Managing Views

> **Note** The web interface does not support the views feature. You can create customized views only in the Cisco Mobile Wireless Transport Manager (MWTM) client interface.

This chapter contains:

Overview

This chapter describes how to create and manage multiple views of your network from the MWTM client. Before creating or managing a view, you must understand the basic concepts of a default view, a custom view (and its associated subviews), and the navigational features available in each view:

Initial View Selection

Initially at client start-up, a new dialog 'Initial View Selection' is displayed which gives the user the ability to select different view options. 'Use Default View' loads the DEFAULT view. When the Cisco Mobile Wireless Transport Manager (MWTM) discovers your network, all discovered objects are placed in a DEFAULT view, which is stored on the MWTM server and shared by all MWTM clients. Clients cannot modify the DEFAULT view that is stored on the MWTM server. This view is always available for users who need to view the entire network.

'Create an Empty View option used to start the client when there is a large number of nodes discovered on the server. 'Open Existing View' option lists all the existing views. 'Open Last Used View' option opens the view which was used last.

You can use the MWTM to create your own, client-specific views and subviews, which are subsets of the DEFAULT view, to meet your individual needs.

Custom View and Subviews

You can choose the nodes you are interested in managing, exclude all other nodes from your view, and change the layout of the topology map in the topology window. You can save all of this customized information in a custom view and set that view as the new *default* view for the MWTM client.

You can use the MWTM client from then on to manage only the part of the network you are interested in, with the settings you prefer. When you modify the DEFAULT view in any way (except for modifying the layout of the topology map in the topology window), the MWTM prompts you to name the new, custom view.

You can also create many different views and subviews on a given MWTM client, with each view devoted to a different aspect of the network. You can then load a different view to manage a different part of the network, or switch to the DEFAULT view to see the entire network. For details on creating views, see Creating a New View, page 7-7.

If more than one person uses a certain MWTM, each user can create a personal view.

Also, you can create subviews in any custom view. The custom view becomes the parent view of one or more subviews. When you load a custom view that has subviews, the MWTM displays the Views label under Summary Lists in the navigation tree. When you click Views, the Views table appears in the right pane and lists all subviews of the custom (parent) view (see Views Summary List Table, page 7-3).

Note   You cannot create subviews for the DEFAULT view. Subviews are valid only for custom views.

Viewing Basic Information for Custom Views

To see all subviews currently configured in a custom view:

Step 1   Load a custom view by choosing **File > Load View**.

Step 2   Choose a custom view from the View List in the Load File dialog box and click **OK**.

If the chosen custom view has associated subviews, the Views label appears under Summary Lists in the navigation tree.

Step 3   Click the turner [icon] beside **Summary Lists**, then click **Views**.

The View Summary List window appears.

The View Summary List window provides information about all subviews that have been defined for this custom view, including their status and other important information.

The View Summary List window contains these sections:

- Right-Click Menu for Views, page 7-3

- Views Summary List Table, page 7-3

Related Topics
- Viewing Detailed Information for Views, page 7-4
- Navigating Table Columns, page 5-clxiii

Right-Click Menu for Views

To see the right-click menu for views, under Summary Lists, select **Views** and right-click the mouse. For details on menu options, see Viewing the Right-Click Menu for an Object, page 8-2.

Note If the Views label does not appear under Summary Lists, you have loaded the DEFAULT view or a custom view that has no subviews.

Views Summary List Table

The views table shows information about the subviews that have been defined for a custom view. If a custom view has no subviews, this option is not available.

You can resize each column, or sort the table based on the information in one of the columns. By default, this table is sorted by Parent View, and the MWTM shows all of the columns in the view table except Internal ID.

For detailed information on working in tables, see Navigating Table Columns, page 5-clxiii.

The view table contains:

Column	Description
Internal ID	Internal ID of the view. The internal ID is a unique ID for every object, assigned by the MWTM for its own internal use. It can also be useful when the TAC is debugging problems.
Name	Name of the subview that belongs to the custom (parent) view.
Parent View	Name of the custom or parent view to which the subview belongs.
Ignored	Indicates whether the subview should be included when aggregating and displaying MWTM status information: • Check the check box to ignore the subview. • Uncheck the check box to include the subview. This is the default setting. Users with authentication level Power User (level 2) and higher can edit this field.
Notes	Indicates whether a note is associated with the subview.

Column	Description
Events	Indicates whether a recent event associated with a network object in the subview. (Even if the server purges all of the events associated with objects in the subview, the MWTM continues to display the event icon in this field.) To delete the event icon (orange triangle) from MWTM displays for: • A specific subview, select the subview and click the icon. • All subviews, choose **Edit > Clear All Events** from the MWTM main menu. **Note** During Discovery, the MWTM might flag most views with an event icon. If the event icons are too distracting, use the **Edit > Clear All Events** menu option to remove them. Changing a view (for example, by ignoring it or attaching a note to it) does not generate an event, and therefore does not cause an event icon to appear in this field. Deleting an application server process, node, or signaling point with the Delete menu option does not generate an event, and therefore does not cause an event icon to appear in this field. However, if the MWTM rediscovers a deleted application server process, node, or signaling point, events are generated and logged for the deletion and the rediscovery, and the event icon appears in this field.
Last Status Change	Date and time that the status of the subview last changed.
Severity	This is the worst severity of the network objects in the view or any subview.
Status	Current status of the subview. Possible values are: • Active • Unmanaged • Warning For detailed definitions of each status, see Appendix E, "Status Definitions."
Status Reason	Reason for the current status of the subview. For a full list of possible reasons, see the *stateReasons.html* file. If you installed the MWTM in: • The default directory, */opt*, then the file resides at */opt/CSCOsgm/apache/share/htdocs/eventHelp* directory. • A different directory, then the help directory and file reside in that directory. If the cell is too small to show all of the status reason, place the cursor over the cell to see the full text in a tooltip. The status reasons are listed in order of decreasing magnitude. If two or more reasons apply, the reason of greatest magnitude appears. If the status reason is Unsupported Configuration, correct the configuration and enter the **mwtm cleandiscover** command to delete all current network data and begin a discovery of the network. If the status reason remains Unsupported Configuration, enter the **mwtm clean** command to restore the MWTM server to a state that would exist after a new installation of the MWTM, excluding the log files, which the MWTM retains. To also remove the log files, enter the **mwtm cleanall** command. For more information on the use of these commands, see Appendix B, "Command Reference."

Viewing Detailed Information for Views

The MWTM can display detailed information about a chosen view, including its associated objects, status, and other information.

Updates for the view that are received from the MWTM server are reflected automatically in this window.

To display the Details tab for a view, click the name of the view in the MWTM main window navigation tree. For example, to see detailed information for the DEFAULT view in the right pane, click DEFAULT View in the navigation tree.

The View Details window contains:

Function or Tab	For More Information
Right-click menu (MWTM client only)	Viewing the Right-Click Menu for an Object, page 8-2.
Status Contributors	Viewing Status Contributors, page 8-7
Details	Viewing Details, page 8-9
Notes (MWTM client only)	Viewing Notes, page 6-39
Recent Events	Viewing Alarms and Recent Events, page 8-42
Alarms	Viewing Alarms and Recent Events, page 8-42

Editing a View

For details on editing a view, see Editing Properties, page 6-33.

Saving a View

You use the MWTM to save a specific view, change the list of views, and select one view to be loaded automatically when the associated preferences file is saved.

When you are satisfied with the changes you made to a view, use one of these procedures to save the view:

- To save the changes you made to the view without changing the name of the file, choose **File > Save** from the View Editor window menu.

    Note   You cannot save changes to the DEFAULT view. If you are currently using the DEFAULT view and you choose **File > Save**, the MWTM shows the Save File Dialog: View List dialog box.

- To save the changes you made to the view with a new name, choose **File > Save As** from the Discovery Dialog menu. The MWTM shows the Save File Dialog: View List dialog box.

The MWTM stores the view in the view file directory on the MWTM server:

- If you installed the MWTM in the default directory, */opt*, then the MWTM view file directory is */opt/CSCOsgm/views*.

- If you installed the MWTM in a different directory, then the MWTM view file directory resides in that directory.

Note If another user modifies and saves the view before you save your changes, the MWTM asks if you want to overwrite that user's changes. If you choose to do so, the other user's changes are overwritten and lost. If you choose not to do so, your changes are lost, unless you save the view to a different filename.

The Save File Dialog: View List contains:

Field or Button	Description
Create New Folder	Click this icon to create a new folder in the current directory. This action opens the Input dialog box.
	Enter a folder name and click **OK**. The new folder appears in the Save File dialog box.
	Double-click the folder to open it. You can save files in this folder or create another folder at this level.
Go Up One Folder	Click this icon to go up one folder in the directory structure.
Type	Icon indicating whether the item in the table is a file or a folder.
Name	Name of the view file or folder.
Last Modified	Date and time the view file or folder was last modified.
Size (bytes)	Size of the view file or folder, in bytes.
Filename	Name by which you want to save the view. You must specify a name other than DEFAULT view. You cannot save changes to the DEFAULT view.
	When you create a new view filename, you can use any letters, numbers, or characters in the name that are allowed by your operating system. However, if you include any spaces in the new name, the MWTM converts those spaces to dashes. For example, the MWTM saves file *a b c* as *a-b-c*.
Make this my preferred startup option	Specifies whether the chosen view should be loaded automatically whenever the associated preferences file is loaded. To load the:
	• Saved view, select the view, then check this check box.
	• Last-used view, uncheck the check box. This is the default setting.
OK	Saves any changes you made to the current named view or to the list of views and closes the dialog box.
	To save the view with a new name, use one of these procedures. To save the file with:
	• A completely new name, enter the new name and click **OK**.
	• An existing name, overwriting an old view, select the name in the list and click **OK**.
	The MWTM saves the view with the new name, closes the Save File Dialog: View List dialog box, and returns to the Discovery dialog box.
	To save any changes you made to the list of files, click **OK**. The MWTM saves the changes and closes the Load File Dialog: View List dialog box.
Delete	Deletes the chosen file from the view list. The MWTM issues an informational message containing the name and location of the deleted file.
Cancel	Closes the dialog box without saving the view or any changes to the view list.

Field or Button	Description
Help	Shows online help for the dialog box.
Number of Files (visible in bottom left corner)	Total number of view files and folders.

Creating a New View

You use the MWTM to specify the nodes and objects you want to see in MWTM displays. This view is called a client-specific network view. All changes you make are reflected in topology tables and maps as soon as you make the changes.

Before creating a client-specific network view, ensure that Discovery has been run at least once, and data appears in the server's MWTM database. See Discovery Overview, page 4-cxiii, for details.

To create a client-specific network view, choose **Edit > Views** from the MWTM main menu. The Create New View window appears. Enter a name for the new view in the 'Enter name for new view' text box and then click **OK.** The View Editor window appears. Click **Cancel** to close the window.

You use the View Editor window also to move objects into and out of the current view. All changes that you make in this window are reflected in the MWTM client, and in the topology tables and maps as soon as you make the changes.

The View Editor window contains:

- View Editor Window Menu, page 7-8
- Objects In Current View, page 7-9
- View Objects Pane, page 7-10
- Excluded/New Objects Pane, page 7-11
- Filter pane, page 7-12
- View Editor Buttons, page 7-13
- Closing the View Editor Window, page 7-13

Related Topics

- Choosing a View, page 7-13
- Viewing Network Topology

View Editor Window Menu

The menu on the View Editor window contains:

Menu Command	Description
File > Load (Ctrl-L)	Loads an already existing view. If you have already saved a view and you want to change it, choose the **File > Load** menu option. The MWTM prompts you for the name of the view you want to load: • Select the name of the view, or accept the default view name, then click **OK** to load the view. • Click **Cancel** to close the prompt window without loading a view.
File > Create Views by SP Instances (Ctrl-P)	Creates views based on signaling point's network names. A confirmation window is displayed asking for the confirmation of replacement of current set of views.
File > Create Views by Aggregation Node (Ctrl-P)	Creates views based on aggregation nodes. A confirmation window is displayed asking for the confirmation of replacement of current set of views.
File > Save (Ctrl-S)	Saves the current view. If you have: • Not already saved the current view, opens the Save File Dialog: View List, which you use to enter or select a filename under which to save the current view. • Already saved the current view, saves the view to that filename. If you have implemented MWTM User-Based Access, this option is available to users with authentication level Power User (level 2) and higher.
File > Save As	Opens the Save File Dialog: View List, which you use to save changes you made to the chosen view with a new name, or overwrite an existing seed file. The view is updated immediately in the MWTM client. If you have implemented MWTM User-Based Access, this option is available to users with authentication level Power User (level 2) and higher.
File > Close (Ctrl-W)	Closes the View Editor window. If you have modified the view, the MWTM asks if you want to save your changes. Click: • **Yes** to save your changes to the current view. • **No** to keep the current view as-is, without applying any changes. The MWTM closes the View Editor window. • **Cancel** to close the prompt window and return to the View Editor window without applying any changes to the current view.
Edit > Create Subview (Ctrl-N)	Creates a new subview for the chosen view or subview. Enter a name for the new subview.
Edit > Rename View (Ctrl-R)	Renames the chosen view. The new name can be from 1 to 30 characters, and can contain any letters, numbers, or special characters.
Edit > Include In View (Ctrl-I)	Includes the chosen object in the view.

Menu Command	Description
Edit > Exclude From View (Alt-X)	Excludes the chosen object from the view. The MWTM also excludes the object and associated objects from the topology map. If you exclude all of the objects associated with a node, the node is excluded, too.
Edit > Delete View (Ctrl-D)	Deletes the chosen view.
Help > Topics (F1)	Shows the table of contents for the MWTM online help.
Help > Window (Shift-F1)	Shows online help for the current window.
Help > About (F3)	Shows build date, version, SSL support, and copyright information about the MWTM application.

Objects In Current View

The navigation tree in the left pane of the View Editor window lists nodes that the current view contains.

To see the objects that are associated with a node, and that are in the current view, click the turner beside the node.

To exclude any of these objects from the current view, select them in the navigation tree, then choose **Edit > Exclude From View** from the View Editor window to move them to the Excluded From View pane of the View Editor window.

Note   If you are using an MWTM client with the DEFAULT view set, the MWTM automatically adds all newly discovered objects to the navigation tree as soon as they are discovered.

If you delete an object, the MWTM removes it from the navigation tree. If the MWTM then discovers the object, the MWTM places it in the New on the Network pane. To see this object again in your current view, you must move it into the navigation tree using Edit > Include In View from the View Editor window.

The navigation tree in the View Editor window provides these right-click menus:

- Right-Click Menu for a View, page 7-9
- Right-Click Menu for a Subview, page 7-10
- Right-Click Menu for an Object, page 7-10

Right-Click Menu for a View

The right-click menu for a view in the navigation tree of the View Editor window provides these options:

Menu Command	Description
Create Subview	Creates a new subview for the chosen view. Enter a name for the new subview.
Rename View	Renames the chosen view. The new name can be from 1 to 30 characters, and can contain any letters, numbers, or special characters.

Right-Click Menu for a Subview

The right-click menu for a subview in the navigation tree of the View Editor window contains:

Menu Command	Description
Create Subview	Creates a new subview for the chosen subview. Enter a name for the new subview.
Rename Subview	Renames the chosen subview. The new name can be from 1 to 30 characters, and can contain any letters, numbers, or special characters.
Open Subview	Opens the chosen subview.
Delete Subview	Deletes the chosen subview.

Right-Click Menu for an Object

The right-click menu for an object in the navigation tree of the View Editor window provides this option:

Menu Command	Description
Exclude From View	Excludes the chosen object, and any lower-level associated objects, from the view or subview. This action also excludes the object from the topology map.

View Objects Pane

The View Objects pane lists the nodes that the current view contains. To exclude any of these objects from the current view, right click the object, then choose **Exclude From View** in the right click menu or chose **Edit > Exclude From View** from the menu.

The View Objects pane provides:

Field	Description
View Object	Lists the objects that the current view contains.
View Parent	Lists the parent objects of the entries in the View Object column.
Severity	Indicates the alarm severity for the chosen signaling point. The severity can be Critical, Major, Minor, Warning, Informational, Indeterminate, Unmanaged, or Normal. See Managing Alarms and Events, page 9-1 for more information.
View Type	Type of the object listed in the View Object column.

The right-click menu for an object in the View Objects pane provides this option:

Menu Command	Description
Exclude From View	Excludes the chosen object, and any lower-level associated objects, from the view or subview. This action also excludes the object from the topology map.

Excluded/New Objects Pane

The Excluded/New Objects pane contains the following tabs:

Excluded from View

The Excluded from View tab lists the objects that have been excluded from the current view. To add these objects to the current view, select them from the table under Excluded from View tab, then choose **Edit > Include In View** from the MWTM main menu or right click on them and choose **Include In View** from the right click menu.

The Excluded from View tab contains:

Field	Description
View Object	Lists the objects that are excluded from the view.
View Parent	Parent objects of the entries in the View Object column of the Excluded from View tab.
Severity	Indicates the alarm severity for the chosen signaling point. The severity can be Critical, Major, Minor, Warning, Informational, Indeterminate, Unmanaged, or Normal. See Managing Alarms and Events, page 9-1 for more information.
View Type	Type of the object listed in the View Object column of the Excluded from View tab.

The Excluded from View tab provides this right-click option for an object:

Menu Command	Description
Include In View	Includes the chosen object, and any lower-level associated objects, in the chosen view or subview.

New on the Network

The New on the Network tab shows newly discovered objects, based on these criteria. If you are using an MWTM client with:

- The DEFAULT view set, this table never contains any objects. In the DEFAULT view, the MWTM adds all newly discovered objects to the navigation tree in the View Editor window as soon as they are discovered.
- A custom view set, this table contains all objects discovered since the View Editor window was opened in this session that have *not* been excluded in the Excluded from View pane or that are not in the current view.

When the MWTM discovers one or more new objects in the network, the MWTM also:

- Broadcasts the discovery of the new objects to all MWTM clients.

- Shows a **New** icon in the bottom of most MWTM windows. Clicking the **New** icon in the topology window opens the New Objects pane in the left pane. Clicking the **New** icon in any other window opens the Edit View tab of the View Editor window.

- Adds graphical elements for the newly discovered objects to the New Objects pane in the left pane of the topology window. For more information, see Printing the Topology Map, page 10-16.

To add a newly discovered object to the current view, select one or more objects in the table under New on the Network tab, then choose **Edit > Include In View** from the MWTM main menu or right click on them and choose **Include In View** from the right click menu.

To exclude a newly discovered object from the current view, select one or more objects in the New on the Network pane, then choose **Edit > Exclude From View** from the MWTM main menu or right click on them and choose **Include In View** from the right click menu.

The New on the Network tab provides:

Field	Description
New Object	Lists the objects that are newly added to the current view.
View Parent	Parent objects of the entries in the New Object column of the New on the Network tab.
Severity	Indicates the alarm severity for the chosen signaling point. The severity can be Critical, Major, Minor, Warning, Informational, Indeterminate, Unmanaged, or Normal. See Managing Alarms and Events, page 9-1 for more information.
View Type	Type of the object listed in the New Object column of the New on the Network tab.

The New on the Network tab provides these right-click options for an object:

Menu Command	Description
Include In View	Includes the chosen object, and any lower-level associated objects, in the chosen view or subview.
Exclude From View	Excludes the chosen object, and any lower-level associated objects, from the view or subview. The MWTM also removes the object from the topology map.

Filter pane

The Filter pane provides an option to filter the list of objects which are necessary when there are thousands of items in the editor. The Filter pane contains this text field:

Field	Description
Name or Parent Name or Type	Enter the name or the parent name or the type of the object in this text box. Based on your entry in this field, the content of the View Editor window gets filtered.

View Editor Buttons

The View Editor window provides the following buttons:

Field	Description
OK	Applies the changes you made to the editor and closes the View Editor window.
Cancel	Closes the View Editor window without saving the changes.

Closing the View Editor Window

To close the View Editor window at any time, click **File > Close**. If you have modified the view, the MWTM asks if you want to apply the changes before leaving the window. Click:

- **Yes** to apply the changes to the current view. The MWTM applies the changes to all MWTM windows immediately. The MWTM then asks if you want to make this the default view. Click:

    - **Yes** to make this view the new default view. In the future, when this client is started, this will be the default view.

    - **No** to retain your old default view.

    The MWTM closes the View Editor window.

- **No** to keep the current view unchanged, without applying any changes. The MWTM closes the View Editor window.

- **Cancel** to close the prompt window and return to the View Editor window without applying any changes to the current view.

If you are working in a custom view (that is, not in the DEFAULT view) and you exit the MWTM client, the MWTM automatically saves any changes you made to the view.

Choosing a View

If you are performing an action and have multiple views from which to choose, the Choose a View dialog box appears. Use it to choose the view you wish to apply.

The Choose a View dialog box contains:

Field or Button	Description
View List	Shows a list of views available for this action.
OK	Confirms the view you have chosen.
Cancel	Cancels the dialog without choosing a view.
Help	Shows help for this dialog box.

Loading the DEFAULT View

To load the DEFAULT network view, choose **File > Load DEFAULT View** from the MWTM main menu. You might be prompted to save the view in which you currently are. Once you have chosen whether to save your current view, the MWTM loads the DEFAULT view.

> **Note** Any custom views are saved in the View Editor window (Import Views tab) under the Edit > Views option in the MWTM main window.

Loading a Client-Specific View

You use the MWTM to load a specific view, change the list of views, and select one view to be loaded automatically when the associated preferences file is loaded.

To load a client-specific network view, choose **File > Load View** or choose **Edit > Views** from the MWTM main menu. The View Editor window appears. Then choose **File > Load** from the View Editor window menu. The MWTM shows the Load File Dialog: View List dialog box.

The Load File Dialog: View List contains:

Field or Button	Description
⬆ Go Up One Folder	Click this icon to go up one folder in the directory structure.
Type	Icon indicating whether the item in the table is a file or a folder.
Name	Name of the view file or folder.
Last Modified	Date and time the view file or folder was last modified.
Size (bytes)	Size of the view file or folder, in bytes.
Make this my preferred start option	Specifies whether the chosen view should be loaded automatically whenever the associated preferences file is loaded. To load the: • Chosen view, select the view, then check this check box. • Last-used view, uncheck the check box. This is the default setting.
Number of Files (visible in bottom left corner)	Total number of view files and folders.
OK	Loads the chosen view, saves any changes you made to the list of views, closes the dialog box, and returns to the View Editor window. To load a view, double-click it in the list, select it in the list and click **OK**, or enter the name of the view and click **OK**. **Note** If the network elements belonging to a client-specific view have been removed from the network, a message appears when you load the view. The message warns you that the network elements have been removed from the view. To prevent the warning from being issued the next time you load the view, save the view using the same name (File > Save from the View Editor window).
Delete	Deletes the chosen file from the view list. The MWTM issues an informational message containing the name and location of the deleted file.

Field or Button	Description
Cancel	Closes the dialog box without loading a view or saving any changes to the view list.
Help	Shows online help for the dialog box.