (Figure 4.3.4-74) maintains records of software licenses obtained from vendors. Licenses can be mapped to purchased, license entitlements so that consumption of license rights can be tracked. A license may also be mapped to individual sites and hosts in order to track allocations, but only after it has first been mapped to one or more entitlements. This helps preclude allocating rights that exceed entitlements purchased.

A license is a euphemism for the rights granted a number of users to operate a software product or one or more of the product's versions or features concurrently on certain machines. These rights are often encoded in a license "key", but not all products employ such keys. Consequently, the License Manager screen uses a License ID to uniquely identify each license.

Licenses typically have an affectivity period; that is a range of dates within which they are being used. The effectivity period for a license is reflected by its start and stop dates. While these dates often correspond to the dates the license gets issued and expires, they more correctly equate to the dates the license is actually in use since they affect computations of remaining rights-to-use for entitlements.

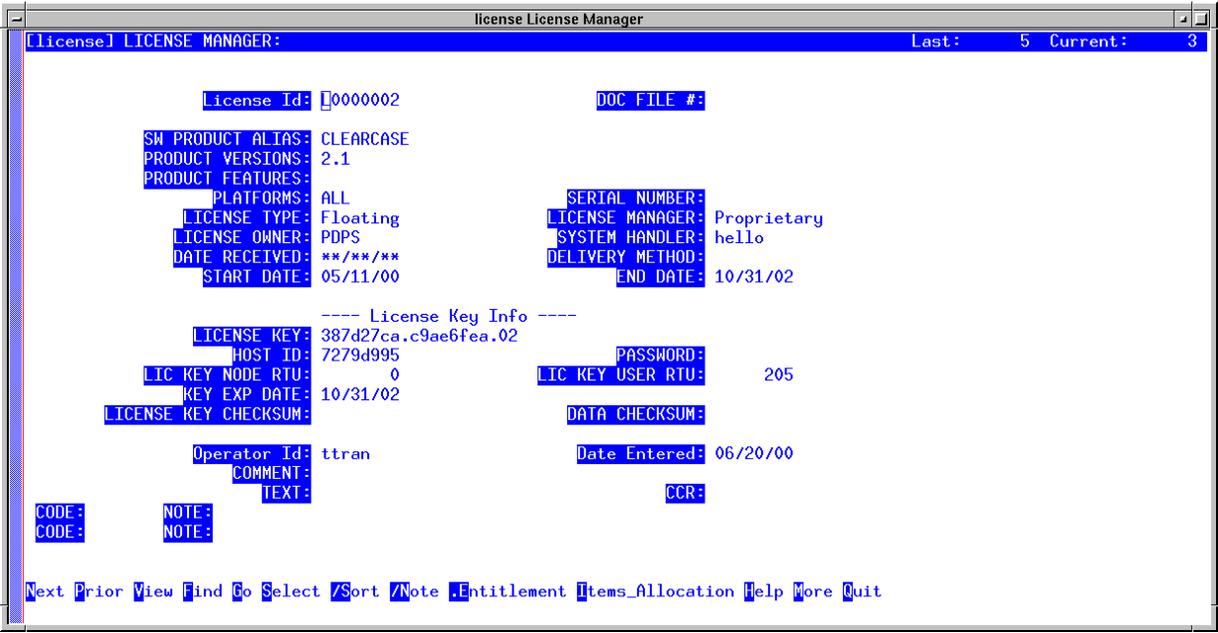


Figure 4.3.4-74. License Manager CHUI

Note: SW Product Alias rather than License ID sorts Records displayed on this screen as one might expect. This anticipates a user preference to browse records by product.

The following bottom-line commands are unique to this screen:

- **.Entitlement** - activates an items page that lists the purchased entitlements from which the license's rights-to-use are derived.
- **Items_Allocation** - activates an items page that lists the host machines and sites to which the license has been allocated. The license's rights-to-use must have first been mapped to at least one entitlement before the license can be allocated.

Add or modify information about software licenses using Table 4.3.4-62 as a guide. For each license, use the **.Entitlement** command to map its rights-to-use to one or more entitlements, then use the **Items_Allocation** command to invoke the License Allocations page in order to map the license to the sites and hosts where the license is to be installed.

Table 4.3.4-62. License Manager Field Descriptions (1 of 2)

Field Name	Data Type	Size	Entry	Description
License Id	String	20	Required	Unique designator for a license.
DOC FILE #	String	20	Optional	Identifier under which any hardcopy records or correspondence pertaining to the license have been filed.
SW PRODUCT ALIAS	String	40	Optional	Common name used in ECS for the licensed product and all its versions and variants.
PRODUCT VERSIONS	String	24	Optional	Identifier(s) of one or more versions of the licensed product that are covered by the license.
PRODUCT FEATURES	String	54	Optional	Name(s) of one or more features of the licensed product that are covered by the license.
PLATFORMS	String	15	Optional	One or more codes for the types of machines to which the license applies (e.g., Sun, Origin, PC, etc.)
SERIAL NUMBER	String	30	Optional	Vendor-supplied serial number for the license or the product being licensed.
LICENSE TYPE	String	16	Optional	Classification that distinguishes among licenses according to rules of use. Examples include: floating (limited number of concurrent users), nodelocked (limited to use on a single machine), user (limited to use by a certain individual), project (unlimited use anywhere by individuals working on a certain project), site (unlimited use at a single site), etc.
LICENSE MANAGER	String	12	Optional	Technology employed in managing the license on-line (e.g., flexlm, proprietary, etc.)
LICENSE OWNER	String	10	Optional	A code for the organization owning the license.
SYSTEM HANDLER	String	30	Optional	Name of the system handler as provided by the license vendor.
DATE RECEIVED	Date	2	Optional	Date the license key and/or data arrived.
DELIVERY METHOD	String	10	Optional	Means by which the license key and/or data arrived (e.g., mail, e-mail, fax, etc.)
START DATE	Date	2	Optional	Date on which the license record takes effect. As of its end date, neither the license nor any of its associated allocations are counted in computations of node or user rights against entitlements. Changing the start date causes earlier start dates in allocation records to be changed to match.

Table 4.3.4-62. License Manager Field Descriptions (2 of 3)

Field Name	Data Type	Size	Entry	Description
END DATE	Date	2	Optional	Date on which the license record is rendered ineffective. This is not the same as the license expiration date. As of its end date, neither the license nor any of its associated allocations are counted in computations of node or user rights against entitlements. Changing the end date causes later end dates in allocation records to be changed to match.
LICENSE KEY	String	50	Optional	String of alphanumeric characters that represent the provisions for a license in an encoded form.
HOST ID	String	20	Optional	Host id of the license server machine supplied to the vendor when requesting the license. This field is only for information. Allocations of licenses to machines are accomplished via the License Allocation Manager screen.
PASSWORD	String	20	Optional	Password supplied along with the license key by the vendor. This field is only for information.
LIC KEY NODE RTU	Numeric	8	Optional	Number of machines on which the licensed product may be run concurrently sharing the same license key, if any. This value limits how many host allocation records can be created for the license.
LIC KEY USER RTU	Numeric	8	Optional	Number of users authorized by the license to run the licensed product concurrently on a single network. This value limits the user rights-to-use that can be recorded in the license's allocation records.
KEY EXP DATE	Date	2	Optional	Date on which the license key is no longer usable. This is not the same as the license end date, which is the date the license is no longer needed or used. The key expiration date is not used in computing license rights consumed against entitlements.
LICENSE KEY CHECKSUM	String	10	Optional	Checksum of the license key as supplied by the license vendor. (The vendors to verify that a key copied matches a key issued use Checksums.)
DATA CHECKSUM	String	10	Optional	Checksum for license data supplied by the vendor.
Operator Id	String	8	System supplied	Login id of the user who created the record.
Date Entered	Date	2	System supplied	Date the record was created.
COMMENT	String	60	Optional	Comment to be stored in the record.

Table 4.3.4-62. License Manager Field Descriptions (3 of 3)

Field Name	Data Type	Size	Entry	Description
TEXT	String	n/a	Optional	A block of text associated with the current record. Use the /Zoom command to display and edit the text. A "T" in this field indicates text has previously been entered.
CCR	String	10	Optional	Identifier for the CCR authorizing the license.
CODE 1, 2	String	2	Optional	Identifier for a type or category of note associated with the item.
NOTE 1, 2	String	60	Optional	A message that can be associated with the item.

The License - Entitlements page (Figure 4.3.4-75) manages the mapping of a license to purchased entitlements and specifies how many node and/or user rights-to-use the license is consuming from each. The screen ensures that:

- a) The rights-to-use attributed to an entitlement do not exceed the entitlement's rights remaining;
- b) The sum of the rights being attributed to all entitlements does not exceed the rights-to-use for the license.

Use the /Add command to link a license to an entitlement, or use the /Modify command to revise how many of the entitlement's rights-to-use are being allocated by the license. Exit ADD and MODIFY modes by pressing <F3>, and return to the License Manager header screen by pressing <F3> again.

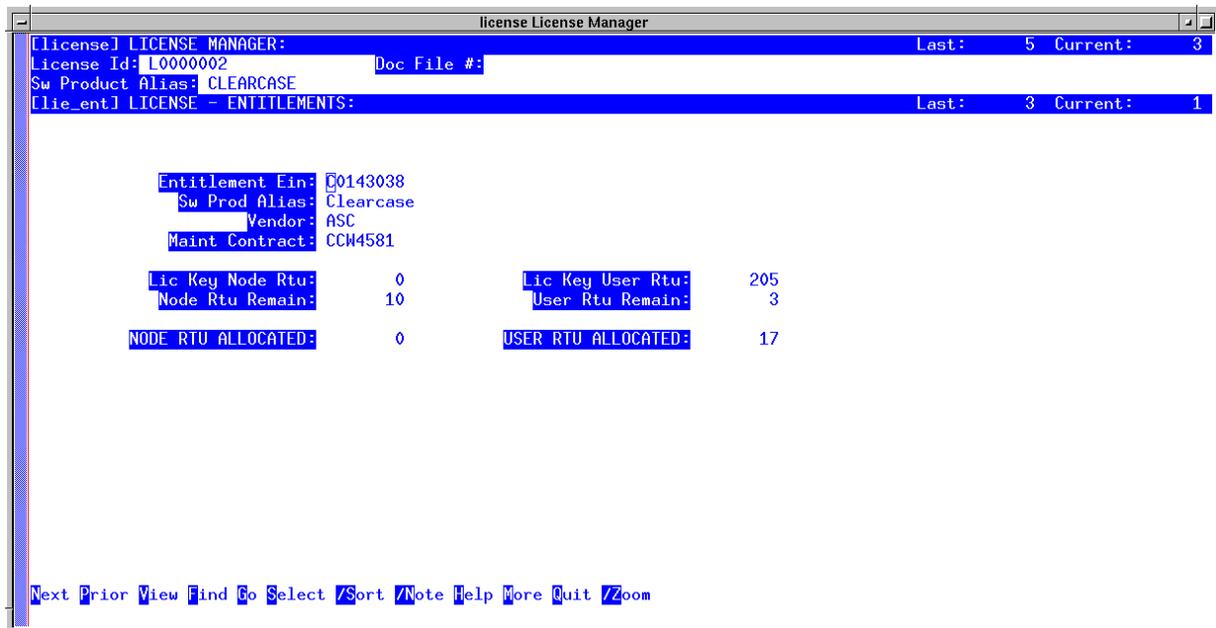


Figure 4.3.4-75. License – Entitlements Page CHUI

Table 4.3.4-63 describes the fields on the License-Entitlements Page for the License Manager screen.

Table 4.3.4-63. License – Entitlements Page Field Descriptions

Field Name	Data Type	Size	Entry	Description
Entitlement Ein	String	20	Required	Identifier for a purchased license entitlement. The equivalent of an EIN number.
Sw Prod Alias	String	40	System supplied	Common name used in ECS for the licensed product and all its versions and variants.
Vendor	String	6	System supplied	Code for the Vendor from whom the license entitlement was purchased.
Maint Contract	String	15	System supplied	Identifier for the Maintenance Contract under which the license entitlement is covered.
Lic Key Node Rtu	Numeric	8	System supplied	Number of machines on which the licensed product may be run concurrently sharing the same license key, if any. This value limits how many host allocation records can be created for the license.
Lic Key User Rtu	Numeric	8	System supplied	Number of users authorized by the license to run the licensed product concurrently on a single network. This value limits the user rights-to-use that can be recorded in the license's allocation records.
Node Rtu Remain	Numeric	8	System supplied	Quantity of node rights under a license entitlement not yet consumed by the mapping of licenses to the entitlement.
User Rtu Remain	Numeric	8	System supplied	Quantity of user rights under a license entitlement not yet consumed by the mapping of licenses to the entitlement.
NODE RTU ALLOCATED	Numeric	8	Optional	Number of node rights-to-use to be counted under the entitlement as having been consumed by the license. The value may not exceed the current value plus the node rights remaining under the entitlement.
USER RTU ALLOCATED	Numeric	8	Optional	Number of user rights-to-use to be counted under the entitlement as having been consumed by the license. The value may not exceed the current value plus the user rights remaining under the entitlement.

The License Allocations items page (Figure 4.3.4-76) maintains records about the hosts and sites to which software licenses have been allocated, and it has its own items page, License Allocation Additional Hosts, for identifying redundant or backup server machines on which this license are installed.

One license allocation record is required for each host on which the license is installed where rights are to be counted as consumed. Allocations to hosts that are redundant or backup server

machines are not typically counted against license entitlements and can be recorded as additional hosts associated with the allocation to the primary server if operators want them listed in license allocation reports.

The screen helps prevent licenses from being over-allocated. A license may not be allocated until it has first been mapped to at least one license entitlement, and allocations may not exceed the rights-to-use reflected in the license record or in the mappings to associated entitlements. In other words, a license cannot be allocated to:

- 1) more hosts than specified by:
 - a) the license's Node Rights-To-Use;
 - b) the sum of all Node RTU Allocated in corresponding License – Entitlement records;
- 2) more users than specified by:
 - a) the license's User Rights-To-Use;
 - b) the sum of all User RTU Allocated in corresponding License – Entitlement records.

The screen also helps operators determine if their license and license allocation records are consistent with the current name, location, and status in the EIN record for that host. An inconsistency suggests that a license-related issue may exist that should be resolved.

The following bottom-line commands are unique to this screen:

- **Items_Addl** – This command activates an items page that lists the backup or redundant server hosts for the allocated license. These items are not included when calculating the rights-to-use allocated and remaining for purchased entitlements.

Use the **/Add** command to record an allocation of a license, or use the **/Modify** command to revise details about the allocation. Use the **Items_Addl** command to identify any redundant or backup machines.

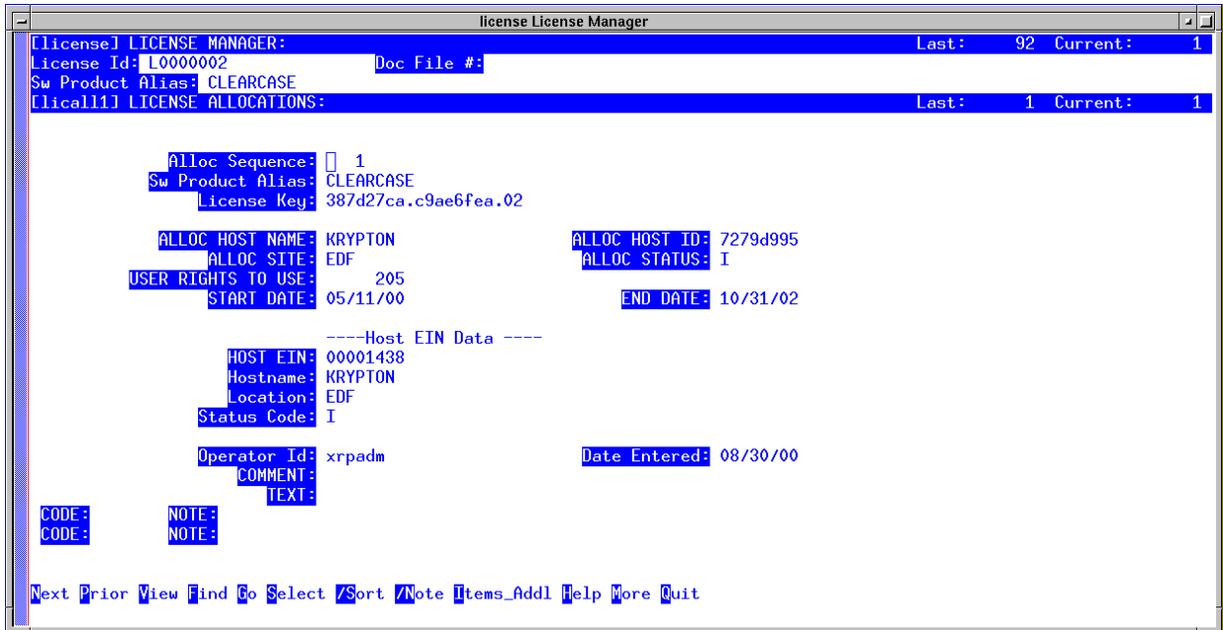


Figure 4.3.4-76. License Allocations Page for the License Manager CHUI

Table 4.3.4-64 describes the fields on the License Allocations Page for the License Manager screen.

Table 4.3.4-64. License Allocations Page Field Descriptions (1 of 2)

Field Name	Data Type	Size	Entry	Description
Alloc Sequence	Numeric	4	Required	Number used for identifying uniquely the principal host allocation records for a specific license.
Sw Product Alias	String	40	Optional	Common name used in ECS for the licensed product and all its versions and variants.
License Key	String	50	System supplied	String of alphanumeric characters that represent the provisions for a license in an encoded form.
ALLOC HOST NAME	String	30	Optional	ECS name of a machine to which the license is allocated.
ALLOC HOST ID	String	8	Optional	Host id of a machine to which a license is allocated.
ALLOC SITE	String	6	Optional	Code for the site to which the license is allocated.
ALLOC STATUS	String	1	Optional	Implementation status of the license with respect to the host or site.
USER RIGHTS TO USE	Numeric	8	Optional	Quantity of user rights being consumed for this license allocation.

Table 4.3.4-64. License Allocations Page Field Descriptions (2 of 2)

Field Name	Data Type	Size	Entry	Description
START DATE	Date	2	Optional	Date on which the license allocation takes effect. Computations of node and user rights consumed against entitlements do not include any associated with allocations having a start date after the current date.
END DATE	Date	2	Optional	Date on which the allocation of the license to the host expires. This is not the same as the license expiration date. As of its end date, an allocation is no longer counted in computations of user or node rights against entitlements.
HOST EIN	String	30	Optional	EIN number of the host to which the license is allocated.
Hostname	String	30	System supplied	Name of the machine with which the Host EIN is associated.
Location	String	8	System supplied	Identifier that designates the inventory location of the Host EIN.
Status Code	String	1	System supplied	Code that designates the status of the Host EIN. The following values are set when processing transactions: R = Received; S = Shipped; I = Installed; X = Archived.
Operator Id	String	8	System supplied	Login id of the user who created the record.
Date Entered	Date	2	System supplied	Date the record was created.
COMMENT	String	60	Optional	Comment to be stored in the record.
TEXT	String	n/a	Optional	A block of text associated with the current record. Use the /Zoom command to display and edit the text. A "T" in this field indicates text has previously been entered.
CODE 1, 2	String	2	Optional	Identifier for a type or category of note associated with the item.
NOTE 1, 2	String	60	Optional	A message that can be associated with the item.

The License Allocation Additional Hosts screen (Figure 4.3.4-77) maintains records about backup or redundant license servers for machines to which a license has been allocated. Identifying additional hosts has no effect on calculations of entitlements' node or user rights-to-use consumed or remaining, but is useful for tracking where licenses are supposed to be or may be installed. As a convenience, the screen lets operators specify a Host EIN to facilitate corroborating license allocation data with data in ILM property records.

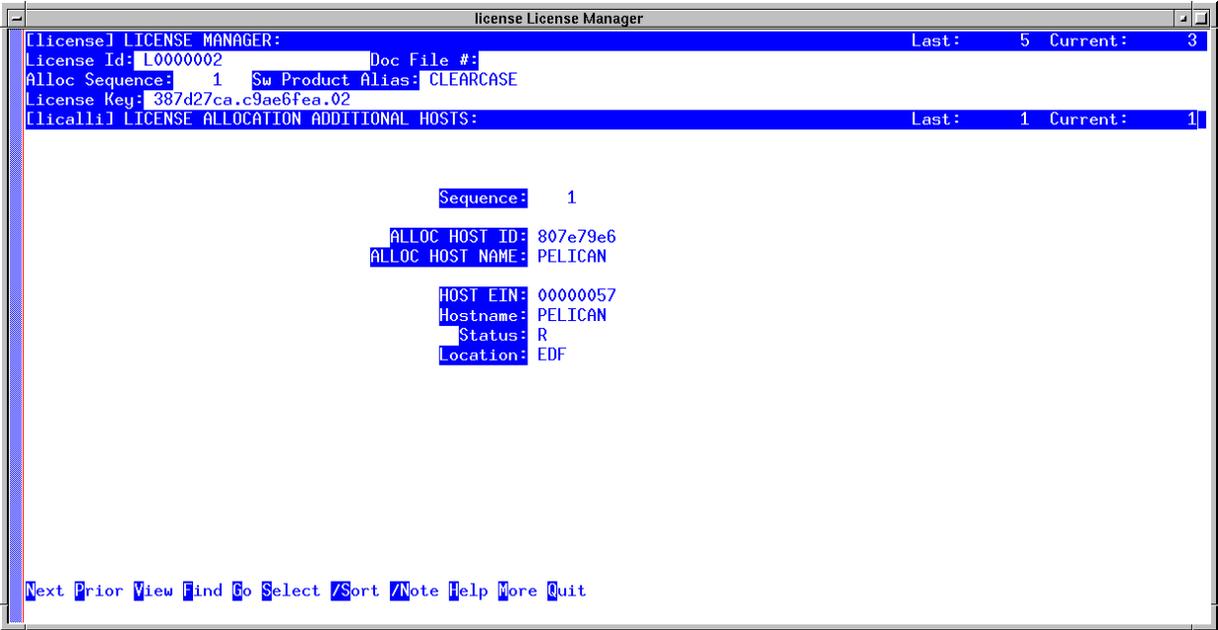


Figure 4.3.4-77. License Allocation Additional Hosts Page for the License Manager CHUI

Table 4.3.4-65 describes the fields on the License Allocation Manager Additional Hosts screen.

Table 4.3.4-65. License Allocation Additional Hosts Field Descriptions (1 of 2)

Field Name	Data Type	Size	Entry	Description
Sequence	Numeric	4	Required	Number used for identifying uniquely the records that describe the backup or redundant license servers for a machine allocated a specific license.
ALLOC HOST ID	String	20	Optional	Host id of a machine that is a backup or redundant license server for the one to which the license is principally allocated.
ALLOC HOST NAME	String	30	Optional	ECS name of a machine that is a backup or redundant license server for the one to which the license is principally allocated.
HOST EIN	String	30	Optional	EIN number of the host to which the license is allocated.
Hostname	String	30	System supplied	Name of the machine with which the Host EIN is associated.

Table 4.3.4-65. License Allocation Additional Hosts Field Descriptions (2 of 2)

Field Name	Data Type	Size	Entry	Description
Status	String	1	System supplied	Code that designates the status of the Host EIN. The following values are set when processing transactions: R = Received; S = Shipped; I = Installed; X = Archived.
Location	String	8	System supplied	Identifier that designates the inventory location of the Host EIN.

4.3.4.2.7.4 License Allocation Manager Screen

The License Allocation Manager screen (Figure 4.3.4-78) maintains records about the hosts and sites to which software licenses have been allocated. The screen is a near clone of the License Allocations items page of the License Manager screen, permitting operators to browse and update all allocation records at once rather than one license at a time. Refer to Section 4.3.4.2.7.1 for the description.

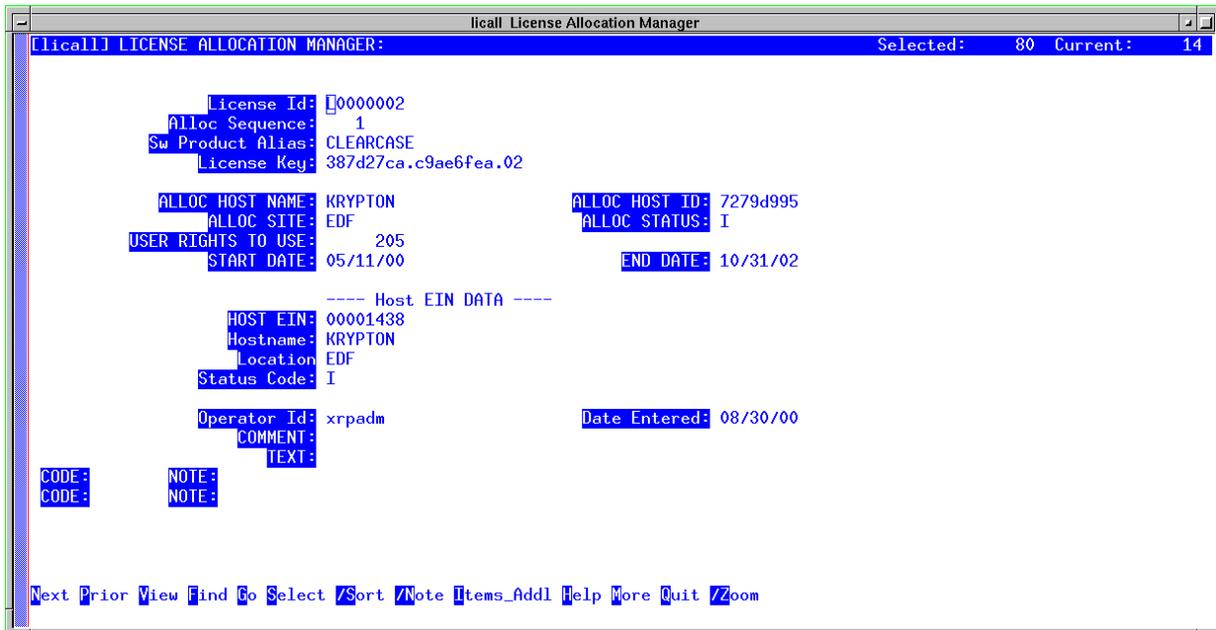


Figure 4.3.4-78. License Allocation Manager CHUI

4.3.4.2.7.5 Adjust License Quantities Screen

The Entitlement Quantity Adjustment screen (Figure 4.3.4-79) recalculates node and user rights-to-use then generates a status report detailing the status of license entitlements.

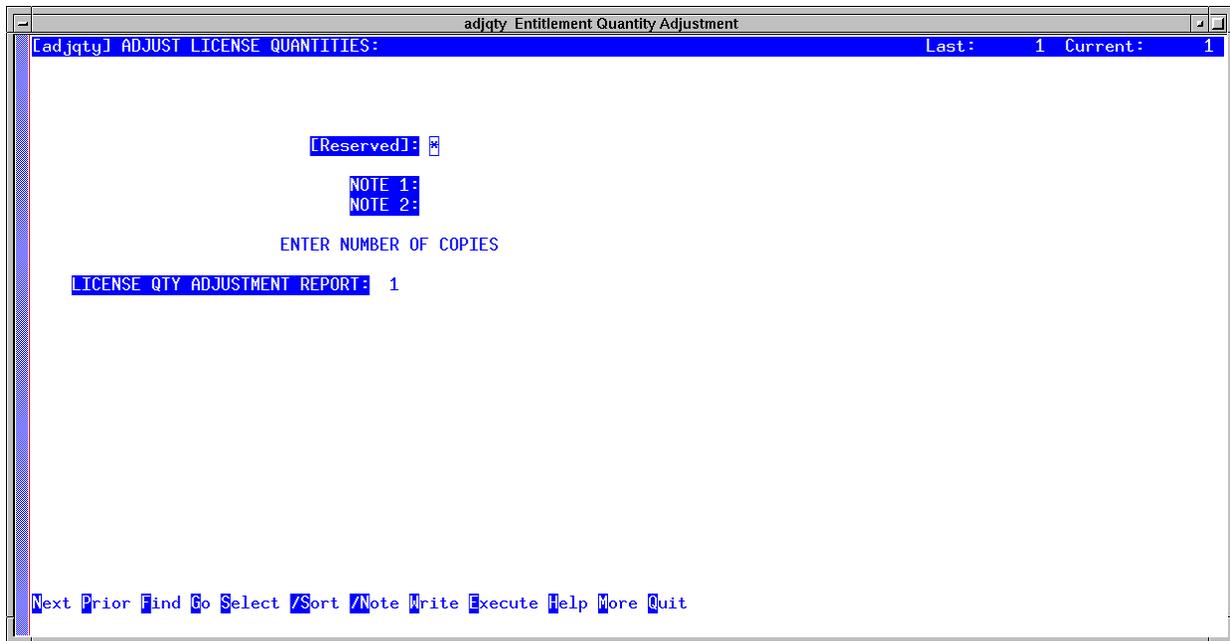


Figure 4.3.4-79. Adjust License Quantities Page for the Entitlement Quantity Adjustment CHUI

Table 4.3.4-66 describes the fields on the Adjust License Quantities Page for the Entitlement Quantity Adjustment screen.

Table 4.3.4-66. Adjust License Quantities Page Field Descriptions

Field Name	Data Type	Size	Entry	Description
[Reserved]	String	20	Required; “*”	Reserved for future use. Must be “*” for now.
NOTE 1, 2	String	40	Optional	A 40-character note to include in the report.
LICENSE QTY ADJUSTMENT REPORT	Numeric	2	Required	Number of copies of this report to generate.

4.3.4.2.8 ILM Master Menu

The ILM Master Menu provides access to ILM system administration capabilities typically reserved for the ILM Administrators. Figure 4.3.4-80 shows the ILM Master Menu.

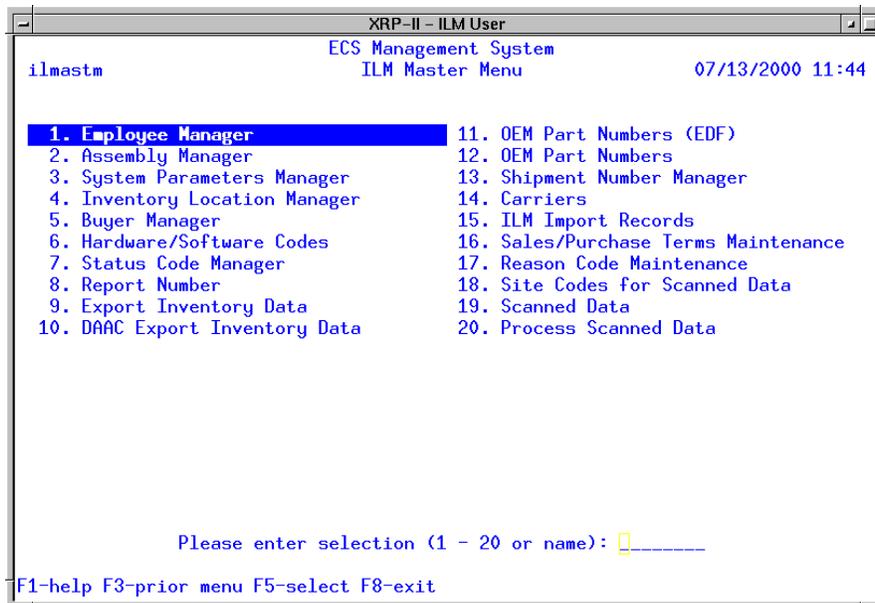


Figure 4.3.4-80. ILM Master Menu

This menu helps operators navigate to the following screens:

- Employee Manager - for maintaining employee information.
- Assembly Manager - for creating parent/child relationship between components in an assembly.
- System Parameters Manager - for maintaining critical system values affecting both ILM and Baseline Manager functions.
- Inventory Location Manager - for maintaining standardized information about ECS inventory locations for all ILM processes.
- Buyer Manager - for maintaining standardized information about purchasing agents for inventory and logistics processes.
- Hardware/Software Codes - for maintaining a standard set of codes for classifying inventory items according to type.
- Status Code Manager - for maintaining a standard set of codes for classifying inventory items according to status.
- Report Number - for maintaining the Report Number conversions used to assign numbers to reports.
- Export Inventory Data - for exporting the SMC's inventory records and transferring them to other ILM systems.
- DAAC Export Inventory Data - for exporting a DAAC's inventory data and transferring them to the SMC's ILM system.
- OEM Part Numbers (EDF)- for maintaining a standard set of OEM part numbers.
- OEM Part Numbers - for maintaining OEM part numbers. See Section 4.3.4.2.8.11 for the description and screen.

- Shipment Number Manager - for maintaining shipment number conversions used to assign numbers to shipments.
- Carriers - for maintaining standardized information about shipment carriers.
- ILM Import Records - for uploading inventory data that had been exported at another site.
- Sales/Purchase Terms Maintenance - for maintaining a standard set of sales/purchase terms for the inventory and logistics processes.
- Reason Code Maintenance - for maintaining reason codes used to justify changes to ECS property records.
- Site Codes for Scanned Data – for maintaining a standard set of codes for uniquely identifying an ECS site and building.
- Scanned Data - for reviewing and editing bar code scanner data prior to updating property records.
- Process Scanned Data – for updating inventory records using bar code scanner data.

Each of these screens is discussed in the sections that follow.

4.3.4.2.8.1 Employee Manager Screen

The Employee Manager screen (Figure 4.3.4-81) is used to maintain helpful information about employees, primarily those to whom inventory items have been assigned or issued. The identifier in which employees are listed and referred to in other screens is by employee number.

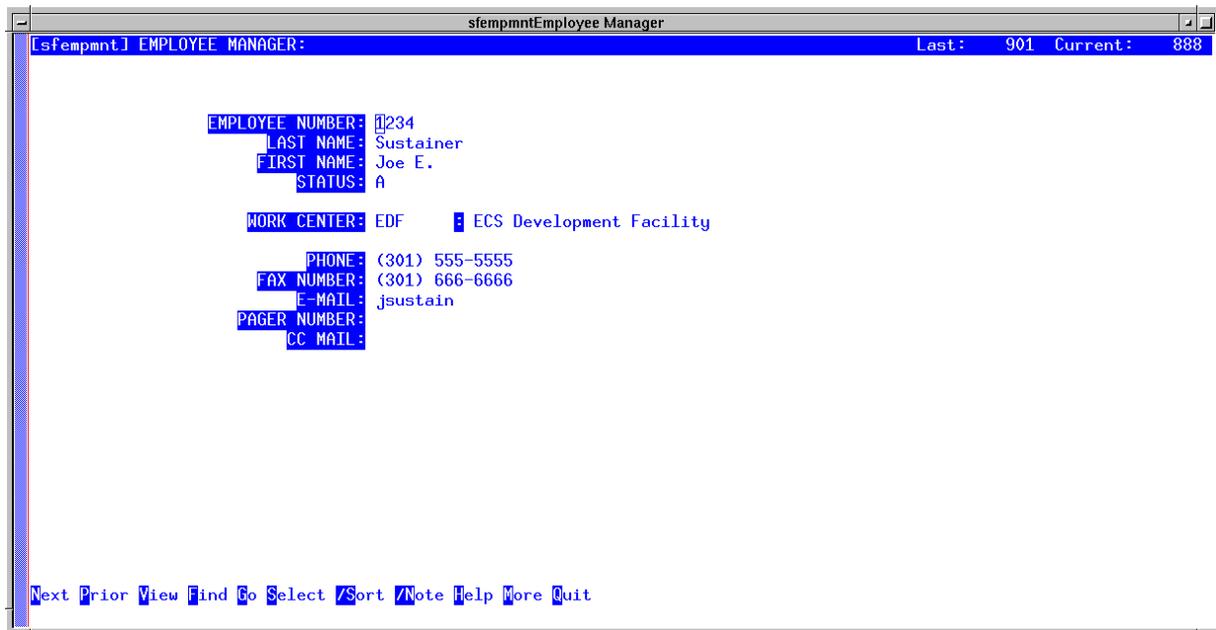


Figure 4.3.4-81. Employee Manager CHUI

Table 4.3.4-67 describes the fields on the Employee Manager screen.

Table 4.3.4-67. Employee Manager Field Descriptions

Field Name	Data Type	Size	Entry	Description
EMPLOYEE NUMBER	String	10	Required	Unique identifier for an employee.
LAST NAME	String	30	Optional	Last name of the employee.
FIRST NAME	String	30	Optional	First name of the employee.
STATUS	String	1	Optional	Status of the employee.
WORK CENTER	String	6	Optional	Code for work center where the employee is normally assigned. The operator may zoom to the Inventory Locations file to choose the code for the work center-type location, if it had been entered there previously. (See the Inventory Location Manager section.)
PHONE	String	18	Optional	Telephone number of the employee.
FAX NUMBER	String	13	Optional	FAX number of the employee.
E-MAIL	String	30	Optional	E-mail address for the employee.
PAGER NUMBER	String	13	Optional	Pager number for the employee.
CC MAIL	String	30	Optional	CC-mail address of the employee.

4.3.4.2.8.2 Assembly Manager Screen

The Assembly Manager screen (Figure 4.3.4-82) is used to define parent/child relationships between an assembly and its components. Unlike the EIN structure relationships discussed in Section 4.3.4.2.1.3, these define the product structure of an item as it is received rather than as it is installed or issued. This facilitates the receiving process. During receiving, listing the assembly as received causes each of the assembly's components to be received instead. In order to record the assembly itself as received, it must be included as its own first component.

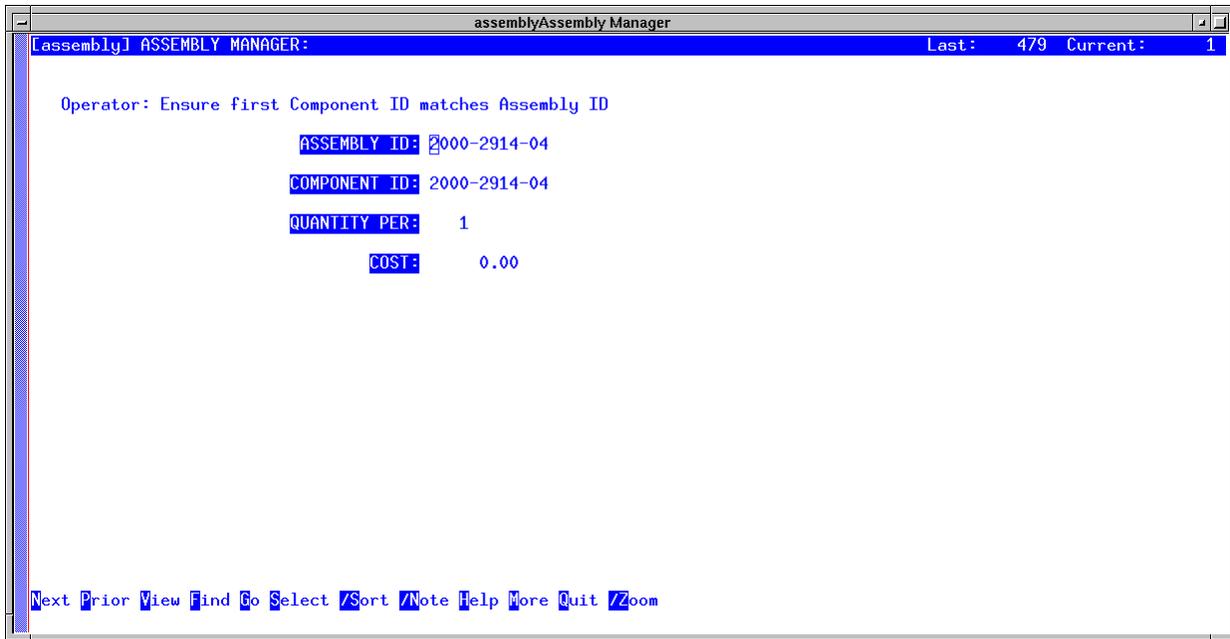


Figure 4.3.4-82. Assembly Manager CHUI

Table 4.3.4-68 describes the fields on the Assembly Manager screen.

Table 4.3.4-68. Assembly Manager Field Descriptions

Field Name	Data Type	Size	Entry	Description
ASSEMBLY ID	String	35	Required	Identifier for an assembly. All components of the assembly can be referenced through this parent id or code.
COMPONENT ID	String	35	Required	Identifier for a component of the assembly. The first component of an assembly must have the same id/code as the assembly id.
QUANTITY PER	Floating	10.3	Optional	Quantity of the component in the assembly.
COST	Floating	9.2	Optional	Purchase cost of the component.

4.3.4.2.8.3 System Parameters Manager Screen

The System Parameters Manager screen (Figure 4.3.4-83) is for maintaining system-wide XRP-II parameters and is principally used when first installing the system. Since ILM uses only a subset of the full XRP-II capabilities, this is a scaled down version of the screen described in the Section 6 of the *XRP-II System Reference Manual*. It contains only the fields needed to tailor the system to the site at which it operates.

Several fields have particular significance for ILM. The Site ID field contains the code for the ECS site where the operator's copy of XRP-II is installed. ILM processes having to determine

which assets belong to the local site interrogate the field. The Last EIN field is used by XRP-II to keep track of the most recently used, automatically assigned EIN. It updates the field whenever an operator presses <RETURN> in the EIN field when creating records via EIN Entry. The NASA Contract Number and Default MFG Year fields contain values used as defaults when creating ILM records, and the Export Functioning field precludes more than one export process from running at a time because they would conflict.

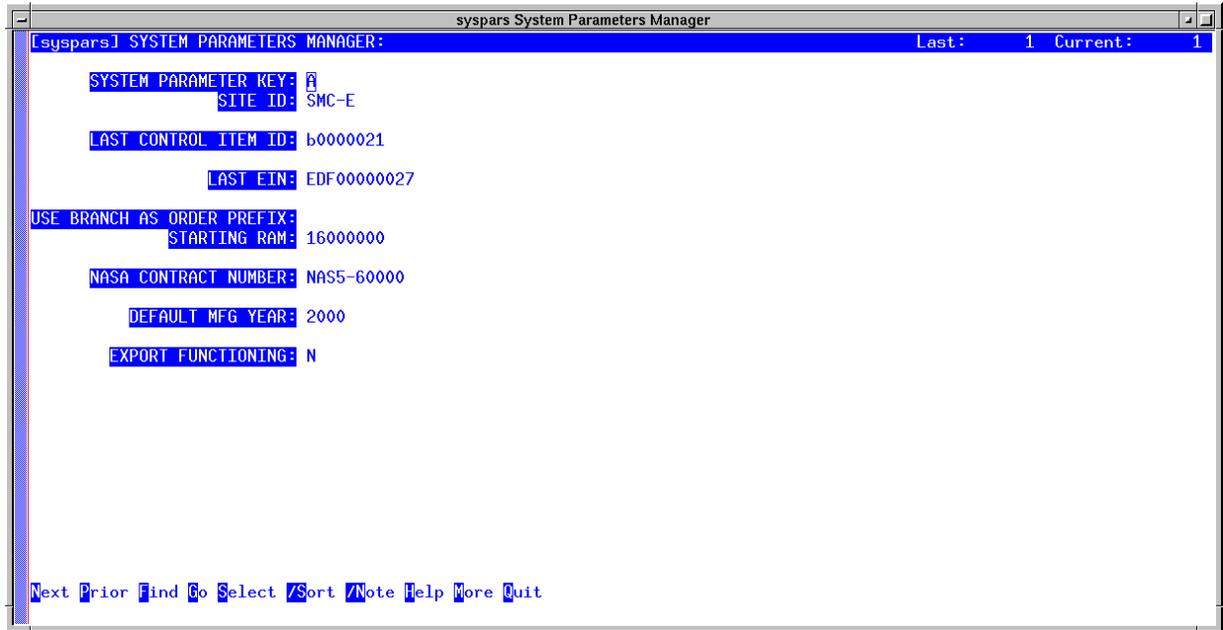


Figure 4.3.4-83. System Parameters Manager CHUI

Table 4.3.4-69 describes the fields on the System Parameters Manager screen.

Table 4.3.4-69. System Parameters Manager Field Descriptions

Field Name	Data Type	Size	Entry	Description
SYSTEM PARAMETER KEY	String	1	Required	Code that designates the active record in XRP-II's system parameter table. The active record must have the value "A".
SITE ID	String	6	Optional	Code that identifies the ECS site where this XRP-II system is installed.
LAST CONTROL ITEM ID	String	20	System-supplied, but modifiable	Code used in determining the next sequentially available identifier when assigning control item identifiers automatically.
LAST EIN	String	20	System-supplied, but modifiable	Code used in determining the next sequentially available identifier when assigning EIN numbers automatically.
USE BRANCH AS ORDER PREFIX	String	1	Optional	Code that, if "Y", causes all new purchase orders, work orders, and sale orders to be prefixed with the site code of the operator or, if null, the default site code.
STARTING RAM	Number	8	Optional	Initial amount of memory XRP-II is to use.
NASA CONTRACT NUMBER	String	11	Optional	Code that is used by NASA to identify the ECS contract. It is attached to all property records.
DEFAULT MFG YEAR	String	4	Optional	Year used as default to identify when an item was built.
EXPORT FUNCTIONING	String	1	Required	Code that indicates if an XRP-II data "export" function is in progress; used to prevent multiple export routines being run concurrently.

4.3.4.2.8.4 Inventory Location Manager Screen

The screen shown in Figure 4.3.4-84 is used to maintain information about ECS inventory locations. This standardized information is available to other screens and reports, which can access it by reference to a location's ID.

Note: An important distinction is made in XRP-II between an ECS site and an inventory location. Sites are officially designated by NASA and generally include the SMC, DAACs, and other official support installations. ECS Property Administrators designate inventory locations for purposes of property management. They are typically facilities or locales where inventory items are stored or installed at a site. Inventory locations are sometimes assigned the same names and codes as a site, but XRP-II treats the two as different entities.

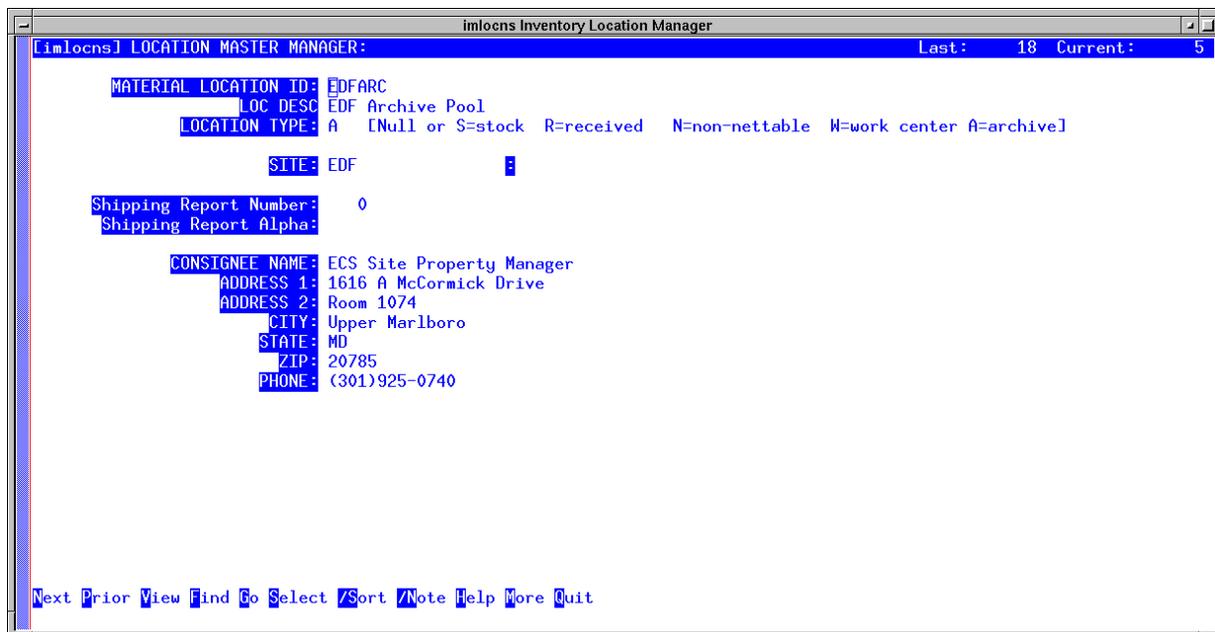


Figure 4.3.4-84. Inventory Location Manager CHUI

Table 4.3.4-70 describes the fields on the Inventory Location Manager screen.

Table 4.3.4-70. Inventory Location Manager Field Descriptions (1 of 2)

Field Name	Data Type	Size	Entry	Description
MATERIAL LOCATION ID	String	6	Required	Identifier for the inventory location where material can be found.
LOC DESC	String	30	Optional	Description of the location.
LOCATION TYPE	String	1	Optional; S, R, N, W, or A	Code that distinguishes among inventory locations according to purpose. Null or S = stock, R = received, N = non-nettable, W = work center, A = archive.
SITE	String	6	Optional	Code for the ECS site hosting the inventory location. The operator can zoom to the Site Master screen and pick a code, if it had been entered there previously. (See the Site Master Manager section.)
Shipping Report Number	Number	2	System-supplied	The installation report number used when an EIN was last installed at the location.
Shipping Report Alpha	String	2	System-supplied	The alpha code used with the installation report when an EIN was last installed at the location.

Table 4.3.4-70. Inventory Location Manager Field Descriptions (2 of 2)

Field Name	Data Type	Size	Entry	Description
CONSIGNEE NAME	String	30	Optional	Name of individual/office responsible for material at the site.
ADDRESS 1, 2	String	30	Optional	The inventory location's address.
CITY	String	20	Optional	City part of the inventory location's address.
STATE	String	2	Optional	State 2-character abbreviation of the address.
ZIP	String	10	Optional	Zip code of the inventory location's address.
PHONE	String	18	Optional	Telephone number for a point of contact at the inventory location.

4.3.4.2.8.5 Buyer Manager Screen

The Buyer Manager screen (Figure 4.3.4-85) is used to maintain a list of purchasing agents for ILM. Purchasing Management screens primarily use and process this information to ensure only authorized persons create, edit, and release purchase orders.

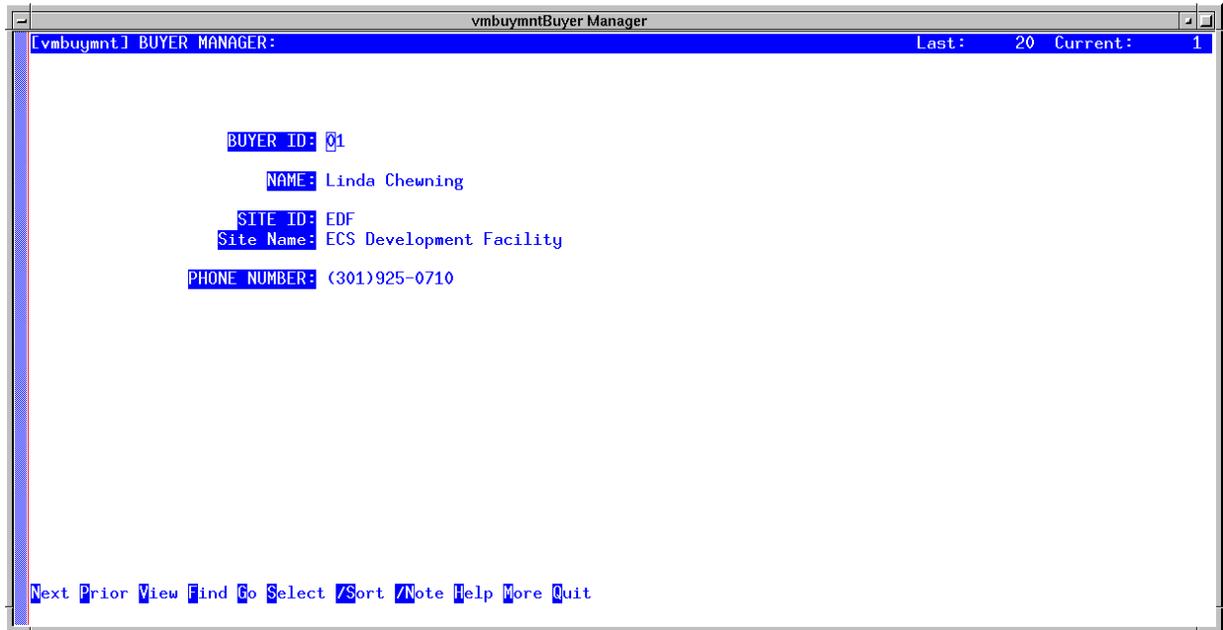


Figure 4.3.4-85. Buyer Manager CHUI

Table 4.3.4-71 describes the fields on the Buyer Manager screen.

Table 4.3.4-71. Buyer Manager Field Descriptions

Field Name	Data Type	Size	Entry	Description
BUYER ID	String	6	Required	Identifier for the person authorized to purchase an item.
NAME	String	30	Optional	Name of the buyer.
SITE ID	String	6	Optional	Code for the ECS site where the buyer works. The operator can zoom to the Site Master file and choose the code, if it had been entered there previously. (See the Site Manager section in the Baseline Manager part of this book.)
Site Name	String	46	Optional	Name of the site whose code is displayed.
PHONE NUMBER	String	18	Optional	Telephone number of the Buyer whose identifier is displayed.

4.3.4.2.8.6 Hardware/Software Codes Screen

Operators use the Hardware/Software Codes screen (Figure 4.3.4-86) to maintain a standard set of codes for distinguishing among items according to source of maintenance costs. These codes are associated with EIN items and are essential for grouping the items for reporting and browsing.

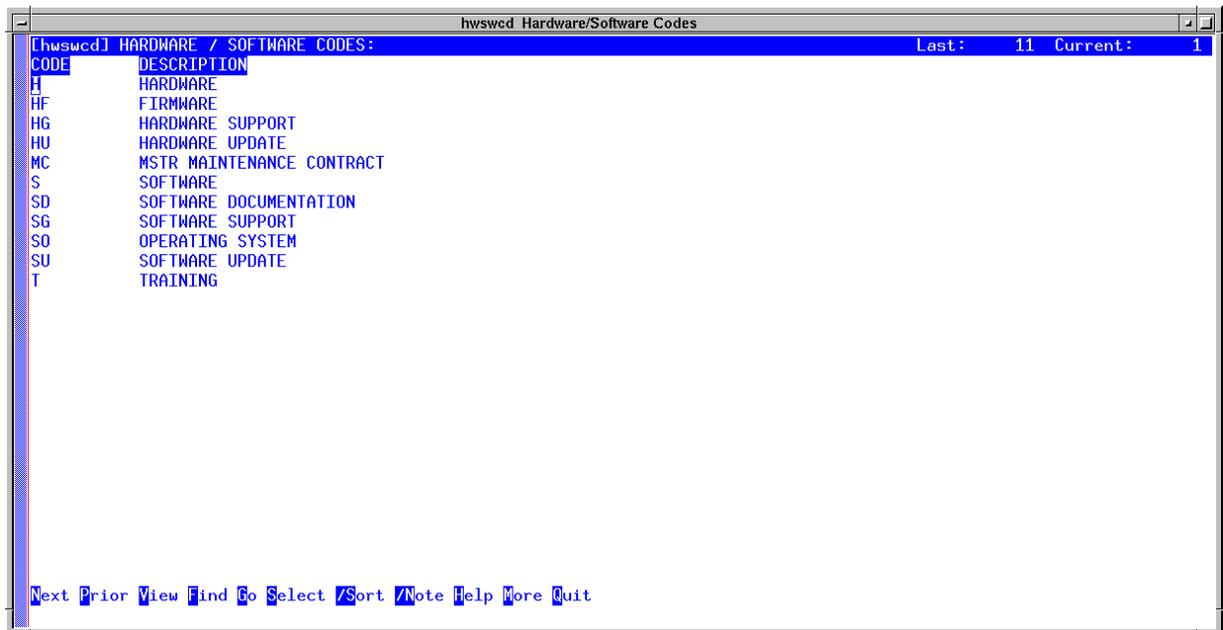


Figure 4.3.4-86. Hardware/Software Codes CHUI

Table 4.3.4-72 describes the fields on the Hardware/Software Codes screen.

Table 4.3.4-72. Hardware/Software Codes Field Descriptions

Field Name	Data Type	Size	Entry	Description
CODE	String	10	Required	Code for classifying items according to source of maintenance costs.
DESCRIPTION	String	30	Optional	Description for the Hardware/Software code.

4.3.4.2.8.7 Status Code Manager Screen

The Status Code Manager screen (Figure 4.3.4-87) maintains a set of standardized status codes for tracking property and events in the inventory and logistics processes.

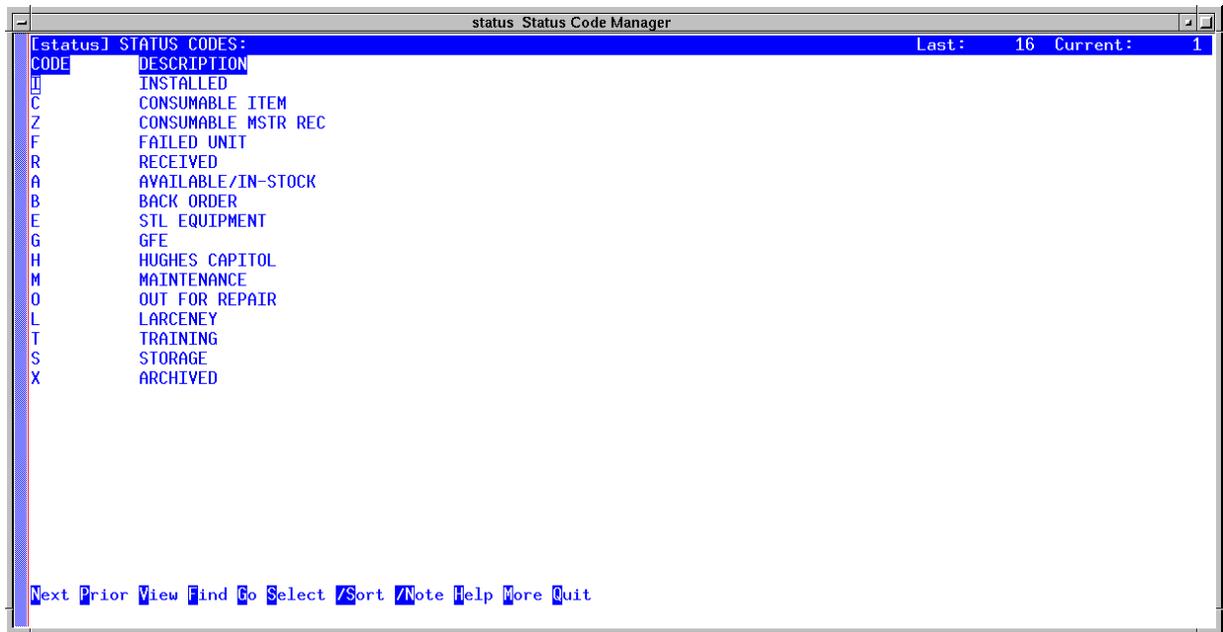


Figure 4.3.4-87. Status Code Manager CHUI

Table 4.3.4-73 describes the fields on the Status Code Manager screen.

Table 4.3.4-73. Status Code Manager Field Descriptions

Field Name	Data Type	Size	Entry	Description
CODE	String	4	Required	Code for an inventory status for an item.
DESCRIPTION	String	30	Optional	Description for the code.

4.3.4.2.8.8 Report Number Screen

The screen shown in Figure 4.3.4-88 helps operators maintain the sequence in which report alpha characters are to be assigned. The EIN shipping and installation processes use this information. Referring the first record in the figure for an example, if the most recent alpha character used in the shipping report for an EIN was “BY”, then its next shipping report uses “BZ” and this value is stored in the EIN’s record at that time.

ILM is deployed with 78 report number records to accommodate alpha characters A thru BZ. Should reports exceed 78 iterations, use this screen to add records for characters CA and beyond.

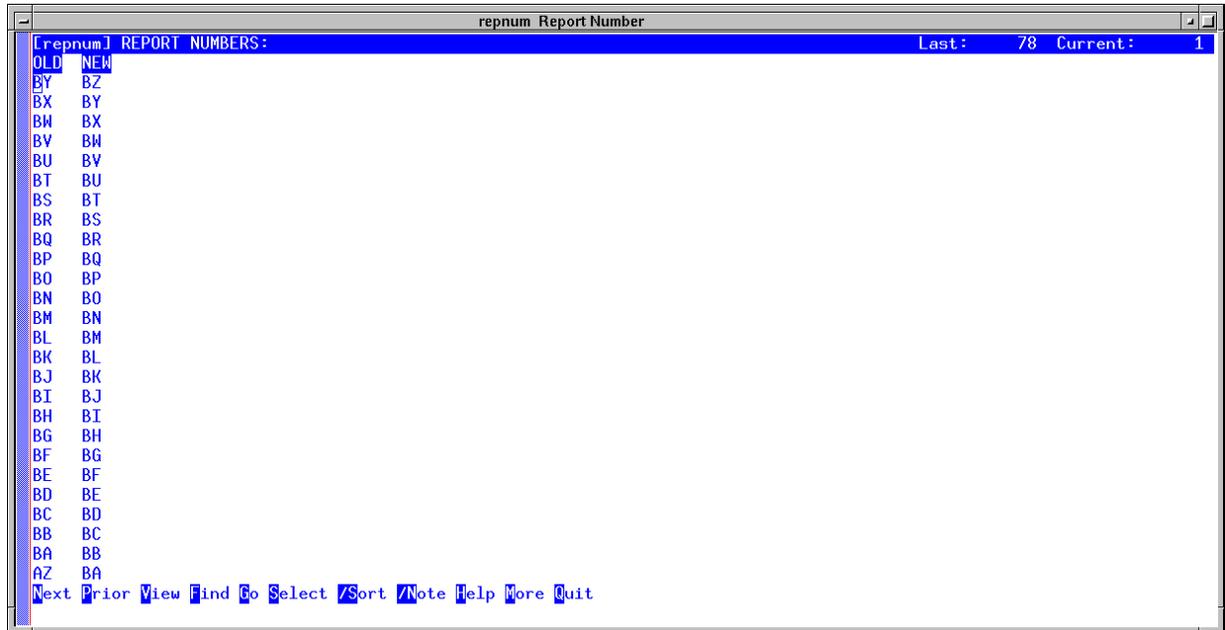


Figure 4.3.4-88. Report Number CHUI

Table 4.3.4-74 describes the fields on the Report Number screen.

Table 4.3.4-74. Report Number Field Descriptions

Field Name	Data Type	Size	Entry	Description
OLD	String	4	Required	Alpha character used to identify the most recent iteration of a report.
NEW	String	4	Required	Alpha character to use in the next iteration of the report.

4.3.4.2.8.9 Export Inventory Data Screen

The Export Inventory Data screen (Figure 4.3.4-89) supports the transfer of SMC inventory data to other locations. It extracts, and distributes to remote sites, copies of centrally managed ILM records changed since the last time this function was used. XRP-II can ftp the files to up to nine remote hosts specified by the operator.

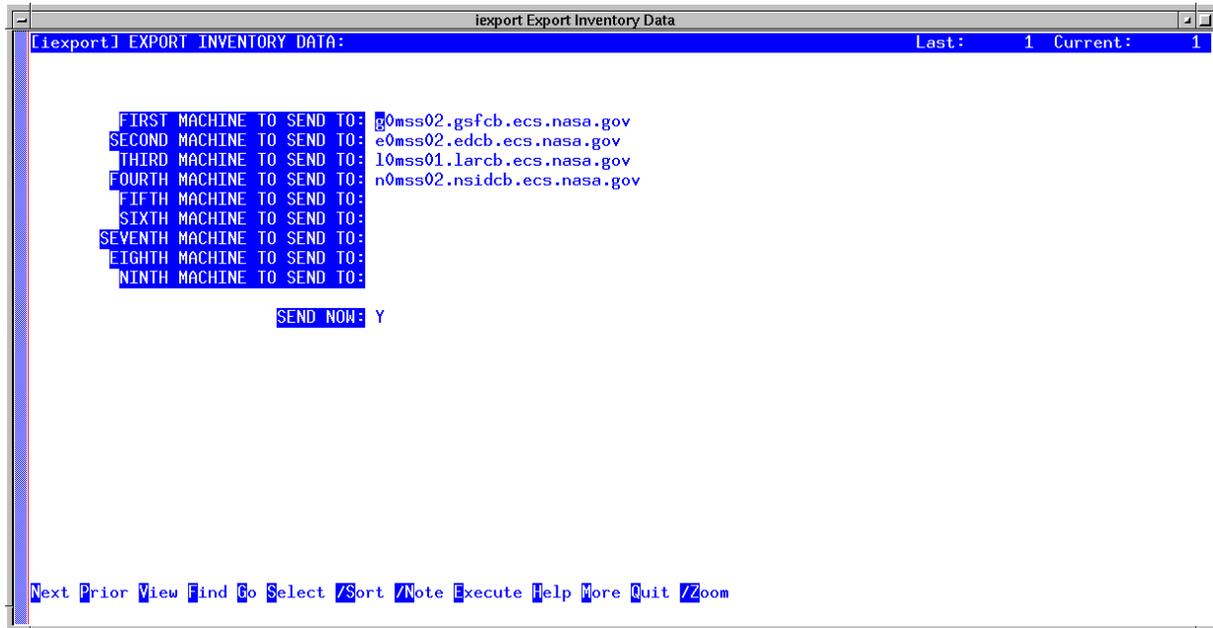


Figure 4.3.4-89. Export Inventory Data CHUI

XRP-II analyzes the transaction log to determine what data changed and which records were affected. EIN, EIN structure, purchase order, work order, inventory, and transaction history records that changed are copied and stored in files compatible with XRP-II's ILM Import Records utility. These files are, in turn, archived as tar files, one per destination host the operator specifies. Each tar file is given a name that identifies the date and time the export was done, the origination site, the file's type, and the machine to which the file is to be sent. If the SEND NOW feature is used, XRP-II attempts to transfer the files via ftp then moves them from the export directory to an archive directory. Otherwise, the files remain in the export directory to be transferred manually.

Enter the name of one or more hosts to receive the data (using either domain names or IP addresses), and choose whether or not to transfer (via ftp) the data files immediately after they are created. Names can be selected from a list of servers (see Section 4.3.3.2.11.5) by using the /Zoom command. Use Execute to begin data extraction and, if prompted, provide a login account and a password for the transfer (via ftp). [Note: the password cannot contain the special character "\$" because the login application does not accept this character as part of the password.] As processing progresses, XRP-II displays informational messages; including some

that contain the names of the tar files that are created. Messages that terminate with the symbol “>” require an operator response. Hit any key and processing continues. XRP-II returns to the System Utilities menu when done.

Note: Export files that are transferred manually to a destination machine must also be moved manually to the archive directory.

Note: The export directory and its corresponding export archive directory are configuration parameters named via program environment variables set in the XRP-II configuration files during installation.

Table 4.3.4-75 describes the screen’s fields.

Table 4.3.4-75. Export Inventory Data Field Descriptions

Field Name	Data Type	Size	Entry	Description
MACHINE TO SEND TO (1-9)	String	40	Required	Full domain name or IP address of the machine to receive the exported inventory data.
SEND NOW	String	1	Optional; Y or N	Flag to indicate if the export tar file is to be sent now.

4.3.4.2.8.10 DAAC Export Inventory Data Screen

ILM at the SMC can maintain consolidated records about inventory, logistics, and maintenance activities system-wide. Records created at local sites can be exported and shipped to the SMC where they can be added to records that were centrally created. For ECS, only records about items at the site are to be exported.

The DAAC Export Inventory Data utility supports this customized export process. It generates a formatted data file containing site records changed but not previously exported, and optionally transfers the file via ftp to a machine at the SMC. Operators at the SMC use the ILM Import Records utility (see Section 4.3.4.7.16) to load the data into the system there.

The screen in Figure 4.3.4-90 initiates the export process. XRP-II analyzes the transaction log to determine what data changed since the last time the function was used and which site items were affected. EIN, EIN structure, purchase order, work order, inventory and transaction history records are copied and stored in files compatible with XRP-II’s ILM Import Records utility. These files are, in turn, archived in a tar file. The tar file is given a name that identifies the date and time the export was done, the origination site, the file’s type, and the machine to which the file is to be sent. If the SEND NOW feature is used, XRP-II transfers the files via ftp then moves them from the export directory to an archive directory. Otherwise, the files remain in the export directory to be transferred manually.

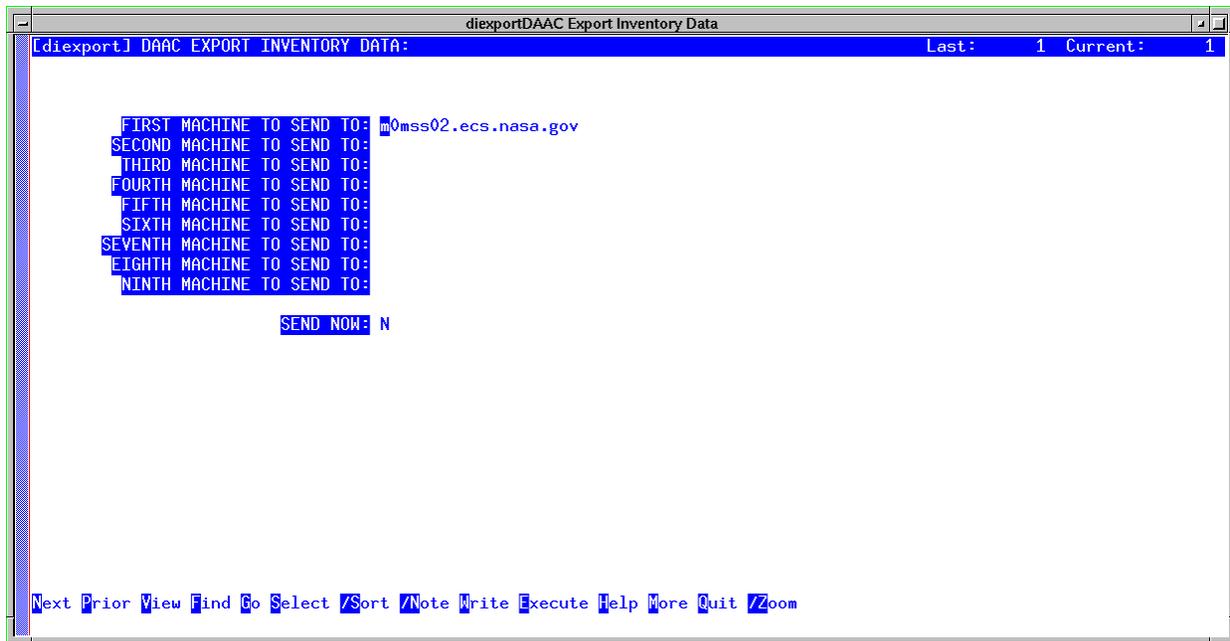


Figure 4.3.4-90. DAAC Export Inventory Screen

Enter the name of the machine to receive the data (using its domain name or IP address), and choose whether or not to ftp the tar file immediately after it is created. The name can be selected from a managed list by using XRP-II's /Zoom command. Use **Execute** to begin data extraction and, if prompted, provide a login account and a password for the transfer (via ftp). **[Note: the password cannot contain the special character “\$” because the login application does not accept this character as part of the password.]** As processing progresses, XRP-II displays informational messages, including some that contain the name of the tar file that are created. Messages that terminate with the symbol “>” require an operator response. Hit any key and processing continues. XRP-II returns to the System Utilities menu when done.

Note: Export files that are transferred manually to a destination machine must also be moved manually to the export archive directory.

Note: The export directory and its corresponding export archive directory are configuration parameters named via program environment variables set in the XRP-II configuration files during installation.

Table 4.3.4-76 describes the screen's fields.

Table 4.3.4-76. DAAC Export Inventory Data Field Descriptions

Field Name	Data Type	Size	Entry	Description
MACHINE TO SEND TO (1-9)	String	40	Required	Full domain name or IP address of the machine to receive the exported inventory data.
SEND NOW	String	1	Optional; Y or N	Flag to indicate if the export tar file is to be sent now.

4.3.4.2.8.11 OEM Part Numbers (EDF) Screen

Operators use the OEM Part Numbers (EDF) screen (Figure 4.3.4-91) to maintain standardized information about manufacturer's or developer's parts. Part numbers must be recorded before they can be added to a purchase order via purchase order screens and, consequently, before items (especially consumables) can be processed as received.

Parts are listed in part number order, and other screens and processes use much of the data.

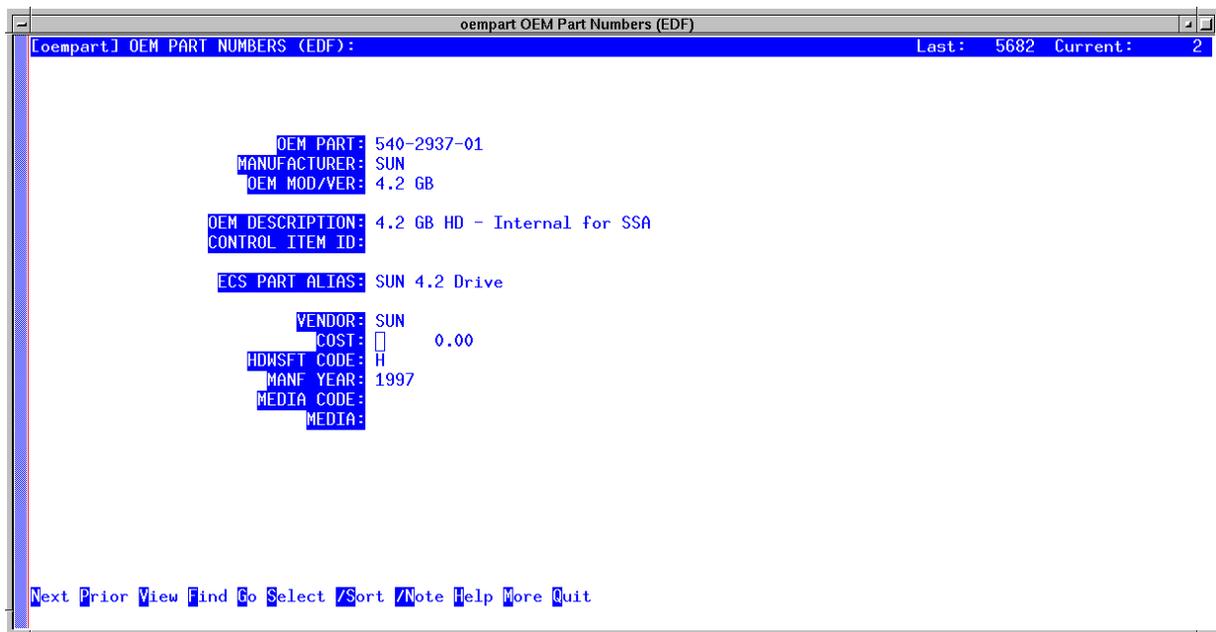


Figure 4.3.4-91. OEM Part Numbers (EDF) CHUI

Table 4.3.4-77 describes the fields on the OEM Part Numbers screen.

Table 4.3.4-77. OEM Part Numbers (EDF) Field Descriptions

Field Name	Data Type	Size	Entry	Description
OEM PART	String	34	Required	Manufacturer's or vendor's part number for an item.
MANUFACTURER	String	40	Optional	Code for the manufacturer of the item.
OEM MOD/VER	String	24	Optional	Model or version of the item.
OEM DESCRIPTION	String	40	Optional	Manufacturer's or vendor's description of the item.
CONTROL ITEM ID	String	20	Optional	Identifier of a corresponding, version-controlled item in the BASELINE MANAGEMENT system. The operator can enter the ID if known, or perform a zoom to the baseline data file.
ECS PART ALIAS	String	40	Optional	Common name used in ECS for a product and all its versions and variants.
VENDOR	String	6	Optional	Code for the vendor from whom the item is purchased. The operator can zoom to the Vendor file and choose the code, if it had been entered there previously. (See the Vendor Master section.)
COST	Floating	9.2	Optional	Purchase cost of the item.
HDWSFT CODE	String	10	Optional	Code for classifying items according to source of maintenance costs.
MANF YEAR	String	4	Optional	Year (4-digit) the item was manufactured. This field defaults to the year specified in the system parameters data file.
MEDIA CODE	String	4	Optional	Code for Media identification.
MEDIA	String	10	Optional	Media material.

4.3.4.2.8.12 Shipment Number Manager Screen

Operators use the Shipment Number Manager screen (Figure 4.3.4-92) to browse – and update if necessary – the numbers and alpha characters used for reporting and tracking shipments of material. Inventory locations are each to be assigned a unique shipping number. Alpha characters reflect individual shipments, and are incremented during Ship EIN processing using the conversion data maintained via the Report Number screen.

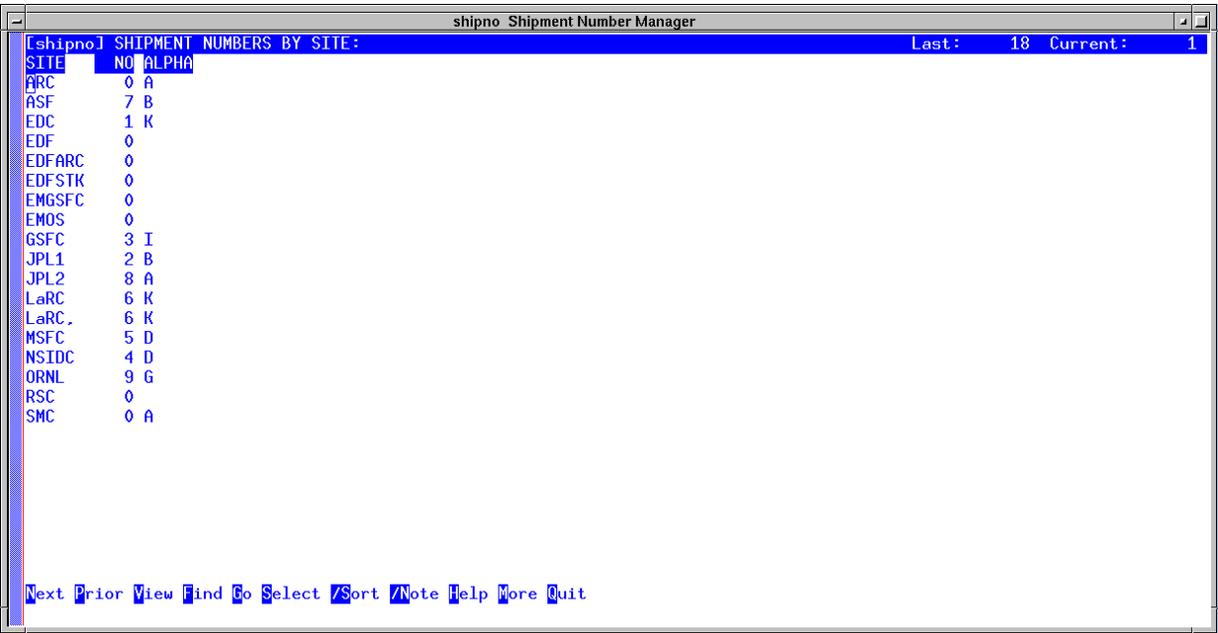


Figure 4.3.4-92. Shipment Number Manager CHUI

Table 4.3.4-78 describes the fields on the Shipment Number Manager screen.

Table 4.3.4-78. Shipment Number Manager Field Descriptions

Field Name	Data Type	Size	Entry	Description
SITE	String	6	Required	Code for a "site" listed in the Inventory Location file.
NO	Numeric	4	Optional; default is 0	Number assigned to all shipments for the site.
ALPHA	String	4	Optional	Alpha character used to identify the most recent iteration of a report.

4.3.4.2.8.13 Carriers Screen

Operators use the Carriers screen (Figure 4.3.4-93) to maintain standardized information about carriers used for shipments. Screen Ship EIN uses this data.

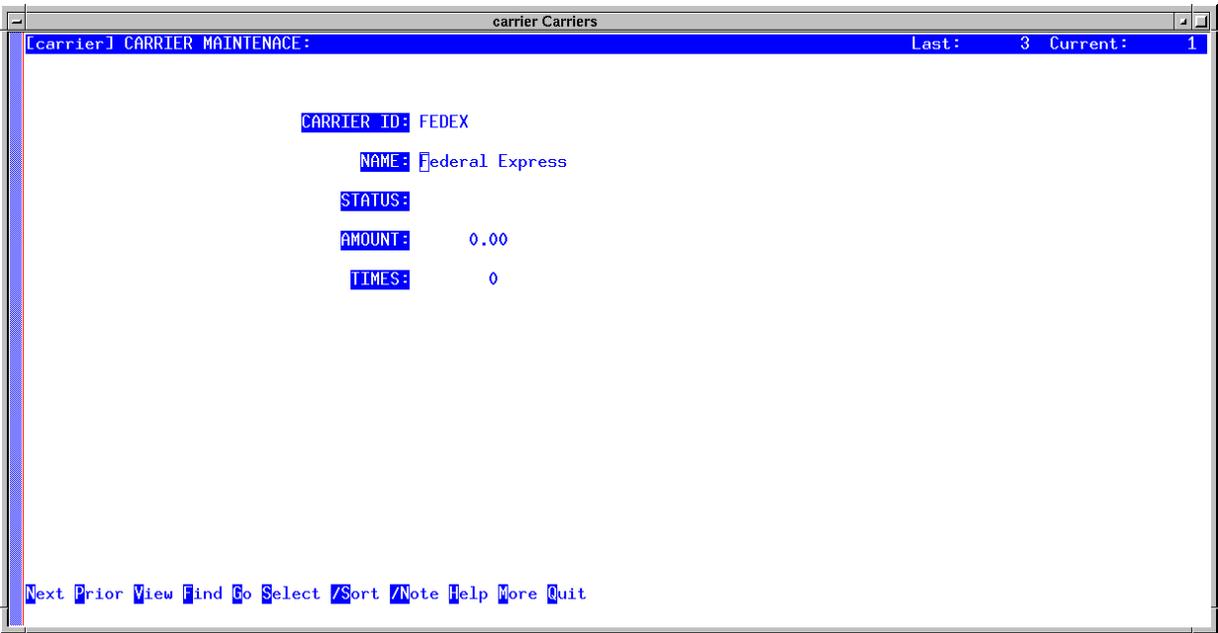


Figure 4.3.4-93. Carriers CHUI

Table 4.3.4-79 describes the fields on the Carrier Maintenance Page for the Carriers screen.

Table 4.3.4-79. Carriers Field Descriptions

Field Name	Data Type	Size	Entry	Description
CARRIER ID	String	6	Required	Enter the code to be used for the carrier.
NAME	String	30	Optional	Enter the name of the carrier corresponding to the displayed code.
STATU	String	10	Optional	Status of the carrier.
AMOUNT	A	7	Optional	Amount of carrier services used.
TIMES	String	8	Optional	Number of times carrier has been used.

4.3.4.2.8.14 ILM Import Records Screen

ILM data are exchanged among ECS sites on a routine basis. The ILM Import Records utility is designed to load data from tar files that had been created and forwarded using either of XRP-II's two ILM data export utilities (see Sections 4.3.4.2.7.9 and 4.3.4.2.7.10).

The screen shown in Figure 4.3.4-94 starts the import process. Entering "Y" at the prompt causes XRP-II to process all files in the directory named in the IMPORTPATH environment variable. Import tar files -- whose names indicate the date and time they were made -- are processed in chronological order as determined from their file names. Upon completion, the original files are moved to an archive directory named in the IMPORTARC environment variable.

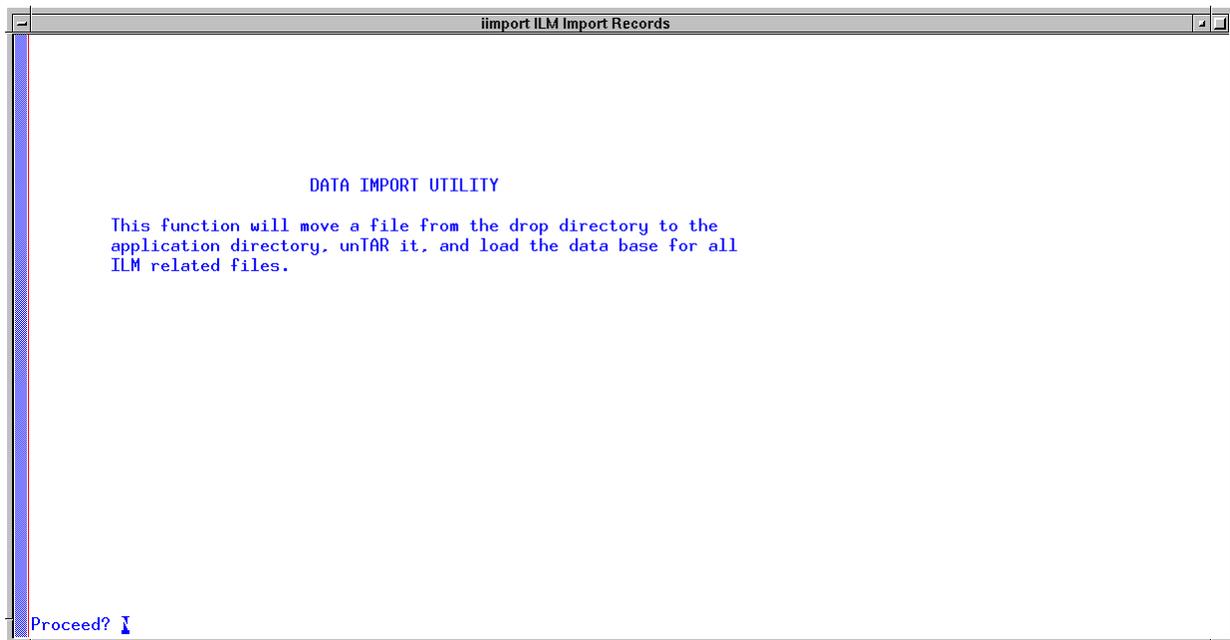


Figure 4.3.4-94. ILM Import Records CHUI

4.3.4.2.8.15 Sales/Purchase Terms Maintenance Screen

The Sales/Purchase Terms Maintenance screen (Figure 4.3.4-95) maintains codes and descriptions for standard terms under which purchases are made. The data supports purchase order processing.

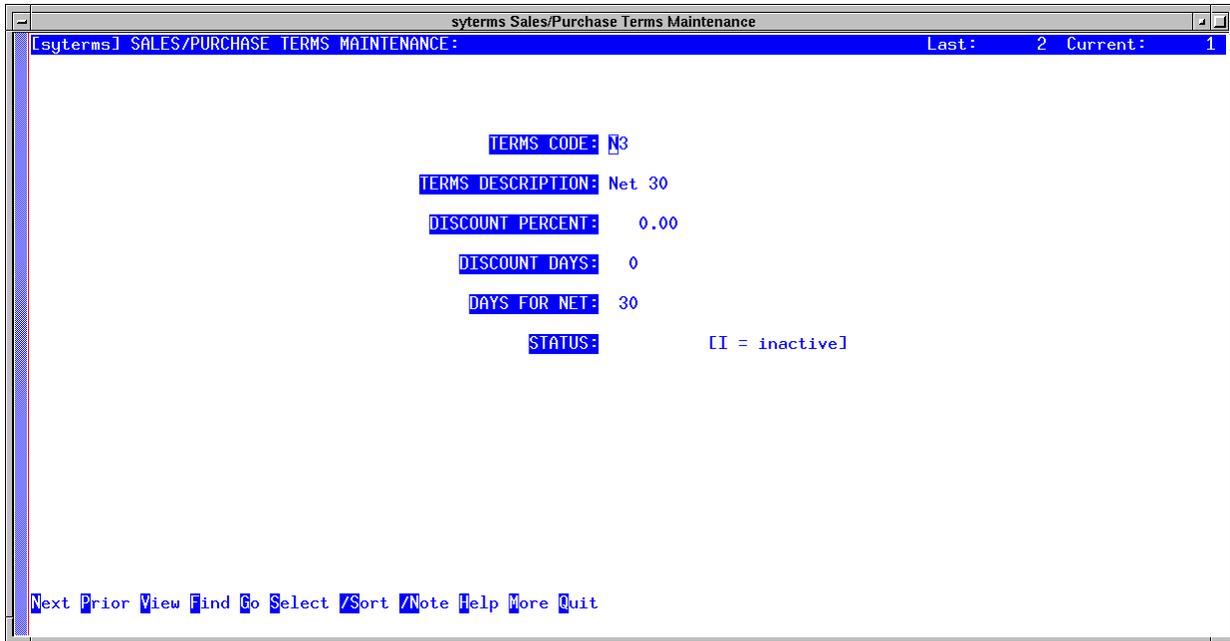


Figure 4.3.4-95. Sales/Purchase Terms Maintenance CHUI

Table 4.3.4-80 describes the fields on the Sales/Purchase Terms Maintenance screen.

Table 4.3.4-80. Sales/Purchase Terms Maintenance Field Descriptions

Field Name	Data Type	Size	Entry	Description
TERMS CODE	String	2	Required	Code for the default payment terms for invoices for a vendor.
TERMS DESCRIPTION	String	20	Optional	Description of the terms.
DISCOUNT PERCENT	String	3	Optional	Discount percent if available.
DISCOUNT DAYS	String	3	Optional	Days to pay invoice to get discount.
DAYS FOR NET	Numeric	3	Optional	Days to pay before getting penalized for late payment.
STATUS	String	1	Optional	Code the status of the code. Codes can be designates as inactive.

4.3.4.2.8.16 Reason Code Maintenance Screen

Operators use the Reason Code screen (Figure 4.3.4-96) to maintain standard codes and descriptions of reasons for inventory and maintenance management transactions.

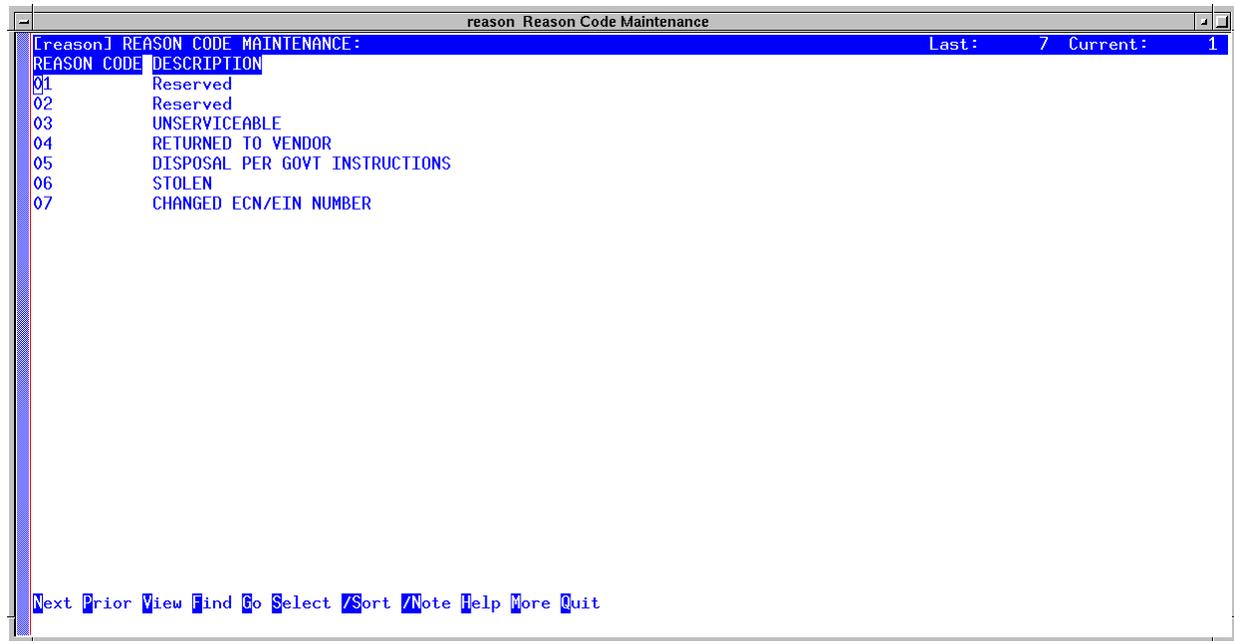


Figure 4.3.4-96. Reason Code Maintenance CHUI

Table 4.3.4-81 describes the fields on the Reason Code Maintenance screen.

Table 4.3.4-81. Reason Code Maintenance Field Descriptions

Field Name	Data Type	Size	Entry	Description
REASON CODE	String	2	Required	Code for a "reason".
DESCRIPTION	String	20	Optional	Description of the reason.

4.3.4.2.8.17 Site Codes for Scanned Data Screen

This screen (Figure 4.3.4-97) allows operators to maintain a set of standard codes and descriptions for identifying ECS sites and buildings. Each code represents one site/building pair. They are used to decipher location codes used in bar code scanner data imported into ILM.

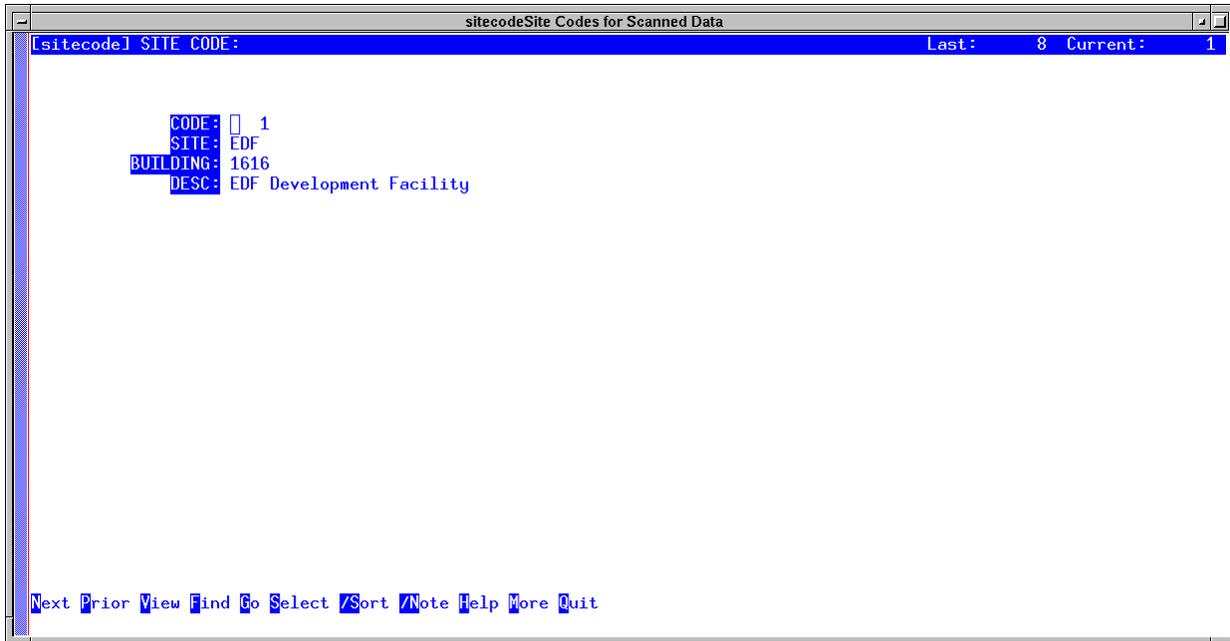


Figure 4.3.4-97. Site Codes for Scanned Data CHUI

Table 4.3.4-82 describes the fields on the Site Codes for Scanned Data screen.

Table 4.3.4-82. Site Codes for Scanned Data Field Descriptions

Field Name	Data Type	Size	Entry	Description
CODE	Numeric	4	Required	Code assigned to a Site and Building.
SITE	String	6	Optional	Code for an ECS site. The operator can zoom to the Site Master file to choose the code, if it had been entered there previously. (See the Site Master Manager section.)
BUILDING	String	6	Optional	Identifier for the building where an item can be found.
DESC	String	40	Optional	Description of the Site/Bldg combination.

4.3.4.2.8.18 Scanned Data Screen

The Scanned Data screen (Figure 4.3.4-98) presents a set of bar code scanner data that had been loaded into ILM but not yet processed. It allows operators to review and edit scanned data that has been pre-processed and to create additional data if desired. Records are typically imported using ILM's scan data processing function, which also deletes them after they have been processed successfully.

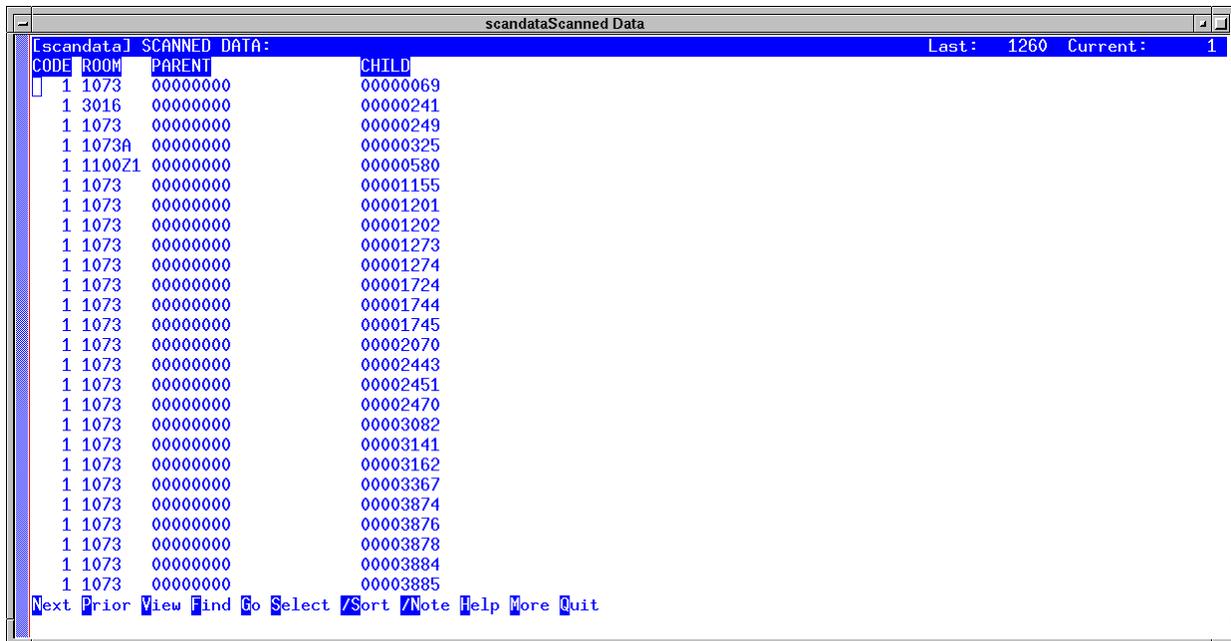


Figure 4.3.4-98. Scanned Data CHUI

Table 4.3.4-98 describes the fields on the Scanned Data screen.

Table 4.3.4-83. Scanned Data Field Descriptions

Field Name	Data Type	Size	Entry	Description
CODE	Numeric	4	Required	Code assigned to a Site and Building.
ROOM	String	4	Optional	Scanned room number.
PARENT	String	20	Optional	Scanned Parent EIN.
CHILD	String	20	Optional	Scanned Child EIN.

4.3.4.2.8.19 Process Scanned Data Screen

The Process Scanned Data screen (Figure 4.3.4-99) controls the updating of ECS property records using information about EINs derived from bar code readers. The bar code data is typically obtained during a physical inventory or audit and is stored in a file specially formatted for processing by XRP-II.

Operators can load data from the file and pre-process it to identify conflicts between it and information already stored in the ILM database. Among others, discrepancies can include:

- EINs that were found by the audit but are not known to ILM;
- EINs designated in ILM as a child of a parent but found associated with a different parent in the bar code data; and,

- parent EINs shown in ILM as being at the site but missing in the data. The Preprocess Data Report itemizes the findings.

Operators process the data after the discrepancies are resolved, at which time the system updates the property records to reflect the location, building, and room for the EINs in the file. However, the database remains unchanged for EINs that still have product structure discrepancies and for those that have not yet been added to ILM.

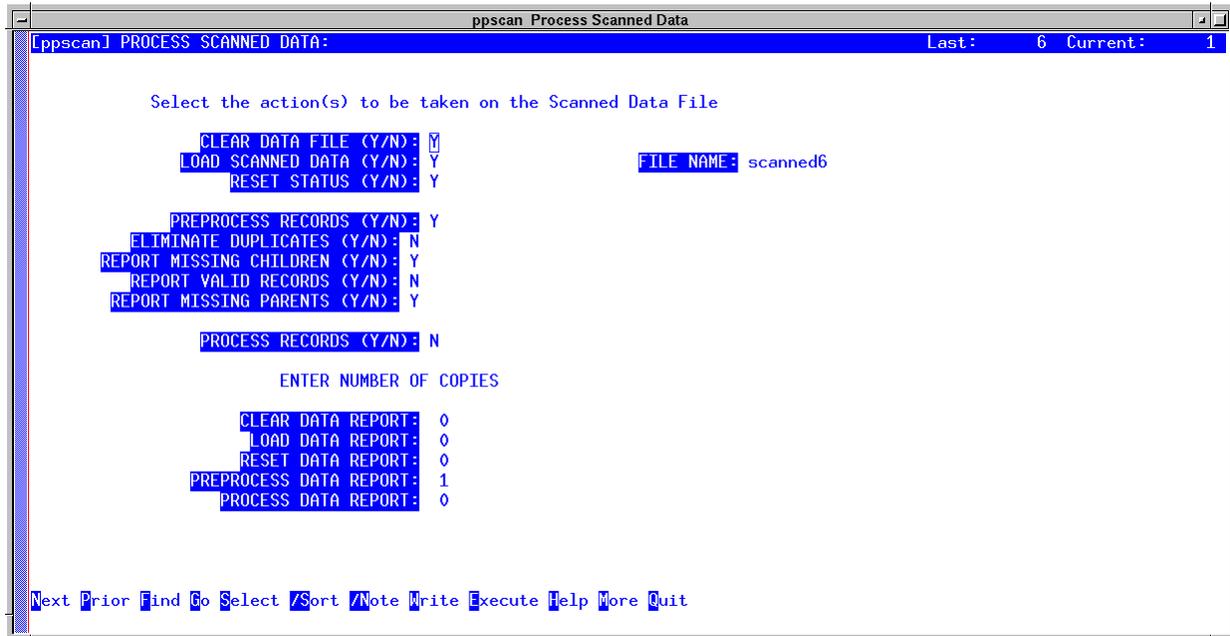


Figure 4.3.4-99. Process Scanned Data CHUI

Table 4.3.4-84 describes the fields on the Process Scanned Data screen.

Table 4.3.4-84. Process Scanned Data Field Descriptions (1 of 2)

Field Name	Data Type	Size	Entry	Description
CLEAR DATA FILE (Y/N)	String	1	Optional; Y or N	Flag designating whether or not to clear previously loaded scanned data records before starting the pre-processing or processing activity.
LOAD SCANNED DATA (Y/N)	String	1	Optional; Y or N	Flag designating if scanned data should be loaded or reloaded from the named file before starting the pre-processing or processing activity.
FILE NAME	String	40	Optional; Required when Load Scanned Data = Y	Name of the file containing the bar code scan data to be imported.

Table 4.3.4-84. Process Scanned Data Field Descriptions (2 of 2)

Field Name	Data Type	Size	Entry	Description
RESET STATUS (Y/N)	String	1	Optional; Y or N	Flag designating if processing status flags have been previously set in loaded data records should be reset before starting the pre-processing or processing activity. Set to Y before preprocessing.
PREPROCESS RECORDS (Y/N)	String	1	Optional; Y or N	Flag designating whether or not to compare scanned data to existing inventory records before updating the database.
ELIMINATE DUPLICATES (Y/N)	String	1	Optional; Y or N	Flag designating if duplicate records are to be eliminated from scanned data. Applies to pre-processing only.
REPORT MISSING CHILDREN (Y/N)	String	1	Optional; Y or N	Flag designating whether or not to report child EINs not found in the scanned data. Applies to pre-processing only.
REPORT VALID RECORDS (Y/N)	String	1	Optional; Y or N	Flag designating whether or not to report records found to be valid in the scanned data file. Applies to pre-processing only.
REPORT MISSING PARENTS (Y/N)	String	1	Optional; Y or N	Flag designating whether or not to report "top-level" EINs not found in the scanned data. Applies to pre-processing only.
PROCESS RECORDS (Y/N)	String	1	Optional; Y or N	Flag designating whether or not to update location information in the database based on the scanned data.
CLEAR DATA REPORT	Numeric	2	Required	Number of copies of "CLEAR DATA FILE" report desired.
LOAD DATA REPORT	Numeric	2	Required	Number of copies of "LOAD DATA FILE" report desired.
RESET DATA REPORT FILE	Numeric	2	Required	Number of copies of "RESET DATA FILE" report desired.
PREPROCESS DATA REPORT	Numeric	2	Required	Number of copies of "PREPROCESS RECORDS" report desired.
PROCESS DATA REPORT	Numeric	2	Required	Number of copies of "PROCESS RECORDS" report desired.

4.3.4.3 Required Operating Environment

For all COTS packages, appropriate information on operating environments, tunable parameters, environment variables, and a list of vendor documentation can be found in a CM controlled document for each product. To access the ILM document, refer to the COTS Release Notes Index web page of the EDHS. The current URL is <http://cmdm.east.hitc.com/baseline/cots/>.

4.3.4.3.1 Interfaces and Data Types

Not applicable.

4.3.4.4 Databases

The XRP-II application uses the COTS product UNIFY for database functions. Refer to the UNIFY documentation listed in Section 4.3.4.

4.3.4.5 Special Constraints

None.

4.3.4.6 Outputs

Outputs from the XRP-II application for ILM are generated in several ways as listed in Table 4.3.4-85.

Table 4.3.4-85. Outputs

Output	Description and Format
CHUI displays	Menus and functions described in Section 4.3.4.2.
ILM ad hoc reports	Reports generated using the /Report option on ILM CHUIs.
Prints of CHUI displays	Screen prints of the displayed information.
File output	Files generated with the Write option on ILM CHUIs.
Data base updates	ILM Add, Insert, Copy, Delete, and Modify actions.

4.3.4.7 Event and Error Messages

Error messages from ILM that originate from data storage access conflicts are documented in Appendix E of the *UNIFY Direct HLI Programmer's Manual*.

4.3.4.8 Reports

Table 4.3.4-86 identifies the predefined reports available in ILM. The following figures (4.3.4-100 - 4.3.4-128) present a sample of each.

Table 4.3.4-86. Reports (1 of 3)

Report Type	Report Description	When and Why Used
Logistics Management		
Open Purchase Order by PO Report (Figure 4.3.4-100)	A list of the items on open purchase orders, sorted by purchase order and line item sequence number.	Whenever the status of purchase orders in work must be reported.
Open Purchase Orders by Part Report (Figure 4.3.4-101)	A list of the items on open purchase orders, sorted by part number, purchase order, and line item sequence number.	Whenever the status of part purchases must be reported.
Open Purchase Orders Date Due Report (Figure 4.3.4-102)	A list of the items on open purchase orders, sorted by date due, part number, purchase order, and line item sequence number.	Whenever the schedule of pending deliveries must be reported.
Open Purchase Orders by Vendor and Due Date Report (Figure 4.3.4-103)	A list of the items on open purchase orders, sorted by vendor, date due, purchase order, and line item sequence number.	Whenever vendor performance must be reported.
Purchase Order (Figure 4.3.4-104)	Details about one or more operator-specified purchase orders having “firm planned” or, optionally, “released” status intended for use with pre-printed forms.	Whenever a purchase is required.
Receiving		
Receiving Report (Figure 4.3.4-105)	A list of the items in operator-selected receipts, grouped by receipt and sorted by purchase order line item number.	Whenever a history of receiving activity must be reported.
Receipts by Part Report (Figure 4.3.4-106)	A list of the receipts for parts during an operator-specified timeframe, grouped by part number then sorted by date.	Whenever a history of having received certain parts is required.
Receipts by Vendor Report (Figure 4.3.4-107)	A list of the receipts for parts during an operator-specified timeframe, grouped by vendor then sorted by receipt number.	Whenever a history of having received parts from a certain vendor is required.
Receipt List by Part Report (Figure 4.3.4-108)	A list of items received sorted by part number, purchase order, and receive date.	Whenever a history of receiving activity is required.
Inventory/Property Management		
ILM Inventory – By Location (Figure 4.3.4-109)	A list of EINs by inventory location.	This report would be used to assist in performing an Inventory Audit.
ILM Costed Inventory Report – By Location (Figure 4.3.4-110)	A list of EINs by inventory location with unit costs.	Whenever a financial audit is required.
EIN Structure Report (Figure 4.3.4-111)	This report provides a listing of equipment with parent and child (parts) of equipment to assemble.	Whenever equipment with parts are provided to a site to determine and track parts of equipment and for maintenance.

Table 4.3.4-86. Reports (2 of 3)

Report Type	Report Description	When and Why Used
Equipment Installation/Receipt Report by EIN Number (Figure 4.3.4-112)	A receipt describing a operator-specified EIN-controlled item together with all its associated components.	Whenever an audit of site property is required.
Equipment Installation Report by EIN Number (Figure 4.3.4-113)	A receipt describing an operator-specified EIN-controlled item together with its components having status "I" (for installed).	Whenever equipment is installed at a site to keep track of equipment available and warranties and licenses.
Installation Summary Report (Figure 4.3.4-114)	A list containing the identity and location of parent EIN items and their associated components installed during an operator-specified timeframe.	Whenever a history of installation activity is required.
EOSDIS Equipment Relocation Report (Figure 4.3.4-115)	This report provides a record of any equipment relocations within or outside of a site.	Whenever equipment is relocated from one place to another within the ECS.
ECS Shipping Report (Figure 4.3.4-116)	A description of the cartons and the items in an operator-specified shipment.	Whenever a shipment occurs.
EOSDIS Equipment Transfer / Receipt Report (Figure 4.3.4-117)	This report provides a list of equipment that has been targeted for transfer and a status of the receipt of the equipment at the transfer site.	Whenever equipment is moved from one place to another in the ECS for tracking and inventory purposes.
Receipts by Receipt Number Report (Figure 4.3.4-118)	A list of inventory items received -- sorted by receipt number -- derived from the inventory transaction log.	Whenever a history of the activity against a receipt is required.
Receipts by EIN / Part Report (Figure 4.3.4-119)	A list of operator-specified items received during an operator-specified timeframe, sorted by OEM part number and "from" location.	Whenever a history of the receiving activity against certain EINs is required.
Transaction History by EIN Report (Figure 4.3.4-120)	A list of the number and type of transactions processed for operator-specified items during an operator-specified timeframe, sorted by EIN number and "from" location.	Whenever a history of all transactions against certain EINs is required.
Transaction History for Spares Report (Figure 4.3.4-121)	A list of the transactions (e.g., receipts and transfers) processed for spare items during an operator-specified timeframe, sorted by OEM part number.	Whenever a history of all transactions against certain spare parts is required.
Transaction History for Consumables Report (Figure 4.3.4-122)	A list of the transactions (e.g., receipts and transfers) processed for consumable items during an operator-specified timeframe, sorted by OEM part number.	Whenever a history of all transactions against certain consumable parts is required.

Table 4.3.4-86. Reports (3 of 3)

Report Type	Report Description	When and Why Used
<i>Maintenance Management</i>		
Maintenance Work Order Report (Figure 4.3.4-123)	A full description of operator-selected work orders and the items undergoing maintenance action that they cover.	Whenever full details about certain work orders must be reported.
Work Order History Report (Figure 4.3.4-124)	A list of repaired, replaced, and replacement items, grouped by work order and sorted by EIN number.	Whenever a summary of the parts replaced is required for one or more work orders.
Work Order Status Report (Figure 4.3.4-125)	A list of operator-specified work orders that identifies the status of each and the items under maintenance each work order covers.	Whenever a summary of selected work orders is required.
<i>License Management</i>		
License Entitlements Status Report (Figure 4.3.4-126)	A list of purchased license entitlements for software, grouped by product, detailing the rights-to-use remaining for each.	Whenever a review of license availability is required.
License Allocations by Product Report (Figure 4.3.4-127)	A list of the software licenses allocated to hosts, grouped by product and version.	Whenever a license inventory by product is required.
License Allocations by Host Report (Figure 4.3.4-128)	A list of the software licenses allocated to hosts, grouped by host and EIN number.	Whenever a license inventory by host is required.

4.3.4.8.1 Sample Reports

PO VENDOR		SEQ	PART	DESCRIPTION	DUE DATE	PUOM	QUANTITY ORDERED (puom)	TOTAL DUE (puom)	ITEM PRICE	BAL DUE EXT COST
CCW0011436	Storage	1	RW/MED-50	TAPE CLEANING CART	11/28/99		220	220.0		0.00
CCW0011436	Storage	2	RW/MED-CLN	REDWOOD CLEANING C	11/28/99		20	20.0		0.00
CCW0012600	Storage	1	MED9840-CLN	CLEANING TAPE,9840	11/29/99		150	150.0		0.00
H28508	APCON	1	ACI-6515	Cable - 15FT 68PT	12/03/99		32	32.0		0.00
H28508	APCON	2	ACI-6550	CABLE - 50 FT 68 P	12/03/99		16	16.0		0.00

Figure 4.3.4-100. Open Purchase Orders by PO Report

(vmporeps3)
 ECS Development Facility
 Order Types: S
 All Vendors

OPEN PURCHASE ORDERS BY PART
 All Purchase Orders

DATE: 01/05/00 TIME: 13:40
 PAGE: 1
 Entry Dates: 09/01/99-12/31/99
 All Due Dates

PART	DESCRIPTION	PUOM	QUANTITY ORDERED (puom)	TOTAL DUE (puom)	ITEM PRICE	BAL DUE EXT COST	DUE DATE	PO	SEQ	VENDOR
THXHC-02	TAPE CLEANING CART		25	25.0		0.00	11/28/99	310516-011	1	
RW/MED-50	TAPE CLEANING CART		220	220.0		0.00	11/28/99	CCW0011436	1	Storag
RW/MED-CLN	REDWOOD CLEANING C		20	20.0		0.00	11/28/99	CCW0011436	2	Storag
MED9840-CLN	CLEANING TAPE,9840		150	150.0		0.00	11/29/99	CCW0012600	1	Storag
ACI-6515	Cable - 15FT 68PT		32	32.0		0.00	12/03/99	H28508	1	APCON
ACI-6550	CABLE - 50 FT 68 P		16	16.0		0.00	12/03/99	H28508	2	APCON

Figure 4.3.4-101. Open Purchase Orders by Part Report

(vmporeps4)
 ECS Development Facility
 Order Types: S

OPEN PURCHASE ORDERS BY DATE DUE
 All Purchase Orders
 All Vendors

DATE: 01/05/00 TIME: 13:40
 PAGE: 1
 Entry Dates: 09/01/99-12/31/99
 All Due Dates

PART	DESCRIPTION	PUOM	QUANTITY ORDERED (puom)	TOTAL DUE (puom)	ITEM PRICE	EXT COST	DUE DATE	PO	SEQ	VENDOR
THXHC-02	TAPE CLEANING CART		25	25.0		0.00	11/28/99	310516-011	1	
RW/MED-50	TAPE CLEANING CART		220	220.0		0.00	11/28/99	CCW0011436	1	Storag
RW/MED-CLN	REDWOOD CLEANING C		20	20.0		0.00	11/28/99	CCW0011436	2	Storag
MED9840-CLN	CLEANING TAPE,9840		150	150.0		0.00	11/29/99	CCW0012600	1	Storag
ACI-6515	Cable - 15FT 68PT		32	32.0		0.00	12/03/99	H28508	1	APCON
ACI-6550	CABLE - 50 FT 68 P		16	16.0		0.00	12/03/99	H28508	2	APCON

Figure 4.3.4-102. Open Purchase Orders by Date Due Report

(vmporeps6)
 ECS Development Facility
 Order Types: S

OPEN PURCHASE ORDERS BY VENDOR AND DUE DATE
 All Purchase Orders
 All Vendors

DATE: 01/05/00 TIME: 13:40
 PAGE: 1
 Entry Dates: 09/01/99-12/31/99
 All Due Dates

VENDOR ID	PO	SEQ	PART	DESCRIPTION	PUOM	DUE DATE	QUANTITY ORDERED (puom)	TOTAL DUE (puom)	ITEM PRICE	EXT COST
ALL	310516-011	1		THXHC-02		11/28/99	25	25.0		0.00
ALL	H27369	1		LABELS		11/28/99	10	10.0		0.00
Vendor ALL								total		0.00
APCON	H28508	1		ACI-6515		12/03/99	32	32.0		0.00
APCON	H28508	2		ACI-6550		12/03/99	16	16.0		0.00
Vendor APCON								total		0.00
STK	CCW0011436	0				**/**/**	1	1.0		0.00
STK	CCW0011436	1		RW/MED-50		11/28/99	220	220.0		0.00
STK	CCW0011436	2		RW/MED-CLN		11/28/99	20	20.0		0.00
STK	CCW0012600	1		MED9840-CLN		11/29/99	150	150.0		0.00
STK	CCW0012600	2		RWMED-CLN		11/29/99	50	50.0		0.00
Vendor STK								total		0.00
Grand total									=====	0.00

Figure 4.3.4-103. Open Purchase Orders by Vendor and Due Date Report

ECS Development Facility					H28369
ANICOM	ECS Development Facility				STOCK
					10/07/99 1
Destination					
1 0400-30200	10/07/99	83	91.25	7,573.75	
DELIVER TO ==> EDF					
Interim report					
** STATE TAX TOTAL:					0.00
** LOCAL TAX TOTAL:					0.00
MISCELLANEOUS CHARGES:					0.00
PURCHASE ORDER TOTAL:					7,573.75

Figure 4.3.4-104. Purchase Order

SITE: ECS Development Facility		RECEIVING REPORT		PAGE: 1	
PURCHASE ORDER: 0000000016		DATE: 01/28/00			
OEM PART	OEM DESCRIPTION	QUANTITY RXD (suom)	MODEL/VERSION	DATE RECEIVED	
=====	=====	=====	=====	=====	
SCM001414-00	128VOICE PCI WAVETABLE ONBOARD SOU	2.0		**/**/**	
		.			
		.			
		.			

Figure 4.3.4-105. Receiving Report

```

(vmrecvr)
ECS Development Facility
RECEIPTS BY PART
Receipt Dates: 05/02/99-04/01/02
DATE: 01/05/00 TIME: 13:39
PAGE: 1

```

```

*****
Part: 0400-30200 SC TO SC FIBER CABLE, MULTIMODE, 200 FT

```

TYPE ID	NAME	RECEIPT	DATE	ORDER NUMBER	ITEM PRICE
=====	=====	=====	=====	=====	=====
PO	ANICOM ANICOM	60	01/04/00	H28369	

```

*****
Part: 66729 LABELS, ATTENTION (5/8X2) 500 PER ROLL

```

TYPE ID	NAME	RECEIPT	DATE	ORDER NUMBER	ITEM PRICE
=====	=====	=====	=====	=====	=====
PO	MRS MARSHALL INDUSTRIES	67	01/14/98	H28235	

```

*****
Part: 81801 TAPE, FLOOR MARKING, ESD 3" X 108"

```

TYPE ID	NAME	RECEIPT	DATE	ORDER NUMBER	ITEM PRICE
=====	=====	=====	=====	=====	=====
PO	MRS MARSHALL INDUSTRIES	67	01/14/98	H28235	

```

*****
Part: AHA2944UWKIT

```

TYPE ID	NAME	RECEIPT	DATE	ORDER NUMBER	ITEM PRICE
=====	=====	=====	=====	=====	=====
PO	ALA Alantec	332	01/04/00	317665	

Figure 4.3.4-106. Receipts by Part Report

(vmrecvrl)
ECS Development Facility

RECEIPTS BY VENDOR
Receipt Dates: 05/02/99-04/01/02

DATE: 01/05/00 TIME: 13:39
PAGE: 1

Vendor: ALA Alantec

RECEIPT	DATE	ENTERED	PURCHASE ORDER	VENDOR REFERENCE	OEM PART	ITEM PRICE
332	01/04/00		317665		AHA2944UWKIT	

Vendor: ANICOM ANICOM

RECEIPT	DATE	ENTERED	PURCHASE ORDER	VENDOR REFERENCE	OEM PART	ITEM PRICE
60	01/04/00		H28369		0400-30200	

Vendor: ARCADE ARCADE

RECEIPT	DATE	ENTERED	PURCHASE ORDER	VENDOR REFERENCE	OEM PART	ITEM PRICE
70	01/15/98		H28286		PLS16071	

Vendor: MRS MARSHALL INDUSTRIES

RECEIPT	DATE	ENTERED	PURCHASE ORDER	VENDOR REFERENCE	OEM PART	ITEM PRICE
67	01/14/98		H28235		66729	
67	01/14/98		H28235		81801	
67	01/14/98		H28235		CHA06742	
67	01/14/98		H28235		CHA06745	
67	01/14/98		H28235		CHA06850	
67	01/14/98		H28235		CHA07780	

Figure 4.3.4-107. Receipts by Vendor Report

(vmrecvr2)
 ECS Development Facility
 All part numbers
 All vendor names

RECEIPT LIST BY PART
 All part descriptions
 Receipt Dates: 05/02/99-04/01/02

DATE: 01/05/00 TIME: 13:39
 PAGE: 1
 All vendor IDs

OEM PART	OEM DESCRIPTION	RECEIPT	DATE ENTERED	TYPE	ORDER NUMBER	ID NUMBER	QUANTITY RXD (suom)	ITEM PRICE	EXTENDED AMOUNT
0400-30200	SC TO SC FIBER CABLE, MULTIMODE, 200 FT	60	01/04/00	PO	H28369	ANICOM	84.0		0.00
66729	LABELS, ATTENTION (5/8X2) 500 PER ROLL	67	01/14/98	PO	H28235	MRS	2.0		0.00
81801	TAPE, FLOOR MARKING, ESD 3" X 108"	67	01/14/98	PO	H28235	MRS	2.0		0.00
AHA2944UWKIT		332	01/04/00	PO	317665	ALA	1.0		0.00
CHA06742	SIGN AREA WARNING	67	01/14/98	PO	H28235	MRS	2.0		0.00
CHA06745	SIGN, ATTENTION	67	01/14/98	PO	H28235	MRS	14.0		0.00
CHA06850	PADDLES, ESD TRAINING	67	01/14/98	PO	H28235	MRS	1.0		0.00
CHA07780	MAT, PORTABLE W/WRIST STRAP	67	01/14/98	PO	H28235	MRS	2.0		0.00
CHA50070	KIT/TEST/RESISTANCE/DIGITAL 120VAC	67	01/14/98	PO	H28235	MRS	1.0		0.00
CHA50259	TESTER/POCKET/SURFACE RESISTANCE	67	01/14/98	PO	H28235	MRS	7.0		0.00
CHA73720	SMOCK, BLUE LARGE	67	01/14/98	PO	H28235	MRS	14.0		0.00
CHA73730	SMOCK, BLUE X-LARGE	67	01/14/98	PO	H28235	MRS	5.0		0.00
CHA77145	MATTOP RUBBER, BLUE	67	01/14/98	PO	H28235	MRS	11.0		0.00
CHA98207	MONITOR, DUAL OPERATOR	67	01/14/98	PO	H28235	MRS	1.0		0.00
CHA98210	MONITOR, WRIST STRAP W/WORKSTATION	67	01/14/98	PO	H28235	MRS	5.0		0.00
PLS16071	TAPE FLOOR MARKING, ESD 3INCH X 108 INCH	70	01/15/98	PO	H28286	ARCADE	2.0		0.00
RW/MED-50	REDWOOD D-3 50GB CARTRIDGE	54	01/12/99	PO	CCW0011598	STK	100.0		0.00
RW/MED-50	REDWOOD D-3 50GB CARTRIDGE	54	01/12/99	PO	CCW0011598	STK	50.0		0.00
RW/MED-CLN	REDWOOD CLEANING CARTRIDGE	52	01/12/99	PO	CCW0011523	STK	5.0		0.00
RW/MED-CLN	REDWOOD CLEANING CARTRIDGE	52	01/12/99	PO	CCW0011523	STK	10.0		0.00
RW/MED-CLN	REDWOOD CLEANING CARTRIDGE	52	01/12/99	PO	CCW0011523	STK	20.0		0.00
RW/MED-CLN	REDWOOD CLEANING CARTRIDGE	54	01/12/99	PO	CCW0011598	STK	10.0		0.00
Grand Total:							349.0		0.00

Figure 4.3.4-108. Receipt List by Part Report

(ilminv1)

ILM INVENTORY REPORT - BY LOCATION

DATE: 01/07/00 TIME: 12:36

PAGE: 1

LOCATION: EDF : ECS Development Facility

EIN	OEM PART NO	OEM DESC	MODEL	SERIAL NO	BUILDING	ROOM
00000000	PARENTREC	PARENT FOR NON INSTALLED ITEMS RM 1073			1616	1073
00000004	PE301-CD	3000-300 Workstation	300X AXP	AB3500171X	1616	1073
00000006	7012-340	RISC 6000 Workstation	6000	MS70122663304	1616	1073
00000007	A2094A	Color Monitor - 19 IN		JP01000992	1616	1100D3
00000008	VRT19-HA	Color Monitor - 19 IN		IS33984574	1616	1073
00000009	7208-001	4 Milimeter Tape Unit	Model 7208	MS72062626430	1616	1073
00000010	6091-191	19 Inch Color Monitor		23-K0146	1616	1073
00000011	A2627A	715-50 PA RISC Workstation	715-50	6342A30521	1616	1100D3
00000013	S10TX-44-032-P46	SPARCStation 10	10	403F1014	1616	3039
00000014	A2094A	Color Monitor - 19 IN		JP04050797	1616	1100D3
00000015	X557A	CD ROM - 644 MB		405G1578	1616	1100D7
00000016	TLZ06-VA	Tape Drive - 4 MM		CX35103575	1616	1073
00000018	X814A	Tape Drive - 5 GB - 8 MM		407G3165	1616	1100D4
00000019	C1521B	Tape Drive - 2.0 GB - 4 MM		3314E62862	1616	1052C
00000022	PE301-CD	3000-300 Workstation	300X AXP	AB333001N2	1616	1105B1
00000023	PE301-CD	3000-300 Workstation	300X AXP	AB33300I04	1616	1073
00000025	VRT19-HA	Color Monitor - 19 IN		IS31773470	1616	1073
00000027	VRT19-HA	Color Monitor - 19 IN		IS31162480	1616	1105B1
00000028	VRT19-HA	Color Monitor - 19 IN		IS31162482	1616	1073
00000030	X545A	1.05 GB HD - Desktop		410G0301	1616	1100F4
00000031	BA353-AF	CD ROM - in Storage Expansion Unit		KB34203698	1616	1073
00000033	X545A	1.05 GB HD - Desktop		412G2197	1616	1073
00000034	PE301-CD	3000-300 Workstation	300X AXP	AB3500305S	1616	1073
00000035	X557A	CD ROM - 644 MB		408G0598	1616	1100D4
00000038	4-30-GX-32 P46	SPARCSystem LX Workstation	LX	411E0158	1616	1073
00000040	A2627A	715-50 PA RISC Workstation	715-50	6342A30520	1616	1105A2
00000041	A2608A	735 CRX Performance Workstation-Server 3	735-CRX	6342A00425	1616	1100D3
00000042	A2627A	715-50 PA RISC Workstation	715-50	6342A30034	1616	1073
00000043	A2627A	715-50 PA RISC Workstation	715-50	6340A30125	1616	1073

Figure 4.3.4-109. ILM Inventory Report – by Location

(ilminv)

ILM COSTED INVENTORY REPORT - BY LOCATION

DATE: 01/07/00 TIME: 12:37

PAGE: 1

LOCATION: EDF : ECS Development Facility

EIN	OEM PART NO	OEM DESC	MODEL	SERIAL NO	UNIT COST
00000000	PARENTREC	PARENT FOR NON INSTALLED ITEMS RM 1073			
00000004	PE301-CD	3000-300 Workstation	300X AXP	AB3500171X	
00000006	7012-340	RISC 6000 Workstation	6000	MS70122663304	
00000007	A2094A	Color Monitor - 19 IN		JP01000992	
00000008	VRT19-HA	Color Monitor - 19 IN		IS33984574	
00000009	7208-001	4 Milimeter Tape Unit	Model 7208	MS72062626430	
00000010	6091-191	19 Inch Color Monitor		23-K0146	
00000011	A2627A	715-50 PA RISC Workstation	715-50	6342A30521	
00000013	S10TX-44-032-P46	SPARCStation 10	10	403F1014	
00000014	A2094A	Color Monitor - 19 IN		JP04050797	
00000015	X557A	CD ROM - 644 MB		405G1578	
00000016	TLZ06-VA	Tape Drive - 4 MM		CX35103575	
00000018	X814A	Tape Drive - 5 GB - 8 MM		407G3165	
00000019	C1521B	Tape Drive - 2.0 GB - 4 MM		3314E62862	
00000022	PE301-CD	3000-300 Workstation	300X AXP	AB333001N2	
00000023	PE301-CD	3000-300 Workstation	300X AXP	AB333001O4	
00000025	VRT19-HA	Color Monitor - 19 IN		IS31773470	
00000027	VRT19-HA	Color Monitor - 19 IN		IS31162480	
00000028	VRT19-HA	Color Monitor - 19 IN		IS31162482	
00000030	X545A	1.05 GB HD - Desktop		410G0301	
00000031	BA353-AF	CD ROM - in Storage Expansion Unit		KB34203698	
00000033	X545A	1.05 GB HD - Desktop		412G2197	
00000034	PE301-CD	3000-300 Workstation	300X AXP	AB3500305S	
00000035	X557A	CD ROM - 644 MB		408G0598	
00000038	4-30-GX-32 P46	SPARCSystem LX Workstation	LX	411E0158	
00000040	A2627A	715-50 PA RISC Workstation	715-50	6342A30520	
00000041	A2608A	735 CRX Performance Workstation-Server 3	735-CRX	6342A00425	
00000042	A2627A	715-50 PA RISC Workstation	715-50	6342A30034	
00000043	A2627A	715-50 PA RISC Workstation	715-50	6340A30125	

Grand Total:

Figure 4.3.4-110. ILM Costed Inventory Report – by Location

(einstrep)
 ECS Development Facility
 EINs: 00001029
 Explosion quantity: 1

EIN STRUCTURE REPORT

DATE: 01/05/00 TIME: 15:20
 PAGE: 1
 Number of levels: 99
 Date of bill: **/**/**

Parent EIN: 00001029 Desc: SPARCStation 20-50 SX
 MFG Part: S20SX-50-32-P46 Desc: SPARCStation 20-50 SX
 Active date: **/**/** Inactive date: **/**/**

LEVEL	EIN	MFG PART	CONTROL ITEM ID	MODEL/VERSION	QUANTITY PER	ACTIVE DATE	INACTIVE DATE
1	00000751	EXB-210TW Tape Stacker - 8 MM		210	0.0000	04/12/99	**/**/**
.2	C0003845	315570-001 BAR CODE READER/EXB-210 & 218			0.0000	04/12/99	**/**/**
.2	C0003846	872013-025 8MM Tape Drive			0.0000	04/12/99	**/**/**
.2	C0003847	EXB-303220 Terminator			0.0000	04/12/99	**/**/**
.2	C0003848	EXB-30726 Tape Cartridge - 8 MM			0.0000	04/12/99	**/**/**
.2	C0003849	EXB-307627 Cable - SCSI			0.0000	04/12/99	**/**/**
.2	C0003850	TDKP6-1200Q Tapes - 5 GB - 8 MM			0.0000	04/12/99	**/**/**
.2	C0162102	872013-025 8 MM Tape Drive - w/ Carrige Instal			0.0000	09/01/99	**/**/**
1	00001086	365-1324-01 20 Inch Color Monitor			0.0000	04/12/99	**/**/**
1	00003089	CDE-100 Yamaha External 4X Write/4X Read CD-Rom		4X	0.0000	04/12/99	**/**/**
1	00004692	X5511A 2.1 GB HD MultiPack (1 of 2 X 2.1=4.2GB)			0.0000	04/12/99	**/**/**
.2	C0021164	540-2730-03 2.1 GB HD Internal			0.0000	04/12/99	**/**/**
1	C0147699	SOL Solaris		2.4	0.0000	04/22/99	**/**/**

There are 38 components in this bill.

Figure 4.3.4-111. EIN Structure Report

RUN DATE: 01/05/00

Page No: 1

EOSDIS
EQUIPMENT INSTALLATION/RECEIPT REPORT
BY EIN NUMBER

ECN NUMBER: 00002534
DATE ON-SITE WARRANTY EXPIRES: 12/31/98
WARRANTY END DATE: 12/31/98
HTSC HELP CENTER PHONE: 1-800-ECS-DATA
HTSC HELP CENTER HOURS ARE: 08:00 - 17:00 EST
DATE RECEIVED: 05/09/97

USER CONTACT
USER PHONE
LOCATION: Goddard
BUILDING # GSFC
ROOM #: C101
HOST NAME: g0acs03

I certify that I have received the equipment only for work associated with NASA Contract NAS5 - 60000.

Signature: _____ Date: __/__/__

MFR	PRODUCT DESCRIPTION	MODEL/VERSION	PART NUMBER	SERIAL NUMBER	PART EIN	INSTALL DATE
SUN	Enterprize 3000 Enc, 4 Slot, CD 4, PWR/C		E3001	715V006C	00002534	05/27/97
WYE	Terminal		900983-07	0ICD6800046	00003256	03/13/98
WYE	Keyboard		901867-01	97030769	00006417	05/27/97
SUN	2.1 GB Internal HD		X5153A	9644628234	C0009199	08/12/99
SUN	250mhz Ultrasparc Modual		2530A	92F30203138	C0014226	05/27/97
SUN	250mhz Ultrasparc Modual		2530A	92F30202448	C0014227	05/27/97
SUN	CPU/Memory Board		2600A	5012976058254	C0014228	05/27/97
SUN	SBUS I/O Board - Enterprise Family		2610A	5014287011120	C0014229	05/27/97
SUN	CD ROM - Internal		370-2203-01	9715003781	C0014230	05/27/97
SUN	9.1 GB HD - 7200 RPM-3.5 Inch-F/W SCSI-2		540-2951-01	9707363003	C0014231	05/27/97
SUN	9.1 GB HD - 7200 RPM-3.5 Inch-F/W SCSI-2		540-2951-01	9707363312	C0014232	05/27/97
SUN	9.1 GB HD - 7200 RPM-3.5 Inch-F/W SCSI-2		540-2951-01	9715742422	C0014233	05/27/97
SUN	32 MB RAM Expansion (1 of 8X32MB=256 MB)		7022A	501265378299929	C0014234	05/27/97
SUN	32 MB RAM Expansion (1 of 8X32MB=256 MB)		7022A	501265378299923	C0014235	05/27/97
SUN	32 MB RAM Expansion (1 of 8X32MB=256 MB)		7022A	501265378299891	C0014236	05/27/97
			.			
			.			
			.			
SUN	Solaris Media for Servers	2.5.1	SOLS-C		C0150689	05/27/97

Figure 4.3.4-112. Equipment Installation/Receipt Report by EIN Number

RUN DATE: 01/05/00

Page No: 1

EOSDIS
EQUIPMENT INSTALLATION REPORT
BY EIN NUMBER

ECN NUMBER: 00002534
DATE ON-SITE WARRANTY EXPIRES: 12/31/98
WARRANTY END DATE: 12/31/98
HTSC HELP CENTER PHONE: 1-800-ECS-DATA
HTSC HELP CENTER HOURS ARE: 08:00 - 17:00 EST
DATE RECEIVED: 05/09/97

USER CONTACT
USER PHONE
LOCATION: Goddard
BUILDING # GSFC
ROOM #: C101
HOST NAME: g0acs03

I certify that I have received the equipment only for work associated with NASA Contract NAS5 - 60000.

Signature: _____ Date: __/__/__

MFR	PRODUCT DESCRIPTION	MODEL/VERSION	PART NUMBER	SERIAL NUMBER	PART EIN	INSTALL DATE
SUN	Enterprize 3000 Enc, 4 Slot, CD 4, PWR/C		E3001	715V006C	00002534	05/27/97
WYE	Terminal		900983-07	0ICD6800046	00003256	03/13/98
WYE	Keyboard		901867-01	97030769	00006417	05/27/97
SUN	250mhz Ultrasparc Modual		2530A	92F30203138	C0014226	05/27/97
SUN	250mhz Ultrasparc Modual		2530A	92F30202448	C0014227	05/27/97
SUN	CPU/Memory Board		2600A	5012976058254	C0014228	05/27/97
SUN	SBUS I/O Board - Enterprise Family		2610A	5014287011120	C0014229	05/27/97
SUN	CD ROM - Internal		370-2203-01	9715003781	C0014230	05/27/97
SUN	9.1 GB HD - 7200 RPM-3.5 Inch-F/W SCSI-2		540-2951-01	9707363003	C0014231	05/27/97
SUN	9.1 GB HD - 7200 RPM-3.5 Inch-F/W SCSI-2		540-2951-01	9707363312	C0014232	05/27/97
SUN	9.1 GB HD - 7200 RPM-3.5 Inch-F/W SCSI-2		540-2951-01	9715742422	C0014233	05/27/97
SUN	32 MB RAM Expansion (1 of 8X32MB=256 MB)		7022A	501265378299929	C0014234	05/27/97
SUN	32 MB RAM Expansion (1 of 8X32MB=256 MB)		7022A	501265378299923	C0014235	05/27/97
SUN	32 MB RAM Expansion (1 of 8X32MB=256 MB)		7022A	501265378299891	C0014236	05/27/97
			.			
			.			
			.			
SUN	Solaris Media for Servers	2.5.1	SOLS-C		C0150689	05/27/97

Figure 4.3.4-113. Equipment Installation Report by EIN Number

```

(installr)
ECS Development Facility
                                INSTALLATION SUMMARY REPORT
                                Dates: 09/01/99-12/31/99
                                DATE: 01/05/00   TIME: 13:42
                                PAGE: 1

PARENT EIN: 00000343           NAME: judge
OEM PART: S20SX-50             OEM DESC: SPARCStation 20-50 SX
INSTALL DATE: 03/10/95
SITE: EDF ; ECS Development Facility
BUILDING: 1616   ROOM: 1100A4

CHILDREN INCLUDED:

EIN          OEM PART          INSTALL
=====
00000343    S20SX-50          03/10/95 EDF 1616 1100A4 Geistfeld

```

Figure 4.3.4-114. Installation Summary Report

RUN DATE: 01/28/00

Page No: 1

EOSDIS
EQUIPMENT RELOCATION REPORT
BY EIN NUMBER

NEW PARENT EIN: 00000006

ECN NUMBER: 00000006
DATE ON-SITE WARRANTY EXPIRES: 12/31/97
WARRANTY END DATE: 12/31/97
HTSC HELP CENTER PHONE: 1-800-ECS-DATA
HTSC HELP CENTER HOURS ARE: 08:00 - 17:00 EST
DATE RECEIVED: 08/23/93
CCR #:

USER CONTACT
USER PHONE
LOCATION: Langely Research
BUILDING # 1268C
ROOM #: 1321
HOST NAME: 10moi01
TROUBLE TICKET:

MFR	PRODUCT DESCRIPTION	MODEL/VERSION	PART NUMBER	SERIAL NUMBER	PART EIN	INSTALL DATE
IBM	RISC 6000 Workstation	6000	7012-340	MS70122663304	00000006	10/21/93
HPC	19 Inch Color Monitor		A2094A	JP01000992	00000007	01/28/00

Figure 4.3.4-115. EOSDIS Equipment Relocation Report

ECS SHIPPING REPORT
 DATE: 01/05/00
 CONTRACT # NAS5 - 60000

SHIPPING REPORT #: 1 L
 CARRIER: Federal Express
 CARRIER BOL: test123

PLANNED SHIP DATE: 11/12/97
 MODE: AIR
 # OF PIECES: 2
 ESTIMATED WEIGHT: 600.0

ORIGIN: ECS Development Facility
 SENDER:
 ADDRESS:
 CITY:
 STATE-ZIP:

DESTINATION:
 CONSIGNEE:
 ADDRESS:
 CITY:
 STATE-ZIP:

CTN#	DIMENSIONS	WEIGHT	QTY
2	24x24x24	200.00	2
1	12x12x12	100.00	2

MFG	OEM	DESC	MOD/VER	PART	EIN	PARENT	SERIAL NUMBER
SUN	Ultra 2	System Model	11170	00001895		00001895	647F0937

Figure 4.3.4-116. ECS Shipping Report

RUN DATE: 01/28/00

Page No: 1

EOSDIS
EQUIPMENT TRANSFER/RECEIPT REPORT
BY ECN NUMBER

ECN NUMBER: 00000004
DATE ON-SITE WARRANTY EXPIRES: 12/31/97
WARRANTY END DATE: 12/31/97
HTSC HELP CENTER PHONE: 1-800-ECS-DATA
HTSC HELP CENTER HOURS ARE: 08:00 - 17:00 EST
DATE RECEIVED: 12/17/93
CCR #:

USER CONTACT: Merritt
USER PHONE: (818)306-6061
LOCATION: ECS Development F
BUILDING #: 1616
ROOM #: 1072
HOST NAME: ETHER
TT:

MFR	PRODUCT DESCRIPTION	MODEL/VERSION	PART NUMBER	SERIAL NUMBER	PART ECN	INSTALL DATE
DEC	3000-300 Workstation	300X AXP	PE301-CD	AB3500171X	00000004	01/28/00
DEC	19 Inch Color Monitor		VRT19-HA	IS33984574	00000008	01/28/00
DEC	Tape Drive - 4 MM		TLZ06	CX35103575	00000016	01/28/00
DEC	CD ROM - in Storage Expansion Unit		BA353-AF	KB34203698	00000031	01/28/00
DEC	Mouse - 3 Button		VSXXX-GA	7A323H4085	00007719	01/28/00
DEC	Keyboard		LK401-AA	HJ342U8927	00007720	01/28/00
DEC	10 Based T Ethernet Port		10BT-ETHNET			01/28/00
DEC	Cable - SCSI cable 2 meter 2 male		BN21H-01			01/28/00
DEC	FDDI - Card		DEFTA-FA	AS42305487		01/28/00
DEC	8 MB RAM (1 x 8 MB SIMM)		ME534-HE			01/28/00
DEC	8 MB RAM (1 x 8 MB SIMM)		ME534-HE			01/28/00
DEC	8 MB RAM (1 x 8 MB SIMM)		ME534-HE			01/28/00
DEC	8 MB RAM (1 x 8 MB SIMM)		ME534-HE			01/28/00
DEC	8 MB RAM (1 x 8 MB SIMM)		ME534-HE			01/28/00
DEC	8 MB RAM (1 x 8 MB SIMM)		ME534-HE			01/28/00
DEC	8 MB RAM (1 x 8 MB SIMM)		ME534-HE			01/28/00
DEC	8 MB RAM (1 x 8 MB SIMM)		ME534-HE			01/28/00
DEC	1.05 GB HD		RZ26-EP	CX34594749		01/28/00
DEC	1.05 GB HD		RZ26-EP	CX34891643		01/28/00

Figure 4.3.4-117. EOSDIS Equipment Transfer/Receipt Report

(imtransr4)
ECS Development Facility

RECEIPTS BY RECEIPT NUMBER

DATE: 01/05/00 TIME: 15:16
PAGE: 1

RECEIPT NUMBER	SITE	TRANS NUMB	DATE	TIME	ORDER	LINE NO	EIN / OEM PART NUMB	VENDOR ID	QUANTITY
3	EDF	3	02/21/97	13:38	000001	1	34565666002	SUN	1.0
3	EDF	2	02/21/97	13:36	000001	1	34565666002	SUN	1.0
5	EDF	15	03/12/97	13:02	000029	1	HARVCD1	SUN	1.0
5	EDF	14	03/12/97	11:04	000029	1	HARVCD1	SUN	1.0
5	EDF	13	03/12/97	11:02	000029	1	HARVCD1	SUN	1.0
5	EDF	12	03/12/97	10:57	000029	1	HARVCD1	SUN	1.0
5	EDF	11	03/12/97	10:53	000029	1	HARVCD1	SUN	1.0
5	EDF	10	03/12/97	10:49	000029	1	HARVCD1	SUN	1.0
5	EDF	9	03/12/97	10:45	000029	1	HARVCD1	SUN	1.0
5	EDF	8	03/12/97	10:41	000029	1	HARVCD1	SUN	1.0
5	EDF	7	03/12/97	10:39	000029	1	HARVCD1	SUN	1.0
5	EDF	6	03/12/97	10:36	000029	1	HARVCD1	SUN	1.0
5	EDF	5	03/12/97	10:35	000029	1	HARVCD1	SUN	1.0
6	EDF	630	03/21/97	08:02	577HP	1	J200 BASE SYSTEM	HPC	1.0
6	EDF	4	03/11/97	09:50	577HP	1	J200 BASE SYSTEM	HPC	1.0
8	EDF	632	03/21/97	08:42	000029	1	HARVCD1	SUN	1.0
8	EDF	631	03/21/97	08:41	000029	1	HARVCD1	SUN	1.0
8	EDF	16	03/12/97	15:06	000029	1	HARVCD1	SUN	1.0
9	EDF	129	03/14/97	13:06	CCW000	8	X3500A	SUN	1.0
10	EDF	634	03/21/97	08:53	000001	1	HARVsunMEM8	SUN	1.0
10	EDF	633	03/21/97	08:44	000001	1	HARVsunMEM8	SUN	1.0
10	EDF	135	03/17/97	08:15	000001	1	HARVsunMEM8	SUN	1.0
11	EDF	635	03/22/97	08:28	000001	2	X3500A	SUN	1.0
12	EDF	636	03/22/97	08:31	000001	2	X3500A	SUN	1.0
13	EDF	637	03/22/97	08:37	000001	2	X3500A	SUN	1.0
14	EDF	638	03/22/97	08:47	000001	2	X3500A	SUN	1.0
15	EDF	639	03/22/97	09:02	000001	2	X3500A	SUN	1.0
16	EDF	865	04/18/97	07:21	ZZK000	1	00000001	MBA	1,000.0
26	EDF	1,241	05/18/97	12:14	000027	1	004024		1.0
38	EDF	1,242	05/19/97	06:21	000027	1	004024		10.0
39	EDF	1,243	05/25/97	19:51	000001	1	SK-540		1.0
						.			
						.			
						.			
9,991	SMC-E	11,102	09/17/99	10:13	257104	27	7738280-7-DE		3.0

Figure 4.3.4-118. Receipts by Receipt Number Report

(imtransr8)		RECEIPTS BY EIN / PART		DATE: 01/05/00	TIME: 15:16
ECS Development Facility					PAGE: 1
SITE	TRAN NUMB	EIN	NAME	DATE	QUANTITY
EDF	4,168			01/17/98	1.0
EDF	4,167			01/17/98	1.0
EDF	4,166			01/17/98	1.0
EDF	4,165			01/17/98	1.0
EDF	4,164			01/17/98	1.0
EDF	4,163			01/17/98	1.0
EDF	4,162			01/17/98	1.0
EDF	4,161			01/17/98	1.0
EDF	4,160			01/17/98	1.0
EDF	4,159			01/16/98	1.0
EDF	4,131			01/15/98	1.0
EDF	4,130			01/15/98	1.0
EDF	4,129			01/15/98	1.0
EDF	4,128			01/15/98	1.0
EDF	4,127			01/15/98	1.0
EDF	4,126			01/15/98	1.0
EDF	4,125			01/15/98	1.0
EDF	4,124			01/15/98	1.0
EDF	4,119			01/14/98	1.0
EDF	4,118			01/14/98	1.0
EDF	4,117			01/14/98	1.0
EDF	4,116			01/14/98	1.0
EDF	4,115			01/14/98	1.0
EDF	4,114			01/14/98	1.0
EDF	4,113			01/14/98	1.0
EDF	4,112			01/13/98	2.0
EDF	4,096			01/08/98	1.0
			.		
			.		
			.		
SMC-E	11,131	120-238		09/17/99	11.0

Figure 4.3.4-119. Receipts by EIN / Part Report

```

(imtransr8)
ECS Development Facility
TRANSACTION HISTORY BY EIN
DATE: 01/05/00 TIME: 15:16
PAGE: 1

```

EIN	DESCRIPTION	ARCHIVE	RELOCATE	SHIP	RECVD	TRANS
00000000	EOSDIS Parent Record DO N	0.00	0.00	0.00	0.00	2.00
00000001	INDGO XS Graphics Worksta	0.00	7.00	11.00	0.00	2.00
00000002	19 Inch Color Monitor	0.00	1.00	8.00	0.00	2.00
00000003	Tape Drive - 1.3 GB - 4 M	4.00	1.00	10.00	0.00	4.00
00000004	3000-300 Workstation	0.00	1.00	8.00	0.00	2.00
00000006	RISC 6000 Workstation	0.00	1.00	8.00	0.00	2.00
00000007	19 Inch Color Monitor	0.00	1.00	8.00	0.00	2.00
00000008	19 Inch Color Monitor	0.00	2.00	16.00	0.00	4.00
00000010	19 Inch Color Monitor	0.00	1.00	8.00	0.00	2.00
00000013	SPARCStation 10	0.00	1.00	0.00	0.00	1.00
00000016	Tape Drive - 4 MM	0.00	1.00	8.00	0.00	2.00
00000020		1.00	0.00	0.00	0.00	0.00
00000023	3000-300 Workstation	0.00	0.00	0.00	0.00	1.00
			.			
			.			
			.			

Figure 4.3.4-120. Transaction History by EIN Report

(imtransr5)		ECS Development Facility		TRANSACTIONS FOR SPARES			DATE: 01/05/00	TIME: 15:17	PAGE: 1
SITE	TRAN NUMB	DATE	TIME	EIN	NAME	FROM LOCN	VENDOR ID	QUANTITY	
EDF	832	03/29/97	17:29	00000008	ETHER	GSFC	DEC	1.0	
EDF	829	03/29/97	08:07	00000008	IN STOCK	GSFC	DEC	1.0	
EDF	5,532	04/22/98	17:43	00000495	ETHER	EDF	DEC	1.0	
EDF	3,506	04/22/98	16:54	00000495	IN STOCK	EDF	TDI	1.0	
EDF	5,632	05/20/98	14:13	C0002501	10mos17	LaR	SUN	1.0	
EDF	4,659	05/20/98	14:11	C0002501	10mos17	LaR	SUN	1.0	
EDF	4,659	05/20/98	14:11	C0002501	IN STOCK	EDF	SUN	1.0	
					.				
					.				
					.				

Figure 4.3.4-121. Transaction History for Spares Report

```

(imtransr6)
ECS Development Facility
                                TRANSACTIONS FOR CONSUMABLES
                                DATE: 01/05/00  TIME: 15:17
                                PAGE: 1

```

SITE	TRAN NUMB	DATE	TIME	OEM PART	NAME	FROM LOCN	VENDOR ID	QUANTITY	EXTENDED VALUE
SMC-E	10,787	08/23/99	15:50	0400-30200			ANICOM	83.0	0.00
SMC-E	11,011	09/13/99	13:26	CHA07780			MRS	2.0	0.00
SMC-E	10,061	07/07/99	09:33	CHA07780			MRS	5.0	0.00
SMC-E	11,010	09/13/99	13:26	CHA73730			MRS	5.0	0.00
SMC-E	11,028	09/15/99	10:13	RW/MED-50		EDF		50.0	0.00
SMC-E	11,029	09/15/99	14:56	RW/MED-50		GSFC		50.0	0.00
SMC	5,375	05/13/99	15:06	RW/MED-50			STK	50.0	0.00
SMC	5,374	05/13/99	15:04	RW/MED-50			STK	50.0	0.00
SMC-E	12,319	10/14/99	14:30	RW/MED-50			STK	220.0	0.00
SMC	5,377	05/13/99	15:08	RW/MED-CLN			STK	10.0	0.00
SMC	5,337	05/11/99	10:03	RW/MED-CLN			STK	20.0	0.00
SMC	5,336	05/11/99	10:02	RW/MED-CLN			STK	10.0	0.00
SMC	5,334	05/11/99	10:01	RW/MED-CLN			STK	5.0	0.00
SMC-E	12,320	10/14/99	14:30	RW/MED-CLN			STK	20.0	0.00

Figure 4.3.4-122. Transaction History for Consumables Report

(wohistr)
 ECS Development Facility
 Work Order: *

WORK ORDER HISTORY

DATE: 09/15/00 TIME: 17:08
 PAGE: 1

 WORK ORDER: SMC-E00052
 PARENT EIN: 00012053 : PARENTREC
 OEM PART: 9101834 : MS WINDOWS KEYBOARD FOR NCD

CHG DATE	EVENT TYPE	COMPONENT PART	OEM PART	OEM DESCRIPTION	SERIAL #	MOD/VER	LINE ITEM
05/17/00	FAILED	00012053	9101834	MS WINDOWS KEYBOARD FOR NCD	81180054		1
05/19/00	REPLACED	00054613	9202934	KEYBOARD	1234		2

 WORK ORDER: SMC-E00055
 PARENT EIN: 00001776 : 10mss01
 OEM PART: A14-UBA1-9S-128DB : Ultra Server 2 w/1-167 Mhz CPU

CHG DATE	EVENT TYPE	COMPONENT PART	OEM PART	OEM DESCRIPTION	SERIAL #	MOD/VER	LINE ITEM
05/02/00	FAILED	00003690	ACI-2014-CDW-R1	4X2 SWITCH DIFFERENTIAL WIDE (RACKMOUNT)	141530		2
05/02/00	NEW	00001779	A1897A	Cabinet - 1.6 Mtr Std 19 In EIA Rack	US00064470		1

 WORK ORDER: SMC-E00056
 PARENT EIN: 00001738 : g0msh11
 OEM PART: A3550AZ : Disk Array - HA - Model 20 SP620

CHG DATE	EVENT TYPE	COMPONENT PART	OEM PART	OEM DESCRIPTION	SERIAL #	MOD/VER	LINE ITEM
05/20/00	FAILED	C0008355	A3550AZ OPT#314	4.2 GB HD (1 of 20x4.2GB)	SGS3386323		4
05/20/00	FAILED	C0008354	A3550AZ OPT#314	4.2 GB HD (1 of 20x4.2GB)	SGS3394514		3
05/20/00	FAILED	C0008353	A3550AZ OPT#314	4.2 GB HD (1 of 20x4.2GB)	SGS3394510		1
05/20/00	NEW	C0030011	A3550AZ OPT#315	Hard Drive - 4.2 GB	4444444444444444		9
05/20/00	NEW	C0030010	A3550AZ OPT#315	Hard Drive - 4.2 GB	333333333		8
05/20/00	NEW	C0008376	A3550AZ OPT#314	4.2 GB HD (1 of 15x4.2GB)	SGS3388648		2
05/20/00	REPLACED	C0008362	A3550AZ OPT#314	4.2 GB HD (1 of 20x4.2GB)	SGS3395259		13
05/20/00	REPLACED	C0008358	A3550AZ OPT#314	4.2 GB HD (1 of 20x4.2GB)	SGS3386319		7
05/20/00	REPLACED	C0008357	A3550AZ OPT#314	4.2 GB HD (1 of 20x4.2GB)	SGS3394708		6
05/20/00	REPLACED	C0008356	A3550AZ OPT#314	4.2 GB HD (1 of 20x4.2GB)	SGS3394487		5

 WORK ORDER: SMC-E00057
 PARENT EIN: 00000044 : 10moh06
 OEM PART: A2627A : 715-50 PA RISC Workstation

CHG DATE	EVENT TYPE	COMPONENT PART	OEM PART	OEM DESCRIPTION	SERIAL #	MOD/VER	LINE ITEM
05/19/00	REPLACED	C0001596	AT210TS	10 Base T Transceiver			12
05/20/00	FAILED	00000290	MSLC-001	HD Expansion Box	9441138834		4
05/20/00	FAILED	00000079	A1999A	CD ROM - 600 MB	3660102398		3
05/20/00	FAILED	00000071	A2049A	Monitor - 19 Inch Color	JP04050843		1
05/20/00	NEW	C0030006	A3560AZ OPT#426	Power Supply	1245315764564		8
05/20/00	NEW	C0001553	A2646A	32 MB RAM (1 of 2X32MB=64MB)	A56102224855		2
05/20/00	REPLACED	C0001596	AT210TS	10 Base T Transceiver			7
05/20/00	REPLACED	C0001595	0004025	3.5 DS-HD Floppy Diskette			6
05/20/00	REPLACED	C0001594	004024	3.5 DS-HD Floppy Diskette			5

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 .
 .

Figure 4.3.4-124. Work Order History Report

(wostatre)
 ECS Development Facility
 Work Order: KENMW011

WORK ORDER STATUS
 All Statuses

DATE: 09/15/00 TIME: 14:41
 PAGE: 1
 All Parent EINs

 Work Order: KENMW011 Status: O
 Parent EIN: 00000011
 Suffix:
 OEM Part: A2627A
 OEM Desc: 715-50 PA RISC Workstation
 Location: EDF
 Building: 1616
 Room: 1100D3
 User: 132
 Name: Newell

Failed Components:

COMPONENT EIN	CHG DATE	SERIAL NUMBER	OEM PART	OEM DESCRIPTION	SEQ	PRO
00000014	05/20/00	JP04050797	A2094A	19 Inch Color Monitor	1	Y
00000019	05/20/00	3314E62862		3000-300 Workstation	4	Y
00000110	05/20/00	3760102096	A1999A	CD ROM - 600 MB	5	Y

New Components:

COMPONENT EIN	CHG DATE	SERIAL NUMBER	OEM PART	OEM DESCRIPTION	SEQ	PRO
C0001550	05/20/00	A56102224855	A2646A	32 MB RAM (1 of 2X32MB=64MB)	3	Y
C0030003	05/20/00	123456789	3560Z OPT#423	POWER SUPPLY	9	Y

Components Replaced:

COMPONENT EIN	CHG DATE	SERIAL NUMBER	OEM PART	OEM DESCRIPTION	SEQ	PRO
C0001459	05/20/00		A2816A	8 MB RAM Chip (SIMM)	8	Y
C0001464	05/20/00		A2816A	8 MB RAM Chip (SIMM)	6	Y
C0001465	05/20/00		A2816A	8 MB RAM Chip (SIMM)	7	Y

Figure 4.3.4-125. Work Order Status Report

```

(liestatr)
ECS Development Facility
                                LICENSE ENTITLEMENTS STATUS
                                DATE: 09/15/00  TIME: 11:03
                                PAGE: 1
-----
*** AutoExpert ***
LIC TYPE      EIN          OEM DESC
=====
NODELOCK      C0147812   AutoExpert - High Availability Server Op
Nodelock      c0147812   AutoExpert - High Availability Server Op
-----
*** Clearcase ***
LIC TYPE      EIN          OEM DESC
=====
FLOATING      C0000289   Clearcase Licenses
FLOATING      C0143038   Clearcase Licenses
FLOATING      C0146938   Clearcase Licenses
FLOATING      C0147677   Clearcase Licenses
-----
VENDOR        PURCHASE ORDER  MAINT CONTRACT  WARR DT  USER RTU  URTU REM  URTU MNT  NODE RTU  NRTU REM  NRTU MNT  U  N  M
=====
PLT            CCW0002190      CCW2190         12/31/00  0          0          0          20         19         20         =  =  =
PLT            CCW0002190      CCW2190         12/31/00  0          0          0          20         20         20
-----
VENDOR        PURCHASE ORDER  MAINT CONTRACT  WARR DT  USER RTU  URTU REM  URTU MNT  NODE RTU  NRTU REM  NRTU MNT  U  N  M
=====
ASC            CCW0004581      CCM1631         07/21/01  0          0          0          0          0          0
ASC            CCM0001631      CCM1631         10/03/02  20         3          17         10         10         0
ASC            CCW0004528      CCW4528         10/31/02  180        0          180        0          0          0
ASC            CCW0004528      CCW4528         10/31/02  100        100        100        0          0          0
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Figure 4.3.4-126. License Entitlements Status Report

*** AUTO EXPERT ***

Versions: 3.4

Features: P

LICENSE	SEQ	HOST NAME	HOST ID	LICENSE KEY	EXP DATE	PLATFORMS	USER RTU	START DT	END DATE
L0000001	1	p0sps06	808041c1	ECONTLPGQIQIOHS	10/31/02	ALL	0	05/11/00	12/31/00
-- Addl Host:	1		asdfasdf	ECONTLPGQIQIOHS	10/31/02	ALL	0		
L0000010	1	p0sps06	808041c1	ECONTLPGQIQOHS	10/31/02	ALL	0	05/11/00	05/22/00
-- Addl Host:	1		808041c1	ECONTLPGQIQOHS	10/31/02	ALL	0		
-- Addl Host:	3		8081e393	ECONTLPGQIQOHS	10/31/02	ALL	0		

*** CLEARCASE ***

Versions: 2.1

Features:

LICENSE	SEQ	HOST NAME	HOST ID	LICENSE KEY	EXP DATE	PLATFORMS	USER RTU	START DT	END DATE
CC000001	1	KRYPTON	7279d995	387d27ca.c9ae6fea.02	10/31/02	ALL	205	05/11/00	10/31/02
L0000002	1	KRYPTON	7279d995	387d27ca.c9ae6fea.02	10/31/02	ALL	205	05/11/00	10/31/02
L0000012	1	KRYPTON	7279d995	387d27ca.c9ae6fea.02	10/31/02	ALL	205	05/11/00	10/31/02

*** Clearcase ***

Versions:

Features:

LICENSE	SEQ	HOST NAME	HOST ID	LICENSE KEY	EXP DATE	PLATFORMS	USER RTU	START DT	END DATE
TRANGLIC11	1	t1sps02	8081e393	df2d1sf532f1g5	**/**/**		0	**/**/**	**/**/**
TRANGLIC10	1	KRYPTON		6542DS1F5FDG215	**/**/**	ALL	0	05/11/00	10/31/02
TRANGLIC10	2	JLKJFDG		6542DS1F5FDG215	**/**/**	ALL	0	05/11/00	10/31/02
TRANGLIC10	3	HKJHDF		6542DS1F5FDG215	**/**/**	ALL	0	05/11/00	10/31/02
TRANGLIC2	1	KRYPTON	7279d995	387d27ca93121422121	10/31/02	ALL	205	05/11/00	10/31/02
TRANGLIC6	1	KRYPTON	7279d995	37521D24DRE512	10/31/02	ALL	205	05/11/00	**/**/**
TRANGLIC6	2	t1sps01	745c542d	37521D24DRE512	10/31/02	ALL	0	**/**/**	**/**/**
TRANGLIC8	1	KRYPTON	7279d995	32872d54af45421	**/**/**	ALL	205	**/**/**	**/**/**

⋮

Figure 4.3.4-127. License Allocations by Product Report

(licallhr)		ECS Development Facility						LICENSE ALLOCATIONS BY HOST				DATE: 09/15/00	TIME: 11:04
												PAGE: 1	
*** JASON ***		ALLOC HOSTID:		ALLOC STATUS:									
EIN:		EIN HOSTID:		EIN STATUS:		MFR:		MODEL:		SERIAL NUMBER:			
DESC:													
LICENSE	SEQ	ECS ALIAS	VERSION	PLATFORMS	LICENSE KEY	EXP DATE	USER RTU	START DT	END DATE				
TRANGLIC10	2	Clearcase	2.1	ALL	6542DS1F5FDG215	**/**/**	0	05/11/00	10/31/02				
*** KRYPTON ***		ALLOC HOSTID: 7279D995		ALLOC STATUS: I									
EIN:	00001438	EIN HOSTID:		EIN STATUS:	I	MFR:	SUN	MODEL:	20-712	SERIAL NUMBER:	547F0DB2		
DESC:	SPARCStation 20-712												
LICENSE	SEQ	ECS ALIAS	VERSION	PLATFORMS	LICENSE KEY	EXP DATE	USER RTU	START DT	END DATE				
CC000001	1	CLEARCASE	2.1	ALL	387D27CA.C9AE6FEA.02	10/31/02	205	05/11/00	10/31/02				
L0000002	1	CLEARCASE	2.1	ALL	387d27ca.c9ae6fea.02	10/31/02	205	05/11/00	10/31/02				
*** KRYPTON ***		ALLOC HOSTID:		ALLOC STATUS:									
EIN:		EIN HOSTID:		EIN STATUS:		MFR:		MODEL:		SERIAL NUMBER:			
DESC:													
LICENSE	SEQ	ECS ALIAS	VERSION	PLATFORMS	LICENSE KEY	EXP DATE	USER RTU	START DT	END DATE				
TRANGLIC10	1	Clearcase	2.1	ALL	6542DS1F5FDG215	**/**/**	0	05/11/00	10/31/02				
L0000012	1	CLEARCASE	2.1	ALL	387d27ca.c9ae6fea.02	10/31/02	205	05/11/00	10/31/02				
TRANGLIC2	1	Clearcase	2.1	ALL	387d27ca93121422121	10/31/02	205	05/11/00	10/31/02				
TRANGLIC5	2	AutoExpert	3.4	ALL	JLKJDLKJ6542D	10/31/02	0	**/**/**	**/**/**				
TRANGLIC8	1	Clearcase	2.1	ALL	32872d54af45421	**/**/**	205	**/**/**	**/**/**				
TRANGLIC9	1	AutoExpert	3.4	ALL	F54DFG21F8FD1G	**/**/**	0	**/**/**	05/20/00				
tranglic4	1	AutoExpert	3.2	SUN	789456123.0	10/31/02	0	06/20/00	10/31/02				
-- Addl Host:	1	ncd25											
*** KRYTON ***		ALLOC HOSTID: 7279d995		ALLOC STATUS: I									
EIN:	00001438	EIN HOSTID:		EIN STATUS:	I	MFR:	SUN	MODEL:	20-712	SERIAL NUMBER:	547F0DB2		
DESC:	SPARCStation 20-712												
LICENSE	SEQ	ECS ALIAS	VERSION	PLATFORMS	LICENSE KEY	EXP DATE	USER RTU	START DT	END DATE				
TRANGLIC6	1	Clearcase	2.1	ALL	37521D24DRE512	10/31/02	205	05/17/00	**/**/**				
*** p0sps06 ***		ALLOC HOSTID: 808041c1		ALLOC STATUS: I									
EIN:		EIN HOSTID:		EIN STATUS:		MFR:		MODEL:		SERIAL NUMBER:			
DESC:													
LICENSE	SEQ	ECS ALIAS	VERSION	PLATFORMS	LICENSE KEY	EXP DATE	USER RTU	START DT	END DATE				
L0000001	1	AUTO EXPERT	3.4	ALL	ECONTLPGQIQOHS	10/31/02	0	05/11/00	12/31/00				
-- Addl Host:	1												
L0000010	1	AUTO EXPERT	3.4	ALL	ECONTLPGQIQOHS	10/31/02	0	05/11/00	05/22/00				
-- Addl Host:	4												
-- Addl Host:	5												

Figure 4.3.4-128. License Allocations by Host Report

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