

Understanding EDMInformation

CADD5[®] Revision 9.0

DOC36813-002

The information and drawings contained herein are the sole property of Computervision Corporation, or its third party licensor, furnished under license only, and authorized for use only by the licensee. Use of this document is reserved exclusively for Computervision customers and personnel, and is provided under license only.

Reproduction or distribution of this material in whole or in part is forbidden without the express written consent of Computervision Corporation. Copyright ©1994 Computervision Corporation. Unpublished-rights reserved under the copyright laws of the United States.

Use, duplication, or disclosure by the Government is subject to restrictions as set forth in subparagraph (c)(1)(ii) of the Rights in Technical Data and Computer Software clause at DFARS 252.227-7013 or FAR52.227-19(c)(1) and (2), as applicable. Contractor is Computervision Corp. Bedford, MA 01730

The following trademarks of Computervision Corporation are registered with the USPTO:

Advanced Surface Design, CADDs, CADDShade, Computervision, CV-COMPUTERVISION Logo, CV (stylized letters), CVMOS, CVware, Designer, HARNESSDESIGN, MEDUSA, microDRAFT, Personal Designer, Personal Machinist and VersaCAD.

The following are trademarks of Computervision Corporation:

CV, CVaec, CVdesign, CV-DORS, CV-GEAR, CV Liberator, CVMAC, CVNC, CVselect, DesignView, DIMENSION III, EDMClient, EDMControl, EDMNavigator, EDMVault, ISSM, MEDEA, MEDUSA DESIGN, PlasticsLab, Product Structure Navigator, STRESSLAB, ThermaLab, VirtualStation. Computervision Services is a service mark of Computervision Corporation.

The following are trademarks of others:

- ALPHA, DEC, DECstation, ULTRIX and VAX are trademarks of Digital Equipment Corporation.
- Apollo, Hewlett Packard, HP, HP-GL/2 and HP-UX are trademarks of Hewlett-Packard Company.
- BRAVO is a trademark of Schlumberger Technologies, Inc.
- CADAM is a trademark of Cadam, Inc.
- CADRA-III is a trademark of Adra Systems, Inc.
- CalComp is a trademark of Calcomp, Inc.
- CATIA is a trademark of Dassault Systems, Inc.
- DAZIX and Intergraph are trademarks of Intergraph Corporation.
- HOOPS is a trademark of Autodesk, Inc.
- Inventor and IRIS are trademarks of Silicon Graphics, Inc.
- Interleaf is a trademark of Interleaf, Inc.
- MICROSOFT and WINDOWS are trademarks of Microsoft Corporation.
- MicroStation is a trademark of Bentley Systems, an Intergraph affiliate.
- Motorola is a trademark of Motorola, Inc.
- PATRAN is a trademark of PDA Engineering.
- PostScript is a trademark of Adobe Systems, Inc.
- SDRC is a trademark of Structural Dynamics Research Corporation.
- SmartCAM is a trademark of Point Control Company.
- SPARC and SPARCclassic are trademarks of SPARC International.
- Sun, OpenWindows, Solaris, SPARCstation and SunOS are trademarks of Sun Microsystems, Inc.
- UNIGRAPHICS is a trademark of McDonnell Douglas Corporation.
- UNIX is a trademark of UNIX System Laboratories, a subsidiary of Novell, Inc.
- Valisys is a trademark of the Valisys Corporation.
- Versatec is a trademark of Versatec, Inc.
- X Window System is a trademark of Massachusetts Institute of Technology.

Other marks are trademarks of their respective owners.

Table of Contents

Preface

Your Comments _____	vii
Online User Documentation _____	vii
Related Documents _____	vii
Book Conventions _____	viii

Introduction to EDMInformation

What Is EDMInformation? _____	1-2
Attribute Data Managed by EDMInformation _____	1-2
What EDMInformation Can Do with Attribute Data _____	1-4
Why Use EDMInformation? _____	1-5
How EDMInformation Works with Other Products _____	1-6
EDM _____	1-6
Concurrent Assembly Mock-Up _____	1-6
CADDs _____	1-7
EDMControl _____	1-7
RDBMS _____	1-7

EDMInformation Features

Overview of EDMInformation Features _____	2-2
Using RDBMS Technology to Store Attributes _____	2-3

Taking Advantage of the RDBMS _____	2-3
EDMInformation Associated Database _____	2-4
Storing Attribute Data in a Corporate Database _____	2-4
EDMInformation Work Table _____	2-4
Using the Work Table to Batch EDMInformation Functions _____	2-5
Creating, Editing, and Deleting Attributes _____	2-6
Linking Parts to the Associated Database _____	2-6
Associated Attributes _____	2-6
CADDs Nongraphic Attributes _____	2-6
Creating Labels from Attributes _____	2-7
Extracting and Updating Part Data _____	2-8
Highlighting Entities Based on Attribute Conditions _____	2-9
Generating Reports _____	2-10
Predefined Queries _____	2-10
Interactive Queries _____	2-11
Customizing Reports _____	2-11
Example of an Interactive Query _____	2-12
EDMInformation Graphical User Interface _____	2-13
Accessing the EDMInformation Graphical User Interface _____	2-13
Example of an EDMInformation Property Sheet _____	2-13
Customizing EDMInformation _____	2-15
Creating Customized Applications _____	2-15
Using the Work Table and Scripts to Perform Multiple Operations _____	2-15
Using the Work Table and Scripts with Other RDBMS Products _____	2-16
Customizing the Graphical User Interface _____	2-16

EDMInformation Task Flow

EDMInformation Users _____	3-2
Administrator _____	3-2

End Users _____	3-2
Task Flow - EDMInformation Administrator _____	3-4
Task Flow - EDMInformation End User _____	3-5

Glossary

Preface

This manual provides the following:

- Description of what EDMInformation does and the benefits to be gained by using it
- Description of EDMInformation features
- Definition of the two main types of users for EDMInformation and the tasks each performs
- Glossary of EDMInformation terms

Your Comments

We welcome your suggestions and comments about this or any other documentation. Send your comments in e-mail to `doc_input@cvbnet`

Online User Documentation

Online documentation is provided in HTML. PostScript files of each book in the online collection are also provided. You can print the PostScript files for hard copy books. The documentation media contains the PostScript files.

Related Documents

The following documents may be helpful as you use *Understanding EDMInformation*:

- *EDMInformation User Guide and Menu Reference*
- *EDMInformation Administrator Guide*

Book Conventions

The following table illustrates and explains conventions used in writing about CADDs applications.

Use of the Convention	Examples	Explanation
Menu selections and options	List Section option, Specify Layer field, File menu	Indicates a selection you must make from a menu or property sheet or a text field that you must fill in.
User-selected graphic location	X, d ₁ or P1	Marks a location or entity selection in graphic examples.
User input in CADDs text fields and on any command line	<code>cvaec.hd.data.param</code> <code>tar -xvf /dev/rst0</code>	Enter the text in a CADDs text field or on any command line.
System output	<code>Binary transfer complete.</code>	Indicates system responses in the CADDs text window or on any command line.
Variable in user input	<code>tar -cvf /dev/rst0 filename</code>	Replace the variable with an appropriate substitute; for example, replace filename with an actual file name.
Variable in text	tagname	Indicates a variable that requires an appropriate substitute when used in a real operation; for example, replace tagname with an actual tag name.
CADDs commands and modifiers	INSERT LINE TANTO	Shows CADDs commands and modifiers as they appear in the command line interface.
Text string	"SRFGROUPA" or 'SRFGROUPA'	Shows text strings. You must enclose text string with single or double quotation marks.
Integer	<i>n</i>	Supply an integer for the <i>n</i> .
Real number	<i>x</i>	Supply a real number for the <i>x</i> .
#	# <code>mkdir /cdrom</code>	Indicates the root (superuser) prompt on command lines.
%	% <code>rlogin remote_system_name</code> <code>-l root</code>	Indicates the C shell prompt on command lines.
\$	\$ <code>rlogin remote_system_name</code> <code>-l root</code>	Indicates the Bourne shell prompt on command lines.

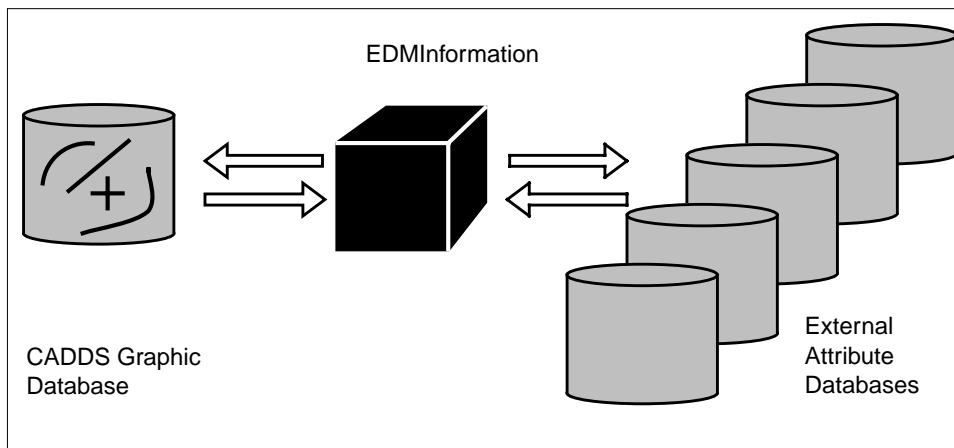
Introduction to EDMInformation

This chapter provides an overview of what EDMInformation does, why you would want to use it, and how it works with other company products.

- What Is EDMInformation?
- What EDMInformation Can Do with Attribute Data
- Why Use EDMInformation?
- How EDMInformation Works with Other Products

What Is EDMInformation?

EDMInformation is an attribute management system that provides tools for the storage, maintenance, and retrieval of attribute data associated with CADDs models and drawings. The following illustration shows EDMInformation connecting the graphic database to attribute data stored in external databases.



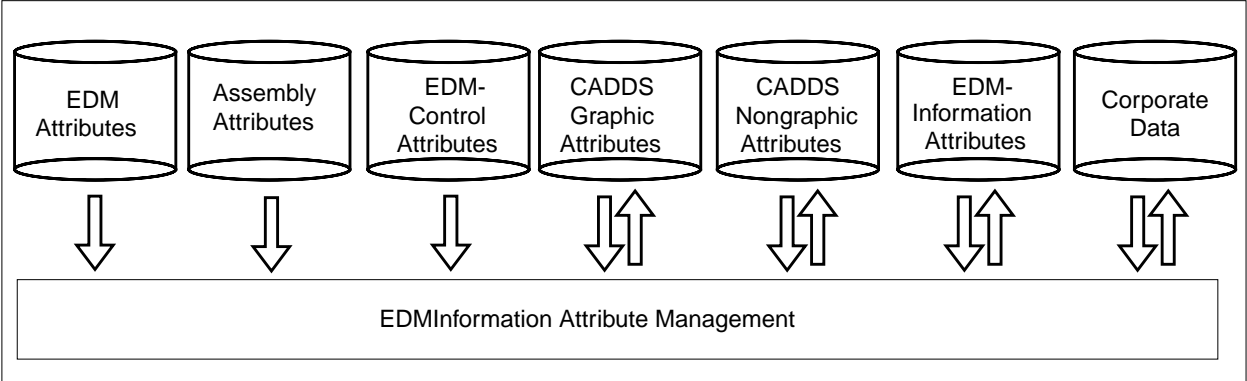
EDMInformation is integrated with other company products (Concurrent Assembly Mock-Up, EDMControl, EDM) to provide a complete data management and project integration solution.

Attribute Data Managed by EDMInformation

Attribute data associated with CADDs models and drawings can be stored in many databases. EDMInformation gives you concurrent access to the following attribute data:

- CADDs nongraphic attributes (also known as CADDs properties)
- Attributes stored in the EDMInformation associated database
- CADDs graphic attributes (for example, layer number and coordinate values)
- Concurrent Assembly Mock-Up attributes (CAMU attributes could include cost, material, and supplier, for example)
- EDM file attributes (for example, user ID that last updated the file, revision, date of last incremental backup)
- EDMControl attributes (for example, disciplines and zones)
- Attributes stored in the corporate database

The figure below shows the databases where CADDs attribute data can be stored. EDMInformation can read attribute data from all these databases (as indicated by the down-pointing arrows). EDMInformation can also write attribute data to many of these databases (indicated by the upward-pointing arrows).



What EDMInformation Can Do with Attribute Data

With EDMInformation, you can act on attributes as follows:

- Create, edit, and delete attributes stored in the RDBMS (both the EDMInformation associated database and the corporate database)
- Create, edit, and delete CADDs nongraphic attributes stored in the CADDs part database
- Relate existing attributes in a corporate database to CADDs entities
- Create labels from attributes
- Extract and update part data
- Highlight graphic entities based on attribute conditions
- Generate reports, such as Bills of Materials, inventories, and schedules from any combination of attributes from multiple database sources

Each of these EDMInformation features is described in more detail in Chapter 2, “EDMInformation Features.”

Why Use EDMInformation?

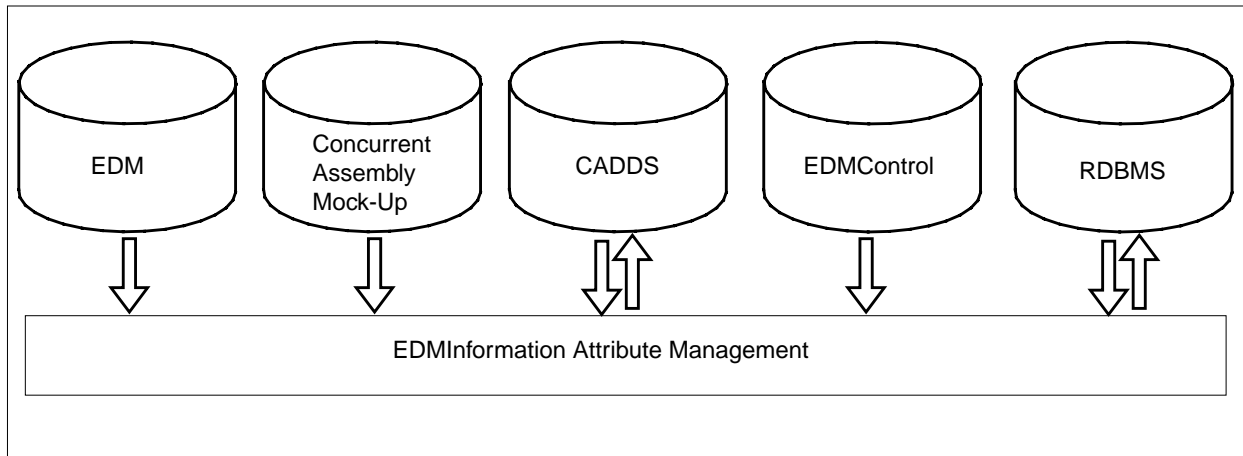
The table below lists some typical attribute data management problems and how EDMInformation solves these problems.

Attribute Data Management Problem		EDMInformation Solution
Storing attribute data	Large amount of attribute data to store	Attribute data stored in RDBMS tables, providing easy access to and efficient storage of attribute data
	Attribute data resides in different databases (CADDs, EDM, Concurrent Assembly Mock-Up)	Easy, concurrent access to attribute data from all these databases
Reporting attribute data	Duplicate attribute data stored in CADDs and in other databases	Attribute data stored in RDBMS linked to CADDs, avoiding duplication
	Creating formatted reports from attribute data stored in CADDs and in other databases	Reports easily generated from any combination of attributes from multiple database sources
Using attribute data to act on CADDs parts	Using parts catalog data for reporting purposes	Parts catalog data can be linked to graphic data to create reports
	Updating graphic model and drawing data based on attribute search criteria	Can select entities by attribute condition and then update them
	Creating text labels in the CADDs part from attribute data	Text labels automatically generated and updated from attribute data retrieved from multiple sources
	Highlighting graphic entities in the part based on attribute conditions	Select any attribute data you want and highlight the entities with those attributes

How EDMInformation Works with Other Products

EDMInformation works with other PTC products and a relational database management system to provide a complete data management and project integration solution.

The following figure shows how EDMInformation relates to other products. The arrows illustrate read and write access privileges.



The networking used between EDMInformation and these other products is based on the TCP/IP (Transmission Control Protocol/Internet Protocol) communication protocol.

EDM

EDM is engineering data management software that stores, catalogs, and retrieves engineering data files. EDMVault centralizes storage for multiple types of files and controls data access in a distributed environment. If you are using EDM, EDMInformation reads EDM file attributes from EDMVault.

Concurrent Assembly Mock-Up

Concurrent Assembly Mock-Up is used to speed the design of large mechanical assemblies by allowing you to perform top-down design in a multiuser environment. If you are using Concurrent Assembly Mock-Up, EDMInformation reads the attributes assigned to assemblies, subassemblies, and their components.

CADDS

EDMInformation reads from and writes to the CADDs database. It can create nongraphic attributes or edit and delete existing attributes. EDMInformation also reads graphic information about entities and graphically highlights entities.

EDMControl

Using EDMInformation, EDMControl integrates project data stored in part databases and the associated database. EDMInformation reads project data and snapshots (versions of work parts) managed by EDMControl.

RDBMS

EDMInformation reads and writes to RDBMS tables (EDMInformation associated database tables and corporate database tables). The data dictionary (one of the associated database tables) defines rules for looking up information in the corporate database tables.

This chapter describes the major features of EDMInformation.

- Overview of EDMInformation Features
- Using RDBMS Technology to Store Attributes
- Creating, Editing, and Deleting Attributes
- Creating Labels from Attributes
- Extracting and Updating Part Data
- Highlighting Entities Based on Attribute Conditions
- Generating Reports
- EDMInformation Graphical User Interface
- Customizing EDMInformation

Overview of EDMInformation Features

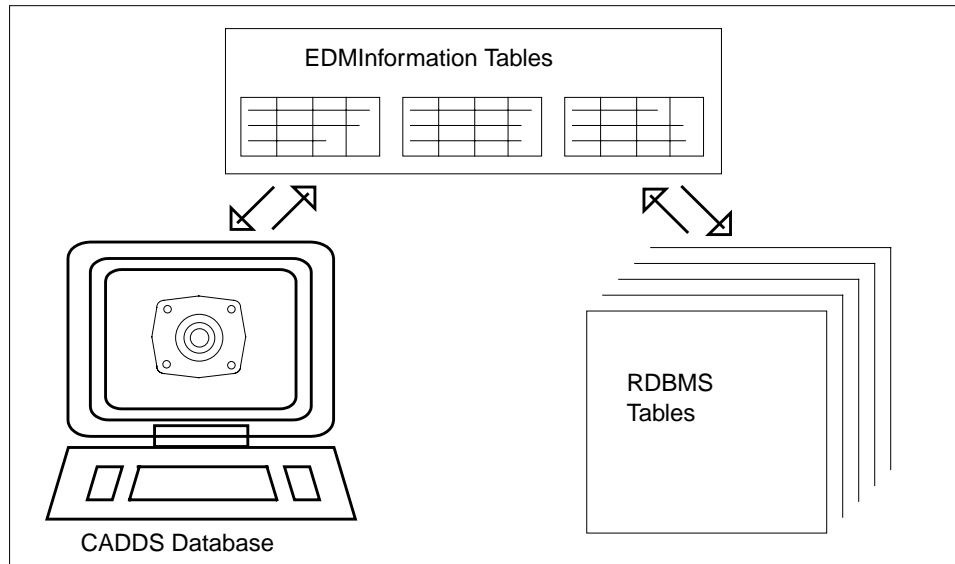
EDMInformation provides the following features:

- Transparent storage of large quantities of nongraphic attribute data in RDBMS tables. This allows access to both CADDs and non-CADDs users, thus eliminating duplication of attribute data inside and outside CADDs.
- Ability to create, edit, and delete nongraphic attributes stored in RDBMS tables (or in the part database, if you choose).
- Creation of text labels from attributes.
- Extraction of part data from CADDs into an RDBMS table and the ability to update that part data from modified data in the table.
- Highlighting of graphic entities based on attribute conditions.
- Report generation from any combination of attributes from multiple database sources. With EDMInformation you can create any kind of report, including Bills of Materials, inventories, and schedules.
- Sophisticated, easy-to-use graphical user interface to EDMInformation functions.
- Ability to customize and extend the product through the use of the associated RDBMS and scripts.

These features are described in this chapter.

Using RDBMS Technology to Store Attributes

EDMInformation provides a link between CADDSS and an RDBMS, as illustrated in the figure below. It uses SQL (Structured Query Language) to retrieve data from the RDBMS tables.



Taking Advantage of the RDBMS

The CADDSS database is a nonrelational database designed for the storage of graphic data. This type of database is less efficient for storing and maintaining nongraphic attribute data. An RDBMS, which stores information in simple, two-dimensional tables, efficiently manages large quantities of nongraphic data, such as CADDSS attributes.

By allowing data retrieval from within CADDSS or directly from the RDBMS, EDMInformation provides open access to CADDSS attribute data. The CADDSS user does not need to learn about RDBMS technology or SQL; the RDBMS user does not need to learn CADDSS.

Because EDMInformation relays data between the CADDSS database and the RDBMS, you no longer need to maintain duplicate information inside and outside CADDSS. By maintaining one source for attribute data, EDMInformation promotes data integrity.

EDMInformation Associated Database

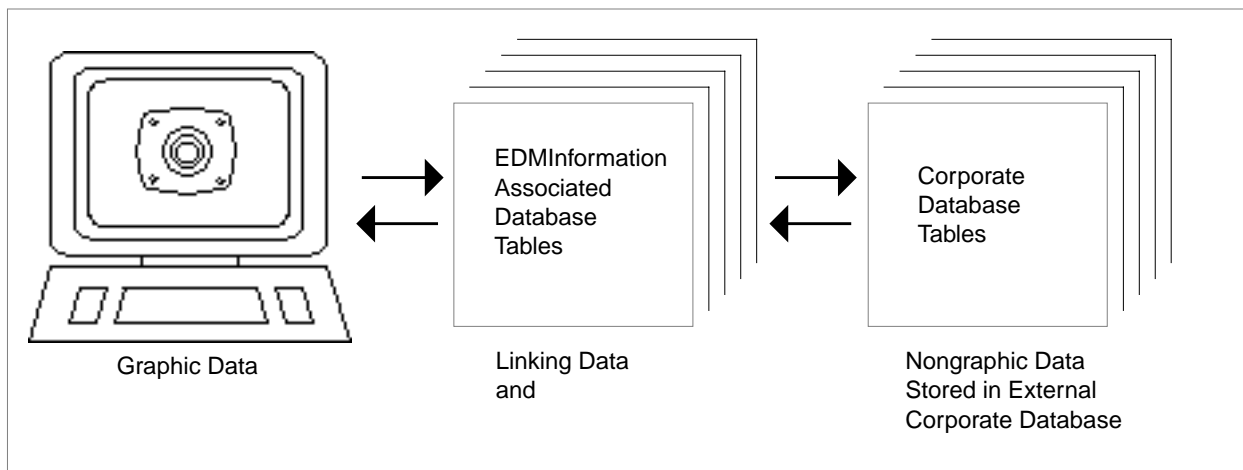
The predefined RDBMS tables installed with EDMInformation are collectively known as the associated database. Among other things, the tables in the associated database do the following:

- Store nongraphic attribute data
- Store data linking CADDSS graphic entities to nongraphic attribute data stored within the associated database or in a corporate RDBMS

Storing Attribute Data in a Corporate Database

One table in the associated database is known as the data dictionary. This table can be used to access and store information in corporate database tables.

You can store all nongraphic attributes in the EDMInformation associated database. (Graphic data is stored in CADDSS parts.) However, if you wish to store some or all nongraphic attributes in external corporate database tables, EDMInformation relays data between its associated database and the corporate database. This is illustrated in the figure below.



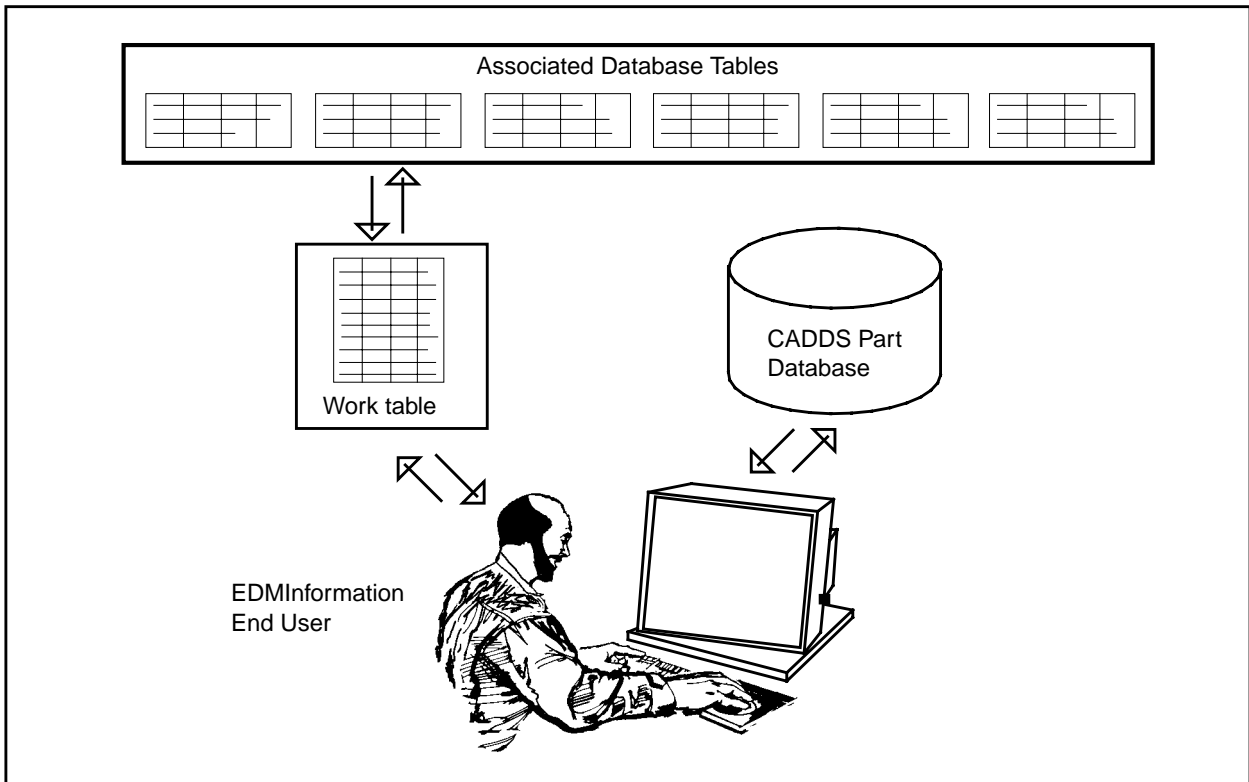
You can use the corporate database to store attributes that can be assigned to CADDSS entities or parts as needed. That is, you can create attributes in the corporate database, then later link the attribute data to the appropriate CADDSS part or entity.

EDMInformation Work Table

Each EDMInformation end user is assigned an RDBMS table called the work table. The work table acts as a temporary buffer to hold data associated with the

current EDMInformation operation. Through the work table, the EDMInformation end user accesses the associated database.

The figure below illustrates the interaction of the work table with the associated database and the CADDSS part database.



Using the Work Table to Batch EDMInformation Functions

The work table can be used to store graphic and nongraphic data and then perform an action on that data. For example, you store in the work table all entities with the attribute STOCKNO 4567 and then move all these entities to layer 210. Or, you store in the work table all entities with the attribute SAE TYPE BOLT and add an attribute value for SUPPLIER to all of them.

Creating, Editing, and Deleting Attributes

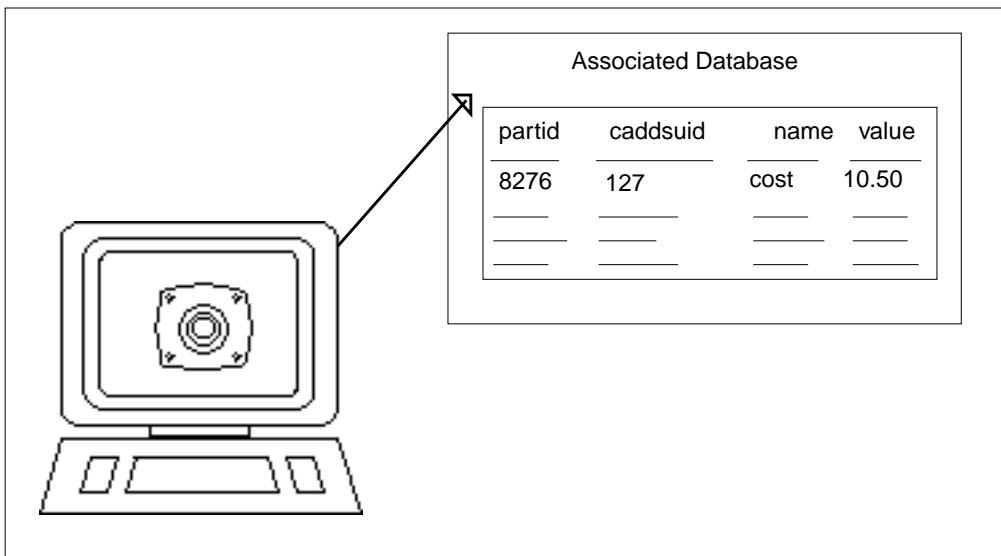
EDMInformation allows you to create, edit, and delete CADDs nongraphic attributes. You choose whether to store these attributes in the associated database or in the CADDs part database.

Linking Parts to the Associated Database

To manage a part's attribute data, that part must be "linked" to the associated database. EDMInformation creates a unique identifier (partid) for the part. The partid is used to track all attribute data associated with the part. Parts can be linked to a project coordinate system origin with an offset from the part coordinate system origin.

Associated Attributes

EDMInformation allows you to create and edit associated attributes for an existing graphic entity or CADDs part. These attributes are stored in the associated database. You can delete attributes from the associated database. When you delete an entity within CADDs, its attributes are deleted from the associated database.



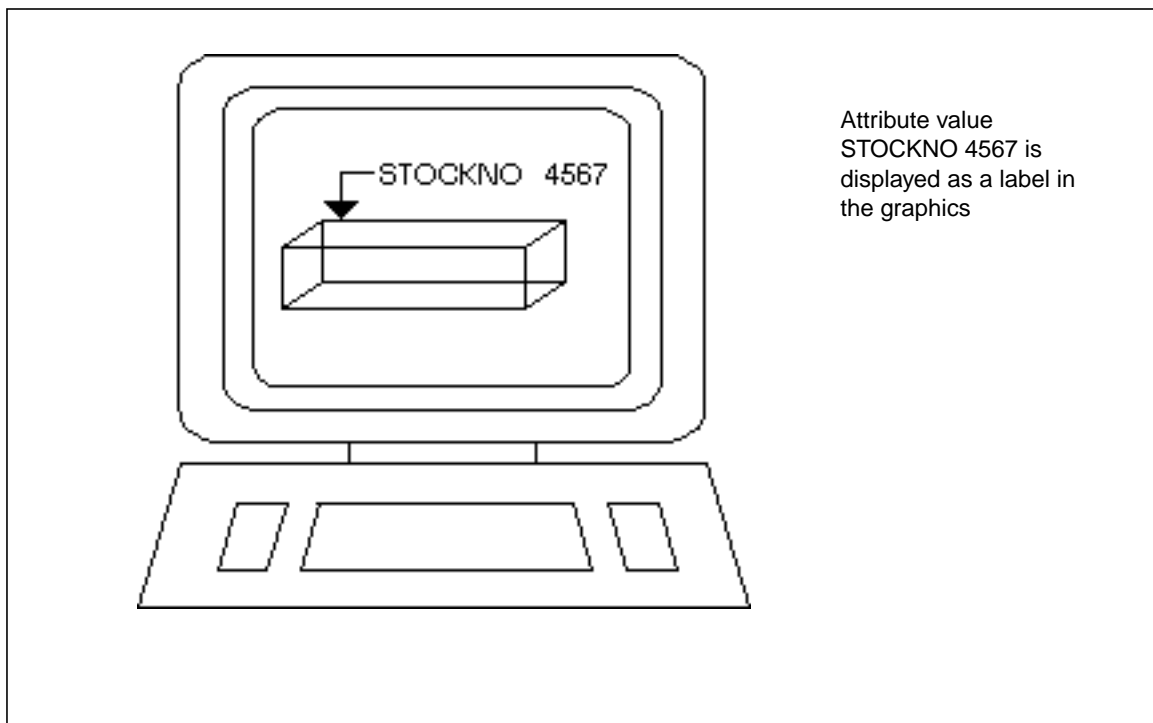
CADDs Nongraphic Attributes

EDMInformation allows you to create, edit, and delete CADDs attributes that are stored in the CADDs database. These attributes are also known as CADDs properties. They can be assigned to a part or to an individual entity.

Creating Labels from Attributes

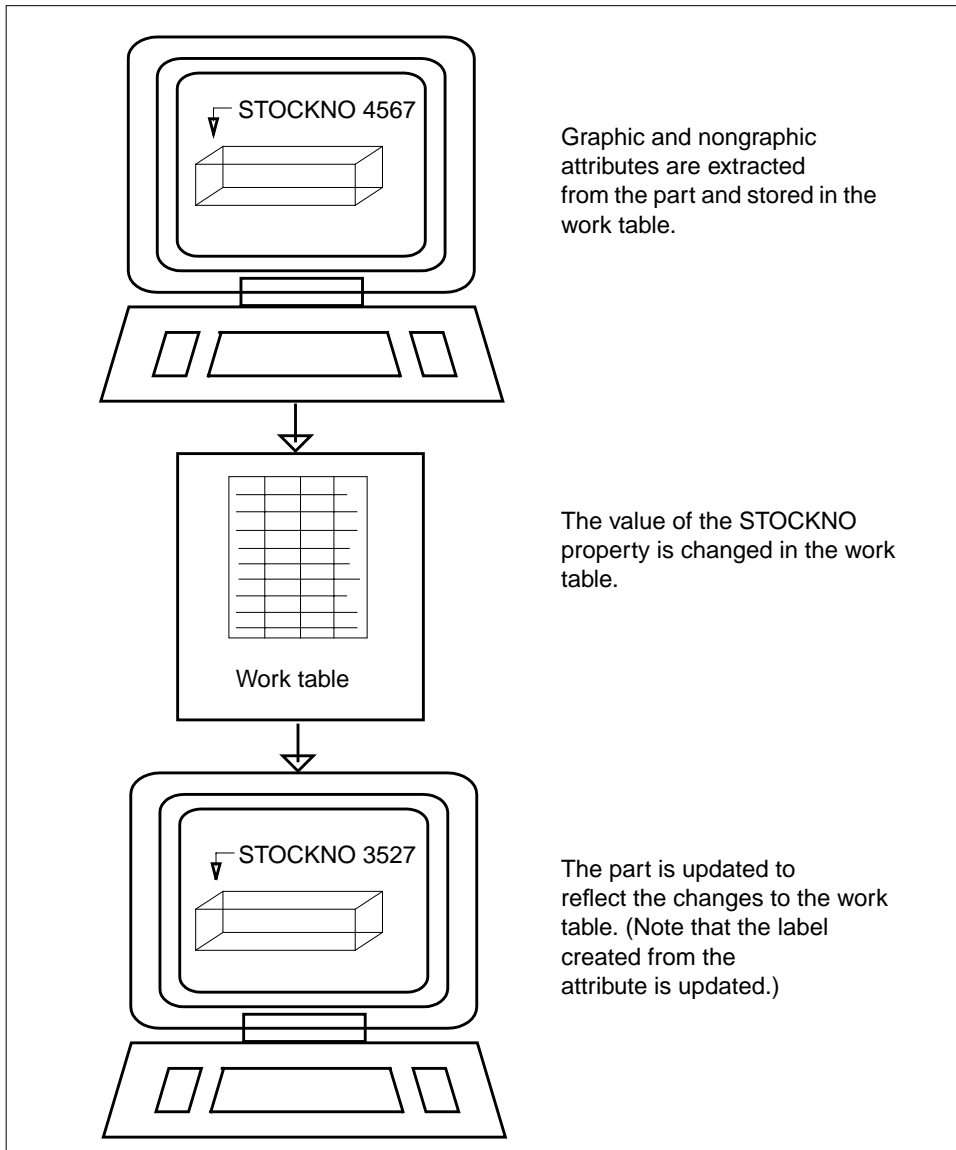
EDMInformation allows you to create text labels from CADD5 graphic and nongraphic attributes, associated attributes, Concurrent Assembly Mock-Up attributes, and EDM file attributes. These labels are associated with the related entity; if the entity is deleted, the label is removed.

Labels are automatically updated when you edit the nongraphic attribute value displayed in the label. You can also edit labels with CADD5 Premium Engineering or Design and Drafting. The following illustration shows a graphic display annotated with a label generated from a nongraphic attribute.



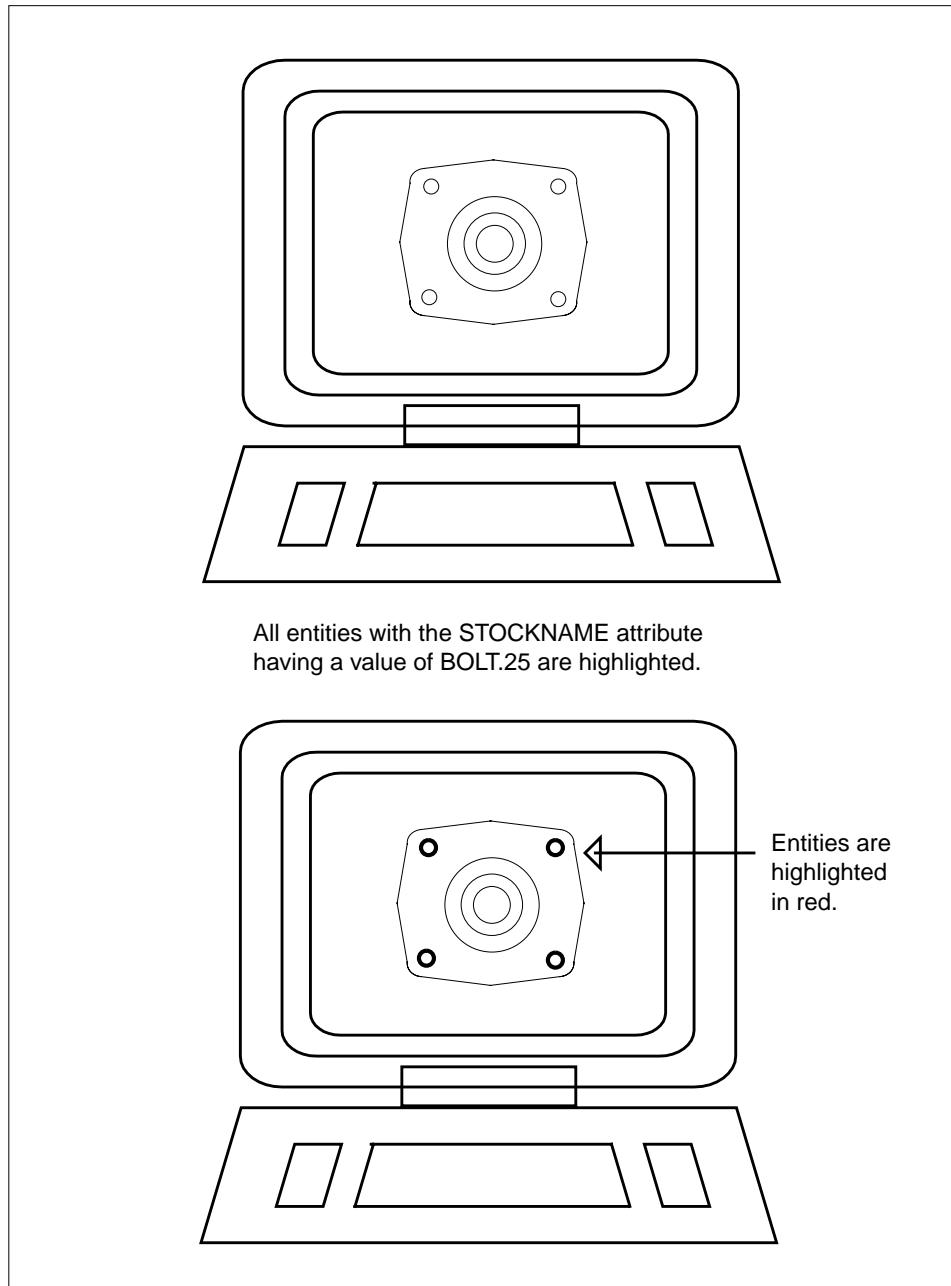
Extracting and Updating Part Data

You can extract graphic and nongraphic attributes directly from CADDs entities and store the information in the work table. All CADDs entities are supported. You can then modify data in the work table and update the part based on those changes.



Highlighting Entities Based on Attribute Conditions

You can graphically highlight and dehighlight graphic entities based on associated database attribute or CADDs nongraphic attribute conditions. You can then perform an action, such as generating a report or updating attributes, on the highlighted entities.



Generating Reports

With EDMInformation, you can create formatted reports from any combination of attributes. You can also use the predefined queries supplied with EDMInformation. These queries generate standard reports about EDMInformation.

Predefined Queries

A number of predefined query files are shipped with EDMInformation. These queries generate the following reports, which can be sent to the screen, to a file, or to a printer:

- Entities linked to the associated database
- EDMInformation groups and their members
- Parts associated with EDMInformation
- EDMInformation projects
- EDMInformation users
- Contents of the work table
- Contents of corporate tables

Following is an example of the report you receive when you run the predefined query “Parts associated with EDMInformation.” (Because the report is too wide to show on this page, the leftmost portion is shown first, followed by the rightmost portion on the next page.)

Date: March 10, 1993

Time: 02:39:33 PM

EDMInformation P
All Parts Linked to the Associate

Project ID	Part Name	Part ID	Last Snapshot	Part Owner
C-541	P2309R.T1.C-541.BASE	46	6	ALASALL
	P2309R.T1.C-541.BOX	47	1	JJOHNSO
	P2309R.T1.C-541.COVER	50	10	SRAMON
	P2309R.T1.C-541.HANDLE	54	0	MLEONID
	P2309R.T1.C-541.CTRLPANEL	53	3	FKRZYWD
C-577	P2309R.T1.C-577.BASE	32	23	HMILLER
	P2309R.T1.C-577.BOX	35	0	YANDERS
	P2309R.T1.C-577.COVER	34	2	JYAWKEY
	P2309R.T1.C-577.HANDLE	36	7	VLEE
	P2309R.T1.C-577.CTRLPANEL	38	1	WDEUTSC

o n P A R T S
associated Database

Part Owner	Part Group	Part Units	Part State	Re-extract Geometry?	Security ID	Part Status
ALASALL	null	FT	Current	No	12	0
JJOHNSO	null	FT	Current	No	10	0
SRAMON	null	FT	Current	No	14	8
MLEONID	null	IN	Current	No	13	4
FKRZYWD	null	IN	Current	No	34	4
HMILLER	null	FT	Current	No	11	4
YANDERS	null	FT	Curren	No	20	4
JYAWKEY	null	FT	Current	No	48	4
VLEE	null	IN	Current	No	22	4
WDEUTSC	null	IN	Current	No	19	4

Interactive Queries

EDMInformation allows you to generate reports such as Bills of Materials, price lists, schedules, and inventories from

- Nongraphic attributes from the EDMInformation associated database.
- CADDs nongraphic attributes and entity information from active and viewed parts.
- Concurrent Assembly Mock-Up attributes. You can generate reports from data associated with assemblies, subassemblies, and their components.
- EDM file attributes stored in EDMVault.
- EDMControl project data based on zone and/or function criteria.
- Snapshots (CADDs part versions) managed by EDMControl.
- Corporate database information.

Reports can be displayed on the screen, written to a file, or written to the work table.

Customizing Reports

EDMInformation allows you to customize your reports by defining

- Types of attributes reported
- Report title
- Line format

- Lines per page
- Blank lines after each report block

Example of an Interactive Query

Following is an example of an interactive query.

Date: May 1, 1993 Page 1

Time: 11:39:33 AM

Parts and Their Parent Assemblies
Ordered by Assembly

Part Name	Assembly Name	Last Updated in EDM
=====		
P2309R.T1.C-541.BASE	sew541_1	19-NOV-1992
P2309R.T1.C-541.BOX		29-FEB-1992
P2309R.T1.C-541.COVER		05-DEC-1992
P2309R.T1.C-541.HANDLE		11-OCT-1992
P2309R.T1.C-541.CTRLPANEL		04-JAN-1993
* * * * *		
P2309R.T1.C-577.BASE	sew577_1	24-JAN-1993
P2309R.T1.C-577.BOX		04-APR-1993
P2309R.T1.C-577.COVER		31-JUL-1992
P2309R.T1.C-577.HANDLE		10-DEC-1992
P2309R.T1.C-577.CTRLPANEL		15-MAR-1993

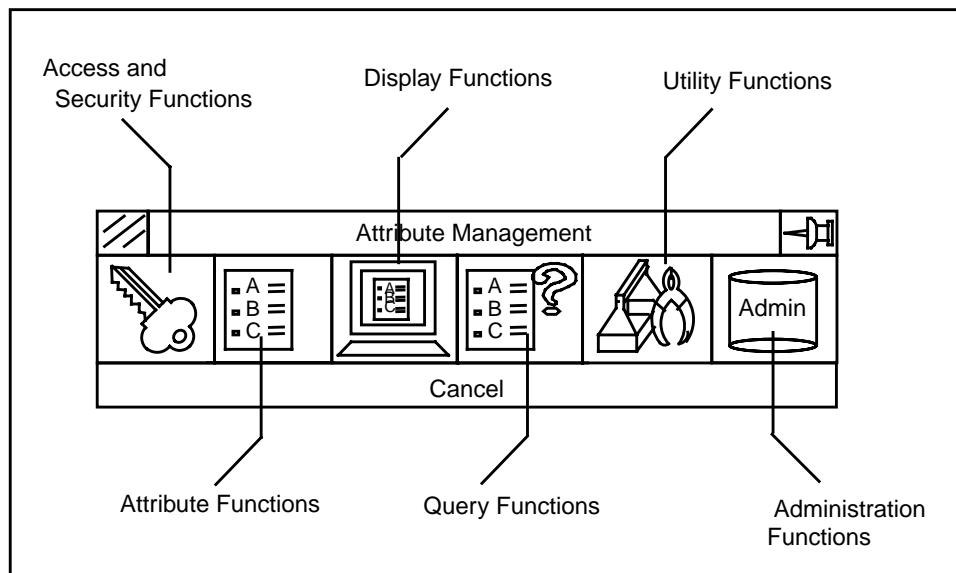
EDMInformation Graphical User Interface

EDMInformation provides an easy-to-use, task-oriented graphical user interface.

Accessing the EDMInformation Graphical User Interface

To access the EDMInformation graphical user interface, select Utility from the top bar of the CADD5 Explicit environment desktop and then select Attribute Management from the Utility menu.

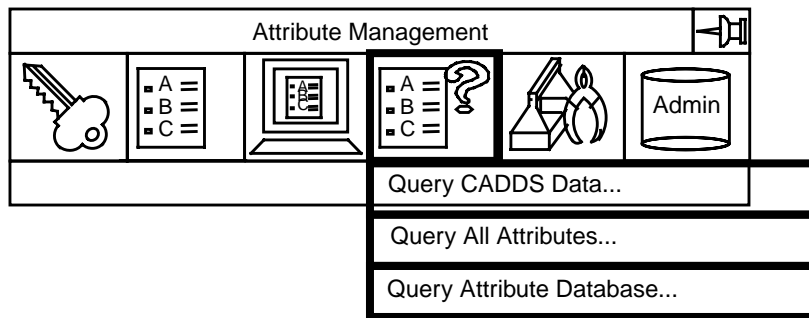
When you select Attribute Management from the Utility menu, you receive the command palette shown below. (The icon labels are *not* displayed, but are shown only to describe the icons.)



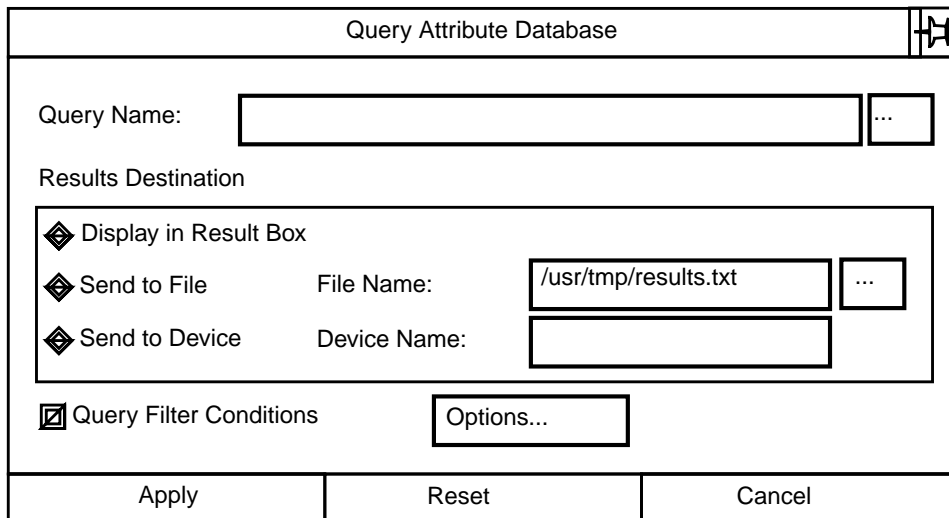
Example of an EDMInformation Property Sheet

When you select an icon on the EDMInformation command palette, a menu is displayed. Some menu options, when selected, perform an action immediately, but

most menu options display a property sheet. Following is the menu displayed when you select the Query icon.



If you select the Query Attribute Database option from the menu, you receive the following property sheet.



Customizing EDMInformation

EDMInformation provides you with a complete solution to the problem of attribute management. But, if you choose, you can extend the capabilities of the product to suit many other requirements.

You can customize and build on EDMInformation by using these EDMInformation tools:

- EDMInformation work table, in which you can store data to be used in a subsequent operation
- Ability to execute operating system commands from within CADDs
- Ability to access any RDBMS table, including lookup tables such as a parts catalog, and to link to these tables

Creating Customized Applications

One of the most powerful features of EDMInformation is the ability to store data in the work table and then supply this data as input to subsequent operations. EDMInformation also allows you to execute scripts and operating system commands from within EDMInformation.

Using the Work Table and Scripts to Perform Multiple Operations

With the work table and the scripts feature, you can create your own applications. Scripts can contain any combination of operating system commands, CADDs commands, and RDBMS commands. For example, you could create a script that does the following:

1. Stores data in the work table based on conditions you specify
2. Annotates the part entities whose UIDs are stored in the work table
3. Updates corporate data based on the contents of the work table
4. Creates a formatted report from the data in the work table
5. Sends mail to affected employees

Using the Work Table and Scripts with Other RDBMS Products

Through the work table and the scripts feature, EDMInformation can work with other RDBMS products, such as products that create reports and forms. Following are just two examples:

- You can execute a query using EDMInformation and send the query result to the work table. Then you can execute a script that calls an RDBMS report product to format the query result into a standard report such as a Bill of Materials.
- After you perform an EDMInformation function, you can execute a script that displays a form to fill out.

Customizing the Graphical User Interface

The EDMInformation graphical user interface is created with CVAct software. You can use this software to customize the graphical user interface. With CVAct you can do the following:

- Modify any property sheet delivered with EDMInformation.
- Create new user interface elements. This is especially useful if you create new applications using EDMInformation.

EDMInformation Task Flow

In general, two types of users use EDMInformation: EDMInformation end users and one or more EDMInformation administrators. This chapter provides an overview of the tasks performed by both types of users.

- EDMInformation Users
- Task Flow - EDMInformation Administrator
- Task Flow - EDMInformation End User

EDMInformation Users

There are two main types of EDMInformation users: administrators and end users. The tasks performed by these users are described on this page. The interaction of these users with EDMInformation is illustrated on the next page.

Administrator

The EDMInformation administrator is responsible for building and maintaining the associated database and owns all EDMInformation RDBMS tables. The administrator's functions include:

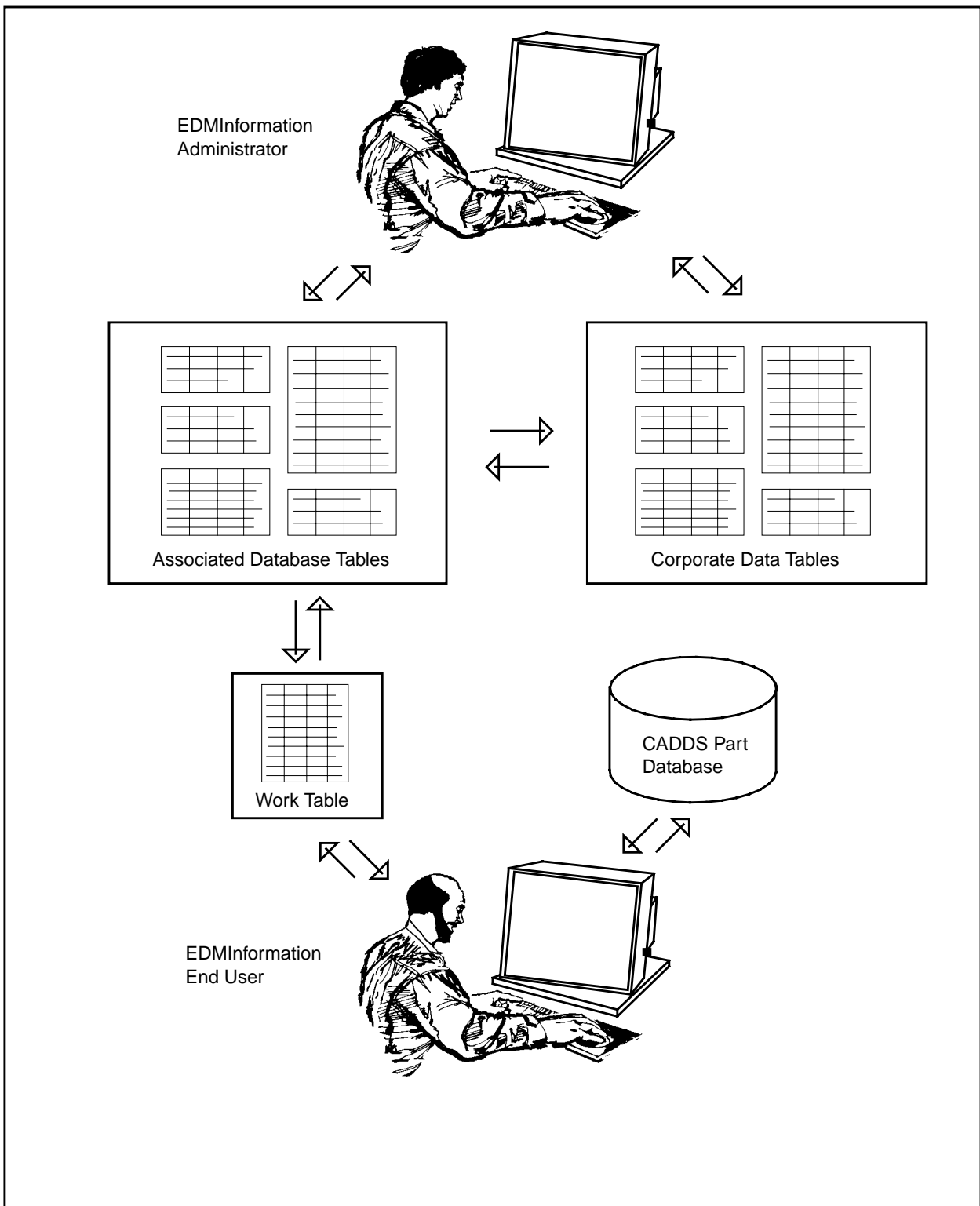
- Installing the associated database.
- Creating users.
- Creating groups.
- Creating projects.
- Adding corporate data table definitions to the data dictionary.
- Creating scripts to maintain information in corporate tables. For example, a script may be written that posts information to the corporate data tables every time a user files a part. (If you do not use corporate tables, you do not need to create scripts.)

End Users

The EDMInformation end user accesses the associated database maintained by the administrator. The end user interacts with the CADDs part database and his/her own RDBMS table (the work table). End user access permissions for corporate data tables are assigned by the administrator.

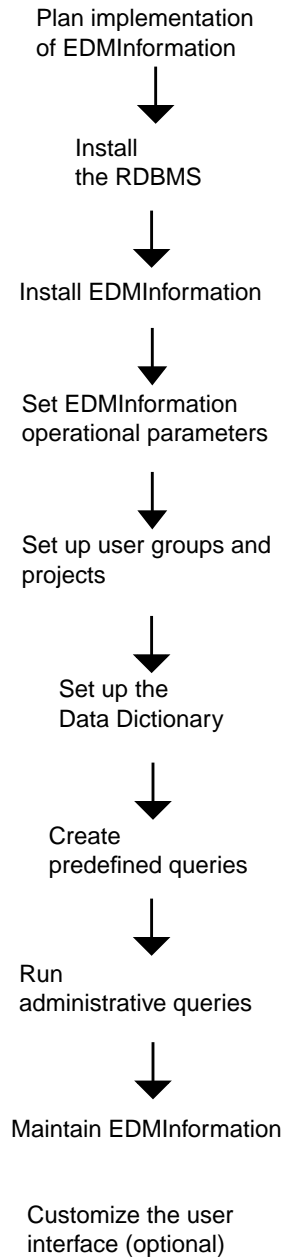
The work table acts as a temporary buffer to hold data associated with the current EDMInformation operation. The work table includes data that serve as links between the CADDs entities affected by the current operation and the associated information in the database tables.

Interaction between the work table and the associated database is handled by EDMInformation and is transparent to the end user.



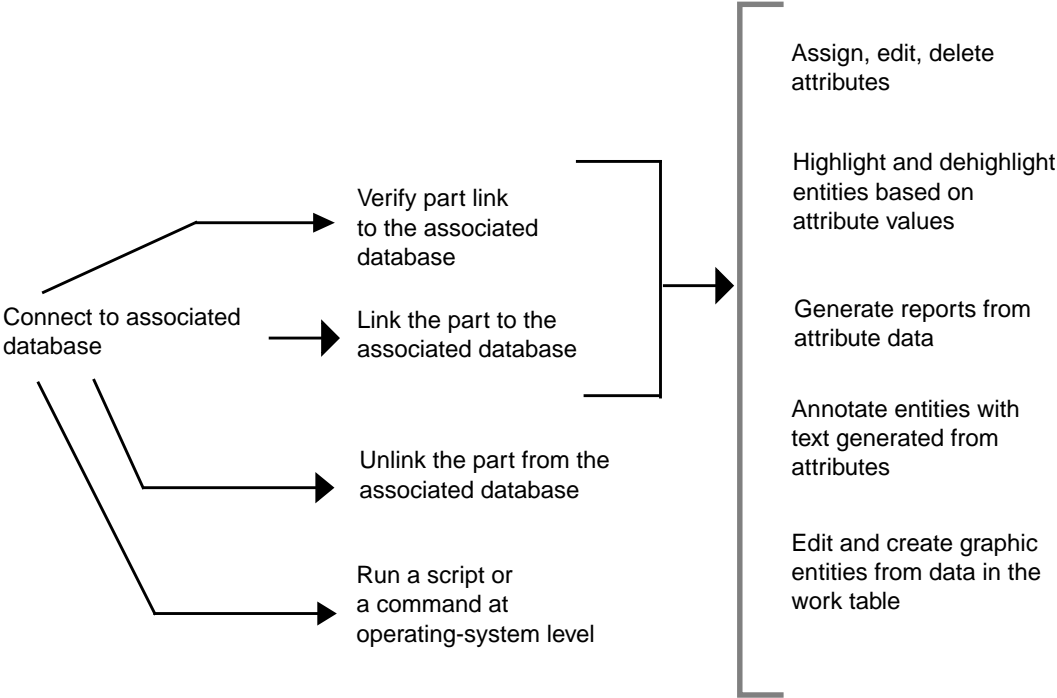
Task Flow - EDMInformation Administrator

The flow chart below lists in order the main tasks performed by the EDMInformation administrator. These tasks are described in the *EDMInformation Administrator Guide*.



Task Flow - EDMInformation End User

The flow chart below lists the main tasks available to the EDMInformation end user. These tasks are described in the *EDMInformation User Guide and Menu Reference*.



Glossary

administrator

EDMInformation user responsible for building and maintaining the associated database and customizing the user interface for end users.

associated attributes

Nongraphic attribute data stored in the EDMInformation associated database or in corporate database tables. EDMInformation links these attributes to CADDs graphic entities.

associated database

Predefined RDBMS tables shipped with EDMInformation. The functions performed by these tables include the storage of nongraphic attribute data and the storage of data linking CADDs graphic entities to nongraphic attribute data stored within the associated database or in a corporate RDBMS.

CADDs graphic attributes

Graphic attributes of CADDs entities, such as layer number and coordinate values.

CADDs nongraphic attributes

Nongraphic attribute data attached to graphic entities and stored in the CADDs part. Also known as CADDs properties, these attributes are defined in the CADDs property file (data.prop).

Concurrent Assembly Mock-Up attributes

Assembly and subassembly attributes stored in the Concurrent Assembly Mock-Up database.

corporate data

Descriptive attribute data (for example, cost, supplier, install dates) stored in RDBMS tables linked to CADDs graphic entities. Corporate data is outside the EDMInformation associated database, but EDMInformation links to it.

data dictionary

One of the associated database tables. For EDMInformation to access EDM tables and corporate tables, you must define these tables in the data dictionary.

EDM attributes

File information stored in EDMVault.

EDMControl attributes

Data stored in the Project database, such as objects, parts, changes, and transactions.

EDMInformation

An attribute management system that provides tools for the storage, maintenance, and retrieval of attribute data associated with CADDs models and drawings.

end user

EDMInformation user with access privileges to RDBMS tables, as determined by the EDMInformation administrator.

offsets

Used to position work parts with respect to other parts in the project coordinate system.

partid

Unique identification number assigned by EDMInformation to each CADDs part. The partid enables EDMInformation to track all attributes assigned to that part.

Relational Database Management System (RDBMS)

Type of database that stores data in tables consisting of columns and rows; for example, ORACLE is an RDBMS. EDMInformation uses an RDBMS to store and manage attributes.

script

UNIX shell script, set up by the EDMInformation administrator, that end users can execute from within the CADDs work session. The ability to use scripts allows you to greatly extend the capabilities of EDMInformation. For example, to store CADDs attributes in RDBMS tables outside the EDMInformation associated database, you would create a script that stores attributes in the appropriate table(s).

Structured Query Language (SQL)

ANSI-standard query language used for defining and manipulating data in an RDBMS.

UID

Unique, permanent identifier assigned to an entity when it is created.

Work table

Table assigned to each end user for temporary storage of data associated with the current EDMInformation operation.

Index

A

Accessing
graphical user interface 2-13

Administrator
glossary definition Glossary-1
responsibilities of 3-2
flowchart 3-4

Applications
creating 2-15

Associated attributes
definition 2-6
glossary definition Glossary-1

Associated database
definition 2-4
glossary definition Glossary-1
linking parts to 2-6
storing attributes in 2-6

Attributes
associated
definition 2-6
glossary definition Glossary-1

CADDS graphic
extracting and updating 2-8
glossary definition Glossary-1

CADDS nongraphic
definition 2-6
extracting and updating 2-8
glossary definition Glossary-1

Concurrent Assembly Mock-Up
glossary definition Glossary-2

EDM
glossary definition Glossary-2

EDMControl

glossary definition Glossary-2
managed by EDMInformation
illustration 1-3
list 1-2
storing in corporate database 2-4

C

CADDS
database
contrasted with relational database 2-3
graphic attributes
extracting and updating 2-8
glossary definition Glossary-1
how EDMInformation works with 1-7
nongraphic attributes
definition 2-6
extracting and updating 2-8
glossary definition Glossary-1

parts
linking to the associated database 2-6
storing attributes in 2-6

CAMU 1-2

Command palette 2-13

Commands
operating system
executing from within
EDMInformation 2-15

Concurrent Assembly Mock-Up
attributes
glossary definition Glossary-2
how EDMInformation works with 1-6

Corporate data

- glossary definition Glossary-2
- Corporate database
 - storing attribute data in 2-4
- Creating
 - customized applications 2-15
- Customizing
 - graphical user interface 2-16
 - reports 2-11
- CVACT software
 - used to customize graphical user interface 2-16

D

- Data dictionary
 - glossary definition Glossary-2
 - used to access information in corporate database 2-4

E

- EDM
 - attributes
 - glossary definition Glossary-2
 - how EDMInformation works with 1-6
- EDMControl
 - attributes
 - glossary definition Glossary-2
 - how EDMInformation works with 1-7
- EDMInformation
 - benefits of 1-5
 - definition of 1-2
 - features
 - descriptions 2-1
 - glossary Glossary-1
 - glossary definition Glossary-2
 - how it works with other products 1-6
 - introduction to 1-1
 - networking used with 1-6
 - task flow 3-1
 - users 3-1
- End users
 - glossary definition Glossary-2
 - tasks of 3-2
 - flowchart 3-5
- Executing
 - scripts and operating system commands 2-15

G

- Graphic attributes
 - extracting and updating 2-8
 - glossary definition Glossary-1
- Graphical user interface
 - accessing 2-13
 - command palette 2-13
 - customizing 2-16
 - menus 2-13
 - property sheets 2-13

I

- Interactive queries 2-11
 - example 2-12

M

- Menus
 - example 2-13

N

- Networking
 - used with EDMInformation 1-6
- Nongraphic attributes
 - definition 2-6
 - extracting and updating 2-8
 - glossary definition Glossary-1

O

- Offsets
 - glossary definition Glossary-2
- Operating system commands
 - executing from within EDMInformation 2-15
- ORACLE 1-2

P

- partid
 - definition 2-6

glossary definition [Glossary-2](#)

Parts

- linking to the associated database 2-6
- storing attributes in 2-6

Predefined queries 2-10

- example 2-10

Property sheets

- example 2-13

PTC

- products
 - how they work with EDMInformation 1-6

Q

Queries

- interactive 2-11
 - example 2-12
- predefined 2-10
 - example 2-10

R

RDBMS

- contrasted with CADDs database 2-3
- glossary definition [Glossary-3](#)
- how EDMInformation works with 1-7
- products
 - used to customize EDMInformation 2-16

Relational Database Management System 1-2

Reports

- customizing 2-11

S

Scripts

- executing from within EDMInformation 2-15
- glossary definition [Glossary-3](#)
- used to customize EDMInformation 2-15

SQL

- glossary definition [Glossary-3](#)
- used to retrieve attribute data 2-3

T

Tasks

- administrator 3-2
 - flowchart 3-4
- end user 3-2
 - flowchart 3-5

TCP/IP

- used with EDMInformation 1-6

Transmission Control Protocol/Internet Protocol

- used with EDMInformation 1-6

U

UID

- glossary definition [Glossary-3](#)

Users

- EDMInformation 3-1

W

Work table

- as link to the associated database 3-2
- definition 2-4
- glossary definition [Glossary-3](#)
- used to batch functions 2-5
- used to customize EDMInformation 2-15
- used to store data extracted from parts 2-8

