

WebMSM
Web Monitoring System Manager
User Manual



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Preface

The Web Monitoring Systems Manager (WebMSM) consists of two software applications:

- Web Monitoring Systems Manager
- Web Monitoring Systems Manager Configuration Editor

With the configuration editor, you can set up graphical representations of complete networks. The network operator can then use the WebMSM to monitor the error status of the whole network and, where necessary, drill down to the user interfaces of individual DTV Monitors.

User Documentation

This manual, PDF (portable document format), is included with the WebMSM and WebMSM Configuration Editor installation files that can be downloaded from the Tektronix Web site. A PDF Reader is available from the Adobe Web site (www.adobe.com).

Also available from the Tektronix Web site are the MTM400A and RFM300 DTV Monitor Quick Start User Manual (071-2492-XX) and Technical Reference (077-0175-XX).

Getting Started

Overview

The Web Monitoring Systems Manager (WebMSM) consists of two software applications: the WebMSM and the WebMSM Configuration Editor.

The WebMSM provides the network operator with complete visibility of the error status of all of the DTV Monitors identified in a transmission network.

The WebMSM Configuration Editor enables the network manager to design and set up geographic and network-based schematic hot spot views. Using these views in WebMSM, it is then possible to view the error status of the complete network and, when required, drill down to and open individual DTV monitor remote user interfaces to view stream and device data.

The DTV monitor user interface and its operation is described in the DTV user documentation. (See Table 1-1.)

Table 1-1: DTV Monitor user documentation

Tektronix part number	Description
071-2492-XX	Quick Start User Manual (English)
071-2493-XX	(Japanese)
071-2632-XX	(German)
077-0175-XX	Technical Reference
077-0181-XX	Release Notes
077-0176-XX	Specifications and Performance Verification Technical Reference
077-0177-XX	Test Parameter and Configuration File Technical Reference
077-0178-XX	Programmer Manual
077-0179-XX	Declassification and Security Instructions
077-0174-XX	DTV Monitor RUI v3.x Upgrade

The WebMSM features, including configuration selection and password management, are all accessible through the WebMSM Control Panel.

Configuration of network-based systems may use one or more of the following views: Hot Spot, Stream and Device. Each view is provided by a separate application that handles a different aspect of system management and monitoring.

DTV monitor user interfaces can also be viewed directly using the DTV monitor viewer. Using the viewer negates the need to download the DTV monitor remote user interface (RUI) each time that a DTV monitor is accessed.

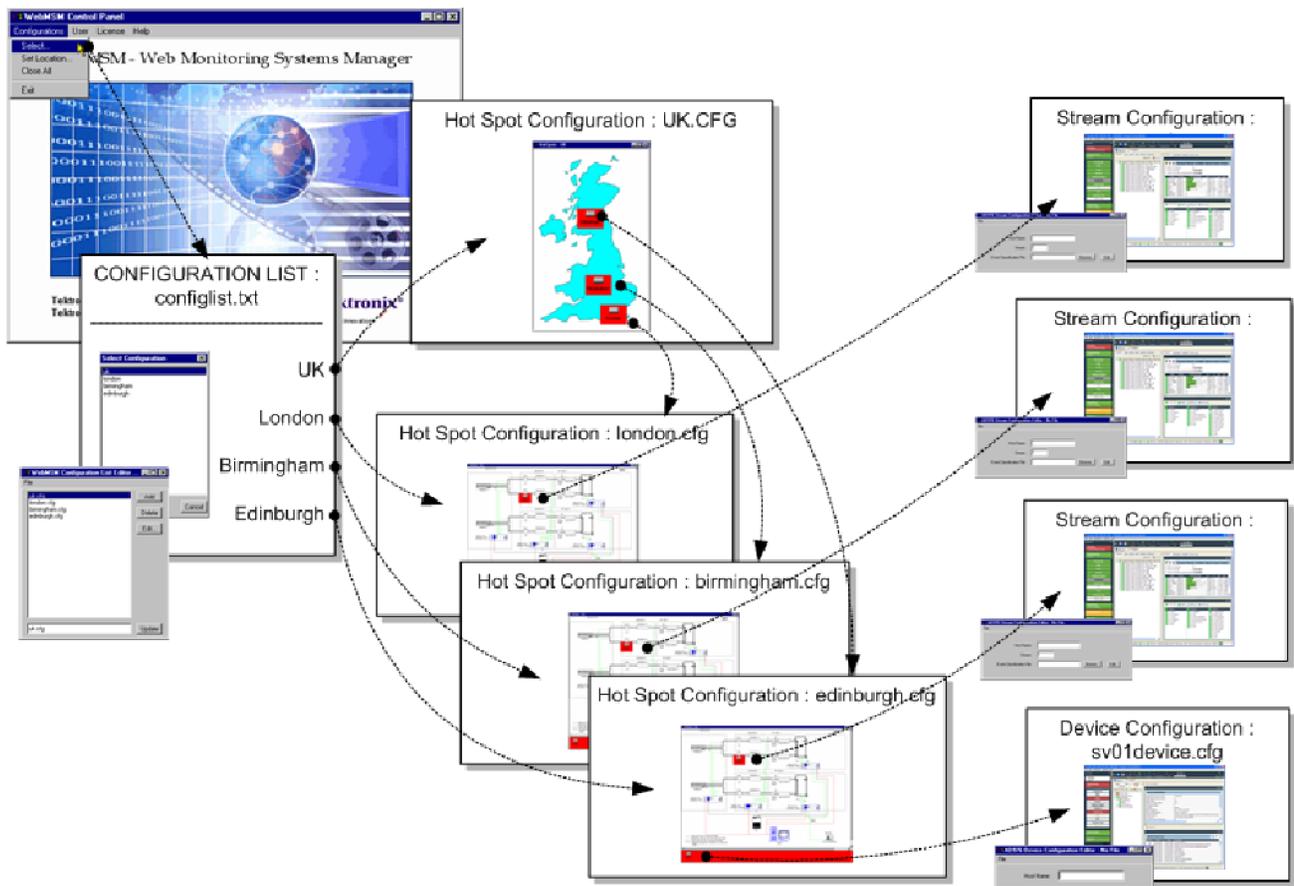


Figure 1-1: System configuration - example

The **Hot Spot application** allows the overall state of streams and devices to be viewed in a graphical environment. Hot spots are icon-like images placed at strategic points on a background image of a map or system diagram and linked to a device, a stream or another hot spot view. Hot Spots also provide an overview of the status of the linked item using color coding.

The Hot Spot views are managed by a set of configuration files that dictate the content and linking of the various views. Any number of configurations can be created using WebMSM Configuration Editor. On starting the WebMSM, you can select a specific configuration from a configuration list.

The **Stream application** interprets and conveys stream-related information received from the associated DTV monitor, including:

- Tests
- Programs
- PIDs (packet identities)
- Service information tables:
 - PSI/SI/PSIP - Program Specific Information (MPEG)
 - Service Information (DVB)
 - Program and Specific Information Protocol (ATSC)

The **Device application** interprets and conveys instrument-related information received from the associated DTV monitor, including fan status and the device event log.

System Configuration

A major feature of WebMSM is its versatility with respect to configuration. Although always operating within a client-server architecture, the system components can be centralized or distributed around a system.

A large network may have a dedicated Web server that holds the WebMSM Configuration files. Users of the system would have WebMSM installed on their own personal computer (PC); they may then choose to use either their own local WebMSM configuration files or the WebMSM configuration files held by the dedicated Web server.

System Security is facilitated using password files. These are held on individual DTV monitors or on a central Web server.

The user interface can also be accessed by the DTV Monitor Viewer.

Although a user can access multiple DTV monitors through multiple instances of the DTV Monitor Viewer, this is not recommended as a normal working practice.

Network Architecture

The diagram below illustrates an example of WebMSM network architecture.

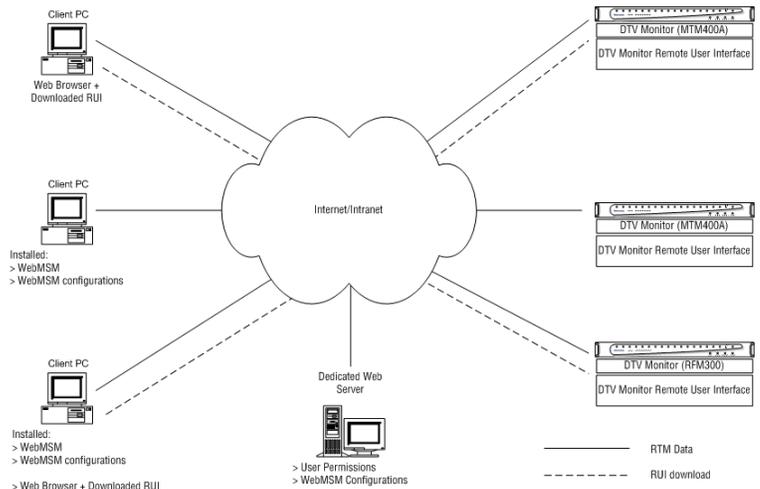


Figure 1-2: Network architecture

WebMSM configuration files can be stored either on the Web server, on the client PCs, or in both locations. The files stored on the Web server are available to all users of the network (subject to permissions), whereas those stored on client PCs are available to only the user of that PC.

The Passwords can still be installed on a Web Server; this can either be a monitoring device or a dedicated Web server.

NOTE. *The Remote User Interface can be used from any networked PC equipped with a Web Browser independently of the WebMSM architecture.*

WebMSM Configuration

Configuration of the WebMSM for a particular system setup is provided by a hierarchy of configuration files. Each configuration file handles a specific aspect of the system architecture and provides links to other levels. The WebMSM Configuration Editor provides the tools (editors) needed to create and edit the configuration files.

The diagram below illustrates the relationship between the various configuration files.

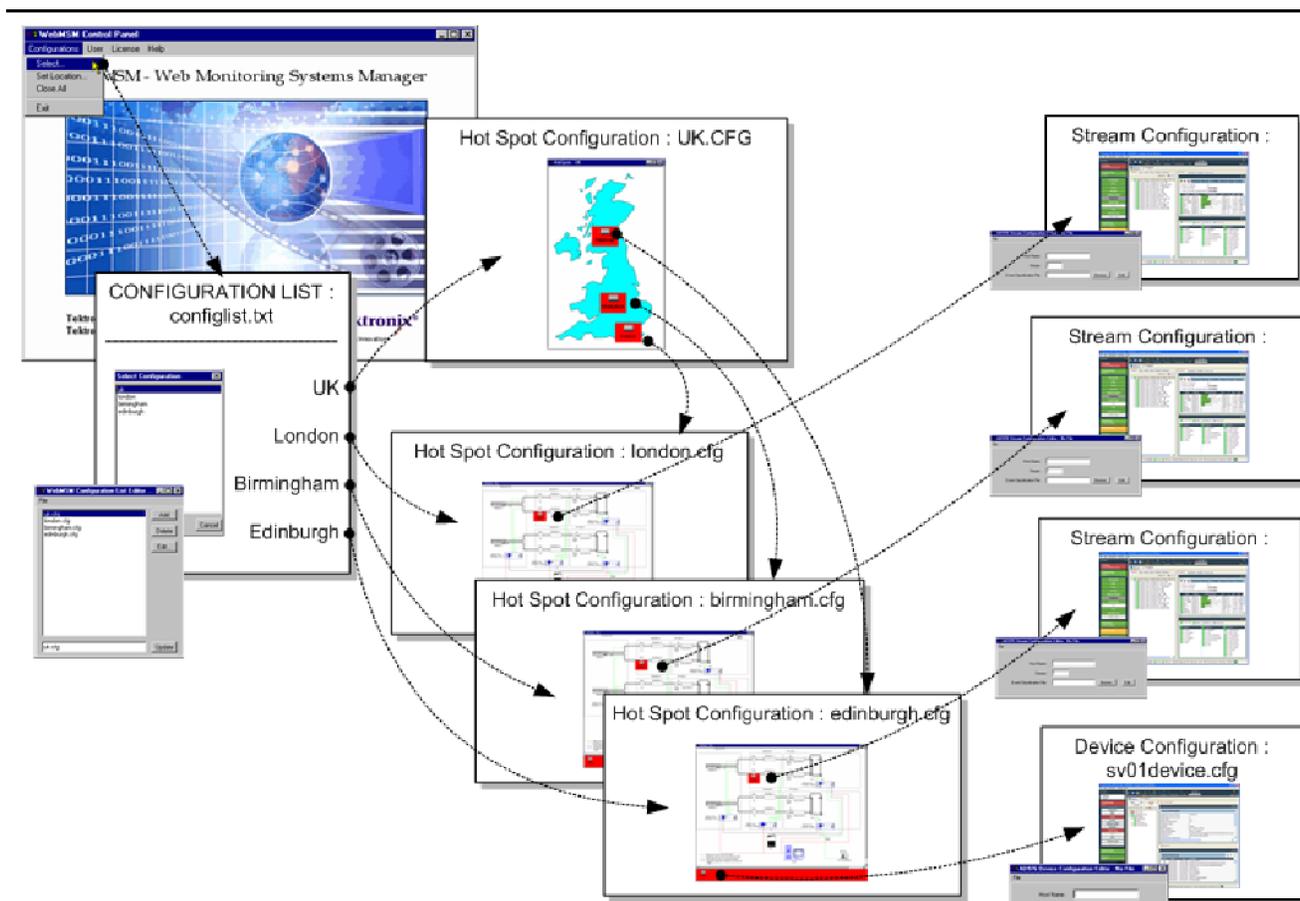


Figure 1-3: Configuration file relationships

The configuration files are as follows:

Configuration List. The WebMSM reads this file (configlist.txt) when Configuration > Select is selected from the WebMSM Control Panel. The configuration list provides content for the Select Configuration dialog box. Each entry in the Configuration List acts as a pointer to the next level of system configuration files.

Configuration Lists are created and edited using the Configuration List Editor.

Hot Spots. Hotspot views are graphical representations of systems overlaid with active hotspots. Each hot spot provides a link to another hot spot view or a DTV monitor.

Hotspot configuration files (*.cfg) are created and edited using the Hot Spot Editor.

Stream. The error content for Stream views is received from a DTV monitor.

Stream configuration files (*.cfg) indicate which stream is to be used. Stream configuration files are created and edited using the Stream Configuration Editor.

Device. The error content for Device views is received from a DTV monitor.

Device configuration files (*.cfg) indicate which device is to be used. Device configuration files are created and edited using the Device Configuration Editor.

Sample Configuration

A sample configuration has been provided in the SampleConfiguration directory. It may be useful to inspect the sample files.

The directory containing the files are included with the installation files. The sample includes the following files:

Table 1-2: Sample files

Hot Spot views	Stream views	Device views
uk.cfg	stream1.cfg	device1.cfg
london.cfg	stream2.cfg	device2.cfg
birmingham.cfg	stream3.cfg	device3.cfg
edinburgh.cfg		

Also: Two graphic files: uk.gif and site.gif The primary configuration list file: configlist.txt

WebMSM Licensing

WebMSM options are enabled using licensing. All options are licensed during installation; no further installation activity is currently required.

The deliverables are given in the following table.

Table 1-3: Standard WebMSM configuration

Nomenclature	Description	Deliverables
WebMSM	Web-based monitoring management software	Download from the Tektronix Web site, including automatically installed license for unlimited monitoring probes.

Passwords

Security access is controlled by a combination of user names and passwords. Currently two user names are available:

- User, enables monitoring only access to the DTV monitors.
- Administrator, in addition to monitoring access, allows a range of device parameters to be set on the DTV monitors.

Each user name may be allocated a password by the Administrator. The user name and password details are stored in a password file, which may be stored locally or on a Web server.

The following diagram shows the possible locations for the password file and the accessibility:

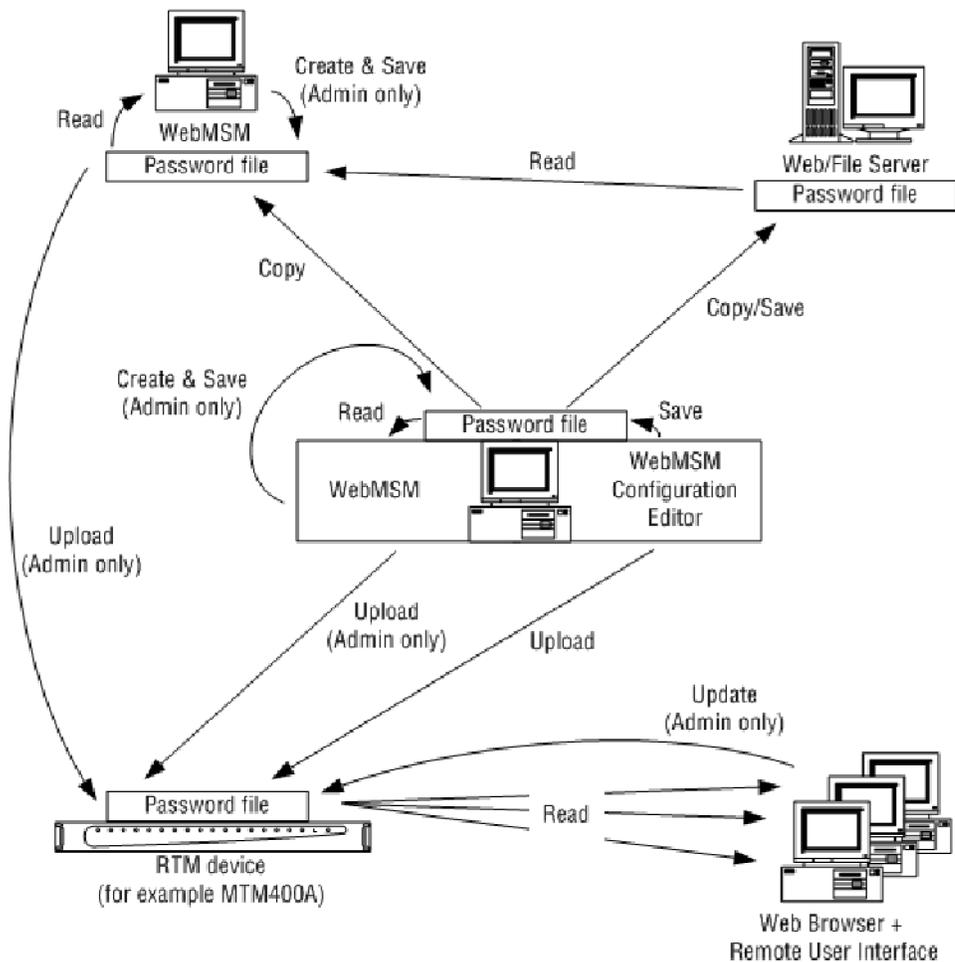


Figure 1-4: Password locations

From the previous diagram, note the following points:

- Only a user designated as an Administrator can create and save passwords.
- Passwords for the installed WebMSM can be stored on the local PC or on a Web/File Server.
- Passwords created and edited on an installed WebMSM or WebMSM Configuration Editor can be uploaded to DTV monitors for use by those accessing the device through the RUI.

DTV Monitor Viewer

The DTV Monitor Viewer software is installed with the WebMSM software. Normally, when a DTV Monitor is accessed not using WebMSM, the RUI is accessed through a Web browser and downloaded to the client PC at that time. However, the DTV Monitor Viewer is a locally installed RUI, so that when a stream or device is accessed through a WebMSM hot spot, the RUI will open directly and communicate with the DTV monitor.

Installation

This section describes the procedures for installing the WebMSM and the WebMSM Configuration Editor applications onto a personal computer (PC). Use these procedures to reinstall the software if it is deleted or becomes corrupted.

Installation is described in two parts:

- User installation: Installation of WebMSM application.

A user has access to WebMSM and the monitoring functions that it provides. Security, in the form of passwords, will be advised by the Administrator.

- Administrator installation: Installation of WebMSM and the WebMSM Configuration Editor application.

An administrator has access to the WebMSM Configuration Editor and WebMSM. The WebMSM Configuration Editor allows the Administrator to configure the system and allocate passwords.

Minimum Requirements

The minimum requirements for a client PC running the WebMSM applications are as follows:

- 1.2 GHz Intel Pentium Processor
- 1 GB RAM
- 30 MB free disk space
- Microsoft Windows XP operating system
- 1024 x 768 pixel video monitor with 256 available colors
- Ethernet: 10/100 Base-T; RJ45
- MTM400A or RFM300 DTV Monitor

It is assumed that the DTV Monitor and the Client PC are networked together. (Refer to the *MTM400A and RFM300 DTV Monitor Technical Reference*.)

If not present initially on the client PC, the Sun Java Virtual Machine is installed automatically during installation of the WebMSM.

NOTE. *If the user does not have Windows administrative rights, attempting to install the Java Virtual Machine will elicit an error message, and then go on to indicate success. However, the installation will not succeed.*

User Installation

Installation for a user includes the following processes:

- Installing WebMSM
- Accessing passwords

A WebMSM User must be able to access real-time monitoring devices using the WebMSM interface. For this activity, all that is required is a password and the configuration, for example, the IP address. The password and configuration is supplied and set up by the WebMSM Administrator.

Installing and Starting WebMSM

The WebMSM installation files are available from the Tektronix Web site. On the site, search for "WebMSM application", locate the latest software version, and download.

1. From your download location, run setup.exe.
2. Step through the installation process, following the on-screen instructions as necessary.
3. Start WebMSM from either the desktop shortcut (created during installation):



or the **Start > Programs > Tektronix WebMSM > WebMSM** option.

The WebMSM cannot be used if a password file cannot be found. This will typically occur at first use, but it may also occur if the password file is not stored locally; in this case, you will need to identify the location of the files.

A message is displayed when the file containing passwords cannot be found.



4. Select **OK**. The lack of password details is explained and rectified in the following steps. The following screen is displayed:



Figure 1-5: WebMSM control panel - initial user screen

NOTE. The menu options are limited initially. When the Password details have been successfully entered, more menu options will become available.

Accessing Passwords and Logging On

Only an operator designated as a WebMSM Administrator can create or edit the password file. From a User's point of view, there are two options:

- The password file must have already been set up and placed in a location accessible from the user's PC.
- The file must be supplied to the user by the administrator and copied into the WebMSM installation directory.

If passwords have not been set up, the instructions for the administrator Installation must be carried out, see *Administrator Installation*, page 1-16.

If the WebMSM Administrator has accepted the default location for the password file, the password file will be available.

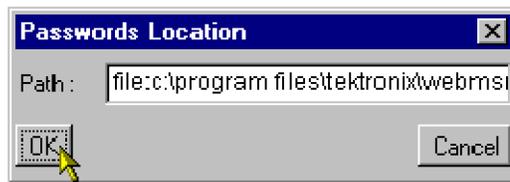
If the password file is stored at a location other than the default (c:\program files\tektronix\webmsm\), examples of the path set up by the administrator may be as follows:

- Local:
file:c:\program files\tektronix\webmsm\security\
- Network:
file:\\server/path/
- Web Server:
http://streamview01/

NOTE. *If the password file is available, the Login Details dialog box is displayed. Proceed to step 4 of the following procedure.*

If the existence and location of the password file is known, the user can locate and use it.

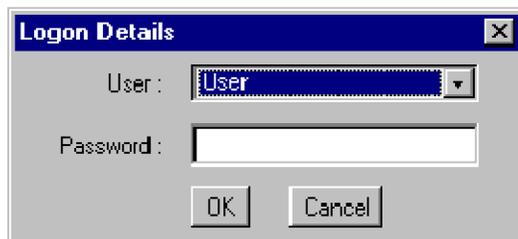
1. Select User > Set Password Location.



2. In the **Password Location** dialog box, enter the full path to the passwords file.

NOTE. *In all cases, the file name (passwords) is omitted.*

3. Select **OK**.
4. With the location of the passwords file identified, select **User > Logon**. The Login Details dialog box is displayed.



5. Select **User** from the **User** drop-down list.
6. Enter a password (if required). The person designated as the Administrator is responsible for the allocation of passwords.
7. Select **OK**.

Proceed to *First User for Monitoring*. (See page 1-22.)

WebMSM Viewer

The WebMSM Viewer application is installed by default at the same location as the WebMSM files. If the files have not been installed at the default location, you must use the WebMSM DTV Monitor Viewer menu to locate and specify the new location of the WebMSM Viewer files.

Administrator Installation

Installation for an Administrator includes the following processes:

- Installing the WebMSM Configuration Editor
- Starting the WebMSM Configuration Editor
- Setting the Passwords
- Saving the Password File
- Uploading the Password File
- Installing the WebMSM

NOTE. *It is the WebMSM administrator who sets up passwords. Password information must be given to WebMSM users before they can successfully access the WebMSM interface.*

Installing and Starting the WebMSM Configuration Editor

The WebMSM Configuration Editor installation files are available from the Tektronix Web site. On the site, search for "WebMSM configuration editor", locate the latest software version, and download.

1. From your download location, run `setup.exe`.
2. Step through the installation process, following the on-screen instructions as necessary.
3. Start WebMSM Configuration Editor either from the desktop shortcut (created during installation):



or the **Start > Programs > Tektronix WebMSM > WebMSM Configuration Editor** option.



Figure 1-6: WebMSM Configuration Editor - Initial administrator screen

Setting Passwords

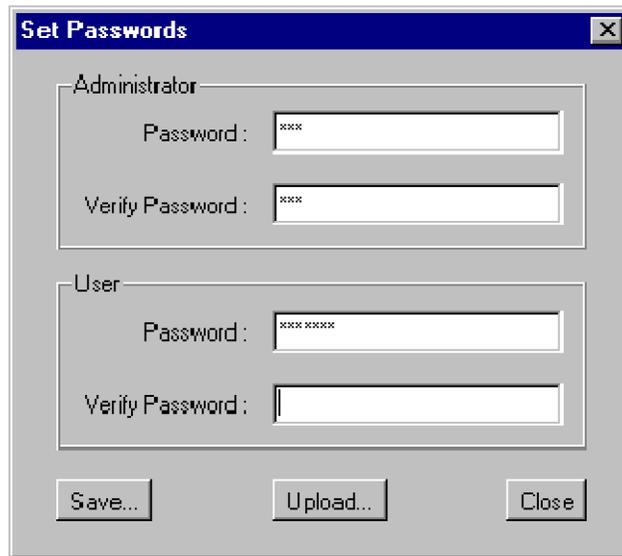
Only an operator designated as an administrator can create or edit a password file for use by the WebMSM. It is assumed that a user accessing the WebMSM Configuration Editor is an administrator, and therefore no password is required to open the application. However, both a user and an administrator require a password to access the WebMSM.

Passwords must be set for a new installation. A common password file can be used for multiple installations if the file is accessible by either a network or a Web server. For example:

Local:
file:c:\program files\tektronix\webmsm\security\
Network:
file:\\server/path/
Web Server:
http://streamview01/

Password files can also be uploaded to individual DTV monitors (or lists of DTV monitors). This allows passwords which will be used to access WebMSM to be administered using the WebMSM Configuration Editor.

1. Select **User > Set Passwords**. The Set Passwords dialog box is displayed. This dialog box is used to set the User and the Administrator password.



2. Enter the required password in the **Administrator - Password** field. Repeat the password in the **Administrator - Verify Password** field.

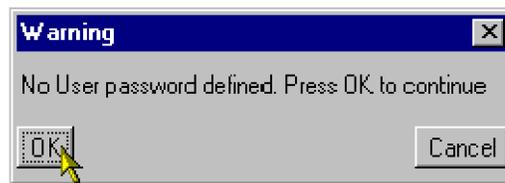
Repeat for the **User** password.

Use **Save** to save the passwords to the passwords file either locally or on a network. (See page 1-18, *Saving the Password File*.) Use **Upload** to save the passwords file to DTV monitors. (See page 1-20, *Uploading the Password Files*.)

Saving the Password File

1. Select **Save**.

If a blank password has been set for either user, a message box is displayed.



NOTE. While a blank password is permissible, for security reasons it may not be advisable.

2. The **Password Filename** dialog box is displayed.



This is a standard Windows feature. Select the required location and **Save** in the selected directory.

NOTE. *Always name the file "passwords."*

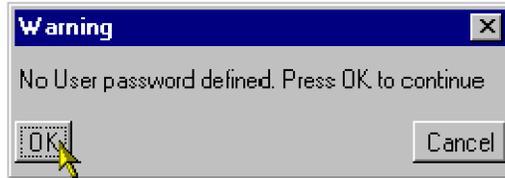
3. Unless the password file is also to be uploaded to individual DTV monitors, proceed to install the WebMSM. (See page 1-21, *Installing WebMSM.*)

Uploading the Password Files

This feature allows the password file to be uploaded to one or more DTV monitors, and thus set the password for any user accessing the WebMSM through the RUI.

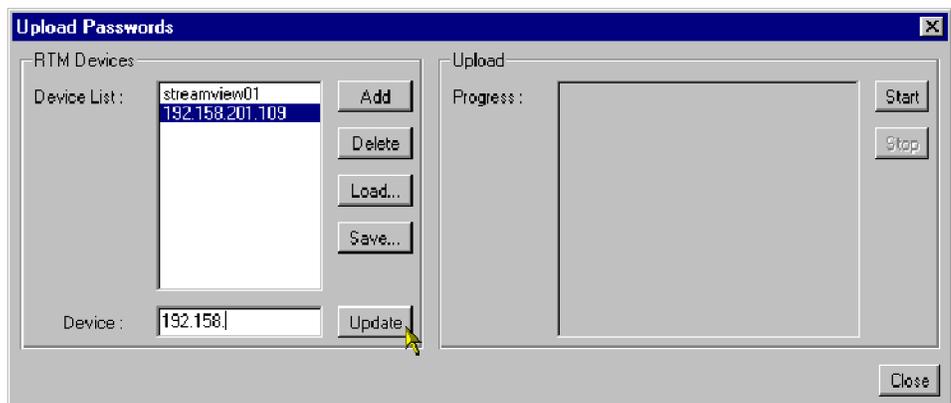
1. Select **Upload**.

If a blank password has been set for either user, a message box may be displayed.



NOTE. While a blank password is permissible, for security reasons it may not be advisable.

2. Select **OK**. The **Upload Passwords** dialog box is displayed.



The **RTM Devices** pane displays the addresses of the DTV monitors that the Passwords file will be uploaded to when **Start** is selected.

3. To create or add to the Device List, enter the DTV monitor network identity or IP address in the **Device** field. Select **Add** to add the device to the **Device List**.

Devices can be deleted from the **Device List** using **Delete**. Device lists can be saved using **Save**. Saved lists of devices can be loaded using **Load**.

Device names already in the Device List can be modified by highlighting the device name in the list, modifying it in the **Device** field, and selecting **Update**.

4. To upload the Passwords file to the listed devices, select **Start** in the **Upload** panel.

Upload progress will be logged in the **Progress** window.

5. When the password file has been successfully uploaded, close the dialog box using **Close**.

Installing WebMSM

1. From your download location, run `setup.exe`.
2. Step through the installation process, following the instructions as necessary.

It is assumed that the Passwords file has been correctly set up during installation of the WebMSM Configuration Editor.

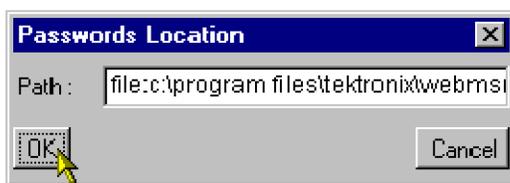
If the password file is not stored locally, on starting WebMSM it will be necessary to set the password location:

3. On startup, the WebMSM will display the following message (if the password file cannot be found):



If the existence and location of the password file is known, the user can locate and use it.

4. Select **User > Set Passwords Location**.



5. In the **Passwords Location** dialog box, enter the full path to the passwords file.

6. Select **OK**.

WebMSM and the WebMSM Configuration Editor have now been installed, and the passwords have been set up.

NOTE. *The WebMSM and the WebMSM Configuration Editor do not need to be installed on the same PC. Configuration creation and setup can be carried out on any PC, provided that the files thus created are made available to the WebMSM.*

First User for Monitoring

This section describes first access to the WebMSM monitoring functions.

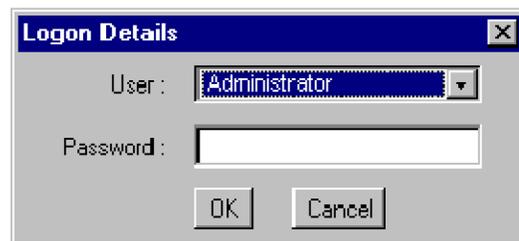
(It is assumed that the WebMSM Configuration Editor has been used to configure the system and set up passwords.)

1. Start WebMSM from either the desktop shortcut (created during installation):



or the **Start > Programs > Tektronix WebMSM > WebMSM** option.

2. During the start up, the **Logon Details** dialog box will be displayed (if the passwords file is available).



3. Select the user and enter the password (if required).

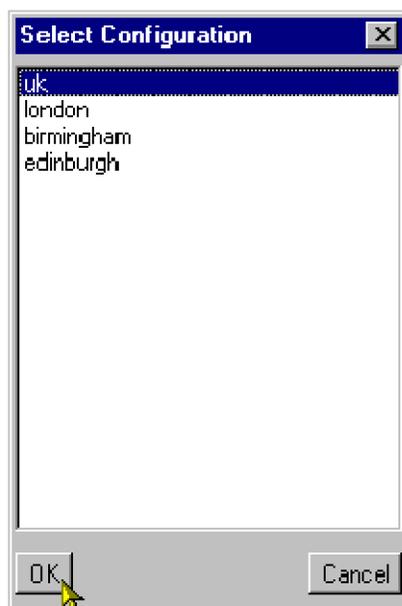
4. Select **OK**.

The WebMSM Control Panel is displayed.



Figure 1-7: WebMSM Control Panel - first use

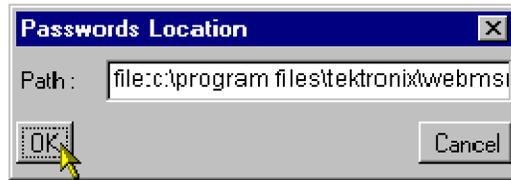
5. Select **Configurations** > **Select** from the Control Panel menu bar.
The **Select Configuration** dialog box is displayed.



6. Select an opening configuration from the **Configuration List**.

If the configuration files are not available locally, it may be necessary to set their location.

- a. From the Control Panel menu bar, select **Configurations > Set Locations**.
- b. The **Configuration Location** dialog box is opened.



- c. Enter the configuration files path.
 - d. Select **OK**.
7. From the **Select Configuration** dialog box, select the required configuration.

The following diagram shows a pictorial example of the process. (See Figure 1-8.) Configurations will vary in content and the number of Hot Spot levels.

From the users point of view, the Streams and Device views are the point at which monitoring of a probe or a device starts.

The Streams and Device views are not described here; they will vary depending on the DTV monitor being monitored. Refer to the DTV monitor technical reference for a detailed description of these views.

MSM - Web Monitoring Systems Manager

The figure illustrates the configuration setup for the WebMSM system. It shows three main components:

- WebMSM Control Panel:** The main application window with a menu (File, Edit, View, License, Help) and a central globe graphic.
- Select Configuration dialog box:** A small window with a list of configurations: london, birmingham, and edinburgh. An arrow points from the 'Select' menu item to this dialog.
- Hot Spot diagram:** A map of the United Kingdom with red squares indicating monitoring locations in Edinburgh, Birmingham, and London. An arrow points from the 'Select Configuration' dialog to this map.
- RT M device monitoring interface:** A detailed view of a transport stream monitor for 'Stream (192.168.201.114) - MTM400A Transport Stream Monitor'. It includes:
 - Monitoring sidebar:** A vertical menu with options like Programs, PIDs, Tests, SI/PSI, Timing Graphs, Template, Event Log, SFN, EPG, Service Log, IMCC/IDP, Interface, Info Events, and Device.
 - Summary panel:** Shows 'Transport Stream: Id 16384, Network Na...' with 10 programs and a current TS bit rate of 12,097 Mbps.
 - Test Failures panel:** Lists various errors such as 'Failed within the last second (3)', 'SQT Actual Timer', and 'SQT Actual Max Section Repetition'.
 - Thumbnail panel:** Displays a video thumbnail for 'cbeebies' with a blue parrot.

Arrows indicate the flow of configuration: from the Control Panel to the dialog box, then to the Hot Spot diagram, and finally to the detailed device monitoring interface.

Figure 1-8: Configuration setup - example

Operating Basics

Using WebMSM

The WebMSM Control panel provides a gateway to the WebMSM functions (using the Configuration menu) and a means of setting up the security (password) options.

User Interface Overview

The main point of entry to the monitoring features provided by WebMSM is through the Configurations menu in the Control Panel - specifically the Configuration > Select option which opens the Select Configuration dialog box.

The Select Configuration dialog box lists the available configuration entry points as defined in the Configuration List. An entry point may be either a Hot Spot view, or a Stream or Device view on a specific DTV monitor; this will depend on the configuration set up using the WebMSM Configuration Editor.

Hot Spot View

The Hot Spot view allows the overall state of streams and DTV monitors to be viewed in a graphical environment. Hot spots are icon-like images placed at strategic points on a background image of a map or system diagram and linked to a device, a stream, or another hot spot view.

The Hot Spot window is split into a main panel and a status banner; the latter may be hidden. The main panel can display a background map, a system diagram or similar graphic information. Also visible in the main panel are hot spots; user-defined images and labels can be used for hot spots images.

The Hot Spot color or the Hot Spot background color is dependent on the error status of the item to which it is linked.

In terms of the view that a hot spot links to, the error status of each type of hot spot is determined as follows:

- Device - the highest error state of the DTV monitor
- Stream - the highest error state of the stream
- Hot Spot - the highest error state of any of the hot spots on the linked hot spot view

Hot spots can also be displayed on the status banner, but in this case the background of the status banner itself will indicate the highest error state of any hot spot (device, stream or other hotspot view). If no errors are present, the status banner background will be green.

If a user clicks on a hot spot with the left mouse button, the linked WebMSM view will be opened. For example, if the hot spot represents a stream, the Stream view will be started for the stream. If the hot spot represents another hot spot view, the linked Hot Spot view will be opened.

The Hot Spot view may also be configured so that clicking the right mouse button on a hot spot highlights a set of hot spots. This may be useful for highlighting stream and DTV monitor hotspots that relate to the same monitoring unit.

Color Coding

In setting up the WebMSM user interface, a choice is offered between changing the button colors and changing the button background color. (See page 2-23, *Hot Spot Images*.) The following table shows the color scheme where the background color option is chosen:

Table 2-1: Color coding - background

Icon	Color	Meaning
 Device	White	Operation normal - no error detected
 Device	Red	Error detected and still present
 Device	Yellow	Transient error, which has now corrected itself
 Device	Gray	The corresponding test has been disabled (or is unavailable). All buttons are gray indicates that connection to a device has been lost

The following table gives examples of buttons that may be used where the button color is to indicate the error state.

Table 2-2: Color coding - buttons

Icon	Color	Meaning
 Device	Green	Operation normal - no error detected
 Device	Red	Error detected and still present
 Device	Yellow	Transient error, which has now corrected itself
 Device	Gray	The corresponding test has been disabled (or is unavailable). All buttons are gray indicates that connection to a device has been lost

Stream and Device Views

The Streams and Device views are not described here; they will vary depending on the DTV monitor being monitored. Refer to the monitor user manual for a detailed description of these views.

Opening the WebMSM Control Panel

The WebMSM can be started by selecting **Start > Tektronix WebMSM > WebMSM**.



or by double clicking the WebMSM shortcut on the desktop.



The WebMSM Control Panel opens.



Figure 2-1: WebMSM Control Panel - open

Closing WebMSM

Select **Configurations > Exit** to close the WebMSM and all associated windows.

Menus and Options

The Menu Bar provides access to all WebMSM control options using drop-down menus.

Options displayed in the menus are context sensitive. They may be grayed out depending on the level of access granted to the user (Administrator or User).

Configurations Menu

Table 2-3: Configurations Menu commands

Command	Function
Select	Opens the Select Configuration dialog box
Set Location	Allows the location of the configuration files to be set
Close All	Closes all associated WebMSM windows; the Control Panel remains open
Exit	Closes the WebMSM Control Panel

User Menu

Table 2-4: User Menu commands

Command	Function
Logon	Opens the Logon Details dialog box
Set Passwords Location	Allows the location of the password file to be set
Set Passwords	(Administrator only) Allows passwords to be set

Password setup is described in the *Installation* section. (See page 1-11, *Installation*.)

License Menu



CAUTION. Do not change the license details. If the details are changed, access to unlimited probes will be lost and you will be unable to reopen the WebMSM application.

Table 2-5: License Menu commands

Command	Function
View Details	Opens the License Details dialog box and allows license details to be viewed
Update	Allows license details to be viewed

MTM Viewer Menu

Table 2-6: MTM Viewer Menu commands

Command	Function
MTM Viewer Location	Identifies the location of the DTV monitor viewer

Help Menu

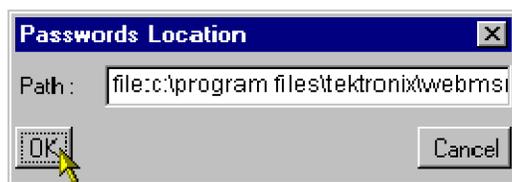
Table 2-7: Help Menu commands

Command	Function
About	Opens the About WebMSM dialog box; this gives program details

Accessing Configuration Lists

The list of configurations that is displayed in the Select Configuration dialog box is derived from the Configuration List stored in the config.txt file created by the WebMSM Configuration Editor. By default, configuration files are stored in the configuration directory automatically created at installation under the WebMSM Configuration Editor program files directory.

Configuration files do not need to be stored locally. They can be made accessible by either sharing the default directory on a network or placing them on a Web server. If this is done, the Configurations > Set Location option in the Control Panel should be used to indicate the location of the configuration files.



Example:

Other directory: file://<drive>:\<path>\webmsm\configuration\

Web Server: http://<network id or IP address>/

If the Path field is left blank, the location will be set to the default configuration directory.

Using the WebMSM Configuration Editor

The WebMSM Configuration Editor provides access, using a simple Windows dialog box, to the tools that are used to create, configure, and edit the system-level interface components of WebMSM.

The WebMSM Configuration Editor is intended for use by the System Administrator or the person responsible for configuring the user interface. It will not normally be used by the system operator. It is installed as a separate application.

All configuration files must be filed in a single directory. Since all configuration files use the file extension .cfg, it is recommended that a naming convention is adopted to enable the different configuration types (Hot Spot, Stream, Device) to be identified. A suitable scheme might be to preface the filenames with hotspot_, stream_ or device_, for example, stream_sv01.cfg.

For large systems with many levels and probes, it is also recommended that a hierarchical system diagram be drawn before using the Configuration Editor. This will aid the user in visualizing the system configuration requirements. Configuration file names can be allocated from the diagram.

NOTE. *All configuration files associated with a single configuration must be stored in a single directory; this can be local or remote.*

Configuration files are stored by default in the configuration directory automatically created at installation under the WebMSM Configuration Editor program files directory.

Opening the WebMSM Configuration Editor

Start the WebMSM Configuration Editor either from the desktop shortcut (created during installation):



or the **Start > Programs > Tektronix WebMSM > WebMSM Configuration Editor** option.

The WebMSM Configuration Editor dialog box opens.



Figure 2-2: WebMSM Configuration Editor - open

Closing the WebMSM Configuration Editor

Select **Configurations > Exit** to close the WebMSM Configuration Editor and all associated windows. Options will be offered by the various editors to save unsaved configuration data.

Menus and Options

Configurations Menu

Table 2-8: Configuration Menu commands

Command	Function
Configuration List	Opens the Select Configuration dialog box
Hot Spots	Opens the Hot Spot Configuration Editor
Stream	Opens the Stream Configuration Editor
Device	Opens the Device Configuration Editor
Exit	Closes the WebMSM Configuration editor control panel

User Menu

Table 2-9: User Menu command

Command	Function
Set Passwords	Allows passwords to be set

License Menu



CAUTION. Do not change the license details. If the details are changed, access to unlimited probes will be lost and you will be unable to reopen the WebMSM application.

Table 2-10: License Menu commands

Command	Function
View Details	Opens the License Details dialog box and allows license details to be viewed
Update	Allows license details to be viewed

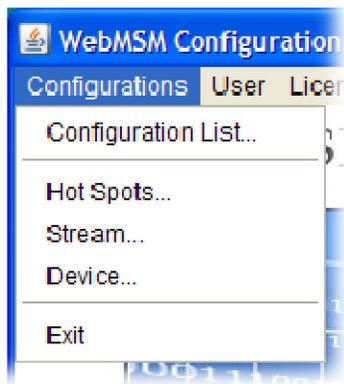
Help Menu **Table 2-11: Help Menu command**

Command	Function
About	Opens the About WebMSM dialog box; this gives program details

Editing an Existing Configuration File

The procedure for opening an existing configuration file in each editor is similar.

1. Identify the type of configuration file to be opened, for example, Configuration List, Hotspot, Stream, Device or Event Classifications, and select the appropriate editor from the Configuration menu.



2. In the selected editor, from the File menu, select **File > Open**.
3. A standard File Open dialog box will be displayed from which the required configuration file can be selected.
4. The selected configuration file will be opened in the appropriate editor.

If an attempt is made to open a configuration file in the wrong editor, the most likely result is that the fields normally displayed in the editor will be blank.

Configuration List

The Configuration List is the entry point for the WebMSM to a system configuration. It is the Configuration List that provides the entries in the Select Configuration dialog box that may be displayed after logging on to WebMSM. Each entry in the Configuration List acts as a pointer to the next level of system configuration.



Figure 2-3: Select Configuration dialog box

Only configurations at a higher level that need to be available to a user at WebMSM start up are included in the configuration list.

The Configuration List Editor allows configuration file names to be added, removed, and modified in the configuration list. Listed files can also be opened and edited by the Configuration List Editor.

To open the Configuration List Editor, select **Configurations > Configuration List**.

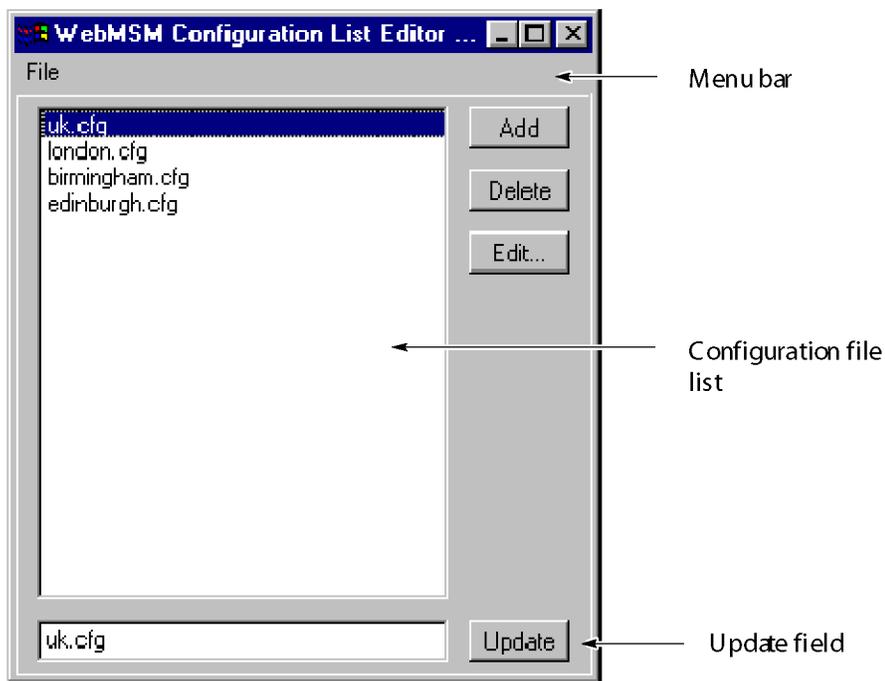


Figure 2-4: WebMSM Configuration List Editor

The Menu Bar contains a File menu only. The following options are available in the File menu

Table 2-12: Configuration List Editor - File menu commands

Command	Function
New	Opens a new configuration list file
Open	Opens an existing configuration list file
Save	Saves the current configuration list file
Save As	Allows the current configuration list file to be named and saved
Exit	Closes the Configuration List Editor (and all associated windows)

The buttons operate as follows:

Table 2-13: Configuration List Editor buttons

Button	Function
Add	Adds a default name (config.cfg) to the configuration list. It is automatically highlighted and displayed in the update field, where it can be renamed and updated.
Delete	Deletes the currently highlighted file name.

Table 2-13: Configuration List Editor buttons (cont.)

Button	Function
Edit	Opens the currently highlighted file for editing (see below).
Update	Updates the configuration file list with any changes made in the update field.

Adding a Configuration List File Name

1. Select the **Add** button. The default file name config.cfg is added to the file list.
2. With the file name (config.cfg) highlighted in the file list (and therefore displayed in the update field), rename the file and select the **Update** button.

The file name is updated in the file list. Note also that the file only exists as a name in this list; it is yet to be created (by editing it).

NOTE. Configuration files must be given their required name in the configuration list before they are edited. If a file is opened in an Editor (using the Edit button) and saved under a different filename, the new filename will not appear in the Configuration List until it is specifically added.

Deleting a Configuration List File Name

1. Highlight the file name to be deleted.
2. Select the **Delete** button.

The selected file name is deleted from the file list.

NOTE. The file referred to is not deleted, only the reference in the configuration list is deleted.

Renaming a Configuration List File Name

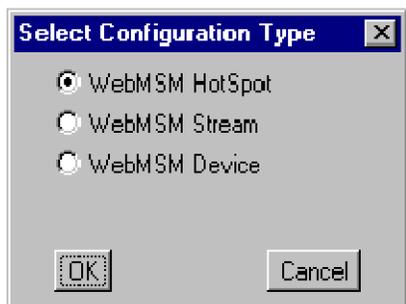
1. Highlight the file name to be changed.
2. In the update field, enter the new file name.
3. Select the **Update** button.

The file name is updated in the file list. The renaming does not affect the source file, only the entry in the file list.

Editing a Configuration List File Name

1. Highlight the file name to be edited.
2. Select the **Edit** button.

If the selected configuration file is found (and recognized) in the configuration file directory, the appropriate editor will be opened with the file loaded.



If the selected configuration file is not found in the configuration file directory, the Select Configuration Type dialog box will be displayed. This allows the user to specify which type of configuration file is to be created. When the selection has been made and the **OK** button is pressed, the appropriate editor will be opened.

The operation of the other Editors is described in the following sections.

Saving the Configuration List

1. From the Menu Bar, select **File > Save**.
2. The name and location of the Configuration List file is dependent on the system configuration. The Configuration List file name is displayed in the editor title bar.

Hot Spot Editor

The Hot Spot Editor allows Hot Spot configuration files to be created and edited; backgrounds can be added and hot spots can be associated with devices, streams or other hot spot diagrams.

To open the Hot Spot Editor, do one of the following:

- Select **Configurations > Hot Spots** in the main WebMSM Configuration Editor control panel
- Highlight a Hot Spot configuration file in the Configuration List Editor and select the **Edit** button
- Create a configuration file in the Configuration List Editor, use the **Add** button to create a new entry in the configuration list, rename it if required and when the **Edit** button is used, select WebMSM Hot Spot in the Select Configuration Type dialog box

A new Hot Spot window will be displayed in the Hot Spot Editor as shown in the following figure. The window is blank until some hot spots, or a background image, are added

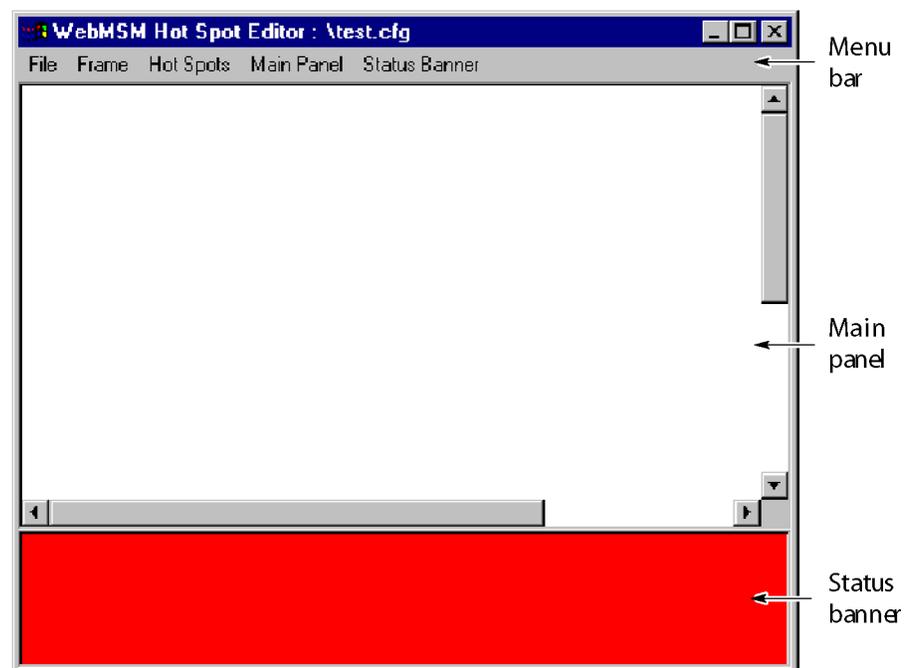


Figure 2-5: WebMSM Hot Spot Editor

The Hot Spot Editor displays the images that will be visible in the WebMSM Hot Spot view. The main window has two panels: the Main Panel and the Status Banner.

The Main Panel will commonly contain a background image of a physical area or a system diagram on which monitoring points are signified by Hot Spot images. The Hot Spots link to Device, Stream or other Hot Spot applications.

The Status Banner is not displayed when the Hot Spot Editor is first opened; select **Status Banner > Display**. The Status Banner provides a means of monitoring a group of devices, for example, the monitoring points from a selected stream.

In the WebMSM application, the background color of each Hot Spot or the Hot Spot image itself in the Main Panel is dependent on the error status of the item that it is linked to. In the Status Banner, the highest error state of any Hot Spot in both panels will be indicated by the overall background color.

Menu Bar

The Menu Bar provides access to all editor options through the drop-down menus; some options are context sensitive and may be disabled. Also, a number of menu options are available from pop-up menus displayed when the right mouse button is clicked once; these pop-up menu options are also context sensitive.

A check mark (✓) next to a pop-up menu option indicates that the feature is currently visible; no check mark means that it is hidden.

Table 2-14: Hot Spot Editor - File Menu commands

Command	Function
New	Opens new Hot Spot configuration file
Open	Opens an existing Hot Spot configuration file
Save	Saves the current Hot Spot configuration list file
Save As	Allows the current configuration list file to be named and saved
Check Against License	Checks the number of probes accessible from the currently selected Hot Spot configuration file
Exit	Closes the Hot Spot Editor

Table 2-15: Hot Spot Editor - Frame Menu commands

Command	Function
Title	Allows the name displayed in the title bar of the Hot Spot application to be edited
Bring to Front On Error	When enabled (✓), indicates that this Hot Spot view should be brought to the front of the displayed views when any of the Hot Spots indicates an error

Table 2-16: Hot Spot Editor - Hot Spots Menu commands

Command	Function
Add to Main Display	Adds a Hot Spot icon to the Main Panel. A sequential hot spot name is allocated; this name can be changed in the Hot Spot Details dialog box
Add to Status Banner	Adds a Hot Spot icon to the Status Banner. A sequential hot spot name is allocated; this name can be changed in the Hot Spot Details dialog box
Delete	Displays a list dialog box from which a Hot Spot can be selected for deletion

Table 2-17: Hot Spot Editor - Main Panel Menu commands

Command	Function
Select Background	Allows a background to be added to the Main Panel
Clear Background	Clears the current Main Panel background
Display Labels	When enabled (✓), displays the Hot Spot labels in the Main Panel

Table 2-18: Hot Spot Editor - Status Banner Menu commands

Command	Function
Display	When enabled (✓), displays the Status Banner
Display Labels	When enabled (✓), displays the Hot Spot labels in the Status Banner

Backgrounds

Backgrounds in the Hot Spot views are simply images; they perform no active function other than to act as a visual reference. If required, a background can be changed without affecting the operation of the Hot Spots. Backgrounds can be in either GIF or JPEG graphics format. Image size is not important except with respect to usability; however, the image cannot be resized in the editor window.

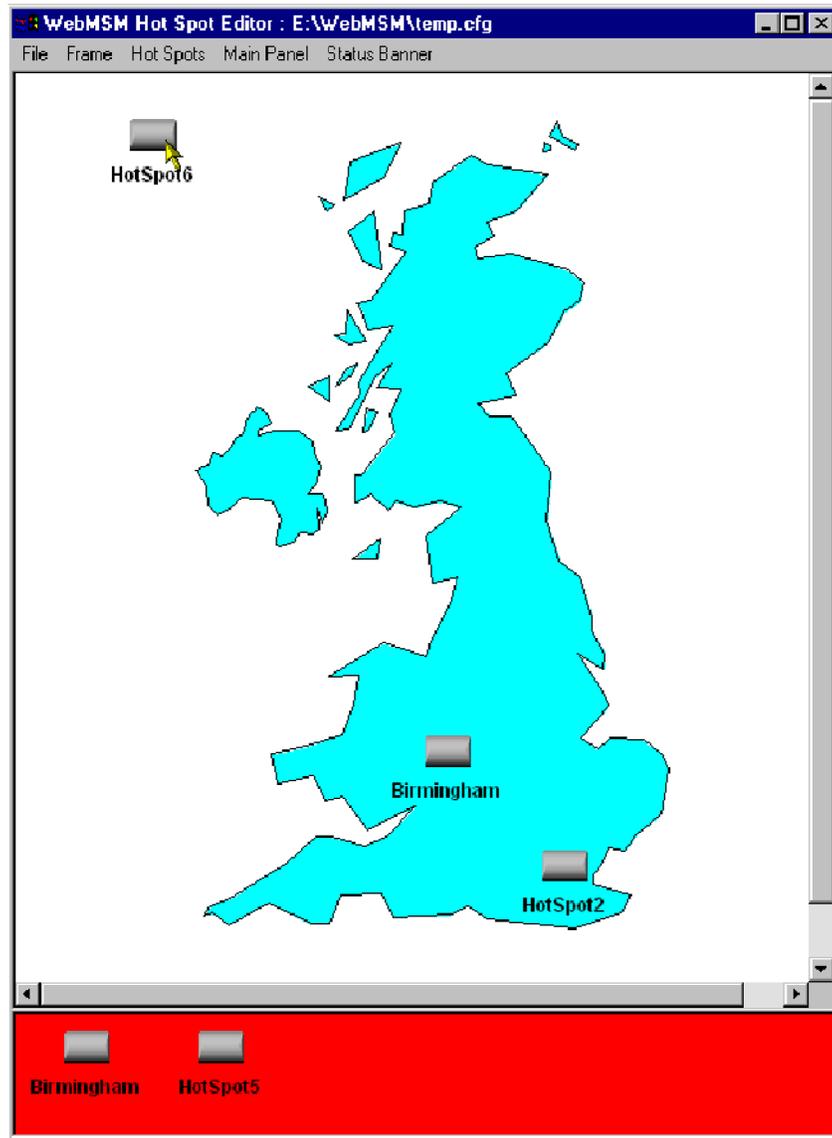


Figure 2-6: WebMSM Hot Spot Editor - backgrounds

To add a background to the Main Panel, select the Select Background option from the Main Panel menu. Use the Select Background dialog box to locate and select a background.

Hot Spots Hot Spots provide links to subsequent layers of a system; they can link to Device, Stream or another Hot Spot application. In the Main Panel, Hot Spots can be dragged to any position; each Hot Spot can be specified in one of the following forms:

- The Hot Spot image itself can change color with the error state, in which case an appropriately colored image must be specified for each state.
- The Hot Spot background color can change color for each error state, in which case only a single Hot Spot image need be specified.

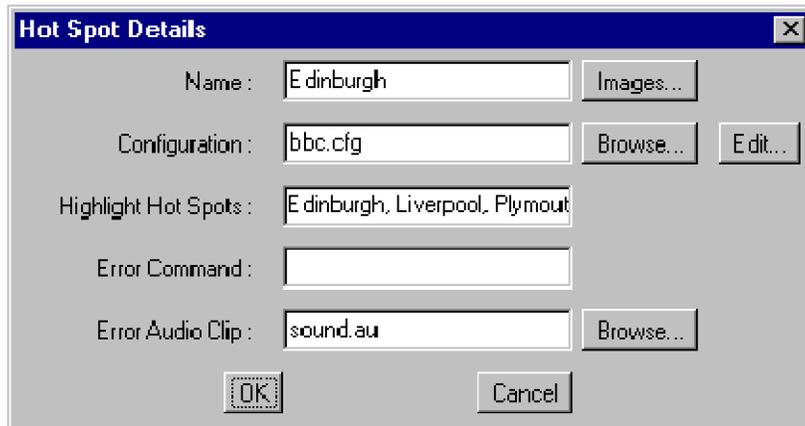
Different styles of Hot Spot can be used in a single Hot Spot view.

A set of default Hot Spot images are provided to be used if no other images are specified by the user.

Various properties can be associated with a Hot Spot; these are listed in the description of the Hot Spot properties below.

Adding a Hot Spot A Hot Spot is added to the selected display area.

1. From the Hot Spots menu, select the Add to Main Display option (or the Add to Status Banner option).
2. In the Main Panel, drag the Hot Spot to the required location.
3. In either panel, with the cursor over the Hot Spot, select the Edit option from the right-click menu (or double-click the Hot Spot image).
4. Edit the Hot Spot properties; see the following pages.

Hot Spot Properties.**Figure 2-7: Hot Spot Details dialog box****Table 2-19: Hot Spot Details dialog box commands**

Command	Function
Name ¹	The name of the Hot Spot; this name is displayed in the Hot Spot label. Up to 11 characters can be used.
Images	Allows the Hot Spot images (buttons) to be set up.
Configuration ¹	The configuration file that the Hot Spot is linked to; Device, Stream or another Hot Spot. If the named configuration file exists, the Edit button will open the configuration file in the appropriate editor. If the named configuration file does not exist, the Select Configuration Type dialog box will be displayed from which the user can select the configuration type to be created; when OK is selected, the appropriate editor will be opened.
Highlight Hot Spots	A comma-delimited list of Hot Spot names that will all be highlighted when the user right-clicks any of the named Hot Spots in the WebMSM Hot Spot view.
Error Command	A command which will be executed on the Client PC if the Hot Spot signals a (red) error state.
Error Audio Clip	An audio clip file name that will be played if the Hot Spot signals a (red) error state. Audio clips must be provided as .au files in eight-bit, mono μ -law format.

¹ Name and Configuration are the only required fields

Hot Spot Images

For related information, see also *Color Coding*. (See page 2-2.)

This dialog box specifies images to be used for Hot Spots. Any GIF or JPEG format image can be used; the maximum recommended image size is 32 pixels x 32 pixels.

If the Button Images check box is selected in the Hot Spot State Indicator area, the Button Images Mode area is made active. If the Background Color check box is selected in the Hot Spot State Indicator area, the Background Color Mode area is made active.

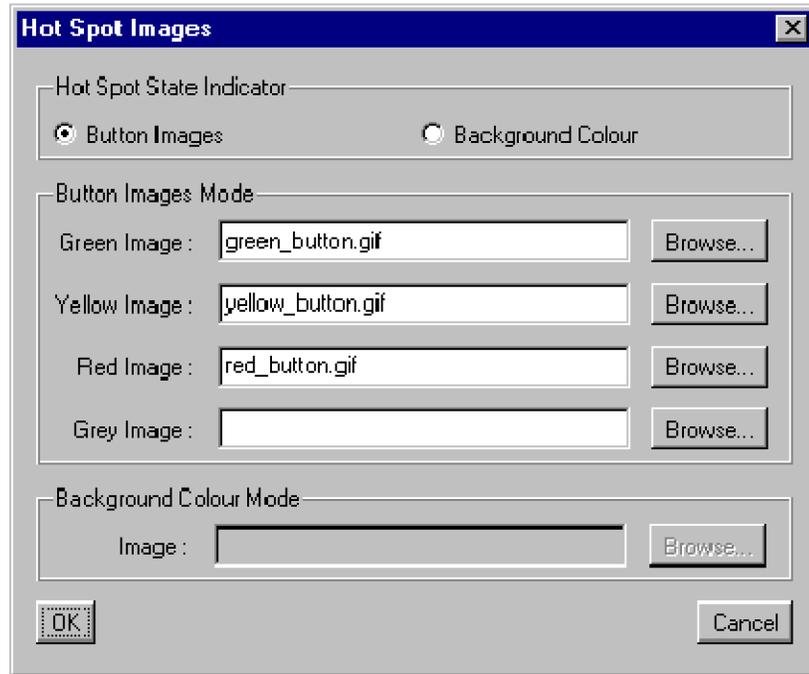


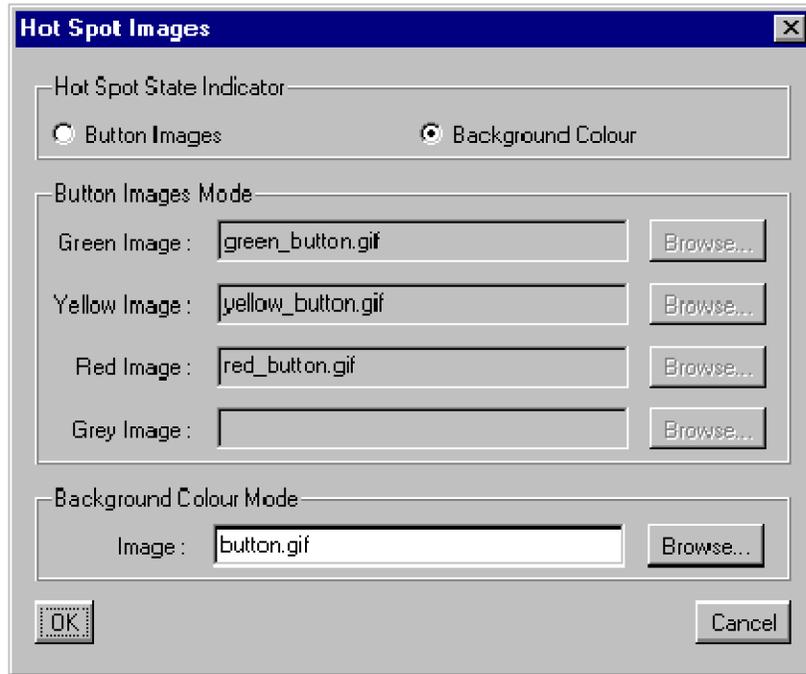
Figure 2-8: Hot Spot Images dialog box

Selecting Hot Spot State Indicator. This selection dictates whether the Hot Spot image or the Hot Spot button background indicates the error state of the linked item.

Selecting Button Images. With the Button Images check box selected in the Hot Spot State Indicator area, enter, or browse and select an image file for each button color. These images will be used to indicate the error state of the associated configuration item.

If images are not specified, default buttons will be used.

Selecting Background Color Mode. With the Background Color check box selected in the Hot Spot State Indicator area, enter or browse and select the image file to be used. The background color of this image will be used to indicate the error state of the associated configuration item.



If no image is specified, a default gray background is used.

Save Hot Spot View

When editing is complete, the Hot Spot view can be saved using File > Save.

When configuration files are saved, the .cfg extension is added automatically, if necessary. Images specified as the Main Panel Background or Hot Spot images are copied to the same directory as the configuration file.

Stream Editor

The stream configuration file provides a means of identifying a single stream and subsequently opening the Stream view in WebMSM. The stream is identified by its position or number on an RTM device; the RTM device is identified by its IP address or Network identity.

Adding a New Stream Configuration File

1. From the WebMSM Configuration Editor control panel, select **Configurations > Stream**.

The Stream Configuration Editor dialog box is displayed:

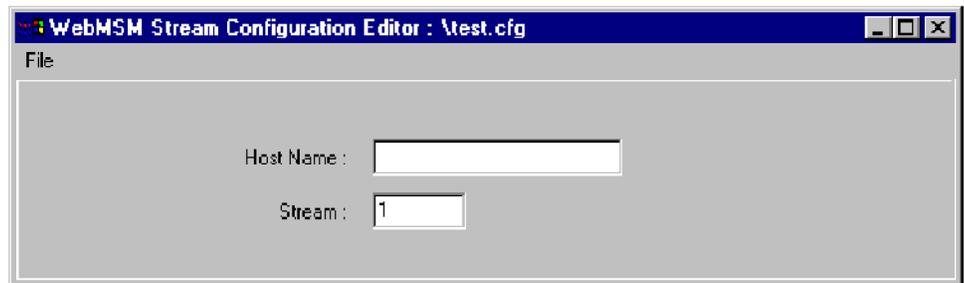


Figure 2-9: WebMSM Stream Configuration Editor

The File menu has the following options:

Table 2-20: Stream Configuration Editor - File Menu commands

Command	Function
New	Opens a new Stream configuration file
Open	Opens an existing Stream configuration file to be opened
Save	Saves the current Stream configuration file
Save As	Allows the current Stream configuration file to be named and saved
Exit	Closes the Stream Configuration Editor

2. Enter the **Host Name** of the Device; the IP address or the network identity can be used.
3. Enter the **Stream** number of the device.
4. Save the configuration file (**File > Save**), naming it as required.

When configuration files are saved, the .cfg extension is added automatically, if necessary.

To be accessible, the configuration file must be identified in either a configuration list or as a hot spot.

Editing a Stream Configuration File

1. From the WebMSM Configuration Editor control panel, select **Configurations > Stream**.
2. Select **File > Open** and select the required Stream Configuration file.
3. Edit the parameters as required.
4. Save the configuration file (**File > Save**).

Deleting a Stream Configuration File

The appearance of a Stream Configuration File name can be removed from either a configuration list or from a Hot Spot diagram. If the file is to be completely deleted from the system, standard Windows commands must be used.

Device Editor

The Device Configuration file provides a means of locating a single RTM device and subsequently opening the Device view in WebMSM. The device is identified by its IP address or Network identity on the network.

Adding a New Device Configuration File

1. From the WebMSM Configuration Editor control panel, select **Configurations > Device**.

The Device Configuration Editor dialog box is displayed:

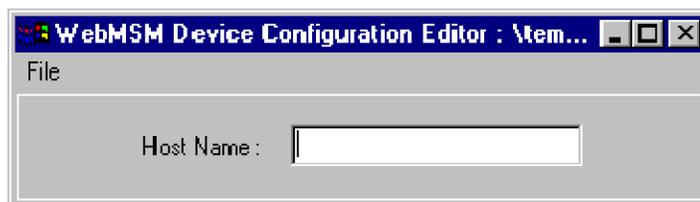


Figure 2-10: WebMSM Device Configuration Editor

The File menu comprises the following options:

Table 2-21: Device Configuration Editor - File Menu commands

Command	Function
New	Opens a new Device configuration file
Open	Opens an existing Device configuration file to be opened
Save	Saves the current Device configuration file
Save As	Allows the current Device configuration file to be named and saved
Exit	Closes the Device Configuration Editor

2. Enter the **Host Name** of the Device; the IP address or the network identity can be used.
3. Save the configuration file (**File > Save**), naming it as required.

When configuration files are saved, the .cfg extension is added automatically, if necessary.

To be accessible, the configuration file must be identified in either a configuration list or as a hot spot.

Editing a Device Configuration File

1. From the WebMSM Configuration Editor control panel, select **Configurations > Device**.
2. Select **File > Open** and select the required Device Configuration file.
3. Edit the **Host Name** as required.
4. Save the configuration file (**File > Save**).

Deleting a Device Configuration File

The appearance of a Device Configuration File name can be deleted from either a configuration list or removed from a Hot Spot diagram. If the file is to be completely deleted from the system, it must be deleted using standard Windows commands

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