

EDMControl User Guide and Menu Reference

CADD5 5 Revision 9.0

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Glossary

Preface

The *EDMControl User Guide and Menu Reference* gives you a quick reference to the menus and property sheets on the Graphical User Interface. It tells you the type of information that needs to be entered in which fields, and the criteria for each entry.

Your Comments

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

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 *EDMControl User Guide and Menu Reference*:

- *Understanding EDMControl*
- *Understanding EDMInformation*
- *EDMInformation User Guide and Menu Reference*
- *EDMControl Administrator Guide*
- *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.

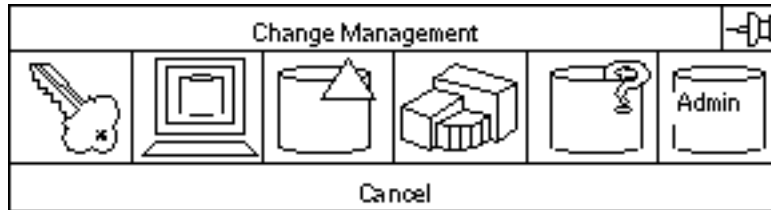
Overview of the EDMControl Options

This chapter describes the following:

- Introduction
- Accessing EDMControl Options
- Change Management Command Palette
- EDMControl Property Sheets

Introduction

This chapter describes how licensed users access the Graphical User Interface (GUI) for EDMControl. EDMControl is available from all CADD5 Explicit environments, and its features are context sensitive.

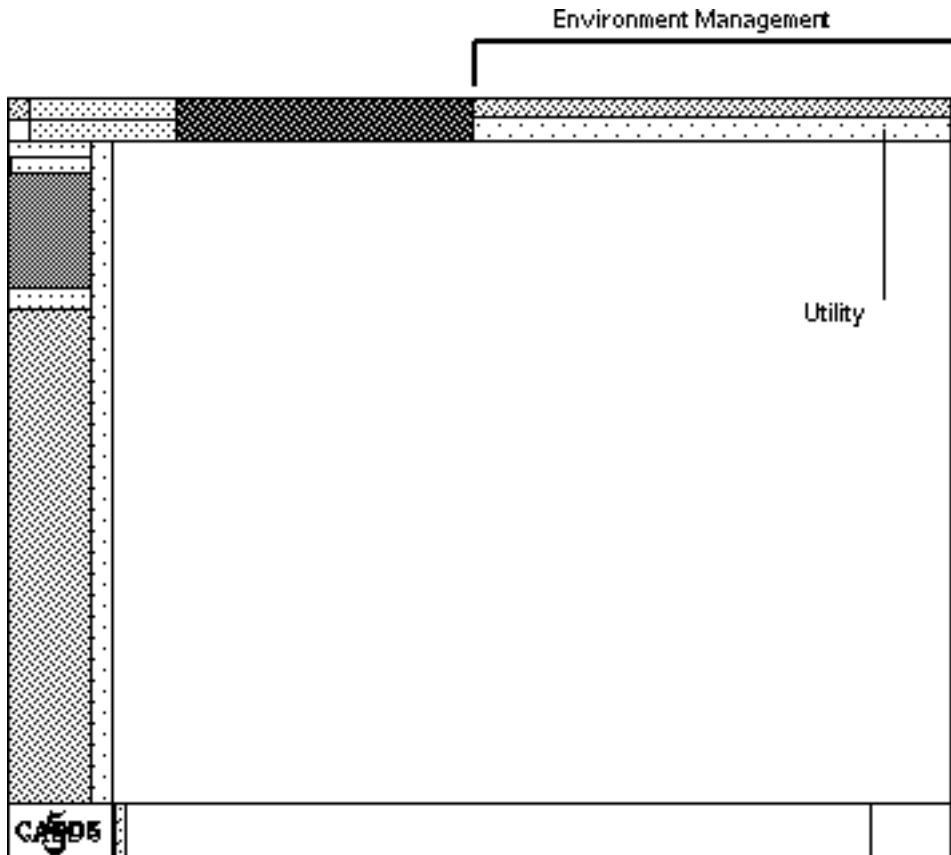


Accessing EDMControl Options

EDMControl options are available from the Utility Environment Management pulldown menu located on the top bar of all Explicit environments.

Procedure

1. Select Utility on the Environment Management menu area.



Result: The Utility pulldown menu appears, as illustrated on the next page.

2. Select CHANGE MANAGEMENT from the Utility pulldown menu to display the Change Management command palette.

FILE	DRAWING	VIEW	ENTITY	SETUP	UTILITY	CUSTOM
						OPEN TEXT FILE...
						TIME STAMP
						RUN COMMAND FILE...
						RUN MACRO...
						CLOSE TEXT FILE
						DATABASE MANAGEMENT...
						RAPID PROTOTYPING...
						ATTRIBUTE MANAGEMENT...
						CHANGE MANAGEMENT...
						CUSTOMIZER...

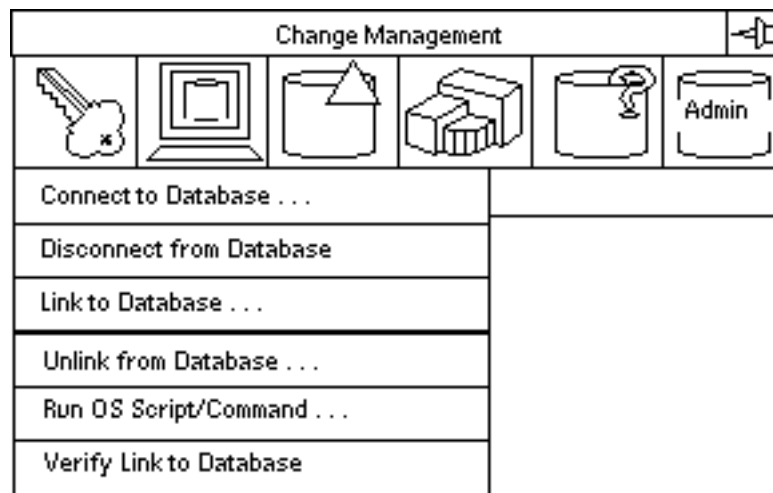
See the following pages for more information about the CHANGE MANAGEMENT command palette.

Change Management Command Palette

Description

All EDMControl options are accessible from the CHANGE MANAGEMENT command palette, shown below. All options are logically grouped together into the following areas:

- Access and Security
- Display
- Change
- Zones
- Queries
- Administration



The options available from the Change Management command palette are briefly described on the following pages. See the following chapters for a more detailed description of the options.

Access and Security Option

This option is always available; it is the only way to connect to the Project Database. The Access and Security option gives you access to these suboptions:

- Connect to Database
- Disconnect from Database
- Link to Database

- Unlink from Database
- Run OS Command
- Verify Link to Database

Display Option

This option is only valid after you are connected to the Project Database. The Display option gives you access to these suboptions:

- Display by Part
- Display by Discipline
- Display by Zone
- Display Zones
- Restore Objects

Change Option

This option is only valid after you are connected to the Project Database. The Change option gives you access to these suboptions:

- Post Snapshot Only
- Post Changes
- Highlight Changes
- Dehighlight Changes
- Update Changes

Zones Option

This option is only valid after you are connected to the Project Database. The Zones option gives you access to these suboptions:

- Display Zones
- Create Zones
- Delete Zones

Queries Option

This option is always available. The Queries option gives you access to these suboptions:

- List Change Status

- Query by Zone/Discipline
- User Queries

Administration Option

This option is always available. Change Management provides built-in checks for the necessary privileges.

The Administration option provides access to these suboptions:

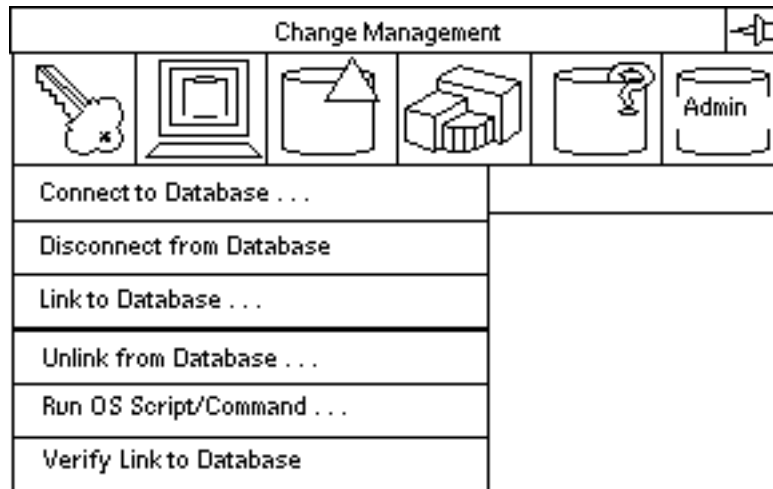
- Change Management Installation
- Setup and Maintenance
- Administrative Utilities
- Administrative Queries

The EDMControl administrative options and suboptions are not discussed in this book. For more information about the Administration options, see the *EDMControl Administrator Guide*.

Please note: The Administration Option is primarily for the use of the management and administrative team, or its authorized representatives, and not for the use of the design team end user.

EDMControl Property Sheets

When you select an option from a Change Management menu, the option either performs a direct action or displays a property sheet. For example, the Access and Security menu is shown below.



The menu options followed by three dots (. . .) display a property sheet when selected. The menu options that are not followed by three dots perform a direct action when selected.

Editor Button

Change Management property sheets have a unique feature called the Editor button. (Basic information about using CADD5 5 property sheets can be found in the *Explicit Modeling User Guide*.)

Some fields on property sheets display scrolling lists of valid selections for that field. To access such a list, an Editor button is provided next to the field.

For example, the following is a field on a property sheet:

User :

Select the empty field to type in a user name.

Select the Editor button (with the three dots) to display a scrolling list of valid users. When you select a user name on the list, it is automatically displayed in the field to the left of the Editor button.

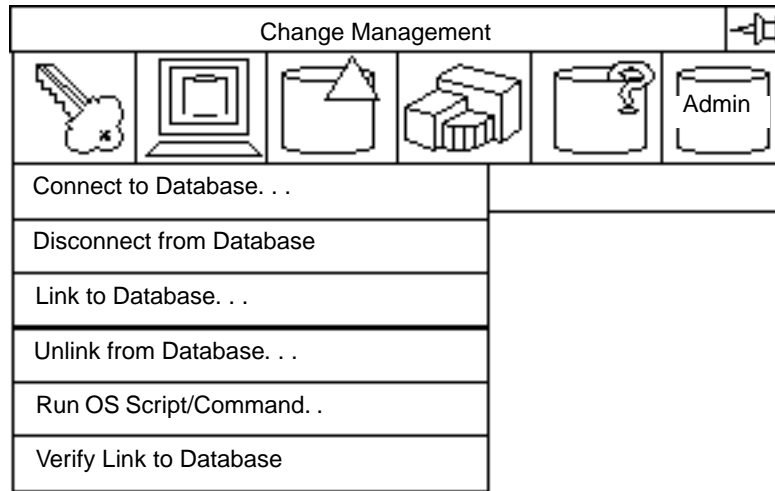
Access and Security Option

The property sheet associated with each of the menu items is described in this chapter.

- Introduction
- Overview of the Access and Security Option
- Connecting to the Project Database
- Disconnecting from the Project Database
- Linking to the Project Database
- Unlinking from the Project Database
- Running Scripts and Operating System Commands
- Verifying your Database Link

Introduction

Selecting the Access and Security option displays the menu illustrated below. These menu selections affect your interaction with the project database.



Overview of the Access and Security Option



Selecting the Access and Security option displays a pulldown menu. Each menu option either executes a direct action or displays a property sheet.

Description

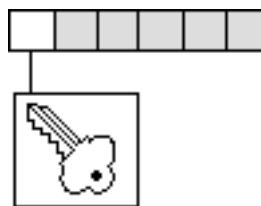
The Access and Security pulldown menu includes options for the following tasks:

- Connecting to the project database
- Disconnecting from the project database
- Linking to the project database
- Unlinking from the project database
- Running scripts and OS commands
- Verifying your database link

Getting to the Access and Security Option

1. Select Utility on the Environment Management area of the top bar.
2. Select CHANGE MANAGEMENT on the Utility pulldown menu.

Procedure



1. Select the Access and Security option on the Change Management menu.
2. Select the desired option from the Access and Security pulldown menu.

See the following pages for more information on the options in this procedure.

Options on the Access and Security Menu

Connect to Database

Displays a property sheet that enables you to connect to a project. This option is always available because you can connect to another project, user, or group without first disconnecting from the initial project; the system disconnects the first project for you.

Disconnect From Database

This is a direct action option and is only available if you are connected to the Project Database. Always disconnect when you are not working with the associated database, because there are a limited number of users who can concurrently access it.

Link to Database

Displays a property sheet that enables you to link to a project. This option is only available if you are connected to a project and a part is active.

Unlink From Database

Displays a property sheet that enables you to unlink from a project. This option is only available if you are connected to a project, a part is active, and the active part is linked.

Run OS Script/Command

Displays a property sheet that enables you to execute a script or command at the system level. This option is available at all times.

Verify Link to Database

This is a direct action option that verifies linkage to the associated database. This option is available if you are connected to the Project Database and your active part is linked.

Connecting to the Project Database

It is necessary to be connected to the project database before any Change Management activities can begin.

Description

When working within Change Management, you must first be connected to the project database and then linked to it. The Connect to Database... property sheet guides you through the requirements and displays lists of authorized entries.

Getting to the Connect to Database... Option

1. Select Utility on the Environment Management area of the top bar.
2. Select CHANGE MANAGEMENT on the Utility pulldown menu.
3. Select the Access and Security option on the Change Management menu.
4. Select Connect to Database on the Access and Security pulldown menu to display the Connect to Database property sheet.

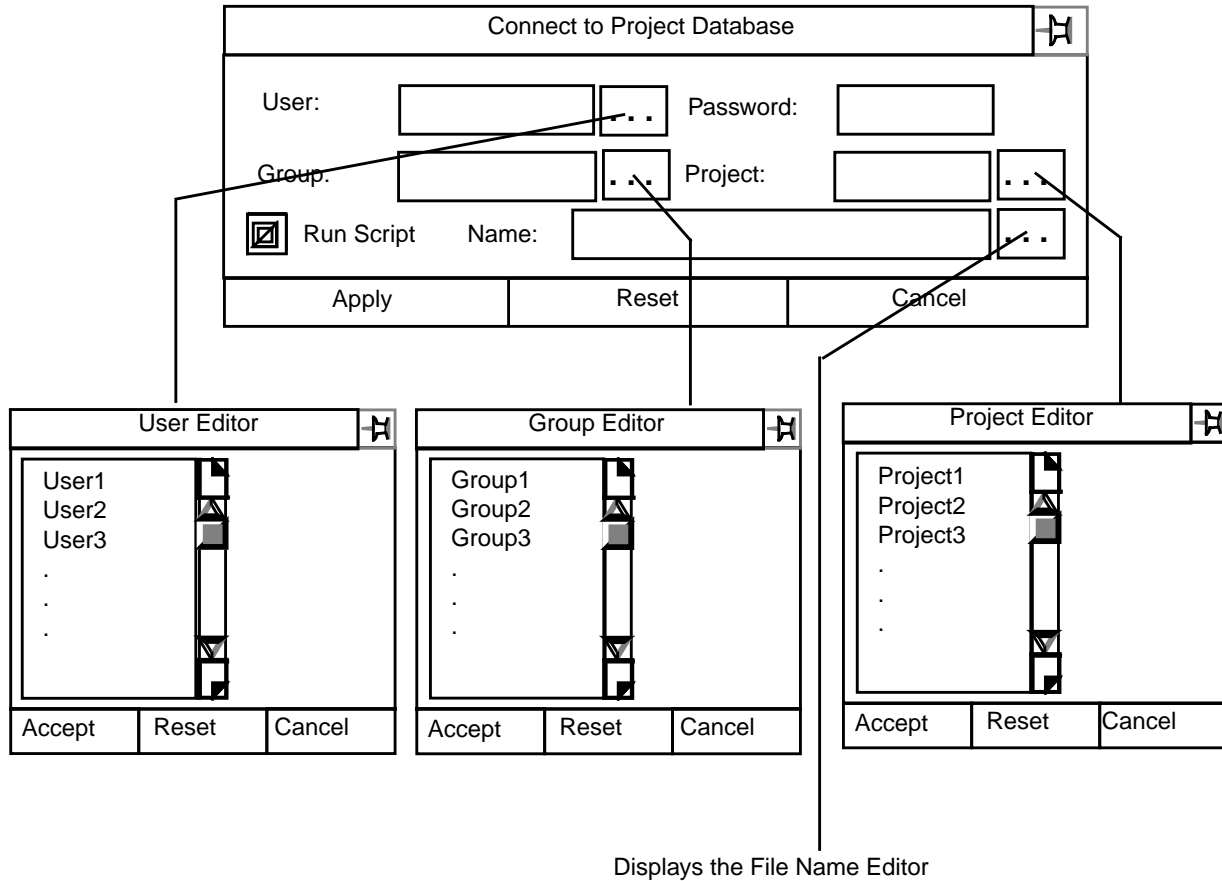
Procedure

1. Enter the following required information, in the order shown, on the Connect to Database property sheet:
 - a. Enter a user name in the User field.
 - b. Enter a password in the Password field.
 - c. Enter a project name in the Project field.
2. Optionally, enter a Group name.
3. If you wish to execute a script, select the Run Script button and then the Editor button.
4. Select Apply.

See the following pages for more information about this option.

Connect to Project Database Property Sheet

The following figure shows the property sheet and the available lists



Options on the Connect to Database Property Sheet

User Name (Required): Selecting the User field Editor button causes a scrollable list of authorized users to be displayed. Select a name for which you are authorized, or select the field and type in a valid name. Only one userid may be selected. A User id may not exceed 12 characters in length.

Password (Required): The Password field is invalid until the userid has been specified. A valid password must be typed into the Password field. The password is protected. The password may not exceed eight characters in length.

Group Name (Optional): Selecting the Group field Editor button causes a scrollable list of authorized groups to be displayed. Select a group for which you are authorized, or select the field and type in a valid group name. Only one group may be selected. A group name may not exceed 12 characters in length.

Project Name (Required): Selecting the Project field Editor button causes a scrollable list of projects to be displayed. Select the project to connect to or select the field and type the name of the project. Only one project may be selected. A project name may not exceed eight characters in length.

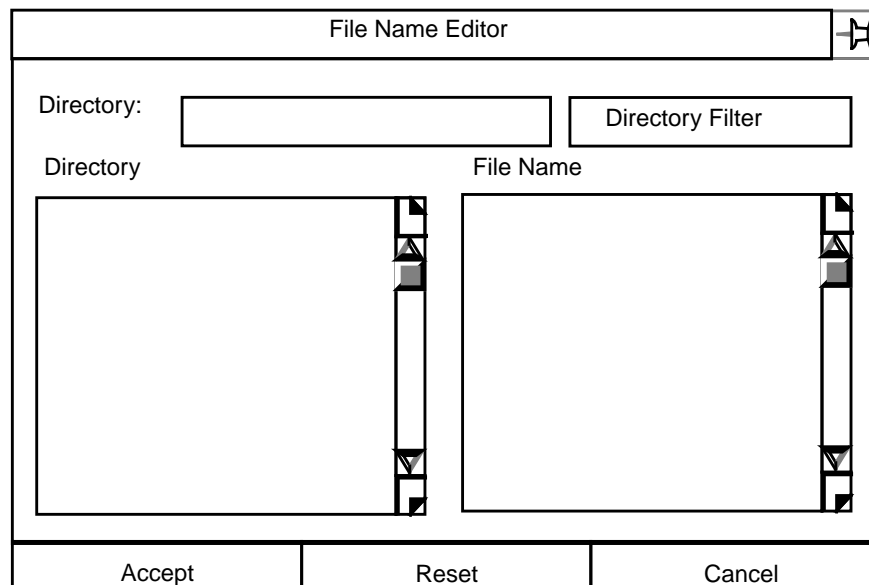
Run Script (Optional): The Run Script toggle button must be selected before a script can be specified. Valid scripts are contained in the directory `/usr/apl/cadds/data/control/scripts`

The Run Script function is specific to the Bourne shell.

Select the Name field Editor button. This displays the File Name Editor with the `script` directory as default. Select a file and press Accept. Only one script may be specified. A script name may not exceed 255 characters, scrolling.

File Name Editor Property Sheet

The File Name Editor property sheet is illustrated below.



Using the Property Sheet

By default, the Directory fillin box displays your Explicit Modeling create directory. A list of directories located below the create directory is displayed in the Directory scroll window.

Select a directory and it replaces the create directory. Select the Directory Filter box and a scrollable list of files contained in your selected directory is displayed.

Select a file and press Accept.

Disconnecting from the Project Database

You can disconnect from the Project Database by selecting this option on the Access and Security menu.

Description

To end your Change Management work session, disconnect from the project database. To reconnect to the database, you must again select the Connect to Database menu option and enter the required information on the Connect to Project Database property sheet.

Please note: Because there are a limited number of users who can concurrently access the project database, always disconnect when you are not working with the associated database.

Getting to the Disconnect from Database Option

1. Select Utility on the Environment Management area of the top bar.
2. Select ATTRIBUTE MANAGEMENT from the Utility menu.
3. Select the Access and Security icon from the command palette.

Procedure

To disconnect from the project database, select Disconnect from Database from the Access and Security menu. This is a direct action selection. After you select this option from the menu, you are disconnected from the project database.

Linking to the Project Database

You must create links to the project database in order to be able to post and retrieve information. Only one project can be linked at a time.

Description

This menu option determines the model information to be displayed as snapshots when you retrieve information from the project database. It also controls the information that is posted to the project database when you post changes.

Your active part becomes a work part when it is linked to the project database. The part is linked with either an Inwork or Released status.

Inwork status specifies that the most recent snapshot is to be displayed. A Released link displays the last snapshot to have passed a Review and been approved.

Please note: You must select the Specify Zone/Discipline toggle button, and specify a zone name, before the list of authorized disciplines is displayed.

The items that are displayed are governed by your privileges for the specified zone name. You will have read-only privileges if the displayed snapshot was posted to the project database by another member of the design team. You will have write privileges if the snapshot is one that you posted to the project database.

From one to ten disciplines can be selected.

Getting to the Link to Database... Option

Follow these steps to get to the Link to Database... option.

1. Select Utility on the Environment Management area of the top bar.
2. Select CHANGE MANAGEMENT on the Utility pulldown menu.
3. Select the Access and Security option on the Change Management menu.
4. Select Link to Database on the Access and Security pulldown menu to display the Link to Project Database property sheet.

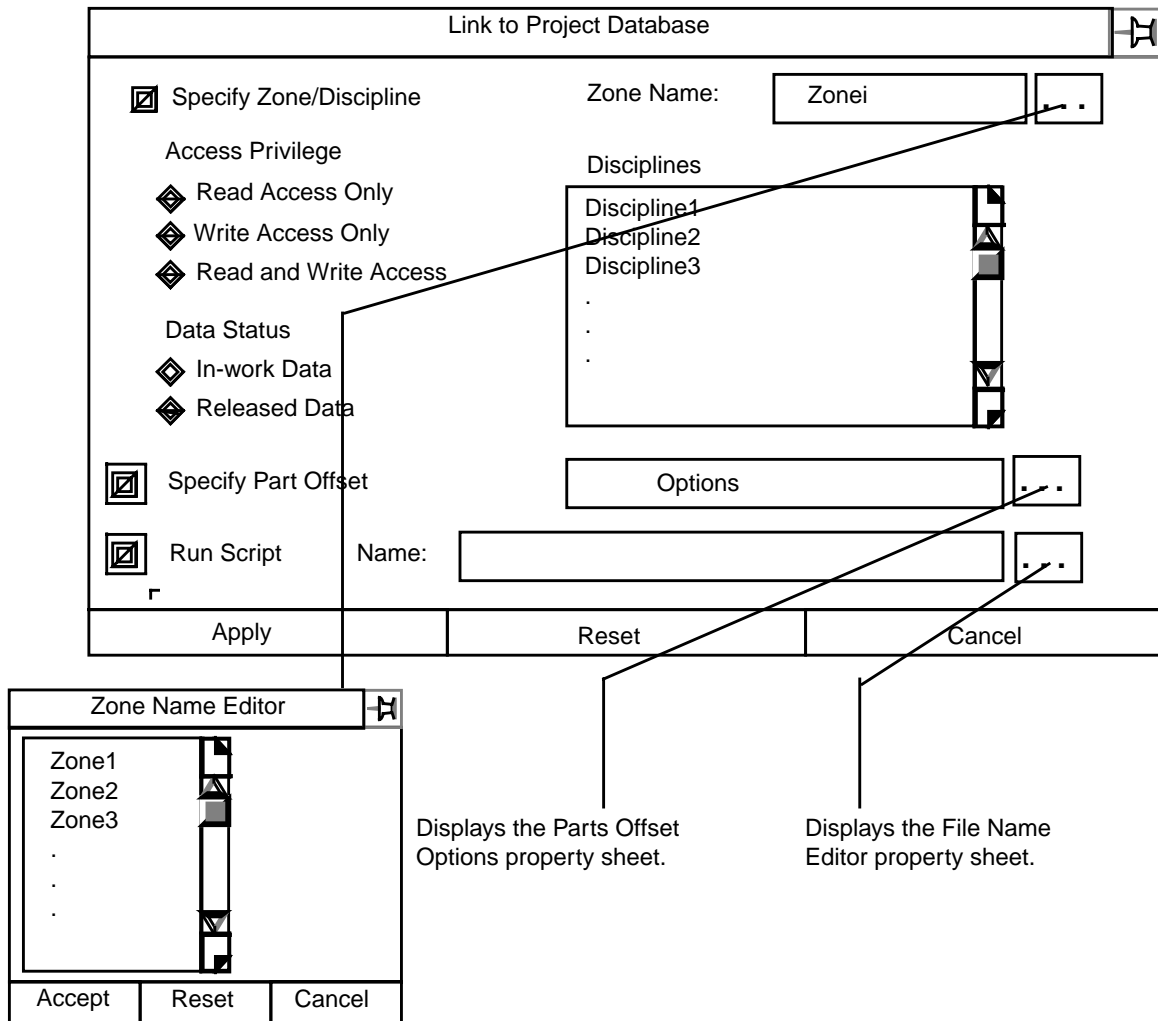
Procedure

1. Select the Specify Zone/Discipline button.
2. Select an access privilege.

3. Specify a zone name.
4. Specify from one to ten disciplines.
5. Specify a part offset (optional).
6. If you wish to execute a script, select Run Script and select the Name Editor button.
7. Select Apply.

Link to Project Database Property Sheet

The following figure illustrates the Link to Project Database property sheet and its available options.



See the following pages for more information about the options on this property sheet.

Options on the Link to Project Database Property Sheet

Specify Zone and Discipline: Select the Specify Zone/Discipline button if you want this option. You do not need to select it if the zone/discipline you want information about is already linked.

The following items on the property sheet are dependent upon your selecting the Specify Zone/Discipline button:

- Zone Name
- Disciplines List
- Access Privilege
- Data Status

Zone Name: Selecting the Zone Name field Editor button causes a scrollable list of authorized names to be displayed. This list is based upon access privileges granted by the Project Administrator.

Select the zone name you want, or select the field and type in the name of a valid zone. Select only one zone name.

A zone name may not exceed 24 characters.

Disciplines: When you have specified a zone, a scrollable list of disciplines associated with the selected zone is displayed. Select from one to ten disciplines.

Access Privilege: The default setting for access privileges is Read Access Only. To change this setting to either Write Access Only or Read and Write Access select the appropriate button. Only one selection is valid at a time.

Data Status: The default setting for data status is In-work Data. This accesses the most recent information filed in the project database.

The alternate setting is Released Data. This accesses the latest released information in the project database.

Select Released Data if you want this selection. Only one selection is valid at a time.

Part Offset: Select the Specify Parts Offset toggle button if you want to establish the offset from the point of origin of the active part to the point of origin of the project coordinate system.

Selecting the Options button displays the Part Offset Options property sheet.

You can establish the parts offset either by specifying the actual X-, Y-, and Z-project coordinates (By Explicit Location), or by specifying the name of an offset that has been predefined by the system administrator.

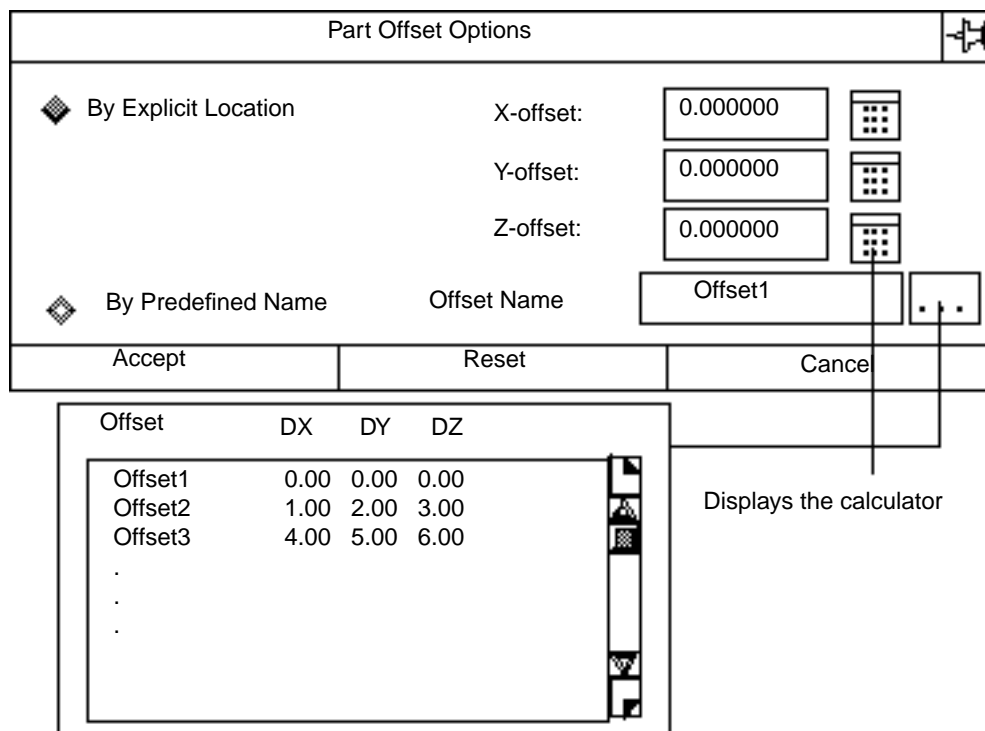
By Explicit Location and By Predefined Name cannot be selected together.

Please note: If you do not specify either a specific location or an offset name, the part offset defaults to zero (0), the project origin.

For more information about linking, see the following pages.

Part Offset Options Property Sheet

The following figure shows the Part Offset Options property sheet and the options associated with it.



By Explicit Location (Default): Select the By Explicit Location button and enter the X-, Y-, and Z- project coordinates. You can either enter the information by typing, or select the calculator button next to the field.

Press Accept.

By Predefined Name: Select the By Predefined Name button. Select the Offset Name Editor button. A scrollable list of authorized offsets is displayed. Select your choice or select the option field and type in the name. Offset1 is the default.

Press Accept.

A part offset name may not be more than 24 characters in length.

Run Script (Optional): The Run Script toggle button must be selected before a script can be specified. Valid scripts are contained in the directory `/usr/apl/cadds/data/control/scripts`

The Run Script function is specific to the Bourne shell.

Select the Name field Editor button. This displays the File Name Editor with the `script` directory as default. Select a file and press Accept. Only one script may be specified. A script name may not exceed 255 characters, scrolling.

For more information about the File Name Editor, see “File Name Editor Property Sheet” on page 2-7.

Unlinking from the Project Database

You can unlink zones and disciplines from the active part, or the part from the project.

Description

Change Management generates tremendous amounts of information. You can unlink in order to dispose of information that you will never want to track again.

When you unlink a read-only discipline, parts containing only that discipline will no longer be displayed as snapshots.

When you unlink a write discipline, no more data relevant to that discipline is posted to the project database.

When you unlink all of a zone's disciplines, the zone itself is unlinked.

Please note: Unlinking a part does not delete it from the project.

Getting to the Unlink from Database... Option

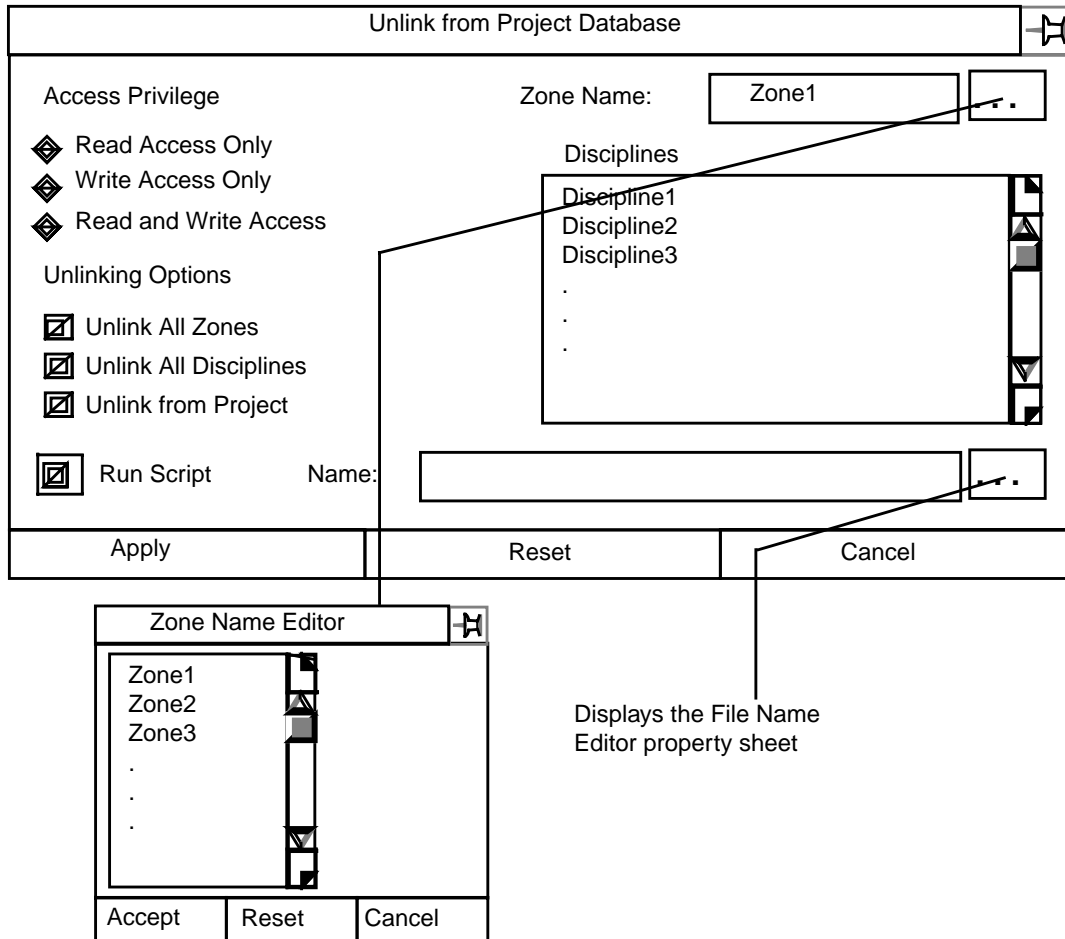
1. Select Utility on the Environment Management area of the top bar.
2. Select CHANGE MANAGEMENT on the Utility pulldown menu.
3. Select the Access and Security option on the Change Management menu.
4. Select Unlink from Database... on the Access and Security pulldown menu to display the Link to Project Database property sheet.

Procedure

1. Select an access privilege.
2. Select a zone name.
3. Select an associated discipline.
4. Select the unlinking option.
5. If you wish to execute a script, select Run Script and then enter a script name in the Name field.
6. Select Apply.

For more information about unlinking, see the following pages.

Unlink from Project Database... Property Sheet



Options on the Unlink from Project Database Property Sheet

Access Privilege (Required): Click the button next to the kind of access privilege associated with the zone to unlink. Read Access is the default.

Zone Name (Required): Selecting the Zone Name field Browser button displays a scrollable list of zones that are currently linked to the active part. Only one may be selected to be unlinked. The zone name may not exceed 24 characters.

Disciplines (Required): A scrollable list of disciplines associated with the zone and access privilege you selected is displayed. You can select more than one discipline.

Unlinking Options (Optional): These are elective options if you want to unlink groups of zones or disciplines. You can unlink

- All the zones, based on access privilege, in the active part.
- All the disciplines in the zone named in the Zone Name field. This unlinks the zone itself from the project database.
- The active part from the project.

Run Script (Optional): The Run Script toggle button must be selected before a script can be specified. Valid scripts are contained in the directory
`/usr/apl/cadds/data/control/scripts`

The Run Script function is specific to the Bourne shell.

Select the Name field Editor button. This displays the File Name Editor with the `script` directory as default. Select a file and press Accept. Only one script may be specified. A script name may not exceed 255 characters, scrolling.

For more information about the File Name Editor, see “File Name Editor Property Sheet” on page 2-7.

Running Scripts and Operating System Commands

You can execute scripts and operating system commands from within the Explicit Modeling environment.

Description

Change Management provides a mechanism for you to execute scripts and operating system commands while you work with it. This feature is specific to the Bourne shell.

Getting to the Run OS Script/Command... Option

1. Select Utility from the top bar of the explicit desktop.
2. Select CHANGE MANAGEMENT from the Utility menu.
3. Select the Access and Security icon from the command palette.
4. Select Run OS Script/Command from the Access and Security menu to display the Run OS Script/Command property sheet.

Procedure

To run a script or an operating system command, enter the following information on the Run OS Script/Command property sheet. This property sheet is illustrated on the next page.

1. Select either Run Script or Run OS.
2. If you select Run Script, select the Name field Editor button. The File Name Editor is displayed. Select a directory and file.
3. If you selected Run OS type into the field the name of the operating system command you want executed.
4. Select Apply.

For more information about these options, see the following pages.

Run OS Script/Command Property Sheet

Run OS Script/Command

Run Script

Name:

Run OS Command: Name:

Apply Reset Cancel

Displays the File Name
Editor property sheet

Options on the Run OS Script/Command Property Sheet

Run OS Command: You can specify any valid operating system command in this field. A command cannot exceed 255 characters.

Run Script (Optional): The Run Script toggle button must be selected before a script can be specified. Valid scripts are contained in the directory `/usr/apl/cadds/data/control/scripts`

The Run Script function is specific to the Bourne shell.

Select the Name field Editor button. This displays the File Name Editor with the `script` directory as default. Select a file and press Accept. Only one script may be specified. A script name may not exceed 255 characters, scrolling.

For more information about the File Name Editor, see “File Name Editor Property Sheet” on page 2-7.

Verifying your Database Link

You can verify the consistency between the active part's entities and their related records in the associated database.

Description

The Verify Link to Database option checks for consistency between the active part's entities and the related records for the entities in the associated database. When you select this option, a list of entities with records in the associated database is displayed. If any inconsistencies are found a message is displayed.

There are two types of inconsistencies:

- Records exist in the associated database, but the entity referred to no longer exists in the part
- Attributes assigned to an entity no longer exist in the associated database

A non-serious inconsistency between Explicit Modeling and the associated database can occur during a work session. However, inconsistencies between Explicit Modeling and the associated database may indicate a serious problem.

Inconsistencies That Are Easily Reconciled:

If you delete entities that have records in the associated database and then verify the part link to the associated database before you file the part, you will see a message that associated database records still exist, but that the entities no longer exist in the part. When you file the part, the records for the deleted entities are deleted from the associated database.

Inconsistencies That Indicate a Problem:

The first Attribute Management action performed on an active part automatically verifies the part against the associated database. If you ever see an inconsistency displayed at this point, report it to the system administrator. Such inconsistencies indicate a problem with Explicit Modeling or the RDBMS. For information about resolving inconsistencies between Explicit Modeling and the associated database, see the *EDM Information Administrator Guide*.

Getting to the Verify Link to Database Option

1. Select Utility from the top bar of the explicit desktop.
2. Select CHANGE MANAGEMENT from the Utility menu.

3. Select the Access and Security icon from the command palette.

Procedure

To verify consistency between the active part and the associated database, select Verify Link to Database from the Access and Security menu. This is a direct action selection.

After you select this option from the menu, a list of linked entities is displayed. If any inconsistencies are found between the part and the associated database, a message is displayed indicating this.

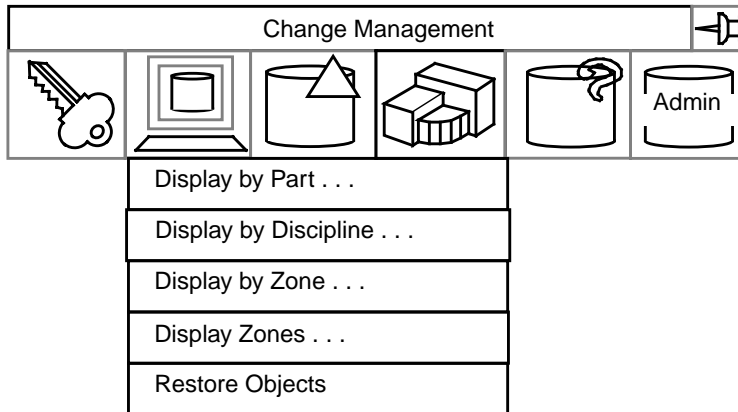
Display Option

This chapter describes the following:

- Introduction
- Overview of the Display Option
- Displaying Objects by Part
- Displaying Objects by Discipline
- Displaying Objects by Zone
- Displaying Zone Boundaries
- Restoring Objects

Introduction

Selecting the Display option displays the menu illustrated below. These menu selections affect your interaction with the project database and determine which objects are to be graphically displayed or blanked.



The property sheet associated with each of the menu items is described in the following pages.

Overview of the Display Option



Selecting the Display icon displays a pulldown menu. Each entry either executes a direct action or displays a property sheet.

Description

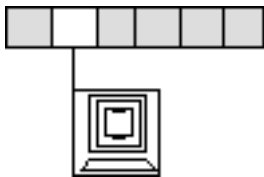
Selecting the Display icon displays a menu on which you can choose one of the following options:

- Display by Part...
- Display by Discipline...
- Display by Zone...
- Display Zones...
- Restore Objects

Getting to the Display Option

1. Select Utility on the Environment Management area of the top bar.
2. Select CHANGE MANAGEMENT on the Utility pulldown menu.

Procedure



1. Select the Display option on the Change Management menu to display the Display menu.
2. Select the desired option from the Display pulldown menu.

See the following pages for more information on the options in this procedure.

Options on the Display Menu

Display Objects by Part

Select this option to display a property sheet that enables you to select a part whose objects are to be displayed. You must be connected to the Project Database, the part must be active, and it must be linked.

Display Objects by Discipline

Select this option to display a property sheet that enables you to display objects associated with a specific discipline. You must be connected to the Project Database, a part must be active, and it must be linked for read access.

Display Objects by Zone

Select this option to display a property sheet that enables you to display objects located within a specific zone. You must be connected to the Project Database, a part must be active, and it must be linked for read access. Optionally, it can also be displayed by disciplines.

Display Zone Boundaries

Select this option to display a property sheet that enables you to specify the boundaries of a zone that you want displayed. You must be connected to the Project Database, a part must be active, and it must be linked for read or write access.

Restore Viewed Objects

Select this direct action option to return your display to the last previous work state.

For more information about the Display option, see the following pages.

Displaying Objects by Part

This menu item allows you to graphically display the objects in a part that you select.

Description

You can display, or remove from display, parts other than the active part that are linked for the same zone/disciplines as the active part. The Display Objects by Part property sheet provides lists of authorized parts, revisions, and snapshots from which you may choose.

Please note: The displayed list of authorized parts will be different depending upon your choice of Display Method.

If you select the Add to Display option, the parts listed are those that are not currently being displayed.

If you select the Remove from Display option, the parts listed are those that are currently being displayed.

You can select the part by either specifying its name, or by graphically removing one or more objects. The system identifies the part that the object belongs to and uses that part name.

Getting to the Display by Part... Option

1. Select Utility on the Environment Management area of the top bar.
2. Select CHANGE MANAGEMENT on the Utility pulldown menu.
3. Select the Display option on the Change Management menu.
4. Select Display by Part... on the Display pulldown menu to show the Display Objects by Part property sheet.

Procedure

1. Select the display method, Add (the default) or Remove.
2. Specify the selection method,
 - Select by Name (the default)
 - Select by Name and Revision
 - Select by Name and Snapshot

- Select Graphically
3. If you select one of the first three options, a scrollable list of parts is displayed. Select one.

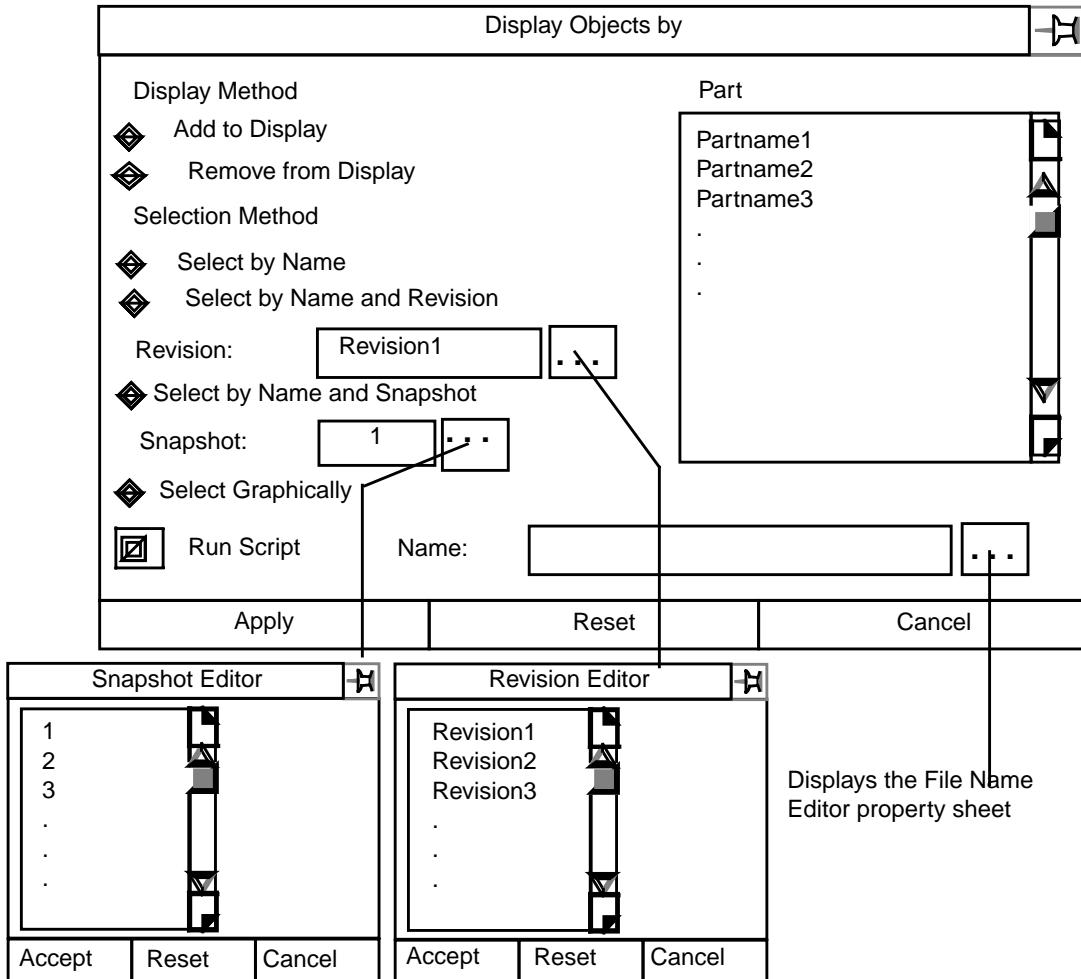
If you specify Select by Name, press Apply. All of the objects in the part are either displayed or removed from display.

If you specify Select by Name and Revision, and press the Revision Editor button, the Revision Editor displays a scrollable list of Revisions. The first revision on the list is the default. Select one. Press Accept, then Apply. All of the objects in that part or revision are added to, or removed from, your display.

If you specify Select by Name and Snapshot, and press the Snapshot Editor button, the Snapshot Editor displays a scrollable list of snapshots. The first snapshot is the default. Select one. Press Accept, then Apply. All of the objects in that part or snapshot are added to, or removed from, your display.

If you specify Select Graphically, select an object in the active part.
 4. If you want to execute a script, select the Run Script Editor button and the File Name Editor is displayed.
 5. Press Apply.

Display Objects by Part Property Sheet



Options on the Display Objects by Part Property Sheet

Display Method: Select either Add to Display, (to view a part not on display), or Remove from Display (to turn off a part being displayed). Only one part may be selected. Add to Display is the default.

Selection Method: Select one of the following:

- Select by Name (the default)
 Displays a scrollable list of parts. The first part name is the default. Select a part name. When you press Apply all of the objects in the part are displayed or removed, as you specified.
- Select by Name and Revision

Displays a scrollable list of parts. The first part name is the default. Select a part name. Select the Revision Editor button. This displays the Revision Editor with a scrollable list of revisions. The first revision is the default. Select one, then press Accept. The revision number is entered in the Revision field. Press Apply and the selected part or revision is added to, or removed from, your display.

- Select by Name and Snapshot

Displays a scrollable list of parts. The first part name is the default. Select a part name. Select the Snapshot Editor button. This displays the Snapshot Editor with a scrollable list of snapshots. The first snapshot is the default. Select one, then press Accept. The snapshot number is entered into the snapshot field. Press Apply and the selected part or snapshot is added to, or removed from, your display.

- Select Graphically

Select an object in the active part. Press Apply This identifies the active part as the one to be added to, or removed from, your display.

Run Script (Optional): The Run Script toggle button must be selected before a script can be specified. Valid scripts are contained in the directory
`/usr/apl/cadds/data/control/scripts`

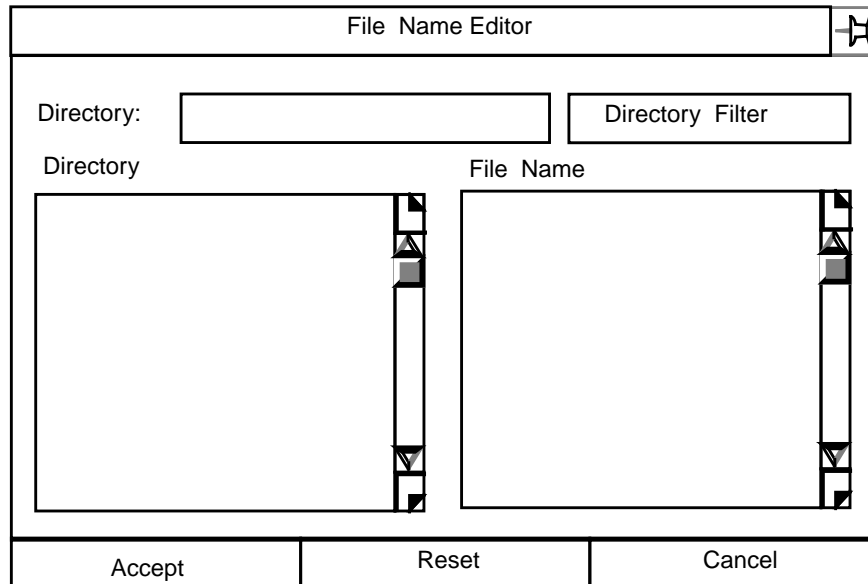
The Run Script function is specific to the Bourne shell.

Select the Name field Editor button. This displays the File Name Editor with the `script` directory as default. Select a file and press Accept. Only one script may be specified. A script name may not exceed 255 characters, scrolling.

For information about the File Name Editor, see the next page.

File Name Editor Property Sheet

The File Name Editor property sheet is illustrated below.



Using the Property Sheet

By default, the Directory fillin box displays your Explicit Modeling create directory. A list of directories located below the create directory is displayed in the Directory scroll window.

Select a directory and it replaces the create directory. Select the Directory Filter box and a scrollable list of files contained in your selected directory is displayed.

Select a file and press Accept.

Displaying Objects by Discipline

This menu item allows you to graphically display objects in a part as determined by their disciplines.

Description

You can display, or remove from display, objects stored in the project database that are identified by their links to specific disciplines.

The Display Objects by Discipline... property sheet provides a list of valid disciplines from which to choose. This list is only displayed if your active part is linked to a zone/discipline.

Please note: The displayed list of disciplines will be different depending upon your choice of display method.

If you select the Add to Display option, the disciplines listed are those linked to objects that are not currently being displayed.

If you select the Remove from Display option, the disciplines listed are those linked to objects that are currently being displayed.

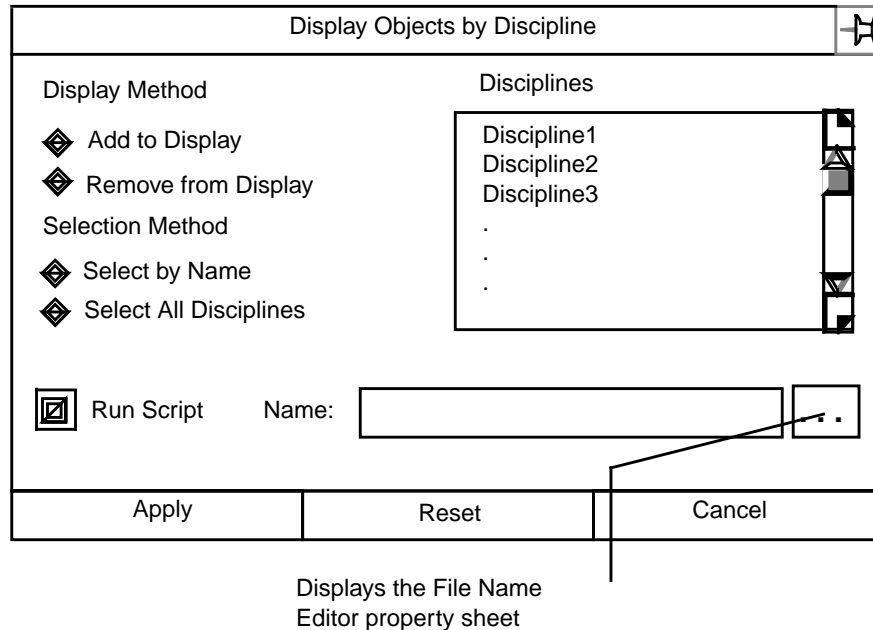
Getting to the Display by Discipline... Option

1. Select Utility on the Environment Management area of the top bar.
2. Select CHANGE MANAGEMENT on the Utility pulldown menu.
3. Select the Display option on the Change Management menu.
4. Select Display by Discipline... on the Display pulldown menu to show the Display Objects by Discipline property sheet.

Procedure

1. Select the display method, Add (the default) or Remove.
2. Specify the selection method, by Name (the default) or All Disciplines.
3. If you selected by Name, select from one to ten disciplines from the scrollable list displayed in the Disciplines window.
4. If you wish to execute a script, select Run Script and enter a script name in the Name field.
5. Select Apply.

Display Objects by Discipline Property Sheet



Options on the Display Objects by Discipline Property Sheet

Display Method: Select **Add to Display** to view disciplines not on display, or **Remove from Display** to turn off disciplines being displayed. From one to ten disciplines may be displayed. **Add to Display** is the default.

Selection Method: Select, **Select by Name**. Select from one to ten of the discipline names that are displayed in the scrollable **Disciplines** window.

Select, Select All Disciplines and objects associated with all the disciplines in the part are selected.

Select by Name is the default.

Run Script (Optional): The **Run Script** toggle button must be selected before a script can be specified. Valid scripts are contained in the directory `/usr/apl/cadds/data/control/scripts`

The **Run Script** function is specific to the Bourne shell.

Select the Name field Editor button. This displays the File Name Editor with the `script` directory as default. Select a file and press Accept. Only one script may be specified. A script name may not exceed 255 characters, scrolling.

For more information about the File Name Editor, see “File Name Editor Property Sheet” on page 3-9.

Displaying Objects by Zone

This menu item allows you to graphically display objects in a part as determined by the zone or set of zones in which the part is located.

Description

You can display or remove from display objects, selectively or in a group, that are identified by their disciplines and zones.

Initially, all of the objects in a part are displayed. Your selection of zones, disciplines, and display method filters the object information and displays only what you specify.

A part must be active and be linked to a project.

The list of valid zones or zone sets that is displayed is dependent upon the selection method chosen.

The list of disciplines is displayed when a valid zone has been identified. This list will vary according to the display method you choose.

Please note: The displayed list of disciplines will be different depending upon your choice of display method.

Select the Display All option and objects of every discipline in the specified zone are displayed.

Select the Add to Display option and the objects displayed are those linked to zones and disciplines that are not currently being displayed.

Select the Remove from Display option and the objects removed are those linked to zones and disciplines that are currently being displayed.

Getting to the Display by Zone... Option

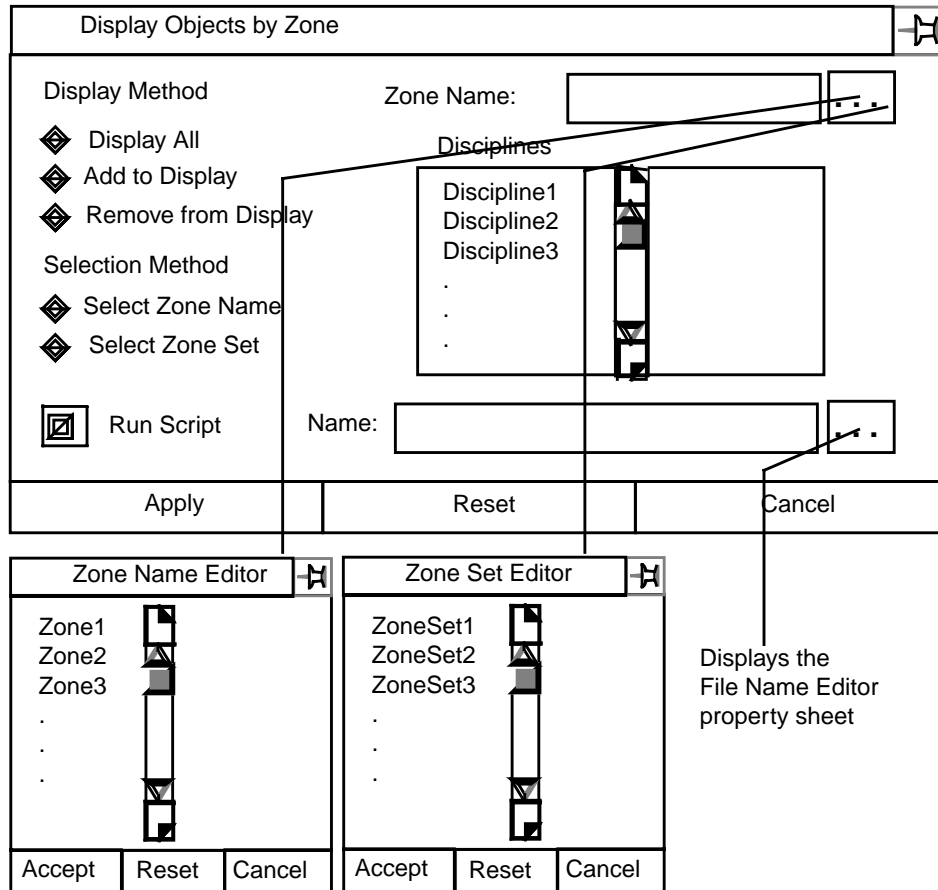
1. Select Utility on the Environment Management area of the top bar.
2. Select CHANGE MANAGEMENT on the Utility pulldown menu.
3. Select the Display option on the Change Management menu.
4. Select Display by Zone... on the Display pulldown menu to show the Display Objects by Zone property sheet.

Procedure

1. Select the display method, Display All (the default), Add to Display, or Remove from Display.
2. Specify the selection method, Select Zone Name or Select Zone Set.
Press the Editor button next to the Zone Name. Either the Zone Name Editor or Zone Set Editor, depending upon your Selection choice, displays a scrollable list of zones or sets.
3. Select a zone or zone set. The default is the first zone on the list.
4. A scrollable list of disciplines associated with the selected zone or zone set is displayed in the Disciplines window. Select from one to ten disciplines.
5. If you wish to execute a script, select Run Script and then enter a script name in the Name field.
6. Select Apply.

For more information about this option, see the next page.

Display Objects by Zone Property Sheet



Options on the Display Objects by Zone Property Sheet

Display Method: Display All (the default) displays objects of every discipline in the selected zone or zone set.

Add to Display displays objects that are blanked.

Remove from Display blanks objects that are on display.

Selection Method: You can select either the Select Zone Name or Zone Set option. Your choice displays the appropriate scrollable Editor. Select your choice and it is entered into the Zone Name field. A zone or zone set name may not exceed 24 characters in length. Select Zone Name is the default.

Disciplines: A scrollable list of valid disciplines is displayed when a zone name or set has been specified. The list of disciplines displayed is also governed by the display method you selected.

Run Script (Optional): The Run Script toggle button must be selected before a script can be specified. Valid scripts are contained in the directory
`/usr/apl/cadds/data/control/scripts`

The Run Script function is specific to the Bourne shell.

Select the Name field Editor button. This displays the File Name Editor with the `script` directory as default. Select a file and press **Accept**. Only one script may be specified. A script name may not exceed 255 characters, scrolling.

For more information about the File Name Editor, see “File Name Editor Property Sheet” on page 3-9.

Displaying Zone Boundaries

Select this menu option to specify zones whose boundaries you want to view, or displayed ones you want to blank.

Description

You can selectively display, or blank, the boundaries of zones based upon whether you want to select

- Specific linked zones
- All the zones that are linked
- Any zone, linked or not

You must be connected to the project database. A part must be linked for read or write access.

Getting to the Display Zones... Option

1. Select Utility on the Environment Management area of the top bar.
2. Select CHANGE MANAGEMENT on the Utility pulldown menu.
3. Select the Display option on the Change Management menu.
4. Select Display Zones... on the Display pulldown menu to display the Display Zone Boundaries property sheet.

Procedure

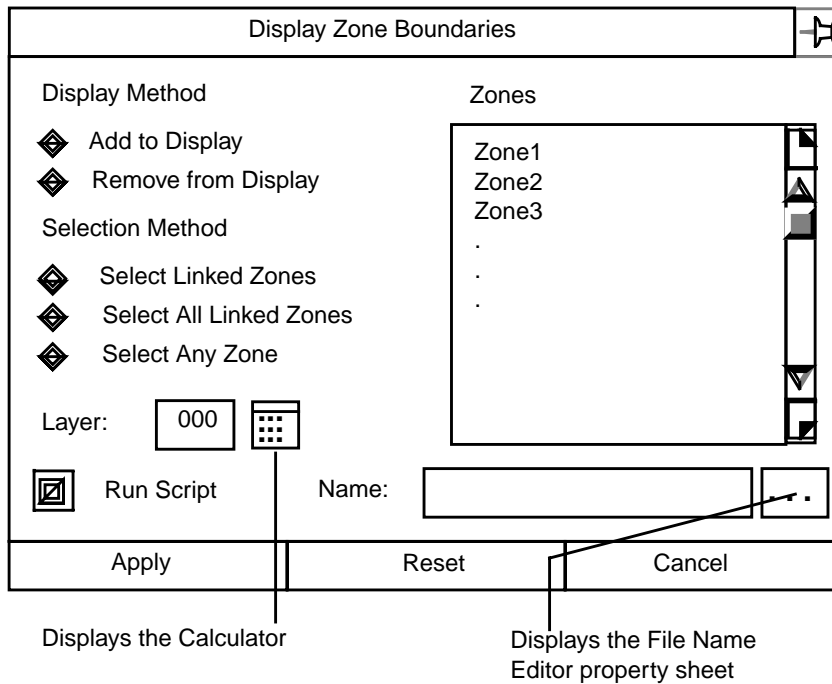
1. Select the display method.
2. Select the type of zone association to be displayed.
3. If you select Select Linked Zones or Select Any Zone a scrollable list appropriate to your choice is displayed. Select one.
4. Specify the layer on which the graphics are to be displayed.
5. If you wish to execute a script, select Run Script and then enter a script name in the Name field.
6. Select Apply.

For more information about the options on the property sheet, see the next page.

Display Zone Boundaries Property Sheet

The following figure shows the Display Zone Boundaries property sheet and the available options.

Display Zone Boundaries Property Sheet



Options on the Display Zones Property Sheet

Display Method: Select Add to Display and blanked zone boundaries are displayed. Select Remove from Display and boundaries currently being displayed are blanked. Add to Display is the default.

Selection Method: Select, Select Linked Zones and only the names of zones that are currently linked is shown. Select, Select Any Zone and the listing is of all the project zones, regardless of whether they are linked or not. Select, Select All Linked Zones and no list is displayed. Instead, all of the linked zones in the project are selected to be displayed. Select Linked Zones is the default.

Zones: Scrollable lists of zone names are displayed in this window, according to the criteria established in Display Method and Selection Method above.

Layer: You can specify any layer from 0 to 254 on which to display the project zone boundaries. Select the Calculator button or type in a number.

Run Script (Optional): The Run Script toggle button must be selected before a script can be specified. Valid scripts are contained in the directory `/usr/apl/cadds/data/control/scripts`

The Run Script function is specific to the Bourne shell.

Select the Name field Editor button. This displays the File Name Editor with the `script` directory as default. Select a file and press Accept. Only one script may be specified. A script name may not exceed 255 characters, scrolling.

For more information about the File Name Editor, see “File Name Editor Property Sheet” on page 3-9.

Restoring Objects

Select this menu option to restore objects to their last previous work session state.

Description

This is a direct action menu selection.

Executing Restore Objects returns your current snapshot to the previous work session state.

Getting to the Restore Objects Option

1. Select Utility on the Environment Management area of the top bar.
2. Select CHANGE MANAGEMENT on the Utility pulldown menu.
3. Select the Display option on the Change Management menu.

Procedure:

Select Restore Objects on the Display pulldown menu.

The snapshot is restored to its previous state.

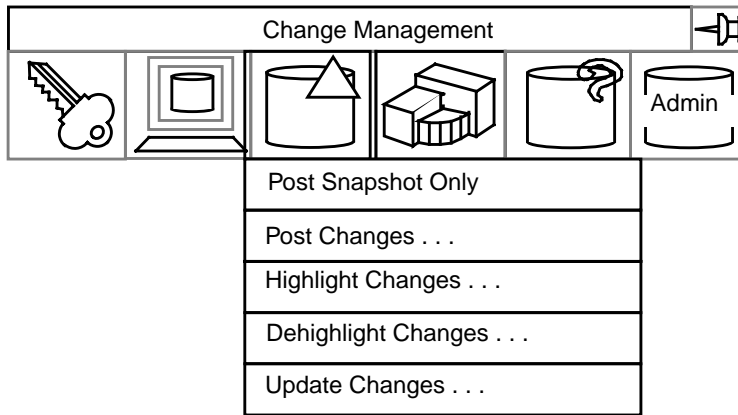
Change Option

This chapter describes the following:

- Introduction
- Overview of the Change Option
- Posting a Snapshot
- Posting Changes to the Project Database
- Graphically Highlighting Changes
- Dehighlighting Change Graphics
- Updating Objects Changed by Others

Introduction

Selecting the Change option displays the menu illustrated below. These menu selections affect your interaction with the EDM project database.



The property sheet associated with each of the menu items is described in the following pages.

Overview of the Change Option



Selecting the Change icon displays a pulldown menu. Each option either executes a direct action or displays a property sheet.

Description

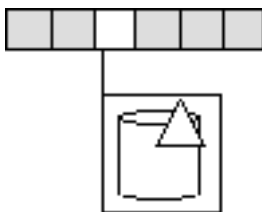
The Change pulldown menu displays the following options:

- Post Snapshot Only
- Post Changes...
- Highlight Changes...
- Dehighlight Changes
- Update Changes...

Getting to the Change Option

1. Select Utility on the Environment Management area of the top bar.
2. Select CHANGE MANAGEMENT on the Utility pulldown menu.

Procedure



1. Select the Change option on the Change Management menu to display the Change pulldown menu.
2. Select the desired option from the Change pulldown menu.

For more information about the Change options, see the following pages.

Options on the Change Menu

Post Snapshot Only

Select this direct action option to create and post to the project database a snapshot of the currently active part. You must be connected to the project database and the part must be active. Changes must have been made.

Post Changes

Select this option to display a property sheet that enables you to identify changes that you have made to the active part and post that information to the project database.

Also select this option to lock a part for EDM Review.

You must be connected to the project database. The part must be active and linked for write access.

Highlight Changes

Select this option to display a property sheet that enables you to graphically identify changes that have been made since the last posting to the project database. A part must be active; it must be connected to the project database, and may be linked for either read or write access.

Dehighlight Changes

Select this option to display a property sheet that enables you to dehighlight some or all of the graphics whose changes you have highlighted. A part must be active; it must be connected to the project database, and may be linked for either read or write access.

Update Changes

Select this option to display a property sheet that enables you to retrieve from the project database information about changes that have been posted by others. A part must be active; it must be connected to the project database, and must be linked for read access.

For more information about these options see the following pages.

Posting a Snapshot

Periodically save your design work by posting a snapshot to the project database.

Description

This is a direct action menu item that posts a current snapshot of your design work in the project database.

Changes are not committed and are not propagated to other users.

Getting to the Post Snapshot Only Option

1. Select Utility from the top bar of the explicit desktop.
2. Select CHANGE MANAGEMENT from the Utility menu.
3. Select the Change icon from the command palette.

Procedure

1. Select Post Snapshot Only on the pulldown menu.
2. A current view of your design is posted to the database.

For more information about the Change option see the following pages.

Posting Changes to the Project Database

Select this menu option to post your changes to the project database.

Description

You can post your changes with or without propagation to other members of the concurrent engineering team.

Use this menu selection to

- Verify changes that have been made to objects, whether posted or not
- Highlight, or mark and highlight, changed objects that have or have not been posted
- Commit the changes to the project database, propagating the change information to other users.

Please note: Marking and highlighting objects is not the same as highlighting changes. Marking and highlighting identifies objects that have been posted or not posted to the project database. Highlight Change identifies entities that have been added, modified, or deleted.

Getting to the Post Changes... Option

1. Select Utility from the top bar of the explicit desktop.
2. Select CHANGE MANAGEMENT from the Utility menu.
3. Select the Change icon from the command palette.
4. Select Post Changes... on the Change pulldown menu.

Procedure

Follow these steps to commit, verify, or verify and commit, changes you have made to the design. You can also lock the part for EDM Review.

1. Select Commit Changes or Verify Changes.
2. If you selected Commit Changes, now select Apply.
3. If you selected Verify Changes, now select the verification method.
4. Select the objects to verify.
5. If you wish to execute a script, select Run Script and then enter a script name in the Name field.

6. Select Lock Part for Review if appropriate.
7. Select Apply.
8. To commit the verified changes, select Commit Changes.
9. Select Apply.

Post Changes to Project Database Property Sheet

Post Changes to Project Database

Change Options	Objects to Verify
<input checked="" type="checkbox"/> Commit Changes	<input checked="" type="checkbox"/> Objects Not Posted
Verify Changes	Objects Posted
Lock Part for Review	Verification Method
	Mark and Highlight
	Highlight Only
<input checked="" type="checkbox"/> Run Script	Name: <input type="text"/> <input type="button" value="..."/>
Apply	Reset
	Cancel

Displays the File Name Editor property sheet

Options on the Post Changes to Project Database Property Sheet

Commit Changes: Select this option to commit changes you have made to the project database. When you commit, Change Management transparently

- Checks authorizations
- Extracts and stores changed data in all the relevant tables for access by other authorized users
- Creates a snapshot and numbers it sequentially
- Puts the snapshot into the EDM Vault
- Assigns a security number and files the part in the project database

Verify Changes: You can verify changes you made by selecting the Verify Changes field.

Verification Method: You can select Mark and Highlight or Highlight Only. Highlighting graphically displays objects that have been posted (in the project

database) in green, and objects that have not been posted in red. These options are only valid if Verify Changes has been selected. Mark and Highlight is the default.

Objects to Verify: You can select Objects Not Posted or Objects Posted. These options are only valid if Verify Changes has been selected. Objects Not Posted is the default.

Lock Part for Review: Parts within a project are subject to periodic review. To ensure that no changes are posted to the project database while the review is being conducted, selecting this option locks the part until the review is finished.

The actual review is conducted within EDM.

Run Script (Optional): The Run Script toggle button must be selected before a script can be specified. Valid scripts are contained in the directory
`/usr/ap1/cadds/data/control/scripts`

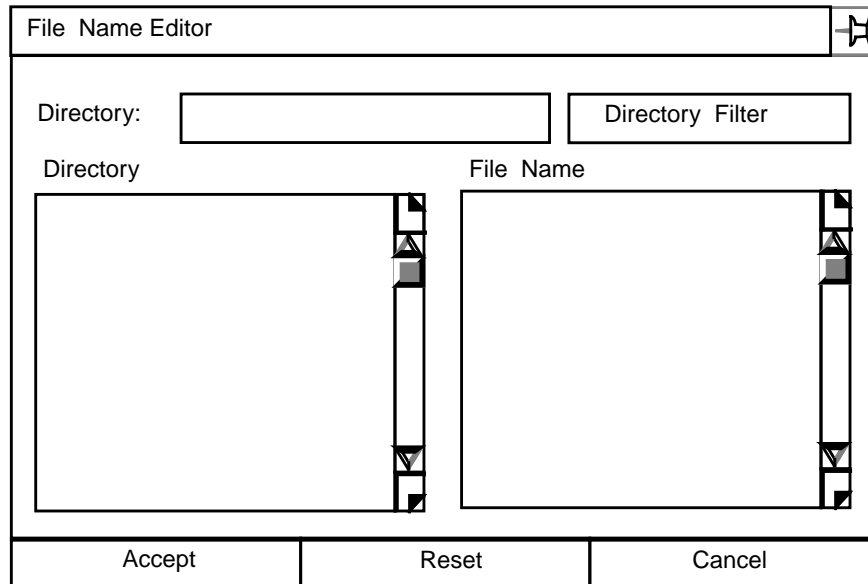
The Run Script function is specific to the Bourne shell.

Select the Name field Editor button. This displays the File Name Editor with the `script` directory as default. Select a file and press Accept. Only one script may be specified. A script name may not exceed 255 characters, scrolling.

For information about the File Name Editor, see the next page.

File Name Editor Property Sheet

The File Name Editor property sheet is illustrated below.



Using the Property Sheet

By default, the Directory fillin box displays your Explicit Modeling create directory. A list of directories located below the create directory is displayed in the Directory scroll window.

Select a directory and it replaces the create directory. Select the Directory Filter box and a scrollable list of files contained in your selected directory is displayed.

Select a file and press Accept.

For more information about the Highlight Change Option see the following pages.

Graphically Highlighting Changes

Select this menu item to graphically highlight changes, posted to the project database, that have been made by you or another.

Description

You can graphically highlight changes that have been made to objects by you or someone else. The comparison is between your active work part and a revision or snapshot that you specify. The highlighting scheme is as follows:

- Objects that have been added are highlighted in green
- Objects that have been modified are highlighted in blue
- Objects that have been deleted are highlighted in red, in the snapshot only, since they no longer exist in the active part

Please note: Use of the Revision or Snapshot fields requires the selection of the Select Graphically button under Selection Method.

You can graphically select only one part at a time.

Getting to the Highlight Changes... Option

1. Select Utility from the top bar of the explicit desktop.
2. Select CHANGE MANAGEMENT from the Utility menu.
3. Select the Change icon from the command palette.
4. Select Highlight Changes... on the Change pulldown menu.

Procedure

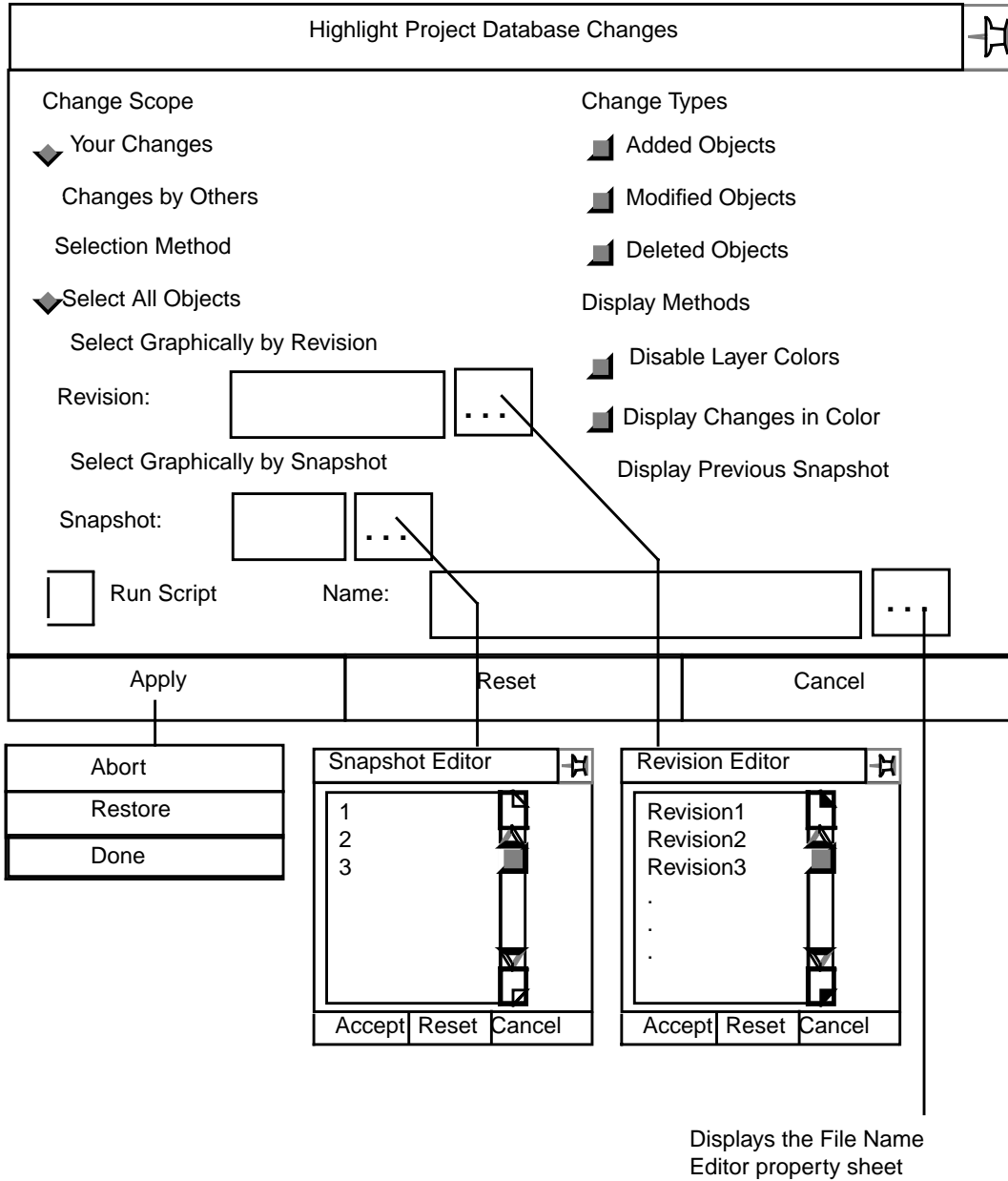
Follow these steps to graphically highlight changes you, or another member of the design team, have made to the design.

1. Select the scope of the change.
2. Specify the selection method.
3. Select some or all of the types of changes.
4. Specify the display methods.
5. Select an object within the part to identify the part to the system.
6. Select one of the three Selection buttons.

- 7.** Specify either an EDM Revision designation or a Change Management snapshot number.
- 8.** If you wish to execute a script, select Run Script and then enter a script name in the Name field.
- 9.** Select Apply.
- 10.** Select Abort, Restore, or Done.

For more information about the property sheet see the next page.

Highlight Project Database Changes Property Sheet



Options on the Highlight Project Database Changes Property Sheet

Change Scope: Select Your Changes to determine changes that you made.

Select Changes by Others to determine changes that others have posted to the project database.

Your Changes is the default.

Change Types: You can specify the highlighting of any or all of the

- Added Objects
- Modified Objects
- Deleted Objects

The default is for all three to be highlighted.

Selection Method: Select, Select All Objects to highlight changes in all the objects that have occurred between the time of the last posting to the project database and now. This is the default.

Select, Select Graphically if you want to specify a specific revision or snapshot. Only one part at a time can be selected graphically.

Revision: You can specify any officially released revision. The default is to display the latest one. You must select Select Graphically by Revision to choose this option and select the Revision Editor button to display a scrollable list of revisions. The revision identification cannot exceed 20 alphanumeric characters.

Snapshot: You can specify a snapshot for comparison by entering its number. Only one snapshot can be specified at a time. You must select Select Graphically by Snapshot to choose this option and select the Snapshot Editor button to display a scrollable list of snapshots.

Display Methods: Select Disable Layer Colors to turn off layer discrimination. Change highlighting will be more visible. This is a default.

Select Display Changes in Color: added - green; modified - blue;

deleted - red. This is a default.

Select Display Previous Snapshot to simultaneously display the comparison snapshot. Otherwise, highlighting will all be in red.

Run Script (Optional): The Run Script toggle button must be selected before a script can be specified. Valid scripts are contained in the directory
`/usr/apl/cadds/data/control/scripts`

The Run Script function is specific to the Bourne shell.

Select the Name field Editor button. This displays the File Name Editor with the `script` directory as default. Select a file and press Accept. Only one script may be specified. A script name may not exceed 255 characters, scrolling.

For information about the File Name Editor, see “File Name Editor Property Sheet” on page 4-9.

Dehighlighting Change Graphics

Select this menu option if you want to dehighlight some of the changes you highlighted.

Description

The Dehighlight Project Database Changes property sheet allows you to selectively, or completely, turn off highlighting of changes. When you dehighlight, the system

- Turns off the specified change highlighting
- Returns layer discrimination to its previous state
- Views off comparison snapshots and revisions

The following describes the use of this option.

Getting to the Dehighlight Changes... Option

1. Select Utility from the top bar of the explicit desktop.
2. Select CHANGE MANAGEMENT from the Utility menu.
3. Select the Change icon from the command palette.
4. Select Dehighlight Changes... on the Change pulldown menu.

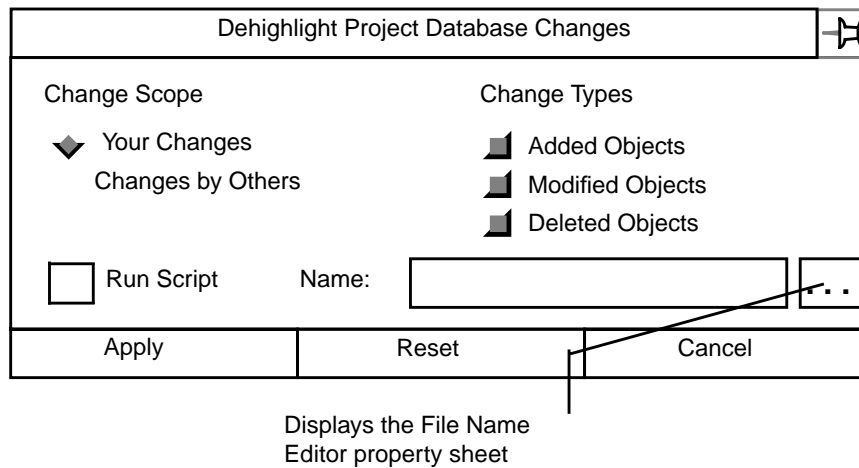
Procedure

Follow these steps to dehighlight changes.

1. Specify the scope of the change.
2. Select the types of changes to be dehighlighted.
3. If you wish to execute a script, select Run Script and then enter a script name in the Name field.
4. Select Apply.

For more information about this option see the next page.

Dehighlight Project Database Changes Property Sheet



Options on the Dehighlight Changes Property Sheet

Change Scope: Select the same option you used to highlight the changes. Your Changes is the default.

Change Types: You can specify the dehighlighting of any or all of the

- Added Objects
- Modified Objects
- Deleted Objects

The default is for all three to be selected.

Run Script (Optional): The Run Script toggle button must be selected before a script can be specified. Valid scripts are contained in the directory `/usr/apl/cadds/data/control/scripts`

The Run Script function is specific to the Bourne shell.

Select the Name field Editor button. This displays the File Name Editor with the script directory as default. Select a file and press Accept. Only one script may be specified. A script name may not exceed 255 characters, scrolling.

For more information about the File Name Editor see "File Name Editor Property Sheet" on page 4-9.

Updating Objects Changed by Others

Update displayed objects that have been changed by others.

Description

Since others are also posting objects to the project database, it is necessary to periodically update your design to incorporate those changed objects.

The following describes the use of this option.

Getting to the Update Changes... Option

1. Select Utility from the top bar of the explicit desktop.
2. Select CHANGE MANAGEMENT from the Utility menu.
3. Select the Change icon from the command palette.
4. Select Update Changes... on the Change pulldown menu.

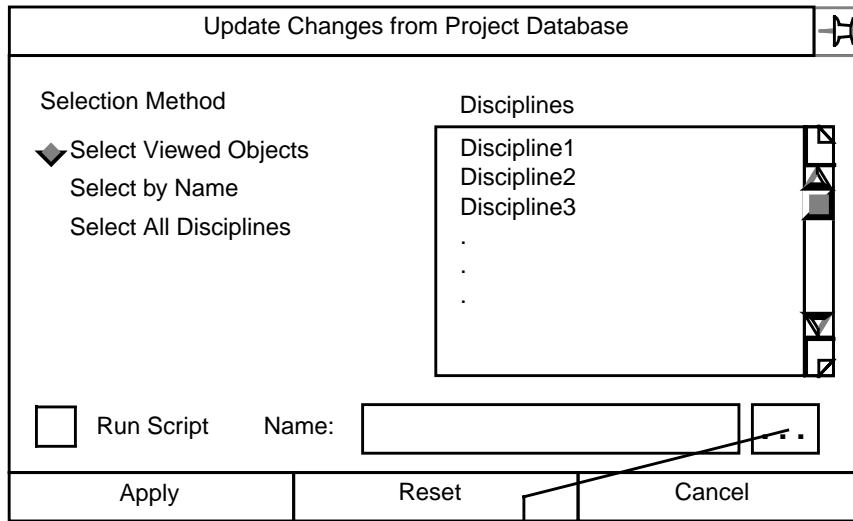
Procedure

Follow these steps to update object data changed by other members of the design team.

1. Select the method by which the update occurs.
2. If you select Select Disciplines a scrollable list of valid disciplines is displayed. Select one.
3. If you wish to execute a script, select Run Script and then enter a script name in the Name field.
4. Select Apply.

For more information about this option see the following pages.

Update Changes from Project Database Property Sheet



Displays the File Name
Editor property sheet

Options on the Update Changes from Project Database Property Sheet

Selection Method: Select one of these three options:

- Select Viewed Objects - The objects in the active part that are visible will be updated with changes that others have posted to the project database. This is the default.
- Select by Name - Objects belonging to the selected disciplines will be updated.
- Select All Disciplines - All Change Management objects will be updated.

Disciplines: The list that is displayed is based on the zone/discipline combinations that are linked for your active part.

Run Script (Optional): The Run Script toggle button must be selected before a script can be specified. Valid scripts are contained in the directory `/usr/apl/cadds/data/control/scripts`

The Run Script function is specific to the Bourne shell.

Select the Name field Editor button. This displays the File Name Editor with the `script` directory as default. Select a file and press Accept. Only one script may be specified. A script name may not exceed 255 characters, scrolling.

For information about the File Name Editor, see “File Name Editor Property Sheet” on page 4-9.

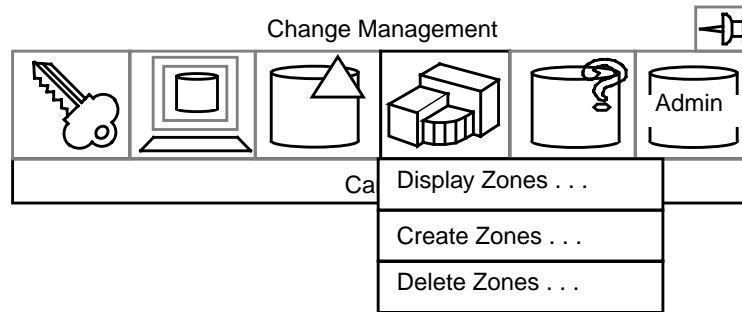
Zone Option

This chapter describes the following:

- Introduction
- Overview of the Zone Option
- Displaying Zone Boundaries
- Creating Project Zones
- Deleting Project Zones

Introduction

Selecting the Zone option displays the menu illustrated below. These menu selections affect your interaction with the project database.



The property sheet associated with each of the menu items is described in the following pages.

Overview of the Zone Option



Selecting the Zone icon displays a pulldown menu. Each pulldown entry displays a property sheet.

Description

The Zone pulldown menu includes options for the following tasks:

- Display Zones...
- Create Zones...
- Delete Zones...

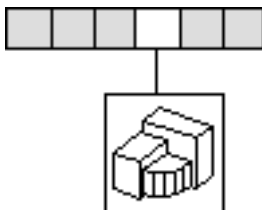
These menu options assist you in

- Specifying project zone boundaries you want to view
- Creating new zones
- Deleting, if you are authorized, a zone which no part is accessing

Getting to the Zone Option

1. Select Utility on the Environment Management area of the top bar.
2. Select CHANGE MANAGEMENT on the Utility pulldown menu.

Procedure



1. Select the Zone option on the Change Management menu to display the Zone pulldown menu.
2. Select the desired option from the Zone pulldown menu.

For more information about the Zone option see the following pages.

Options on the Zone Menu

Display Zone Boundaries

Select this option to display a property sheet that enables you to specify zones whose boundaries you want to have graphically displayed. You must be connected to the project database and be linked to a project.

Create Project Zones

Select this option to display a property sheet that enables you to specify new zone/discipline combinations. You and the active part must both be connected to the project database. The active part does not need to be linked for read or write access., but must be linked to a project.

Delete Project Zones

This option is restricted. The system determines the authority to delete read zones. Administrative privileges grant the right to delete write zones. Select this option to display a property sheet on which the zone to be deleted is identified. The zone must not be accessed by any part.

For more information about this option see the following pages.

Displaying Zone Boundaries

Select this menu option to specify zones whose boundaries you want to display, or displayed ones you want to blank.

Description

You can selectively display, or blank, the boundaries of zones based upon whether you want to select

- Specific linked zones
- All the zones that are linked
- Any zone, linked or not

You must be connected to the project database. A part must be linked for read or write access.

Getting to the Display Zones... Option

1. Select Utility on the Environment Management area of the top bar.
2. Select CHANGE MANAGEMENT on the Utility pulldown menu.
3. Select the Display option on the Change Management menu.
4. Select Display Zones... on the Display pulldown menu to display the Display Zone Boundaries property sheet.

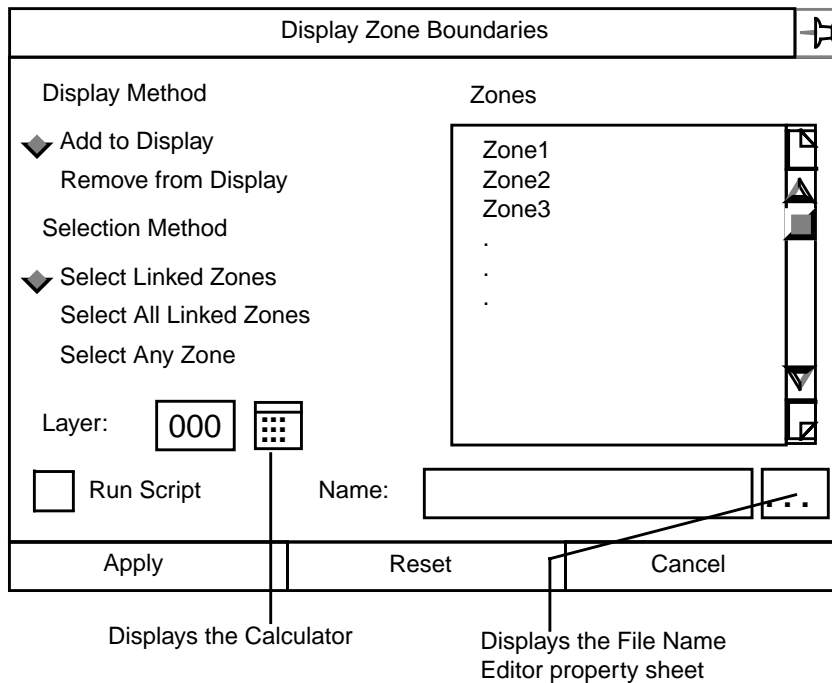
Procedure

Follow these steps to display zone boundaries.

1. Select the display method.
2. Select the type of zone association to be displayed.
3. If you select Select Linked Zones or Select Any Zone a scrollable list appropriate to your choice is displayed. Select one.
4. Specify the layer on which the graphics are to be displayed.
5. If you wish to execute a script, select Run Script and then enter a script name in the Name field.
6. Select Apply.

For more information about the property sheet, see the next page.

Display Zone Boundaries Property Sheet



Options on the Display Zones Property Sheet

Display Method: Select Add to Display and blanked zone boundaries are displayed. Select Remove from Display and boundaries currently being displayed are blanked. Add to Display is the default.

Selection Method: Select Select Linked Zones and only the names of zones that are currently linked is shown. Select Select Any Zone and the listing is of all the project zones, regardless of whether they are linked or not. Select Select All Linked Zones and no list is displayed. Instead, all of the linked zones in the project are selected to be displayed. Select Linked Zones is the default.

Zones: Scrollable lists of zone names are displayed in this window, according to the criteria established in Display Method and Selection Method.

Layer: You can specify any layer from 0 to 254 on which to display the project zone boundaries. Select the Calculator button or type in a number.

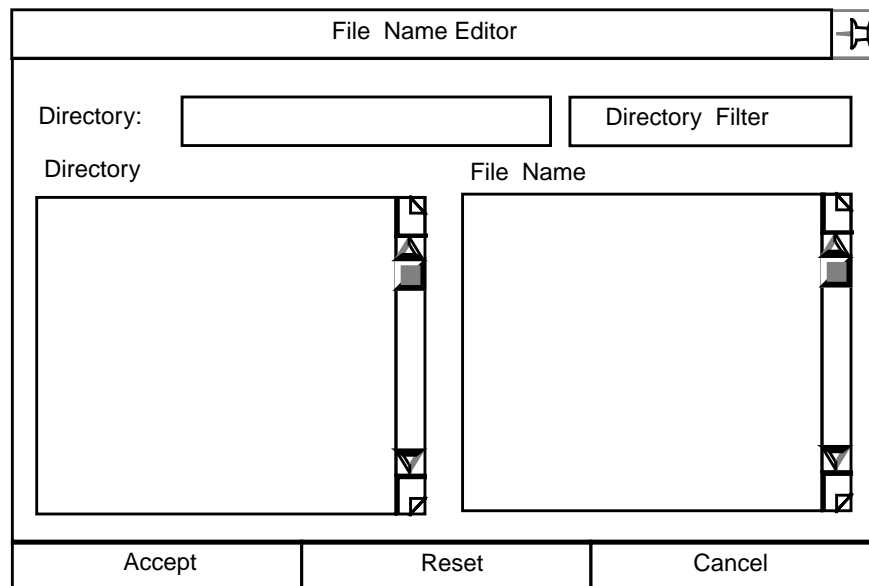
Run Script (Optional): The Run Script toggle button must be selected before a script can be specified. Valid scripts are contained in the directory `/usr/apl/cadds/data/control/scripts`

The Run Script function is specific to the Bourne shell.

Select the Name field Editor button. This displays the File Name Editor with the `script` directory as default. Select a file and press Accept. Only one script may be specified. A script name may not exceed 255 characters, scrolling.

File Name Editor Property Sheet

The File Name Editor property sheet is illustrated below.



Using the Property Sheet

By default, the Directory fillin box displays your Explicit Modeling create directory. A list of directories located below the create directory is displayed in the Directory scroll window.

Select a directory and it replaces the create directory. Select the Directory Filter box and a scrollable list of files contained in your selected directory is displayed.

Select a file and press Accept.

Creating Project Zones

Select this menu option to create, but not redefine, project zones, provided you have been granted authority to do so by the Project Administrator.

Description

To create a project zone, you must be connected to the project database. Your modeling part must be linked to the project database.

You can create a zone for read access or write access, provided you are authorized to do so.

Zones are defined as rectangles or polygons that are bounded by a maximum and minimum elevation. A newly created zone is entered in the project database Zone Table. From then on, you can link and unlink the zone using its name.

A zone name cannot exceed 24 characters.

Getting to the Create Zones... Option

1. Select Utility on the Environment Management area of the top bar.
2. Select CHANGE MANAGEMENT on the Utility pulldown menu.
3. Select the Zone option on the Change Management menu.
4. Select Create Zones... on the Zone pulldown menu to display the Create Project Zones property sheet.

Procedure

Follow these steps to create zone boundaries.

1. Select an access privilege.
2. Specify a selection method.
 - If you select Select Locations use a locator to identify objects to be included in the zone.
 - If you select Select String graphically select a string that will define the zone.
3. Select the Zone Name field and enter a new, unique name.
4. Select the Z-maximum and Z-minimum fields and enter the extents of the zone.
5. Select the Description field and describe the zone.

6. Select Display Zone Boundaries
7. Select the Layer field and enter the number of the layer on which the zone boundary is to be displayed.
8. If you wish to execute a script, select Run Script and then enter a script name in the Name field.
9. Select Apply.

The following figure shows the property sheet and the available options.

Create Project Zones Property Sheet

Creates Project Zones

Access Privilege

Read Access Only
Read and Write Access

Selection Method

Select Locations
Select String

Display Zone Boundary

Run Script Name:

Zone Attributes

Zone Name:

Z-maximum:

Z-minimum:

Description:

Layer:

Apply Reset Cancel

Displays the File Name Editor property sheet

Displays the Calculator

Options on the Create Project Zones Property Sheet

Access Privilege: Select either Read Access Only or Read and Write Access. The default is to grant read access only.

Selection Method: A zone is either a rectangle or a polygon, with maximum and minimum extents. Choose Select Locations and use a locator to identify objects to be included in the zone. The system calculates the zone boundary and displays it. This is the default selection.

You can identify the perimeter of a zone by selecting **Select String** and graphically selecting a predefined string entity. The endpoints of the string will close automatically if they are open. Endpoints are not considered coincident.

EDMZone Attributes: Type a new, unique name into the **Zone Name** field. The name may not exceed 24 characters.

Specify the maximum and minimum extents of the zone in the **Z-maximum** and **Z-minimum** fields.

Type the zone/discipline purpose of the zone into the **Description** field.

Display Zone Boundary: You can elect to display or not to display the zone boundaries graphically by clicking the toggle button on or off. The default is to display the zone boundaries.

Layer: Specify a layer on which the zone boundary is to be displayed. The default is layer 254. You can type the number into the field or select the **Calculator** button.

Run Script (Optional): The **Run Script** toggle button must be selected before a script can be specified. Valid scripts are contained in the directory
`/usr/apl/cadds/data/control/scripts`

The **Run Script** function is specific to the Bourne shell.

Select the **Name field Editor** button. This displays the **File Name Editor** with the `script` directory as default. Select a file and press **Accept**. Only one script may be specified. A script name may not exceed 255 characters, scrolling.

For information about the **File Name Editor**, see “**File Name Editor Property Sheet**” on page 5-7.

Deleting Project Zones

Select this menu option to delete project zones, provided you have been granted authority to do so by the Project Administrator.

Description

A project zone can only be deleted by someone with administrative authority to do so. No part can be accessing the zone. If any is, the zone cannot be deleted.

Getting to the Delete Zones... Option

1. Select Utility on the Environment Management area of the top bar.
2. Select CHANGE MANAGEMENT on the Utility pulldown menu.
3. Select the Zone option on the Change Management menu.
4. Select Delete Zones... on the Zone pulldown menu to display the Delete Project Zones property sheet.

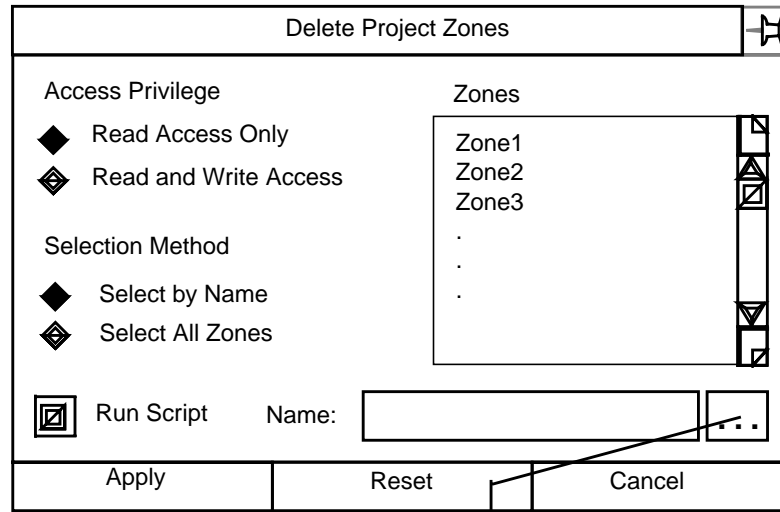
Procedure

Follow these steps to delete zone boundaries.

1. Select an access privilege.
2. Specify a selection method.
3. If you specified Select by Name a scrollable list of zones that meet the delete criteria is displayed. Select one.
4. If you wish to execute a script, select Run Script and then enter a script name in the Name field.
5. Select Apply.

For more information about the property sheet see the next page.

Delete Project Zones Property Sheet



Displays the File Name
Editor property sheet

Options on the Delete Project Zones Property Sheet

Access Privilege: Select one of

- Read Access Only (the default)
- Read and Write Access

Selection Method: Choose Select by Name and a scrollable list of authorized Zones is displayed. This is the default.

Choose Select All Zones and every zone that meets the criteria is selected.

Zones: The list of authorized zones that is displayed is determined by the access privilege and the selection method you select:

- Read Access Only displays a list of zones that are linked for read-only.
- Read and Write Access displays a list of all the zones.

Run Script (Optional): The Run Script toggle button must be selected before a script can be specified. Valid scripts are contained in the directory `/usr/ap1/cadds/data/control/scripts`

The Run Script function is specific to the Bourne shell.

Select the Name field Editor button. This displays the File Name Editor with the `script` directory as default. Select a file and press Accept. Only one script may be specified. A script name may not exceed 255 characters, scrolling.

For information about the File Name Editor, see “File Name Editor Property Sheet” on page 5-7.

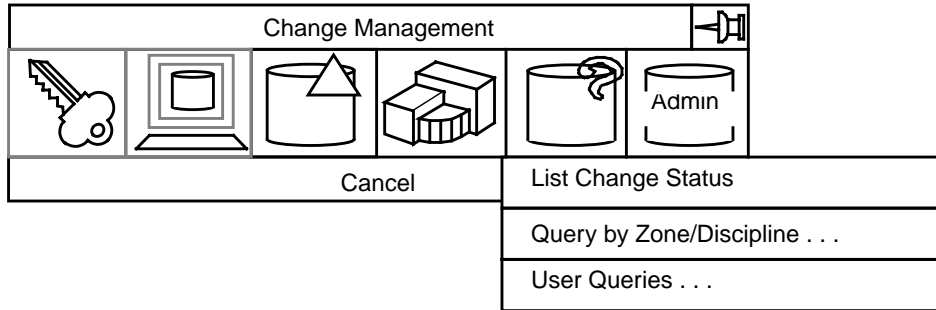
Query Option

This chapter describes the following:

- Introduction
- Overview of the Query Option
- Listing the Status of Linked Parts
- Providing Work Table Data
- Obtaining Data from the Database

Introduction

Selecting the Query option displays the menu illustrated below. These menu selections affect your interaction with the project database.



The property sheet associated with each of the menu items is described in the following pages.

Overview of the Query Option



Selecting the Query icon displays a pulldown menu. Each pulldown entry either executes a direct action or displays a property sheet.

Description

The Query pulldown menu lists the options for the following tasks:

- List Change Status
- Query by Zone/Discipline
- User Queries

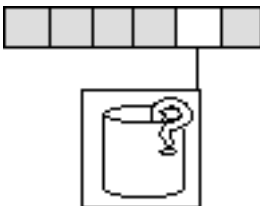
These options help you to

- View a screen report of the status of your active part
- Display the work table data for specific zone/discipline associations
- Request data about a variety of subjects

Getting to the Query Option

1. Select Utility on the Environment Management area of the top bar.
2. Select CHANGE MANAGEMENT on the Utility pulldown menu.

Procedure



1. Select the Query option on the Change Management menu to display the Query pulldown menu.
2. Select the desired option from the Query pulldown menu.

For more information about this option see the following pages.

Options on the Query Menu

List Change Status

Select this direct action option to create a screen report listing the status of the active part in the project database.

Query by Zone and Discipline

Select this option to display a property sheet that enables you to specify a zones or zones, and a set of disciplines, for which the information is posted to the work table.

User Queries

Select this option to display a property sheet that enables you to request information about any or all of the following:

- Objects
- Object geometry and rules
- Disciplines and discipline rules
- Entity sets
- Layer sets
- Links
- Transaction log
- Offsets
- Privileges
- Viewed parts
- Zones and zone sets
- Zone vertices

This option is available at all times if you are connected to the project database.

For more information about this option see the following pages.

Listing the Status of Linked Parts

Selecting this direct action option displays a list of information about the currently linked parts.

Description

The List Change Status pulldown menu option displays a list of data about the linked parts, including the following:

- Part name
- Part ID number
- Discipline name
- Zone name
- Display status
- Viewing status
- Snapshot number
- Data status

Getting to the List Change Status Option

1. Select Utility on the Environment Management area of the top bar.
2. Select CHANGE MANAGEMENT on the Utility pulldown menu.

Procedure

Follow these steps to list the status of linked parts.

1. Select the Query option on the Change Management menu to display the Query pulldown menu.
2. Select List Change Status from the Query pulldown menu.

For an example of a typical status report see the next page.

Example of a Typical Status Report

#14#GET ADBMS Status

STATUS REPORT

Part: ABC-PART5 ←

(This is the active part)

Discipline = EQUIP_A Zone = PROJECT

Display: ON Id: 642 Partname: PART2
Status: UP TO DATE Current Snapshot = 1

Discipline = HVAC_A Zone = ZONE_6A

Display: OFF Id: 646 Partname: PART6
Status: UP TO DATE Current snapshot = 1

Discipline = PIPING_A Zone = PIPE_1

Display: ON (not viewed Id: 504) Partname: PART-12
Status: OUT OF DATE Current Snapshot = 5 (Last viewed=3)

Display: NEVER BEEN DISPLAYED (PUT) Id: 637 Partname: PART15
Status: UP TO DATE Current snapshot = 1

Discipline = PIPING_A Zone = ZONE_6A

Display: NEVER BEEN DISPLAYED (LINK) Id: 644 Partname: PART4
Status: UP TO DATE Current snapshot = 1

Discipline = STEEL_A Zone = PROJECT

Display: ON Id: 645 Partname: PART5
Status: UP TO DATE Current snapshot = 1

Parts displayed: ON - 3 OFF 1 NEVER DISPLAYED - 2 OUT OF DATE - 1
No changes were made.

Snapshots

Providing Work Table Data

Selecting this option provides data about objects, identified by zone/discipline combination, from the project database to your work table.

Description

This pulldown menu option displays a property sheet on which you identify a zone, or a set of zones, and a discipline classification.

Based on this information, the system identifies objects that lie within that combination, and reports those objects to your work table.

The information reported includes

- Partid (Part identification)
- Uid (User identification)
- Zone name
- Discipline classification

Getting to the Query by Zone/Discipline... Option

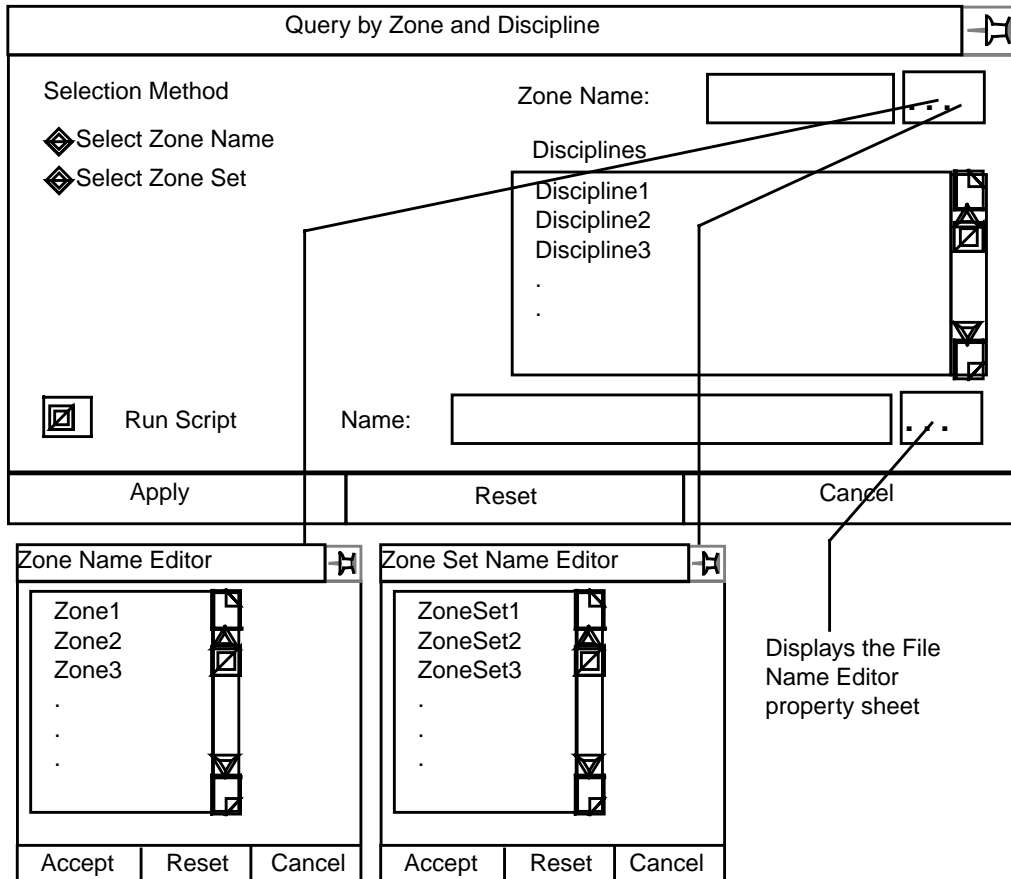
1. Select Utility on the Environment Management area of the top bar.
2. Select CHANGE MANAGEMENT on the Utility pulldown menu.
3. Select the Query option on the CHANGE MANAGEMENT menu.
4. Select Query by Zone/Discipline... on the Query pulldown menu to show the Query by Zone and Discipline property sheet.

Procedure

Follow these steps to display objects located within a zone.

1. Specify the selection method.
2. Select a zone or zone set.
3. Select a discipline from the scrollable list that is displayed in the discipline window.
4. If you wish to execute a script, select Run Script and then enter a script name in the Name field.
5. Select Apply.

Query by Zone and Discipline Property Sheet



Options on the Query by Zone and Discipline Property Sheet

Selection Method: Select either Select Zone Name or Select Zone Set. Your choice determines which list is displayed. Select Zone Name is the default.

Zone/Set: A scrollable list of valid zones or sets, depending on your selection method, is displayed. Choose one and it is entered in the Zone Name field. The name may not exceed 24 characters.

Disciplines: A scrollable list of valid disciplines is displayed. The lists vary according to the zone or zone set you selected.

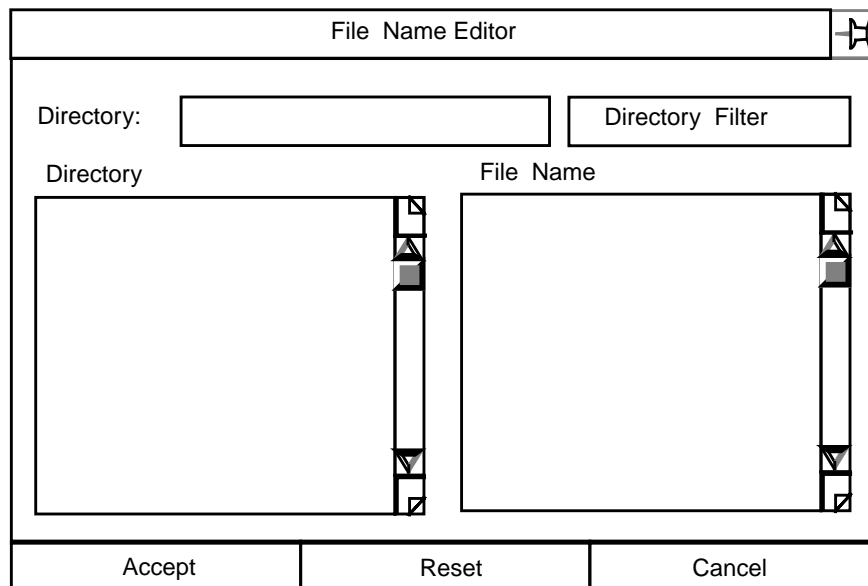
Run Script (Optional): The Run Script toggle button must be selected before a script can be specified. Valid scripts are contained in the directory `/usr/ap1/cadds/data/control/scripts`

The Run Script function is specific to the Bourne shell.

Select the Name field Editor button. This displays the File Name Editor with the `script` directory as default. Select a file and press Accept. Only one script may be specified. A script name may not exceed 255 characters, scrolling.

File Name Editor Property Sheet

The File Name Editor property sheet is illustrated below.



Using the Property Sheet

By default, the Directory fillin box displays your Explicit Modeling create directory. A list of directories located below the create directory is displayed in the Directory scroll window.

Select a directory and it replaces the create directory. Select the Directory Filter box and a scrollable list of files contained in your selected directory is displayed.

Select a file and press Accept.

Obtaining Data from the Database

Select this menu item to obtain a variety of information from the project database. You can establish filter options to limit the search.

Description

You can request data that is contained in the RDBMS tables set up by your Project Administrator. The information is provided in the form of SQL tables. The column headings are determined by the Administrator.

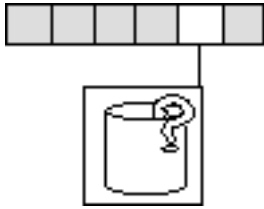
Valid User Queries

Valid queries are listed in the `/usr/apl/cadds/data/control/sql` directory. They are

- Disciplines
- Discipline Rules
- Entity Sets
- Layer Sets
- Links
- Transaction Log
- Object Construction Rules
- Objects
- Offsets
- Privileges
- Snapshots
- Viewed Parts
- Zones
- Zone Vertices
- Zone Sets

For more information about this option see the following pages.

Getting to the User Queries... Option



- 1.**Select Utility on the Environment Management area of the top bar.
- 2.**Select CHANGE MANAGEMENT on the Utility pulldown menu.
- 3.**Select the Query option on the CHANGE MANAGEMENT menu.
- 4.**Select User Queries... on the Query pulldown menu to show the Query Project Database property sheet.

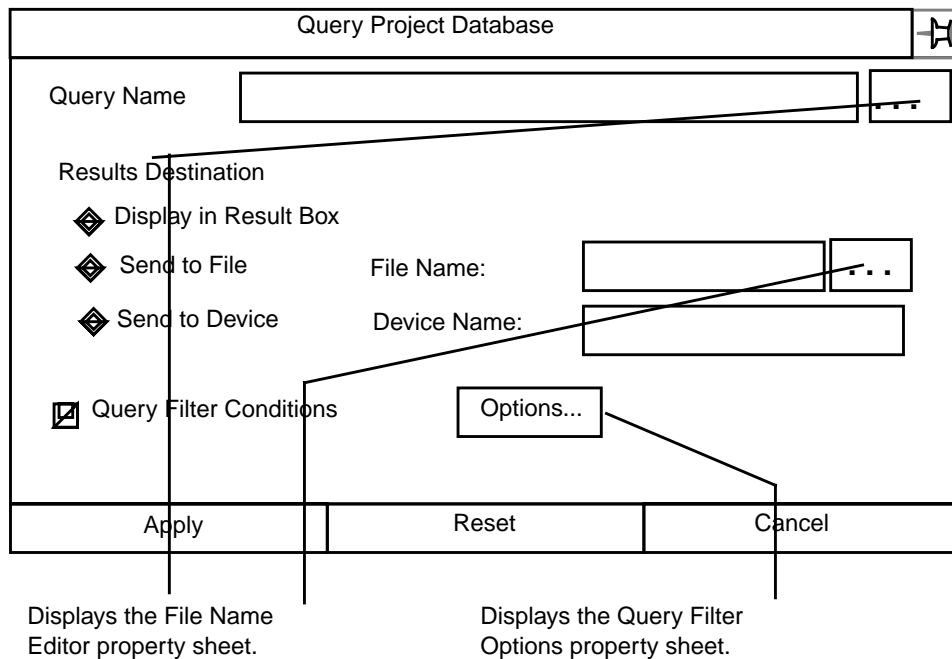
Procedure

Follow these steps to display data.

- 1.** Select the Query Name Editor button.
Select a query name from the File Name Editor that is displayed.
- 2.** Specify the destination to which the data is to be sent.
 - a.** Graphic display.
 - b.** A file. Select the File Name Editor button. Select a file name from the File Name Editor that is displayed.
 - c.** A printer or plotter. Enter the name of a properly configured printer or plotter in the Device Name field.
- 3.** Select the Query Filter Conditions button.
Select Options... in the Query Filter Conditions box.
Supply the requested information on the Query Filter Options property sheet.
- 4.** Select Apply.

For more information about User Queries see the following pages.

Query Project Database Property Sheet



Options on the Query Project Database Property Sheet

Query Name: Enter a valid query name or select the Editor button to display the File Name Editor property sheet described on the next page.

Select the directory `/usr/apl/cadds/data/control/sql/user`. Only one file can be specified.

Select Apply.

Results Destination: Select where you want the information to be sent:

- Display in Result Box displays the results in the Query Results box, described on a following page. This is the default.
- Send to File places the results in a file at the end of a full pathname. Select the Send to File, File Name Editor button and the File Name Editor property sheet described on the next page is displayed. The default destination file is `/usr/tmp/results.txt`.

Only one file may be selected. A file name may not exceed 24 characters.

- Send to Device sends the information to a properly configured printer or plotter. The default device name is `lpr`. A device name may not exceed 24 characters.

For information about the File Name Editor and the options associated with it see “File Name Editor Property Sheet” on page 6-9.

Query Filter Conditions: Select this option to filter the query by

- User
- Project
- Part name
- SQL Where clause statement

The default is not to select the Query Filter Conditions option.

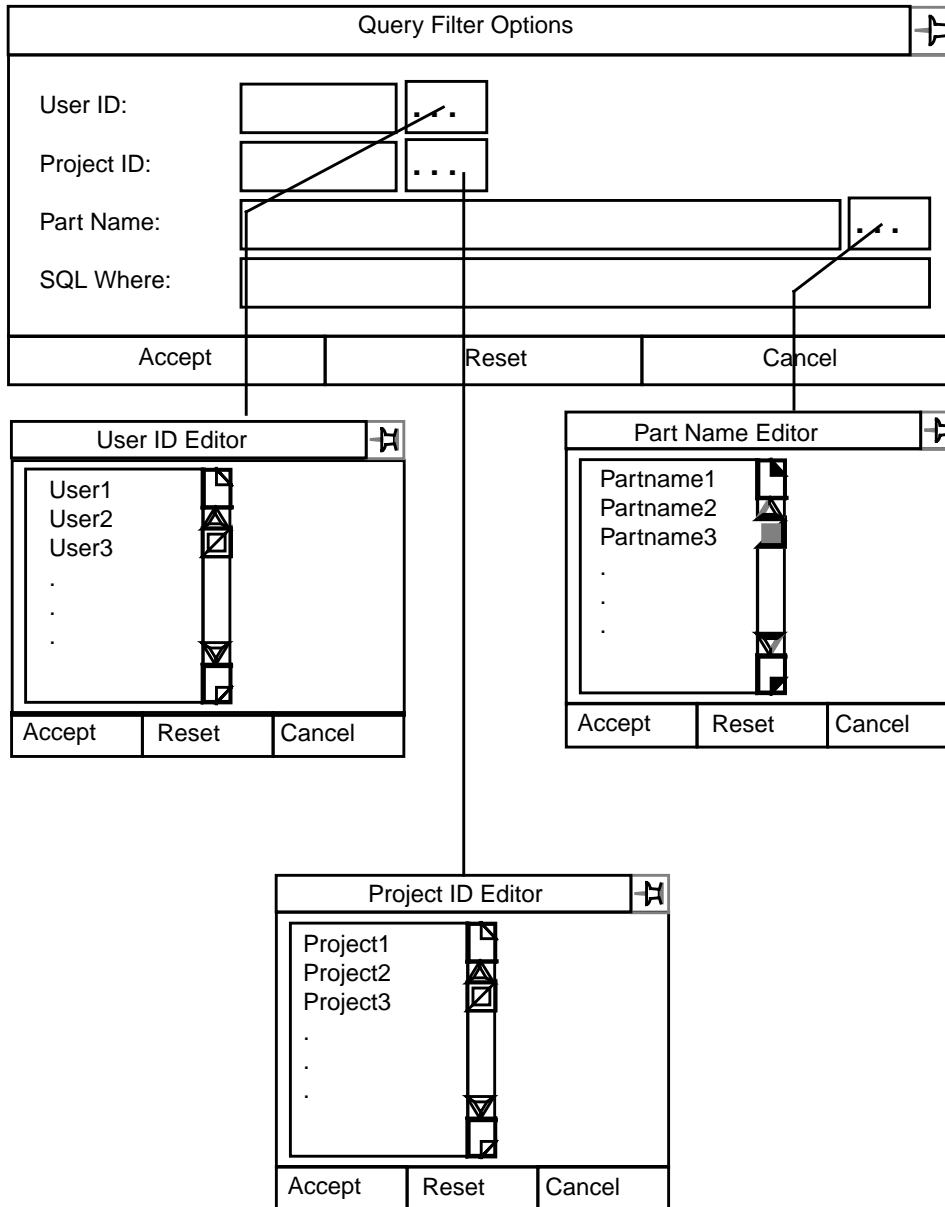
Procedure

Follow these steps to specify an SQL Where clause.

1. Select Query Filter Conditions on the Query Project Database property sheet.
2. Select Options... in the Query Filter Conditions box.
3. Select the User ID Editor button. Select an ID from the scrollable list that is displayed.
4. Select the Project ID Editor button. Select an ID from the scrollable list that is displayed.
5. Select the Part Name Editor button. Select a name from the scrollable list that is displayed.
6. Enter a valid SQL Where clause from the `/usr/apl/cadds/data/control/sql` directory.
7. Press Accept.

For more information about the Query Filter Options property sheet see the next page.

Query Filter Options Property Sheet



Options on the Query Filter Options Property Sheet

User ID: Enter a valid ID or select the Editor button and a scrollable list of valid User IDs is displayed. Select only one. It may not exceed eight alphanumeric characters. The system displays a message if you are not authorized to use this ID.

Project ID: Enter a valid ID or select the Editor button and a scrollable list of valid Project IDs is displayed. Select only one. It may not exceed eight

alphanumeric characters. The system displays a message if you are not authorized to use this ID.

Part Name: Enter a valid part name or select the Editor button and a scrollable list of valid Parts is displayed. The list depends upon the Project ID that is specified. Select only one. It may not exceed eighty alphanumeric characters.

SQL Where: Select this entry if you want to particularize the data you are searching for.

You may enter a Standard Query Language Where clause statement. Valid statements are contained in the `/usr/apl/cadds/data/control/sql` directory. It may not exceed 80 alphanumeric characters.

Example of a Filtered Query Displayed in the Query Result Box

The following is a brief example of data you might receive in response to a Query.

1. Specify a Query Name of Discipline Rules.
2. Enter the filter condition:

```
dr_disc_name like 'CV%' order by 1,2;
```

3. The information is displayed in the Query Result box.

	DR_DISC_NAME	DR_RULE_PRIORITY	DR_RULE_NAME	DR_OBJECT_TYPE
1	CV_ARCHITECTU	1	ARCH_WALL	Wa
2	CV_ARCHITECTU	2	ARCH_OB	Architectural_object
3	CV_ENTITIES	1	ALL	Entit
4	CV_EQUIPMENT	1	CVPD_N	Equipment Nozzle
5				
6				
7				
8				
9				

Cancel

Glossary

This Glossary contains definitions of words and phrases particular to EDMControl.

Access Privileges

Access to the Project Database is granted on a username/password basis for zone/discipline combinations.

Change Control and Propagation

EDMControl propagates changes to users by tracking objects, snapshots, and work parts whenever changes are posted. Users decide when to post or retrieve object changes from the database.

Change Notification

Users may check at any time for modeling changes based on one or more disciplines and graphically highlight these changes.

EDMControl

A change control management system for Explicit Modeling designs and drawings based on geometric zone and functional relationships.

Database Administrator

Responsibility and authority for building and maintaining the RDBMS and customizing the user interface.

Disciplines

Subdivisions of a product based upon the functional classifications (trades and crafts). For example, hot water pipes, HVAC ducts, and so on.

End User

Member of the engineering design team who utilizes EDMControl.

Offsets

The positioning of a Work Part with respect to other Work Parts within the project coordinate system.

Object Construction Rules

A formula used by EDMControl to construct objects from entity primitives stored in the Work Part.

Objects

A group of graphical entities created each time a user posts changes. The graphical entities are used to display objects and are stored in snapshot versions of the Work Parts. Object data is stored in the RDBMS tables.

Project

An undertaking requiring extensive planning and work, that has a definite objective with specific start and completion dates.

Project Control

The phase of a project management cycle that compares actual performance with the planned schedule of objectives and implements corrective measures to avoid project completion delays.

Project Database

The database consists of all the Explicit Modeling Work Parts, the Snapshot version of Explicit Modeling Work Parts associated with a Project, and other project data contained in RDBMS tables.

Project Parts

Explicit Modeling parts, and data stored in RDBMS tables, associated with a specific project.

Project Reporting

Reports generated, using SQL queries, about objects, parts, transaction dates, changes, etc., based on data stored in the Project Database RDBMS tables.

Relational Database Management System - RDBMS

Database used by CADDInformation to store and manage attributes, i.e. ORACLE. EDMControl shares some, and uses some, of the CADDInformation tables.

SCRIPT

A global modifier which allows the execution of a UNIX shell script, set up by the project administrator, from within the modeling session.

Snapshots

Versions of the Work Part created each time a user posts changes to the Project Database Used to compare and track changes between versions, and to display objects.

Structured Query Language - SQL

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

Work Parts

Standard Explicit Modeling parts that have been linked to a specific EDMControl Project. They are used to store objects, and post objects, to the project database.

Work Table

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

Zones

Geometric subdivisions of a project as defined by a polygon in the XY plane with a minimum and maximum Z elevation.

Zone/Disciplines

Standard Explicit Modeling parts that have been linked to a specific EDMControl Project and are used to store objects, and post objects, to the project database.

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