Integrated EMS Basics

The Integrated Element Management System (Integrated EMS) Client Interface is the human interface to the Succession Operations and Maintenance Center Platform. The the Integrated EMS Client presents complex enterprise management information in a clear, well-organized, and easily understandable GUIs. This section provides overview and using basic features in the Integrated EMS Client which includes following sections:

- System requirements
- Using Java Web Start client
- Launching applications from Integrated EMS
- Understanding high availability & co-residency
- Using other general features
- Troubleshooting tips
- Using Web Client

The terms Passport and PVG have been re-branded in conjunction with the new Nortel Networks brand simplified naming format. Passport is now referred to as the Nortel Networks Multiservice Switch, and PVG is now Media Gateway 7480/15000.

Table of Contents

System requirements

This section details the hardware and software system requirements for Integrated EMS. The section comprises of the following sub-sections:

- Hardware requirements
- Software requirements

Hardware requirements

Performance of Integrated EMS is largely dependent upon the CPU speed and memory of both the client and the server systems.

Integrated EMS Server requirements

The following table describes the suggested minimum requirements for the Integrated EMS Server

Integrated EMS Server Requirements

Field Pop Support	Initial Deployment	Solutions
None	NTRX51LC(COAM) Simplex only Dual N240 (HA) 4G - NTRX51LC Single T1400 (simplex) 4Gig Only - NTRX51KW	All, excluding Packet Trunking AAL1

Integrated EMS Client requirements

The following table describes the suggested minimum hardware requirements for the Integrated EMS Client.

Integrated EMS Client Requirements

Processor Speed	Memory	Storage
500 Mhz	1 GB RAM	200 MB

Software requirements

This section describe software requirements to run the Integrated EMS Server and Client. Integrated EMS Server is installed on the SN07 Succession Server Platforms Foundation Software (SSPFS) platform.

Software requirements for the Integrated EMS Java Web Start Client

The table below lists the various platforms, Operating Systems (OSs), and browsers compatible with the Integrated EMS Java Web Start Client.

Client platform	Client OS with version	Browser	
		Netscape	Windows
PC	Windows NT 4	Netscape 6.1 or later	Microsoft Internet Explorer 5.5 or later
PC	Windows 98	Netscape 6.1 or later	Microsoft Internet Explorer 5.5 or later
PC	Windows 98SE	Netscape 6.1 or later	Microsoft Internet Explorer 5.5 or later
PC	Windows 2000	Netscape 6.1 or later	Microsoft Internet Explorer 5.5 or later
PC	Windows XP or later	Netscape 6.1 or later	Microsoft Internet Explorer 5.5 or later
Sun	Sun Solaris 2.7	Mozilla 1.4 or later	Not Applicable
Sun	Sun Solaris 2.8	Mozilla 1.4 or later	

Note: Integrated EMS is compatible with Java Web Start bundled with JRE version 1.4.1_02.

Software requirements for the Integrated EMS Web Client

The table below lists the various platforms, OSs and browsers compatible with the Integrated EMS Web Client.

Client platform	Client OS with version	Browser	
		Netscape	Windows
PC	Windows NT 4	Netscape 6.1 or later	Microsoft Internet Explorer 5.5 or later
PC	Windows 98	Netscape 6.1 or later	Microsoft Internet Explorer 5.5 or later
PC	Windows 98SE	Netscape 6.1 or later	Microsoft Internet Explorer 5.5 or later
PC	Windows 2000	Netscape 6.1 or later	Microsoft Internet Explorer 5.5 or later
PC	Windows XP or later	Netscape 6.1 or later	Microsoft Internet Explorer 5.5 or later
Sun	Sun Solaris 2.7	Mozilla 1.4 or later	Not Applicable
Sun	Sun Solaris 2.8	Mozilla 1.4 or later	

Java Web Start and Web Client interfaces

Integrated EMS Client GUI provides a graphical display of information, accessed from the Integrated EMS Server. Various Integrated EMS functions, including displaying the discovered devices, and viewing alarms and events are performed through the Integrated EMS Client.

Since access to Integrated EMS information is performed through a client, the selection of the client is up to the user. The two types of user interface available and the advantages of one over the other are provided in the following table:

Comparison of Java Web Start and Web Client GUIs

Feature	Java Web Start Interface	Web Client
Browser	The correct virtual machine must be included with the browser. Netscape 6.1 or higher, Microsoft Internet Explorer 5.5 or higher with the JRE Plug-in 1.4.1_02.	Browser is required but plug-ins are not necessary. Netscape 6.1 or higher, Microsoft Internet Explorer 5.5 or higher.
Distribution	Nothing to install on the client platform except for the requirement of browser with the JRE Plug-in 1.4.1_02.	Nothing to install on the client. Just a browser is enough. Netscape 6.1 or higher, Microsoft Internet Explorer 5.5 or higher.
Information Update	Automatic and immediate updates of data take place on the Client.	Need to refresh the client HTML pages manually to view updated data.
Link	Requires a high speed link of 1 Mbps or higher.	Functions well over a low-speed dial-up Internet connection of 64 kbps.
Availability of Features of Integrated EMS	All the features in Integrated EMS can be found in Java Web Start Interface Client.	Not all features in Integrated EMS are available in the Web Client.

Note: Integrated EMS is compatible with Java Web Start bundled with JRE version 1.4.1_02.

System configuration

The primary IP address and host name of the Integrated EMS Server as well as the Integrated EMS Server application Virtual IP and host name must be configured in the DNS server. Any DNS query to the DNS server must return the IP address and fully qualified domain name of the Integrated EMS Server. Refer to the Launch of Integrated EMS Java Web Start Client Hangs for details.

Note: The Integrated EMS Client must must be able to resolve the Integrated EMS server IP addresses and host names.

Configuring DNS on an SSPFS-based server

Use this procedure to configure Domain Name Service (DNS) on a Succession Server Platform Foundation Software (SSPFS)-based server. This procedure provides the instructions for the following tasks:

- Configure server as a DNS master server

  Note: Only one DNS master server is used for one Communication Server (CS) LAN. Other hosts in the CS LAN that use DNS, should be configured to use the DNS master server.

- Add or remove a host entry in the DNS database
- Configure server as a DNS client
- Turn off DNS capability on the server

  Note: Perform the steps under Turn off DNS capability on the server when the DNS master server function is no longer required, or if the DNS master server function is moving to a different server. If needed the server can then be configured as a DNS client using the steps under Configure server as a DNS client.

Prerequisites

This procedure has the following prerequisites:

- you need the root user ID and password for the server
- you need the office CLLI to complete the steps under Configure server as a DNS master server

- you need to complete the steps under Configure server as a DNS master server prior to performing the steps under Add or remove a host entry in the DNS database
- you need familiarity with the “vi” editor to perform the steps under Add or remove a host entry in the DNS database

Action

Configure server as a DNS master server

At your workstation

1 Telnet to the server by typing

```
> telnet <server>
```

and pressing the Enter key.

where

server
is the IP address or host name of the server you want to configure as the DNS master server

2 When prompted, enter your user ID and password.

3 Change to the root user by typing

```
$ su - root
```

and pressing the Enter key.

4 When prompted, enter the root password.

5 Access the command line interface by typing

```
# cli
```

and pressing the Enter key.

Example response

```
Command Line Interface
 1 - View
 2 - Configuration
 3 - Other

 X - exit

select -
```

6 Enter the number next to the “Configuration” option in the menu.

Example response

```
Configuration
 1 - NTP Configuration
 2 - Apache Proxy Configuration
 3 - DCE Configuration
 4 - OAMP Application Configuration
 5 - CORBA Configuration
 6 - IP Configuration
 7 - DNS Configuration
 8 - Syslog Configuration
 9 - Database Configuration
10 - NFS Configuration
11 - Bootp Configuration
12 - Restricted Shell Configuration
13 - Security Services Configuration
14 - Login Session
15 - Location Configuration
16 - Cluster Configuration
17 - Succession Element Configuration
18 - snmp_poller (SNMP Poller Configuration)

      X - exit

Select -
```

7 Enter the number next to the “DNS Configuration” option in the menu.

Example response

```
DNS Configuration
 1 - turn_dns_on (Configure as DNS client)
 2 - turn_dns_off (Turn off a system’s DNS
     capability)
 3 - enable_dnssvr (Configure as DNS server)

 X - exit

select -
```

8 Enter the number next to the “enable_dnssrv” option in the menu.

Example response

```
===Executing “enable_dnssvr”
Enter domain name for the office:
```

9 When prompted, enter the domain name for the office.

Note: This procedure configures a DNS master server that is not connected to any other DNS zones outside of the CS LAN. To allow possible future connections of CS LAN DNS zones, it is recommended that the domain name for each CS LAN be the office CLLI.

10 If prompted, indicate whether you want to overwrite the existing DNS configuration.

Example response

```
Configuring with:
hostname: <hostname>
DNS domain: <office clli>
server IP: <IP address>
Starting DNSSVR through servstart
DSNSVR Started

===”enable_dnssvr” completed successfully
```

11 Exit each menu level of the command line interface to eventually exit the command line interface, by typing

`select - x`

and pressing the Enter key.

12 Verify that DNS is working by typing

`# nslookup <hostname>`

and pressing the Enter key.

Example response

```
Server: <hostname>.<domain name>
Address: <IP address>

Name: <hostname>.<domain name>
Address: <IP address>
```

Note:

13 You have completed this procedure.

Add or remove a host entry in the DNS database

At your workstation

1 Telnet to the server by typing

```
> telnet <server>
```

and pressing the Enter key.

where

server
is the IP address or host name of the DNS master server

2 When prompted, enter your user ID and password.

3 Change to the root user by typing

```
$ su - root
```

and pressing the Enter key.

4 When prompted, enter the root password.

5 Add or remove host entries in the DNS database, which entails editing two files; the “forward” (hosts) zone file, which translates domain names to IP addresses, and the “reverse” (hosts.rev) zone file, which translates IP addresses to domain names.

Note 1: Increment the “serial” number at the beginning of each zone file every time you update the file.

Note 2: The zone files will only be present if a DNS master server was configured. If required, refer to the steps under Configure server as a DNS master server.

Following is an example of adding a host named “annex” with an IP address of “45.136.123.46. The serial number for the file is also incremented to 2. In the example, the domain name (or office CLLI if used as domain name) is “loco”.

```
# vi /data/dns/named/hosts
```

Example response:

```
$TTL  3h
; SOA
loco.  IN SOA apex.loco. root.apex.loco (
                          2   ; Serial
                          3h  ; Refresh
                          15  ; Retry
                          1W  ; Expire
                          3h ); Minimum
; name servers
loco.  IN   NS   apex.loco
; addresses
apex   IN   A    45.136.123.70
annex  IN   A    45.136.123.46
```

 # vi /data/dns/named/hosts.rev

Example response:

```
$TTL  3h
; SOA
123.136.45.in-addr.arpa.  IN SOA apex.loco.
root.apex.loco (
                          2   ; Serial
                          3h  ; Refresh
                          15  ; Retry
                          1W  ; Expire
                          3h ); Minimum
; name servers
123.136.45.in-addr.arpa.  IN   NS   apex.loco
; addresses
70.123.136.45.in-addr.arpa  IN   PTR apex.loco
46.123.136.45.in-addr.arpa. IN   PTR annex.loco
```

6 Restart the DNS service by typing

 # servrestart DNSSVR

and pressing the Enter key

Example response

```
Stopping DNSSVR
Starting DNSSVR
DNSSVR re-started successfully
```

7 You have completed this procedure.

Configure server as a DNS client

At your workstation

1 Telnet to the server by typing

```
> telnet <server>
```

and pressing the Enter key.

where

server
is the IP address or host name of the server you want to configure as a DNS client

2 When prompted, enter your user ID and password.

3 Change to the root user by typing

```
$ su - root
```

and pressing the Enter key.

4 When prompted, enter the root password.

5 Access the command line interface by typing

```
# cli
```

and pressing the Enter key.

Example response

```
Command Line Interface
 1 - View
 2 - Configuration
 3 - Other

 X - exit

select -
```

6 Enter the number next to the “Configuration” option in the menu.

Example response

```
Configuration
 1 - NTP Configuration
 2 - Apache Proxy Configuration
 3 - DCE Configuration
 4 - OAMP Application Configuration
 5 - CORBA Configuration
 6 - IP Configuration
 7 - DNS Configuration
 8 - Syslog Configuration
 9 - Database Configuration
10 - NFS Configuration
11 - Bootp Configuration
12 - Restricted Shell Configuration
13 - Security Services Configuration
14 - Login Session
15 - Location Configuration
16 - Cluster Configuration
17 - Succession Element Configuration
18 - snmp_poller (SNMP Poller Configuration)

      X - exit

Select -
```

7 Enter the number next to the “DNS Configuration” option in the menu.

Example response

```
DNS Configuration
 1 - turn_dns_on (Configure as DNS client)
 2 - turn_dns_off (Turn off a system’s DNS
     capability)
 3 - enable_dnssvr (Configure as DNS server)

 X - exit

select -
```

8 Enter the number next to the “turn_dns_on” option in the menu.

9 When prompted, confirm the command by typing

yes

and pressing the Enter key.

10 When prompted, enter the DNS domain.

Example
us.nortel.com

11 When prompted, enter the IP address of a DNS server.

12 When prompted, enter the IP address of a second DNS server.

13 When prompted, enter the IP address of another DNS server. If there are no other DNS server addresses to enter, press the Enter key.

14 When prompted, enter the name of a search domain.

Example
us.nortel.com

15 When prompted, enter the name of another search domain. If there are no other search domains, press the Enter key.

16 Accept the DNS configuration that is displayed by typing

ok

and pressing the Enter key.

17 Exit each menu level of the command line interface to eventually exit the command line interface, by typing

`select - x`

and pressing the Enter key.

18 You have completed this procedure.

Turn off DNS capability on the server

At your workstation

1 Telnet to the server by typing

`> telnet <server>`

and pressing the Enter key.

where

server
is the IP address or host name of the server on which you want to turn off DNS capability

2 When prompted, enter your user ID and password.

3 Change to the root user by typing

`$ su - root`

and pressing the Enter key.

4 When prompted, enter the root password.

5 Access the command line interface by typing

```
# cli
```

and pressing the Enter key.

Example response

```
Command Line Interface
 1 - View
 2 - Configuration
 3 - Other

 X - exit

select -
```

6 Enter the number next to the “Configuration” option in the menu.

Example response

```
Configuration
 1 - NTP Configuration
 2 - Apache Proxy Configuration
 3 - DCE Configuration
 4 - OAMP Application Configuration
 5 - CORBA Configuration
 6 - IP Configuration
 7 - DNS Configuration
 8 - Syslog Configuration
 9 - Database Configuration
10 - NFS Configuration
11 - Bootp Configuration
12 - Restricted Shell Configuration
13 - Security Services Configuration
14 - Login Session
15 - Location Configuration
16 - Cluster Configuration
17 - Succession Element Configuration
18 - snmp_poller (SNMP Poller Configuration)

      X - exit

Select -
```

7 Enter the number next to the “DNS Configuration” option in the menu.

Example response

```
DNS Configuration
 1 - turn_dns_on (Configure as DNS client)
 2 - turn_dns_off (Turn off a system's DNS
     capability)
 3 - enable_dnssvr (Configure as DNS server)

 X - exit

select -
```

8 Enter the number next to the "turn_dns_off" option in the menu.

Example response

```
===Executing "turn_off_dns"
Do you really want to turn off DNS? (default:
No):
```

9 When prompted, confirm you want to turn off DNS capability by typing

yes

and pressing the Enter key.

Example response

```
Group registered
Stopping group using servstop
DNSSVR Stopped
DNS successfully turned off

==="turn_dns_off" completed successfully
```

10 Exit each menu level of the command line interface to eventually exit the command line interface, by typing

select - x

and pressing the Enter key.

11 You have completed this procedure.

Using Java Web Start client

This section describes the procedure to launch the Integrated EMS Java Web Start Client in different OSs. This section comprises of the following sub-sections:

- Logging in Integrated EMS
- Configuring login settings
- Java Web Start GUI setup
- Launching the Integrated EMS Java Web Start Client

Logging in Integrated EMS

The authentication user interface for accessing Integrated EMS is described below.

Note 1: The term Logging In refers to the process of entering a user name and password in order to gain access to the Integrated EMS Server when using an Integrated EMS Client.

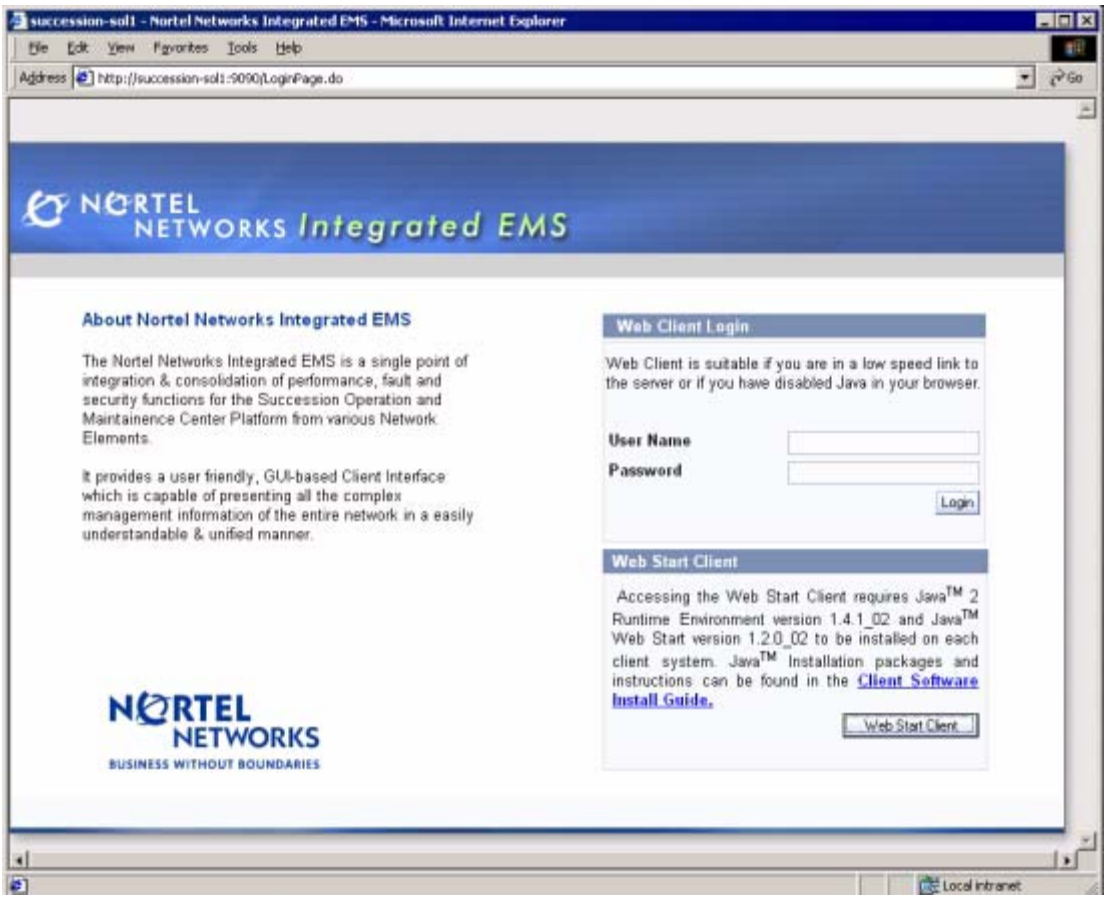
Note 2: Integrated EMS supports upto 20 simulataneous Java Web Start Client and 44 simulataneous Web Client.

Logging in using browser

To log in and connect to the Integrated EMS Server using a Web browser, follow these steps:

At Integrated EMS workstation

1 Connect to the Integrated EMS Server using a Web browser with the URL in the format of: http://hostname:9090. A page, similar to the figure shown below is displayed:

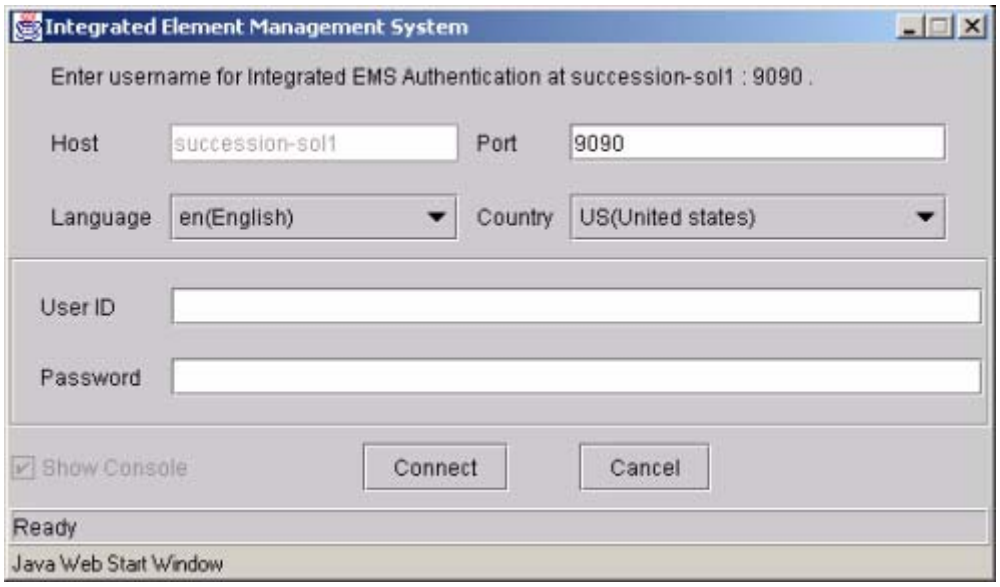


Note: The process of logging in to the Web Client and Java Web Start are different. To connect to the Integrated EMS Server using the Web Client, the user name and password must be provided prior to selecting the Web Client button. To use the Java Web Start client, select the **Web Start Client** button, then type the user name and password.

2 Type the user name and password to connect to the Web Client by selecting the **Web Client** button.

or

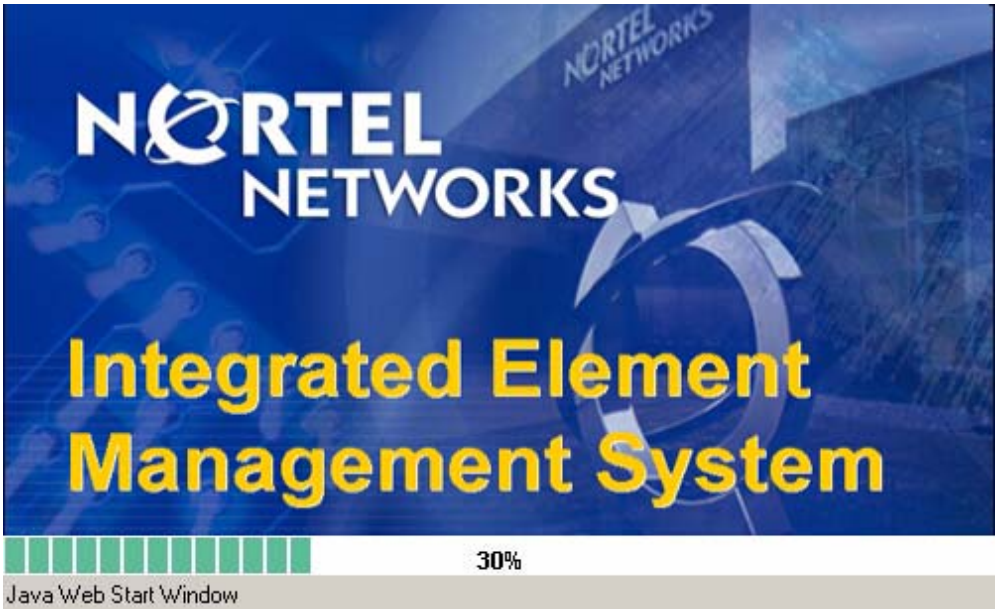
Click the **Web Start Client** button to launch the login dialog as given below for the Java Web Start Client:



Note: The password field does not display the text during typing to enable it is secured.

3 Enter the valid user name and password and click the **Connect** button.

The following splash screen is displayed during a successful login.



Once the splash screen disappears, a Security Notice is displayed. Click the **OK** button to bring up the Integrated EMS Java Web Start Client.

Locking out of Integrated EMS client screen

The client screen gets locked out when it is not accessible for a specified time period. The time period (in minutes) for which the client is left idle can be specified for the ALLOWED_IDLE_TIME_BEFORE_LOCKOUT attribute in the **clientparameters.conf** file located in <IEMS Home>/conf directory. Once the client screen is locked, it is required to authenticate it with user ID and password to login again. The client lock-out screen is as shown below:

For procedure to configure idle time before lock out, refer to the "Configuring security management parameters" of Integrated EMS Security and Administration, NN10336-611.

Configuring login settings

The login settings including password and user accounts are explained in this section.

Logging in after the password has expired

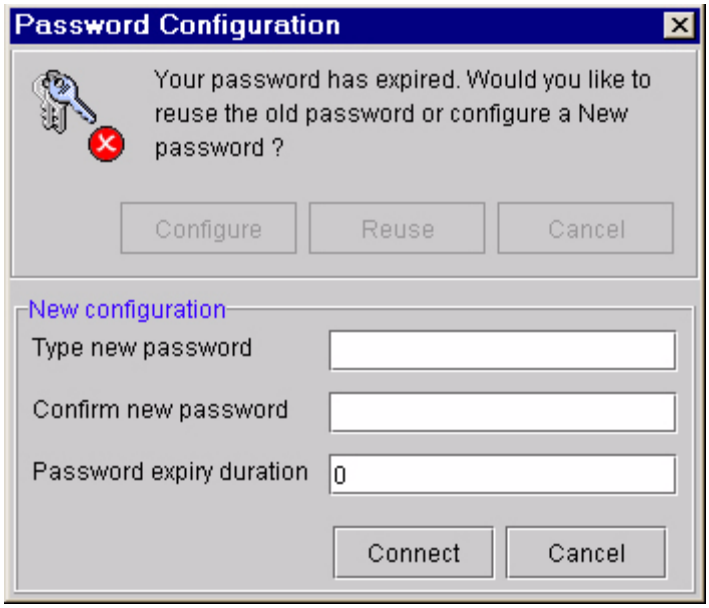
If a user attempts to connect to the Integrated EMS Server after their password has expired, the following message is shown:

Retaining Old Password

Click the **Reuse** button to continue using the existing password. The password is kept the same for a period of time as previously scheduled.

Configuring New Password

Click the **Configure** button to set a new password and specify the number of days after which the password shall must expire. After specifying the new password and its expiration duration, click the **Connect** button to connect to the server with the new password. Future logins must use the new password.



User account expiration

User account expration dialog is displayed as shown below. In this condition, no access to the Integrated EMS Java Web Start Client is permitted until the account is reactivated by the administrator through the Security Administration GUI.

User Account Expiration dialog

User disabled status

If an account is disabled by the administrator using the security administration GUI, the individual account cannot access the Integrated EMS Java Web Start Client. A Login Failed dialog is displayed in the following figure:

User disabled status dialog

Java Web Start GUI setup

The graphical user interface (GUI) contains a menu bar, toolbar, topology toolbar, Integrated EMS tree, alarm count panel, status bar, and Integrated EMS panel. This section provides a detailed description of the various configurations available initially on the screen.

Menu bar

The menu bar contains drop-down menus including File, Custom Views, Edit, View, Actions, Tools, Look And Feel, Window, and Help.

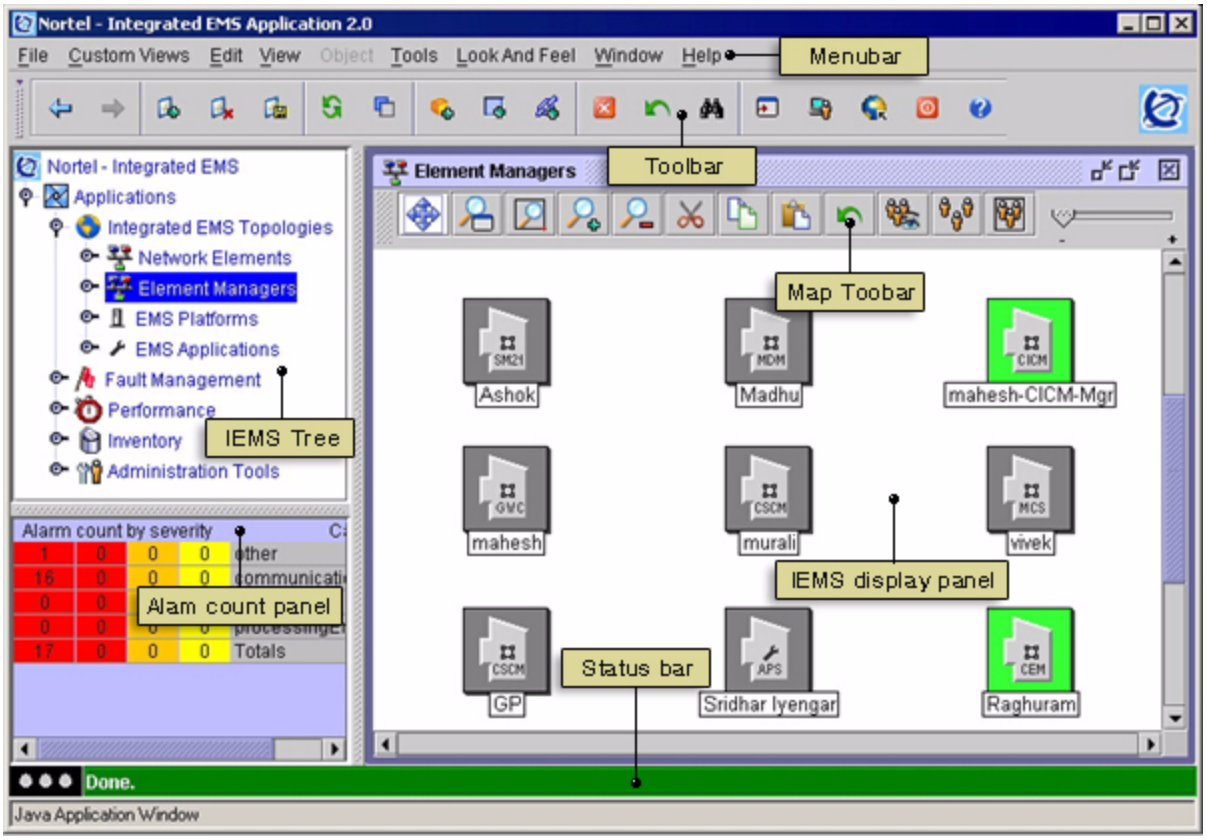
Note: The menus appearing in the menu bar are context sensitive to the object selected in the Integrated EMS Java Web Start Client. The menus and the menu items appear or disappear dynamically according to the object selected in the Integrated EMS Java Web Start Client.

Toolbar

The toolbar is a component that displays a collection of actions, commands, or control functions. Toolbars are useful to provide access to the frequently used components. The default position for the toolbar is below the menu bar. A tool tip is provided for each tool button, which indicates the operations performed by them. The tool buttons include Go Back to Previous, Go Forward to Next, Save, Print, Refresh, Delete, Stop, and Help. The toolbar is movable and floatable.

Note: The tool-buttons appearing in the toolbar are context sensitive to the object selected in the Integrated EMS Java Web Start Client. The tool buttons appear or disappear dynamically according to the object selected in the Integrated EMS Java Web Start Client.

Parts of the Integrated EMS Java Web Start Client GUI



Tree

A tree is used to display a set of Integrated EMS applications with their hierarchical data relationships. The fundamental object in a tree is called a node, which represents a data item in the given hierarchical set. Thus, a tree is composed of one or more nodes. The root node is the top node of the hierarchical data.

Nodes inside the root nodes are called child nodes. Nodes that contain no child nodes are called leaf nodes. By choosing a particular node, the corresponding panel is displayed on the right-side frame.

Alarm count panel

The alarm count panel shows the alarm count of each severity (Critical, Major, Minor, Warning, and Clears) for each alarm category [the figure above shows four categories the previous sentence lists five]. The alarm count panel is located below the Integrated EMS tree. Double-clicking the count displayed in the alarm count panel causes the alarms of the specific severity to display in the corresponding alarm panel. This panel is updated automatically and the counts can be seen

continuously, irrespective of the functional view (whether maps or events that are chosen). The tool tip and the cursor shape changes when the mouse pointer is pointed on alarm counts. By selecting the counts in the alarm count panel, the respective alarms in the right-hand side panel are displayed.

Status bar

The status bar is located at the bottom of the screen. It indicates the status of the current process. The status bar displays "Done" when all the contents are loaded, or displays "loading..." if the process is still active. The status bar changes from dark blue to green during the loading of the product.

Display panel

The display panel is shown on the right hand side as a frame within the main window. The panel shows the frame that corresponds to the selection made on the tree. The following parts are found in the display panel when the Network Events, Alarms, Inventory, Configured Collection and Jobs nodes are selected which contain the tabulated data.

Launching the Integrated EMS Java Web Start Client

Integrated EMS Java Web Start Client is launched by connecting to the Integrated EMS Server and logging in.

To launch the Integrated EMS Java Web Start Client, follow the steps:

At the Integrated EMS workstation

1 Connect to the Integrated EMS Server host from the browser using a URL in the format of http://hostname_or_IP_Address:9090.

Example
http://succession-sol1:9090

In the above example, "succession-sol1" is the name of the machine in which the server is running, and "9090" is the port number on which the server is running.

Note: If the Integrated EMS Server is running in HTTPS mode and the Java Web Start Client require to contact in secured mode, the URL must be specified in format https://hostname:9091. Since 9091 is the SSL port for communication.

2 Select the **Web Start Client** button to display the authentication dialog.

3 Enter the correct user name and password and select the **Connect** button.

A flash screen appears after you successfully log in.

4 Click the **OK** button in the Security Notice window to launch the Integrated EMS Java Web Start Client.

Launching the Java Web Start Client in various platforms

The Java Web Start Client runs on multiple platforms, including Microsoft Windows and Sun Solaris. From any of the browsers in the system, Integrated EMS Java Web Start Client can be launched by navigating to the URL comprising of the name and port number of the host. The complete URL is in the form of http://hostname:9090. Click the **Web Start Client** button on the page to invoke the login dailog. After entering the user name and the password, connection to the Integrated EMS Server is accomplished.

Launching applications from Integrated EMS

The applications, Element Managers, or commands can be launched from the topology GUI in Integrated EMS. The applications, Element Managers, or commands launched are depending on the selected object. This following sections explains procedure to the launch applications from the topology GUI for objects listed below. For common step-by-step to launch applications for remaining objects managed by Integrated EMS, refer to the following sections.

- Launching applications of NEs from topology panel
- Launching applications of EMS platform from topology panel
- Launching EMS applications from topology panel
- Launching element managers from topology panel

Requirements for Client Workstation

In order to access the launch applications the client must have the following requirements:

- HTTP Browser
- The client launch for the PP8600 NE requires the installation of the Java Device Manager (JDM) application.
- The client launch for the MCS client requires the installation of the MCS client application. The MCS client is supported on the Microsoft Windows OS only.
- The client launch for the MAS client requires the installation of the Microsoft Remote Desktop Connection Software application on the client PC. The MCS client is supported on the Windows OS only.
- Launching the MDM client from a Integrated EMS client in Microsoft Windows requires the installation of the Exceed application. Exceed is a 3rd party software application that transforms your PC computer into a fully functional X Window terminal. It lets you run and display UNIX applications (X clients) from the familiar Microsoft.
- The client must either be a UNIX platform or a PC that supports emulation software like Exeed on VNC which are required for the access to the MDM clients.

Launch applications for Element Managers

The table given below lists the Element Managers with launch applications based on the Command Line UI or GUI applications.

Element Managers with corresponding Application launched

For Element Manager	Device version	Application or command name	Menu item in object-specific menu or right-click menu of the object in topology
Command Line through Integrated EMS Server			
Preside Multi-Service Data Manager	6.2	Command Line	Command Line
CICM Manager	6.2/7.0	Command Line	Launch Command Line
CICM Manager node	6.2/7.0	Command Line	Launch Command Line
GUI applications			
Audio Provisioning Server	6.2/7.0	APS Manager	APS Manager
CS 2000 Core (manages Call Agent Core and XA Core NEs)	6.2/7.0	Core Manager Maintenance	Launch Core Mgr Maintenance
		MAPCI	Launch MAPCI Session
MCS 5200 (manages MCS 5200 and Media Proxy NEs)	6.2/7.0	MCS Client	Launch MCS Client
GWC	6.2/7.0	GWC Manager (CS 2000 Management Tools)	GWC Mgr(CMT)
		GWC Manager Network View	GWC Mgr Network View
SAM21	6.2/7.0	SAM21 Manager	SAM21 Mgr GUI
MG 9000	6.2	MG 9000 Manager 6.2	MG9k Manager
	7.0	MG 9000 Manager 7.0	MG9K Manager

Element Managers with corresponding Application launched

For Element Manager	Device version	Application or command name	Menu item in object-specific menu or right-click menu of the object in topology
Preside MDM (manages PVG and Multiservice Switch 15000 NEs)	6.2/7.0	MDM Manager GUI	MDM Mgr GUI
UAS	6.2/7.0	UAS Manager (CS 2000 Management Tools)	UAS Mgr(CMT)
CICM	7.0	CICM Manager	Launch CICM Manager

Launch applications for EMS platforms

The table given below lists the platforms with corresponding launch applications based on the Command Line UI or GUI applications.

EMS platforms with corresponding Application launched

For EMS platform	Device version	Application or command name	Menu item in object-specific menu or right-click menu of the object in topology
Command Line through Integrated EMS Server			
MDM	6.2/7.0	Command Line	Command Line
SSPFS	6.2/7.0	Command Line	Command Line
		Restart SSPFS	Restart SSPFS
		Restart IEMS	Restart IEMS
SSPFS unit	6.2/7.0	Command Line	Command Line
		Restart SSPFS	Restart SSPFS
SDM	6.2/7.0	Command Line	Command Line
GUI applications			

EMS platforms with corresponding Application launched

For EMS platform	Device version	Application or command name	Menu item in object-specific menu or right-click menu of the object in topology
SSPFS	6.2/7.0	Servman Application Status	Servman Application Status
		Swact Cluster	Swact Cluster
SSPFS Unit	6.2	Servman Application Status	Servman Application Status
		Swact Cluster	Swact Cluster

Launch applications for EMS applications

The table given below lists the EMS applications with corresponding launch applications based on the Command Line UI or GUI applications.

EMS applications with corresponding Application launched

For EMS application	Device version	Application or command name	Menu item in object-specific menu or right-click menu of the object in topology
Command Line through Integrated EMS Server			
OSSGate	6.2/7.0	BPT Command Line	Launch BPT CLUI
QoS Collector Application	6.2/7.0	Command Line	Launch Command Line
GUI applications			
Line Maintenance Manager	6.2/7.0	Line Maintenance Manager	Line Maintenance Manager (LMM)
Trunk Maintenance Manager	6.2/7.0	Trunk Maintenance Manager	Trunk Maintenance Manager (TMM)
OSSGate	6.2/7.0	OSSGate	Launch OSSGate
		BPT Servlet	Launch BPT Servlet

EMS applications with corresponding Application launched

For EMS application	Device version	Application or command name	Menu item in object-specific menu or right-click menu of the object in topology
Network Patch Manager	6.2/7.0	Network Patch Manager	Network Patch Manager (NPM)
Audio Provisioning Server	6.2/7.0	APS Manager (CS 2000 Management Tools)	APS Manager (CMT)
		APS Audio Configuration Tool	APS Audio Configuration Tool

Launch Applications for NEs

The table given below lists the NEs with corresponding launch applications based on the Command Line UI or GUI applications.

NEs with corresponding Application launched

For NE	Device version	Application or command name	Menu item in object-specific menu or right-click menu of the object in topology
Command Line through Integrated EMS Server			
Passport 8600	6.2/7.0	Command Line	Command Line
STORM	6.2/7.0	Command Line	Launch Command Line
USP	6.2/7.0	Command Line	Command Line
MS 2000	7.0	Command Line	EM Command Line
Call Agent Core managed by CS 2000 Core Manager	6.2/7.0	Command Line	Call Agent Platform Command Line
Call Agent Platform managed by CS 2000 Core Manager	6.2/7.0	Command Line	Call Agent Platform Command Line

NEs with corresponding Application launched

For NE	Device version	Application or command name	Menu item in object-specific menu or right-click menu of the object in topology
GWC NE managed by GWC Manager	6.2/7.0	Command Line	Launch Command Line
UAS	6.2/7.0	Command Line	Command Line
Session Server	7.0	Command Line	Command Line
Session Server unit	7.0	Command Line	Command Line
GUI applications			
USP	6.2	Citrix Client	Launch USP Manager
	7.0	CMT	Launch USP Manager
Passport 8600	6.2	Passport 8600 Device Manager	Passport 8600 Device Manager
STORM	6.2/7.0	STORM Manager	STORM Manager
Call Agent Core managed by CS 2000 Core Manager	6.2/7.0	MAPCI Session	Launch MAPCI Session
Call Agent Platform managed by CS 2000 Core Manager	6.2/7.0	MAPCI Session	Launch MAPCI Session
Audio Provisioning Server NE managed APS application	6.2/7.0	APS Manager(CS2000 Management Tools)	APS Mgr(CMT)
		APS Audio Configuration Tool	APS Audio Configuration Tool

NEs with corresponding Application launched

For NE	Device version	Application or command name	Menu item in object-specific menu or right-click menu of the object in topology
MTX NE managed by CEM Manager	7.0	CEM Manager	CEM Manager
MSC NE managed by CEM Manager		CEM Manager	CEM Manager
HLR NE managed by CEM Manager		CEM Manager	CEM Manager
TRI NE managed by CEM Manager		CEM Manager	CEM Manager
GWC NE managed by GWC Manager	6.2/7.0	GWC Unit Manager	GWC Unit Mgr
		Line Maintenance Manager	Launch LMM
		Trunk Maintenance Manager	Launch TMM
		Network Patch Manager	Launch NPM
		CS 2000 Tools	Launch GWC Tools
XA-Core managed by CS 2000 Core Manager	6.2	MAPCI Session	Launch MAPCI Session
	7.0	MAPCI Session	Launch MAPCI Session
Session Server NE	7.0	Session Server	Launch Session Server
Session Server Unit	7.0	Session Server	Launch Session Server
CICM NE managed CICM Manager	7.0	CICM Manager	Launch CICM Manager
CICM NE node managed CICM Manager	7.0	CICM Manager	Launch CICM Manager

NEs with corresponding Application launched

For NE	Device version	Application or command name	Menu item in object-specific menu or right-click menu of the object in topology
MAS NE managed by MAS Manager	7.0	MAS Manager	MAS Manager
MCS 5200 NE managed by MCS 5200 Manager	6.2/7.0	MCS Client	Launch MCS Client
SAM21 NE managed by SAM21 Manager	6.2/7.0	SCU Subnet	Launch SCU Subnet
		SCU Manager	Launch SCU Manager

Launching element managers from topology panel

This section describes the procedure to launch applications for element manager objects from the Integrated EMS Topology panel.

The applications for element manager objects launched from topology panel are as follows:

- Launching APS Manager
- Launching applications for CS 2000 Core Manager
- Launching MCS client
- Launching GWC Manager
- Launching MG 9000 Manager
- Launching Preside Multi-Service Data Manager
- Launching SAM21 Manager
- Launching UAS Manager
- Launching CICM Manager

Launching APS Manager

The APS Manager for version 6.2 and 7.0 can be launched from Integrated EMS Java Web Start Client.This section describes the procedure for launching the APS Manager client from Integrated EMS Java Web Start Client

Launching APS Manager for APS Manager version 6.2 or 7.0

To launch the APS Manager for APS Manager version 6.2 or 7.0 objects from Integrated EMS Java Web Start Client, follow these steps:

At Integrated EMS workstation

1. Launch the Integrated EMS Java Web Start Client (refer to the "Launching the Integrated EMS Java Web Start Client").
2. Select the **Element Managers** topology node in the Integrated EMS tree.
3. Select an Element Managers map symbol in the Integrated EMS display panel.
4. Right-click the map symbol and select the **APS Manager** menu item.

   This opens the APS Manager client. For APS Manager version 6.2, acces to the APS Manager client is permitted after authentication, where as for version 7.0 is with SSO(Single Sign On).

Launching APS application for APS unit version 6.2 and 7.0

To launch the APS unit of version 6.2 and 7.0 from Integrated EMS Java Web Start Client, follow these steps:

At Integrated EMS workstation

1. Launch the Integrated EMS Java Web Start Client (refer to the "Launching the Integrated EMS Java Web Start Client").
2. Select the **Element Managers** topology node in the Integrated EMS tree.
3. Select a APS unit map symbol in the Integrated EMS display panel.
4. Right-click the map symbol and select the **Launch APS** menu item.

This opens the APS Manager client. For APS unit version 6.2, acces to the APS Manager client is permitted after authentication, where as for version 7.0 is with SSO(Single Sign On).

Launching applications for CS 2000 Core Manager

The Core Manager Maintenance or MAPCI Session for CS 2000 Core Manager version 6.2 or 7.0 can be launched from Integrated EMS Java Web Start Client.This section describes the procedure for launching the Core Manager Maintenance application and MAPCI Session for CS 2000 Core Manager from Integrated EMS Java Web Start Client.

Launching Core Manager Maintenance

To launch the Core Manager Maintenance application for CS 2000 Core Manager of version 6.2 or 7.0 from Integrated EMS Java Web Start Client, follow these steps:

At Integrated EMS workstation

1. Launch the Integrated EMS Java Web Start Client (refer to "Launching the Integrated EMS Java Web Start Client").
2. Select the **Element Managers** topology node in the Integrated EMS tree.
3. Select a CS 2000 Core Manager map symbol in the Integrated EMS display panel.
4. Right-click the map symbol and select **Launch Core Mgr Maintenance** menu item.

   This option enables communicating with the device through Integrated EMS using SSH on executing the command "*/sdmtools/bin/sdmmtc*".

Launching MAPCI Session

To launch the MAPCI Session for CS 2000 Core Manager of version 6.2 or 7.0 from Integrated EMS Java Web Start Client, follow these steps:

At Integrated EMS workstation

1. Launch the Integrated EMS Java Web Start Client (refer to "Launching the Integrated EMS Java Web Start Client").
2. Select the **Element Managers** topology node in the Integrated EMS tree.
3. Select a CS 2000 Core Manager map symbol in the Integrated EMS display panel.
4. Right-click the map symbol and select **Launch MAPCI Session** menu item.

This option enables communicating with the device through Integrated EMS using SSH.

Launching MCS client

The MCS Client can be launched for MCS 5200 Manager version 6.2 or 7.0 from Integrated EMS Java Web Start Client. This section describes the procedure for launching the MCS Client from Integrated EMS Java Web Start Client in Microsoft Windows platform.

Required prerequisites for launching MCS Client

MCS client launch is available only on a PC, which must have MCS software installed. For details of how to install the software, refer to the MCS System Management Console User Guide, NN10247-111. MCS Client software can be launched only in Microsoft Windows platforms.

Launching MCS Client for MCS 5200 Manager version 6.2 or 7.0

To launch the MCS Client for MCS 5200 Manager version 6.2 or 7.0 from Integrated EMS Java Web Start Client, follow these steps:

At Integrated EMS workstation

1. Launch the Integrated EMS Java Web Start Client (refer to the "Launching the Integrated EMS Java Web Start Client").
2. Select the **Element Managers** topology node in the Integrated EMS tree.
3. Select a MCS 5200 Manager map symbol in the Integrated EMS display panel.
4. Right-click the map symbol and select **Launch MCS Client** menu item.

   A file chooser dialog is launched.
5. Use the **Browse** button to select the MCS executable file path.
6. Click the **OK** button to launch the MCS Client.

   Note: Integrated EMS saves the location of most recently executed script or executable file in the client system from which the Integrated EMS Java Web Start Client is launched.

Launching GWC Manager

The GWC Manager for version 6.2 and 7.0 can be launched from Integrated EMS Java Web Start Client.This section describes the procedure for launching the GWC Manager client from Integrated EMS Java Web Start Client

Launching GWC Manager applications from Integrated EMS

To launch the GWC Manager of version 6.2 or 7.0 from Integrated EMS Java Web Start Client, follow these steps:

At Integrated EMS workstation

1. Launch the Integrated EMS Java Web Start Client (refer to the "Launching the Integrated EMS Java Web Start Client").
2. Select the **Element Managers** topology node in the Integrated EMS tree.
3. Select a GWC Manager map symbol in the Integrated EMS display panel.
4. Right-click the map symbol and select **GWC Mgr (CMT)** menu item.

   This opens the GWC Manager client.

   OR

   Right-click the map symbol and select **GWC Mgr Network View** menu item.

   This opens the GWC Manager network view. For GWC Manager version 6.2, access to the GWC Manager network view client is permitted after authentication, where as for version 7.0 is with SSO(Single Sign On).

Launching applications for GWC Unit version 6.2 or 7.0 from Integrated EMS

To launch the GWC Unit of version 6.2 or 7.0 from Integrated EMS Java Web Start Client, follow these steps:

At Integrated EMS workstation

1. Launch the Integrated EMS Java Web Start Client (refer to the "Launching the Integrated EMS Java Web Start Client").
2. Select the **Element Managers** topology node in the Integrated EMS tree.

3 Select a GWC Unit map symbol in the Integrated EMS display panel.

4 Right-click the map symbol and select **GWC Unit Mgr** menu item.

This opens the GWC Manager client .

OR

Right-click the map symbol and select **Launch Command Line** menu item.

This options enables communictaing with devices from Integrated EMS using SSH.

OR

Right-click the map symbol and select **Launch LMM** menu item.

Launches the LMM client in the browser specified in the URL.

OR

Right-click the map symbol and select **Launch TMM** menu item.

Launches the TMM client in the browser specified in the URL.

OR

Right-click the map symbol and select **Launch NPM** menu item.

Launches the NPM client in the browser specified in the URL.

OR

Right-click the map symbol and select **Launch CS2K Tools** menu item.

Launches the CS 2000 Core client in the browser specified in the URL.

Note: For GWC units under GWC Manager version 6.2, access to the applications launched are permitted after authentication, where as for version 7.0 is with SSO(Single Sign On).

Launching MG 9000 Manager

The MG 9000 Manager for version 6.2 and 7.0 can be launched from Integrated EMS Java Web Start Client.This section describes the procedure for launching the MG 9000 Manager client from Integrated EMS Java Web Start Client

To launch the MG 9000 Manager for MG 9000 version 6.2 or 7.0 from Integrated EMS Java Web Start Client, follow these steps:

At Integrated EMS workstation

1. Launch the Integrated EMS Java Web Start Client (refer to the "Launching the Integrated EMS Java Web Start Client").
2. Select the **Element Managers** topology node in the Integrated EMS tree.
3. Select an Element Managers map symbol in the Integrated EMS display panel.
4. Right-click the map symbol and select **MG9K Manager** menu item.

   This opens the MG 9000 Manager client. For MG 9000 Manager version 6.2, acces to the MG 9000 Manager client is permitted after authentication, where as for version 7.0 is with SSO(Single Sign On).

Launching Preside Multi-Service Data Manager

A client-server IP address must be provisioned before launching Preside Multi-Service Data Manager (Preside MDM) from the Integrated EMS Client. The client-server IP address is the IP address of the box present between the Integrated EMS and Preside Multi-Service Data Manager. This section describes the procedures for provisioning the client-server IP address and launching Preside Multi-Service Data Manager in Integrated EMS Client.

Requirements for launching Preside MDM GUI

The requirements for launching the Preside MDM GUI are as follows:

- Preside Multi-Service Data Manager launch on a UNIX platform requires the user to login to the Preside Multi-Service Data Manager Client Set UNIX shell. For details of how to launch the client GUI, refer to *Preside MDM Installer Guide*, NN241-6001-100.
- Preside Multi-Service Data Manager launch on a PC requires a UNIX emulation package such as Exceed. For information on installing and configuring Exceed refer to Exceed documentation. For details of the specific command used to launch through Exceed, refer to *Preside MDM Installer Guide*, NN241-6001-100 and *Preside MDM Customization Administrator Guide*, NN241-6001-301.
- The client-server IP address must be provisioned using the procedure given in the next section, Provisioning client-server IP address for MDM Manager.

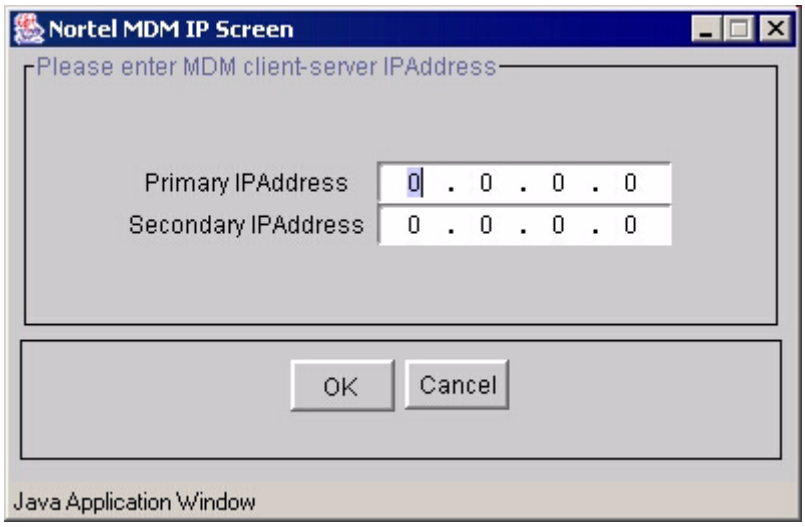
Provisioning client-server IP address for MDM Manager

To provision a client-server IP address for Preside MDM version 7.0 object in Integrated EMS, follow these steps:

At Integrated EMS workstation

1. Launch the Integrated EMS Java Web Start Client (refer to the "Launching the Integrated EMS Java Web Start Client").
2. Select the **Element Managers** topology node in the Integrated EMS tree.
3. Select the required Preside MDM map symbol in the Integrated EMS display panel.
4. Right-click the map symbol and select the **Client-Server IP** provisioning menu item.

   The system displays a window similar to the following figure.



5 Enter the Preside MDM Client-Server primary IP address in the **Primary IP Address** field.

6 Enter the Preside MDM Client-Server secondary IP address in the **Secondary IP Address** field.

7 Click the **OK** button.

Note: The above steps must be carried out only once.

Launching MDM Manager for Preside MDM version 7.0

To launch MDM Manager GUI for Preside MDM version 7.0, follow these steps:

At Integrated EMS workstation

1 Launch the Integrated EMS Java Web Start Client (refer to the "Launching the Integrated EMS Java Web Start Client").

2 Navigate to the Element Managers topology in the Integrated EMS tree.

3 Select a Preside MDM version 7.0 map symbol.

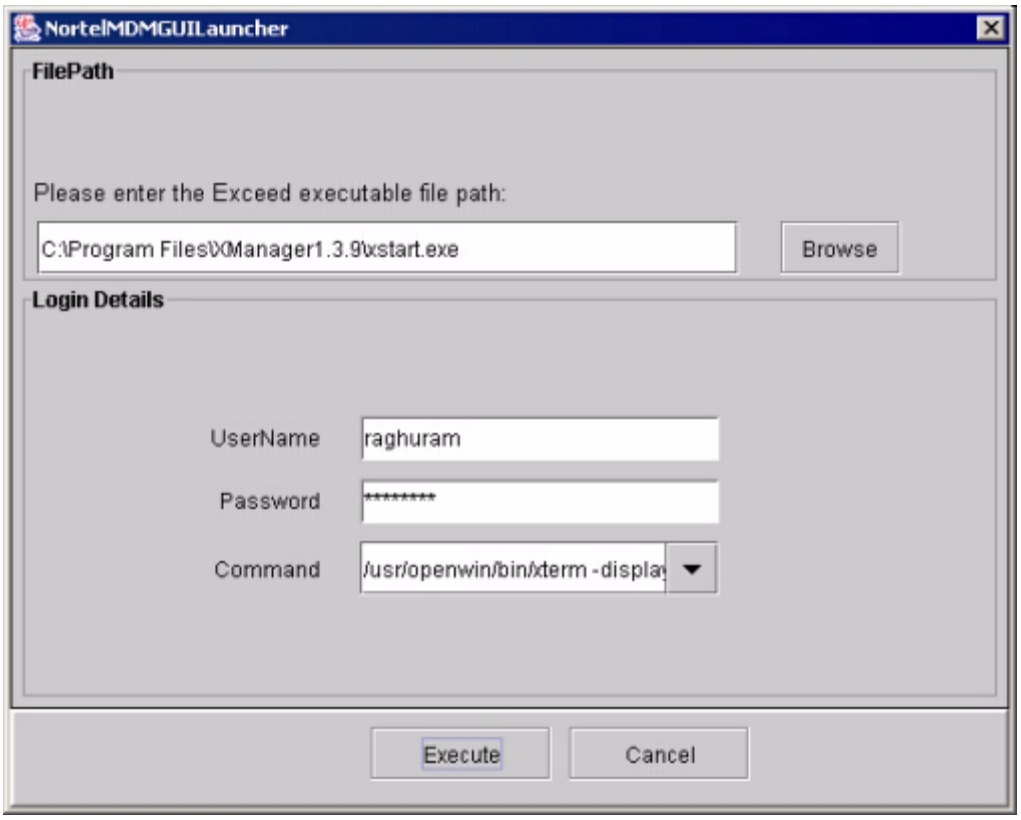
4 Right-click the map symbol and select the **MDM Mgr GUI** menu item.

The Client Server List window is launched.

5 Select the IP addres from the list box.

6 Click the **OK** button.

The system displays a window similar to the following figure.



Note: If the Client-Server IP is not provisioned, a dialog with message "Please provision the client server ipaddress" is displayed.

7 Click the **Browse** button to select Exceed executable file path.

8 Type the user name and password in the respective fields.

9 Type the command location in the Command editable list box. The command is a shell file, which is present at the specified location.

10 Click the **Execute** button to execute the specified command.

Note: Integrated EMS saves the location of script or executable file and commands in the client system from which the Integrated EMS Java Web Start Client is launched.

Launching CLI for Preside MDM version 6.2

To launch the Preside MDM of version 6.2 from Integrated EMS

Java Web Start Client, follow these steps:

At Integrated EMS workstation

1. Launch the Integrated EMS Java Web Start Client (refer to the "Launching the Integrated EMS Java Web Start Client").
2. Select the **Element Managers** topology node in the Integrated EMS tree.
3. Select an Preside MDM version 6.2 map symbol in the Integrated EMS display panel.
4. Right-click the map symbol and select **Command Line** menu item.

   This option enables communicating with the device through Integrated EMS using SSH.

Launching SAM21 Manager

The SAM21 Manager client for version 6.2 and 7.0 can be launched from Integrated EMS Java Web Start Client.This section describes the procedure for launching the SAM21 Manager from Integrated EMS Java Web Start Client

Launching SAM21 Manager application for SAM21 Manager version 6.2 or 7.0 objects

To launch the SAM21 Manager of version 6.2 or 7.0 from Integrated EMS Java Web Start Client, follow these steps:

At Integrated EMS workstation

1. Launch the Integrated EMS Java Web Start Client (refer to the "Launching the Integrated EMS Java Web Start Client").
2. Select the **Element Managers** topology node in the Integrated EMS tree.
3. Select a SAM21 Manager map symbol in the Integrated EMS display panel.
4. Right-click the map symbol and select **SAM21 Mgr GUI** menu item.

   This opens the SAM21 Manager client. For SAM21 Manager version 6.2, access to the client is permitted by authentication.

Launching SAM21-Unit Manager for SAM21 Card version 7.0

To launch the SAM21-Unit Manager of version 7.0 from Integrated EMS Java Web Start Client, follow these steps:

At Integrated EMS workstation

1. Launch the Integrated EMS Java Web Start Client (refer to the "Launching the Integrated EMS Java Web Start Client").
2. Select the **Element Managers** topology node in the Integrated EMS tree.
3. Select a SAM21-Unit Manager map symbol in the Integrated EMS display panel.
4. Right-click the map symbol and select **Launch SAM21Card View** menu item.

   This opens the SAM21-Unit Manager client. Access to the client is permitted by authentication.

Launching UAS Manager

The UAS Manager client for version 6.2 and 7.0 can be launched from Integrated EMS Java Web Start Client.This section describes the procedure for launching the UAS Manager cleint from Integrated EMS Java Web Start Client

Launching UAS Manager(CMT) application for UAS Manager version 6.2 0r 7.0

To launch the UAS Manager version 6.2 or 7.0 from Integrated EMS Java Web Start Client, follow these steps:

At Integrated EMS workstation

1. Launch the Integrated EMS Java Web Start Client (refer to the "Launching the Integrated EMS Java Web Start Client").
2. Select the **Element Managers** topology node in the Integrated EMS tree.
3. Select an UAS Manager map symbol in the Integrated EMS display panel.
4. Right-click the map symbol and select **UAS Mgr (CMT)** menu item.

   This opens the UAS Manager client. For UAS Manager version 6.2 objects, access to the client is permitted by authentication.

Launching CLI for UAS units version 6.2 and 7.0

To launch the UAS unit version 6.2 or 7.0 from Integrated EMS Java Web Start Client, follow these steps:

At Integrated EMS workstation

1. Launch the Integrated EMS Java Web Start Client (refer to the "Launching the Integrated EMS Java Web Start Client").
2. Select the **Element Managers** topology node in the Integrated EMS tree.
3. Select an UAS unit map symbol in the Integrated EMS display panel.
4. Right-click the map symbol and select **Command Line** menu item.

Choosing this option enables communicating with devices from Integrated EMS using SSH. For UAS Manager version 6.2 objects, access to the client is permitted by authentication.

Launching CICM Manager

The CICM Manager can be launched for CICM Manager and CICM Manager node with version 7.0 objects in Integrated EMS Java Web Start Client. This section describes the procedure for launching the CICM Manager client from Integrated EMS Java Web Start Client

Prerequisites for launching CICM Manager

CICM Manager has to be configured using **SSPFS CLI** tool for launching CICM Manager from Integrated EMS Client. For details, refer to the procedure for Configuring the Apache Proxy Server for CICM in CICM Configuration Management, NN10240-511.

Launching CICM Manager for CICM version 7.0 objects

To launch the applications for CICM Manager of version 7.0 from Integrated EMS Java Web Start Client, follow these steps:

At Integrated EMS workstation

1. Launch the Integrated EMS Java Web Start Client (refer to "Launching the Integrated EMS Java Web Start Client").
2. Select the **Element Managers** topology node in the Integrated EMS tree.
3. Select a CICM Manager map symbol in the Integrated EMS display panel.
4. Right-click the map symbol and select **Launch CICM Manager** menu item.

   This launches the CICM Manager client in the browser as per the specified URL.

   OR

   Right-click the map symbol and select **Launch Command Line** menu item.

   This option enables communicating with the device through Integrated EMS using SSH. For CICM Manager version 6.2 objects, access to the client is permitted by authentication.

Launching applications for CICM Node version 7.0

To launch the applications for CICM NE, CICM Manager node, or CICM node version 7.0 from Integrated EMS Java Web Start Client,

follow these steps:

At Integrated EMS workstation

1. Launch the Integrated EMS Java Web Start Client (refer to "Launching the Integrated EMS Java Web Start Client").
2. Select the **Element Managers** topology node in the Integrated EMS tree.
3. Select a CICM Manager node map symbol in the Integrated EMS display panel.
4. Right-click the map symbol and select **Launch CICM Manager** menu item.

   This launches the CICM Manager client in the browser as per the specified URL.

   OR

   Right-click the map symbol and select **Launch Command Line** menu item.

   This option enables communicating with the device through Integrated EMS using SSH.

Launching applications of EMS platform from topology panel

This section describes the procedure to launch applications for EMS platform objects from topology panel.

The applications for EMS platform objects launched from the topology panel are as follows:

- Launching applications for MDM platform
- Launching applications for SDM platform
- Launching applications for SSPFS platform

Launching applications for MDM platform

The CLI application for MDM platform version 6.2 and 7.0 can be launched from Integrated EMS Java Web Start Client.This section describes the procedure for launching the MDM platform client from Integrated EMS Java Web Start Client. To launch the MDM platform client of version 6.2 or 7.0 from Integrated EMS Java Web Start Client, follow these steps:

At Integrated EMS workstation

1. Launch the Integrated EMS Java Web Start Client (refer to "Launching the Integrated EMS Java Web Start Client").
2. Select the **EMS Platform** topology node in the Integrated EMS tree.
3. Select a MDM platform map symbol in the Integrated EMS display panel.
4. Right-click the map symbol and select **Command Line** menu item.

   Selecting this menu item enables communicating with remote device from Integrated EMS using SSH. For MDM platform version 6.2, access to CLI is permitted after authentication, where as for version 7.0 it can be done using SSO (Single Sign On).

Launching applications for SDM platform

The CLI application for SDM platform version 6.2 and 7.0 can be launched from Integrated EMS Java Web Start Client.This section describes the procedure for launching the SDM platform client from Integrated EMS Java Web Start Client. To launch the SDM platform of version 6.2 and 7.0 from Integrated EMS Java Web Start Client, follow these steps:

At Integrated EMS workstation

1. Launch the Integrated EMS Java Web Start Client (refer to "Launching the Integrated EMS Java Web Start Client").
2. Select the **EMS Platforms** topology node in the Integrated EMS tree.
3. Select a SDM platform map symbol in the Integrated EMS display panel.
4. Right-click the map symbol and select **Command Line** menu item.

   Selecting this menu item enables communicating with remote device from Integrated EMS using SSH. For SDM platform version 6.2, access to the CLI is permitted after authentication, where as for version 7.0 is with SSO (Single Sign On).

Launching applications for SSPFS platform

The applications for SSPFS platform version 6.2 and 7.0 and SSPFS unit version 6.2 can be launched from Integrated EMS Java Web Start Client.This section describes the procedure for launching the SSPFS platform client from Integrated EMS Java Web Start Client

Launching applications for SSPFS platform from topology panel

To launch the applications for SSPFS platform version 6.2 or 7.0 from Integrated EMS Java Web Start Client, follow these steps:

At Integrated EMS workstation

1. Launch the Integrated EMS Java Web Start Client (refer to the "Launching the Integrated EMS Java Web Start Client").
2. Select the **EMS Platforms** topology node in the Integrated EMS tree.
3. Select a SSPFS platform map symbol in the Integrated EMS display panel.
4. Right-click the map symbol and select **Command Line** menu item.

   Choosing this option enables communicating with remote device from Integrated EMS using SSH.

   OR

   Right-click the map symbol and select **Servman Applications Status** menu item.

   Launches the application which enables viewing the status of all applications running in SSPFS platform from Integrated EMS using SSH.

   OR

   Right-click the map symbol and select **Swact Cluster** menu item.

   Choosing this option enables swacting of platforms from Integrated EMS using SSH.

   OR

   Right-click the map symbol and select **Restart IEMS** menu item.

   Choosing this option enables restarting Integrated EMS using SSH.

   OR

Right-click the map symbol and select **Restart SSPFS** menu item.

Choosing this option enables restarting SSPFS using SSH.

Launching applications for SSPFS unit version 6.2 from topology panel

To launch the SSPFS units of version 6.2 from Integrated EMS Java Web Start Client, follow these steps:

At Integrated EMS workstation

1. Launch the Integrated EMS Java Web Start Client (refer to the "Launching the Integrated EMS Java Web Start Client").
2. Select the **EMS Platforms** topology node in the Integrated EMS tree.
3. Select a SSPFS platform map symbol in the Integrated EMS display panel.
4. Right-click the map symbol and select **Command Line** menu item.

   Choosing this option enables communicating with remote device from Integrated EMS using SSH.

   OR

   Right-click the map symbol and select **Servman Applications Status** menu item.

   Launches the application which enables viewing the status of all applications running in SSPFS platform from Integrated EMS using SSH.

   OR

   Right-click the map symbol and select **Swact Cluster** menu item.

   Choosing this option enables swacting of platforms from Integrated EMS using SSH.

   OR

   Right-click the map symbol and select **Restart IEMS** menu item.

   Choosing this option enables restarting Integrated EMS using SSH.

   OR

   Right-click the map symbol and select **Restart SSPFS** menu item.

Choosing this option enables restarting SSPFS using SSH.

Launching EMS applications from topology panel

This section describes the procedure to launch applications for EMS application objects from topology panel.

The applications for EMS application launched from the topology panel are as follows:

- Launching applications for APS application
- Launching LMM application
- Launching applications for NPM application
- Launching OSSGate application
- Launching CLI for QoS Collector application
- Launching TMM application

Launching applications for APS application

The APS Manager (CMT) and APS Audio Configuration tool can be launched for APS application of version 6.2 and 7.0 from Integrated EMS Java Web Start Client.This section describes the procedure for launching the applications for APS application from Integrated EMS Java Web Start Client

To launch applications for APS application version 6.2 or 7.0 from Integrated EMS Java Web Start Client, follow these steps:

At Integrated EMS workstation

1. Launch the Integrated EMS Java Web Start Client (refer to "Launching the Integrated EMS Java Web Start Client").
2. Select the **EMS Applications** topology node in the Integrated EMS tree.
3. Select an APS application map symbol in the Integrated EMS display panel.
4. Right-click the map symbol and select **APS Mgr(CMT)** menu item.

   This opens the APS application.

   OR

   Right-click the map symbol and select **APS Audio Configuration Tool** menu item.

   This opens the APS Audio Configuration Tool in the browser as specified in the URL.

Launching LMM application

The Line Maintenance Manager can be launched for LMM application of version 6.2 and 7.0 from Integrated EMS Java Web Start Client.This section describes the procedure for launching the LMM from Integrated EMS Java Web Start Client

To launch the LMM for LMM application version 6.2 or 7.0 from Integrated EMS Java Web Start Client, follow these steps:

At Integrated EMS workstation

1. Launch the Integrated EMS Java Web Start Client (refer to "Launching the Integrated EMS Java Web Start Client").
2. Select the **EMS Applications** topology node in the Integrated EMS tree.
3. Select an LMM application map symbol in the Integrated EMS display panel.
4. Right-click the map symbol and select **Line Maintenance Manager(LMM)** menu item.

   This opens the LMM application. For LMM application version 6.2, access to the LMM application is permitted after authentication, where as for version 7.0 is with SSO (Single Sign On).

Launching TMM application

The Trunk Maintenance Manager can be launched for TMM application of version 6.2 and 7.0 from Integrated EMS Java Web Start Client.This section describes the procedure for launching the TMM from Integrated EMS Java Web Start Client

To launch the TMM for TMM application version 6.2 or 7.0 from Integrated EMS Java Web Start Client, follow these steps:

At Integrated EMS workstation

1. Launch the Integrated EMS Java Web Start Client (refer to "Launching the Integrated EMS Java Web Start Client").
2. Select the **EMS Applications** topology node in the Integrated EMS tree.
3. Select an TMM application map symbol in the Integrated EMS display panel.
4. Right-click the map symbol and select **Trunk Maintenance Manager(TMM)** menu item.

   This opens the TMM application. For TMM application version 6.2, access to the TMM application is permitted after authentication, where as for version 7.0 is with SSO (Single Sign On).

Launching OSSGate application

The applications for OSSGate application of version 6.2 and 7.0 can be launched from Integrated EMS Java Web Start Client.This section describes the procedure for launching appplications for OSSGate application from Integrated EMS Java Web Start Client

Launching applications for OSSGate application version 6.2 or 7.0

To launch the applications for OSSGate application version 6.2 or 7.0 from Integrated EMS Java Web Start Client, follow these steps:

At Integrated EMS workstation

1. Launch the Integrated EMS Java Web Start Client (refer to "Launching the Integrated EMS Java Web Start Client").
2. Select the **EMS Applications** topology node in the Integrated EMS tree.
3. Select an OSSGate application map symbol in the Integrated EMS display panel.
4. Right-click the map symbol and select **Launch OSSGate** menu item.

   Selecting this menu item enables communicating with the application from Integrated EMS using SSH.

   OR

   Right-click the map symbol and select **Launch BPT Servlet** menu item.

   This opens the BPT servlet in the browser as specified in the secured URL.

   OR

   Right-click the map symbol and select **Launch BPT Command Line** menu item.

   Selecting this menu item enables communicating with remote devices from Integrated EMS using SSH. For OSSGate application version 6.2, access to the TMM application is permitted after authentication, where as for version 7.0 is with SSO (Single Sign On).

Launching applications for NPM application

The NPM and CLI can be launched for NPM application of version 6.2 and 7.0 from Integrated EMS Java Web Start Client.This section describes the procedure for launching these applications for NPM application from Integrated EMS Java Web Start Client

To launch the applications for NPM application version 6.2 or 7.0 from Integrated EMS Java Web Start Client, follow these steps:

At Integrated EMS workstation

1. Launch the Integrated EMS Java Web Start Client (refer to "Launching the Integrated EMS Java Web Start Client").
2. Select the **EMS Applications** topology node in the Integrated EMS tree.
3. Select an NPM application map symbol in the Integrated EMS display panel.
4. Right-click the map symbol and select **Network Patch Manager (NPM)** menu item.

   This opens the NPM application.

   OR

   Right-click the map symbol and select **Command Line** menu item.

   Selecting this menu item enables communicating with remote applications or devices from Integrated EMS using SSH. For NPM application version 6.2, access to the NPM application is permitted after authentication, where as for version 7.0 is with SSO (Single Sign On).

Launching CLI for QoS Collector application

The CLI can be launched for QoS Collector application of version 6.2 and 7.0 from Integrated EMS Java Web Start Client.This section describes the procedure for launching the CLI for QoS Collector application from Integrated EMS Java Web Start Client

To launch the CLI for QoS Collector application version 6.2 or 7.0 from Integrated EMS Java Web Start Client, follow these steps:

At Integrated EMS workstation

1. Launch the Integrated EMS Java Web Start Client (refer to "Launching the Integrated EMS Java Web Start Client").
2. Select the **EMS Applications** topology node in the Integrated EMS tree.
3. Select a QoS Collector application map symbol in the Integrated EMS display panel.
4. Right-click the map symbol and select **Launch Command Line** menu item.

   Selecting this menu item enables communicating with the application from Integrated EMS using SSH. For QoS Collector application version 6.2, access to the QoS Collector application is permitted after authentication, where as for version 7.0 is with SSO (Single Sign On).

Launching applications of NEs from topology panel

This section describes the procedure for launching applications for NE objects from topology panel.

The applications launched for NE objects from the topology panel are as follows:

- Launching USP applications
- Launching Passport 8600 Device Manager
- Launching application for MS 2000
- Launching STORM client
- Launching MAS Manager
- Launching Session Server
- Launching CICM Manager for CICM NE
- Launching Core Element Manager
- Launching MAPCI Session for Call Agent Core and XA Core

Launching USP applications

The USP Manager (Universal Signaling Point) for Universal Signaling Point NEs with device version 6.2 or 7.0 can be launched from Integrated EMS Java Web Start Client. This section describes the procedure to launch the USP NEs with version 6.2 or 7.0 from Integrated EMS Java Web Start Client.

Requirements for launching Citrix Client

USP client launch is provided through Citrix for USP NEs with device version 6.2. The Citrix ICA client must be installed on the client machine and it must be configured to connect to the Universal Signaling Point. For details of how to install and configure the Citrix client refer to the Citrix documentation (http://www.citrix.com).

Launching Citrix Client for USP NE version 6.2

To launch the Citrix Client for USP NEs with version 6.2 in the Java Web Start Client, follow these steps:

At Integrated EMS workstation

1. Launch the Integrated EMS Java Web Start Client (refer to the "Launching the Integrated EMS Java Web Start Client").
2. Navigate to the **Network Elements** topology node in the Integrated EMS tree.
3. Select an USP (with device version 6.2) map symbol in the Integrated EMS display panel.
4. Right-click the map symbol and select the **Launch USP Manager** menu item.

   A file chooser dialog is launched.
5. Click the **Browse** button to select the Citrix Client executable file path.
6. Click the **OK** button to launch the Citrix Client.

   Choosing this option enables communicating with remote device from Integrated EMS using SSH. The access to the Citrix Client application is permitted after authentication.

Note: Integrated EMS saves the location of script or executable file in the client system from which the Integrated EMS Java Web Start Client is launched. The recently executed script or executable file location is saved.

Launching USP Manager for USP NE version 7.0

To launch the USP Manager for Universal Signaling Point NEs with version 7.0 in the Java Web Start Client, follow these steps:

At Integrated EMS workstation

1. Launch the Integrated EMS Java Web Start Client (refer to the "Launching the Integrated EMS Java Web Start Client").
2. Navigate to the Network Elements topology node in the Integrated EMS tree.
3. Select an USP (with device version 7.0) map symbol.
4. Right-click the map symbol and select the **Launch USP Manager** menu item.

   Choosing this option enables communicating with remote device from Integrated EMS using SSH. The access to the USP Manager is permitted with SSO(Single Sign On).

Note: The above mentioned procedure for launching discovered USP units is executed for respective versions of Integrated EMS.

Launching Passport 8600 Device Manager

The Passport 8600 Device Manager can be launched for Passport 8600 of version 6.2 and 7.0 from Integrated EMS Java Web Start Client. This section describes the procedure for launching the Passport 8600 Device Manager and CLI for Passport 8600 from Integrated EMS Java Web Start Client.

Required prerequisites for launching Passport 8600 Device Manager

Passport 8600 Device Manager must be installed on the client machine in order to launch the GUI. For details of how to install the Device Manager refer to *Installing Passport 8600 Switch Modules-312749F*.

Launching Passport 8600 Device Manager version 6 .2 or 7.0 from Integrated EMS

To launch the Passport 8600 for version 6.2 or 7.0, follow these steps:

At Integrated EMS workstation

1. Launch the Integrated EMS Java Web Start Client (refer to the "Launching the Integrated EMS Java Web Start Client").
2. Select the **Network Elements** topology node in the Integrated EMS tree.
3. Select the required Passport 8600 (with device version 6.2) map symbol in the Integrated EMS display panel.
4. Right-click the map symbol and select the **PP8600 Device Manager** menu item.

   A file chooser dialog is launched.
5. Click the **Browse** button to select the Passport 8600 Device Manager executable file path.
6. Click the **OK** button to launch the Passport 8600 Device Manager.

Note: Integrated EMS saves the location of the most recently executed script or executable file in the client system from which the Integrated EMS Java Web Start Client is launched.The access to the Citrix Client application is permitted after authentication.

Launching CLI for Passport 8600 version 6.2 or 7.0

To launch the CLI for Passport 8600 for version 6.2 or 7.0, follow

these steps:

At Integrated EMS workstation

1. Launch the Integrated EMS Java Web Start Client (refer to the "Launching the Integrated EMS Java Web Start Client").
2. Select the **Network Elements** topology node in the Integrated EMS tree.
3. Select the required Passport 8600 (with device version7.0) map symbol in the Integrated EMS display panel.
4. Right-click the map symbol and select the **Command Line** menu item.

   Choosing this option enables communicating with remote device from Integrated EMS using telnet.

Note: For Pasport 8600 NE version 6.2, the access to the CLI is permitted after authentication, where as for version 7.0 is with SSO (Single Sign On).

Launching application for MS 2000

The MS 2000 NE can be launched from Integrated EMS Java Web Start Client. To launch the EM CLI for MS 2000 NE 7.0 from Integrated EMS Java Web Start Client, follow these steps:

At Integrated EMS workstation

1. Launch the Integrated EMS Java Web Start Client (refer to the "Launching the Integrated EMS Java Web Start Client" of the *Integrated EMS Basics* guide).
2. Select the **Network Elements** topology node in the Integrated EMS tree.
3. Select a MS 2000 map symbol in the Integrated EMS display panel.
4. Right-click the map symbol and select "**EM Command Line**" menu item.

   Choosing this option enables communicating to SESM box from Integrated EMS using SSHby executing the command "*/opt/nortel/NTsesm/bin/MS 2000.sh"*. For MS 2000 NE version 6.2, acces to the EM CLI is permitted after authentication, where as for version 7.0 is with SSO(Single Sign On).

Launching STORM client

The STORM network element (NE) can be launched from Integrated EMS Java Web Start Client. This section describes the procedure for launching the STORM NE client from Integrated EMS Java Web Start Client

Required prerequisites for launching STORM client

- To allow the SSPFS host to forward the SSH connection from the local workstation through the SSPFS machine, refer to the "Setting secure FTP proxy" in ATM/IP Solution-level Security and Administration, NN10402-60.
- The Apache HTTPS Proxy must be configured so that the STORM Manager can be started from the Integrated EMS. Refer to the procedure for "Configuring the Apache Web Server for HTTPS proxy" in ATM/IP Solution-level Configuration, NN10409-500.

Launching STORM client from Integrated EMS

To launch the STORM NE client from Integrated EMS Java Web Start Client, follow these steps:

At Integrated EMS workstation

1 Launch the Integrated EMS Java Web Start Client (refer to the "Launching the Integrated EMS Java Web Start Client").

2 Select the **Network Elements** topology node in the Integrated EMS tree.

3 Select a STORM map symbol in the Integrated EMS display panel.

4 Right-click the map symbol and select "**Launch Command Line**" menu item.

Choosing this option enables communicating with remote device from Integrated EMS using SSH.

OR

Right-click the map symbol and select "**Launch STORM Mgr**" menu item.

This launches the STORM Manager client. For STORM NE version 6.2, acces to the application is permitted after authentication, where as for version 7.0 is with SSO(Single Sign On).

Launching MAS Manager

The MAS Manager can be launched from Integrated EMS Java Web Start Client. This section describes the procedure for launching the MAS Manager from Integrated EMS Java Web Start Client.

Required prerequisites for launching MAS Manager

MAS Manager launch is available only on a PC, which must have MAS Manager software installed. For detail of how to install the software refer to the MAS Manager User Guide.

Launching MAS Manager for MAS NE

To launch the MAS Manager for MAS NE from Integrated EMS Java Web Start Client, follow these steps:

At Integrated EMS workstation

1. Launch the Integrated EMS Java Web Start Client (refer to the "Launching the Integrated EMS Java Web Start Client").
2. Select the **Network Elements** topology node in the Integrated EMS tree.
3. Select the required MAS NE map symbol in the Integrated EMS display panel.
4. Right-click the map symbol and select **MAS Manager** menu item.

   A file chooser dialog is launched.
5. Click the **Browse** button to select the MAS Manager executable file path.
6. Click the **OK** button to launch the MAS Manager.

   For MAS NE version 6.2, access to the MAS Manager is permitted after authentication, where as for version 7.0 is with SSO(Single Sign On).

   Note: Integrated EMS saves the location of most recently executed script or executable file in the client system from which the Integrated EMS Java Web Start Client is launched.

Launching Session Server

The Session Server application can be launched for Session Server NE and Session Server unit from Integrated EMS Java Web Start Client. This section describes the procedure for launching the applications for Session Server NE and its unit from Integrated EMS Java Web Start Client

Prerequisites for launching Session Server

For launching Session Server from Integrated EMS Client, requires the configuration of the HTTPS proxy on the Integrated EMS SSPFS server. For details, refer to the "Modifying the SSPFS server web proxy setup for Session Server" in Session Server Configuration, NN10338-511.

Launching applications for Session Server NE

To launch the applications for Session Server NE in the Java Web Start Client, follow these steps:

At Integrated EMS workstation

1. Launch the Integrated EMS Java Web Start Client (refer to "Launching the Integrated EMS Java Web Start Client").
2. Go to the **Network Elements** topology node in the Integrated EMS tree.
3. Select a Session Server map symbol in the Integrated EMS display panel.
4. Right-click the map symbol and select the **Command Line** menu item.

   Selecting this menu item enables communicating with remote device from Integrated EMS using SSH.

   OR

   Right-click the map symbol and select "**Launch Session Server**" menu item.

   This launches the Session Server client.

   For Session Server NE version 6.2, access to the Session Server or CLI is permitted after authentication, where as for version 7.0 is with SSO.

Note: Integrated EMS saves the location of script or executable file in the client system from which the Integrated EMS Java Web Start

Client is launched.The recently executed script or executable file location is saved.

Launching applications for Session Server unit

To launch the applications for Session Server unit in the Java Web Start Client, follow these steps:

At Integrated EMS workstation

1. Launch the Integrated EMS Java Web Start Client (refer to "Launching the Integrated EMS Java Web Start Client").
2. Select the node (with the display name) under the **Network Elements-->Session Server** topology node in the Integrated EMS tree.
3. Select a Session Server unit map symbol in the Integrated EMS display panel.
4. Right-click the map symbol and select the **Command Line** menu item.

   Selecting this menu item enables communicating with remote device from Integrated EMS using SSH.

   OR

   Right-click the map symbol and select "**Launch Session Server**" menu item.

   This launches the Session Server client.

   For Session Server NE version 6.2, access to the Session Server or CLI is permitted after authentication, where as for version 7.0 is with SSO.

Note: Integrated EMS saves the location of script or executable file in the client system from which the Integrated EMS Java Web Start Client is launched.The recently executed script or executable file location is saved.

Launching CICM Manager for CICM NE

The CICM Manager and CLI can be launched for CICM NE can be launched from Integrated EMS Java Web Start Client.This section describes the procedure for launching these applications for CICM NE from Integrated EMS Java Web Start Client.

Prerequisites for launching CICM Manager

For launching CICM Manager from Integrated EMS Client, requires the configuration of the https proxy on the Integrated EMS SSPFS Server. For details, refer to the "Configuring the Apache Proxy Server for CICM" in CICM Configuration Management, NN10240-511.

Launching applications for CICM NE

To launch the applications for CICM NE version 7.0 from Integrated EMS Java Web Start Client, follow these steps:

At Integrated EMS workstation

1. Launch the Integrated EMS Java Web Start Client (refer to "Launching the Integrated EMS Java Web Start Client").
2. Select the **Network Elements** topology node in the Integrated EMS tree.
3. Select a CICM map symbol in the Integrated EMS display panel.
4. Right-click the map symbol and select "**Launch CICM Manager**" menu item.

   The CICM Manager is launched in the browser as per the specified URL.
5. Right-click the map symbol and select "**Launch Command Line**" menu item.

   Selecting this menu item enables communicating with remote device from Integrated EMS using SSH. The access to the application is permitted with SSO.

Launching Core Element Manager

The CEM can be launched for NEs managed by CEM such as MTX NE, MSC NE, HLR NE, and TRI NE in Integrated EMS Java Web Start Client. This section describes the procedure to launch the CEM from Integrated EMS Java Web Start Client.

Note: The Core Element Manager is available with selected versions of Succession platforms. Hence, Core Element Manager is available in selected sites of Succession platforms.

To launch the CEM for NEs managed by CEM from Integrated EMS Java Web Start Client, follow these steps:

At Integrated EMS workstation

1. Refer to the "Launching the Integrated EMS Java Web Start Client" to launch the Integrated EMS Java Web Start Client.
2. Select the **Network Elements** topology node in the Integrated EMS tree.
3. Select an NE managed by CEM in the Integrated EMS display panel.
4. Right-click the selected NE and select the **Launch CEM** menu item to launch the dialog.

   The CEM is launched in the right-side frame of the Integrated EMS Java Web Start Client. The access to the CEM is permitted with SSO(Single Sign On).

Launching MAPCI Session for Call Agent Core and XA Core

The MAPCI Session for Call Agent Core and XA Core NE of version 6.2 and 7.0 can be launched from Integrated EMS Java Web Start Client.This section describes the procedure for launching the MAPCI Session from Integrated EMS Java Web Start Client.

Launching MAPCI Session from Integrated EMS Client

To launch the MAPCI Session for Call Agent Core and XA Core NE client from Integrated EMS Java Web Start Client, follow these steps:

At Integrated EMS workstation

1. Launch the Integrated EMS Java Web Start Client (refer to the "Launching the Integrated EMS Java Web Start Client").
2. Select the **Network Elements** topology node in the Integrated EMS tree.
3. Select a Call Agent Core (of specific version 6.2 or 7.0) map symbol in the Integrated EMS display panel.
4. Right-click the map symbol and select "**Launch MAPCI Session**" menu item.

   Choosing this option enables communicating with remote device from Integrated EMS using SSH.

Understanding high availability & co-residency

OAM&P operations are business critical and require uninterrupted high availability service. Integrated EMS is the centralized authentication server and the GUI for launching applications, fault, performance feeds and some element management functions. Deploying Integrated EMS on a HA platform is recommended for all customers. SSPFS-HA provides a high availability middleware for all SSPFS applications. Integrated EMS uses SSPFS-HA to provide high availability on the Sun N240 hardware platform.

SSPFS-HA implements the active-inactive cold start model where applications along with their dependent services are running on one node. They are restarted on a secondary node upon failover.

SSPFS-HA supports a simple two-node cluster. Each SSPFS-HA cluster has three TCP/IP addresses associated with it. One IP address and its matching host name uniquely identify each node in the cluster (active and inactive node) and one IP address identifies the SSPFS-HA cluster.

In SN07, Integrated EMS is supported both as a standalone application and coresident with CS2M and APS.

- As a standalone application two separate SSPFS-HA clusters are required (one SSPFS-HA cluster for CS2M with/without APS and one SSPFS-HA cluster for Integrated EMS). Four Sun N240 servers are required to support this configuration (two Sun N240 servers to support the CS2M with/without APS cluster and two Sun N240 servers to support the Integrated EMS cluster)
- When Integrated EMS is coresident with CS2M with/without APS one SSPFS-HA cluster is required. Two Sun N240 servers are required to support this configuration.

Note: In the CS2M non co-resident, it is recommended that a virtual IP address is allocated for the Integrated EMS application. This virtual IP address is required in the non co-resident configuration to prevent port conflicts with the multiple applications running on the common server. This virtual IP must be added during the installation of the SSPFS server (with an application name of 'iems') when configuring the SSPFS IP addresses.

Platforms with HA and co-residency support

Integrated EMS and CS 2000 Core Manager on SSPFS are available with HA and Co-residency in the following platforms.

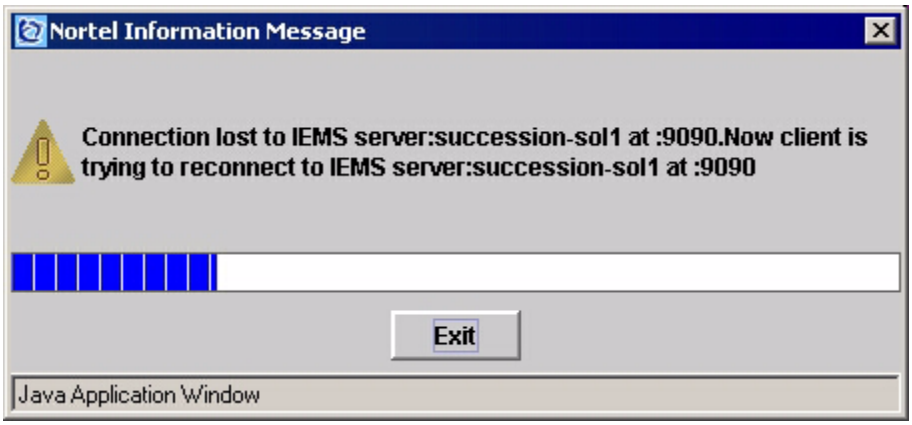
- On single N240 (simplex) 4G - NTRX51LC
- On dual N240 (HA) 4G - NTRX51LC
- On single T1400 (simplex) 4Gig only - NTRX51KW

Note: Requires a T1400 upgrade procedure for existing T1400 platform versions.

Reconnecting Java Web Start client with server

If the Integrated EMS Server is stopped or shut down in unforeseen circumstances, Integrated EMS Java Web Start Client tries to connect to server for a certain period(shown in the following figure). The maximum period (in milliseconds) till which the Integrated EMS Java Web Start tries to reconnect the Integrated EMS Server is called the Maximum Retry Period. The default Maximum Retry Period by default is 300000 milliseconds.

Client Reconnection to Server dialog



The progress bar shows that the Integrated EMS Java Web Start Client is trying to reconnect to the Integrated EMS Server. If the Integrated EMS Java Web Start Client successfully establishes the Integrated EMS Server, the Client Reconnection to Server window is closed. After the Maximum Retry Period is reached, the Integrated EMS Java Web Start Client disconnects the Integrated EMS Server and launches the Client Reconnection to Server dialog dialog.

Note: The Maximum Retry Period can be modified using the MAX_RETRY_PERIOD parameter in clientparameters.conf under <IEMS Home>/conf directory. Refer to the "Configuring Client Retry Time" of the *Integrated EMS Security and Administration, NN10336-611* for detailed explanation.

Exiting the Java Web Start Client while reconnecting the Server

To exit the Java Web Start Client while the client is reconnecting the Server, click the **Exit** button in the reconnection dialog displayed in the Client Reconnection to Server dialog screen shot.

Replicating data for high availability

The files essential for High Availability have to be replicated by SSPFS HA. The files listed below are replicated when the active node fails and inactive node gets active, since the state of the failed node must be maintained by the node which was recently got active.

The following directories (including files in the sub-directories) under <IEMS Home> are replicated by SSPFS HA:

- oidtemplates
- state
- users

Using other general features

Integrated EMS Java Web Start Client provides other features, such as context sensitive help, changing look and feel of the client, and broadcasting messages to client(s), The following the subsections describes these features:

- Viewing context sensitive help
- Using look and feel
- Using broadcast message
- Showing or hiding toolbar
- Using Integrated EMS tree
- Using the LED indicator
- Using Theme Manager
- Using custom view filtering criteria
- Understanding sorting of custom views
- Exiting the Java Web Start client

Viewing context sensitive help

Context sensitive help directs the user to an appropriate help section, which provide specific information about the feature of the Integrated EMS Java Web Start Client in use.

To launch complete Integrated EMS Help documentation, select **Help-->Help Contents**. The complete Integrated EMS Help Documentation in HTML format is launched in the default browser that has been configured in your system.

To launch context sensitive help in various Integrated EMS Java Web Start Client GUIs:

- Press **F1** on any screen

  OR

- Click **Help** button on the toolbar in a screen.

Performing either of the above actions invokes the help section associated with the current screen. For example, if you press F1 while working on the Fault Management panel, a help file that explains Fault Management opens in a Web browser (the system default browser).

Some of the Client GUI dialog boxes also contain a Help button that gives context-sensitive help on that dialog box.

Note: The browser is not invoked when trying to access help from Integrated EMS Java Web Start Client. This is because the Java Web Start path does not include the default browser, a situation which occurs on Sun Solaris platforms. To correct the situation, in the Java Web Start Application Manager, provide the required command (that is. to invoke the browser from the command line) in the Path field of the General tab.

Using look and feel

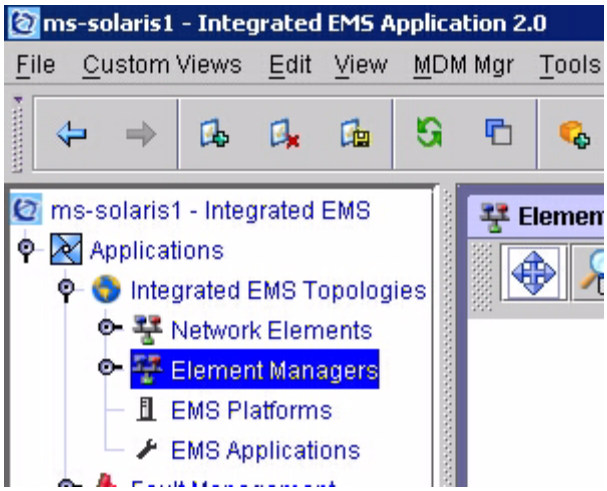
The look and feel of different components in the GUI are different for different platforms, such as Microsoft Windows or Sun Solaris. The default system color of the desktop background, text, caption, and other components can be different for various platforms. You can use the Look And Feel menu to change the look and feel of the window. To launch the Integrated EMS Client, refer to the section "Launching the Integrated EMS Java Web Start Client".

Integrated EMS Java Web Start Client supports three different types of look and feel:

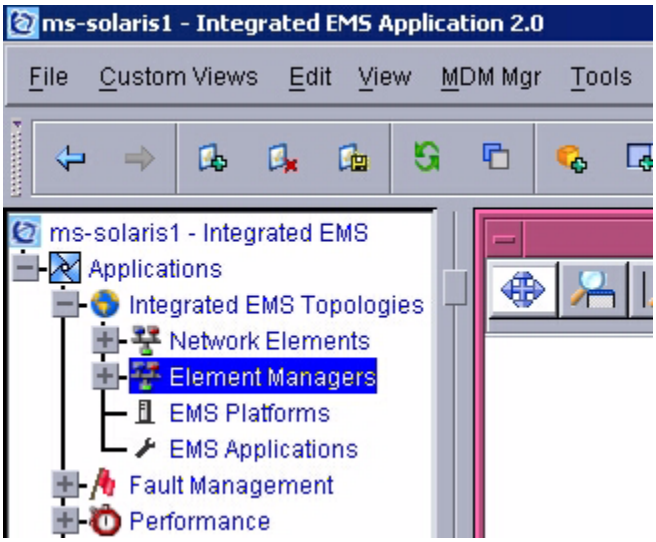
- Metal (the default look and feel)
- CDE/Motif
- Windows

  To change the look and feel, in the LookAnd Feel menu select the required name: Metal, CDE/Motif, or Window.

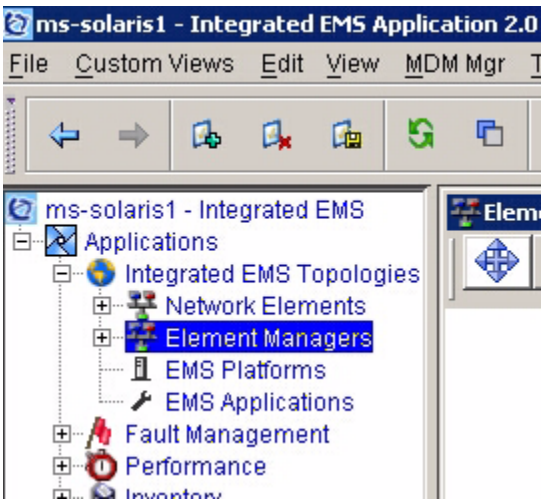
Metal: The panel heading and the selected item are light blue and the sort row is gray. The following figure shows the GUI with Metal look and feel.



CDE/Motif: The tree appears as continuous dark lines. The panel heading is pink, the sort row is light blue and the selected row is black. The following figure shows the GUI with CDE/Motif look and feel.



Windows: The panel heading and the selected row are dark blue and the sort row is gray. The following figure shows the GUI with Windows look and feel.



Using broadcast message

The broadcast message feature is used to send messages to all the clients connected to the Integrated EMS Server. To broadcast a message follow these steps:

Sending broadcast Message

At the Integrated EMS workstation.

1. Refer to the "Launching the Integrated EMS Java Web Start Client" to invoke the Integrated EMS Java Web Start Client.
2. Select the **File-->Broadcast Message** menu command.

   The Broadcast Message window is launched.
3. Type the message to be broadcast.
4. Ensure that the **Send to all client** option is selected. By default, Send to all client option is selected.
5. Click the **BroadCast** button to send the message.

   The message is shown in the Broadcast Message window with time, month and day of broadcast.
6. Click the **Close** button to close the dialog.

Note: If two or more messages sent simultaneously or continuously, the latest messages are appended below the earlier message.

Showing or hiding toolbar

The toolbar can be hidden using the Show/Hide Toolbar toggle button at the top of the tree, to provide an enlarged view of the frame. This feature hides the whole toolbar, not just some of the tools. To launch the Integrated EMS Client, refer to the section "Launching the Integrated EMS Java Web Start Client".

A tool tip "Hide Toolbar" indicates when the toolbar is visible and "Show Toolbar" indicates when it is hidden. To hide the toolbar, click the Show/Hide Toolbar toggle button. The toggle button changes from vertical to the horizontal position.

Using Integrated EMS tree

A node can be added anywhere in the tree by specifying the parent node of the node to be added. The menus for the parent and child nodes need not be the same; the child node can have the same tree popup menu as that of the parent node, or any other tree popup menus. To launch the Integrated EMS Client, refer to the section "Launching the Integrated EMS Java Web Start Client".

This Integrated EMS tree fulfills the "Any Node Anywhere" concept, whereby different node types can exist under a parent node. You can place a node in the tree using the Tree Operations menu specific to the frame or using the standard Integrated EMS Java Web Start Client menu. The Tree Operations menu (or Node Operations option in the File menu) provides the following functions:

- Adding a tree node
- Modifying a tree node
- Removing a tree node
- Moving a tree node

Adding a tree node

The Add Node option opens the Add Tree Node property form. This form allows you to specify the Tree Node Attributes, Panel Attributes, and Frame Attributes. Certain fields are mandatory and you must specify the default values, namely parent node, Tree Name, Panel Name, and popup Menu File Name.

If you do not specify the default properties, the system displays an error message. For example, if you omit the Panel Name, the error message states: "Panel Name is empty. Please give a valid entry".

The user-defined properties for the added node can also be added, modified, or removed at any point. By this, you can add the key and the value into the table for a particular node.

To add a tree node, follow these steps:

At the Integrated EMS workstation

1 Select the **File-->Node Operations-->Add Node** menu command.

This launches the **Add Tree Node** property form.

2 Select the parent node from **Parent Node** drop down to which the child has to be added from the drop-down tree.

3 Type the Panel Name, Tree Name, and Menu File Name of the node to be added (mandatory fields).

4 Type any other properties required (Action on Close, Icon File Name, Tree Popup Menu, Frame Title, Class Name).

5 If user-defined properties are required, add the property key and property value in the user-defined property form.

6 Clicking the **Apply** button to add the node under the specified parent node.

Example

To add an Alarm node under Network Events, follow these steps:

At the Integrated EMS workstation

1 Select the **File-->Node Operations-->Add Node** menu command.

This launches the **Add Tree Node** property form.

2 Select the Network Events node from the **Parent Node** drop down list.

3 Type the tree name "Alarms Test" and the panel name "com.adventnet.nms.alertui.AlertApplet".

4 Type the menu file name “alarmsmenu.xml” and select the Action on Close to be "Dispose only".

5 Select the tree icon file name images/alarms.png, and the tree popup menu Custom View, frameoptions.xml".

6 Type the frame title "Alarms".

7 Click the **Apply** button.

The system adds the Alarms Test node into the tree with the above-defined attributes as its values.

8 Click the **Close** button to close the dialog after applying the changes.

User-Defined Properties

The default properties shown in Integrated EMS may not be sufficient for a user requirements. Additional user-defined properties may be added, as required. These user-defined properties can be included when adding a node to a tree. The user-defined properties can later be added to, modified, or deleted.

To add user-defined properties, first add a tree node as described above (step 1 to step 4). Then click the **Next** button to launch the user-defined property form. Type the property key (for example, FRAME-TITLE) and the property value (for example, Frame Title). Click the Add button. You can add any number of user-defined properties. When you click the Apply button to add the node, the system adds the user-defined properties to the database, and displays the properties in the table.

Modifying a tree node

To add user-defined properties, first add a tree node as described above (step 1 to step 4). Then click the The Modify Node option allows you to change the properties of any node. The option changes both the default properties and the user-defined properties. After modifying the properties, click the **Apply** button. The properties of the selected node are changed.

Example

Select the Modify Node from the Node Operations under the File Menu and do the following changes to tree node attributes:

- Change the icon files tick.png and alarms.png from <IEMS Home>/images.
- Change the pop-up menu filename to Custom Views alone. The node properties are modified.

Removing a tree node

The Remove Node option allows you to remove any node from the tree. In the File menu select Node Operations, then select Remove Node to invoke the dialog. Select the tree node to be removed from the drop-down tree of the GUI, then click Apply. This removes the node from the tree.

Moving a tree node

The Move Node option allows you to position the node anywhere in the tree. To move a node in tree, follow these steps:

At the Integrated EMS workstation

1 Select the **File-->Node Operations-->Move Node** menu command to launch the Move Tree Node dialog.

2 Select the tree node to be moved from the **Select the Tree Node to be moved** combo box.

3 Select the tree node to be moved from the **Select the Destination Tree Node** combo box.

4 Enter the required index in **Node Index** field.

5 Click the **Apply** button to save the changes.

6 Click the **Close** button to close the dialog after applying the changes.

Using the LED indicator

The LED indicator is located at the bottom left-hand corner of the screen, in the status bar). To launch the Integrated EMS Client, refer the section "Launching the Integrated EMS Java Web Start Client".

The indicator contains three LEDs representing (in order from left to right) Events, Alarms, and Inventory. The LEDs show the severity of the latest network event, alarm, and inventory.

Using Theme Manager

Themes control the appearance of the GUI components, for example, the icons and fonts used. They can also change the feel of your Integrated EMS environment, allowing you to define your own unique menu styles and window borders.

The themes can be set only when the Look And Feel of the client GUI is set to the default value Metal.

To set the theme for the Integrated EMS Java Web Start client, follow these steps:

At Integrated EMS workstation

1. Launch the Integrated EMS Java Web Start Client (refer to the "Launching the Integrated EMS Java Web Start Client").
2. Select the **Tools-->Themes** menu command.

   The Themes Configurator GUI listing all the themes is launched.
3. Click on the required theme from the **Theme Name** field.
4. Click the **Apply** button to save the changes.
5. Click the **Close** button.

Using custom view filtering criteria

This section gives tips for using the custom view filtering criteria to filter events, alarms, and inventory. To launch the Integrated EMS Client, refer to the section "Launching the Integrated EMS Java Web Start Client". For procedure to add custom view for various GUIs, refer to the following sections:

- "Creating Custom View for Events" of the *Integrated EMS Fault Management*, NN10334-911 for Network Events node.
- "Creating Custom View for Alarms" of the *Integrated EMS Fault Management*, NN10334-911 for Network Events node.
- "Adding Custom Topology Node" of the *Integrated EMS Configuration Management*, NN10330-511 for Network Events node.
- "Creating Custom View for Inventory" of the *Integrated EMS Configuration Management*, NN10330-511 for Network Events node.

Following is the list of custom views filtering criteria for Events, Alarms, and Inventory Views panels of Integrated EMS:

- Most of the properties listed while adding a custom view are string-based. Additionally, if there is a boolean, the properties form indicates a choice box containing three items: "all", "true", and "false". Selecting "true" or "false" has the expected behavior and selecting "all" means the condition is not required.
- For string-based properties, the string value is matched exactly. For example, the string "CS 2000" matches the exact word only.
- The wildcard '*' (asterisk) is supported to replace one or more characters. For example, to view objects whose names start with "sa", you specify the filter criterion as "sa*". Similarly, to view objects whose names end with "com", you specify the criterion as "*com".
- The wildcard "?" is not supported and is treated as an ordinary character.
- To specify multiple criteria for the same property, separate them with a commas. For example, if you want to view objects named USP-Mgr1, USP-Mgr2, and USP-Mgr3, specify them as USP-Mgr1, USP-Mgr2, and USP-Mgr3.
- Status and Severity are also treated as strings. Hence, for a filter of Alarms with severity Critical, you specify the criterion "crit*".
- To exclude an item from the filter criteria, add a '!' (exclamation mark) character before it. For example, to view objects which do not

start with "sa", specify the property as "!sa*". To view all Alarms except those with severity Warning or Clear, then enter any of the following:

— !war*, !cle* or

— !warning, !clear or

— cr*, maj*, mino* or

— critical, major, minor

- In Alarms and Events panel, filtering based on time can be done by specifying the start time and the end time. The formats for specifying the time are as follows:

  — MON DD,YYYYHH:MM:SS AM/PM, for example Mar 27,1998 12:24:12AM and

  — MONTH DD,YYYYHH:MM:SS AM/PM, for example March 27,1998 12:24:12 AM. The incompatibility is due to different JVM versions on Client and Server sides.

- It is advisable to leave unused filter criteria fields blank.
- After defining the filter criteria, you can optionally give the filter a name for future reference and then select the ApplyFilter option. The client then sends a request to the server to filter the objects, while it adds the name of the filter to the tree in the main panel.
- The time taken for filtering depends on the total number of objects, the complexity of the filter criteria, and the mode of storage.
- After creation, custom views continue to be updated and navigable for additions/deletions until the client is closed or the custom view is removed using the Remove Custom Views option.

Note: Use the custom views with caution and remove any unnecessary ones. This facilitates quicker updates and clearing of resources associated with each custom view, both on the Client side and the Server side.

Understanding sorting of custom views

Sorting is arranging the data displayed in the panel view in ascending order or descending order. The data can be sorted based on the column type, that is, Source, Date, or Message in the Network Events, Alarms, or Network Database tables. Data selected for creating custom views of events, alarms, and managed objects can be sorted for ease of use and accessibility.

There are two types of sorting:

- Server-side sorting
- Client-side sorting

Both server-side and client-side sorting can be done for one column as required. These sort methods are indicated by a combination of the below indicators.

Server-side sorting

Server-side sorting sorts the complete data. For example, if the server contains 100 events, performing a server-side sort reorders the complete set of 100 events in the server. To carry out a server-side sort, click on the column header. Repeated clicks on the same column header sort the data in ascending and descending order, alternately. The sort indicators for server-side sorting are ascending and descending as specified in the table below.

Icon	Order of Sorting
	Ascending
	Descending

Client-side sorting

Client-side sorting sorts the data displayed in the Event Viewer. For example, if the server contains 100 events, of which 10 are displayed in the Event Viewer, performing a client-side sort reorders only the events displayed in the Event Viewer. To carry out a client-side sort, press the

Ctrl (Control) key and click on the column header. Repeated clicks on the same column header sort the data in ascending and descending order, alternately. The sort indicators for ascending and descending as specified in the table below.

Icon	Order of Sorting
	Ascending
	
	Descending
	

Exiting the Java Web Start client

After completing the tasks required to be performed by the user in Integrated EMS Java Web Start Client, exiting or logging out the Java Web Start is advisable. This section explains the procedure to exit or logout the Java Web Start Client.

To exit the Integrated EMS Java Web Start client, follow these steps:

At Integrated EMS workstation

1. Launch the Integrated EMS Java Web Start Client (refer to the "Launching the Integrated EMS Java Web Start Client").
2. Select the **File-->Exit** menu command.

   OR

   Click the **x** button in the task bar of the Java Web Start Client.

   A dialog asks for confirmation for exiting the Java Web Start Client with the message "Do you really want to exit the client?".
3. Click the **Yes** button in the confirmation dialog to exit the Java Web Start Client.

Note: To exit Java Web Start Client when the client tries to reconnect the Server, refer to the "Exiting the Java Web Start Client while reconnecting the Server" of the "Reconnecting Java Web Start client with server".

Troubleshooting tips

You may encounter error messages and difficulties while working with Integrated EMS. This section provides tips to overcome some of the error messages and difficulties faced while working with Integrated EMS Java Web Start Client and Web Client.

1. **Disappearance of Search dialog**

   When Search dialog is launched in Integrated EMS, the Search dialog screen disappears if you click the Integrated EMS Java Web Start Client main screen. The Search dialog screen can be found behind the Integrated EMS Java Web Start Client main screen. The Search dialog can be viewed by moving the Integrated EMS Java Web Start Client main screen. This scenario is experienced with Integrated EMS Java Web Start Client in Sun Solaris platform.

2. **Disappearance of Event Details Windows**

   Opening many Event Details windows and closing the lastly opened event details window shall hide other Event Details windows. Other Event Details windows can be viewed by moving the Integrated EMS Java Web Start Client main screen or invoking a new Event Details window. This scenario is experienced with Integrated EMS Java Web Start Client in Sun Solaris platform.

3. **Browser not launched when accessing Help**

   The browser is not launched when trying to access help from Integrated EMS Java Web Start Client. This is due to default browser not included in path of Java Web Start. In the Java Web Start Application Manager, provide the command (used to invoke browser from command line) in the Path field of General tab. This scenario is experienced with Integrated EMS Java Web Start Client in Sun Solaris platforms.

4. **Security Tree not showing nodes under Users and Groups**

   If the Security tree not showing nodes under the Users and Groups node, refresh the Security Administration window using the refresh tool button in the toolbar.

5. **Topology GUI inaccessible**

   Sometimes the topology GUIs are inaccessible or you cannot right-click the map symbols in the topology GUI. Refresh the GUI by clicking the refresh tool button in the Integrated EMS Java Web Start Client toolbar.

6. **Security Notice window inaccessible**

After the user name and password is provided while logging in Integrated EMS, the Security Notice window (shown before the Client launch) is launched. If the Integrated EMS Server (to which the client is connected) is shutdown or not running when you are in Security Notice window, the Security Notice becomes inaccesible. For Integrated EMS Java Web Start Client, the reconnect dialog can be seen as a task in the task bar. Click the **Exit** button in the reconnect dialog.

7. **Unable to launch Web Client from Java Web Start Client**

   In a workstation with Netscape as default browser, If you are unable to launch Web Client from Java Web Start Client using the toolbar, follow one of these steps:

   a. Remove all the stored cookies.

      To remove the cookies in Netscape, follow these steps:

      i. Select the **Edit-->Preferences** menu command.

      ii. In the **Privacy&Security** tree, select the **Cookies** node.

      iii. Click the **Manage Stored Cookies** button to launch the Cookie Manager window.

      iv. Click the Remove **All Cookies** button.

   b. Kill all the existing browser windows.

8. **Launch of Integrated EMS Java Web Start Client Hangs**

   When trying to log in Integrated EMS, unable to connect the IEMS server using the IP address of the Integrated EMS server and launch the IEMS login page. In other words, attempting to launch the Integrated EMS Java Web Start Client by selecting **Web Start Client** from the Integrated EMS login page appears to hang with no response.

   The probable cause is due to DNS configuration issue. The Integrated EMS client workstation and the Integrated EMS server host must be DNS enabled. Determine if there is a DNS issue by performing the following tests:

   - Use the **nslookup** tool on the Integrated EMS Server host to attempt to lookup the Integrated EMS Server IP and host name. If this test fails, investigate the DNS issue on the Integrated EMS server.
   - Use the **nslookup** tool on the client to attempt to lookup the Integrated EMS server IP and host name. Provided the DNS

lookup passed on the server, and this test fails, investigate the DNS lookup issue on the Integrated EMS client workstation.

9. **Unable to connect to the Integrated EMS Server.**

   The Client is unable to connect to the Integrated EMS Server with its default browser (http://host_name_IP_address:9090/).

   The probable cause can be Integrated EMS Server is not started. Verify that the Integrated EMS Server is started, refer to the "Viewing the Integrated EMS server status" of Integrated EMS Security and Administration, NN10336-611. If the Integrated EMS Server is not started, start the IEMS server, refer to the "Starting the Integrated EMS Server" of Integrated EMS Security and Administration, NN10336-611.

Using Web Client

Integrated EMS Web Client is a light-weight interface that facilitates in connecting to the Integrated EMS Server using a Web browser over the local network or the Internet. Lower download time and lower bandwidth utilization serve as prime factors of the Web Client. Using a Web browser on any PC or UNIX operating system, you can log on to the Web and access Integrated EMS for maps, fault, and other network information. The Web Client enables you monitor your network easily from any place and at any time.

Using the Web Client, you can

- get distinct views for network management modules such as topology, fault, inventory, user administration, and add objects which are completely localized,
- view network maps that provide rich graphical display of network elements,
- view fault occurring in a network in neatly aligned tabulated views,
- view the database entries of network elements in a neatly aligned tabulated view,
- create custom views for easy viewing of network element information of your interest,
- search for network elements with ease,
- perform administrative functions such as add new networks or nodes and manage faults,
- perform user administration tasks such as adding new users, modifying user profiles and removing users,
- add the Element Managers, EMS application, EMS platform and NE objects.

This section contains following sub-sections explaining the basic features of the Integrated EMS Web Client

Logging in Web Client GUI

Integrated EMS Web Client can be accessed through any browser such as Microsoft Internet Explorer or Netscape Navigator. Logging in Web Client means an authenticated entry into Integrated EMS. If you connect to the host from a Web browser, you get a page that asks you for the user name and the password. After the user name and password are validated, you can access data from the server using Web Client.

Logging in Using Browser

Refer to the Launching the Integrated EMS Web Client for logging in the Integrated EMS Client using browser.

Logging in After the User Account Expiry

If you try to log in to the Integrated EMS Server when your user name has expired, you get the message "The User Account has EXPIRED". You must contact the Administrator for further details.

Logging in When the User Account Is Disabled

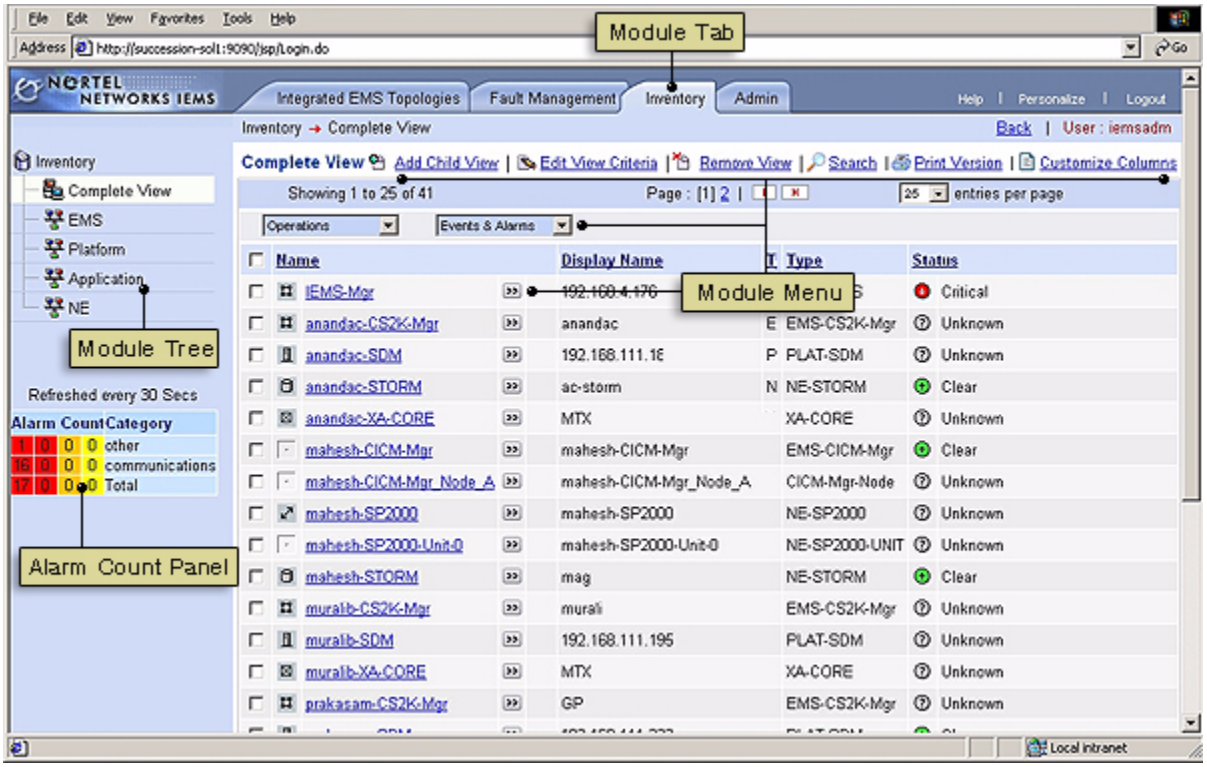
If you try to log in to the Integrated EMS Server when your user account is disabled, you get the message "The User Account has been DISABLED". You must contact the Administrator for further details.

This section describes the procedure to log in Web Client, changing password and Web Client user interface setup. For details, follow the sections given below:

- Web Client GUI setup
- Launching the Integrated EMS Web Client

Web Client GUI setup

After you have logged in to the browser Web Client by typing a valid user name and password the screen displays the following setup. It consists of three frames, namely Tree Frame, Display Frame, and the Alarm Count Frame. This section describes the various parts in the Web Client user interface.



Module Tabs

Module tabs is for easier navigation of various features in a module of Integrated EMS. The following are the various modules in Integrated EMS Web Client:

- Integrated EMS Topologies
- Fault Management
- Inventory
- Admin

Click each tab to display the respective module view on the right-side frame of the Web Client.

Module tree

A tree is provided on the left-side of the Web Client which contains various nodes. This tree differs from one module to the other. Click each tree node to get related information on the right-side frame of the Web Client. For example, in the Topologies view, click Element Managers node on the tree to display the Element Managers in the network.

Module menus

Menus are available as drop-down box, links, and icons. The drop-down box and links are available only in the Fault Management and Network Database views. The drop-down box contains a set of commands which comes handy when you need to perform an operation over multiple elements in a view. For example, in the Inventory view, use options available on clicking icon to perform an operation, say Delete Object and Traces over a single NE. In the same view, when you need to perform the same operation over more than one NE, select the check boxes of those NEs and then select the option in drop-down menu.

Alarm count panel

The Alarm count panel shows the alarm count of each severity (major, minor, critical, info) of alarm. This panel is placed below the module tree and is static. On clicking the count in this panel, the alarms of specific severity are displayed in the corresponding alarm panel. For more information, refer to Using Alarm Counts section in Working with Alarms topic.

Launching the Integrated EMS Web Client

Integrated EMS Web Client runs in Web browsers such as Microsoft Internet Explorer and Netscape Navigator. It is a thin client and loads faster than the Java Web Start Client.

Note: Integrated EMS supports upto 20 simulataneous Java Web Start Client and 44 simulataneous Web Client.

To launch the Integrated EMS Web Client, follow these steps:

At Integrated EMS workstation

1 Connect to the Integrated EMS Server host from the browser using a URL format of http://hostname_or_IP_Address:9090.

Example
http://succession-sol1:9090

In the above example, "succession-sol1" is the name of the machine in which the server is running, and "9090" is the port number on which the server is running.

Note: If the Integrated EMS Server is running in HTTPS mode and the Web Client require to contact in secured mode, the URL must be specified in format https://hostname:9091. Since 9091 is the SSL port for communication.

2 Type the user name and the password and click the **Web Client** button

3 Click the **OK** button in the Security Notice window to launch the Integrated EMS Java Web Start Client.

Note: The Integrated Web Client session expires if the client is idle for certain period. If the session expires, the Web Client prompts for user name and password.

Invoking Web Client from Integrated EMS Java Web Start Client

Launch the Integrated EMS Web Client from Java Web Start Client using the Web Client GUI tool button of the toolbar as in the following figure.

Personalizing the Web Client

The Web Client can be personalized using skins. The skins are used to change the look of the Web Client. By default, the Web Client is displayed with the Steel Blue skin.

To apply other skins to Integrated EMS Web Client, follow these steps:

At Integrated EMS workstation

1. Launch the Integrated EMS Web Client (refer to the "Launching the Integrated EMS Web Client").
2. Click the **Personalize** menu item provided at top right side of the Web Client.

   The Personalize page is displayed.
3. Choose the required skin from the list of skins.

   A preview of the skin is shown in the same page.
4. Click the **Apply** button.

   The complete Web Client's look and feel is changed to the skin type you choose.

Exiting the Web Client

After completing the tasks required to be performed by the user in Integrated EMS Web Client, exiting or logging out the Web Client is advisable. This section explains the procedure to exit or log out the Web Client.

To exit the Integrated EMS Web Client, click the **Logout** menu item provided at top right side of the Web Client. The login page is displayed.

Note: After exiting the Web Client, If you click the **Back** button of browser to get back to the last accessed page of Web Client and a task is performed, it leads to log in page to enable the user to login, since the session has completed for the user.