

# 1. Model Management

## **Introduction:**

Approved versions of data models are stored in centrally controlled production model management libraries. Also, during the course of an application system project, data models that are undergoing development or change are periodically copied to development model libraries to meet backup storage and potential recovery needs.

NOTE: There are references within this section that refer the reader to the Operating Procedures and Guidelines section. Please download the Operating Procedures and Guidelines section to view these references.

All-Fusion's *Model Manager* software and shared disk drives host the libraries of CMS data models and project data management documents.

Contact [Data Administration](#) for assistance with activities described in this process.

The [Model Management diagram](#) depicts the milestones, control points, and deliverables as they occur during the following steps:

- [Granting Access Privileges to Model Management Libraries](#)
- [Model Management Procedures for Data Analysts & Database Administrators](#)
- [Production Change Control for Model Management](#)
- [Importing Data Model architecture to Metadata Repositories \(future topic\)](#)

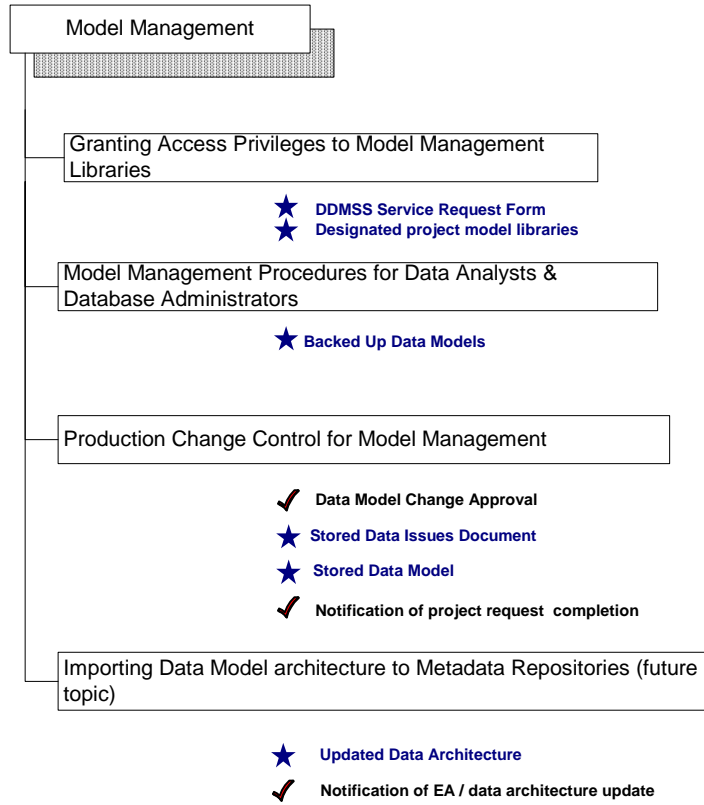
## **Key Deliverables:**

The *Model Management* process controls the following data artifacts:

- *Enterprise Data Model,*
- *Project Logical Data Models*
- *Physical Data Models*
- *Data Issues Documents*
- *Model Change Control Approval Documents*

# Exhibit 1. Model Management Process Diagram

## Model Management Process



★ *Controlled Artifact / Deliverable*

✔ *Data Model Control Point*

## 1.1. Granting Access Privileges to Model Management Libraries

### Introduction:

This process describes how access privileges to data model management libraries are requested and granted.

- [Complete a Project Data Model Library Access Request](#)
  - [DM OP- 027 Operating Procedure for Granting Project Data Model Library Access](#)
  - [DM OP- 028 Operating Procedure for Naming and Describing Data Models](#)

### Deliverable(s):

- A completed Data Service Request Form
- Designated libraries for project data models and documents, initialized with baseline data models

### 1.1.1 Complete a Project Data Model Library Access Request

- |                                       |   |
|---------------------------------------|---|
| <i>Project Manager</i>                | <p>A. The request access to provide project data model libraries is made by completing information in the <i>Data Service Request</i>. This form is usually submitted at the initial contact with DDMSS and routed to the <i>Model Management Administrator</i>.</p> <p>The Data Service Request procedure and form is available from the main Data Administration web page.</p>  |
| <i>Model Management Administrator</i> | <p>B. Accept authorized requests for data model library access. Two (2) libraries, one development and one production, are to be designated for each application project. Create the libraries if they do not exist in the <i>Model Manager</i> environment following <a href="#">DM OP- 027 Operating Procedure for Granting Project Data Model Library Access</a>.</p> <p>The <i>Model Manager</i> software automatically captures the userid of the library creator, the creation date, and the last update date of the library.</p> |
| <i>Model Management Administrator</i> | <p>C. Grant the requested library access.</p> <ul style="list-style-type: none"><li>▪ Add the specified individuals as <i>Model Manager</i> users.</li><li>▪ Assign the appropriate security profile to the user id.</li><li>▪ Modify the security profile to grant the requested access to designated model libraries.</li></ul>   |

*Model Management  
Administrator*

D. If previous approved versions of the project's models exist, initialize each application or enterprise project library with the most recent logical and physical models. The models are to conform to the conventions outlined in [DM OP- 028 Operating Procedure for Creating Data Models](#). Application projects that have split development into sub-project *phases* are exceptions to this rule. In such cases, store 2 models for each phase in the same library and differentiate them by phase name. Previous model versions can still be accessed in *Model Manager*.

*Model Management  
Administrator*

E. Notify the project's manager, project data analysts, and database administrators by e-mail message that model library privileges have been granted.

## *1.2. Model Management Steps for Data Analysts & Database Administrators*

### **Introduction:**

This process describes routine uses of CMS's chosen model management software – AllFusion *Model Manager*.

NOTE: This document is not a replacement for *Model Manager's* HELP function, which remains the appropriate reference for specific software features.

The following section describes project-level model management activities:

- [Model Management Steps for Data Analysts and Database Administrators](#)

### **1.2.1 Model Management Procedures for Data Analysts and Database Administrators**

- A. [Roles in Model Management](#)
- B. [Connecting to Model Manager](#)
- C. [Creating a new Data Model from a Data Model Template](#)
- D. [Checking diagrams into Model Manager development libraries](#)
- E. [Checking diagrams out of Model Manager, saving to an external file](#)
- F. [Checking externally changed diagrams back into Model Manager development libraries](#)
- G. [Managing Change in Model Manager](#)
- H. [Copying diagrams in Model Manager](#)
- I. [Creating Subject Areas in Model Manager Diagrams](#)
- J. [Periodic Library Update of Data Models for active projects](#)

#### **A. Roles in Model Management**

The individual roles for project data model management are:

1. The *Model Manager Administrator* is responsible for creating libraries, storing approved data models, and granting library access privileges.
2. *Project Data Analysts* and *Project Database Administrators* have the responsibility for change management within the development libraries.
3. Only one individual from the project team will be the appointed *Physical Model Manager* and be granted access for storing and managing physical data models.

## B. *Connecting to Model Manager*

1. Using Erwin, Activate *Model Manager* from the Windows program list or through the *Model Manager* icon on the data modeling software toolbar.
2. Once the *Model Manager* logon screen is displayed, type the LAN ID in the Login field, the assigned password in the *Password* field.
3. Select *SQL Server 2000* (using db-lib) in the Host DBMS drop down box.
4. Type *conds04\sql2000* in the DBMS connection box.
5. Type *Modelmanager* in the Master database box.
6. Click *connect*.

## C. *Creating a new Data Model from a Data Model Template*

1. Connect to *Model Manager* to start a new data model from a *template* that includes DDMSS recommended data model formats.
2. Select *File* from the main menu then, *New* from the drop-down menu.
3. Select the *Model Manager* button at the bottom of the *ERwin Template* dialog box.
4. Select the *Enterprise* library from the library list.
5. Select the appropriate data model template.
6. Click *OK*, to open a new model diagram based on the template chosen.

## D. *Checking diagrams into Model Manager development libraries*

1. Open the *.ERI* file for the diagram that is to be loaded into *Model Manager*.
2. Select *Model Manager* from the main menu and *Save to Model Manager* or select the *Save Model Manager Diagram* icon on the *Model Manager* toolbar.
3. Select the library in which the diagram is to be stored.

See [\*DM OP- 028 Operating Procedure for Naming and Defining Data Models\*](#). Then, type in the appropriate model name and description. Click *OK*, to save the model in Model Manager.

#### E. Checking Diagrams out of Model Manager, Saving to an external .ER1 file

1. Connect to *Model Manager* then choose *Open Model Diagram*, or select *Open Model Manager Diagram* icon from the toolbar.
2. Select the library where the diagram is located.
3. Select the model to be checked out.
4. Select the security option according to project circumstances and possible impact to other users of the model, choosing from *Unlocked*, *Locked*, or *Read Only* options then click *OK*.

If the model is to be changed, perform steps 5-9 to save the model to a project location outside of *Model Manager*.

5. Close the Model Manager diagram by selecting *Model Manager* from the main menu and then choose *Close Model Manager Diagram*.
6. Select *Save as .ER1 file* when the Close Diagram window appears.
7. Select *Keep Model Manager Diagram Lock* if the diagram is locked and no other users should be allowed to save the same model or sub-model until the lock is released. Select *OK*.
8. Modify or accept the name of the snapshot that is to be used for a later merge. Select *OK*.
9. Select the name of the drive and directory where the .ER1 file is to be saved. Select *OK*.

#### F. Checking externally changed diagrams back into Model Manager development libraries

1. Connect to *Model Manager* when ready to check a diagram back into *Model Manager*.
2. Select *Model Manager* from the main menu and then choose *Save to Model Manager*, or select the *Save Model Manager Diagram* icon from the Model Manager toolbar.
3. Select *Yes* when asked if snapshot is to be used.
4. Check *Review all Changes Before Save*. Select *OK*.
5. Review changes made and if necessary, make modifications.
6. When ready, commit changes to the model.
7. When asked if snapshot is to be deleted, select *Yes*.

#### G. Managing Change in Model Manager

1. Model Manager has several facilities for managing change and resolving change conflicts. Refer to the *Model Manager* and *ERwin* HELP function for details on how to use these facilities.

#### H. Copying diagrams in Model Manager

1. Open the *Model Manager* diagram that is to be copied.
2. Select *Model Manager* from the main menu, and then choose *Model Manager Save As*.
3. Select the library to which the copy is to be saved.
4. Enter the full name of the new diagram. Select *OK*.

### I. Creating Subject Areas in Model Manager Diagrams

1. Connect to Model Manager.
2. Select *Model Manager* from the main menu and then choose *Model Manager Subject Area Manager*, or select the *Manage Model Manager Subject Areas* icon from the Model Manager toolbar.
3. Select the library where the diagram is located.
4. Select the model from which a subject area will be created or modified.
5. Rename or delete the subject area if needed.
6. If needed, enter a new subject area name for the new subject area, and select *OK*.
7. Select the entities that are to be included in the new subject area, and then select *OK*.

### J. Periodic Updates of Diagrams to Model Manager Libraries for active projects

1. Project personnel, who are changing data models are responsible for storing the most recent project models to the *Model Manager* development libraries at least once every 2 weeks. Offsite projects must coordinate with the Central Data Administrator to ensure that models are backed up and available for potential recovery needs.

## ***1.3. Production Change Control for Model Management***

### **Introduction:**

The following activities describe *Model Manager Administration* activities for production change control of data models.

- [Confirm approval for Data Models](#)
  - **DM OP-024 Operating Procedure for Validation of Data Models based on Business Data Views**
- [Check approved diagrams into Model Manager Production Libraries](#)

### **Deliverable(s):**

- Approved project data models are stored in *Model Manager* production libraries
- Project *Data Issue Documents* and Change Control approval documents stored in the *Change Control Library*.

### **1.3.1 Confirm approval for Data Models**

*Project Data Analyst /  
Database Administrator*

A. Forward the approved data model, approval confirmation message, and related Data Issues Documents to the *Model Management Administrator*.

*Model Management  
Administrator*

B. Accept approved requests for moving data models to production libraries in accordance with **DM OP-024 Operating Procedure for Approval of Data Models based on Business Data Views**.



### 1.3.2 Check approved diagrams into Model Manager Production Libraries

*Model Management Administrator*

- A. If the newly approved data model replaces a previously approved version of the model, update the description for the previous model version to state “obsolete approved” rather than “current approved”.

*Model Management Administrator*

- B. After adding “current approved” to the model description, move the new approved model version to the *Model Manager* production libraries.

Note: All ‘approved’ models, both current and obsolete, are kept in the production model libraries to facilitate change comparison tracking.

*Model Management Administrator*

- C. Store project *Data Issue Documents* and change control approval documents in the project’s folder in the *Change Control Library*.

*Model Management Administrator*

- D. Notify the Project Manager, Project Data Analysts and Project Database Administrators when the model has been successfully stored in production libraries.

### *1.4. Importing Data Model architecture to Metadata Repositories*

#### **Introduction:**

Changes to the Data Models result in changes to the overall CMS data architecture. The *Metadata Repository Administrator* shall update the metadata repository to reflect the changes.

#### **Deliverable(s):**

Metadata stored in an organized, searchable, and sharable format.