

311-EMD-104

EOSDIS Maintenance and Development Project

Release 7.20 Order Manager Database Design and Schema Specifications for the EMD Project

July 2007

Raytheon Company
Upper Marlboro, Maryland

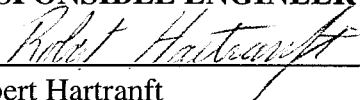
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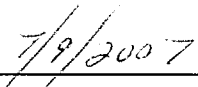
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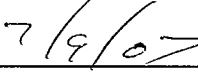


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Preface

This document is a formal contract deliverable. It requires Government review and approval within 45 business days. Changes to this document will be made by document change notice (DCN) or by complete revision.

Any questions should be addressed to:

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This document describes the data design and database specification for the Subscription Server subsystem. It is one of eleven documents comprising the detailed database design specifications for each of the EMD subsystems.

The subsystem database design specifications for the as delivered system include:

| | |
|-------------|--|
| 311-EMD-100 | Release 7.20 INGEST (INS) Subsystem Database Design and Schema Specifications for the EMD Project |
| 311-EMD-101 | Release 7.20 Science Data Server Database Design and Schema Specifications for the EMD Project |
| 311-EMD-102 | Release 7.20 Storage Management and Data Distribution Subsystems Database Design and Schema Specifications for the EMD Project |
| 311-EMD-103 | Release 7.20 Systems Management Subsystem Database Design and Schema Specifications for the EMD Project |
| 311-EMD-104 | Release 7.20 Order Manager Database Design and Schema Specifications for the EMD Project |
| 311-EMD-105 | Release 7.20 Spatial Subscription Server (SSS) Database Design and Schema Specifications for the EMD Project |
| 311-EMD-106 | Release 7.20 Data Pool Database Design and Schema Specifications for the EMD Project |

Entity Relationship Diagrams (ERDs) presented in this document have been exported directly from tools and some cases contain too much detail to be easily readable within hard copy page constraints. The reader is encouraged to view these drawings on-line using the Portable Document Format (PDF) electronic copy available via the ECS Data Handling System (EDHS) on the world-wide web at <http://edhs1.gsfc.nasa.gov>.

Abstract

This document outlines Release 7.20 “as-built” database design and database schema of the Order Manager Subsystem database including the physical layout of the database and initial installation parameters.

Keywords: data, database, design, configuration, database installation, scripts, security, data model, data dictionary, replication, performance tuning, SQL server, database security, and database scripts

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Contents

Preface

Abstract

Contents

1. Introduction

| | | |
|-----|----------------------|-----|
| 1.1 | Identification | 1-1 |
| 1.2 | Scope | 1-1 |
| 1.3 | Purpose | 1-1 |
| 1.4 | Audience | 1-1 |

2. Related Documents

| | | |
|-----|-----------------------------|-----|
| 2.1 | Applicable Documents | 2-1 |
| 2.2 | Information Documents | 2-2 |

3. Data Design

| | | |
|-------|---|------|
| 3.1 | Design Overview | 3-1 |
| 3.1.1 | Physical Data Model Entity Relationship Diagram | 3-1 |
| 3.1.2 | Tables | 3-2 |
| 3.1.3 | Columns | 3-41 |
| 3.1.4 | Column Domains | 3-59 |
| 3.1.5 | Column Default Values | 3-59 |
| 3.1.6 | Referential Integrity Rules | 3-60 |
| 3.1.7 | Check Constraints | 3-60 |
| 3.1.8 | Views | 3-60 |

| | | |
|--------|---|------|
| 3.1.9 | Declarative Integrity Constraints | 3-60 |
| 3.1.10 | Triggers | 3-63 |
| 3.1.11 | Order Manager Stored Procedures | 3-63 |
| 3.1.12 | MSS Stored Procedures | 3-74 |
| 3.1.13 | SDSRV Stored Procedure Modification | 3-74 |
| 3.1.14 | DPL Stored Procedures | 3-74 |
| 3.2 | Flat File Usage | 3-74 |
| 3.2.1 | File Descriptions | 3-74 |
| 3.2.2 | Field Specifications | 3-75 |
| 3.2.3 | Domain Definitions | 3-75 |
| 3.3 | OMS States | 3-75 |
| 3.3.1 | MSS states | 3-75 |
| 3.3.2 | Request/Granule States | 3-75 |

4. Performance and Tuning Factors

| | | |
|-----|----------------|-----|
| 4.1 | Indexes | 4-1 |
| 4.2 | Segments | 4-5 |
| 4.3 | Caches | 4-5 |

5. Database Security

| | | |
|-----|--------------------------------------|-----|
| 5.1 | Initial Users | 5-1 |
| 5.2 | Login/Group Object Permissions | 5-3 |

6. Scripts

| | | |
|-----|-----------------------------------|-----|
| 6.1 | Installation Scripts | 6-1 |
| 6.2 | De-Installation Scripts | 6-1 |
| 6.3 | Backup and Recovery Scripts | 6-1 |
| 6.4 | Miscellaneous Scripts | 6-2 |

List of Figures

| | |
|---|-----|
| Figure 3-1. Order Manager ERD Key..... | 3-1 |
| Figure 5-1. Sybase General Approach to SQL Server Security..... | 5-1 |

List of Tables

| | |
|---|------|
| Table 3-1. Database Tables Listing | 3-2 |
| Table 3-2. OmActionQueue..... | 3-3 |
| Table 3-3. OmActionType..... | 3-6 |
| Table 3-4. OmAddress_R | 3-9 |
| Table 3-5. OmAgingConfig..... | 3-10 |
| Table 3-6. OmArchive | 3-10 |
| Table 3-7. OmBundlingOrder..... | 3-10 |
| Table 3-8. OmBundlingOrder_R..... | 3-11 |
| Table 3-9. OmCleanupProcesses | 3-11 |
| Table 3-10. OmCode..... | 3-11 |
| Table 3-11. OmConfigDestinationSource | 3-11 |
| Table 3-12. OmConfigParameter..... | 3-12 |
| Table 3-13. OmConfigRetTimePeriod..... | 3-15 |
| Table 3-14. OmDestStatistics | 3-15 |
| Table 3-15. OmDevice..... | 3-15 |
| Table 3-16. OmDeviceMediaXref | 3-16 |
| Table 3-17. OmDuplicateCheck | 3-17 |
| Table 3-18. OmEcsEsdtExceptions | 3-17 |
| Table 3-19. OmEsdtRef | 3-17 |
| Table 3-20. OmExplanation..... | 3-17 |
| Table 3-21. OmExternalProcessor..... | 3-21 |
| Table 3-22. OmFile..... | 3-22 |

| | |
|---|------|
| Table 3-23. OmGranuleCounts | 3-22 |
| Table 3-24. OmGranuleDelivery | 3-23 |
| Table 3-25. OmGranule_R..... | 3-23 |
| Table 3-26. OmJewelCase | 3-23 |
| Table 3-27. OmMediaType..... | 3-24 |
| Table 3-28. OmNotification..... | 3-24 |
| Table 3-29. OmOdlMetadataRequestors | 3-25 |
| Table 3-30. OmOperatorAlert..... | 3-25 |
| Table 3-31. OmOperatorIntervention | 3-26 |
| Table 3-32. OmOrder_R | 3-27 |
| Table 3-33. OmPrinterConfig | 3-28 |
| Table 3-34. OmProcessorRequestXref | 3-28 |
| Table 3-35. OmProcessingInstruction | 3-28 |
| Table 3-36. OmProductJob | 3-29 |
| Table 3-37. OmProductJob_R | 3-29 |
| Table 3-38. OmProductModule | 3-30 |
| Table 3-39. OmReqGrInput..... | 3-30 |
| Table 3-40. OmReqGrOutput | 3-30 |
| Table 3-41. OmRequest | 3-31 |
| Table 3-42. OmRequest_R..... | 3-32 |
| Table 3-43. OmRequest_Temp..... | 3-33 |
| Table 3-44. OmRequestGranule_Temp..... | 3-33 |
| Table 3-45. OmRequestGranPI..... | 3-34 |
| Table 3-46. OmRequestGranPI_Temp | 3-34 |
| Table 3-47. OmRequestGranPI_R..... | 3-34 |
| Table 3-48. OmRequestGranule | 3-35 |
| Table 3-49. OmRequestInterventions | 3-35 |
| Table 3-50. OmRequestNotes | 3-36 |
| Table 3-51. OmRequestNotes_R | 3-36 |

| | |
|---|------|
| Table 3-52. OmQueue..... | 3-36 |
| Table 3-53. OmStagingConfig..... | 3-37 |
| Table 3-54. OmStagingCounts..... | 3-37 |
| Table 3-55. OmStagingStatistics | 3-38 |
| Table 3-56. OmStatus | 3-38 |
| Table 3-57. OmSubSettingInfo..... | 3-40 |
| Table 3-58. OmSuspendedDestination | 3-40 |
| Table 3-59. OmUsersToDelete | 3-40 |
| Table 3-60. EcDbDatabaseVersions | 3-41 |
| Table 3-61. Table Column Descriptions..... | 3-41 |
| Table 3-62. Order Manager Database Column Defaults | 3-59 |
| Table 3-63. Order Manager Check Constraints | 3-60 |
| Table 3-64. Dependencies on Table: OmActionType | 3-60 |
| Table 3-65. Dependencies on Table: OmArchive..... | 3-61 |
| Table 3-66. Dependencies on Table: OmConfigDestinationSource..... | 3-61 |
| Table 3-67. Dependencies on Table: OmDevice | 3-61 |
| Table 3-68. Dependencies on Table: OmExplanation | 3-61 |
| Table 3-69. Dependencies on Table: OmExternalProcessor | 3-61 |
| Table 3-70. Dependencies on Table: OmMediaType | 3-61 |
| Table 3-71. Dependencies on Table: OmNotification | 3-61 |
| Table 3-72. Dependencies on Table: OmProductJob | 3-62 |
| Table 3-73. Dependencies on Table: OmProductModule..... | 3-62 |
| Table 3-73.1. Dependencies on Table: OmQueue | 3-62 |
| Table 3-74. Dependencies on Table: OmRequest..... | 3-62 |
| Table 3-75. Dependencies on Table: OmRequestGranule..... | 3-62 |
| Table 3-76. Dependencies on Table: OmRequestGranPI | 3-62 |
| Table 3-77. Dependencies on Table: OmStatus..... | 3-63 |
| Table 3-78. Order Manager Database Triggers | 3-63 |
| Table 3-79. List of Order Manager Stored Procedures..... | 3-64 |

| | |
|---|-----|
| Table 4-1. Index Type Key | 4-1 |
| Table 4-2. Index List..... | 4-1 |
| Table 5-1. Permission Key..... | 5-3 |
| Table 5-2. Object Permissions | 5-3 |
| Table 6-1. Installation Scripts | 6-1 |
| Table 6-2. De-Installation Scripts | 6-1 |
| Table 6-3. Backup/Recovery Scripts | 6-2 |
| Table 6-4. Miscellaneous Scripts and Input Data Files | 6-2 |

Appendix A. Entity Relationship Diagram

Abbreviations and Acronyms

1. Introduction

1.1 Identification

This Order Manager System (OMS) Database Design and Database Schema Specification document, is part of Contract Data Requirements List (CDRL) Item Number 23, which is a required deliverable under the Earth Observing System Data and Information System (EOSDIS) Maintenance and Development (EMD) Contract (NAS5-03098).

1.2 Scope

The OMS Database Design and Database Schema Specification document describes the data design and database specifications to support the data requirements of Release 7 Order Manager software.

1.3 Purpose

The purpose of the OMS Database Design and Database Schema Specification document is to support the maintenance of OMS data and databases throughout the life cycle of ECS. This document communicates the database implementation in sufficient detail to support ongoing configuration management.

1.4 Audience

This document is for ECS maintenance and operations staff. The document is organized as follows:

Section 1 provides information regarding the identification, scope, purpose, and audience of this document.

Section 2 provides a listing of the related documents, which were used as a source of information for this document.

Section 3 contains the OMS data design which is the database tables, triggers, and stored procedures.

Section 4 provides a description of database performance and tuning features such as indexes, caches, and segments.

Section 5 provides a description of the database security infrastructure used and list of the users, groups, and permissions available upon initial installation.

Section 6 provides a description of database and database related scripts used for installation, de-installation, backup/recovery, and other miscellaneous functions.

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2. Related Documents

2.1 Applicable Documents

The following documents, including Internet links, are referenced in this document, or are directly applicable, or contain policies or other directive matters that are binding upon the content of this volume.

| | |
|-------------|---|
| 305-EMD-100 | Release 7.20 Segment Design Specification for the EMD Project |
| 920-TDN-009 | DAAC Hardware Database Mapping/NSIDC |
| 920-TDE-009 | DAAC Hardware Database Mapping/EDC |
| 920-TDL-009 | DAAC Hardware Database Mapping/LARC |
| 920-TDS-009 | DAAC Hardware Database Mapping/SMC |
| 920-TDN-010 | DAAC Database Configuration/NSIDC |
| 920-TDE-010 | DAAC Database Configuration/EDC |
| 920-TDL-010 | DAAC Database Configuration/LARC |
| 920-TDS-010 | DAAC Database Configuration/SMC |
| 920-TDN-011 | DAAC Sybase Log Mapping/NSIDC |
| 920-TDE-011 | DAAC Sybase Log Mapping/EDC |
| 920-TDL-011 | DAAC Sybase Log Mapping/LARC |
| 920-TDS-011 | DAAC Sybase Log Mapping/SMC |
| 922-TDN-013 | Disk Partitions/NSIDC |
| 922-TDL-013 | Disk Partitions/LARC |
| 922-TDS-013 | Disk Partitions/SMC |

These documents are maintained as part of the ECS baseline and available on the World Wide Web at the URL: <http://cmdm.east.hitc.com/baseline>. Please note that this is a partial mirror site in that some items are not available (they are identified) since this is OPEN to all.

This site may also be reached through the EDHS homepage. Scroll page to the connections line and click on the ECS Baseline Information System link.

2.2 Information Documents

The following documents, although not directly applicable, amplify or clarify the information presented in this document. These documents are not binding on this document.

609-EMD-100 Release 7.20 Operations Tools Manual for the EMD Project

611-EMD-100 Release 7.20 Mission Operation Procedures for the EMD Project

These documents are accessible via the EDHS homepage.

3. Data Design

3.1 Design Overview

The Order Manager Subsystem database implements the persistent data requirements for the Order Manager Subsystem. The database is designed to satisfy business rules while maintaining data integrity, consistency, and performance. Database tables are implemented using the Sybase Relational Database Management System (RDBMS) Version 12.5. All components of the Order Manager Subsystem database are described in the following sections; information is presented in sufficient detail to support operational needs.

3.1.1 Physical Data Model Entity Relationship Diagram

An entity relationship diagram (ERD) was developed for use as a "roadmap" to the Order Manager Subsystem database. An ERD is a schematic of the physical data structure that illustrates the dependencies and relationships between database entities, i.e., tables. On ERDs, rectangles and arrows represent database entities as shown by the key in Figure 3-1. The ERD for the Order Manager is shown in Appendix A.

Sample Table

Table Name
Column 1, PK
Column 2
Column 3

PK = Primary Key
FK = Foreign Key

Sample Relationship

Independent Table

Table A
Column 1, PK
Column 2

Dependent Table

Table B
Column 1, PK
Column 2, FK

Table A has a one to many relationship with Table B

Figure 3-1. Order Manager ERD Key

3.1.2 Tables

A listing of each the tables in the Order Manager database is given here. A brief definition of each of these tables follows including a listing of the columns comprising the table in Table 3-1. The column list indicates if the column is part of the primary key for the table, that is, if the columns can be used alone or in combination with other primary key columns to uniquely identify a single row in the table. The column list also indicates whether the column is a mandatory attribute that must be included in every row.

Table 3-1. Database Tables Listing (1 of 2)

| Table Name | Logical Grouping |
|---------------------------|-----------------------------|
| OmActionQueue | Order Manager |
| OmActionType | Order Manager |
| OmAddress_R | Archive |
| OmAgingConfig | Order Manager |
| OmArchive | Order Manager |
| OmBundlingOrder | Order Manager |
| OmBundlingOrder_R | Archive |
| OmCleanupProcesses | Archive |
| OmCode | Order Manager |
| OmConfigDestinationSource | Order Manager |
| OmConfigParameter | Order Manager |
| OmConfigRetTimePeriod | Order Manager |
| OmDestStatistics | Order Manager |
| OmDevice | Physical Media Distribution |
| OmDeviceMediaXref | Physical Media Distribution |
| OmDuplicateCheck | Order Manager |
| OmEcsEsdtExceptions | Order Manager |
| OmEsdtRef | Physical Media Distribution |
| OmExplanation | Order Manager |
| OmExternalProcessor | Order Manager |
| OmFile | Order Manager |
| OmGranule_R | Archive |
| OmGranuleCounts | Order Manager |
| OmGranuleDelivery | Physical Media Distribution |
| OmJewelCase | Physical Media Distribution |
| OmMediaType | Order Manager |
| OmNotification | Order Manager |
| OmOdIIMetadataRequestors | Order Manager |
| OmOperatorAlert | Order Manager |
| OmOperatorIntervention | Order Manager |
| OmOrder_R | Archive |

Table 3-1. Database Tables Listing (2 of 2)

| Table Name | Logical Grouping |
|-------------------------|-----------------------------|
| OmPrinterConfig | Physical Media Distribution |
| OmProcessingInstruction | Order Manager |
| OmProcessorRequestXref | Order Manager |
| OmProductJob | Physical Media Distribution |
| OmProductJob_R | Archive |
| OmProductModule | Physical Media Distribution |
| OmQueue | Order Manager |
| OmReqGrInput | Line Item Processing |
| OmReqGrOutput | Line Item Processing |
| OmRequest | Order Manager |
| OmRequest_R | Archive |
| OmRequest_Temp | Archive |
| OmRequestGranPI | Line Item Processing |
| OmRequestGranPI_R | Archive |
| OmRequestGranPI_Temp | Archive |
| OmRequestGranule | Line Item Processing |
| OmRequestGranule_Temp | Archive |
| OmRequestInterventions | Order Manager |
| OmRequestNotes | Order Manager |
| OmRequestNotes_R | Archive |
| OmStagingConfig | Order Manager |
| OmStagingCounts | Order Manager |
| OmStagingStatistics | Order Manager |
| OmStatus | Order Manager |
| OmSubSettingInfo | Order Manager |
| OmSuspendedDestination | Order Manager |
| OmUsersToDelete | Order Manager |
| EcDbDatabaseVersions | Database Versioning |

Table 3-2 OmActionQueue represents the current set of actions that are queued.

Table 3-2. OmActionQueue (1 of 2)

| Column Name | Data Type | PK Column | Mandatory Column |
|----------------|-------------|-----------|------------------|
| ActionQueueId | numeric(9) | Yes | Yes (identity) |
| ActionType | char(2) | No | Yes |
| ActionPriority | tinyint | No | Yes |
| RequestId | varchar(10) | No | No |

Table 3-2. OmActionQueue (2 of 2)

| Column Name | Data Type | PK Column | Mandatory Column |
|----------------|---------------|-----------|------------------|
| NotificationId | numeric(9) | No | No |
| EnqueueTime | datetime | No | Yes |
| LastUpdate | datetime | No | Yes |
| CompletionTime | datetime | No | No |
| RetryCount | tinyint | No | No |
| ActionStatus | tinyint | No | Yes |
| DispatchInfo | varchar(100) | No | No |
| ActionInfo | varchar(255) | No | No |
| Pid | int | No | No |
| GranId | numeric(16,0) | No | No |
| PickedTime | datetime | No | No |

Valid Queue Actions

| Action Type | Description | ActionInfo |
|-------------|--|---|
| A | Acceptance Notification (Data Pool web drill down) | |
| AE | Alert Email | <AlertType>:<AlertObject>:EMAIL:<AlertEmailAddress> |
| AH | Accept HEG request | |
| AM | Activate Media Request | <Device> |
| AR | Archive Resumed | <Archive Name> |
| AS | Archive Suspended | <Archive Name> |
| D | Distribution | |
| DA | Destination Added | <Destination Name> |
| DC | Destination Change (not staging related) | <Destination Name> |
| DD | Destination Deleted | <Destination Name> |
| DR | Destination Resumed | <Destination Name> |
| DS | Destination Suspended | <Destination Name> |
| E | Email | |
| EF | Email Failed | EMAIL:<EmailFailedAddress> |
| ER | Email Resumed | |
| ES | Email Suspended | |
| FA | File System Active (Data Pool originated) | <FS> |
| FC | File System Changed (Data Pool notification) | <FS> |
| FD | File System Down (Data Pool originated) | <FS> |

(Cont'd)

| Action Type | Description | ActionInfo |
|-------------|---|--|
| FM | File System Collection Removed (Data Pool notification) | FileSystemPath:GroupId:EsdtName:InsertEnabledFlag:ExclusionFlag |
| FN | File System Change Completed (Data Pool notification) | FileSystemPath:GroupId:EsdtName:InsertEnabledFlag:ExclusionFlagFSOLD:<GROUP>::<FS>::: <Collection>:FSNEW: <GROUP>::<FS>:::<Collection> |
| FP | File System Collection Added (Data Pool notification) | FileSystemPath:GroupId:EsdtName:InsertEnabledFlag:ExclusionFlag |
| GA | Granule Added | |
| GF | Granule Failed staging | |
| GG | Granule Failed | |
| GS | Granule staged | <OrderOnly DPL> |
| MC | Media Type Changed | <MediaType> |
| MD | Product Module Deleted | <ProdModuleId> |
| MR | Media Resumed | <MediaType> |
| MS | Media Suspended | <MediaType> |
| N | Distribution Notice | EMAIL:<email address> |
| NR | Resume New Requests | |
| NS | Suspend New Requests | |
| PC | PDS Distribution Succeeded | |
| PF | PDS Distribution Failed | |
| PL | S4 FTP Pull Cleanup Action | |
| PR | Submission to PDS Resumed | |
| PS | Submission to PDS Suspended | |
| PT | Print | Type of print action |
| QR | Queue Resume | <QueueName> |
| QS | Queue Suspended | <QueueName> |
| R | Resubmit Request | |
| RA | Resume Queue Processing | |
| RC | Request canceled | USERID:<UserId>::<reason text> |
| RF | Request FtpPush Parameter Changed | |
| RH | Reject HEG request | |
| RP | Priority Changed | |
| RR | Request Resumed | |
| RS | Request Suspended | |
| RW | Resume Global Staging | |
| RX | Request Changed | <FieldName>:NewValue |
| S | Shipped | |
| SA | Suspend Queue Processing | |
| SC | Staging Parameter Change | [D M]:<MediaType/DestinationName> |

(Cont'd)

| Action Type | Description | ActionInfo |
|-------------|-------------------------------|-------------------|
| SR | Submission to SDSRV Resumed | |
| SS | Submission to SDSRV Suspended | |
| SW | Suspend Global Staging | |
| TR | Stop request | |
| TV | Stop volume | VolumeName |
| V | Validate | |
| VC | Volume Status Change | VolumeName:Status |

Table 3-3 OmActionType represents the valid set of actions used by OMS.

Table 3-3. OmActionType

| Column Name | Data Type | PK Column | Mandatory Column |
|-------------|--------------|-----------|------------------|
| ActionType | char(2) | Yes | Yes |
| Description | varchar(100) | No | Yes |

Valid ActionTypes

| Action Type | Description |
|-------------|--|
| A | Acceptance Notification (Data Pool web drill down) |
| AD | Scp Destination Added |
| AE | Alert Email |
| AH | Accept HEG request |
| AM | Activate Media Request |
| AP | Assemble Package |
| AR | Archive Resumed |
| AS | Archive Suspended |
| CD | Scp Destination Changed |
| CH | Cancel HEG Processing |
| CP | Scp Stage Parameter Changed |
| D | Distribution |
| DA | Destination Added |
| DC | Destination Change (not staging related) |
| DD | Destination Deleted |
| DG | Decompressed Granule |
| DR | Destination Resumed |

(Cont'd)

| Action Type | Description |
|--------------------|---|
| DS | Destination Suspended |
| DU | Device Updated |
| E | Email |
| EA | Action Email |
| EF | Email Failed |
| ER | Email Resumed |
| ES | Email Suspended |
| FA | File System Active (Data Pool originated) |
| FC | File System Changed (Data Pool notification) |
| FD | File System Down (Data Pool originated) |
| FM | File System Collection Removed (Data Pool notification) |
| FN | File System Change Completed (Data Pool notification) |
| FP | File System Collection Added (Data Pool notification) |
| GA | Granule Added |
| GF | Granule Failed Staging |
| GG | Granule Failed |
| GS | Granule Staged |
| HE | HEG Error |
| HP | HEG Process |
| MA | Media Assignment For Request (or Volume) |
| MC | Media Type Changed |
| ME | Media Creation Error |
| MQ | Mount Media For QC |
| MR | Media Resumed |
| MS | Media Suspended |
| MV | Verify Media Request |
| N | Distribution Notice |
| NR | Resume New Requests |
| NS | Suspend New Requests |
| OI | Operator Intervention |
| P2 | Cleanup External Processor Temporary Files |
| PA | Print Action (summary) |
| PC | PDS Distribution Succeeded |
| PT | Print Action |
| PL | S4 FTP Pull Cleanup Action |
| PR | Submission to PDS Resumed |
| PS | Submission to PDS Suspended |
| QC | QC Action For Request |
| QD | QuickServer Not Reachable |
| QF | QC Failed |

(Cont'd)

| Action Type | Description |
|-------------|-----------------------------------|
| QN | Activate Request for QC |
| QM | Media Mounted for QC |
| QR | Queue Resume |
| QS | Queue Suspended |
| QU | QuickServer Not Reachable |
| R | Resubmit Request |
| RA | Resume Queue Processing |
| RC | Request canceled |
| RD | Request Done |
| RF | Request FtpPush Parameter Changed |
| RH | Reject HEG Request |
| RN | Operator Request Activation |
| RO | Rimage Timeout |
| RP | Request Changed |
| RR | Request Resumed |
| RS | Request Suspended |
| RU | Rimage Timeout |
| RW | Resume Global Staging |
| S | Shipped |
| S3 | Synergy III Request |
| SA | Suspend Queue Processing |
| SC | Staging Parameter Change |
| SD | Scp Destination Deleted |
| SE | SN Failure Email |
| SM | Scp Destination Resumed |
| SN | scp Distribution Notice |
| SP | Scp Destination Suspended |
| SR | Submission to SDSRV Resumed |
| SU | Request scp Update |
| SS | Submission to SDSRV Suspended |
| SW | Suspend Global Staging |
| V | Validate |
| VC | Volume Status Change |
| XA | Allocate Device |
| XC | Collect Media For QC |
| XD | Dismount Media From Production |
| XM | Mount Media For Production |
| XS | Prepare For Shipment |

Table 3-4 OmAddress_R contains archived addresses for requests.

Table 3-4. OmAddress_R

| Column Name | Data Type | PK Column | Mandatory Column |
|-----------------------|------------------|------------------|-------------------------|
| orderId | varchar(10) | No | No |
| userId | varchar(14) | No | No |
| homeDAAC | char(3) | No | No |
| title | char(5) | No | No |
| firstName | varchar(20) | No | No |
| middleInit | char(1) | No | No |
| lastName | varchar(20) | No | No |
| eMailAddr | varchar(255) | No | No |
| organization | varchar(60) | No | No |
| mailAddrStreet1 | varchar(32) | No | No |
| mailAddrStreet2 | varchar(32) | No | No |
| mailAddrStreet3 | varchar(32) | No | No |
| mailAddrCity | varchar(35) | No | No |
| mailAddrState | varchar(20) | No | No |
| mailAddrZip | varchar(15) | No | No |
| mailAddrCountry | varchar(30) | No | No |
| mailAddrPhone | varchar(22) | No | No |
| mailAddrFax | varchar(22) | No | No |
| billContactTitle | char(5) | No | No |
| billContactName_First | varchar(20) | No | No |
| billContactName_MI | char(1) | No | No |
| billContactName_Last | varchar(20) | No | No |
| billEMailAddr | varchar(255) | No | No |
| billContactOrg | varchar(60) | No | No |
| billAddrStreet1 | varchar(32) | No | No |
| billAddrStreet2 | varchar(32) | No | No |
| billAddrStreet3 | varchar(32) | No | No |
| billAddrCity | varchar(35) | No | No |
| billAddrState | varchar(20) | No | No |
| billAddrZip | varchar(15) | No | No |
| billAddrCountry | varchar(30) | No | No |
| billAddrPhone | varchar(22) | No | No |
| billAddrFax | varchar(22) | No | No |
| shipContactOrg | varchar(60) | No | No |

Table 3-5 OmAgingConfig contains the aging policy used globally for each ECS priority.

Table 3-5. OmAgingConfig

| Column Name | Data Type | PK Column | Mandatory Column |
|---------------|--------------|-----------|------------------|
| AgingConfigId | numeric(9,0) | Yes | Yes (identity) |
| MaxPriLevel | float | No | No |
| agingStep | float | No | No |
| ECSPriority | char(15) | No | No |
| IntPriority | tinyint | No | No |

Table 3-6 OmArchive contains a list of Storage bins used for staging to the Data Pool.

Table 3-6. OmArchive

| Name | Data Type | PK Column | Mandatory Column |
|--------------------|-------------|-----------|------------------|
| ArchiveId | numeric(9) | Yes | Yes (identity) |
| ArchiveName | varchar(75) | No | No |
| ArchiveStatus | char(1) | No | No |
| LastUpdate | datetime | No | No |
| ArchiveExplanation | smallint | No | No |

Table 3-7 OmBundlingOrder holds the information pertaining to bundled orders for which subscriptions will be submitted against.

Table 3-7. OmBundlingOrder

| Name | Data Type | PK Column | Mandatory Column |
|-----------------------|-------------|-----------|------------------|
| BundlingOrderId | varchar(10) | Yes | Yes |
| BundlingOrderStatus | tinyint | No | Yes |
| RequestId | varchar(10) | No | Yes |
| MediaTypeId | tinyint | No | Yes |
| BundlingOrderPriority | tinyint | No | Yes |
| ExpirationDate | datetime | No | Yes |
| MinBundleSize | float | No | Yes |
| MinBundleGranCnt | int | No | Yes |
| MaxBundleAge | float | No | Yes |
| LastAccess | datetime | No | Yes |

Table 3-8 OmBundlingOrder_R holds the archive information pertaining to bundled orders.

Table 3-8. OmBundlingOrder_R

| Name | Data Type | PK Column | Mandatory Column |
|---------------------|-------------|-----------|------------------|
| RequestId | varchar(10) | FALSE | FALSE |
| BundlingOrderId | varchar(10) | FALSE | FALSE |
| ExpirationDate | datetime | FALSE | FALSE |
| BundlingOrderStatus | tinyint | FALSE | FALSE |

Table 3-9 OmCleanupProcesses tracks instance of Cleanup as it runs in OMS database.

Table 3-9. OmCleanupProcesses

| Name | Data Type | PK Column | Mandatory Column |
|----------------------|-----------|-----------|------------------|
| spid | Smallint | FALSE | TRUE |
| kpid | Int | FALSE | TRUE |
| cutOffDate | Datetime | FALSE | TRUE |
| numRequestsProcessed | Int | FALSE | TRUE |

Table 3-10 OmCode contains codes used in various tables. It serves as a repository and reference for ad hoc querying.

Table 3-10. OmCode

| Name | Data Type | PK Column | Mandatory Column |
|-------------|--------------|-----------|------------------|
| Code | varchar(30) | Yes | Yes |
| TableName | varchar(30) | Yes | Yes |
| Description | varchar(255) | No | No |

Table 3-11 OmConfigDestinationSource contains Ftp Push Destination information as configured by the DAAC operator.

Table 3-11. OmConfigDestinationSource (1 of 2)

| Name | Data Type | PK Column | Mandatory Column |
|-----------------|--------------|-----------|------------------|
| DestinationId | numeric(9) | Yes | Yes (identity) |
| DestinationName | varchar(75) | No | No |
| DestinationHost | varchar(100) | No | No |

Table 3-11. OmConfigDestinationSource (2 of 2)

| Name | Data Type | PK Column | Mandatory Column |
|--------------------|--------------|-----------|------------------|
| Directory | varchar(255) | No | No |
| CreationTime | datetime | No | No |
| DestDispatchStatus | char(1) | No | No |
| MinThroughput | float | No | No |
| Notes | varchar(255) | No | No |
| LastUpdate | datetime | No | No |
| TimeOut | float | No | No |
| RetryMode | char(1) | No | No |
| RetryInterval | float | No | No |
| MaxConnections | int | No | No |
| MediaTypeld | tinyint | No | No |

Table 3-12 OmConfigParameter contains the dynamic configuration parameters for the OmServer. These parameters will be able to be modified without re-booting the OmServer.

Table 3-12. OmConfigParameter

| Name | Data Type | PK Column | Mandatory Column |
|---------------|--------------|-----------|------------------|
| ConfigId | numeric(3) | Yes | Yes (identity) |
| ParameterName | varchar(50) | No | Yes |
| ParameterType | char(1) | No | Yes |
| Units | varchar(10) | No | No |
| ParameterDesc | varchar(100) | No | Yes |
| IntValue | int | No | No |
| CharValue | varchar(255) | No | No |
| FloatValue | float | No | No |
| Category | char(1) | No | No |

Valid Configuration Parameter Values

| ParameterName | ParameterDesc |
|-------------------------------------|--|
| NUM_OF_ALLOWED_PDS_SUBMISSIONS | Max Number of concurrent submissions to PDS |
| NUM_OF_ALLOWED_SDSRV_SUBMISSIONS | Max Number of concurrent submissions to SDSRV |
| NUM_OF_ALLOWED_EMAIL_SUBMISSIONS | Max Number of concurrent submissions to PDS |
| CHILD_PROCESS_TIME_LIMIT | Amount of time to wait to kill child ... |
| DELETE_COMPLETE_INTERVENTIONS_AFTER | Time in hours Completed ... |
| DELETE_COMPLETE_ACTIONS_AFTER | Time in hours Completed ... |
| MAX_REQUEST_GRANULES | Maximum number of granules a request may contain |

(Cont'd)

| ParameterName | ParameterDesc |
|------------------------------------|---|
| MAX_SUBSET_GRANULES | Maximum number of granules a... |
| MAX_BUNDLE_AGE | Default maximum bundle age... |
| MIN_BUNDLE_GRANULES | Default minimum bundle granule count |
| DELAY_PARTITION | Time delay in hours each successive... |
| MAX_ACTION_RETRIES | Maximum number of times an... |
| IDLE_SLEEP_TIME | Length of time in... |
| ACTION_RETRY_WAIT | Time in seconds the OmServer |
| NUM_OF_ALLOWED_VALIDATIONS | Number of threads the |
| ACTION_CHECK_INTERVAL | Time in seconds the OmServer... |
| CLEANUP_CHECK_INTERVAL | Time in seconds the OmServer... |
| SUSPEND_CHECK_INTERVAL | Time in seconds the OmServer... |
| BILLING_AGENCY_EMAIL_ADDRESS | Name used by OmServer for DORRAN Emails,... |
| BILLING_AGENCY_NAME | Name used by OmServer for DORRAN Email ... |
| MAX_CONCURRENT_REQUESTS_PROCESSED | Number of concurrent. |
| BUNDLE_EXPIRATION_PERIOD | Number of days until the Bundling Order Expires |
| NOTIFY_USER_FOR_PARTITION_REQUESTS | Whether or not user want to receive notification when partition happens |
| DDIST_RETENTION_VALUE | Retention Value from MSS SERVER in minutes |
| GLOBAL_STAGING_STATUS | Synergy IV Processing Mode Status <A/S> |
| PROCESSING_MODE | S3 or S4 (set at Server Start) <S3/S4> |
| MAX_CONCURRENT_FTPPUSH_OPS | Max allowable Ftp Push Ops |
| MAX_FTPPUSH_DURATION | Max time allowed for Ftp Push |
| MAX_FTPPUSH_RETRIES | Allowable number of retries for FtpPush |
| RETRY_INTERVAL | Time between retries |
| NEW_REQUEST_PROCESSING | Indicates whether new request processing is suspended <A/S> |
| MIN_MODERATE_REQUEST | min number of tape mounts classified Moderate |
| MIN_EXPENSIVE_REQUEST | min number of tape mounts classified Expensive |
| MAX_CHEAP_REQUESTS | Max number of Concurrent requirements class as Cheap that can be promoted to staging |
| MAX_MODERATE_REQUESTS | Max number of Concurrent requirements class as Moderate that can be promoted to staging |
| MAX_EXPENSIVE_REQUESTS | Max number of Concurrent requirements class as Exp. That can be promoted to staging |
| MAX_FAILED_PUSH_OPS | Maximum allowable FTP Push op failures before suspending a destination |
| PULL_GRAN_DPL_TIME | Amount of time to keep granules associated with FTP Pull requests in the DPL |
| PULL_GRAN_DPL_RET_PRI | Retention priority for the DPL to associate with granules from FTP Pull requirements |
| MIN_PRI_TO_PREEMPT | Min priority for a request to qualify for preemptive staging |

(Cont'd)

| ParameterName | ParameterDesc |
|--|---|
| MAX_FAILURE_ARCHIVE | Allowable number of failures prior to suspending Archive |
| GLOBAL_CONFIGURED_EMAIL | Configured email account to send actions to when an alert or intervention is generated. |
| MAX_ORPHAN_REQ_AGE | How long to keep an orphaned request in system before it is qualified for removal |
| CLEANUP_ORPHAN_REQ_PERIOD | How often to cleanup orphaned requests |
| FORWARD_DN_EMAIL | Configured email account for forwarded DN email |
| UNSUCCESS_REQ_RET_TIME | How long to keep unsuccessful requests in OMS/MSS |
| DUP_LOOKUP_HOURS | How many hours to look back when doing duplicate checking |
| DUE_DATE_FOR_MEDIA_REQUEST | Number of hours from the time the request finished staging that request is due for distribution |
| ACTIVATE_MEDIA_CREATION_AUTOMATICALLY | Indicates if physical media creation is automatic or manual |
| SUSPEND_HEG_DISPATCHING | Indicates if HEG dispatching is suspended |
| STOP_HEG_ACCEPTANCE | Indicates if HEG acceptance is stopped |
| GENERATE_INTERVENTION_FOR_S3_MEDIA_ORDER | Indicates whether to generate an intervention for S3 media orders |
| GLOBAL_CONFIGURED_OPERATOR_ACTIONS_EMAIL | Configured email account to send operator actions to. |
| MAX_NUM_OF_CONCURRENT_HEG_PROCESS | The maximum number of line items that may be processed concurrently. |
| MAX_NUM_OF_CONCUR_HEG_PROC_PER_REQ | The maximum number of line items that may be processed concurrently for a single request. |
| HEG_PROCESS_RETRY_INTERVAL | The retry interval for automatic retry in case the queue is suspended automatically for HEG process. |
| BILLABLE_PROC_MODE | The processing mode for billable granules. (S3/S4) |
| RESTRICT_PROC_MODE | The processing mode for restricted granules (S3/S4). |
| CLEANUP_DELAY_INTERVAL | The delay time interval for cleanup granules. |
| QC_TIMEOUT | The maximum time (minutes) QC is allowed to run before generating an intervention |
| PRODUCTION_TIMEOUT | The maximum time (minutes) Production is allowed to run before generating an intervention |
| MEDIA_PREP_TIMEOUT | The maximum time (minutes) Media Preparation is allowed to run before generating an intervention |
| RIMAGE_ORDER_PULL_TIME | Configured maximum time interval in minutes within which a Rimage order is expected to be pulled by Rimage after it was created by OMS. |
| MAX_CONCURRENT_SCP_OPS | Max allowable Scp Ops |
| MAX_FAILED_SCP_OPS | Maximum allowable Scp op failures before suspending a destination |
| NUM_OF_ALLOWED GRANULE PROCESSORS | Number of Allowed Granule Processors |

Table 3-13 OmConfigRetTimePeriod Stores length of time to retain orders in MSS for specific media/client combos.

Table 3-13. OmConfigRetTimePeriod

| Name | Data Type | PK Column | Mandatory Column |
|-----------------|--------------|-----------|------------------|
| RetTimePeriodId | numeric(9,0) | Yes | Yes (identity) |
| OrderSource | char(1) | No | No |
| MediaTypeId | tinyint | No | Yes |
| RetTimePeriod | float | No | No |

Table 3-14 OmDestStatistics contains historical copy of FTP Push throughput for each FTP Push destination. Calculated and stored once every 15 minutes.

Table 3-14. OmDestStatistics

| Name | Data Type | PK Column | Mandatory Column |
|-----------------|--------------|-----------|------------------|
| DestinationId | numeric(16) | Yes | Yes |
| IntervalStart | datetime | Yes | Yes |
| IntervalStop | datetime | Yes | Yes |
| MinPushThrpt | float | No | No |
| MaxPushThrpt | float | No | No |
| AvgPushThrpt | float | No | No |
| NumFailed | int | No | No |
| NumPushed | int | No | No |
| SizePushedMB | float | No | No |
| DestinationHost | varchar(100) | No | Yes |
| SizeFailedMB | float | No | No |

Table 3-15 OmDevice Contains information necessary for configuring and managing devices. Specifies devices available for each mediaType. Located in the EcGlobalDb database.

Table 3-15. OmDevice (1 of 2)

| Name | Data Type | PK Column | Mandatory Column |
|-------------|--------------|-----------|------------------|
| DeviceId | numeric(9) | Yes | Yes (identity) |
| Label | varchar(20) | No | Yes |
| Path | varchar(255) | No | No |
| DriveLetter | char(1) | No | No |
| Description | varchar(255) | No | No |

Table 3-15. OmDevice (2 of 2)

| Name | Data Type | PK Column | Mandatory Column |
|-------------------------|------------------|------------------|-------------------------|
| DevicePurpose | varchar(20) | No | No |
| WorkloadActual | float(8) | No | No |
| WorkloadAllocated | float(8) | No | No |
| WorkloadLimit_Allocated | float(8) | No | No |
| WorkloadLimit_Actual | float(8) | No | No |
| Status | varchar(30) | No | No |
| Online_Status | char(1) | No | No |
| Explanation | varchar(255) | No | No |
| CreationDate | datetime | No | No |
| LastUpdate | datetime | No | No |
| ntqcFlag | char(1) | No | No |
| Mode | varchar(5) | No | No |
| ModeReserved | char(5) | No | No |
| BlkSize | int | No | No |
| SerialPrepFlag | char(1) | No | No |
| FtpHost | varchar(255) | No | No |
| FtpUser | varchar(50) | No | No |
| FtpPass | varchar(50) | No | No |

Table 3-16 OmDeviceMediaXref contains Cross Reference data between OmMediaType and OmDevice. Located in the EcGlobalDb database.

Table 3-16. OmDeviceMediaXref

| Name | Data Type | PK Column | Mandatory Column |
|-------------|------------------|------------------|-------------------------|
| DeviceId | numeric(9) | Yes | Yes |
| MediaTypeId | tinyint | Yes | Yes |

Table 3-17 OmDuplicateCheck Used by DPL to prevent duplicate order submission.

Table 3-17. OmDuplicateCheck

| Name | Data Type | PK Column | Mandatory Column |
|--------------|--------------|-----------|------------------|
| OrderId | varchar(10) | No | Yes |
| RequestId | varchar(10) | Yes | Yes |
| UserCheckSum | varchar(128) | Yes | Yes |
| UserEmail | varchar(255) | No | No |
| InsertTime | datetime | No | No |

Table 3-18 OmEcsEsdtExceptions contains a list of ESDT which should cause a request referencing granules from that collection to be processed in Synergy III mode.

Table 3-18. OmEcsEsdtExceptions

| Name | Data Type | PK Column | Mandatory Column |
|------------------|-----------|-----------|------------------|
| EsdtType | char(12) | Yes | Yes |
| Exception_Source | char(1) | No | No |

Table 3-19 OmEsdtRef contains the defined production modules to be used for processing an ECS collection

Table 3-19. OmEsdtRef

| Name | Data Type | PK Column | Mandatory Column |
|--------------|------------|-----------|------------------|
| ProdModuleId | numeric(9) | Yes | Yes |
| EsdtType | char(12) | Yes | Yes |

Table 3-20 OmExplanation contains the static explanation associated with either a granule or a request.

Table 3-20. OmExplanation

| Name | Data Type | PK Column | Mandatory Column |
|-----------------|-------------|-----------|------------------|
| ExplanationCode | smallint | Yes | Yes |
| Explanation | varchar(75) | No | Yes |
| MediaFlag | char(1) | No | No |

Valid Explanation Codes

| ExplanationCode | Explanation |
|------------------------|---|
| 10 | Maximum Request Size Exceeded |
| 20 | Maximum Granule Count Exceeded |
| 30 | Media Capacity Exceeded |
| 40 | Inaccessible due to DFA |
| 50 | Invalid UR/Granule Not Found |
| 60 | Inaccessible - Restricted Granule |
| 70 | Max Retry Reached |
| 80 | Granule has been Logically Deleted |
| 90 | Granule exceeds media capacity |
| 100 | Max Subset Granule Count Exceeded |
| 109 | Minimum Request Size Violation |
| 110 | Request Resubmitted |
| 111 | Failed transferring |
| 112 | Failed staging (Fatal) |
| 113 | Long Running Stage |
| 114 | Max time allowed for Ftp Push Exceeded |
| 115 | Max allowable Ftp Push op failures exceeded |
| 116 | Allowable number of retries for Ftp Push Exceeded |
| 117 | Ftp Login Errors |
| 118 | File System Suspended |
| 119 | Consecutive Inserts from Archive Failure Limit Exceeded |
| 120 | Archive Host Cannot be Reached |
| 121 | Access to AMASS file system Failed |
| 122 | Submission to PDS Suspended |
| 123 | Submission to SDSRV Suspended |
| 124 | File System Changed |
| 125 | File System Change Completed |
| 126 | Failed by Operator |
| 127 | Request Canceled |
| 128 | Archive suspended by operator |
| 129 | Archive resumed by operator |
| 130 | Request suspended by Operator |
| 131 | Request resumed by Operator |
| 132 | Destination suspended by Operator |
| 133 | Destination resumed by Operator |
| 134 | Granule with invalid size |
| 135 | Request failed by PDS |
| 136 | Request suspended by Server |
| 137 | Request resumed by Server |

(Cont'd)

| ExplanationCode | Explanation |
|------------------------|---|
| 138 | Destination suspended by Server |
| 139 | Destination resumed by Server |
| 140 | File system is not available |
| 141 | No free space in the File System |
| 142 | FtpPush Host not reachable |
| 143 | FtpPush destination disk space is full |
| 144 | Invalid Host Address |
| 145 | FtpPush Directory does not Exist or No Write Permission |
| 146 | FtpPush destination write failed |
| 147 | FtpPush File Missing or Unable to Open the File |
| 148 | Host Unreachable |
| 149 | QuickServer Unreachable |
| 150 | Duplicate Request exists |
| 151 | Request contains no granules |
| 152 | File Size on Ftp Daemon does not match file size sent by client |
| 153 | File not found in archive |
| 154 | Database error |
| 155 | Granule failed staging |
| 156 | Transfer failed |
| 157 | Granule file not found |
| 162 | Distribution Notification Failed |
| 163 | Package Assembled |
| 164 | Package Not Assembled |
| 165 | Media Dismounted Confirmed |
| 166 | Package Assembled/Media Dismounted Confirmed |
| 167 | QC Canceled |
| 168 | Mount Complete |
| 169 | Dismount Complete |
| 170 | Mount Failed |
| 171 | Dismount Failed |
| 172 | Request Activated |
| 173 | Media Collection Failed |
| 174 | Media Collection Complete |
| 175 | Physical Media Creation Error |
| 176 | QC Failed |
| 177 | Production Module Error |
| 178 | Media Volume Failed Verification |
| 179 | QC Error |
| 180 | Synergy III request (not allowed) |
| 181 | Media Creation Error |

(Cont'd)

| ExplanationCode | Explanation |
|------------------------|--|
| 182 | HEG Line items failed |
| 183 | Allocated to Synergy III mode processing |
| 184 | Waiting For device assignment |
| 185 | Media Mounted |
| 186 | Media Mount Confirmed |
| 187 | PDS Platform Unavailable |
| 188 | Device Marked Off-line by Operator |
| 189 | Device Marked Off-line by Server |
| 190 | Media Creation Stopped |
| 191 | Write Error |
| 192 | Missing entries in metadata file |
| 193 | Tape archive failure |
| 194 | Rimage cd/dvd creation failure |
| 195 | Rimage cd/dvd creation timeout |
| 196 | Error creating summary file |
| 197 | Error creating tape label file |
| 198 | Invalid tape Drive |
| 199 | Invalid Rimage Drive |
| 200 | Replaced by Operator |
| 201 | Waiting For Media Mount |
| 202 | Collect Media For QC |
| 203 | Creating Links in Staging directory failed |
| 204 | Copying of Summary file from summary dir to staging dir failed |
| 210 | Create link to the public directory failed. |
| 220 | HEG service is not available |
| 221 | Granule fail for HEG processed |
| 222 | Heg Server Unreachable |
| 223 | Heg Request Cancelled |
| 224 | Heg Request Rejected |
| 225 | Heg Processing Error |
| 226 | Request Failed Final Heg Validation |
| 227 | Reading of HDF file failed |
| 228 | Heg File Createion or Write Error |
| 229 | Heg Converter Error |
| 230 | Heg Input Data Error |
| 231 | Media Preparation Timeout |
| 232 | Media Creation Timeout |
| 233 | Media Verification Timeout |
| 234 | Media Preparation Failed |

(Cont'd)

| ExplanationCode | Explanation |
|------------------------|---|
| 235 | Invalid Password |
| 236 | Server has Suspended OMS Media |
| 237 | No Devices available for Request |
| 238 | Media Creation success |
| 239 | Media Verification success |
| 300 | Scp Ssh file copy failed |
| 301 | Scp Destination is not a directory |
| 302 | Scp Connect to host failed |
| 303 | Scp Connection lost |
| 304 | Scp Source file doesn't exist |
| 305 | Scp No read permission |
| 306 | Scp No write permission |
| 307 | Scp Ssh file transfer error |
| 308 | Scp Protocal Mismatch |
| 309 | Scp Invalid commandline options |
| 310 | Scp Connect time out |
| 311 | Scp Invalid password |
| 312 | Scp Read time out |
| 313 | Scp Process killed |
| 314 | Scp Destination directory doesn't exist |
| 315 | Scp Unknown error |
| 316 | Scp Directory access error |
| 317 | Scp Source file is a directory |
| 318 | Scp Copy Server is down |
| 319 | Scp Granule doesn't have any files |
| 320 | Scp CheckExpiredAction detects a time out |

Table 3-21 OmExternalProcessor contains information associated with external processor.

Table 3-21. OmExternalProcessor (1 of 2)

| Name | Data Type | PK Column | Mandatory Column |
|-----------------|------------------|------------------|-------------------------|
| ProcessorId | numeric(9) | Yes | Yes |
| ProcessorName | varchar(16) | No | Yes |
| DNEmailAddr | varchar(255) | No | No |
| AddPreambleText | varchar(255) | No | No |
| IPAddress | varchar(100) | No | Yes |
| PortNumber | int | No | Yes |
| Status | varchar(30) | No | No |

Table 3-21. OmExternalProcessor (2 of 2)

| Name | Data Type | PK Column | Mandatory Column |
|--------------------|------------------|------------------|-------------------------|
| FtpPullRetainHours | int | No | No |
| LastUpdate | datetime | No | Yes |
| CreationDate | datetime | No | Yes |

Table 3-22 OmFile contains metadata file information associated with a granule.

Table 3-22. OmFile

| Name | Data Type | PK Column | Mandatory Column |
|---------------|------------------|------------------|-------------------------|
| FileId | numeric(16,0) | Yes | Yes (identity) |
| GranId | numeric(16,0) | No | No |
| FileType | char(1) | No | No |
| DirectoryPath | varchar(255) | No | No |
| FileName | varchar(255) | No | No |
| FileSize | float | No | No |
| ChkSum | varchar(128) | No | No |
| ChkSumTypeid | tinyint | No | No |

Table 3-23 OmGranuleCounts contains intermediate results pertaining to request status counts

Table 3-23. OmGranuleCounts

| Name | Data Type | PK Column | Mandatory Column |
|---------------|------------------|------------------|-------------------------|
| GranId | numeric(16,0) | No | Yes |
| RequestId | varchar(10) | No | Yes |
| MediaTypeId | tinyint | No | No |
| DestinationId | numeric(9,0) | No | No |
| GrStatus | tinyint | No | No |
| GranuleSize | float | No | No |
| GranSource | char(1) | No | No |

Table 3-24 OmGranuleDelivery Contains production granules associated with a specific production job.

Table 3-24. OmGranuleDelivery

| Name | Data Type | PK Column | Mandatory Column |
|-------------------|-------------|-----------|------------------|
| GranuleDeliveryId | numeric(9) | Yes | Yes (Identity) |
| GranId | numeric(16) | Yes | Yes |
| ProductJobId | numeric(9) | No | No |
| LastUpdate | datetime | No | No |

Table 3-25 OmGranule_R Contains granule level archived data.

Table 3-25. OmGranule_R

| Name | Data Type | PK Column | Mandatory Column |
|-----------------|---------------|-----------|------------------|
| RequestId | varchar(10) | No | No |
| GranId | numeric(16,0) | No | No |
| RequestGrStatus | tinyint | No | No |
| ExplanationCode | smallint | No | No |
| LastUpdate | datetime | No | No |
| BillingInfo | varchar(50) | No | No |
| ECS_GranuleId | numeric(16) | No | No |
| DPL_GranuleId | numeric(16) | No | No |
| GranuleSize | float(8) | No | No |
| EsdtType | char(12) | No | No |
| GranType | char(2) | No | No |
| Archived | numeric(9) | No | No |
| GranSource | char(1) | No | No |

Table 3-26 OmJewelCase Defines attributes associated with the Jewel Case printer used to print Jewel Case inserts.

Table 3-26. OmJewelCase

| Name | Data Type | PK Column | Mandatory Column |
|--------------|-------------|-----------|------------------|
| JewelCaseId | numeric(5) | Yes | Yes (Identity) |
| ProdModuleId | numeric(9) | No | Yes |
| ImageFileLoc | varchar(30) | No | No |
| TextFileLoc | varchar(30) | No | No |
| TextFile2Loc | varchar(30) | No | No |
| Jewel_rpt | varchar(10) | No | No |

Table 3-27 OmMediaType contains those parameters which are specific for each type of media.

Table 3-27. OmMediaType

| Name | Data Type | PK Column | Mandatory Column |
|-----------------------|------------------|------------------|-------------------------|
| MediaTypeId | tinyint | Yes | Yes |
| MediaType | varchar(20) | No | Yes |
| MediaCapacity | float(8) | No | Yes |
| LastUpdate | datetime | No | Yes |
| MinBundleSize | float(8) | No | Yes |
| MaxRequestSize | float(8) | No | Yes |
| PartitionGranuleLimit | int | No | Yes |
| PartitionSizeLimit | float(8) | No | Yes |
| QueueName | varchar(10) | No | Yes |
| QSuspendState | char(1) | No | Yes |
| MinRequestSize | float(8) | No | Yes |
| DispatchMode | char(1) | No | Yes |
| MediaCreationType | char(3) | No | No |
| QC_default | int | No | No |
| QC_Dorran_default | int | No | No |
| MediaCreaDevLimit | int | No | No |
| MediaQCDevLimit | int | No | No |

Table 3-28 OmNotification stores email notification information. The notification will be referenced by an action.

Table 3-28. OmNotification

| Name | Data Type | PK Column | Mandatory Column |
|------------------------|------------------|------------------|-------------------------|
| NotificationId | numeric(9) | Yes | Yes (identity) |
| RequestId | varchar(10) | No | No |
| OperatorInterventionId | numeric(9) | No | No |
| NotificationStatus | tinyint | No | No |
| LastUpdate | datetime | No | Yes |
| OperatorText | varchar(255) | No | No |
| AlertId | numeric(9) | No | No |

Table 3-29 OmOdlMetadataRequestors contains a list of email addresses for users that wish to have their metadata distributed in ODL Format

Table 3-29. OmOdlMetadataRequestors

| Column Name | Data Type | PK Column | Mandatory Column |
|-------------|--------------|-----------|------------------|
| EmailAddr | VARCHAR(255) | Yes | Yes |
| LastUpdate | DATETIME | No | Yes |

Table 3-30 OmOperatorAlert contains Alert relative information for both general, distribution, and request related alerts.

Table 3-30. OmOperatorAlert

| Name | Data Type | PK Column | Mandatory Column |
|------------------|--------------|-----------|------------------|
| AlertId | numeric(9) | Yes | Yes (identity) |
| CreationTime | datetime | No | No |
| CompletionTime | datetime | No | No |
| AlertExplanation | smallint | No | No |
| AlertType | char(2) | No | No |
| AlertInfo | varchar(255) | No | No |
| AlertStatus | char(1) | No | No |

Valid ALERT Types

| Alert Description | AlertType | AlertInfo |
|--|-----------|---|
| Notifying OMS that a file system is down | FD | <FS> |
| Notifying OMS that a file system is up | FA | <FS> |
| Notify OMS that a file system is being modified | FC | <FS> |
| Notify OMS that the modification for FS has completed and inform of new FS | FN | FSOLD:<GROUP>::<FS>:::<Collection>:F SNEW:<GROUP>::<FS>:::<Collection> |
| Destination Suspended | DS | <Destination Name> |
| Destination Resumed | DR | <Destination Name> |
| SDSRV Suspended | SS | SDSRV |
| SDSRV Resumed | SR | SDSRV |
| PDS Suspended | PS | PDS |
| PDS Resumed | PR | PDS |
| Archive Suspended | AS | <Archive Name> |
| Archive Resumed | AR | <Archive Name> |
| QuickSilver Down | QD | |
| QuickSilver Resumed | QR | |

Table 3-31 OmOperatorIntervention contains information relative to requests that require a User Services' Operator to act upon.

Table 3-31. OmOperatorIntervention

| Name | Data Type | PK Column | Mandatory Column |
|------------------------|------------------|------------------|-------------------------|
| OperatorInterventionId | numeric(9) | Yes | Yes (identity) |
| RequestId | varchar(10) | No | Yes |
| WorkedBy | varchar(14) | No | No |
| CreationTime | datetime | No | Yes |
| AckTime | datetime | No | No |
| CompletionTime | datetime | No | No |
| Outcome | varchar(50) | No | No |
| InterventionStatus | tinyint | No | Yes |
| OperatorNotes | varchar(255) | No | No |
| InterventionType | char(2) | No | No |

| Intervention Type | Description | RequestStatus |
|--------------------------|----------------------------|-----------------------------------|
| HE | HEG Error | Operator Intervention |
| ME | Media Creation Error | Operator Intervention |
| OI | Operator Intervention | Operator Intervention |
| QF | QC Failed | Operator Intervention |
| S3 | Synergy III Request | Operator Intervention |
| RN | Activate Media Request | Pending Media Prod |
| XM | Mount Media For Production | Pending Media Prod Transferring |
| AP | Assemble Package | Waiting for Shipment |
| MQ | Mount Media For QC | QC Hold |
| XC | Collect Media For QC | Transferring |

Table 3-32 OmOrder_R contains archived order level information.

Table 3-32. OmOrder_R

| Name | Data Type | PK Column | Mandatory Column |
|-------------------|------------------|------------------|-------------------------|
| homeDAAC | char(3) | No | No |
| orderHomeDAAC | char(3) | No | No |
| orderType | char(2) | No | No |
| orderDesc | varchar(50) | No | No |
| orderId | varchar(10) | No | No |
| orderStatus | varchar(30) | No | No |
| orderSource | varchar(21) | No | No |
| standingOrderId | varchar(10) | No | No |
| externalRequestId | varchar(50) | No | No |
| userId | varchar(14) | No | No |
| eMailAddr | varchar(255) | No | No |
| startDateTime | datetime | No | No |
| receiveDateTime | datetime | No | No |
| timeOfLastUpdate | datetime | No | No |
| shipDateTime | datetime | No | No |
| title | char(5) | No | No |
| firstName | varchar(20) | No | No |
| middleInit | char(1) | No | No |
| lastName | varchar(20) | No | No |
| shipAddrStreet1 | varchar(32) | No | No |
| shipAddrStreet2 | varchar(32) | No | No |
| shipAddrStreet3 | varchar(32) | No | No |
| shipAddrCity | varchar(35) | No | No |
| shipAddrState | varchar(20) | No | No |
| shipAddrZip | varchar(15) | No | No |
| shipAddrCountry | varchar(30) | No | No |
| shipAddrPhone | varchar(22) | No | No |
| shipAddrFax | varchar(22) | No | No |

Table 3-33 OmPrinterConfig specifies printers defined for production output.

Table 3-33. OmPrinterConfig

| Name | Data Type | PK Column | Mandatory Column |
|--------------|------------------|------------------|-------------------------|
| PrinterId | numeric(9) | Yes | Yes (Identity) |
| PrinterName | varchar(50) | No | Yes |
| PrinterType | char(1) | No | No |
| NetworkInfo | varchar(255) | No | No |
| Description | varchar(255) | No | No |
| Status | varchar(30) | No | No |
| CreationDate | datetime | No | No |
| LastUpdate | datetime | No | No |
| Options | char(8) | No | No |

Table 3-34 OmProcessorRequestXref contains relationship between external processors and requests.

Table 3-34. OmProcessorRequestXref

| Name | Data Type | PK Column | Mandatory Column |
|----------------|------------------|------------------|-------------------------|
| RequestId | varchar(10) | Yes | Yes |
| ProcessorId | numeric(9) | Yes | Yes |
| NumGranules | int | No | No |
| SizeInputGrans | float | No | No |

Table 3-35 OmProcessingText contains Processing Text information about the requests.

Table 3-35. OmProcessingInstruction

| Name | Data Type | PK Column | Mandatory Column |
|--------------|------------------|------------------|-------------------------|
| RequestId | varchar(10) | Yes | Yes |
| ODLString | text | No | No |
| StringLength | int | No | No |

Table 3-36 OmProductJob contains information linking volumes to specific production modules that specifies their current status.

Table 3-36. OmProductJob

| Name | Data Type | PK Column | Mandatory Column |
|-----------------|------------------|------------------|-------------------------|
| ProductJobId | numeric(9) | Yes | Yes (Identity) |
| VolumeName | char(9) | No | No |
| VolSize | float | No | No |
| DeviceId | numeric(9) | No | No |
| ProdModuleId | numeric(9) | No | No |
| Resubmit_Count | int | No | No |
| RequestId | varchar(10) | No | No |
| LastUpdate | datetime | No | No |
| Status | tinyint | No | No |
| ExplanationCode | smallint | No | No |
| CreationDate | datetime | No | No |
| CreateDeviceId | numeric(9) | No | No |
| CreateLabel | varchar(20) | No | No |
| VerifyLabel | varchar(20) | No | No |
| QC_Flag | char(1) | No | No |

Table 3-37 OmProductJob_R stores the volume level archived data for Request

Table 3-37. OmProductJob_R

| Name | Data Type | PK Column | Mandatory Column |
|----------------|------------------|------------------|-------------------------|
| RequestId | varchar(10) | Yes | Yes |
| VolumeName | char(9) | Yes | Yes |
| ProdModuleName | varchar(50) | No | No |
| StatusDesc | varchar(25) | No | No |
| CreateDeviceId | numeric(9) | No | No |
| CreateLabel | varchar(20) | No | No |
| VerifyLabel | varchar(20) | No | No |
| LastUpdate | datetime | No | No |

Table 3-38 OmProductModule contains production modules defined for use in OMS production.

Table 3-38. OmProductModule

| Name | Data Type | PK Column | Mandatory Column |
|--------------------|------------------|------------------|-------------------------|
| ProdModuleId | numeric(9) | Yes | Yes (Identity) |
| ProdModuleName | varchar(50) | No | No |
| DefaultFlag | char(1) | No | No |
| CreationDate | datetime | No | No |
| LastUpdate | datetime | No | No |
| ProdMod_Executable | varchar(100) | No | No |
| ProdModuleType | char(1) | No | No |

Table 3-39 OmReqGrInput stores the input granule ID and its request granule processing instruction ID.

Table 3-39. OmReqGrInput

| Name | Data Type | PK Column | Mandatory Column |
|-------------|------------------|------------------|-------------------------|
| GranId | numeric(16,0) | Yes | Yes |
| RGPI_Id | numeric(16,0) | Yes | Yes |

Table 3-40 OmReqGrOutput stores the output granule ID and the its request granule processing instruction ID, which correlate the processing instruction that uses to produce the output granule.

Table 3-40. OmReqGrOutput

| Name | Data Type | PK Column | Mandatory Column |
|-------------|------------------|------------------|-------------------------|
| GranId | numeric(16,0) | Yes | Yes |
| RGPI_Id | numeric(16,0) | Yes | Yes |

Table 3-41 OmRequest records each data distribution request received by an OMS Client.

Table 3-41. OmRequest

| Name | Data Type | PK Column | Mandatory Column |
|----------------------|------------------|------------------|-------------------------|
| RequestId | varchar(10) | Yes | Yes |
| OrderId | varchar(10) | No | Yes |
| UserId | varchar(14) | No | Yes |
| MediaTypeId | tinyint | No | Yes |
| CreationDate | datetime | No | Yes |
| ResubmitCount | tinyint | No | Yes |
| ExemptfromLimitChk | char(1) | No | Yes |
| CompletionTime | datetime | No | No |
| DestinationId | numeric(9) | No | No |
| ProcessingMode | char(2) | No | No |
| ExpirationDate | datetime | No | No |
| ResourceUtil | char(1) | No | No |
| LastUpdate | datetime | No | No |
| PriorRequestState | varchar(20) | No | No |
| Source | varchar(21) | No | No |
| Notify | varchar(255) | No | No |
| NotifyType | char(4) | No | No |
| UserString | varchar(255) | No | No |
| Priority | char(15) | No | No |
| MetaDataFlag | char(1) | No | No |
| ScrambledPullDirName | varchar(20) | No | No |
| DueDate | datetime | No | No |
| Label | varchar(20) | No | No |
| AllocationTime | datetime | No | No |
| MetadataFormat | char(3) | No | Yes |
| OverrideFormatFlag | char(1) | No | No |
| RequestType | char(2) | No | No |

Table 3-42 OmRequest_R stores the request level archived data

Table 3-42. OmRequest_R

| Name | Data Type | PK Column | Mandatory Column |
|------------------|------------------|------------------|-------------------------|
| requestId | varchar(10) | No | No |
| orderId | varchar(10) | No | No |
| parentId | varchar(10) | No | No |
| requestStatus | varchar(30) | No | No |
| MediaType | varchar(20) | No | No |
| MediaTypeId | tinyint | No | No |
| Priority | char(15) | No | No |
| ESDT_Id | varchar(20) | No | No |
| UserId | varchar(14) | No | No |
| lastName | varchar(20) | No | No |
| firstName | varchar(20) | No | No |
| ResubmitCount | tinyint | No | No |
| Source | varchar(21) | No | No |
| ProcessingMode | char(2) | No | No |
| ResourceUtil | char(1) | No | No |
| UserString | varchar(255) | No | No |
| numGranule | int | No | No |
| numBytes | float(8) | No | No |
| DestinationName | varchar(75) | No | No |
| DestinationHost | varchar(20) | No | No |
| destinationNode | varchar(20) | No | No |
| startDateTime | datetime | No | No |
| finishDateTime | datetime | No | No |
| receiveDateTime | datetime | No | No |
| timeOfLastUpdate | datetime | No | No |
| CreationDate | datetime | No | No |
| eMailAddr | varchar(255) | No | No |
| numFiles | numeric(9) | No | No |
| deviceId | varchar(20) | No | No |
| tapeFormat | varchar(20) | No | No |
| shipDateTime | datetime | No | No |
| mediaQuantity | numeric(3) | No | No |
| MetadataFormat | char(3) | No | No |
| ProcessorName | varchar(30) | No | No |
| RequestType | char(2) | No | No |

Table 3-43 OmRequest_Temp table used for storing intermediate request information when archiving data

Table 3-43. OmRequest_Temp

| Name | Data Type | PK Column | Mandatory Column |
|----------------|-------------|-----------|------------------|
| RequestKey | numeric(9) | No | No |
| RequestId | varchar(10) | No | No |
| OrderId | varchar(10) | No | No |
| CompletionDate | datetime | No | No |
| Source | char(1) | No | No |
| MediaTypeId | tinyint | No | No |
| requestStatus | varchar(30) | No | No |

Table 3-44 OmRequestGranule_Temp table used for storing intermediate request granule information when archiving data

Table 3-44. OmRequestGranule_Temp

| Name | Data Type | PK Column | Mandatory Column |
|-----------------|-------------|-----------|------------------|
| Temp_Key | numeric(16) | Yes | Yes (identity) |
| GranId | numeric(16) | No | No |
| RequestId | varchar(10) | No | No |
| Gran_Id_No | int | No | No |
| RequestGrStatus | tinyint | No | No |
| ExplanationCode | tinyint | No | No |
| LastUpdate | datetime | No | No |
| BillingInfo | varchar(50) | No | No |
| ECS_GranuleId | numeric(16) | No | No |
| DPL_GranuleId | numeric(16) | No | No |
| GranuleSize | float(8) | No | No |
| EsdtType | char(12) | No | No |
| GranType | char(2) | No | No |
| ArchiveId | numeric(9) | No | No |
| GranSource | char(1) | No | No |

Table 3-45 OmRequestGranPI stores the granule level processing instructions

Table 3-45. OmRequestGranPI

| Name | Data Type | PK Column | Mandatory Column |
|-----------------------|------------------|------------------|-------------------------|
| RGPI_Id | numeric(16,0) | Yes | Yes |
| GranId | numeric(16,0) | No | Yes |
| ProcessingInstruction | text | No | Yes |
| StepNo | int | No | Yes |
| Pid | int | No | No |

Table 3-46 OmRequestGranPI_Temp stores temporary granule level processing instructions during archive process

Table 3-46. OmRequestGranPI_Temp

| Name | Data Type | PK Column | Mandatory Column |
|-----------------------|------------------|------------------|-------------------------|
| RGPI_Id | numeric(16,0) | No | Yes |
| GranId | numeric(16,0) | No | Yes |
| ProcessingInstruction | text | No | Yes |
| StepNo | int | No | Yes |
| Pid | int | No | No |

Table 3-47 OmRequestGranPI_R stores the archived granule level processing instructions

Table 3-47. OmRequestGranPI_R

| Name | Data Type | PK Column | Mandatory Column |
|-----------------------|------------------|------------------|-------------------------|
| RGPI_Id | numeric(16,0) | No | Yes |
| GranId | numeric(16,0) | No | Yes |
| ProcessingInstruction | text | No | Yes |
| StepNo | int | No | Yes |
| Pid | int | No | No |

Table 3-48 OmRequestGranule contains Request Level Granule Information.

Table 3-48. OmRequestGranule

| Name | Data Type | PK Column | Mandatory Column |
|-----------------|------------------|------------------|-------------------------|
| RequestId | varchar(10) | No | Yes |
| GranId | numeric(16,0) | Yes | Yes (identity) |
| RequestGrStatus | tinyint | No | Yes |
| ExplanationCode | smallint | No | No |
| LastUpdate | datetime | No | No |
| PreviousStatus | tinyint | No | No |
| BillingInfo | varchar(255) | No | No |
| ECS_GranuleId | numeric(16,0) | No | No |
| DPL_GranuleId | numeric(16,0) | No | No |
| GranuleSize | float | No | Yes |
| EsdtType | char(12) | No | No |
| GranType | char(2) | No | No |
| InsertDateTime | datetime | No | Yes |
| Archiveld | numeric(9) | No | No |
| GranSource | char(1) | No | No |
| PriorGrStatus | varchar(25) | No | No |
| ChildGranId | numeric(16,0) | No | No |

Table 3-49 OmRequestInterventions contains request specific information requiring a User Services' Operator to act upon.

Table 3-49. OmRequestInterventions

| Name | Data Type | PK Column | Mandatory Column |
|------------------------|------------------|------------------|-------------------------|
| OperatorInterventionId | numeric(9) | Yes | Yes (identity) |
| RequestId | varchar(10) | Yes | Yes |
| RequestStatus | tinyint | Yes | Yes |
| ExplanationCode | smallint | Yes | Yes |

Table 3-50 OmRequestNotes contains request notes as entered by operator.

Table 3-50. OmRequestNotes

| Name | Data Type | PK Column | Mandatory Column |
|-------------|------------------|------------------|-------------------------|
| RequestId | varchar(10) | Yes | Yes |
| NoteSeq | Int | Yes | Yes |
| Notes | varchar(255) | No | No |

Table 3-51 OmRequestNotes_R Contains archived request notes.

Table 3-51. OmRequestNotes_R

| Name | Data Type | PK Column | Mandatory Column |
|-------------|------------------|------------------|-------------------------|
| RequestId | varchar(10) | Yes | Yes |
| NoteSeq | int | Yes | Yes |
| Notes | varchar(255) | No | No |

Table 3-52 OmQueue maintains the current settings of the Queue utilized by Order Manager Server during Request Dispatching.

Table 3-52. OmQueue

| Name | Data Type | PK Column | Mandatory Column |
|----------------|------------------|------------------|-------------------------|
| QueueName | varchar(10) | Yes | Yes |
| QSuspendState | char(1) | No | Yes |
| QAcceptRequest | char(1) | No | No |
| ActionClass | varchar(10) | No | Yes |
| QueueDesc | varchar(75) | No | Yes |
| LastUpdate | datetime | No | Yes |

Table 3-53 OmStagingConfig contains water mark information for media types and FTP Push Destinations.

Table 3-53. OmStagingConfig

| Name | Data Type | PK Column | Mandatory Column |
|-----------------|--------------|-----------|------------------|
| StagingConfigId | numeric(9,0) | Yes | Yes (identity) |
| MediaTypeId | tinyint | No | No |
| DestinationId | numeric(9) | No | No |
| DHWM | Float | No | No |
| DLWM | Float | No | No |
| RHWM | Int | No | No |
| RLWM | Int | No | No |
| ProcessingMode | Char(2) | No | No |
| StagingStatus | Char(1) | No | No |

Table 3-54 OmStagingCounts contains an up-to-date (within a configurable number of minutes) copy of several staging statistics.

Table 3-54. OmStagingCounts

| Name | Data Type | PK Column | Mandatory Column |
|--------------------------|------------|-----------|------------------|
| DestinationId | numeric(9) | No | No |
| MediaTypeId | tinyint | No | No |
| CntGransWaitingStaging | int | No | Yes |
| GransWaitingForStagingMB | float | No | Yes |
| CntGransStaging | int | No | Yes |
| GransStagingMB | float | No | Yes |
| CntGransStagNotShipd | int | No | Yes |
| GransStagNotShipdMB | float | No | Yes |
| CntGransStagShipd | int | No | Yes |
| GransStagShipdMB | float | No | Yes |
| LastUpdate | datetime | No | Yes |
| RunFlag | char(1) | No | No |

Table 3-55 OmStagingStatistics contains throughput statistics of staging and is populated once every 15 minutes.

Table 3-55. OmStagingStatistics

| Name | Data Type | PK Column | Mandatory Column |
|---------------------------|------------------|------------------|-------------------------|
| StagingStatsId | numeric(16,0) | Yes | Yes |
| IntervalStart | datetime | Yes | Yes |
| IntervalStop | datetime | Yes | Yes |
| CntGransFoundInDPL | int | No | No |
| SizeMBGransFoundInDPL | float | No | No |
| CntGransSubForStag | int | No | No |
| SizeMBGransSubForStag | float | No | No |
| CntGransComplStagCache | int | No | No |
| SizeMBGransComplStagCache | float | No | No |
| CntGransComplStagArch | int | No | No |
| SizeMBGransComplStagArch | float | No | No |
| CntGransFailStagCache | int | No | No |
| SizeMBGransFailStagCache | float | No | No |
| CntGransFailStagArch | int | No | No |
| SizeMBGransFailStagArch | float | No | No |

Table 3-56 OmStatus maintains the static values for the status of request, granules, bundling orders, operator interventions, notifications and actions.

Table 3-56. OmStatus

| Name | Data Type | PK Column | Mandatory Column |
|-------------|------------------|------------------|-------------------------|
| StatusCode | tinyint | Yes | Yes |
| StatusDesc | varchar(25) | No | Yes |

Valid Status Codes

| StatusCode | StatusDesc |
|-------------------|------------------------|
| 10 | FAILED/RETRY |
| 20 | SKIPPED |
| 30 | HOLD |
| 40 | FAILED |
| 50 | PENDING |
| 60 | IN-WORK |
| 70 | DONE |
| 80 | Queued |
| 90 | RETRY |
| 100 | CANCELLED |
| 110 | OPERATOR INTERVENTION |
| 120 | RESUBMIT |
| 130 | SENT |
| 140 | ACTIVE |
| 150 | EXPIRED |
| 160 | Partitioned |
| 167 | TRANSFERRING |
| 168 | SHIPPED |
| 169 | STAGING |
| 170 | STAGED |
| 171 | SUSPENDED |
| 172 | Canceling |
| 180 | PROCESSING |
| 181 | WAITING FOR PROCESSING |
| 182 | PREPPING |
| 183 | PREPPED |
| 184 | CREATING |
| 185 | CREATED |
| 186 | VERIFIED |
| 187 | VERIFYING |
| 188 | COMPLETED PROCESSING |
| 189 | QC Skipped by OPs |

Table 3-57 OmSubSettingInfo, records the subsetting information specific to Landsat granules referenced within a request.

Table 3-57. OmSubSettingInfo

| Name | Data Type | PK Column | Mandatory Column |
|-------------|------------------|------------------|-------------------------|
| RequestId | varchar(10) | Yes | Yes |
| GranId | numeric(16) | Yes | Yes |
| LineNum | int | Yes | Yes |
| SubSetInfo | varchar(255) | No | No |

Table 3-58 OmSuspendedDestination stores the info for destinations that are not configured but are suspended. A destination is removed from this table once it is resumed.

Table 3-58. OmSuspendedDestination

| Name | Data Type | PK Column | Mandatory Column |
|--------------------|------------------|------------------|-------------------------|
| DestinationHost | varchar(100) | Yes | Yes |
| DestinationId | numeric(9) | No | Yes |
| DestinationName | varchar(75) | Yes | Yes |
| Directory | varchar(255) | No | No |
| UserId | varchar(128) | No | No |
| SuspendDate | smalldatetime | No | No |
| SuspendExplanation | smallint | No | No |

Table 3-59 OmUsersToDelete stores the info for UserIDs that can be deleted from the archive tables, OmOrder_R, OmRequest_R, OmGranule_R, OmAddress_R, etc.

Table 3-59. OmUsersToDelete

| Name | Data Type | PK Column | Mandatory Column |
|-------------|------------------|------------------|-------------------------|
| UserID | varchar(14) | No | Yes |

Table 3-60 EcDbDatabaseVersions contains information pertaining to Database patch level and shows what changes have been made to the database.

Table 3-60. EcDbDatabaseVersions

| Name | Data Type | PK Column | Mandatory Column |
|------------------------|--------------|-----------|------------------|
| EcDbSchemaVersionId | smallint | Yes | Yes |
| EcDbComments | varchar(255) | No | No |
| EcDbCurrentVersionFlag | char(1) | No | No |
| EcDbDatabaseName | varchar(255) | No | No |
| EcDbDropDescription | varchar(255) | No | No |
| EcDbDropInstallDate | datetime | No | No |
| EcDbDropVersion | char(64) | Yes | Yes |
| EcDbSybaseServer | varchar(255) | No | No |
| EcDbSybaseVersion | varchar(255) | No | No |
| EcDbUpdateProcess | varchar(255) | No | No |

3.1.3 Columns

Brief definitions of each of the columns present in the database tables defined above are contained Table 3-61 Table Column Descriptions.

Table 3-61. Table Column Descriptions (1 of 19)

| Column Name | Table | Description |
|-----------------|----------------------------|--|
| AckTime | OmOperatorIntervention | Time the Operator chose to work on a PENDING intervention |
| ActionInfo | OmActionQueue | Field that describes file system/ archive associated with this action. |
| ActionPriority | OmActionQueue | The priority of the action. |
| ActionClass | OmQueue | Determines which queue the OM Server should utilize. |
| ActionQueueId | OmActionQueue | UID for the action queue entry. |
| ActionStatus | OmActionQueue | Current Status of an Action in the queue. ActionStatus is NULL until the Action is dispatched. |
| ActionType | OmActionQueue OmActionType | The code that represents the action. |
| AddPreambleText | OmExternalProcessor | Any additional text to add into DN for all requests for this external processor. |
| AgingConfigId | OmAgingConfig | UID for an aging configuration parameter. |
| agingStep | OmAgingConfig | Amount to increase 'effective priority' of a request each hour. |

Table 3-61. Table Column Descriptions (2 of 19)

| Column Name | Table | Description |
|-----------------------|--|--|
| AlertId | OmNotification OmArchive OmOperatorAlert | UID for each alert created internally and used to refer to an alert item both internally and externally. |
| AlertExplanation | OmOperatorAlert | Specifies cause/source of alert. |
| AlertInfo | OmOperatorAlert | Contains either destination id, File system or archive info associated with alert. 'AlertType' signifies what info will be in this field. |
| AlertStatus | OmOperatorAlert | Status of this alert. |
| AlertType | OmOperatorAlert | FileSystem, Archive, Destination, or Media Creation (F, S, D, M) |
| AllocationTime | OmRequest | Time at which the Request is allocated to a production module |
| Archiveld | OmArchive OmRequestGranule OmGranule_R OmRequestGranule_Temp | UID for each archive created and used internally. |
| ArchiveName | OmArchive | DAAC-Specific Name for an individual Archive server. HostName. |
| ArchiveStatus | OmArchive | Suspend, Active. |
| ArchiveExplanation | OmArchive | Static value for the defined reasons for an archive having a specific status. |
| AvgPushThrpt | OmFTPPushStatistics | Average throughput rate of each individual FTP operation for the 15 minute time period specified by intervalStart and intervalStop. Stored in MB/sec. If there are N FTP operations, avgPushThrpt = (1/N) SUM(SizeFile(i)/transferTime(i)) (i = 1,...,N) |
| billAddrCity | OmAddress_R | City of billing address |
| billAddrCountry | OmAddress_R | Country of billing address |
| billAddrFax | OmAddress_R | Fax Number of billing address |
| billAddrPhone | OmAddress_R | Phone Number of billing address |
| billAddrState | OmAddress_R | State of billing address |
| billAddrStreet1 | OmAddress_R | Street Address of billing address |
| billAddrStreet2 | OmAddress_R | Street Address of billing address |
| billAddrStreet3 | OmAddress_R | Street Address of billing address |
| billAddrZip | OmAddress_R | Zip Code of billing address |
| billContactName_First | OmAddress_R | First Name for contact of billing address |
| billContactName_Last | OmAddress_R | Last Name for contact of billing address |
| billContactName_MI | OmAddress_R | Middle Initial for contact of billing address |
| billContactOrg | OmAddress_R | Org Name for contact of billing address |
| billContactTitle | OmAddress_R | Title for contact of billing address |

Table 3-61. Table Column Descriptions (3 of 19)

| Column Name | Table | Description |
|------------------------|--|---|
| billEMailAddr | OmAddress_R | Email address associated with billing address |
| BillingInfo | OmRequestGranule OmGranule_R OmRequestGranule_Temp | Contains billing related Information. |
| BlkSize | OmDevice | Tape Bblock size |
| BundlingOrderId | OmBundlingOrder OmBundlingOrder_R | UID for bundled order. |
| BundlingOrderPriority | OmBundlingOrder | Distribution priority to be used for the actions generated for the specific bundling order. |
| BundlingOrderStatus | OmBundlingOrder OmBundlingOrder_R | Current bundling status. |
| Category | OmConfigParameter | Used by OMS GUI to determine different categories. |
| CharValue | OmConfigParameter | Holds the value of a particular configuration parameter which has a type of "C". |
| ChildGranId | OmRequestGranule | OMS internal granule id of compressed version of this granule. |
| ChkSum | OmFile | Check sum value. |
| ChkSumTypeId | OmFile | Check sum type id. |
| CntGransComplStagArch | OmStagingStatistics | Number of granules from archive that completed staging during this 15 minute time period. |
| CntGransComplStagCache | OmStagingStatistics | Number of granules from cache that completed staging during this 15 minute time period. |
| CntGransFailStagArch | OmStagingStatistics | Number of granules from archive that failed staging during this 15 minute time period. |
| CntGransFailStagCache | OmStagingStatistics | Number of granules from cache that failed staging during this 15 minute time period. |
| CntGransFoundInDPL | OmStagingStatistics | Number of granules found in Data Pool for requests being staged during this 15 minute period. |
| CntGransStaging | OmStagingCounts | Number of granules in staging process in system. |
| CntGransSubForStag | OmStagingStatistics | Number of granules submitted for staging (whether their source is archive or cache or DPL) during this 15 minute time period. |
| CntGransStagNotShipped | OmStagingCounts | Number of request granules whose associated physical granule has been staged but the granule has not been shipped to its destination or physical media. |

Table 3-61. Table Column Descriptions (4 of 19)

| Column Name | Table | Description |
|------------------------|--|---|
| CntGransStagShipd | OmStagingCounts | Number of request granules whose associated physical granule has been staged and the granule has been shipped to its destination or physical media. |
| CntGransWaitingStaging | OmStagingCounts | Number of granules waiting to be staged in system. |
| Code | OmCode | Actual value of code. |
| CompletionDate | OmRequest_Temp | Date Request was marked complete in OmRequest |
| CompletionTime | OmOperatorAlert OmActionQueue OmRequest OmOperatorIntervention | Time the Operator Intervention or Action was completed. |
| ConfigId | OmConfigParameter | UID for each CI created and used internally. |
| CreateDeviceId | OmProductJob OmProductJob_R | The DeviceId of the Device used to create the Request volume. |
| CreateLabel | OmProductJob OmProductJob_R | The Label name of the Device used to create the Request volume. |
| CreationDate | OmDevice OmExternalProcessor OmPrinterConfig OmProductJob OmRequest OmProductModule OmRequest_R | Date request row was added to OmRequestGranule table. |
| CreationTime | OmConfigDestinationSource OmOperatorAlert OmOperatorIntervention | Date destination row was added to this table. Date alert row was added to this table. |
| cutOffDate | OmCleanupProcesses | Cleanup cutoff date |
| DefaultFlag | OmProductModule | Indicates whether this is the default production module. |
| Description | OmCode OmDevice OmActionType OmPrinterConfig | Description for related entity. |
| DestDispatchStatus | OmConfigDestinationSource | Suspended, Active. |
| DestinationHost | OmSuspendedDestination OmConfigDestinationSource OmDestStatistics OmRequest_R | FtpHost, corresponds to destinationNode in EcAcRequest table. |
| DestinationId | OmSuspendedDestination OmStagingCounts OmConfigDestinationSource OmDestStatistics OmStagingConfig OmRequest OmGranuleCounts | UID for each destination created and used internally. |

Table 3-61. Table Column Descriptions (5 of 19)

| Column Name | Table | Description |
|------------------------|--|--|
| DestinationName | OmSuspendedDestination OmConfigDestinationSource OmRequest_R | Operator-assigned name for an individual destination. |
| destinationNode | OmRequest_R | Contains Ftp Host specified in MSS |
| DeviceId | OmDevice OmProductJob OmDeviceMediaXref | Unique Id assigned to device |
| deviceId | OmRequest_R | Device that was used to create media for this request (corresponds to Label) |
| DevicePurpose | OmDevice | Indicates whether device is available for Production, QC, or both. |
| DHWM | OmStagingConfig | Data volume high water mark in MB for destination specifying the desired maximum data volume that may be in staging or staged but not yet shipped. |
| Directory | OmSuspendedDestination OmConfigDestinationSource | Target directory corresponds to destinationDirectory in EcAcRequest table. |
| DirectoryPath | OmFile | Location of file in datapool. |
| DispatchInfo | OmActionQueue | Reason for suspension/resumption. |
| DispatchMode | OmMediaType | Specifies whether media type is configured for automatic or manual dispatch mode, ie, "A" or "M" |
| DLWM | OmStagingConfig | A data volume low water mark in MB for destination specifying the desired minimum data volume that should be in staging or staged but not yet shipped. |
| DNEmailAddr | OmExternalProcessor | Email address to which DNs will be sent for this processor. Used to identify secondary requests (input granule requests). |
| DPL_GranuleId | OmRequestGranule OmGranule_R OmRequestGranule_Temp | UID for granule from DPL. |
| DriveLetter | OmDevice | Drive Letter for Hard Media device |
| DueDate | OmRequest | Date when media creation is expected to be completed for this request. Used by operators. |
| ECS_GranuleId | OmRequestGranule OmGranule_R OmRequestGranule_Temp | UID for granule from SDSRV. Used internally. |
| ECSPriority | OmAgingConfig | Original priority of request. |
| EcDbComments | EcDbDatabaseVersions | Notes or comments on the database version level. |
| EcDbCurrentVersionFlag | EcDbDatabaseVersions | Flag indicating if this row represents the current database version entry. |

Table 3-61. Table Column Descriptions (6 of 19)

| Column Name | Table | Description |
|---------------------|--|--|
| EcDbDatabaseName | EcDbDatabaseVersions | The name of the database for which this database versions level is applied. |
| EcDbDropDescription | EcDbDatabaseVersions | The official name of the ECS software drops for this database version level. |
| EcDbDropInstallDate | EcDbDatabaseVersions | The date and time that the database versions level was installed. |
| EcDbDropVersion | EcDbDatabaseVersions | The official description of the ECS software drops for this database version level. |
| EcDbSchemaVersionId | EcDbDatabaseVersions | The subsystem-specific identifier for this database schema version |
| EcDbSybaseServer | EcDbDatabaseVersions | The name of the baseline Sybase SQL server controlling this database. |
| EcDbSybaseVersion | EcDbDatabaseVersions | The software release version of the Sybase SQL server in place when this database version level was initially installed. |
| EcDbUpdateProcess | EcDbDatabaseVersions | The installation method by which this database version level was installed. |
| eMailAddr | OmAddress_R OmOrder_R OmRequest_R | Email Address associated with this request |
| EmailAddr | OmOdI_MetadataRequestors | Email address of user that desires metadata in ODL format |
| EnqueueTime | OmActionQueue | Time at which this item was added to specified queue. |
| ESDT_Id | OmRequest_R | Primary ESDT associated with this request |
| EsdtType | OmEcsEsdtExceptions OmRequestGranule OmEsdtRef OmGranule_R OmRequestGranule_Temp | Earth Science Data Type short name. |
| ExpirationDate | OmBundlingOrder OmBundlingOrder_R OmRequest | Date and time the Bundling Order will expire. Date and time the Request will expire. |
| Explanation | OmDevice OmExplanation | Static value for the defined reasons for a device being off-line. Detailed information regarding the reason for a specified state of either a request or a granule. In the case of failure, indicates reason code. |
| ExplanationCode | OmExplanation OmRequestGranule OmGranule_R OmRequestInterventions OmRequestGranule_Temp OmProductJob | Static value for the defined reasons for a granule or request to have a specific status. |

Table 3-61. Table Column Descriptions (7 of 19)

| Column Name | Table | Description |
|--------------------|---|---|
| ExemptfromLimitChk | OmRequest | Determines whether the request will undergo Request Limit Validation. |
| Exception_Source | OmEcsEsdtExceptions | Source for exception. Operator or Server. |
| externalRequestId | OmOrder_R | External Request Id used by MTMGW associated with this order. |
| FileId | OmFile | UID for science file or metadata file. |
| FileName | OmFile | System Name of granule file. |
| FileSize | OmFile | Size of file - obtained from system. |
| FileType | OmFile | S or M for Science File or MetaData File. |
| finishDateTime | OmRequest_R | Date/Time this request was marked done in EcAcRequest.finishDateTime. |
| firstName | OmAddress_R OmOrder_R OmRequest_R | First Name of mailing address for a request. First Name associated with an order. First name associated with a request. |
| FloatValue | OmConfigParameter | Column used to store configuration parameters of type float. |
| FtpHost | OmDevice | The hostname of the Rimage PC to FTP disc images to. |
| FtpUser | OmDevice | The username of the account that should be used for FTP. |
| FtpPass | OmDevice | The encrypted password for the account that should be used for FTP |
| FtpPullRetainHours | OmExternalProcessor | Number of hours to keep granules in pull area for external processor requests |
| GranSource | OmRequestGranule OmGranuleCounts OmGranule_R | Source of Granule "A", "C", "D", "O", i.e., Archive, Cache, DataPool, or OutputGranule. |
| GranType | OmRequestGranule OmGranule_R OmRequestGranule_Temp | Identifies whether granule is a type of Science, Quality, ProcessingHistory, or Browse, DataPool. |
| GranuleDeliveryId | OmGranuleDelivery | |
| GranuleSize | OmRequestGranule OmGranule_R OmRequestGranule_Temp OmGranuleCounts | Cumulative size of granule science/metadata files. |
| Gran_Id_No | OmRequestGranule_Temp | Sequential number identifying a specific granule in a multi-granule request. |

Table 3-61. Table Column Descriptions (8 of 19)

| Column Name | Table | Description |
|--------------------------|--|--|
| GranId | OmRequestGranule OmRequestGranule_Temp OmFile OmActionQueue OmReqGrInput OmReqGrOutput OmRequestGranPI OmSubSettingInfo OmGranuleDelivery OmGranuleCounts OmRequestGranPI_Temp OmActionQueue OmGranule_R OmRequestGranPI_R | UID for granule. |
| GransStagingMB | OmStagingCounts | Cumulative size in MB of granules in staging for this destination/media. |
| GransStagNotShipdMB | OmStagingCounts | Cumulative size in MB of granules staged but waiting to be shipped for this destination/Media. |
| GransStagShipdMB | OmStagingCounts | Cumulative size in MB of granules staged, shipped but still in the Data Pool for this destination/Media. |
| GransWaitingForStagingMB | OmStagingCounts | Cumulative size in MB of granules waiting to be moved to staging state for this destination/media. |
| GrStatus | OmGranuleCounts | Present status of granule in OmRequestGranule. Cumulative status of granule. |
| homeDAAC | OmAddress_R OmOrder_R | Primary DAAC processing requests |
| ImageFileLoc | OmJewelCase | Location of the Image file to be used when printing Jewel Case inserts |
| InterventionStatus | OmOperatorIntervention | Static integer value for the defined statuses. |
| InterventionType | OmOperatorIntervention | Indicates type of intervention. |
| IntValue | OmConfigParameter | Field used to store configuration parameter containing an integer value. |
| InsertDateTime | OmRequestGranule | Date this granule row was added to table. |
| IntervalStart | OmDestStatistics OmStagingStatistics | Beginning of 15 minute time period. |
| IntervalStop | OmDestStatistics OmStagingStatistics | End of 15 minute time period. |
| InsertTime | OmDuplicateCheck | Date/Time this row was inserted. |
| IntPriority | OmAgingConfig | Integer value for corresponding ECSPriority |

Table 3-61. Table Column Descriptions (9 of 19)

| Column Name | Table | Description |
|-------------|---|--|
| IPAddress | OmExternalProcessor | IP Address of this external processor |
| JewelCaseId | OmJewelCase | UID for this jewel case |
| Jewel_rpt | OmJewelCase | Location of Jewel report |
| kpid | OmCleanupProcesses | Kernel Process ID. KPID is a system-wide identifier that uniquely identifies a thread on Server. |
| Label | OmDevice OmRequest | Unique label for unit |
| LastAccess | OmBundlingOrder | Last time Bundling Order was accessed. |
| lastName | OmAddress_R OmOrder_R OmRequest_R | Last Name associated with mailing address Last name associated with order Last name associated with request |
| LastUpdate | OmActionQueue OmRequestGranule OmConfigDestinationSource OmExternalProcessor OmArchive OmDevice OmStagingCounts OmRequestGranule OmGranule_R OmGranuleDelivery OmMediaType OmOdI_MetadataRequestors OmPrinterConfig OmProductJob OmProductJob_R OmProductModule OmRequestGranule_Temp OmNotification OmQueue OmRequest | Last change in status of OmActionQueue for specified queue. Last update to Request Granule status in OmRequestGranule. Last time info for this destination was updated in OmConfigFTPPushDest. Last update to this archive's definition/configuration in OmArchive. Last date/time this device's status or offline status was updated in OmDevice. Last time these statistics were updated from summing up the vectors in OmStagCountChanges for OmStagingCounts. Last update to Record before archiving in OmGranule_R. Last time the media delivery status changed for this granule in OmGranuleDelivery. Last update to this media type's configuration in OmMediaType. Last time the configuration for this printer was changed in OmPrinterConfig. Last time the delivery status of this product job was updated in OmProductJob and OmProductJob_R. Last time the configuration for this production module was updated Last time this granule was affected before being archived Last update to this notification in OmNotification. Last update to this queue description/definition in OmQueue. Last time changes made to request in OmRequest. |

Table 3-61. Table Column Descriptions (10 of 19)

| Column Name | Table | Description |
|--------------------|----------------------------|---|
| LineNum | OmSubSettingInfo | Integer detailing line number within ODL for SubSetting Information. |
| mailAddrCity | OmAddress_R | City associated with mailing address |
| mailAddrCountry | OmAddress_R | Country associated with mailing address |
| mailAddrFax | OmAddress_R | Fax number associated with mailing address |
| mailAddrPhone | OmAddress_R | Phone number associated with mailing address |
| mailAddrState | OmAddress_R | State associated with mailing address |
| mailAddrStreet1 | OmAddress_R | Street address associated with mailing address |
| mailAddrStreet2 | OmAddress_R | Street address associated with mailing address |
| mailAddrStreet3 | OmAddress_R | Street address associated with mailing address |
| mailAddrZip | OmAddress_R | Zip Code associated with mailing address |
| MaxBundleAge | OmBundlingOrder | UID of Bundling Order. |
| MaxConnections | OmConfigDestinationSource | Maximum number of parallel connections to this individual destination. |
| MaxPriLevel | OmAgingConfig | Maximum 'effective priority' achievable through aging for a request of this ECS priority. |
| MaxPushThrpt | OmDestStatistics | Best throughput rate for all individual FTP Push operation to this destination over the 15 minute period specified by intervalStart and intervalStop. Stored in MB/sec. |
| MaxRequestSize | OmMediaType | Maximum size of any individual request in MB for specified media type. |
| MediaCapacity | OmMediaType | Maximum storage capacity in MB for specified media type. |
| MediaCreaDevLimit | OmMediaType | For Media configured for automatic processing, represents the configured limits for concurrent device usage for Production |
| MediaQCDevLimit | OmMediaType | For Media configured for automatic processing, represents the configured limits for concurrent device usage for QC |
| MediaCreationType | OmMediaType | DAAC operators configure a media type for PDS or OMS media creation. |
| MediaFlag | OmExplanation | Indicates whether this explanation is associated with media creation |
| mediaQuantity | OmRequest_R | The number of media requested for an order. |
| MediaType | OmMediaType OmRequest_R | Type of Media. |

Table 3-61. Table Column Descriptions (11 of 19)

| Column Name | Table | Description |
|--------------------|--|--|
| MediaTypeld | OmStagingConfig OmStagingCounts OmConfigRetTimePeriod OmDeviceMediaXref OmBundlingOrder OmMediaType OmRequest OmRequest_R OmRequest_Temp OmGranuleCounts | UID for this media type. |
| MetaDataFlag | OmRequest | Indicates whether or not the user has requested metadata with this request. |
| MetadataFormat | OmRequest OmRequest_R | Indicates whether metadata is to be distributed in ODL or XML format for this request. |
| middleInit | OmAddress_R OmOrder_R | Middle Initial for mailing address Middle initial for this order |
| MinBundleGranCnt | OmBundlingOrder | Minimum number of granules a bundle must contain before it is distributed. |
| MinBundleSize | OmMediaType OmBundlingOrder | Minimum size in MB a bundle must attain before it is distributed. |
| MinPushThrpt | OmDestStatistics | Slowest throughput rate of all individual FTP Push operations to this destination over the 15 minute period specified by intervalStart and intervalStop. Stored in MB/sec. |
| MinRequestSize | OmMediaType | Maximum size of any individual request in MB for specified media type. |
| MinThroughput | OmConfigDestinationSource | Best throughput rate for each individual FTP Push operation to this destination over the 15 minute period specified by intervalStart and intervalStop. Stored in MB/sec. |
| Mode | OmDevice | The Mode that a device is allocated to |
| ModeReserved | OmDevice | The Mode that a device is reserved For |
| NetworkInfo | OmPrinterConfig | Network Info field. |
| Notes | OmConfigDestinationSource OmRequestNotes OmRequestNotes_R | User-entered comments for this destination. User-entered request notes |
| Notify | OmRequest | Free text field to record the optional distribution parameter NOTIFY. Normally expected to hold an email address where the user would like the distribution request sent. |
| NotifyType | OmRequest | Text fields to record whether the notification to the user should be sent via EMAIL |
| ntqcFlag | OmDevice | |
| numBytes | OmRequest_R | Total size in MB of this request |

Table 3-61. Table Column Descriptions (12 of 19)

| Column Name | Table | Description |
|------------------------|---|--|
| NotificationId | OmNotification OmActionQueue | UID for this notification created internally and used both internally and externally to refer to this notification. |
| NotificationStatus | OmNotification | Static integer value for the defined statuses. |
| NoteSeq | OmRequestNotes OmRequestNotes_R | Sequential Number allocated to request note |
| NumFailed | OmDestStatistics | Number of granules that FTP Push failed during time period specified by intervalStart and intervalStop. |
| numFiles | OmRequest_R | Total number of granule files for this request |
| numGranule | OmRequest_R | Total number of granules for this request |
| NumGranules | OmProcessorRequestXref | Number of granules for this request |
| NumPushed | OmDestStatistics | Number of granules successfully pushed during the time period specified by intervalStart and intervalStop. |
| numRequestsProcessed | OmCleanupProcesses | Total requests deleted by cleanup instance |
| ODLString | OmProcessingInstruction | ODL in text format |
| Online_Status | OmDevice | indicates whether the device / unit is on-line or off-line, ie, "Y" or "N" for on-line or off-line |
| OperatorInterventionId | OmOperatorIntervention OmNotification OpmRequestInterventions | UID for the operator intervention created internally and used both internally and externally to refer to this operator intervention. |
| OperatorNotes | OmOperatorIntervention | Operator entered notes for this operator intervention. |
| OperatorText | OmNotification | Free text field to permit an operator to enter information into an email notification request. |
| Options | OmPrinterConfig | |
| orderDesc | OmOrder_R | Description of the user's order. |
| orderHomeDAAC | OmOrder_R | The home DAAC where the order was placed. |
| orderId | OmAddress_R OmOrder_R OmRequest_R | UID for order from MSS |
| OrderId | OmRequest_Temp OmRequest OmDuplicateCheck | UID for this order created in MSS. |
| orderSource | OmOrder_R | Origination of this order (MTMGW, SSS, DPLGUI, V0GW, etc) |
| OrderSource | OmConfigRetTimePeriod | OMS Client of order. |
| orderStatus | OmOrder_R | Status of an order in MSS when it was archived |
| orderType | OmOrder_R | The type of an order |

Table 3-61. Table Column Descriptions (13 of 19)

| Column Name | Table | Description |
|-----------------------|---|---|
| organization | OmAddress_R | Organization associated with this request |
| Outcome | OmOperatorIntervention | Information regarding the disposition of an intervention. |
| OverrideFormatFlag | OmRequest | Indicates whether we should ignore the email address and use the present value of MetadataFormat column when deciding what format to ship metadata. See MetadataFormat. |
| ParameterDesc | OmConfigParameter | Description of this configuration parameter. |
| ParameterName | OmConfigParameter | Name of this configuration parameter. |
| ParameterType | OmConfigParameter | Determines whether the parameter will hold integer, character or float values. |
| parentId | OmRequest_R | A request can be broken into subrequests, and this column holds the ID for that request. |
| PartitionGranuleLimit | OmMediaType | Largest number of granules within a partition. |
| PartitionSizeLimit | OmMediaType | Largest size of a partition for a specified Media Type |
| Path | OmDevice | For Unix devices, the Unix device path name. |
| PickedTime | OmActionQueue | Time when the action is read by the OMS server |
| Pid | OmActionQueue OmRequestGranPI OmRequestGranPI_Temp OmRequestGranPI_R | Process Id for the queue item. Process Id for the HEG process |
| PortNumber | OmExternalProcessor | Port number of this external processor |
| PreviousStatus | OmRequestGranule | Previous status of granule, prior to running statistics |
| PrinterId | OmPrinterConfig | UID for a printer |
| PrinterName | OmPrinterConfig | User-specified name for a printer |
| PrinterType | OmPrinterConfig | Identifies the type of processing the printer is used for, ie, SL = Shipping Labels, TL = Tape labels, PL = Packing List, QC = QC reports, JC = Jewel Case Inserts, SF = Summary File |
| Priority | OmRequest_R OmRequest | The priority of a job Optional Distribution request priority |
| PriorRequestState | OmRequest | Previous state of request prior to being suspended. |
| PriorGrStatus | OmRequestGranule | Previous state of granule prior to being canceled. |
| ProcessingInstruction | OmRequestGranPI OmRequestGranPI_Temp OmRequestGranPI_R | Processing instruction for a granule |

Table 3-61. Table Column Descriptions (14 of 19)

| Column Name | Table | Description |
|--------------------|---|---|
| ProcessingMode | OmRequest OmStagingConfig OmRequest_R | Processing Mode (Synergy III/Synergy IV) for this individual request. |
| ProcessorId | OmExternalProcessor OmProcessorRequestXref | UID for an external processor |
| ProcessorName | OmRequest_R OmExternalProcessor | Unique name for an external processor |
| ProdMod_Executable | OmProductModule | Location of executable |
| ProdModuleId | OmEsdtRef OmJewelCase OmProductJob OmProductModule | Unique Id Number associated with production module UID associated with a production module |
| ProdModuleName | OmProductModule OmProductJob_R | Name of a production module |
| ProdModuleType | OmProductModule | Type of Production Module |
| ProductJobId | OmGranuleDelivery OmProductJob | UID for a product job |
| QueueName | OmQueue OmMediaType | Name of queue to which OM Server dispatches. |
| QAcceptRequest | OmQueue | Determines whether the acceptance of any processing/subsetting requests is currently stopped or not. |
| QC_default | OmMediaType | Number of Request volumes that are to be QC'd by default for media, either 100 for all or 0 for none. |
| QC_Dorran_default | OmMediaType | Not used |
| QC_Flag | OmProductJob OmProductJob_R | 'Y' value indicates that the Request volume is to be QC'd. If a Request volume is not to be QC'd, then the status of the Request volume is set to 'QC skipped by Ops' |
| QSuspendState | OmQueue OmMediaType | Determines whether actions can be submitted to a specified QueueName. |
| QueueDesc | OmQueue | Description of the QueueName. |

Table 3-61. Table Column Descriptions (15 of 19)

| Column Name | Table | Description |
|-----------------|---|---|
| RequestId | OmDuplicateCheck OmRequestGranule OmRequestInterventions OmSubSettingInfo OmProductJob OmProductJob_R OmNotification OmProcessingInstruction OmProcessorRequestXref OmRequest OmActionQueue OmBundlingOrder OmBundlingOrder_R OmGranule_R OmRequest_Temp OmRequestGranule_Temp OmRequestNotes OmRequestNotes_R OmGranuleCounts OmOperatorIntervention | UID for request. |
| requestId | OmRequest_R | UID for archived request from MSS. |
| RequestKey | OmRequest_Temp | Internal key used in processing requests for archive |
| receiveDateTime | OmOrder_R OmRequest_R | Receipt Date in MSS for this order Receipt Date in MSS for this request |
| RequestGrStatus | OmRequestGranule OmGranule_R OmRequestGranule_Temp | Status of granule with respect to Request. |
| RequestStatus | OmRequestInterventions | Status of this request in MSS. |
| requestStatus | OmRequest_R OmRequest_Temp | Status of this request from MSS. |
| RequestType | OmRequest OmRequest_R | orderType for this request |
| ResourceUtil | OmRequest OmRequest_R | Resource utilization category (cheap, moderate, expensive) of this request. |
| Resubmit_Count | OmProductJob | Number of times specified volume has been resubmitted. |
| ResubmitCount | OmRequest OmRequest_R | Number of times specified request has been resubmitted. |
| RetryCount | OmActionQueue | Number of times this queue item has been retried. |

Table 3-61. Table Column Descriptions (16 of 19)

| Column Name | Table | Description |
|----------------------|---|--|
| RetryInterval | OmConfigDestinationSource | Amount of time to wait to retry a failed FTP Push attempt to this destination. Stored in seconds. |
| RetryMode | OmConfigDestinationSource | Specifies whether suspended requests are retried automatically or manually. 'A' or 'M'. Automatic or Manual. |
| RetTimePeriod | OmConfigRetTimePeriod | Amount of time to retain an order from this client/media in MSS. |
| RetTimePeriodId | OmConfigRetTimePeriod | UID for Retention Time Period |
| RGPI_Id | OmRequestGranPI OmRequestGranPI_Temp OmReqGrInput OmReqGrOutput OmRequestGranPI_R | UID for request granule processing instruction |
| RHWM | OmStagingConfig | A request high water mark for destination specifying the desired maximum number of requests that maybe in the Staging state. |
| RLWM | OmStagingConfig | A request low water mark for destination, specifying the desired minimum number of requests that should be in staging or staged. |
| RunFlag | OmStagingCounts | Indicates the current process applying change to table. |
| ScrambledPullDirName | OmRequest | Encrypted Pull Directory Name. |
| SerialPrepFlag | OmDevice | Either Y or N depending on whether or not orders should be prepared Concurrently or Serially. |
| shipAddrCity | OmOrder_R | City associated with shipping address |
| shipAddrCountry | OmOrder_R | Country associated with shipping address |
| shipAddrFax | OmOrder_R | Fax Number associated with shipping address |
| shipAddrPhone | OmOrder_R | Phone number associated with shipping address |
| shipAddrState | OmOrder_R | State associated with shipping address |
| shipAddrStreet1 | OmOrder_R | Street address associated with shipping address |
| shipAddrStreet2 | OmOrder_R | Street address associated with shipping address |
| shipAddrStreet3 | OmOrder_R | Street address associated with shipping address |
| shipAddrZip | OmOrder_R | Zip Code associated with shipping address |
| shipContactOrg | OmAddress_R | Contact org name associated with shipping address |

Table 3-61. Table Column Descriptions (17 of 19)

| Column Name | Table | Description |
|---------------------------|--|--|
| shipDateTime | OmOrder_R OmRequest_R | Date/Time this order was moved to a terminal state |
| SizeFailedMB | OmDestStatistics | Cumulative size in MB of all granules successfully pushed during 15 minute period specified by intervalStart and intervalStop. |
| SizeInputGrans | OmProcessorRequestXref | Size in MB of input granules for this request |
| SizeMBGransComplStagArch | OmStagingStatistics | Cumulative size in MB of granules from archive that completed staging during this 15 minute time period. |
| SizeMBGransComplStagCache | OmStagingStatistics | Cumulative size in MB of granules from cache that completed staging during this 15 minute time period. |
| SizeMBGransFailStagArch | OmStagingStatistics | Cumulative size in MB of granules from archive that failed staging during this 15 minute time period. |
| SizeMBGransFailStagCache | OmStagingStatistics | Cumulative size in MB of granules from cache that failed staging during this 15 minute time period. |
| SizeMBGransFoundInDPL | OmStagingStatistics | Cumulative size of granules found in Data Pool for requests being staged during this 15 minute period. |
| SizeMBGransSubForStag | OmStagingStatistics | Cumulative size in MB of granules submitted for staging (whether their source is archive or cache or DPL) during this 15 minute time period. |
| SizePushedMB | OmDestStatistics | Cumulative size in MB of all granules successfully pushed during 15 minute period specified by intervalStart and intervalStop. |
| Source | OmRequest OmRequest_R OmRequest_Temp | Client of this request. |
| spid | OmCleanupProcesses | Session Id |
| StagingConfigId | OmStagingConfig | UID for Staging Config table. |
| StagingStatsId | OmStagingStatistics | UID for this statistic. |
| StagingStatus | OmStagingConfig | Indicates whether staging is active or suspended for this media or destination. |
| standingOrderId | OmOrder_R | ID of a standing order. |
| startDateTime | OmOrder_R OmRequest_R | The time set by DDIST to the first time DDIST started to process the request, i.e., start the staging of its data, and the request status. |

Table 3-61. Table Column Descriptions (18 of 19)

| Column Name | Table | Description |
|--------------------|--|--|
| Status | OmDevice OmPrinterConfig OmProductJob OmExternalProcessor | Current Status of the device, ie, "busy", or "Available" Status of this printer Volume status ACTIVE or SUSPENDED |
| StatusCode | OmStatus | Static integer value for the defined statuses. |
| StatusDesc | OmStatus OmProductJob_R | Description of the state of the granule. |
| StepNo | OmRequestGranPI OmRequestGranPI_Temp OmRequestGranPI_R | The number of step in the process of producing a new granule. |
| StringLength | OmProcessingInstruction | Length of ODL string, used for efficient data retrieval |
| SubSetInfo | OmSubSettingInfo | Holds the subsetting info for a Landsat granule. |
| SuspendDate | OmSuspendedDestination | Date/Time this destination was suspended. |
| SuspendExplanation | OmSuspendedDestination | Specifies cause/source of suspension |
| TableName | OmCode | Table that uses this code |
| tapeFormat | OmRequest_R | Holds the format of the tape for the request. |
| Temp_Key | OmRequestGranule_Temp | Internal Id used in archiving process. |
| TextFile2Loc | OmJewelCase | Location of the second Text file to be used when printing Jewel Case inserts, currently not used |
| TextFileLoc | OmJewelCase | Location of the Text file to be used when printing Jewel Case inserts |
| timeOfLastUpdate | OmOrder_R OmRequest_R | Holds the time of the last order or request update. |
| TimeOut | OmConfigDestinationSource | Time 'buffer' used for determining if an individual FTP Push operation should time out. Stored in seconds. |
| title | OmAddress_R OmOrder_R | This is the title of a user. (i.e., Dr.) |
| Units | OmConfigParameter | Units associated with Parameter. |
| userId | OmAddress_R OmOrder_R | This column uniquely identifies a registered user. |
| UserId | OmRequest OmRequest_R OmSuspendedDestination | Identification of user submitting a request for distribution. Ftp User corresponds to ftpAddress field in EcAcRequest. |
| UserID | OmUsersToDelete | User Id that can be deleted from the archive tables when archive cleanup script is run. |

Table 3-61. Table Column Descriptions (19 of 19)

| Column Name | Table | Description |
|-------------------------|--------------------------------|---|
| UserString | OmRequest OmRequest_R | Optional Distribution option which identifies a request. |
| UserCheckSum | OmDuplicateCheck | Unique checksum generated by DPL. |
| UserEmail | OmDuplicateCheck | User that generated this request. |
| VerifyLabel | OmProductJob OmProductJob_R | The Label name of the Device that the Request volume was verified on. |
| VolSize | OmProductJob | Size of volume in MB |
| VolumeName | OmProductJob OmProductJob_R | Name given to a request volume to uniquely identify it for the request. |
| WorkedBy | OmOperatorIntervention | Identification of the Operator who entered a disposition of an Operator Intervention request. |
| WorkloadActual | OmDevice | Current workload for a RIMAGE device |
| WorkloadAllocated | OmDevice | Maximum workload that can be queued up for a RIMAGE unit. |
| WorkloadLimit_Allocated | OmDevice | Maximum workload that can be allocated for a RIMAGE unit. |
| WorkloadLimit_Actual | OmDevice | Maximum workload that can be queued up for a RIMAGE unit. |

3.1.4 Column Domains

Domains specify the ranges of values allowed for a given table column. Sybase supports the definition of specific domains to further limit the format of data for a given column. Sybase domains are, in effect, user-defined data types. There are no domain specifications within Order Manager.

3.1.5 Column Default Values

Defaults are used to supply a value for a column when one is not defined at row insert time. Defaults defined in Sybase for the Order Manager Subsystem database are described in Table 3-62.

Table 3-62. Order Manager Database Column Defaults

| Column Name | Default Value |
|------------------------------|---------------|
| OmQueue.QSuspend.State | N |
| OmRequest.ResubmitCount | 0 |
| OmBundlingOrder.LastAccess | getdate() |
| OmMediaType.QSuspendState | N |
| OmRequest.ExemptfromLimitChk | N |

3.1.6 Referential Integrity Rules

Sybase supports the definitions of rules. Rules provide a means for enforcing domain constraints on a given column. There are no rules defined for the Order Manager.

3.1.7 Check Constraints

Check constraints are similar to rules, in that they specified the valid domain values. However, check constraints are defined at the table level and as such only apply to the specified table. Table 3-63 identifies the check constraints utilized in Order Manager.

Table 3-63. Order Manager Check Constraints

| Check Constraint | Table/Column | Domain Values |
|------------------|---------------------------------|--|
| State_Chk | OmQueue.QSuspendState | Y,N,S |
| Ptype | OmConfigParameter.ParameterType | I,C,F |
| TypeDomain | OmMediaType.MediaType | FTPPUSH, FTPPULL, 8MM, DLT, DVD, CDROM |

3.1.8 Views

Sybase allows the definition of views as a means of limiting an application or users access to data in a table or tables. Views create a logical table from columns found in one or more tables. Currently, there are no views defined for the Order Manager Subsystem database.

3.1.9 Declarative Integrity Constraints

Sybase allows the enforcement of referential integrity via the use of declarative integrity constraints. Integrity constraints allow the SQL server to enforce primary and foreign key integrity checks automatically without requiring programming. Sybase is ANSI-92 compliant, therefore, its constraints support "restrict-only" operations. This means that a row cannot be deleted or updated if there are rows in other tables having a foreign key dependency on that row. Cascade delete and update operations cannot be performed if a declarative integrity constraint has been used. Declarative integrity constraints used in the Order Manager Subsystem database are found here. Referential integrity is also maintained through use of user-defined triggers and procedures. See Tables 3-64 through 3-77 for dependencies.

Table 3-64. Dependencies on Table: OmActionType

| Referenced by | Primary Key | Foreign Key |
|------------------------|-------------|------------------|
| OmOperatorIntervention | ActionType | InterventionType |
| OmActionQueue | ActionType | ActionType |

Table 3-65. Dependencies on Table: OmArchive

| Referenced by | Primary Key | Foreign Key |
|------------------|-------------|-------------|
| OmRequestGranule | Archiveld | Archiveld |

Table 3-66. Dependencies on Table: OmConfigDestinationSource

| Referenced by | Primary Key | Foreign Key |
|------------------|---------------|---------------|
| OmRequest | DestinationId | DestinationId |
| OmDestStatistics | DestinationId | DestinationId |

Table 3-67. Dependencies on Table: OmDevice

| Referenced by | Primary Key | Foreign Key |
|-------------------|-------------|-------------|
| OmDeviceMediaXref | Deviceld | Deviceld |

Table 3-68. Dependencies on Table: OmExplanation

| Referenced by | Primary Key | Foreign Key |
|------------------------|-----------------|-----------------|
| OmRequestGranule | ExplanationCode | ExplanationCode |
| OmRequestInterventions | ExplanationCode | ExplanationCode |

Table 3-69. Dependencies on Table: OmExternalProcessor

| Referenced by | Primary Key | Foreign Key |
|------------------------|-------------|-------------|
| OmProcessorRequestXref | ProcessorId | ProcessorId |

Table 3-70. Dependencies on Table: OmMediaType

| Referenced by | Primary Key | Foreign Key |
|---------------------------|-------------|-------------|
| OmBundlingOrder | MediaTypeId | MediaTypeId |
| OmConfigRetTimePeriod | MediaTypeId | MediaTypeId |
| OmConfigDestinationSource | MediaTypeId | MediaTypeId |
| OmRequest | MediaTypeId | MediaTypeId |

Table 3-71. Dependencies on Table: OmNotification

| Referenced by | Primary Key | Foreign Key |
|---------------|----------------|----------------|
| OmActionQueue | NotificationId | NotificationId |
| OmRequest | RequestId | RequestId |

Table 3-72. Dependencies on Table: OmProductJob

| Referenced by | Primary Key | Foreign Key |
|-------------------|--------------|--------------|
| OmGranuleDelivery | ProductJobId | ProductJobId |

Table 3-73. Dependencies on Table: OmProductModule

| Referenced by | Primary Key | Foreign Key |
|---------------|--------------|--------------|
| OmProductJob | ProdModuleId | ProdModuleId |
| OmEsdtRef | ProdModuleId | ProdModuleId |
| OmJewelCase | ProdModuleId | ProdModuleId |

Table 3-73.1. Dependencies on Table: OmQueue

| Referenced by | Primary Key | Foreign Key |
|---------------|-------------|-------------|
| OmMediaType | QueueName | QueueName |

Table 3-74. Dependencies on Table: OmRequest

| Referenced by | Primary Key | Foreign Key |
|-------------------------|-------------|-------------|
| OmActionQueue | RequestId | RequestId |
| OmBundlingOrder | RequestId | RequestId |
| OmOperatorIntervention | RequestId | RequestId |
| OmRequestGranule | RequestId | RequestId |
| OmRequestNotes | RequestId | RequestId |
| OmProcessingInstruction | RequestId | RequestId |
| OmProcessorRequestXref | RequestId | RequestId |

Table 3-75. Dependencies on Table: OmRequestGranule

| Referenced by | Primary Key | Foreign Key |
|-----------------|-------------|-------------|
| OmFile | GranId | GranId |
| OmReqGrInput | GranId | GranId |
| OmReqGrOutput | GranId | GranId |
| OmRequestGranPI | GranId | GranId |

Table 3-76. Dependencies on Table: OmRequestGranPI

| Referenced by | Primary Key | Foreign Key |
|---------------|-------------|-------------|
| OmReqGrInput | RGPI_Id | RGPI_Id |
| OmReqGrOutput | RGPI_Id | RGPI_Id |

Table 3-77. Dependencies on Table: OmStatus

| Referenced by | Primary Key | Foreign Key |
|------------------------|-------------|---------------------|
| OmActionQueue | StatusCode | ActionStatus |
| OmBundlingOrder | StatusCode | BundlingOrderStatus |
| OmNotification | StatusCode | NotificationStatus |
| OmOperatorIntervention | StatusCode | InterventionStatus |
| OmRequestGranule | StatusCode | RequestGrStatus |
| OmRequestInterventions | StatusCode | RequestStatus |

3.1.10 Triggers

Sybase supports the enforcement of business rules via the use of triggers. A trigger is a set of activities or checks that are performed automatically whenever a row is inserted, updated, or deleted from a given table. Sybase allows the definition of insert, update, and delete triggers at the table level. Table 3-78 defines the triggers used within the OMS database.

Table 3-78. Order Manager Database Triggers

| Table | Trigger | Description |
|------------------------|----------------------------------|--|
| OmOperatorIntervention | OmOIDelete | Cascades deletes to OmRequestInterventions |
| OmProductJob | OmProductJobFree OrBusyDelete | On delete of a row from the OmProductJob table, set the device status to FREE (EcGlobalDb..OmDevice) |
| OmProductJob | OmProductJobFree OrBusyUpdate | Set the device status to FREE if DeviceId set to NULL; Set the device status to BUSY if DeviceId set to this Device (EcGlobalDb..OmDevice) |

3.1.11 Order Manager Stored Procedures

Sybase also supports business rules via the use of stored procedures. Stored procedures are typically used to capture a set of activities or checks that will be performed on the database repeatedly to enforce business rules and maintain data integrity. Stored procedures are parsed and compiled SQL code that reside in the database and may be called by name by an application, trigger or another stored procedure. A list of the stored procedures Order Manager will be utilizing are identified in Table 3-79.

Table 3-79. List of Order Manager Stored Procedures (1 of 11)

| Procedure Name |
|-----------------------------|
| OmActionComplete |
| OmActivateRequest |
| OmAddDestination |
| OmAddEsdtToProdModule |
| OmAddExternalProcRequest |
| OmAddFTPDestination |
| OmAddGranToRequest |
| OmAddRequestNote |
| OmAppendOperatorNotes |
| OmArchive_requests |
| OmAssignAllFreeDevices |
| OmAssignDevice |
| OmAssignDeviceToVolume |
| OmCalculateScrolling |
| OmCancelBundle |
| OmCancelProcessingGran |
| OmCancelRequest |
| OmCancelRequest_Bulk |
| OmCheckAvailableDevices |
| OmCheckVolumeComplete |
| OmCheckVolumeVerified |
| OmCleanOMSStagedGran |
| OmCleanOutputGran |
| OmCleanupOldData |
| OmCleanupOrphanedRequests |
| OmCleanupVolumeForRequest |
| OmCloseAlertByType |
| OmCloseIntervention |
| OmCompleteReqSubmission |
| OmConfirmMediaDismount |
| OmConfirmMediaMount |
| OmCreateBundlingOrder |
| OmCreateBundlingOrder711 |
| OmCreateDeviceCheckAction |
| OmCreateDistributionRequest |
| OmCreateMediaIntervention |
| OmCreateMediaMountAction |
| OmCreateNonBundlingOrder |
| OmCreateNonBundlingOrder711 |
| OmCreateProductJob |
| OmCreateRequest |
| OmCreateRequestForGUI |
| OmCreateSubsetInfo |
| OmDbCleanArchive |
| OmDelDPLOMSGranule |

Table 3-79. List of Order Manager Stored Procedures (2 of 11)

| Procedure Name |
|------------------------------|
| OmDelESDTEExceptions |
| OmDelOdI_Metadata_User_Email |
| OmDeleteArchivedRequests |
| OmDeleteDPLOrderGranule |
| OmDeleteDPLOrderGranuleN |
| OmDeleteDestination |
| OmDeleteEsdtFromPM |
| OmDeleteExternalProcessor |
| OmDeleteFTPDestination |
| OmDeleteFile |
| OmDeletePrinter |
| OmDeleteProdModule |
| OmDeleteProductJob |
| OmDeleteRequestNote |
| OmExpireBundles |
| OmFailDismount |
| OmFailGranule |
| OmFailMediaCollection |
| OmFailMediaMount |
| OmFailMediaRequest |
| OmFailMount |
| OmFindDeviceForRequest |
| OmGenerateCleanupAction |
| OmGenerateComplAlert |
| OmGetActTypeByComplTime |
| OmGetActionNotes |
| OmGetActionQueueList |
| OmGetActionTypeCnt |
| OmGetActiveActions |
| OmGetActiveProcessingGrans |
| OmGetAddressInfo |
| OmGetAddressInfo_Arch |
| OmGetAgingInfo |
| OmGetAlertDetail |
| OmGetAlerts |
| OmGetAllAlerts |
| OmGetAllCfg |
| OmGetAllMedia |

Table 3-79. List of Order Manager Stored Procedures (3 of 11)

| Procedure Name |
|-------------------------------|
| OmGetAllMediaConfig |
| OmGetAllMediaStates |
| OmGetAllQueues |
| OmGetArchProcessorFilter |
| OmGetArchive |
| OmGetArchiveStatus |
| OmGetAssemblyData |
| OmGetAssignedVolume |
| OmGetAssocFileInfo |
| OmGetAssociatedGranules |
| OmGetAvailTapeDevices |
| OmGetBrowseInfo |
| OmGetBrowseUR |
| OmGetBundInfo |
| OmGetBundleCriteria |
| OmGetBundlingCriteria |
| OmGetBundlingOrder |
| OmGetCfg |
| OmGetComplMediaOrdersLastHr |
| OmGetCompletedInterventions |
| OmGetCompressionAlg |
| OmGetConfigedProcStatus |
| OmGetDPLFSPath |
| OmGetDPLParameter |
| OmGetDestinationParams |
| OmGetDestinationStatus |
| OmGetDeviceInfo |
| OmGetDeviceInfo711 |
| OmGetDeviceReport |
| OmGetDevices |
| OmGetDevices711 |
| OmGetDevicesToDismount |
| OmGetDistActionForRequest |
| OmGetDistribForReqId_Arch |
| OmGetDistribForRequestId_Arch |
| OmGetDistribReq_Arch |
| OmGetDistribRequests_Arch |
| OmGetDistributionForReqId |

Table 3-79. List of Order Manager Stored Procedures (4 of 11)

| Procedure Name |
|-------------------------------|
| OmGetDistributionForRequestId |
| OmGetDistributionReq |
| OmGetDistributionRequests |
| OmGetDoneFiveMin |
| OmGetDuplicateRequestIds |
| OmGetECSOrder |
| OmGetECSOrder_Arch |
| OmGetESDTsExcluded |
| OmGetEsdtProdModuleXref |
| OmGetExpirationPeriod |
| OmGetExplanations |
| OmGetExtSBSTReqStatus |
| OmGetExternalProcessor |
| OmGetFSGrpESDTMappings |
| OmGetFSStats |
| OmGetFailedOps |
| OmGetFileSystemAlertDetail |
| OmGetFileVolumeGroup |
| OmGetFtpDestParams |
| OmGetFtpPushInfo |
| OmGetFtpPushRequests |
| OmGetFtpPushScpInfo |
| OmGetFtpPushScpMedia |
| OmGetFtpPushScpRequests |
| OmGetGrForRequestId_Arch |
| OmGetGran |
| OmGetGranFiles |
| OmGetGranProclInstr |
| OmGetGranProclInstr_Arch |
| OmGetGranProcessingInstr |
| OmGetGranSubSetInfo |
| OmGetGranule |
| OmGetGranuleDelivery |
| OmGetGranuleTotals |
| OmGetGranules |
| OmGetGranulesForRequestId |
| OmGetGranulesForRequestId711 |
| OmGetGranulesForVolume |

Table 3-79. List of Order Manager Stored Procedures (5 of 11)

| Procedure Name |
|-------------------------------|
| OmGetHEGOrderStatus |
| OmGetInterventionForRequestId |
| OmGetInterventionGranInfo |
| OmGetInterventionReqInfo |
| OmGetInterventionType |
| OmGetIntvnTotals |
| OmGetJewelCase |
| OmGetJobInfo |
| OmGetLockRetentionPeriod |
| OmGetLongName |
| OmGetMediaActionList |
| OmGetMediaCollInfo |
| OmGetMediaOrdersLastHour |
| OmGetMediaProcessingMode |
| OmGetModes |
| OmGetNotification |
| OmGetNumStagingRequests |
| OmGetODLString |
| OmGetOdlMetadataUserEmail |
| OmGetOpenInterventions |
| OmGetOrderRequestStatus |
| OmGetOrderStatus |
| OmGetOrderStatusByDate |
| OmGetOutputGran |
| OmGetOutputGranPath |
| OmGetOutputGransForRequest |
| OmGetOverallStagStatus |
| OmGetOverallStats |
| OmGetOverallStats711 |
| OmGetPartitionInfo |
| OmGetPartitionedGranules |
| OmGetPendingJobRequestSummary |
| OmGetPhysGranule |
| OmGetPhysMedTotals |
| OmGetPrinters |
| OmGetProcModeForRequest |
| OmGetProcReqInfo |
| OmGetProcessorFilter |

Table 3-79. List of Order Manager Stored Procedures (6 of 11)

| Procedure Name |
|-------------------------------|
| OmGetProcessorStatus |
| OmGetProdDeviceStatus |
| OmGetProdModules |
| OmGetQueueState |
| OmGetReqInfo |
| OmGetReqProcessingInstr |
| OmGetRequestGranule |
| OmGetRequestInfo |
| OmGetRequestMediaInfo |
| OmGetRequestNotes |
| OmGetRequestNotes_Arch |
| OmGetRequestOutputGran |
| OmGetRequestStatus |
| OmGetRequestTotals |
| OmGetRequestVolumes |
| OmGetResourceCategories |
| OmGetRetTimePeriod |
| OmGetRetryMode |
| OmGetRimageLoads |
| OmGetSBSTMedia |
| OmGetSBSTRequests |
| OmGetSBSTRequests_Arch |
| OmGetSdsrvFileInfo |
| OmGetServerStatistics |
| OmGetUniqueLinkName |
| OmGetUserProfile |
| OmGetUserProfile_Arch |
| OmGetVolumesForRequestId |
| OmGetVolumesForRequestId_Arch |
| OmGetWaterMarks |
| OmGetWaterMarks711 |
| OmGetWorkedBy |
| OmGranuleReplacement |
| OmInsArchive |
| OmInsBulkGranules |
| OmInsBulkGranules_cli |
| OmInsBulkGranules_nondp |
| OmInsClosedReqIntervention |

Table 3-79. List of Order Manager Stored Procedures (7 of 11)

| Procedure Name |
|----------------------------|
| OmInsDPLAction |
| OmInsDPLActionN |
| OmInsDestStats |
| OmInsESDTEExceptions |
| OmInsFTPPushStats |
| OmInsGranuleFile |
| OmInsInputGran |
| OmInsNonECSOMGranule |
| OmInsOdlMetadataUserEmail |
| OmInsOutputGranInfo |
| OmInsSingleGran |
| OmInsStagingStats |
| OmInsSubSetterGran |
| OmInsertAction |
| OmInsertBillableGranule |
| OmInsertBundleRequest |
| OmInsertDevice |
| OmInsertExternalProcessor |
| OmInsertFile |
| OmInsertGranule |
| OmInsertIntervention |
| OmInsertJewelCase |
| OmInsertNotification |
| OmInsertNotificationAction |
| OmInsertNotificationOnly |
| OmInsertOptAddress |
| OmInsertOutputGranuleInfo |
| OmInsertPrinter |
| OmInsertProdModule |
| OmInsertReqIntervention |
| OmInsertSNFailureActions |
| OmInsertSubSetInfo |
| OmIsGranuleInDPL |
| OmIsUsedByODLRequestor |
| OmListBundOrderByEDate |
| OmListBundOrderByMedia |
| OmListBundOrderByOrd |
| OmListBundOrderBySDate |

Table 3-79. List of Order Manager Stored Procedures (8 of 11)

| Procedure Name |
|--------------------------------|
| OmListBundOrderByStatus |
| OmListBundOrderByUser |
| OmLockGranuleForOMS |
| OmLongUpdateCounts |
| OmMaxCompletionCriteriaValues |
| OmMediaCollComplete |
| OmMediaFilter |
| OmOptionalAddress |
| OmPackageAssembled |
| OmPackageNotAssembled |
| OmParseVector |
| OmPartitionRequest |
| OmPopulateGranFiles |
| OmPreValidate |
| OmPreserveTempData |
| OmPrintOutputs |
| OmProcessMediaDisposition |
| OmProcessRequestDisposition |
| OmProcess_FailRequest_Bulk |
| OmProcess_Submit_Bulk |
| OmRemoveComplActionsFromTable |
| OmRemoveComplIntFromTable |
| OmRemoveCompletedActions |
| OmRemoveCompletedInterventions |
| OmRemoveMediaFromDevice |
| OmRemoveOutOfSyncData |
| OmRemoveSingleRequest |
| OmRemoveStaleGranuleLock |
| OmResetActions |
| OmResetGranCountSize |
| OmResubmitRequest |
| OmResubmitRequest_Bulk |
| OmResumeRequest_Bulk |
| OmRetrieveOrders |
| OmRetryAction |
| OmRetryRequestVolume |
| OmServerProcessStop |
| OmSetALLQueueState |

Table 3-79. List of Order Manager Stored Procedures (9 of 11)

| Procedure Name |
|----------------------------|
| OmSetDdistRetentionValue |
| OmSetMetadataFormat |
| OmSetQueueState |
| OmSetRequestStatus |
| OmSetRequestStatusN |
| OmSetRetTimePeriod |
| OmSetScrambledPullDirName |
| OmSet_OI_Done |
| OmStatusFilter |
| OmStopRequestVolume |
| OmStopResumeExtProcessor |
| OmSuspResumeArchive |
| OmSuspResumeDestination |
| OmSuspResumeDestination711 |
| OmSuspResumeDevice |
| OmSuspResumeNewRequests |
| OmSuspResumeRequest |
| OmSuspendResumeArchive |
| OmUnlockGranuleForOMS |
| OmUpdAgingInfo |
| OmUpdAllDestRequests |
| OmUpdArchiveName |
| OmUpdBundleCriteria |
| OmUpdBundleMedSize |
| OmUpdCfg |
| OmUpdConfigParam |
| OmUpdCountsForRequest |
| OmUpdDestParams |
| OmUpdFTPDestParams |
| OmUpdFailGrStatForRequest |
| OmUpdGrStatusForRequest |
| OmUpdGranuleSize |
| OmUpdMediaConfig |
| OmUpdPartGrSubSettingInfo |
| OmUpdProcessID |
| OmUpdProcessingMode |
| OmUpdProdDeviceActions |
| OmUpdRequestCategory |

Table 3-79. List of Order Manager Stored Procedures (10 of 11)

| Procedure Name |
|----------------------------|
| OmUpdRequestGranSource |
| OmUpdRequestGranStatus |
| OmUpdRequestPriority |
| OmUpdRetTimePeriod |
| OmUpdWaterMarks |
| OmUpdateActionNotes |
| OmUpdateActionStatus |
| OmUpdateAddresses |
| OmUpdateBundlingOrder |
| OmUpdateCurrentWorker |
| OmUpdateDPLOrderFlag |
| OmUpdateDPLOrderFlag711 |
| OmUpdateDevice |
| OmUpdateDevice711 |
| OmUpdateDeviceStatus |
| OmUpdateExternalProcessor |
| OmUpdateFtpPushInfo |
| OmUpdateFtpPushScplInfo |
| OmUpdateGranStatus |
| OmUpdateGranuleId |
| OmUpdateJewelCase |
| OmUpdateMetadataFormat |
| OmUpdateOI_Annotation |
| OmUpdateOmRequest |
| OmUpdateOverallStats |
| OmUpdatePartitionedGranule |
| OmUpdatePrinter |
| OmUpdatePriorGrStatus |
| OmUpdatePriorReqState |
| OmUpdateProdModule |
| OmUpdateQCflag |
| OmUpdateRequestNote |
| OmUpdateVolStatus |
| OmUpdateWaterMarks |
| OmUserFilter |
| OmValidateBundlingAge |
| OmValidateDPLGranules |
| OmValidateFinalRequestSize |

Table 3-79. List of Order Manager Stored Procedures (11 of 11)

| Procedure Name |
|----------------------|
| OmValidateGranules |
| OmValidateReqLimits |
| OmValidateRequest |
| OmValidateRequest711 |
| OmValidateRpclId |
| OmValidateUser |
| OmValidateUserId |
| datawarning |
| logdump |
| logwarning |
| sp_thresholdaction |

3.1.12 MSS Stored Procedures

The implementation of Order Manager involves accessing the MSS database to generate new orders and requests. New stored procedures that will be stored within the MSS database to accomplish these functions are identified in the MSS 311.

3.1.13 SDSRV Stored Procedure Modification

The Order Manager application will be accessing the Science Data Server (SDSRV) database to validate granules within requests to determine their accessibility. Modified stored procedures within SDSRV to accomplish this function are identified in SDSRV 311 document.

3.1.14 DPL Stored Procedures

The implementation of Order Manager involves accessing the DPL to process and validate orders and requests. Stored procedures that will be stored within the DPL database to accomplish these functions are identified in the DPL 311 document.

3.2 Flat File Usage

A flat file is an operating system file that is written and subsequently read serially, generally independent of other files that exist, and usually static in nature. There are cases when the implementation of persistent data is better suited to a flat file than to a database (e.g., system configuration data, external interface data). There are No flat files used by the Order Manager Subsystems. Configuration information is stored in the Order Manager database. Additional configuration information may be found in the configuration registry.

3.2.1 File Descriptions

Not Applicable

3.2.2 Field Specifications

Not Applicable

3.2.3 Domain Definitions

Not Applicable

3.3 OMS States

3.3.1 MSS states

| StatusCode | StatusDescription |
|-----------------------|--|
| Abort | Abort |
| Aborted | Aborted |
| Active | Active |
| Bundling | Bundling |
| Cancelled | Cancelled |
| Expired | Expired |
| Not Found | Not Found |
| Operator Intervention | Operator Intervention |
| Partitioned | Partitioned |
| Pending | Pending |
| Pending Media Prod | Queue request for Media Creation; request waits for media assignment |
| Prep for Distribution | Prep for Distribution |
| Queued | Queued |
| QC Complete | |
| QC Hold | Physical Media Creation Complete, Media Need Verification |
| SDSRV Staging | SDSRV Staging |
| Shipped | DN has been queued |
| Staging | Staging |
| Subsetting | Subsetting |
| Terminated | Terminated |
| Transferring | Transferring |
| Waiting for Shipment | QC for all volumes successfully completed |

3.3.2 Request/Granule States

Request-Granule States

|NULL, TRANSFERRING, SHIPPED, FAILED, HOLD, SKIPPED

Physical Granule Level States

|NULL, STAGING, STAGED,

FAILED

Request Level States (MSS)

|Null, Staging, Transferring, Shipped, Operator Intervention, Canceled, Queued, Pending, Partitioned

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4. Performance and Tuning Factors

4.1 Indexes

An index provides a means of locating a row in a database table based on the value of a specific column(s), without having to scan all data in the table. When properly implemented, indexes can significantly decrease the time it takes to retrieve data, thereby increasing performance. Sybase allows the definition of two types of indexes, clustered and non-clustered.

In a clustered index, the rows in a database table are physically stored in sequence-determined by the index. Clustered indexes are particularly useful, when the data is frequently retrieved in sequential order. Only one clustered index may be defined per table.

Non-clustered indexes differ from their clustered counterpart, in that, data is not physically stored in sorted order-newly added rows are stored at the end of the related database table.

A key of the types of indexes found in OMS is provided in Table 4-1 Index Type Key. A list a description of each of the defined indexes is given in Table 4-2 Index List.

Table 4-1. Index Type Key

| Index Type Key | Description |
|----------------|---|
| P | Primary Key |
| F | Foreign Key |
| U | Unique - Only one for the column code combination |
| C | Clustered or non-clustered index |

Table 4-2. Index List (1 of 5)

| Table | Index Name | Column Name(s) | P | F | U | C |
|----------------------|------------------------|---------------------------------------|---|---|---|---|
| EcDbDatabaseVersions | pk_ecdbversions | EcDbSchemaVersion Id, EcDbDropVersion | Y | N | N | Y |
| OmActionQueue | pk_omactque | ActionQueueId | Y | N | N | Y |
| OmActionQueue | x_omactquenot | NotificationId | N | N | Y | N |
| OmActionQueue | x_omactquestat | ActionStatus | N | N | Y | N |
| OmActionQueue | x_actqueueuereq | RequestId | Y | N | N | Y |
| OmActionType | pk_omactiontypeactype | ActionType | Y | N | N | Y |
| OmAddress_R | OmAddress_R_orderId_cl | orderId | Y | N | N | Y |
| OmAddress_R | OmAddress_R_userId | userId, orderId | Y | N | N | Y |

Table 4-2. Index List (2 of 5)

| Table | Index Name | Column Name(s) | P | F | U | C |
|---------------------------|-------------------------|--|----------|----------|----------|----------|
| OmAgingConfig | pk_omagingconfig | AgingConfigId | Y | N | N | Y |
| OmArchive | pk_omarchive | ArchiveId | Y | N | N | Y |
| OmBundlingOrder | pk_ombundord | BundlingOrderId | Y | N | N | Y |
| OmBundlingOrder | x_ombundexpdate | ExpirationDate | N | N | Y | N |
| OmBundlingOrder | x_ombundordmedid | MediaTypeId, BundlingOrderId | N | N | Y | N |
| OmBundlingOrder_R | x_bundlingorder_req_idx | RequestId | Y | N | N | Y |
| OmCode | pk_omcode | Code, TableName | Y | N | N | Y |
| OmConfigDestinationSource | pk_omconfigdest | DestinationId | Y | N | N | Y |
| OmConfigDestinationSource | x_destsrc_hostdir | DestinationHost, Directory | N | N | N | N |
| OmConfigDestinationSource | x_destsrc_name | DestinationName | N | N | N | N |
| OmConfigParameter | pk_omconfigparameter | ConfigId | Y | N | N | Y |
| OmConfigRetTimePeriod | pk_omconfrettimeperiod | RetTimePeriodId | Y | N | N | Y |
| OmDestStatistics | pk_omftppushstatistics | DestinationId, IntervalStart, IntervalStop | Y | N | N | Y |
| OmDuplicateCheck | pk_omduplicatecheck | UserCheckSum, RequestId | Y | N | N | Y |
| OmDuplicateCheck | x_requestId | RequestId | N | N | Y | N |
| OmEsdtRef | PK_OMESDTREF | EsdtType, ProdModuleId | Y | N | N | Y |
| OmExplanation | pk_omexplan | ExplanationCode | Y | N | N | Y |
| OmExternalProcessor | pk_omextprocessor | ProcessorId | Y | N | Y | Y |
| OmExternalProcessor | x_ipport | IPAddress, PortNumber | N | N | Y | N |
| OmExternalProcessor | x_procname | ProcessorName | N | N | Y | N |
| OmExternalProcessor | x_extproEmail | DNEmailAddr | N | N | Y | N |
| OmFile | pk_omfile | FileId | Y | N | Y | Y |
| OmFile | granidfname_noncl | GranId, FileName | N | Y | N | N |
| OmGranule_R | x_omgran_r_ecsdpl | ECS_GranuleId, DPL_GranuleId | Y | N | N | Y |
| OmGranule_R | omreq_r_cl | GranId, RequestId | Y | N | N | Y |
| OmGranule_R | x_omreq_r_rg_lastupdate | LastUpdate, RequestId | Y | N | N | Y |
| OmGranule_R | x_omgran_r_requestid | RequestId | Y | N | N | Y |
| OmGranuleCounts | granCnts_gs | GrStatus | Y | N | N | Y |
| OmGranuleCounts | granCnts_gr | GranId, RequestId | Y | N | N | Y |
| OmGranuleCounts | granCnts_rq | RequestId | Y | N | N | Y |

Table 4-2. Index List (3 of 5)

| Table | Index Name | Column Name(s) | P | F | U | C |
|-------------------------|-----------------------------|------------------------------|---|---|---|---|
| OmGranuleDelivery | pk_GranDelivery | GranId, GranuleDeliveryId | Y | N | N | Y |
| OmGranuleDelivery | x_productjobid | ProductJobId | N | Y | N | N |
| OmJewelCase | PK_OMJEWELCASE | JewelCaseId | Y | N | N | Y |
| OmMediaType | pk_ommedtyp | MediaTypeId | Y | N | N | Y |
| OmNotification | pk_omnot | NotificationId | Y | N | N | Y |
| OmNotification | x_omnotreq | RequestId, NotificationId | N | Y | N | N |
| OmOdI_MetadataRequests | pk_omodlmetreq | EmailAddr | Y | N | Y | Y |
| OmOperatorAlert | pk_omoperatoralert | AlertId | Y | N | N | Y |
| OmOperatorIntervention | x_omreqidcomptime | RequestId, CompletionTime | Y | N | N | Y |
| OmOperatorIntervention | x_omintervstatus | InterventionStatus | Y | N | N | Y |
| OmOperatorIntervention | pk_omoperinterv | OperatorInterventionId | Y | N | N | Y |
| OmOperatorIntervention | x_omrequestid | RequestId | Y | N | N | Y |
| OmOrder_R | omorder_r_LastUpdate | timeOfLastUpdate, orderId | Y | N | N | Y |
| OmOrder_R | omorder_r_cl | orderId | Y | N | N | Y |
| OmOrder_R | x_omord_r_eMailOrderId | eMailAddr, ordered | N | N | Y | N |
| OmPrinterConfig | pk_omprinter | PrinterId | Y | N | N | Y |
| OmProcessingInstruction | pk_omproctext | RequestId | Y | Y | Y | Y |
| OmProcessorRequestXref | pk_omprocreqxref | RequestId, ProcessorId | Y | Y | Y | Y |
| OmProductJob | pk_volume | ProductJobId | Y | N | N | Y |
| OmProductJob | ncldx_RequestIdProductJobId | RequestId, ProductJobId | N | Y | N | N |
| OmProductJob_R | pk_reqVolume | RquestId, VolumeName | Y | N | N | Y |
| OmProductModule | pk_prodModule | ProdModuleId | Y | N | N | Y |
| OmQueue | pk_OmQueue | QueueName | Y | N | N | Y |
| OmReqGrInput | pk_OmReqGrInput | GranId, RGPI_Id | Y | N | N | Y |
| OmReqGrOutput | pk_OmReqGrOutput | GranId, RGPI_Id | Y | N | N | Y |
| OmReqGrOutput | rpgi_id_noncl | RGPI_Id | N | Y | N | N |
| OmRequest | x_omdestinationidreqid | DestinationId, RequestId | Y | N | N | Y |
| OmRequest | x_label | Label | Y | N | N | Y |
| OmRequest | x_ommedtypereqid | MediaTypeId, RequestId | Y | N | N | Y |
| OmRequest | x_omorderid | OrderId | Y | N | N | Y |
| OmRequest | pk_omreq | RequestId | Y | N | N | Y |

Table 4-2. Index List (4 of 5)

| Table | Index Name | Column Name(s) | P | F | U | C |
|------------------------|----------------------------|---|---|---|---|---|
| OmRequest_R | x_omreq_r_receiveDateTime | receiveDateTime, requestId | Y | N | N | Y |
| OmRequest_R | omreq_r_cl | requestId | Y | N | N | Y |
| OmRequest_R | x_omreq_r_requestStatus | requestStatus, requestId | Y | N | N | Y |
| OmRequest_R | x_omreq_r_timeOfLastUpdate | timeOfLastUpdate, requestId | Y | N | N | Y |
| OmRequest_R | x_omreq_r_receiveDTorderId | receiveDateTime,orderId | N | N | Y | N |
| OmRequest_R | x_omreq_r_orderId | orderId | N | N | Y | N |
| OmRequest_Temp | ncldx1 | OrderId | Y | N | N | Y |
| OmRequest_Temp | ncldx2 | RequestId | Y | N | N | Y |
| OmRequest_Temp | ncldx3 | RequestKey, RequestId | Y | N | N | Y |
| OmRequestGranPI | GranId_noncl | GranId | Y | N | N | Y |
| OmRequestGranPI | pk_OmRequestGranPI | RGPI_Id | Y | N | N | Y |
| OmRequestGranPI_R | omrggranpi_r_granid | GranId | Y | N | N | Y |
| OmRequestGranPI_R | omreqgranpi_r_rgpiid | RGPI_Id | Y | N | N | Y |
| OmRequestGranPI_Temp | omrggranpi_t_granid | GranId | Y | N | N | Y |
| OmRequestGranPI_Temp | omreqgranpi_t_rgpiid | RGPI_Id | Y | N | N | Y |
| OmRequestGranule | dplgranule_noncl | DPL_GranuleId | Y | N | N | Y |
| OmRequestGranule | x_omgranecs_dpl | ECS_GranuleId, DPL_GranuleId | Y | N | N | Y |
| OmRequestGranule | pk_omreqgran | GranId | Y | N | N | Y |
| OmRequestGranule | reqGrStatusGranId_noncl | RequestGrStatus, GranId | Y | N | N | Y |
| OmRequestGranule | x_omreqgranstat | RequestId, RequestGrStatus | N | N | Y | N |
| OmRequestGranule_Temp | gldx1 | GranId | Y | N | N | Y |
| OmRequestGranule_Temp | gldx2 | RequestId, Gran_Id_No, GranId | Y | N | N | Y |
| OmRequestGranule_Temp | gldx3 | Temp_Key, RequestId, Gran_Id_No, GranId | Y | N | N | Y |
| OmRequestInterventions | pk_omreqinterid | OperatorInterventionId, RequestId, RequestStatus, ExplanationCode | Y | N | N | Y |
| OmRequestInterventions | x_RequestId | RequestId | N | Y | N | N |
| OmRequestNotes | PK_OMREQUESTNOTES | RequestId, NoteSeq | Y | N | N | Y |

Table 4-2. Index List (5 of 5)

| Table | Index Name | Column Name(s) | P | F | U | C |
|------------------------|---------------------------|---|---|---|---|---|
| OmRequestNotes_R | PK_OMREQUESTNOTES | RequestId, NoteSeq | Y | N | N | Y |
| OmStagingConfig | pk_omstagingconfig | StagingConfigId | Y | N | N | Y |
| OmStagingCounts | x_omstagingcounts | CntGransStaging, CntGransStagShipd | Y | N | N | Y |
| OmStagingStatistics | pk_omstagingstatistics | StagingStatsId, IntervalStart, IntervalStop | Y | N | N | Y |
| OmStatus | pk_omstatus | StatusCode | Y | N | N | Y |
| OmSubSettingInfo | pk_subset | RequestId, GranId, LineNum | Y | N | N | Y |
| OmSuspendedDestination | pk_omsuspendeddestination | DestinationHost, DestinationName | Y | N | N | Y |

4.2 Segments

Not Applicable

4.3 Caches

A cache is a block of memory that is used by Sybase to retain and manage pages that are currently being processed. By default, each database contains three caches:

- Data cache - retains most recently accessed data and index pages
- Procedure cache - retains most recently accessed stored procedure pages
- User transaction log cache - transaction log pages that have not yet been written to disk for each user

The size of each of these default caches is a configurable item which must be managed on a per DAAC basis. These caches may be increased or decreased by the DAAC DBA as needed.

The data cache can be further subdivided into named caches. A *named cache* is a block of memory that is named and used by the DBMS to store data pages for select tables and/or indexes. Assigning a database table to named cache causes accessed pages to be loaded into memory and retained. The named cache does not need to be allocated to accommodate the entire database table since the DBMS manages the cache according to use. Named caches greatly increase performance by eliminating the time associated for disk input and output (I/O). There are no named caches that are currently defined for the OMS Subsystem database. Named caches may be defined as the memory usage of the OMS database becomes more well known and the DAACs move into an operational environment. As named caches are defined this portion of the document will be updated.

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5. Database Security

5.1 Initial Users

The database security discussed within this section is bounded to security implementation within the Sybase SQL Server DBMS. A Sybase general approach to security is adopted as illustrated in Figure 5-1.

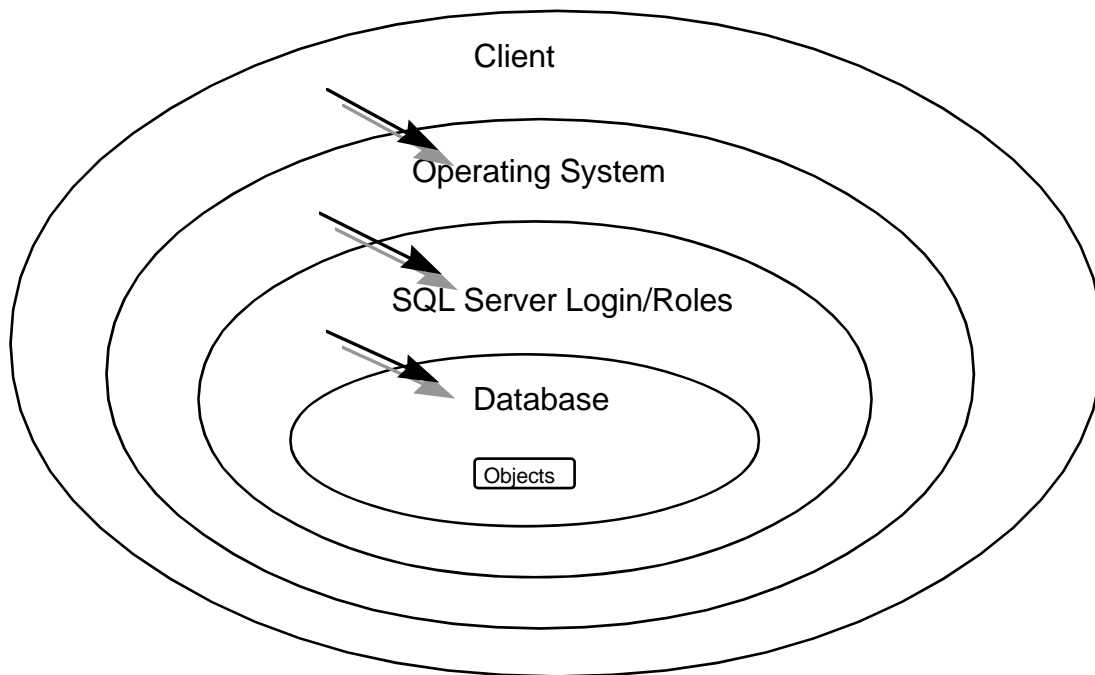


Figure 5-1. Sybase General Approach to SQL Server Security

The client (user) requires a SQL Server login to access the DBMS. The login is assigned to a user with certain related permissions for gaining access to particular objects (e.g., database tables, views, commands) within the database. The System Administrator may grant or revoke objects permissions for a login individually or based on defined group or roles.

Groups are a means of logically associating users with similar data access needs. Once a group has been defined, object and command permissions can be granted to that group. A user who is member of a group inherits all of the permissions granted to that group. No groups have been initially defined in the <SUBSYS> Subsystem “default database.

The DAACs should define database groups to support the database security requirements of their individual DAACs. Security for local DAAC users should be controlled by assigning each user to the appropriate group.

Roles were introduced in Sybase to allow a structured means for granting users the permissions needed to perform standard database administration activities and also provide a means for easily identifying such users. There are six pre-defined roles that may be assigned to a user. A definition of each of these roles follows, as well as a description of the types of activities that may be performed by each role.

System Administrator (*sa_role*): This role is used to grant a specific user permissions needed to perform standard system administrator duties including:

- installing SQL server and specific SQL server modules
- managing the allocation of physical storage
- tuning configuration parameters
- creating databases

Site Security Officer (*sso_role*): This role is used to grant a specific user the permissions needed to maintain SQL server security including:

- adding server logins
- administrating passwords
- managing the audit system
- granting users all roles except the *sa_role*

Operator (*oper_role*): This role is used to grant a specific user the permissions needed to perform standard functions for the database including:

- dumping transactions and databases
- loading transactions and databases

Navigator (*navigator_role*): This role is used to grant a specific user the permissions needed to manage the navigation server.

Replication (*replication_role*): This role is used to grant a specific user the permissions needed to manage the replication server.

Sybase Technical Support (*sybase_ts_role*): This role is used to grant a specific user the permissions needed to execute *database consistency checker (dbcc)*, a Sybase supplied utility supporting commands that are normally outside of the realm of routine system administrator activities.

The DAACs should review these roles and assign them to the appropriate login and/or groups.

5.2 Login/Group Object Permissions

During initial database installation logins used by the ECS custom code were created and permissions assigned for access to the OMS Subsystem database. In addition, special database installation login, oms_role, was created to support database installation needs. For each login, the level of access is limited to that associated with their login, group or assigned group/role. Object Permissions are set within the installation scripts of the OMS Subsystem for each object and group/role.

Permissions are identified in Table 5-1. A specification of the object permissions is contained in Table 5-2.

Table 5-1. Permission Key

| Permission | Description |
|------------|-------------|
| A | All |
| S | Select |
| I | Insert |
| U | Update |
| D | Delete |
| E | Execute |

Table 5-2. Object Permissions

| Group/Role | SYBASE LOGIN | Object | Permissions Granted | | | | | A | S |
|------------|----------------------|--------|---------------------|---|---|---|--|---|---|
| | | | I | U | D | E | | | |
| EMSgroup | EcDbEMSdataExtractor | | | | | | | | |
| software | EcCsMtMGateway | All | X | | | | | | |
| | EcDIActionDriver | | | | | | | | |
| | EcDICleanupDataPool | | | | | | | | |
| | EcDIDpmGUI | | | | | | | | |
| | EcDIInsertUtility | | | | | | | | |
| | EcDIWebAccess | | | | | | | | |
| | EcDmV0ToEcsGateway | | | | | | | | |
| | EcNbActionDriver | | | | | | | | |
| | EcNbSubscriptionCLI | | | | | | | | |
| | EcNbSubscriptionGUI | | | | | | | | |
| | EcOmGui | | | | | | | | |
| | EcOmOrderManager | | | | | | | | |
| | OmSrCliDriver | | | | | | | | |
| PDS_Group | PDS | | | | | | | | |

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6. Scripts

6.1 Installation Scripts

Scripts used to support installation of the OMS database are listed in Table 6-1. These scripts are found in the directory /ecs/formal/OMS/Database/scripts.

Table 6-1. Installation Scripts

| Script File | Description |
|--------------|---|
| EcOmDbBuild | Create a new initialized OMS database |
| EcOmDbPatch | Upgrade an existing <SUBSYS> database to the next valid database version level. |
| EcOmDbLogins | Adds login Ids needed by various OMS clients and applications. |
| EcOmBcpIn | Bulk copy data into all OMS tables. |
| EcOmBcpOut | Bulk copy data out from all OMS tables. |
| EcOmDbUser | Adds all groups and users to the OMS Database. |

6.2 De-Installation Scripts

Scripts used to support de-installation of the OMS Subsystem database are listed in Table 6-2.

Table 6-2. De-Installation Scripts

| Script File | Description |
|-------------|--|
| EcOmDbDrop | Drop all objects in the specified <SUBSYS> database. |

6.3 Backup and Recovery Scripts

Scripts used to perform backup and recovery of the OMS Subsystem database are listed in Table 6-3. These scripts should be configured to run automatically using the UNIX chron facility. It is recommended that, transaction logs dumps (incremental dumps) are performed a minimum of 3 times each day. It is recommended that database dumps (full database dumps) are performed a minimum of once each day. Backup and recovery are M&O activities. At their discretion, DAACs may modify these backup/recover scripts or utilize backup/recovery scripts developed by their local M&O staff.

Table 6-3. Backup/Recovery Scripts

| Script File | Description |
|--------------------|--|
| EcCoDbSyb_DumpDb | Dumps all databases for managed by the SQL server instance. |
| EcCoDbSyb_DumpTran | Dumps the transaction log for all databases managed by the SQL server. |

6.4 Miscellaneous Scripts

Miscellaneous scripts applicable to the SDSRV Subsystem database are listed in Table 6-4.

Table 6-4. Miscellaneous Scripts and Input Data Files

| Script | Description |
|-----------------------------|---|
| EcDdmMonitorServer | Monitors segment usage and user levels for a selected SQL server. Superseded by DbVision COTS. |
| EcDdmSegmentUse | Monitors segment usage. Used by EcDdmMonitorServer. Superseded by DbVision COTS. |
| EcDdmUserCounts | Monitors user access. Used by EcDdmMonitorServer. Superseded by DbVision COTS. |
| EcCoDbSyb_CkErrorLog | Checks the error log for error messages warranting DBO attention. Superseded by DbVision. |
| EcCoDbSyb_DbStat | Updates index statistics for each table in the selected database. |
| EcCoDbSyb_DboMail | Emails DBA error notification via e-mail. Used by EcCoDbSyb_DumpDb/Tran and EcCoDbSyb_CkErrorLog scripts. |
| EcOmCleanupOldData.ksh | Cleans up requests older than a given number of days. |
| EcOmRemoveOutOfSyncData.ksh | Remove requests that are out of sync. |

Abbreviations and Acronyms

| | |
|--------|--|
| ANSI | American National Standards Institute |
| ASCII | American Standard Code for Information Exchange |
| CASE | Computer Aided Software Engineering |
| CD | contractual delivery 213-001 |
| CDRL | contract data requirements list |
| CI | configuration item |
| CONFIG | Configuration Registry Subsystem |
| COTS | commercial off-the-shelf (hardware or software) |
| CSCI | computer software configuration item |
| DAAC | Distributed Active Archive Center |
| DBCC | Database Consistency Checker |
| DBMS | Database Management System |
| DCN | Document Change Notice |
| DID | data item description |
| DM | Data Management |
| DMS | Data Management Subsystem |
| ECS | EOSDIS Core System |
| EDC | EROS Data Center |
| EDHS | ECS Data Handling System |
| EMD | EOSDIS Maintenance & Development |
| EOSDIS | Earth Observing System Data and Information System |
| EROS | Earth Resources Observation System |
| ERD | Entity Relationship Diagram |
| ESDIS | Earth Science Data and Information System (GSFC) |
| ESDT | Earth science data types |
| ESN | EOSDIS Science Network (ECS) |
| FK | Foreign Key |

| | |
|---------|--|
| GSFC | Goddard Space Flight Center |
| GUI | graphic user interface |
| HDF | hierarchical data format |
| HDF-EOS | an EOS proposed standard for a specialized HDF data format |
| HTML | HyperText Markup Language |
| HTTP | Hypertext Transport Protocol |
| I/O | input/output |
| ICD | interface control document |
| INGST | Ingest Services CSCI |
| IOS | Interoperability Subsystem |
| LaRC | Langley Research Center (DAAC) |
| MB | Mega Bytes |
| MSS | Management Support Subsystem |
| N/A | not applicable |
| NAS | National Academy of Science |
| NASA | National Aeronautics and Space Administration |
| NSIDC | National Snow and Ice Data Center (DAAC) |
| ODL | Object Definition Language |
| OM | Order Manager |
| OMS | Order Manager System |
| PCF | Process Control File |
| PDF | Portable Document Format |
| PDPS | Planning and Data Processing Subsystem |
| PGE | Product Generation Executive |
| PK | Primary Key |
| QA | Quality Assurance |
| RDBMS | Relational Data Base Management System |
| SDSRV | Science Data Server CSCI |
| SQL | Structured Query Language |
| STMGT | Storage Management Software CSCI |

| | |
|--------|----------------------------|
| SUBSRV | Subscription Server |
| UID | Unique Identifier |
| URL | Universal Resource Locator |
| WWW | World-Wide Web |

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