

# Sun Management Center CA Integration Package User's Guide for Unicenter TNG

Sun Microsystems, Inc. 4150 Network Circle Santa Clara, CA 95054 U.S.A.

Part No: 817–1101–10 May 2003 Copyright 2003 Sun Microsystems, Inc. 4150 Network Circle, Santa Clara, CA 95054 U.S.A. All rights reserved.

This product or document is protected by copyright and distributed under licenses restricting its use, copying, distribution, and decompilation. No part of this product or document may be reproduced in any form by any means without prior written authorization of Sun and its licensors, if any. Third-party software, including font technology, is copyrighted and licensed from Sun suppliers.

Parts of the product may be derived from Berkeley BSD systems, licensed from the University of California. UNIX is a registered trademark in the U.S. and other countries, exclusively licensed through X/Open Company, Ltd.

Sun, Sun Microsystems, the Sun logo, docs.sun.com, AnswerBook, AnswerBook2, Java, JDK, and Solaris are trademarks, registered trademarks, or service marks of Sun Microsystems, Inc. in the U.S. and other countries. All SPARC trademarks are used under license and are trademarks or registered trademarks of SPARC International, Inc. in the U.S. and other countries. Products bearing SPARC trademarks are based upon an architecture developed by Sun Microsystems, Inc.

The OPEN LOOK and Sun™ Graphical User Interface was developed by Sun Microsystems, Inc. for its users and licensees. Sun acknowledges the pioneering efforts of Xerox in researching and developing the concept of visual or graphical user interfaces for the computer industry. Sun holds a non-exclusive license from Xerox to the Xerox Graphical User Interface, which license also covers Sun's licensees who implement OPEN LOOK GUIs and otherwise comply with Sun's written license agreements.

Federal Acquisitions: Commercial Software-Government Users Subject to Standard License Terms and Conditions.

DOCUMENTATION IS PROVIDED "AS IS" AND ALL EXPRESS OR IMPLIED CONDITIONS, REPRESENTATIONS AND WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT, ARE DISCLAIMED, EXCEPT TO THE EXTENT THAT SUCH DISCLAIMERS ARE HELD TO BE LEGALLY INVALID.

Copyright 2003 Sun Microsystems, Inc. 4150 Network Circle, Santa Clara, CA 95054 U.S.A. Tous droits réservés.

Ce produit ou document est protégé par un copyright et distribué avec des licences qui en restreignent l'utilisation, la copie, la distribution, et la décompilation. Aucune partie de ce produit ou document ne peut être reproduite sous aucune forme, par quelque moyen que ce soit, sans l'autorisation préalable et écrite de Sun et de ses bailleurs de licence, s'il y en a. Le logiciel détenu par des tiers, et qui comprend la technologie relative aux polices de caractères, est protégé par un copyright et licencié par des fournisseurs de Sun.

Des parties de ce produit pourront être dérivées du système Berkeley BSD licenciés par l'Université de Californie. UNIX est une marque déposée aux Etats-Unis et dans d'autres pays et licenciée exclusivement par X/Open Company, Ltd.

Sun, Sun Microsystems, le logo Sun, docs.sun.com, AnswerBook, AnswerBook2, et Solaris sont des marques de fabrique ou des marques déposées, ou marques de service, de Sun Microsystems, Inc. aux Etats-Unis et dans d'autres pays. Toutes les marques SPARC sont utilisées sous licence et sont des marques de fabrique ou des marques déposées de SPARC International, Inc. aux Etats-Unis et dans d'autres pays. Les produits portant les marques SPARC sont basés sur une architecture développée par Sun Microsystems, Inc.

L'interface d'utilisation graphique OPEN LOOK et Sun™ a été développée par Sun Microsystems, Inc. pour ses utilisateurs et licenciés. Sun reconnaît les efforts de pionniers de Xerox pour la recherche et le développement du concept des interfaces d'utilisation visuelle ou graphique pour l'industrie de l'informatique. Sun détient une licence non exclusive de Xerox sur l'interface d'utilisation graphique Xerox, cette licence couvrant également les licenciés de Sun qui mettent en place l'interface d'utilisation graphique OPEN LOOK et qui en outre se conforment aux licences écrites de Sun.

CETTE PUBLICATION EST FOURNIE "EN L'ETAT" ET AUCUNE GARANTIE, EXPRESSE OU IMPLICITE, N'EST ACCORDEE, Y COMPRIS DES GARANTIES CONCERNANT LA VALEUR MARCHANDE, L'APITITUDE DE LA PUBLICATION A REPONDRE A UNE UTILISATION PARTICULIERE, OU LE FAIT QU'ELLE NE SOIT PAS CONTREFAISANTE DE PRODUIT DE TIERS. CE DENI DE GARANTIE NE S'APPLIQUERAIT PAS, DANS LA MESURE OU IL SERAIT TENU JURIDIQUEMENT NUL ET NON AVENU.





030411@5533

# Contents

#### Preface 5

1	Overview and Installation of Sun Management Center Integration Package for Unicenter TNG 9
	Sun Management Center Integration Package Overview 10
	EventAdaptor Component Support 10
	Unicenter TNG Server Component Support 10
	HostDetails Component Support 10
	Sun Management Center Integration Package for Unicenter TNG Documentation 11
	Preinstallation Checklist 11
	Sun Management Center Integration Package Installation 11
	▼ To Install the EventAdaptor Component 12
	▼ To Install the Unicenter TNG Server Component 13
	▼ To Set Up Unicenter TNG Component 13
	▼ To Install the HostDetails Component 14
	▼ To Uninstall the Unicenter TNG Integration Add-On 14
	Additional Help 15
2	Using the Applications 17
	Starting the Applications 17

- ▼ To Start the Unicenter TNG Processes 17
- ▼ To Start the Unicenter TNG WorldView Application 18
- ▼ To Start the Sun Management Center Server 18
- ▼ To Start the EventAdaptor 19
- ▼ Stopping the EventAdaptor 21

Using the Application Tasks 21

▼ To Discover Sun Management Center Agents 21

▼ To Discover a Sun Management Center Agent That Is Running on a Port Other Than the Default Port of 161 22

▼ To View the Status of the Sun Management Center Agents 23

▼ To View the Sun Management Center-Generated Events 24

Using the Details Application 25

▼ To Start the Details Application 25

#### 3 Installation and Application Troubleshooting 27

Installation Troubleshooting 27

Error Messages Display When Installing Packages 27

SUNWescas Package Installation Does Not Install After Substantial Period of Time 27

Application Troubleshooting 28

Cannot Discover a Sun Management Center Agent in Unicenter TNG 28

Unicenter TNG WorldView Cannot Display Status of Sun Management Center Agent 28

EventAdaptor Does Not Work 29

Details Application Does Not Work 29

Load or Unload Module Information Does Not Display in Unicenter TNG WorldView Console 29

Log File Not Created When Starting EventAdaptor 30

Error Messages Are Displayed When Starting EventAdaptor 30

Unicenter TNG Cannot Receive Alarms from EventAdaptor 31

# Preface

This book describes how to install, configure and use the Sun<sup>™</sup> Management Center Integration package for Unicenter TNG<sup>™</sup> and Unicenter Network and Systems Management (NSM). This book assumes that the installation and configuration will be performed by an experienced Unicenter TNG administrator, who is familiar with the Sun Management Center product.

## Before You Read This Book

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

**Note –** It is implied that any references made to Unicenter TNG throughout this book also apply to Unicenter NSM.

# Using UNIX Commands

This book might not contain information about basic UNIX<sup>®</sup> commands or procedures for shutting down the system, booting the system, or configuring devices.

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

Solaris Handbook for Sun Peripherals

- http://docs.sun.com online documentation for the Solaris<sup>™</sup> operating environment
- Other software documentation that you received with your system

# **Typographic Conventions**

The following table describes the typographic changes used in this book.

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

 TABLE P-1 Typographic Conventions

# Shell Prompts in Command Examples

The following table shows the default system prompt and superuser prompt for the C shell, Bourne shell, and Korn shell.

#### TABLE P-2 Shell Prompts

Shell	Prompt
C shell prompt	machine_name%

#### TABLE P-2 Shell Prompts (Continued)

Shell	Prompt
C shell superuser prompt	machine_name#
Bourne shell and Korn shell prompt	\$
Bourne shell and Korn shell superuser prompt	#

## **Related Documentation**

TABLE P-3 Related Documentation

Application	Title
Sun Management Center Installation	Sun Management Center Software User's Guide
Unicenter TNG	Unicenter TNG User's Guide

You can find information about the *Unicenter TNG User's Guide* at http://www.ca.com.

**Note** – Sun is not responsible for the availablity of third-party Web sites mentioned in this document. Sun does not endorse and is not responsible or liable for any content, advertising, products, or other material on or available from such sites or resources. Sun will not be responsible or liable for any damage or loss caused or alleged to be caused by or in connection with use of or reliance on any such content, goods, or services that are available on or through any such sites or resources.

# Accessing Sun Documentation Online

The docs.sun.com<sup>SM</sup> Web site enables you to access Sun technical documentation online. You can browse the docs.sun.com archive or search for a specific book title or subject. The URL is http://docs.sun.com.

Preface 7

# Ordering Sun Documentation

Sun Microsystems offers select product documentation in print. For a list of documents and how to order them, see "Buy printed documentation" at http://docs.sun.com.

#### CHAPTER 1

# Overview and Installation of Sun Management Center Integration Package for Unicenter TNG

This chapter provides an overview of the individual components for the Sun Management Center Integration package for Unicenter TNG<sup>™</sup> and Unicenter NSM. This chapter also provides detailed instructions on how to install and uninstall the components.

**Note –** It is implied that any references made to Unicenter TNG throughout this book also apply to Unicenter NSM.

Unicenter TNG<sup>TM</sup> provides heterogeneous network monitoring functionality. 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 for managing heterogeneous environments that contain Sun products.

The integration package sets up a bridge between Sun Management Center software and Unicenter TNG by performing the following functions.

- The integration package enables Unicenter TNG to discover Sun Management Center agents and their loaded modules and presents them in the Unicenter TNG WorldView. This is done by using the policy files of the Unicenter TNG Distributed State Machine (DSM) WorldView, and the topology bridge between Sun Management Center and Unicenter TNG.
- 2. The integration package retrieves alarms from the Sun Management Center application and performs the following tasks:
  - Forwards them to Unicenter TNG
  - Analyzes the alarms
  - Retrieves the current status of the Sun Management Center agents

If the status has changed, the integration package performs the following tasks:

Sends notification to Unicenter TNG

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

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

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

# Sun Management Center Integration Package Overview

The three components available for the Sun Management Center Integration package for Unicenter release are the EventAdaptor component, the TNG server component, and the HostDetails component.

#### EventAdaptor Component Support

- Supported Sun Management Center versions: Sun Management Center 3.5
- Supported operating environments: Solaris 2.6, Solaris 7, Solaris 8 and Solaris 9
- Software dependency: Sun Management Center Console

## Unicenter TNG Server Component Support

- Supported Unicenter TNG version: Unicenter TNG 2.4, Unicenter NSM 3.0
- Supported Operating environments: Solaris 2.6, Solaris 7, Solaris 8, and Solaris 9
- Software dependency: Unicenter TNG 2.4 or Unicenter NSM 3.0

#### HostDetails Component Support

- Supported Sun Management Center versions: Sun Management Center 3.5
- Supported operating environments: Solaris 2.6, Solaris 7, Solaris 8 and Solaris 9
- Software dependency: Sun Management Center Console

# Sun Management Center Integration Package for Unicenter TNG Documentation

PDF and HTML versions of this document can be viewed online by going to http://docs.sun.com.

## Preinstallation Checklist

Before installing the Sun Management Center Integration package, check to make sure the following conditions have been met:

- Sun Management Center is installed.
- Unicenter TNG WorldView, and TNG DSM are installed and running.

The following suggestions might be helpful in preventing problems with the installation:

- When you are ready to install the EventAdaptor component, ensure that the Sun Management Center console is installed on the same host.
- When you are ready to install the Unicenter TNG WorldView class files, ensure that the Unicenter TNG WorldView is installed on the same host.
- When you are ready to install the Unicenter TNG DSM policy files, ensure that the Unicenter TNG DSM is installed on the same host.
- When you are ready to install the HostDetails component, be sure that the Sun Management Center console has been installed on the same host.

## Sun Management Center Integration Package Installation

The following three components are needed for the Sun Management Center Integration package for Unicenter release:

EventAdaptor component:

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

TNG server component:

Chapter 1 • Overview and Installation of Sun Management Center Integration Package for Unicenter TNG 11

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.

HostDetails bean component:

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, from within which you can view the Sun Management Center console.

### To Install the EventAdaptor Component

- 1. Become superuser.
- 2. Start the Sun Management Center installation process.
- 3. Select the console layer for installation. Select the Sun Management Center Integration for Unicenter TNG add-on.
- 4. When prompted, choose the Sun Management Center Integration for Unicenter TNG EventAdaptor Component for installation.

The following files will be installed:

setup\_sunmctotng, cfg\_sunmctotng, and ea-start will be installed in the following directory:

SunMC\_base\_directory/SunMC-TNG/sbin.

SunMcToTngAdaptorMain.cfg will be installed in the following directory:

/var/opt/SUNWsymon/SunMC-TNG

# 5. After the installation, configure the cfg\_sunmctotng default file by typing the following commands:

- # cd SunMC\_base\_directory/SunMC-TNG/sbin
- # ./cfg\_sunmctotng

When prompted, enter the appropriate information for your system for each of the following parameters:

- Sun Management Center server name
- Sun Management Center user name
- Sun Management Center port number
- Unicenter TNG server name
- Unicenter TNG server DSM trap port number
- Synchronizer Polling Interval, in seconds
- Host Name Format: True Name [0], Short Name [1], IP Address [2]

The synchronizer checks the status of all connected agents. If the synchronizer 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 in one of the following ways:

- true name
- short name
- 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 Server Component

- 1. Become superuser.
- 2. Start the Sun Management Center installation process.
- 3. Select the console layer for installation. Select the Sun Management Center Integration for Unicenter TNG add-on.
- 4. Choose the Sun Management Center Integration for Unicenter TNG Server Component for installation.

#### To Set Up Unicenter TNG Component

The Unicenter TNG server component of the add-on will be automatically set up when the Sun Management Center setup script is run. Refer to the *Sun Management Center Installation and Configuration Guide* for more information on the Sun Management Center setup procedure.

 If you need to set up or re-set up the Unicenter TNG Component, type the following commands:

```
# cd /SunMC_base_directory/SUNWsymon/sbin
# ./es-setup -p TNG
```

**Note** – At the end of the setup procedure, the following warning message might be displayed:

SunMC\_Agent.atp(32) : warning: #VERSION number does not include revision number (in format M.m.r). Revision will be ignored, this may lead to errors later.

This warning message can be safely ignored.

#### ▼ To Install the HostDetails Component

**Note** – The HostDetails component should be installed on a machine that is running Unicenter TNG WorldView, from which you can view the Sun Management Center console.

- 1. Become superuser.
- 2. Start the Sun Management Center installation process.
- 3. Select the console layer for installation. Select the Sun Management Center Integration for Unicenter TNG add-on.
- 4. Choose the Sun Management Center Integration for Unicenter TNG HostDetails Component for installation.

A file named HDMapping.properties is installed with the SUNWescah package under *SunMC\_base\_directory* 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
```

### To Uninstall the Unicenter TNG Integration Add-On

To uninstall any of the components that are part of Sun Management Center Unicenter Integration add-on, complete the following steps:

- 1. Become superuser.
- 2. Change to the /opt/SUNWsymon/sbin directory.
  - # cd /opt/SUNWsymon/sbin
- 3. Start the Sun Management Center uninstallation process.

# ./es-uninst

4. Select the Sun Management Center Integration for Unicenter TNG for uninstallation.

## Additional Help

For assistance with Unicenter TNG problems, refer to the *Unicenter TNG User's Guide*. Information about the *Unicenter TNG User's Guide* can be found at http://www.ca.com.

The online Sun Management Center release documentation can be found at http://www.sun.com/software/sunmanagementcenter.

#### CHAPTER 2

## Using the Applications

This chapter describes how to start, stop, and use the Unicenter TNG<sup>TM</sup> processes, the TNG Worldview Application, the Sun Management Center Server, the EventAdaptor, and other Sun Management Center application tasks.

## Starting the Applications

This section provides information about starting the Unicenter TNG processes and using the unifstat command. Detailed instructions for starting the Unicenter TNG WorldView application, the Sun Management Center Server, and the EventAdaptor are also provided.

## ▼ To Start the Unicenter TNG Processes

- 1. Become superuser.
- 2. Start the Unicenter TNG processes.

# unistart all

3. Use the unifstat command to verify whether the following processes have been started.

```
# unifstat
```

```
# awservices status
```

- 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. Before starting the Unicenter TNG WorldView Application, set up the web browser.

**Note** – The JAVA\_HOME environment variable must be set in the environment of the web browser from which Unicenter TNG WorldView is launched. JAVA\_HOME must point to a complete installation of JDK<sup>TM</sup> 1.3.1 or above. This variable is used to launch the Sun Management Center HostDetails bean from the Unicenter TNG WorldView.

For specific instructions on how to set the Java<sup>™</sup> environment variables, see "Java Environment Variables and Path" in *Sun Management Center 3.5 Installation and Configuration Guide*.

2. In a web browser, type the web address for Unicenter TNG.

For example, type your own address as follows: http://TNG\_server\_name:TNG\_server\_port/tng/

3. In the Unicenter TNG Web Page, select the Click Here to launch Unicenter TNG link.

The Unicenter TNG Explorer Logon dialog box is displayed.

4. Type your user name and password in the appropriate text fields. Click OK to continue.

After you log on to Unicenter TNG WorldView, the Unicenter TNG console window is displayed.

## ▼ To Start the Sun Management Center Server

- 1. Become superuser.
- 2. Change directories to the *SunMC\_base\_directory*.

# cd SunMC\_base\_directory/sbin

3. Type the following command:

# ./es-start -A

## To Start the EventAdaptor

The EventAdaptor is an adapter 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 adapter.

Complete the following steps:

1. Change directories to the SunMC\_base\_directory.

# cd SunMC\_base\_directory/SunMC-TNG/sbin

2. Set the JAVA\_HOME variable to a complete installation of JDK <sup>™</sup> 1.3.1 or above. For example:

# JAVA\_HOME=/usr/java1.4
# export JAVA HOME

3. Type the following command:

#### ./ea-start

All the parameters are optional. If no parameters are specified, the parameters that have been stored in /var/opt/SUNWsymon/SunMC-TNG/SunMCToTngAdaptorMain.cfg will be used.

**Note** – To change the parameters that are stored in this file, run the cfg\_sunmctotng script. See "To Install the EventAdaptor Component" on page 12.

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

The following is a checklist of parameters that are 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

- -1 *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

To use your own parameters, type the following command:

./ea-start parameters

After starting the event adapter, the Sun Management Center EventAdaptor is displayed.

#### 4. Type the following information:

- Your Unicenter TNG user name and password
- Your Sun Management Center server name
- The Unicenter TNG server name

#### 5. Choose the host name format.

This name should match the host name format you previously entered for the cfg\_sunmctotng script. See "To Install the EventAdaptor Component" on page 12" for more information.

6. Type the Sun Management Center server port number and, or the Unicenter TNG server DSM trap port number.

These parameters are optional.

#### 7. Select the checkbox of the Alarm State to be ignored.

These parameters are optional.

8. Select 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. The following table describes each alarm.

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.

TABLE 2-1 Sun Management Center Alarms         (Continued)		
Alarm Name	Description	
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.	

9. Click the Launch button in the Sun Management Center EventAdaptor window to start the event adapter.

## Stopping the EventAdaptor

- 1. Become superuser.
- 2. Change to the *SunMC\_base\_directory*.
  - # cd SunMC\_base\_directory/SunMC-TNG/sbin
- 3. Type the following command.

# ./ea-stop

# Using the Application Tasks

When using the Sun Management Center Integration package, you can perform the following tasks:

- Discover Sun Management agents
- View the status of the Sun Management agents
- View Sun Management Center-generated events
- Start the Details application

### To Discover Sun Management Center Agents

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

If Unicenter TNG is already monitoring the host, you must first delete the objects in the WorldView console and re-discover them.

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

- **a.** Select the Network Topology icon The objects are displayed.
- b. Delete the objects.
- 2. Discover the network in the Unicenter TNG WorldView console.
  - a. Select the Unicenter TNG Tools icon.
  - b. Select the Discovery Wizard to discover the network.

**Note** – If you encounter problems discovering the Sun Management Center agents, see "Cannot Discover a Sun Management Center Agent in Unicenter TNG" on page 28.

The Sun Management Center agents and their loaded modules are displayed in the Unicenter TNG WorldView console.

#### c. Select the DomainBrowser icon.

The contents of the DomainBrowser are displayed.

d. Select a node that is a Sun Management Center agent.

For more information on how to discover Sun Management Center agents, refer to the *Unicenter TNG User's Guide*.

## To Discover a Sun Management Center Agent That Is Running on a Port Other Than the Default Port of 161

#### 1. Create a pollset.

A pollset needs to be created in the Unicenter environment for each port on which Sun Management Center could run. For more information on creating pollsets, see the *Unicenter TNG User's Guide*.

#### a. Create a file with the following content.

```
ADDOBJECT="SunMC001" PollSet
BEGIN
interval TNGWV_OT_INT 600 0
timeout TNGWV_OT_INT 10 0
retries TNGWV_OT_INT 2 0
port_number TNGWV_OT_INT 1161 0
getCommunityString TNGWV_OT_STRING "public" 0
setCommunityString TNGWV OT STRING "admin" 0
```

```
retriesInterval TNGWV_OT_INT 0 0
objectFilter TNGWV_OT_STRING "SunMC" 0
hostFilter TNGWV_OT_STRING "*" 0
END
```

Through this file, a pollset with the name "SunMC001" and the port 1161 is created.

b. Run the trix command to load the pollset into Unicenter.

```
trix -r repository-name -u repository-user -p password -f \
path-to-the-pollset-file-created-in-step1
Example:
```

trix -r HRrepository -u user1 -p pass3 -f /pollset\_1161.txt

#### 2. Discover the host.

Discover the host by using standard Unicenter TNG discovery mechanisms.

#### 3. Reclassify the host.

Reclassify the host to the correct Sun host type, if necessary. Refer to the *Unicenter TNG User's Guide* for more information on how to perform the reclassify operation.

Once the reclassify operation has completed, the Sun Management Center agents that are running on that host are automatically discovered in Unicenter.

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

You can view and monitor the status of the Sun Management Center agents from within the Unicenter TNG WorldView console.

**Note** – The alarm severity states/colors for Sun Management Center and Unicenter TNG differ from each other. Each alarm severity state in Sun Management Center has been mapped to the closest counterpart of that severity state in Unicenter TNG. The following table contains the mapping between alarm severity states/colors in Sun Management Center and Unicenter TNG:

 TABLE 2-2 Mapping Between Severity States in Sun Management Center and Unicenter TNG

Sun Management Center Alarm Severity States/Colors	Unicenter TNG Alarm Severity States/Colors
Normal (Green)	Normal (Green)
Caution (Blue)	Warning (Yellow)

Sun Management Center Alarm Severity States/Colors	Unicenter TNG Alarm Severity States/Colors
Alert (Yellow)	Warning (Yellow)
Down (Black)	Critical (Red)
Disabled (Grey)	Critical (Red)
Critical (Red)	Critical (Red)

 TABLE 2-2 Mapping Between Severity States in Sun Management Center and Unicenter TNG (Continued)

- 1. In the Unicenter TNG WorldView console, select the DomainBrowser. This action expands and displays the contents of the DomainBrowser.
- 2. To view and monitor the status of the Sun Management Center agents, select the agent from the expanded list that is displayed in the Unicenter TNG WorldView console window.

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

The Unicenter TNG WorldView hierarchical tree, which can be viewed from the Unicenter TNG window, consists of the following levels:

- 1. Enterprise Management
- 2. Host names
- 3. Calendar, Event, and Station Management
- 4. Messages for each event

Sun Management Center-generated events, such as alarms, are displayed in the Unicenter TNG Console Log window. To view the Console Logs, complete the following steps:

1. In the Unicenter TNG WorldView hierarchical tree, select and expand the Enterprise Managment icon.

The Enterprise Management contents are displayed.

- 2. Select the host that you wish to view.
- 3. Double-click the Console Logs icon.

All alarms from the Sun Management Center application are displayed in the Unicenter TNG Console Log window when you double-click on Console Logs icon.

# Using the Details Application

To view or manipulate the attributes and properties associated with the hosts managed by Sun Management Center software, run a Unicenter TNG task to launch the console window that contains the host detail information. From this window you can view and manage the Sun Management Center categories.

#### To Start the Details Application

**Note** – Before you can run the Details application, you must install the package for launching Details locally on the machine from which the Unicenter TNG WorldView console is run. See "To Install the HostDetails Component" on page 14.

- 1. Select a node of the installed Sun Management Center agent in the Unicenter TNG WorldView console window.
- 2. Press mouse button 3.
  - a. In the window that is displayed, select the Sun Management Center Console. The Java<sup>™</sup> Security window is displayed.
- 3. In the Java Security window, click the Grant button.

The Sun Management Center Server Name panel is displayed.

4. Type the Sun Management Center server name or IP address for the server that is monitoring the node. Click OK.

A scaled-down version of the Sun Management Center login panel is displayed.

- 5. Type your login ID and password.
- 6. Click the Login button.

The details window is displayed.

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

#### CHAPTER 3

# Installation and Application Troubleshooting

This chapter addresses potential scenarios in which troubleshooting might be necessary. This troubleshooting section covers both installation and software application issues.

## Installation Troubleshooting

This section addresses problems that might occur during the installation process.

### Error Messages Display When Installing Packages

When you install the SUNWescad and SUNWescas packages, the following error messages might be displayed:

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 either of these error messages are displayed, verify the following information:

- Unicenter is installed.
- Environment variables \$CAIGLBL0000 and \$AGENTWORKS\_DIR exist.

### SUNWescas Package Installation Does Not Install After Substantial Period of Time

If the installation of the SUNWescas package has not completed after several hours, type the following commands, to ensure that all Unicenter processes are working:

```
# unifstat
# awservices status
```

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

# **Application Troubleshooting**

This section addresses problems that might occur while using the Sun Management Center Unicenter TNG<sup>™</sup> application and tasks.

# Cannot Discover a Sun Management Center Agent in Unicenter TNG

If you cannot discover the Sun Management Center agent when the SUNWescad and SUNWescas packages have been installed, type the following command:

```
# 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.

Verify the following information:

- The simple MIB-II module or MIB-II instrumentation module has been loaded on the Sun Management Center agent.
- If the Sun Management Center agent is not running on the default port, 161, make sure you followed the procedure to discover a Sun Management Center Agent. See "To Discover Sun Management Center Agents" on page 21.
- If the Sun Management Center platform agents cannot be discovered, make sure the event adapter is running and pointing to the correct Unicenter DSM port.

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

To ensure that Unicenter TNG and all related processes are working, type the following commands:

```
# unifstat
# awservices status
```

```
28 Sun Management Center CA Integration Package User's Guide for Unicenter TNG • May 2003
```

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

If the correct port is being used, and the agent status still does not display, try restarting the EventAdaptor. See "To Start the EventAdaptor" on page 19.

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

#### EventAdaptor Does Not Work

If the EventAdaptor does not work, verify the following information:

- Sun Management Center console is installed with the EventAdaptor.
- Java<sup>TM</sup> environment, the JAVA HOME variable, is correct.
- The SUNWescad and SUNWescas packages are installed correctly.
- Unicenter TNG works.
- Your user name and password for Sun Management Center are correct.

## Details Application Does Not Work

If the Details application does not work, verify the following information:

- Sun Management Center console is installed with SUNWescah.
- Java environment variable, JAVA\_HOME, is set correctly in the environment of the web browser from which Unicenter WorldView is launched.

For specific instructions on how to set the Java environment variables, see "Java Environment Variables and Path" in the *Sun Management Center 3.5 Installation and Configuration Guide*.

### Load or Unload Module Information Does Not Display in Unicenter TNG WorldView Console

If the Load or Unload module information does not display in the Unicenter TNG WorldView console, check the following information:

Warning messages that are displayed about the module load and unload function. If the following warning message displays 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:

Chapter 3 • Installation and Application Troubleshooting 29

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

To ensure that your Sun Management Center server's trap handler is working, and that you can restart it, type the following commands:

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

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

 Exceptions displayed. Restart the EventAdaptor. See "To Start the EventAdaptor" on page 19.

# Log File Not Created When Starting EventAdaptor

The following error message might be displayed if certain conditions exist:

java.io.FileNotFoundException: XXX.log

For example:

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

For details on the SunMCtoTngAdaptorMain.cfg default location. See "To Install the EventAdaptor Component" on page 12.

# Error Messages Are Displayed When Starting 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.

# Unicenter TNG Cannot Receive Alarms from EventAdaptor

If you notice that valid alarms are missing, or cannot be received, follow these steps:

- Verify that the Unicenter TNG SNMP gateway, aws\_snmp, and trap MUX, aws\_listen, are working.
- Verify that no other process is using port number 161.