

Prototype Workshop #1 Presentation Material

May 31, 1995
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726-PP-003-001

PW1 Agenda

Wednesday May 31

8:30 Coffee, registration, etc

9:00 Opening Presentation

Session 1(Home page, User Registration, Data Dictionary, Advertising, Desktop)

10:00 Introduction

10:30 Hands-on

12:00 discussion and lunch (provided)

Session 2 (ESST, Data Dictionary, Desktop)

1:00 Introduction

1:30 Hands-on

2:30 discussion

Session 3 (Other systems of interest)

3:30 Introduction

4:00 Discussion

PW1 Agenda

Thursday, June 1

9:00 Discussion/wrap-up

11:00 Prepare Summary

Summarize comments, URDB recommendations

12:00 - 2:00 Break

ESDIS/ECS presentation

2:00 Intro (same as previous day)

3:00 Tirekicker/Observer Summary

3:30 Demo

4:30 PW1 Conclusion

Attendees

DAAC

ASF Ruth Duerr*
GSFC Dan Ziskin*
EDC John Dwyer
LaRC Jeff Cleveland*
MSFC Marilyn Drewry*
NSIDC Chris McNeave*

Scientist/Tirekicker

Steve Greco
Dan Baldwin
Sundar Christopher
Tony England
Nigel Hinds
Nazmi El Saleous
Mike Caruso
Dave Glover
Cheryl Craig

ESDIS

Marti Szczur
Chris Rouff (code 520)*
Gail McConoughy
Karen Moe
Debbie Blake
Ken McDonald
Robin Pfister*
Mike Moore*
Yonsook Enloe*

Univ of MD

Khoa Doan*
Catherine Plaisant
Ben Shneiderman

ECS

Judy Feldman
Ed Dombrowski*
Janet Hylton*
Kevin Limperos*
Steve Shantzis*
Show Chen*
Sharmishta Erabelli*
Tim Pruss*
Jan Poston Day*
Jerry Hung*
John Nei*
Padmaja Prabhala*
Naveen Hota
Craig Schillhahn
Tom Codella
Tom Hickey
Ezra Jaletta*

20 observers and 10 tirekickers

* = Observer

PW1 Roadmap

EP1, EP2 1993

- installation of workstations and establishing DCE cell

EP3 May, 1994

- DCE User Authentication, data browse and order, EOSView(v X), URDB(v2.0), IET (V1.0)

EP4 January 1995

- EosView(vX+1), Advertising(v1.0), URDB(v3.0), EDHS and IET (v2.0)

PW1 May 1995

- ECS User Registration (v1.0), Advertising (v2.0), URDB (v3.0), EDHS, Science User Survey (v1.0), Earth Science Search Tool (v1.0), Data Dictionary (v1.0) and metadata model

EP6 Fall 1995

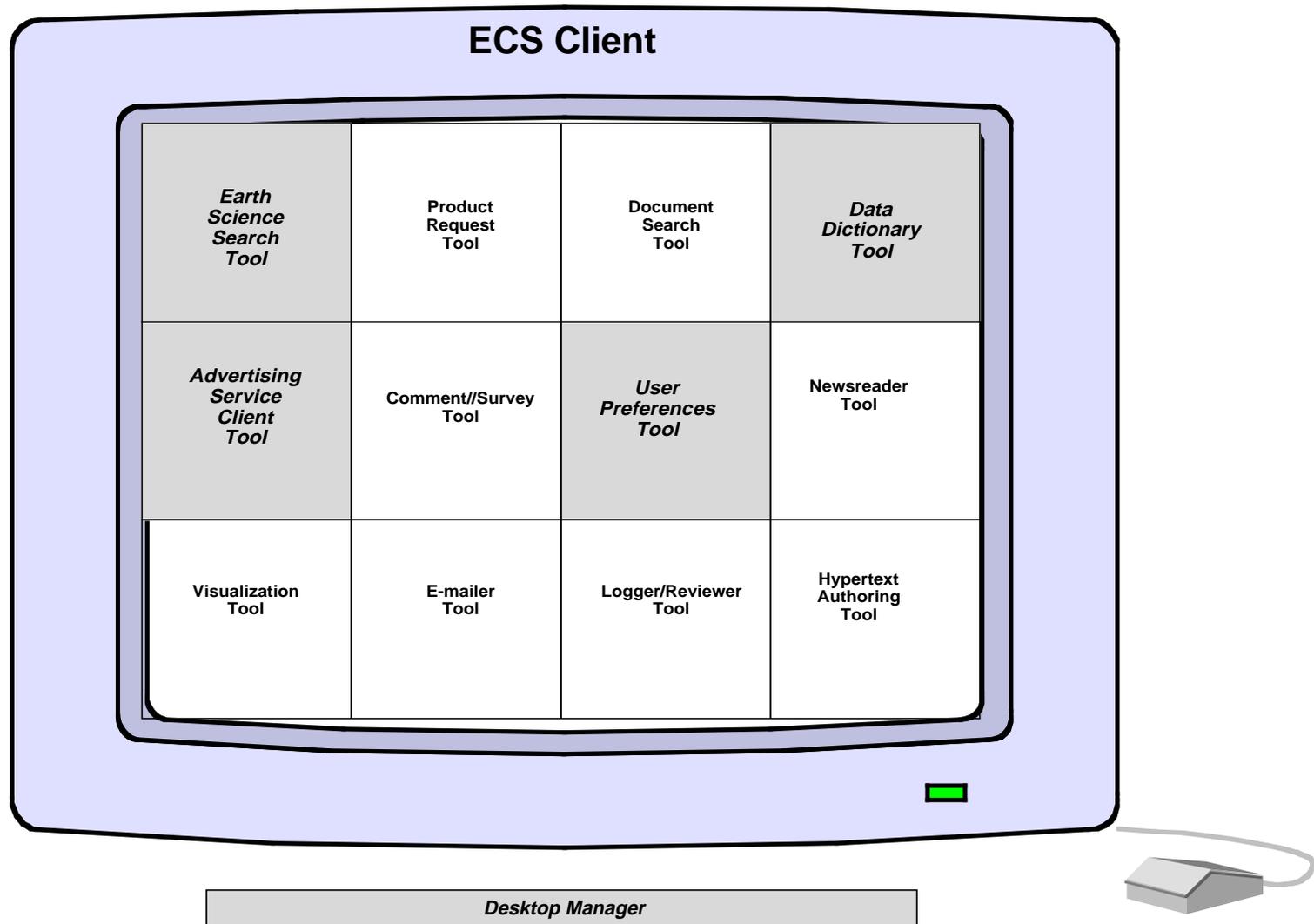
- Objectives to be set in June
- Will integrate PW1 applications (especially dictionary)

PW2 Winter 1995/96

- TBD

EP7 Spring 1996

ECS Context



PW1 Objectives

- **Provide visibility into incremental track development process**
- **Evaluate emerging technologies as they relate to the incremental path**
- **Compare/contrast HTML and X/Motif features/capabilities**
- **Gather constructive feedback on user interface, screen layouts and methodology**
- **Evaluate implementation of the core metadata model (internal lessons learned)**
- **Provide input to EP6 development**
- **Demonstrate advancement from V0 and previous EPs**
- **Respond to USWG concern on manual investment to advertise**

PW1 Format

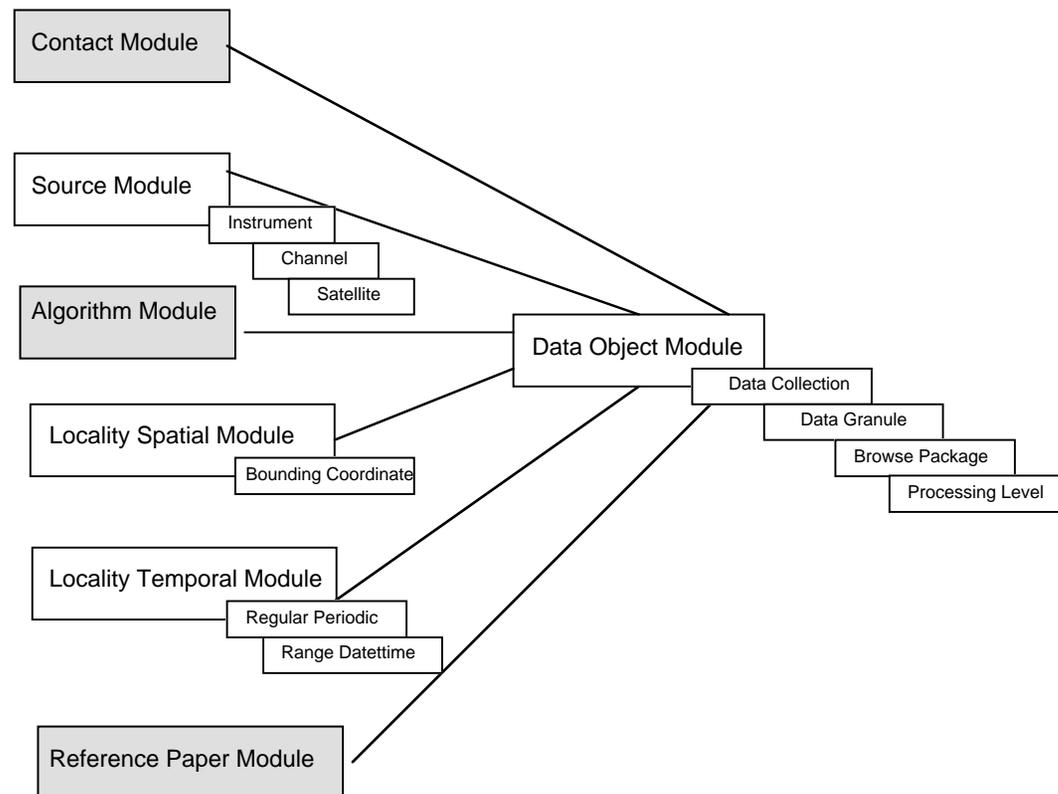
- **Tirekickers will be provided a set of questions for each session; Observers are provided a set of “observation points”. Formal usability testing on one machine**
- **The scenario will be set for each session - high level, not keystrokes**
- **Hands on experience with PW1 for each tirekicker while they are observed by an ECS and gov't/DAAC person**
- **Return to meeting room for discussion of that session.**
- **Last session involves review of other systems**
- **Wrap up will provide recommendations, EP6 directions, and new requirements (URDB).**

PW1 Handouts

- **Day 1**
 - **Presentation material**
 - **Tasks (different for observers and tirekickers!)**
 - **Location of tirekicking sessions**
 - **Screen Dumps of home pages of interest**
 - » **Many of the systems we've advertised, V0, LaRC**
 - **PW1 mockups**
 - **web browser evaluation results**
 - **Questions**
 - **Workshop Exit Survey**
- **Day 2**
 - **presentation material**
 - **1 page PW1 writeup**

Core Metadata Model

- **Implemented partial version of Core metadata model**
- **Good lessons learned:**
 - the model structure
 - data population
 - naming conventions
 - data collection/
granule population
- **model structure is the same for all products but domain of values differ greatly**
- **May not reflect all discussions from the last DMWG meeting (May 1)**



PW1 Data Limitations

AVHRR data only populated: data collections from JPL,EDC,GSFC; this means that AVHRR is the only instrument in the dictionary under instruments, etc.

Granule data has been reformatted to common schema design. This will not be true for future prototypes. This was just a quick fix for PW1.

The bounding coordinates for a data collection (i.e. Halpern Atlas) are a composite of the associated loaded granules.

The beginning and ending dates for the data collection also reflect a composite of the associated loaded granules.

We have eliminated the polar and dateline data because of spatial complexity issues.

The locality name and locality type are specified for a data collection only rather than a data granule and data collection

Locality Name = Global

Locality Type = coverage

FGDC Spatial Standard is being used ; West bounding coordinate, East bounding coordinate, North bounding coordinate, and South bounding coordinate; which expresses coordinates in decimal degrees only, using negative values for longitudes in the Western Hemisphere and for latitudes in the Southern Hemisphere

Data Standards JPL Miami MCSST Nighttime collection is referred to as nighttime or nighttime

Satellite name has a space in it, limiting Boolean searches(e.g.. NOAA 10, NOAA 11)

Web/X-Motif - Who's the winner?

- **Advantages of the Web**
 - Quick
 - Easily accessible by users; Short learning curve
 - Short connection time to databases
 - can get prototypes to the community quickly
 - easy to create and modify prototypes
 - etc.....
- **Disadvantages of the Web**
 - simultaneous search, merge and display of results from multiple web servers just emerging with middleware
 - Capabilities of X not provided with current web browsers: popup windows, advanced mapping, automatic validation of entries with a database
 - hitting a moving target; constantly changing technology
 - HTML-2 standard cannot display algorithms/equations
 - Security; currently OSF/DCE-web software in house for evaluation
 - Navigation can be confusing
- **Web Browser evaluation summary provided in backup material**

PW1 Overview

- **Key Features**
 - Desktop - New version based on EP4 comments
 - User Registration - First version
 - Advertising - New version based on EP4 comments and emerging web technology
 - Data Dictionary- First version
 - Earth Science Search Tool - First version
- **EP4 Comments**
 - Incorporated for Desktop and Advertising
- **Version 0 Comments**
 - Incorporated for User registration, data dictionary, and Earth Science Search Tool
- **Limitations**
 - see following page

PW1 Limitations

- **Limitations**
 - **Small amount of data populated (but all populated data are consistent)**
 - » **metadata only, only one scene**
 - **More areas to be prototyped in ESST**
 - **Web browsers can't do all that ECS requires - yet!**
 - **No training provided to tirekickers**
 - **Database Server is also actively being used for ECS work (may reduce performance)**
 - **Case sensitivity**
 - **Not integrated web and X implementation for PW1**
 - **Database entries haven't been spell checked**

ECS Home Page / User Registration

- **Key Features:**
 - Home Page provides introduction to ECS and PW1 (versions leading to PW1)
 - Allows a new user to register and prototypes ECS response
 - Allows for downloading of client software (interface only)
 - Clearly distinguishes between ECS features and PW1 features
 - Shows CSMS/incremental track coordination with user registration
- **EP4 Comments:**
 - users wanted introduction to Advertising home page
 - user accidentally deleted advertising service, PW1 shows how to reinstall (in several areas)
- **V0 Comments:**
 - V0 home page has not gone through evaluation
 - V0 used in developing user profile
- **Limitations:**
 - User information is stored in Sybase; not currently connected with DCE
 - will not download software for client during PW1 because of risk of error (mockup)

Data Dictionary

- **Key Features:**
 - **Service to user and programs**
 - » User can search on acronyms, glossary, screen definitions
 - » Other tools (ESST) use for definition of valids
 - currently reading dictionary and creating matrix
 - **HTML based**
- **EP4 Comments**
 - **Internal comment to combine Advertising and Dictionary databases**
- **V0 Comments**
 - **Valid implementation is an area of concern to V0**
 - **V0 implementation of a data dictionary is manual at this time.**
- **Limitations:**
 - **current limitation with case sensitivity; boolean searching under discussion (e.g. satellite names with spaces = NOAA 10, NOAA 11)**
 - **difficulty in demo'ing without integration to other services**
 - **matrix has to be evaluated for scalability**
 - **glossary equations may have octal characters**
 - **alias not implemented, may have to spell out words**
 - **glossary is not in synch with ESST**

Advertising Service

- **Key Features**
 - **Concentrating on services, providers**
 - » mockup provided for data advertising in tirekicker package
 - **Ability for users to submit advertisements during PW1**
 - PLEASE NOTE NAMING CONVENTION!!!!!!!!!!
 - **Links to real services/providers**
 - » currently over 50 services
 - » good lessons learned in advertising services
- **EP4 Comments**
 - (see following chart)
- **V0 Comments**
 - no similar feature
 - Responding to USWG question on the manual effort involved to advertise
- **Limitations:**
 - no data advertised; only services and providers
 - boolean searching still under discussion
 - advertisements may not be politically correct

Advertising Service EP4 comments (cont.)

- More thought on look and structure of information - simplified search mechanism
- Road map of service - ability to scroll through advertisements; “what is advertising” feature
- Link management
- Improvements on content and design - searching improved, as well as content
- on-line help*
- HTML capabilities - web based
- “remember feature” - incorporated because of web based implementation
- Drag and Drop alternative - install / invoke
- Icon installation into desktop folder - incorporated
- Link to V0 and GLIS - links to many services
- Upwards scalability - no database limitation
- Search/subset services form*
- Look and feel - new generation

* = not incorporated in PW1

Earth Science Search Tool

- **Key Features**
 - General search tool for Granule level data
 - X Based implementation; some capabilities not in web browsers
 - valids implementation shows valid and invalid entries
 - integrated map and timeline
 - pseudo dynamic implementation of valids (read dictionary and create table) can be a good alternative to V0
 - nesting widget used for listing of parameters and results
 - users can look up terms in the data dictionary
- **V0 comments**
 - Tried to build from V0 lessons learned (valids implementation, dependent valids presentation in querying, results display, geophysical parameter listing, data collection/data granule distinction)
 - built from V0 and LaRC interfaces primarily
- **Limitations**
 - limited data populated
 - data dictionary not integrated with ESST
 - many other areas in ESST to be prototyped (G rings.....)
 - ESST couldn't handle spaces in data collection names, added underscore
 - Spurious window with timeline and map

Desktop - PW

- **Key Features**
 - **General desktop capability;**
 - » **Desktop-EP is icon based, Desktop-PW is hierarchical based**
 - **Beginning to look more like standard desktop**
 - » **icons to show open folders**
 - » **used nesting widget**
- **V0 Comments**
 - **No applicable feature**
- **EP4 comments incorporated**
 - **added pulldown menu “directory”**
 - **User can’t delete services**
 - **windows match path**
 - **busy cursor**
- **Limitations**
 - **Desktop-PW must be loaded before Netscape**
 - **items which are installed on the desktop will appear on the top folder**
 - **User needs to refresh the screen to see the icon**
 - **no drag/drop feature with web browsers**

PW1 team thank yous!

LaRC (Jeff Cleveland) for timeline and map software

JPL, EDC, and GSFC for data collection and data granule metadata

GSFC DAAC for AVHRR subsetting algorithm and data

Lola Olson (GCMD) for discipline definitions

George Fekete (Bill Campbell's group) for the nesting widget software