# Sun™ Management Center Integration Package User's Guide

*For Unicenter TNG®*

## Version 1.0

Sun
microsystems

**THE NETWORK IS THE COMPUTER™**

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# Contents

# Preface

This document describes how to install, configure and use the Sun™ Management Center integration package for Unicenter TNG® (The Next Generation) systems. This manual assumes that the installation and configuration will be performed by an experienced Unicenter TNG administrator familiar with the Sun Management Center product.

Unicenter TNG provides heterogeneous network monitoring functionality, while Sun Management Center software provides advanced capabilities and in-depth information for monitoring Sun products. The integration of these two applications provides Unicenter TNG administrators with significant additional functionality to manage heterogeneous environments containing Sun products.

The integration package sets up a bridge between Sun Management Center software and Unicenter TNG. This product performs the following functions:

1. Enables Unicenter TNG to discover Sun Management Center agents and their loaded modules, and present them in the Unicenter TNG WorldView. This is done by using the policy files of the Unicenter TNG DSM (Distributed State Machine) and WorldView.

2. Retrieves alarms from the Sun Management Center application, then:

- Forwards them to Unicenter TNG
- Analyzes the alarms
- Retrieves the current status of the Sun Management Center agents

   If the status has changed:

- Sends notification to Unicenter TNG
- Retrieves module loaded/unloaded notification from Sun Management Center agents
- Forwards the notification to Unicenter TNG

   Unicenter TNG receives all the above information as traps, processes the traps, and shows the appropriate status in the Unicenter TNG WorldView application.

3. Views Sun Management Center agent information by launching the Sun Management Center Details window from Unicenter TNG WorldView.

# Before You Read This Book

This manual assumes that the Unicenter TNG environment has been correctly configured and that the installation of the Sun Management Center adaptor package will be performed by an experienced Unicenter TNG administrator.

# Using UNIX Commands

This document may not contain information about basic UNIX® commands or procedures for shutting down the system, booting the system, or configuring devices.

Refer to one or more of the following for this information:

■ *Solaris Handbook for Sun Peripherals*

■ AnswerBook2™ online documentation for the Solaris™ operating environment

■ Other software documentation that you received with your system

# Typographic Conventions

**TABLE P-1** Typographic Conventions

| Typeface | Meaning | Examples |
|----------|---------|----------|
| `AaBbCc123` | The names of commands, files, and directories; on-screen computer output | Edit your `.login` file.<br>Use `ls -a` to list all files.<br>`% You have mail.` |
| **`AaBbCc123`** | What you type, when contrasted with on-screen computer output | `%` **`su`**<br>`Password:` |
| *AaBbCc123* | Book titles, new words or terms, words to be emphasized | Read Chapter 6 in the *User's Guide.*<br>These are called *class* options.<br>You *must* be superuser to do this. |
|  | Command-line variable; replace with a real name or value | To delete a file, type `rm` *filename.* |

# Shell Prompts

**TABLE P-2** Shell Prompts

| Shell | Prompt |
|-------|--------|
| C shell | *machine_name*% |
| C shell superuser | *machine_name*# |
| Bourne shell and Korn shell | $ |
| Bourne shell and Korn shell superuser | # |

# Related Documentation

**TABLE P-3**    Related Documentation

| Application | Title | Part Number |
| --- | --- | --- |
| Sun Management Center Installation | *Sun Management Center 2.1 Software User's Guide* | 806-3166 |
| Unicenter TNG | *Unicenter TNG User's Guide* | |

# Ordering Sun Documentation

Fatbrain.com, an Internet professional bookstore, stocks select product documentation from Sun Microsystems, Inc.

For a list of documents and how to order them, visit the Sun Documentation Center on Fatbrain.com at:

`http://www.fatbrain.com/documentation/sun`

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`docfeedback@sun.com`

Please include the part number of your document in the subject line of your email.

# Installing the Packages

This chapter provides an overview of the individual packages for this product, as well as detailed instructions on installing and uninstalling the packages.

## Integration Package Overview

There are four packages available for the *Sun Management Center Integration Package for Unicenter TNG* release:

- `SUNWescaa` – `EventAdaptor` package
- `SUNWescas` – package for Unicenter TNG WorldView class files
- `SUNWescad` – package for Unicenter TNG DSM policy files
- `SUNWescah` – package for launching Details

The following figure provides an architectural overview of all the components in the integration package.

```
        ┌─────────────┐          ┌──────────────┐
        │ EventAdaptor│          │ Unicenter TNG│
        │             │          │ policy files │
        └─────────────┘          └──────────────┘
        ┌─────────────┐    →     ┌──────────────┐        ┌──────────────┐
        │Sun Management│         │Unicenter TNG │        │Unicenter TNG │
        │Center console│         │    DSM       │        │WorldView     │
        └─────────────┘         └──────────────┘        │console       │
                                                         └──────────────┘
        ┌─────────────┐         ┌──────────────┐        ┌──────────────┐
        │Sun Management│        │Unicenter TNG │        │   Details    │
        │Center server │        │ WorldView    │        └──────────────┘
        └─────────────┘        └──────────────┘        ┌──────────────┐
                               ┌──────────────┐        │Sun Management│
                               │Unicenter TNG │        │Center console│
                               │WorldView     │        └──────────────┘
                               │class files   │
                               └──────────────┘
```

Component of Sun Management Center Integration
Package for Unicenter TNG

Component of Sun Management Center Software
or Unicenter TNG

**FIGURE 1-1**   Package Architecture Overview

# Package Support

- `SUNWescaa` (package for `EventAdaptor`)
  - Supported Sun Management Center versions: Sun Management Center 2.1 and Sun Management Center 2.1.1
  - Supported operating environments: Solaris 2.6, Solaris 7, and Solaris 8
  - Software dependency: Sun Management Center Console
- `SUNWescas` (package for Unicenter TNG WorldView class files)
  - Supported Unicenter TNG version: Unicenter TNG 2.2
  - Supported operating environments: Solaris 2.6 and Solaris 7
  - Software dependency : Unicenter TNG 2.2
- `SUNWescad` (package for Unicenter TNG DSM policy files)
  - Supported Unicenter TNG version: Unicenter TNG 2.2
  - Supported operating environments: Solaris 2.6 and Solaris 7
  - Software dependency : Unicenter TNG
- `SUNWescah` (package for launching Details)
  - Supported Sun Management Center versions: Sun Management Center 2.1 and Sun Management Center 2.1.1
  - Supported operating environments: Solaris 2.6, Solaris 7, and Solaris 8
  - Software dependency: Sun Management Center Console

## `SUNWescaa` (`EventAdaptor` Package)

This package will install the following excutable shell programs in the following directory: *Sun_Management_Center_base_directory*`/SunMC-TNG/sbin/`:

- `ea-start` – To start `EventAdaptor` by using either the command line parameters or the default parameters in the following configuration file:

  `/var/opt/SUNWsymon/SunMC-TNG/SunMCToTngAdaptorMain.cfg`

- `setup_sunmctotng` – When installing `EventAdaptor`, the program invokes this shell to create the directory `/var/opt/SUNWsymon/SunMC-TNG` and the following default configuration file:

  `/var/opt/SUNWsymon/SunMC-TNG/SunMCToTngAdaptorMain.cfg`

- `cfg_sunmctotng` – To modify an existing configuration file, or to create a new file. By default, if no file name is provided, this will edit the default configuration file:

  `/var/opt/SUNWsymon/SunMC-TNG/SunMCToTngAdaptorMain.cfg`

The `rootdir` for the `EventAdaptor` files is:

*Sun_Management_Center_base_directory*`/SunMC-TNG/`

The structure of the `EventAdaptor` files is as follows:

*<rootdir/classes>*

- `eventAdaptor.jar`
- `snmp.jar`

*<rootdir/lib/sparc-sun-solarisX.X>*

- `libSsStack.so` (a link)
- `libSsStack.so.1.0`
- `libsnmpv2.so` (a link)
- `libsnmpv2.so.1.0`

*<rootdir/sbin>*

- `ea-start`
- `setup_sunmctotng`
- `cfg_sunmctotng`

## `SUNWescas` (Unicenter TNG WorldView Class Files Package)

The `rootdir` for Unicenter TNG is: `$CAIGLBL0000/`

`$CAIGLBL0000` is defined by Unicenter TNG. The structure of the Unicenter TNG WorldView class files is as follows:

- `$CAIGLBL0000/browser/SunMC/SunMC.TNG`
- `$CAIGLBL0000/browser/SunMC/SunMC_Delete.TNG`
- `$CAIGLBL0000/browser/SunMC/rm_classes`
- `$CAIGLBL0000/browser/images/wvicons`
  (all GIF files in directory)

## `SUNWescad` (Unicenter TNG DSM Policy Files Package)

The `rootdir` for the Unicenter TNG agent is: `$AGENTWORKS_DIR/`

`$AGENTWORKS_DIR` is defined by Unicenter TNG. The structure of the Unicenter TNG DSM policy files is as follows:

- `$AGENTWORKS_DIR/services/config/aws_nsm/dm/SunMC.dat`
- `$AGENTWORKS_DIR/services/config/aws_nsm/dm/SunMC_Agent.cnf`
- `$AGENTWORKS_DIR/services/config/aws_nsm/dm/SunMC_Agent.dat`

## `SUNWescah` (Details Package)

This package will install the following executable shell programs:

- `LaunchHDBean.sh` – Bourne shell scripts to launch the Details window.
- `SunMC_Console` – Bourne shell scripts to *start* the Sun Management Center Details from Unicenter TNG WorldView.

The programs are installed in the following directory:

*Sun_Management_Center_base_directory*`/SunMC-TNG/sbin/`

The `rootdir` for the files to launch Details is:

*Sun_Management_Center_base_directory*`/SunMC-TNG/`

The structure of the Details package is as follows:

<*rootdir/classes*>

- `launchHDBean.jar`

<*rootdir/sbin*>

- `LaunchHDBean.sh`
- `SunMC_Console`

## Documentation

PostScript™ and PDF versions of this document are located in the following directory:

*Sun_Management_Center_base_directory*`/SunMC-TNG/doc.`

# Pre-Installation Checklist

Before installing the integration packages, be sure the following conditions have been met:

■ Sun Management Center 2.1 or 2.1.1 is installed.

■ Unicenter TNG 2.2 WorldView/DSM are installed and running.

The following suggestions may be helpful to prevent problems with the installation:

■ When you are ready to install the `EventAdaptor` (`SUNWescaa`) package, be sure the Sun Management Center console has been installed on the same host.

■ When you are ready to install the Unicenter TNG WorldView class files (`SUNWescas`) package, be sure that Unicenter TNG WorldView has been installed on the same host.

■ When you are ready to install the Unicenter TNG DSM policy files (`SUNWescad`) package, be sure that Unicenter TNG DSM has been installed on the same host and that Unicenter TNG is running.

■ When you are ready to install the Details (`SUNWescah`) package, be sure that the Sun Management Center console has been installed on the same host.

# Package Installation

The following four packages are needed for the *Sun Management Center Integration Package for Unicenter TNG* release:

■ `SUNWescaa` – Installed on a host that has the Sun Management Center console installed. There should only be one `EventAdaptor` for each Sun Management Center server.

■ `SUNWescas` – Installed on the machine that has the Unicenter TNG WorldView.

■ `SUNWescad` – Installed on the machine that has Unicenter TNG DSM (and Unicenter TNG running).

■ `SUNWescah` – Installed on any machine that has the Sun Management Center console layer and web browser. This should be the machine running Unicenter TNG WorldView, within which you can view the Sun Management Center console (see FIGURE 1-1).

**Note –** You should install all four packages at the same time as described in the following sections. Even though you can selectively install only one, two, or three packages, be aware that the integration will not work properly unless all four packages have been installed.

## ▼ To Install the `EventAdaptor` Package

1. **Become superuser.**

2. **Install the** `SUNWescaa` **package:**

```
# pkgadd -d package_directory SUNWescaa
```

This package contains scripts that will be executed with superuser permission during the process of installing the package.

When installing `SUNWescaa`:

- `setup_sunmctotng`, `cfg_sunmctotng`, and `ea-start` will be installed in:

  *Sun_Management_Center_base_directory*`/SunMC-TNG/sbin/`

- `SunMCToTngAdaptorMain.cfg` will be installed in:

  `/var/opt/SUNWsymon/SunMC-TNG/`

3. **After installation, you can type** `cfg_sunmctotng` **to configure the default file:**

```
# cd Sun_Management_Center_base_directory/SunMC-TNG/sbin
# ./cfg_sunmctotng
```

Enter your own parameters. The following is an example:

```
Enter the Sun Management Center server name:
hawk
Enter the Sun Management Center user name:
Sun_Management_Center_user
Enter the Sun Management Center server port number:
2099
Enter the Unicenter TNG server name:
seagull
Enter the Unicenter TNG server DSM trap port number:
162
Enter Synchronizer Polling Interval: (seconds)
60
Enter Host Name Format (True Name [0], Short Name [1], IP Address [2]):
0
```

The synchronizer checks the status of all connected agents. If it recognizes a new module or a change in module status, the synchronizer notifies Unicenter TNG of the change. A value of 0 turns off the synchronizer function.

The host name format can be designated as a true name, short name, or an IP address. A *true* name is determined by the naming service being used (such as NIS+ or DNS). A true name is a host name that either includes or does not include the domain name, depending on the naming service. A *short* name is simply the host name without a domain name designation.

# ▼ To Install the Unicenter TNG WorldView Class Files Package

1. **Become superuser.**

2. **Install the** `SUNWescas` **package:**

```
# pkgadd -d package_directory SUNWescas
```

3. **Enter your parameters.**

   You will be prompted to enter the Unicenter TNG repository (local host) name, as well as your own Unicenter TNG system administrator name and password. For example:

   ```
   Please Enter repository name[hostname]:
   Please Enter User Name: tng_admin
   Please Enter Password:
   ```

# ▼ To Install the Unicenter TNG DSM Policy Files Package

1. **Become superuser.**

2. **Install the** SUNWescad **package:**

   ```
   # pkgadd -d package_directory SUNWescad
   ```

# ▼ To Install the Details Package

**Note –** Details should be installed on the machine running Unicenter TNG WorldView, within which you can view the Sun Management Center console.

1. **Become superuser.**

2. **Install the** SUNWescah **package:**

   ```
   # pkgadd -d package_directory SUNWescah
   ```

   A file named HDMapping.properties is installed with the SUNWescah package under *Sun_Management_Center_base_directory*/SUNWsymon/SunMC-TNG/classes. This file is used to directly map a Unicenter TNG host name to a Sun Management

Center host name when both applications are using the same host. You must edit this file if Unicenter TNG and Sun Management Center use different logical names for the same host, or if you add a new host to Unicenter TNG. For example:

```
# Property File: HDMapping.properties
# Version: 1.2    2000/04/04    15:52:16
# Copyright (c) Sun Microsystems, Inc. All Rights Reserved.
#

# Format Name = Aliases (Aliases should be unique for Name)

# HostNameInTng = HostAliasesInSunMC
seagull = hawk
```

# Uninstalling the Packages

**Note –** You should uninstall all four packages at the same time as described in the following steps. Even though you can selectively uninstall only one, two, or three packages, be aware that the integration will not be fully removed until all four packages have been uninstalled.

## ▼ To Uninstall the `EventAdaptor` Package

Become superuser and type the following command:

```
# pkgrm SUNWescaa
```

## ▼ To Uninstall the Unicenter TNG WorldView Class Files Package

Become superuser and type the following command:

```
# pkgrm SUNWescas
```

## ▼ To Uninstall the Unicenter TNG DSM Policy Files Package

Become superuser and type the following command:

```
# pkgrm SUNWescad
```

## ▼ To Uninstall the Details Package

Become superuser and type the following command:

```
# pkgrm SUNWescah
```

## Additional Help

- For assistance with Unicenter TNG problems, refer to the *Unicenter TNG User's Guide.*
- The online Sun Management Center release documentation can be found at the following web site:

  ```
  http://www.sun.com/sunmanagementcenter
  ```

# Using the Applications

This chapter describes how to start and use the `EventAdaptor`, the Sun Management Center application, and the Unicenter TNG tasks.

## Starting the Applications

### ▼ To Start the Unicenter TNG Processes

1. **Become superuser.**

2. **Start the Unicenter TNG processes as follows:**

```
# unistart all
```

Verify that the following processes have been started by using the `unifstat` command as described in "If the `SUNWescas` Package Installation Takes a Long Time" on page 32:

- Service Control Manager (`awservices`)
- Distributed Services Bus (`aws_orb`)
- SNMP Gateway (`aws_snmp`)
- Trap MUX (`aws_listen`)
- Object Store (`aws_store`)
- Distributed State Machine (`aws_dsm`)
- WorldView Distributed State Machine Gateway (`aws_wvgate`)

For more information about these processes and the `unifstat` command, refer to the *Unicenter TNG User's Guide.*

## ▼ To Start the Unicenter TNG WorldView Application

1. **Set up the web browser and input the web address for Unicenter TNG in the browser (**FIGURE 2-1**).**

   For example, type your own address as follows:

   `http://`*TNG_server_name:TNG_server_port*`/tng/`
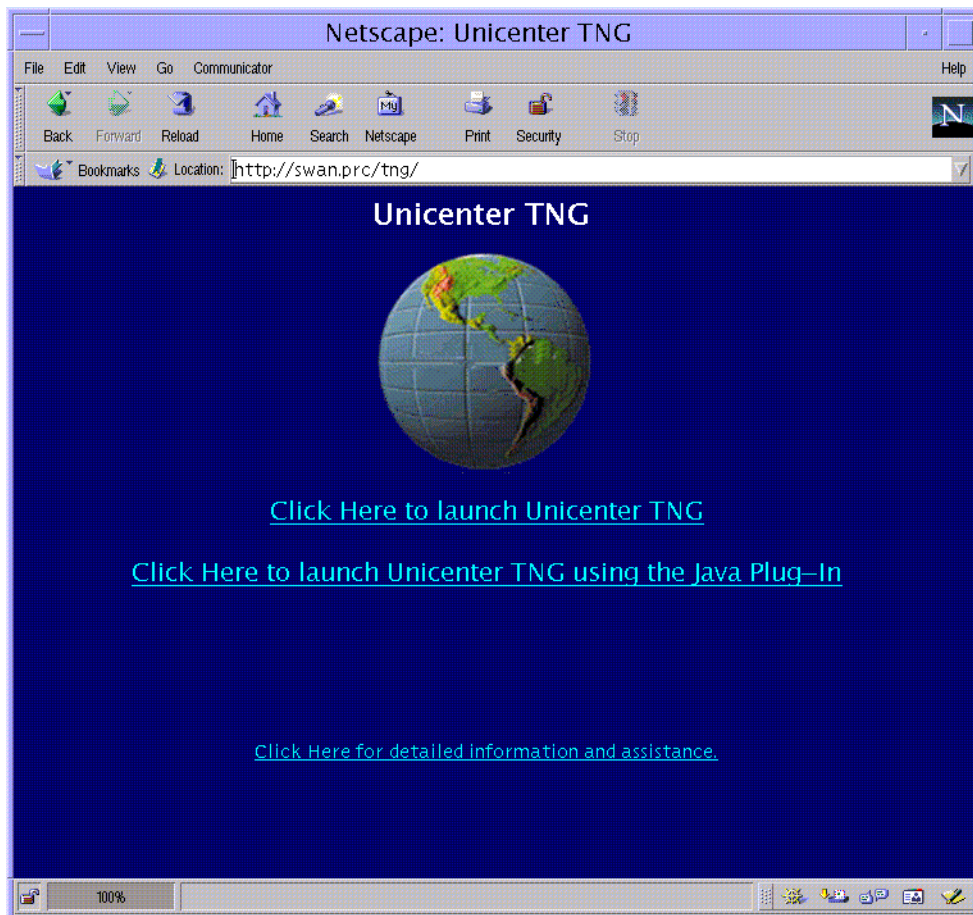


**FIGURE 2-1**   Unicenter TNG Web Page

2. **Click the link <u>Click Here to launch Unicenter TNG</u>, and you will see the Unicenter TNG Explorer Logon dialog box (**FIGURE 2-2**).**

Type your user name (for example, `tng_user`) and password in the text fields. Click OK to continue.



**FIGURE 2-2**   Unicenter TNG Explorer Logon Dialog Box

After you log onto Unicenter TNG WorldView, the Unicenter TNG console window is displayed (FIGURE 2-3).

**FIGURE 2-3**   Unicenter TNG Console

## ▼ To Start the Sun Management Center Server

1. **Become superuser.**

2. **Type the following commands:**

```
# cd Sun_Management_Center_base_directory/sbin/
# ./es-start -A
```

## ▼ To Start the `EventAdaptor`

---

**Note –** If you want to enable the module load/unload functionality, you must be a member of the `esadmin` group.

---

---

**Note –** The `EventAdaptor` is an adaptor for agents that share the same Sun Management Center *server context.* If you want to translate the events of other agents, you must launch another adaptor.

---

---

**Note –** The `EventAdaptor` can work only if the Config-Reader module is loaded.
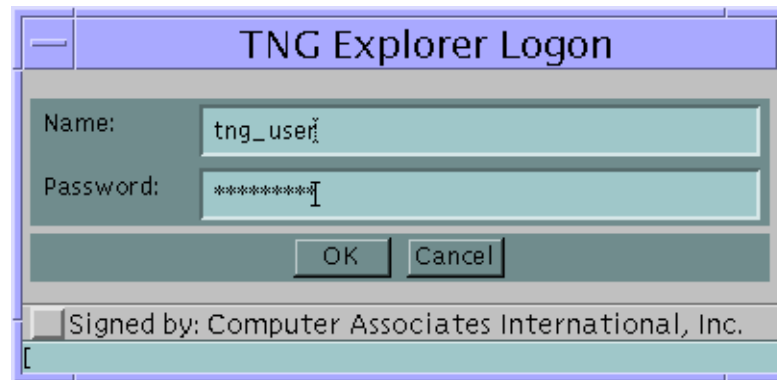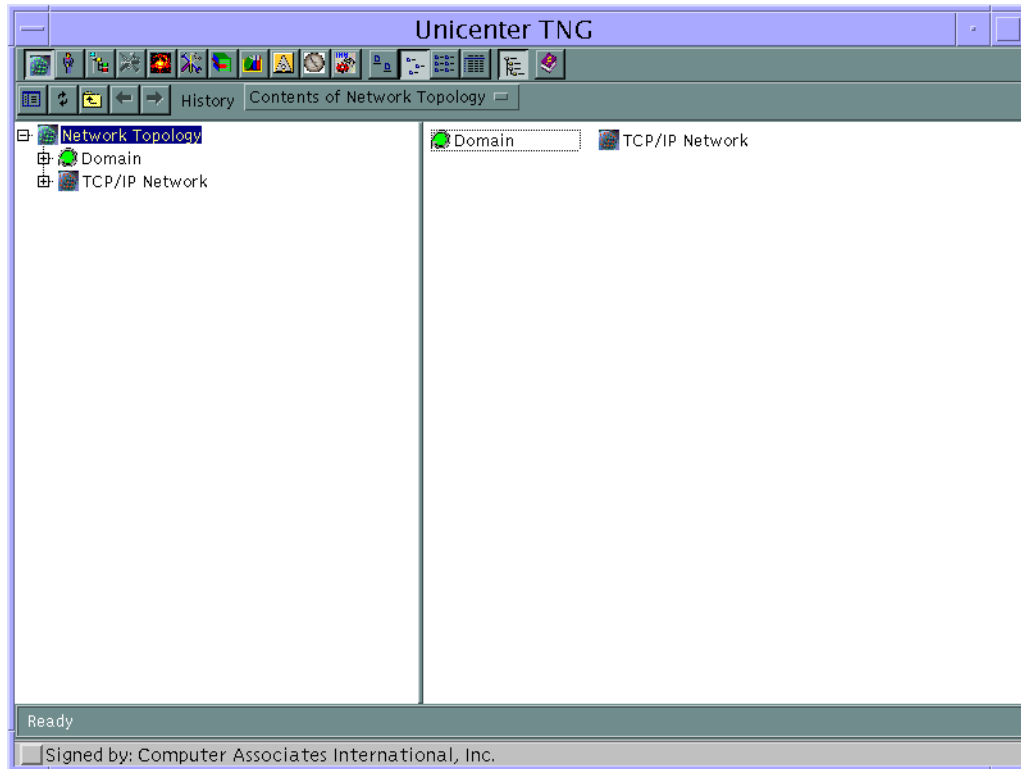
---

Use the `ea-start` program to start the `EventAdaptor`:

### 1. `cd` **to the following directory:**

*Sun_Management_Center_base_directory*`/SunMC-TNG/sbin`

### 2. **Type the following command:**

```
./ea-start parameters
```

The following is a checklist of parameters available for the `ea-start` program:

- `-h` | `-help`*: for help; display all the following messages
- `-ss` *<HOSTNAME>:* for the Sun Management Center server name
- `-sp` *<NUMBER>:* for the Sun Management Center server port; should be a valid port number
- `-ts` *<HOST1,HOST2,...>:* for the Unicenter TNG server list; multiple servers should be separated by a comma; you must be using the same port if running multiple servers
- `-tp` *<NUMBER>:* for the Unicenter TNG server port; should be a valid port number
- `-l` *<FILEPATH>:* for the log file path; can be absolute or relative to current location
- `-i` *<MODPOLLINT>:* for the synchronizer polling interval; should be a valid number of seconds
- `-u` *<USERNAME>:* for the Sun Management Center user name
- `-f` *<Property File>:* specify a property file yourself instead of by default

All the parameters are optional. If you do not provide command line parameters, the default parameters are used from the property file. You can use the proper parameters by modifying the property file located in:

```
/var/opt/SUNWsymon/SunMC-TNG/SunMCToTngAdaptorMain.cfg
```

The following default parameters are designated in the property file:

```
ProxyMechanism.SUNMC_SERVER_NAME : Sun Management Center Server Name.
ProxyMechanism.SUNMC_SERVER_PORT_NO : Sun Management Center Server Port Number.
ProxyMechanism.TNG_SERVERS_NAME : Unicenter TNG Server Name.
ProxyMechanism.TNG_SERVER_PORT_NO : Unicenter TNG Server DSM Trap Port Number.
ProxyMechanism.SUNMC_USER_NAME : Sun Management Center User Name.
ProxyMechanism.MOD_POLL_INTERVAL : Synchronizer polling interval.
```

If you *do* provide parameters on the command line, those parameters will override the ones in the property file.

3. **Type your Unicenter TNG user name and password, and your Sun Management Center server name and Unicenter TNG server name in the text fields** (FIGURE 2-4)**.**

   These parameters are required.

4. **Choose the host name format that you previously input with the** `cfg_sunmctotng` **script (see "To Install the** **EventAdaptor** **Package" on page 7).**

   This designation is required.

5. **Input the Sun Management Center server port number and/or the Unicenter TNG server DSM trap port number.**

   These parameters are optional.

6. **Click the checkbox of the Alarm State to be ignored.**

   These parameters are optional.

**7. Click the checkbox of the Unicenter TNG Alarm Severity to be ignored.**

These parameters are optional. The alarm names map directly with the Sun Management Center alarm names. See TABLE 2-1 for descriptions of each alarm.

**TABLE 2-1**    Sun Management Center and Unicenter TNG Alarms

| Alarm Name | Description |
| --- | --- |
| Down | A service-affecting condition has occurred and an immediate corrective action is required. For example, a module has gone down (exited). |
| Critical | A service-affecting condition has developed and an urgent corrective action is required. For example, an object needs to be restored to full capacity. |
| Alert | A non-service-affecting condition has developed and a corrective action should be taken to avoid a more serious fault. |
| Caution | A potential service-affecting fault has been detected, and action should be taken for further diagnosis to correct the problem, if necessary. |
| Off | A resource for a managed object (for example, a module) has been disabled. |

**8. Click the LAUNCH button to continue the process.**

**FIGURE 2-4** Sun Management Center Integration Package for Unicenter TNG
`EventAdaptor` Login Window

# Stopping the `EventAdaptor`

Use the `ps`, `grep`, and `kill` commands to stop the `EventAdaptor`.

---

**Note –** If you are running multiple `EventAdaptors`, be sure you are stopping the correct `EventAdaptor` when using the `kill` command.

---

## ▼ To Stop the `EventAdaptor`

1. **Become superuser.**

2. **Type the following commands:**

```
# EAPID='ps -ef|grep com.sun.symon.SunM |grep -v grep |awk '{print $2}''
# kill $EAPID
```

# Using the Application Tasks

## ▼ To Discover the Sun Management Center Agents

You must discover the Sun Management Center agents when you begin the application tasks.

1. **Delete the objects of the Sun Management Center agents in the Unicenter TNG WorldView console.**

   If Unicenter TNG is already monitoring the host, you must delete the objects in the WorldView console and rediscover them.

   Click the Network Topology icon, and you can delete the objects. (Refer to the *Unicenter TNG User's Guide.*)

2. **Discover the network in the Unicenter TNG WorldView console.**

   Click the Unicenter TNG Tools icon, and select Discovery Wizard to discover the network. (Refer to the *Unicenter TNG User's Guide.*)

If you encounter problems discovering the Sun Management Center agents, see "If You Cannot Discover a Sun Management Center Agent in Unicenter TNG" on page 32.

You will see the Sun Management Center agents and their loaded modules in the Unicenter TNG WorldView console. Click the DomainBrowser icon, and select a node that is a Sun Management Center agent (FIGURE 2-5).



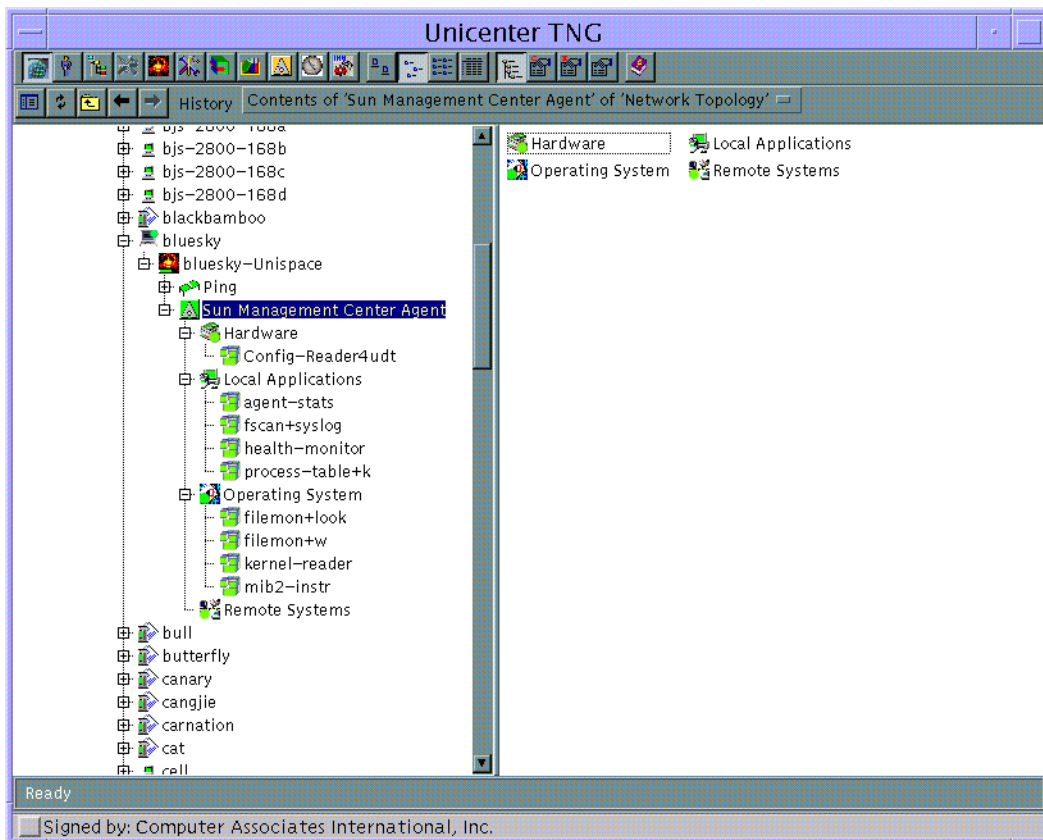**FIGURE 2-5**   Discover Sun Management Center Agent in Unicenter TNG WorldView Console

## ▼ To View the Status of the Sun Management Center Agents

1. **In the Unicenter TNG WorldView console, select the DomainBrowser.**

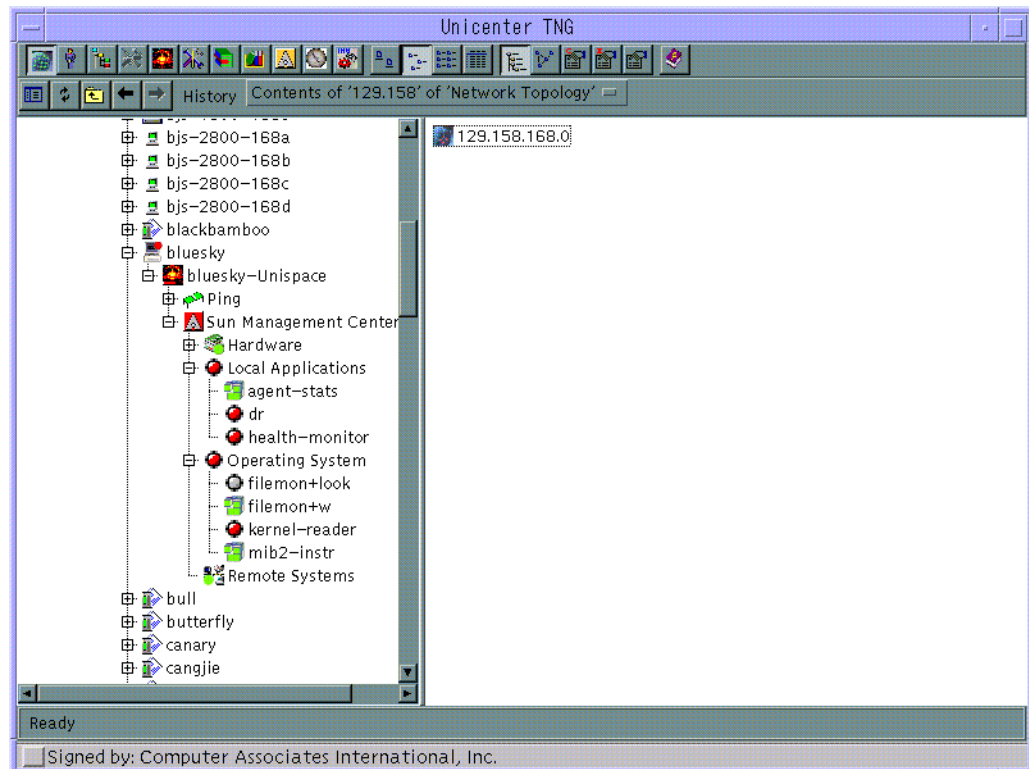   You can view and monitor the status of the Sun Management Center agents (FIGURE 2-6).



**FIGURE 2-6**   Monitor the Status of the Sun Management Center Agents

## ▼ To View the Sun Management Center-Generated Events

1. **In the Unicenter TNG WorldView hierarchical tree, find Console Logs for your host name.**

   For example, under the host name "swan," you would select Enterprise Management ➤ swan ➤ Event Management ➤ Console Logs as shown in FIGURE 2-7.
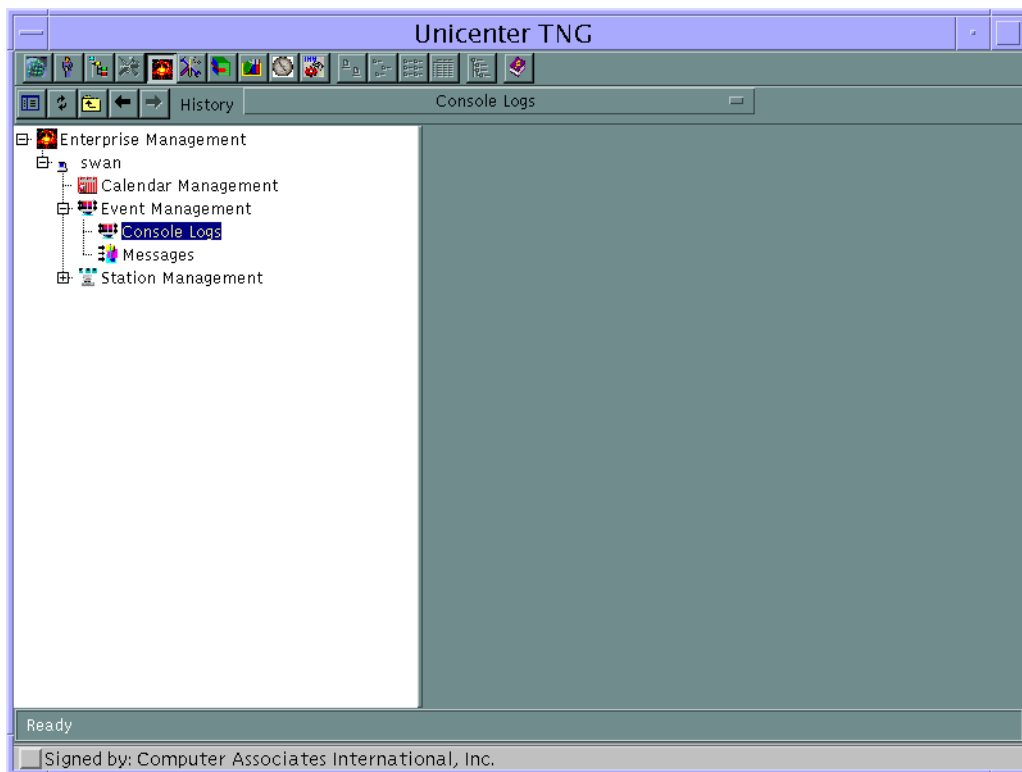


**FIGURE 2-7**　Selecting Console Logs in Unicenter TNG Window

2. **Double-click on Console Logs.**

   All alarms from the Sun Management Center application are displayed in the Unicenter TNG Console Log window (FIGURE 2-8).
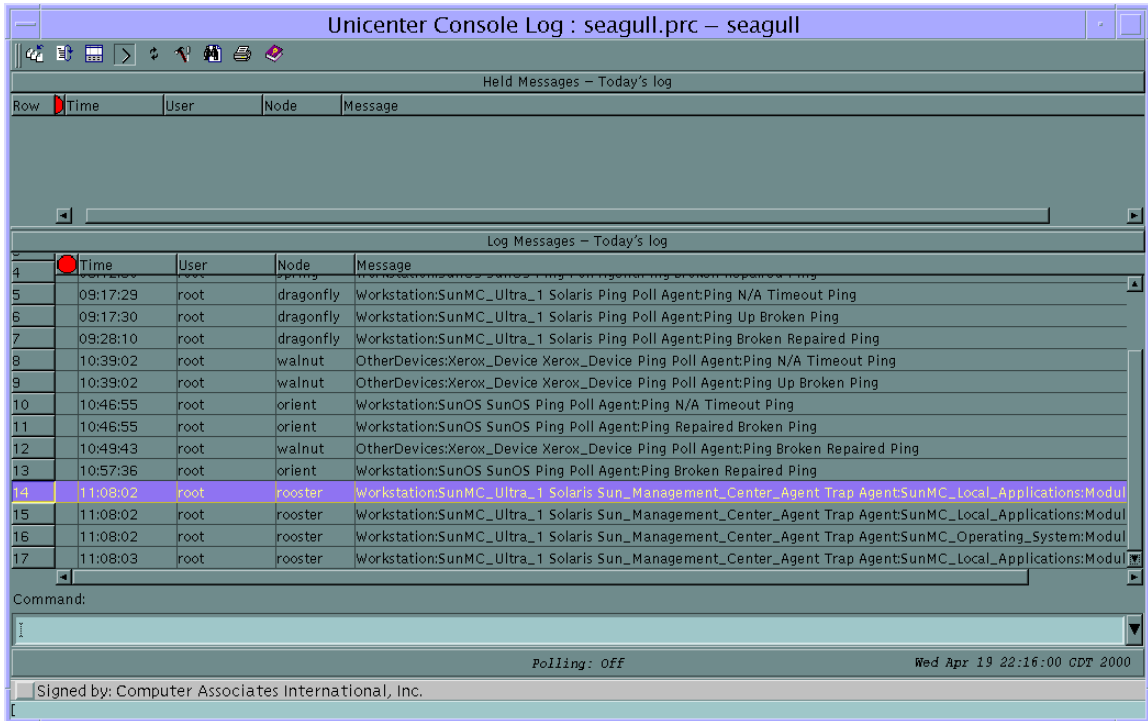
**FIGURE 2-8** Sun Management Center Alarms Displayed in Unicenter TNG Console Log Window

## ▼ To Start the Details Application

---

**Note –** Before the Details application can be run, the package for launching Details must be installed locally (on the machine in which the Unicenter TNG WorldView console is run). See "To Install the Details Package" on page 9.

---

To view or manipulate the attributes and properties associated with the hosts managed by Sun Management Center software, you must run a Unicenter TNG task to launch the console window containing the host detail information.

1. **Select a node of the installed Sun Management Center agent in the Unicenter TNG WorldView console window, and click the right mouse button.**

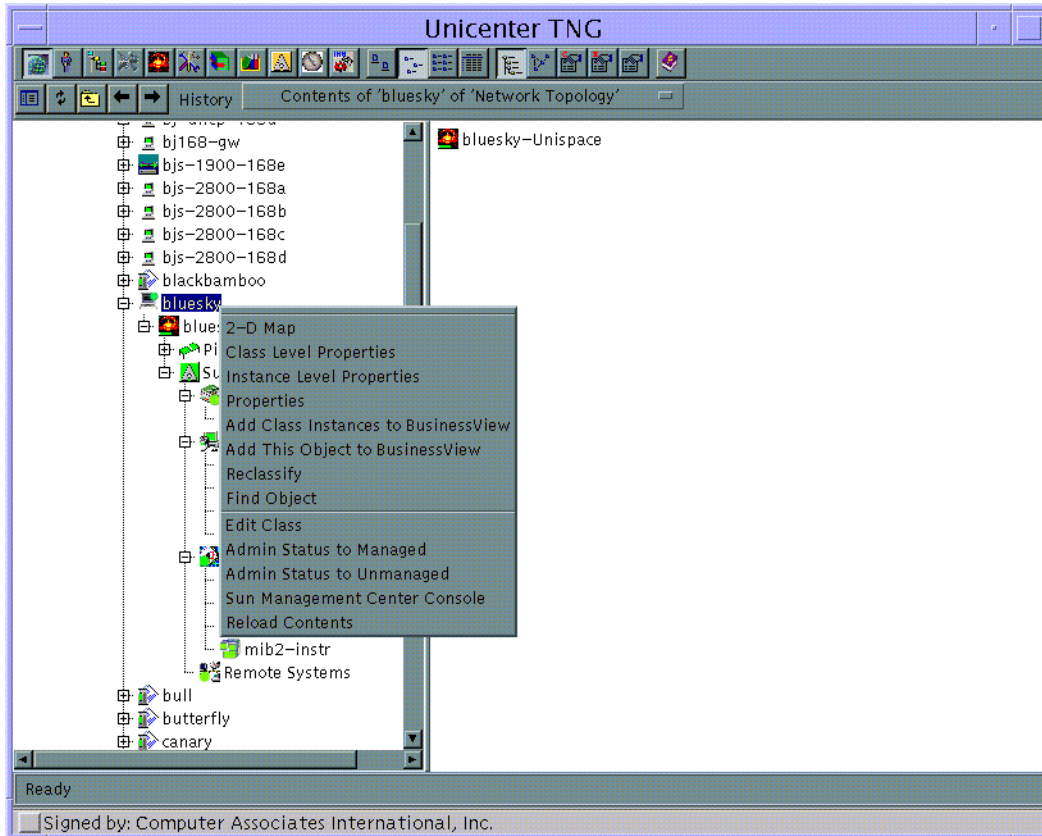   Select Sun Management Center Console in the pop-up menu (FIGURE 2-9).

**FIGURE 2-9** Selecting Node in the Network Topology of Unicenter TNG WorldView Console Window

The Java Security window is displayed (FIGURE 2-10).
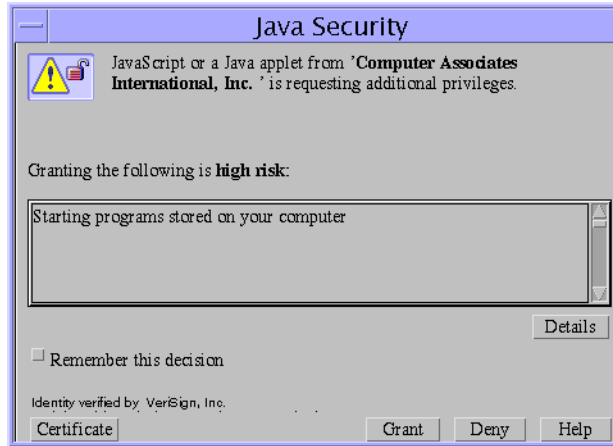
**FIGURE 2-10**  Java Security Window

2. **Click the Grant button, and the Sun Management Center Server Name panel is displayed (**FIGURE 2-11**).**
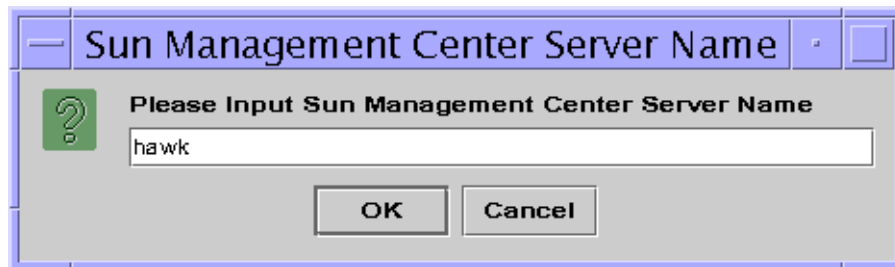


**FIGURE 2-11**  Sun Management Center Server Name Panel

a. **Input the Sun Management Center server name or IP address for the server that is monitoring the node.**

b. **Click OK, and a scaled-down version of the Sun Management Center login panel is displayed (**FIGURE 2-12**).**

**FIGURE 2-12** Sun Management Center Login Panel

**3. Type your login ID and password.**

Click the Login button to get the Details window (FIGURE 2-13).
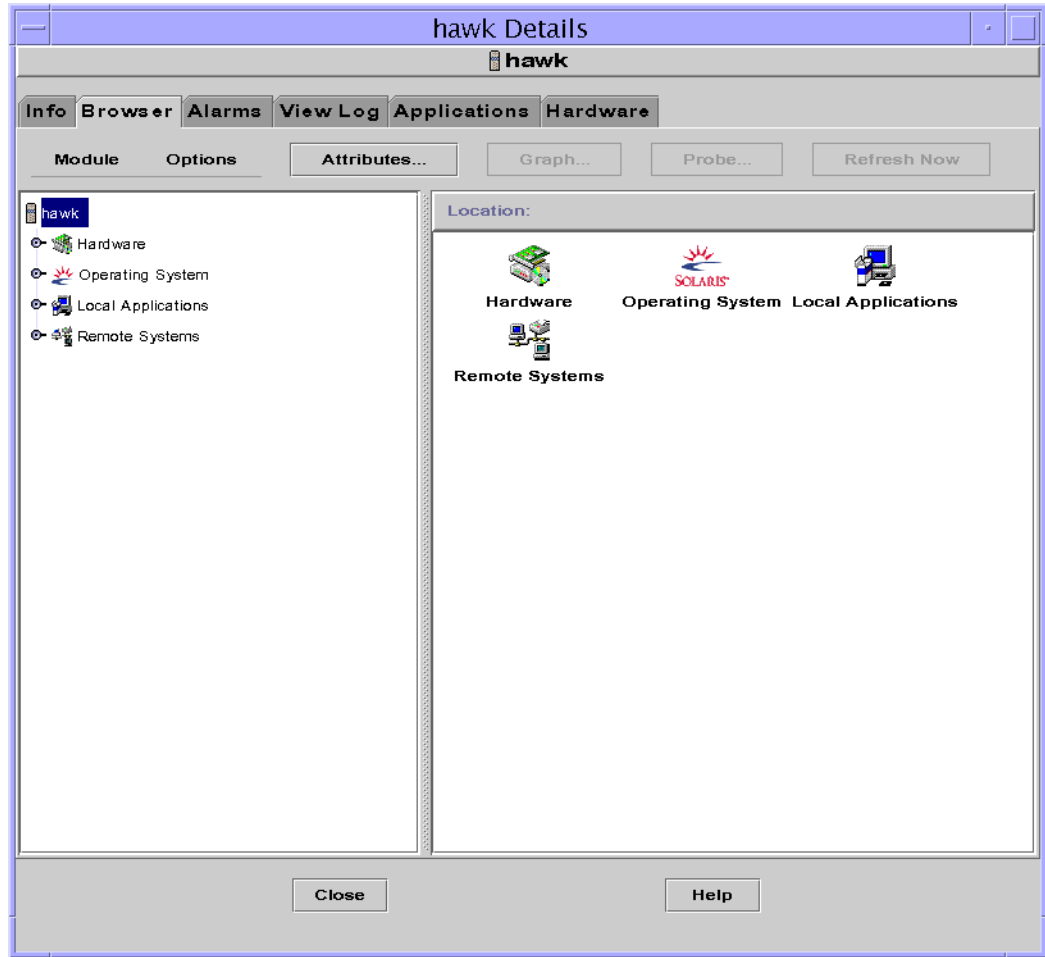
**FIGURE 2-13**  Details Window

In this window, you can view and manage the Sun Management Center categories.

For more information on the Details window, refer to the *Sun Management Center Software User's Guide.*

# Troubleshooting

This chapter addresses potential scenarios in which troubleshooting may be necessary. The troubleshooting sections cover both installation and software application issues.
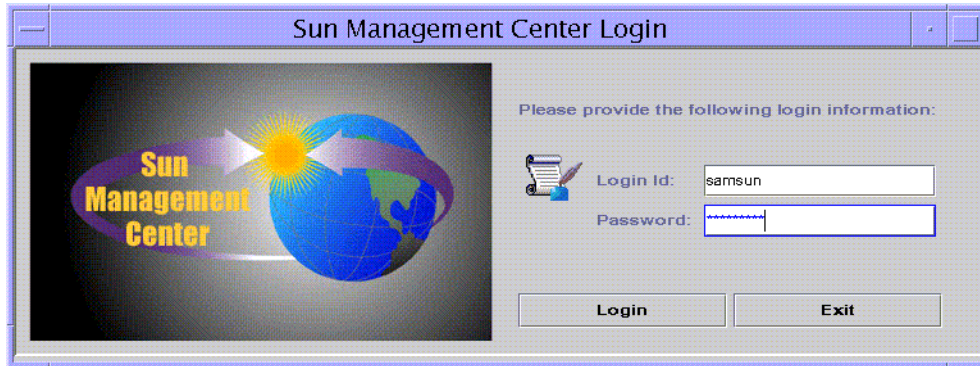
## Installation Troubleshooting

### ▼ If Error Messages Display When Installing Packages

When installing the `SUNWescad` and `SUNWescas` packages, the following error messages may display:

```
ERROR: CA-TNG is not installed, you should install CA-TNG first.
ERROR: Agent Factory is not installed, you should install Agent
Factory first.
```

If this happens, verify the following:

■ Unicenter TNG is installed.

■ The environment variables `$CAIGLBL0000` and `$AGENTWORKS_DIR` exist.

## ▼ If the `SUNWescas` Package Installation Takes a Long Time

If `SUNWescas` has still not installed after several hours, ensure that all Unicenter TNG processes are working. Type the following commands as superuser:

```
# unifstat
# awservices status
```

For more information, refer to the *Unicenter TNG User's Guide.*

# Application Troubleshooting

## ▼ If You Cannot Discover a Sun Management Center Agent in Unicenter TNG

If you cannot discover the Sun Management Center agent when the `SUNWescaa` and `SUNWescas` packages are installed, type the following command as superuser:

```
# dscvrbe -R Unicenter_TNG_repository_address -7 Sun_Management_Center_agent _address
```

This command will discover the Sun Management Center host in Unicenter TNG. (The command can be run more than once, if necessary.)

Also, make sure that the simple MIB-II module or MIB-II instrumentation module has been loaded on the Sun Management Center agent.

## ▼ If Unicenter TNG WorldView Cannot Display the Status of the Sun Management Center Agent

Ensure whether Unicenter TNG works and whether all related processes work by typing the following commands as superuser:

```
# unifstat
# awservices status
```

If all processes are working but the agent status still does not display, verify that the Sun Management Center software is using port 161.

If this is verified and the agent status still does not display, try restarting the EventAdaptor (see "To Start the EventAdaptor" on page 17).

For more information about the unifstat and awservices commands, refer to the *Unicenter TNG User's Guide.*

## ▼ If the EventAdaptor Does Not Work

Ensure the following:

- The Sun Management Center console is installed with the EventAdaptor.
- The Java 2 environment (JAVA_HOME and CLASSPATH) is correct.
- The SUNWescad and SUNWescas packages are correctly installed.
- Unicenter TNG works.
- Your user name and password for Sun Management Center are correct.

## ▼ If Details Does Not Work

Ensure the following:

- The Sun Management Center console is installed with SUNWescah.
- The Java 2 environment (JAVA_HOME and CLASSPATH) is correct.

▼ **If Load/Unload Module Information Does Not Display in the Unicenter TNG WorldView Console**

Check the following:

- Warning messages displayed about the module load/unload function (see "If Warning Messages are Displayed When Starting the `EventAdaptor`" on page 34).

- Exceptions displayed (if so, restart the `EventAdaptor`. See "To Start the `EventAdaptor`" on page 17).

▼ **If Warning Messages are Displayed When Starting the `EventAdaptor`**

If the following warning message is displayed when starting the `EventAdaptor`:

```
Warning: Cannot provide Module Load and Unload Feature!(Community
Setting failed!)
```

Verify that the login user is a member of the `esadmin` group.

If the following warning message is displayed when starting the `EventAdaptor`:

```
Warning: Cannot provide Module Load and Unload Feature!
(Subscription failed!)
```

Ensure your Sun Management Center server's trap handler is working, and that you can restart it by typing the following commands as superuser:

```
# /opt/SUNWsymon/sbin/es-stop -t
# /opt/SUNWsymon/sbin/es-start -t
```

To view the trap log, refer to the *Sun Management Center Software User's Guide.*

## ▼ If the Log File is Not Created When Starting the `EventAdaptor`

If the following error message is displayed:

```
java.io.FileNotFoundException: XXX.log
```

This message may mean one of the following:

- The log file has already been created by another user, and you do not have write permission.
- The log file cannot be created in the specified directory.

For details on the `SunMCtoTngAdaptorMain.cfg` default location, see "To Install the `EventAdaptor` Package" on page 7.

## ▼ If Error Messages are Displayed When Starting the `EventAdaptor`

If the following error messages are displayed when starting the `EventAdaptor`:

```
java.lang.UnsatisfiedLinkError: no SsStack in java.library.path
    at java.lang.Throwable.fillInStackTrace(Native Method)
    at java.lang.Throwable.fillInStackTrace(Compiled Code)
    at java.lang.Throwable.<init>(Compiled Code)
    at java.lang.Error.<init>(Error.java:50)
    at java.lang.LinkageError.<init>(LinkageError.java:43),...,
```

Verify that the `SUNWescaa` package was installed in the correct version of the operating environment.

## ▼ If Unicenter TNG Cannot Receive Alarms from the `EventAdaptor`

Ensure the following:

- The Unicenter TNG SNMP gateway (`aws_snmp`) and trap MUX (`aws_listen`) are working.
- No other process is using port number `162`.