



# **Converged Services Platform**

**SwitchKit**

**Simple Network Management Protocol User's Guide**

Release 8.3.1 Controlled Introduction

January 2005

# Important Notice

---

## **Disclaimer**

The contents of this document are subject to change without notice; therefore, the information presented herein shall not be construed as a commitment or warranty.

Excel Switching Corporation shall not be liable for any technical or editorial errors or omissions contained herein or for incidental or consequential damages resulting from the performance, furnishing, reliance on, or use of this material.

## **Patents**

Certain equipment and software described in this document is protected by issued and pending U.S. and foreign patents.

All products and services are trademarks or registered trademarks of their respective manufacturer.

## **Copyright**

This document contains confidential and proprietary information protected by copyright. All rights reserved. Copying or other reproduction of all or parts of this document is prohibited without the permission of Excel Switching Corporation.

Copyright 2005 by Excel Switching Corporation.

## **Technical Support**

800-541-7002 (within the United States)  
508-862-3366 (international)  
508-862-3351 (Fax)

# Comments and Suggestions

---

Customer satisfaction is extremely important to Excel. We value your comments and suggestions about how we could improve this documentation. Please complete and fax this form to 1-508-862-3020 (Attention: Technical Publications Manager).

Are the hyperlinks in the electronic copies useful?

What tasks are you performing most often when you have to refer to the documentation?

Do the steps in the documentation match the steps you take when using the CSP? If not, explain:

Is the most important information prominent, or do you have to dig for it?

Does the documentation help you to make specific decisions about how to use our products?

What additional graphics would be useful in helping you to understand how to use our products?

Is the documentation visually appealing?

Is terminology consistent and industry-standard?

How could we re-organize our documentation to make it easier for you to use?

Could we change the table of contents to help you find information more quickly?

How else can we make our documentation more useful for you?

Was the document in your preferred language?

Was the document readily available?

---

Please rate the following:    5 = Excellent            4 = More than satisfactory  
   3 = Satisfactory        2 = Less than satisfactory  
   1 = Unsatisfactory    N/A = Not Applicable

Ease of Use	
Level of Detail	
Clarity	
Organization	
Completeness	
Technical Accuracy	
Quality of Translation	
Appearance	

# About this Information Product

---

## **Purpose**

This documentation provides guidelines for using the Excel Converged Services Platform (CSP).

## **Safety Labels**

The following Safety labels may appear in this information product to alert customers to avoidable hazards. The following are in the order of priority:



### **DANGER**

*Danger indicates the presence of a hazard that will cause death or severe personal injury if the hazard is not avoided.*



### **WARNING**

*Warning indicates the presence of a hazard that can cause death or severe personal injury if the hazard is not avoided.*



### **CAUTION**

*Caution indicates the presence of a hazard that will or can cause minor personal injury or property damage if the hazard is not avoided.  
Caution can also indicate the possibility of data loss, loss of service, or that an application will fail.*

## Conventions used

This information product uses the text conventions explained below. In addition, hexadecimal numbers are preceded by a zero and small “x.” For example, the decimal number 15 is represented in hexadecimal as 0x0F.

Convention	Description
...	A horizontal ellipsis in an API message indicates fields of variable length.
:	A vertical ellipsis in an API message indicates that a block of information is repeated or is variable.
<i>n</i>	The letter <i>n</i> is a generic placeholder for a number.
Sans serif mono space	Indicates a command name, option, input, output, non-GUI error, and system messages.
<i>Sans serif monospace italic</i>	Indicates a parameter name in an input message. Example: move *.dot a: c: -s The -s is the parameter.
<i>Serif italic</i>	Indicates the name of a book, chapter, path, file, or API message. Example: <i>UserDirectory/Config.exe</i>
<b>Boldface</b>	Indicates keyboard keys, key combinations, and command buttons Example: <b>Ctrl+Alt+Del</b>
<b>Sans serif boldface</b>	Identifies text that is part of a graphical user interface (GUI). Example: Go to the <b>Configuration</b> menu and select <b>Card-&gt;Span Configuration</b>

## Industry Standards

This documentation contains many references to ITU-T standards. Originally, the CCITT made international standards for modulation, data transfer, and data compression protocols. The CCITT later became the ITU-T, or International Telecommunications Union Telecommunication Standardization Sector. CCITT standards are synonymous with ITU-T standards. For more details on these standards, go to [www.itu.org](http://www.itu.org).

This documentation also refers to American National Standards Institute (ANSI) standards. ANSI administers and coordinates the U.S. voluntary standardization and conformity assessment system for the telecommunications industry. More details on these standards may be viewed at [www.ansi.org](http://www.ansi.org).

## Related Training

Excel offers a variety of training courses for the Excel CSP. Instructors present a comprehensive description of hardware and software components and their interaction. Laboratory sessions provide hands-on experience for developing efficient, robust telecommunication.

For information, call 1-508-862-3000 and ask for a Training representative.

## Contacting Technical Support for Hardware Failures

To expedite the process of returning defective hardware, please provide the serial number of the card and a shipping address.

Technical Support investigate to determine whether a card may be defective, or if it is instead exhibiting a software issue that can be confused as a hardware problem. An example of an indication of a hardware defect would be an LED that fails to display any status. Examples of problems that do not indicate hardware defects include the following:

- Software faults (probably a software defect issue)
- A card that arrives “dead” (probably a dip switch set incorrectly)
- A card not coming into service during software downloading (probably a TFTP issue)
- Spans not framing (probably a wiring issue)
- Power card LEDs blink when no other cards are in the chassis. This is normal.

### **Recommendations for System Supportability**

The following are key elements we have identified across our customer base that have made them successful in their development and deployment of solutions incorporating Excel products. We are passing these onto you as suggestions to consider when designing and building solutions. Not all of these suggestions are appropriate for all customers, but we hope you consider them carefully.

#### **If Your Solution Requires High Availability:**

- Order redundant configurations
- Purchase onsite spares
- Follow the limitations for power, cards, and configurations as noted in the Excel Product Documentation
- Have your developers and technicians trained on the Excel platform
- Enable logging in your application so that problems can be diagnosed and corrected
- Develop test scripts, environments, and systems that best simulate the environment of intended use for each release and each fix you deliver to your customers
- Implement Software Configuration Management to track every revision and change that you release to your customers
- Review your call flows and APIs with Excel Support to identify opportunities to optimize your solution with regard to our product capabilities
- Purchase a support agreement from Excel

If you are running a network with Excel Products in them, in addition to the above suggestions, also:

- Have backup systems for power
- Review your network design with Excel Support to identify opportunities to optimize your solution with respect to our product capabilities

- Design your network to allow for alternative routes and logical assignments to more quickly address any service affecting issues.
- Control your system environment and configuration changes
- Plan your network management and monitoring strategy
- Ensure that your technicians are trained in all network elements and interfaces
- Monitor your network every day, around the clock.
- Have the ability to get someone to every site without delay
- Have a complete list of contact information for the support arm of each network element you deploy
- Provide for supplier remote access if required to diagnose and resolve an issue

All of us at Excel want you, our valued customer, to be successful. For additional information regarding our support services and how we can work more closely together for our mutual success, contact us at our support website at <http://support.ExcelSwitching.com> or contact a sales representative at [sales@ExcelSwitching.com](mailto:sales@ExcelSwitching.com).



# Contents

---

## 1 SNMP Introduction

SNMP Agent Overview .....	1-2
Excel platform SNMP Agent MIB .....	1-7
SNMP Components .....	1-12
Viewing CSP Alarms in HP Openview .....	1-15

---

## 2 Installation

Installing the SNMP Agent on Windows.....	2-2
Verifying the SNMP Installation on Windows.....	2-3
Installing the SNMP Agent on a Solaris SPARC.....	2-6
Verifying the SNMP Installation on a Solaris SPARC.....	2-9
Uninstalling the SNMP Agent on Solaris SPARC .....	2-12
Uninstalling the SNMP Agent on Windows .....	2-13
SNMP Configuration: Valid Queries.....	2-14

---

## 3 Troubleshooting

Troubleshooting the SNMP Agent on Windows .....	3-2
Troubleshooting the SNMP Agent on a Solaris SPARC .....	3-6

---

## 4 System Customization

Changing Destination of Notifications on Windows.....	4-2
Adding a Destination for Notifications on Windows.....	4-5
Changing the Password on Windows.....	4-9
Editing Fields in Configuration File on Windows.....	4-11



Changing the Notifications Version.....	4-13
Changing the Destination of Notifications on Solaris SPARC.....	4-15
Adding a Destination for Notifications on Solaris SPARC.....	4-18
Changing the Password on Solaris SPARC.....	4-22
Editing Fields in Configuration File on Solaris SPARC.....	4-24



# 1 SNMP Introduction

**Purpose** This user guide describes how to install the Simple Network Management Protocol (SNMP) Agent for use with EXS SwitchKit. It also describes notifications specific to the Excel platform that are sent from the Excel platform via SNMP to the destination host. The Excel platform SNMP Agent was developed using the SNMP Research Emanate® Subagent Development Kit, a product of SNMP Research International, Incorporated (SRI).

**Important!** In some instances, output from SRI tools refers to notifications as *traps*.

# SNMP Agent Overview

---

**Overview** The SNMP User's Guide describes the SNMP Agent for use with the Low-Level Communicator (LLC) of EXS SwitchKit. Throughout this document, the software is referred to as the SNMP Agent. The SNMP User's Guide provides a brief introduction to SNMP, but it assumes that you have a basic knowledge of SNMP and network management.

**SNMP** The SNMP provides a way to control and monitor a variety of equipment using one network management protocol. To do this, SNMP uses a number of common Management Information Bases (MIBs) and some company-specific MIBs to allow vendors to provide specific information about the equipment being managed. A MIB is a collection of objects that can be accessed via SNMP. Excel includes a private MIB on your installation CD that provides information about the Excel platform. After you install the SNMP software, you can find the `csp.mib` in `srconf/agt/csp.mib`.

**SNMP History** In May 1990, the Internet Engineering Task Force (IETF) published SNMPv1 in RFC1157. The security administration framework of SNMPv1 is based on the community model. This algorithm allows the agent and Network Management Station (NMS) to agree on a community string that is passed along for authentication, but this string is not encrypted or in any way protected. Following its publication, the IETF immediately formed a new working group to update SNMP to offer a more robust security administration framework. The working group was unable to settle on one standard, so two different standards emerged: SNMPv2c and SNMPv2. But neither of these standards addressed the security issue.

The NOTIFICATION-TYPE replaced the TRAP-TYPE from SNMPv1 and a new type of notification named INFORM was introduced to implement reliable event announcement between Network Management Stations. In 1998, the IETF published SNMPv3, which offers the features of SNMPv2c and user-based security. This security algorithm attempted to incorporate the best ideas of the SNMPv2c variants that had emerged in the mid-1990s.

**Excel's SNMP Compliance** The Excel SNMP MIB is defined according to RFC 2578 (Structure of Management Information (SMI) for Version 2 of SNMP), while the Excel SNMP Traps are defined in both RFC 1215 (version 1) format and RFC 1902 (version 2: see NOTIFICATION-TYPE).

The current release of the Excel SNMP Agent supports the ability to receive events and alarms from the Excel platform, and then create and distribute these as SNMPv1 notifications or SNMPv2c notifications. By default, SNMPv2c notifications are sent. You can edit the `snmpd.cfg` file so that SNMPv1 notifications can be sent. See *System Customization (4-1)*. Part of the installation is the configuration file, `snmpd.cnf`, which defines the community strings and passwords that are currently valid for this agent. By default, any NMS running SNMPv1, SNMPv2c, or SNMPv3 can perform get or get-next queries using the community string `public`. By default, any NMS running SNMPv1, SNMPv2c, or SNMPv3 can perform set queries using the community string `CSPAdmin`.



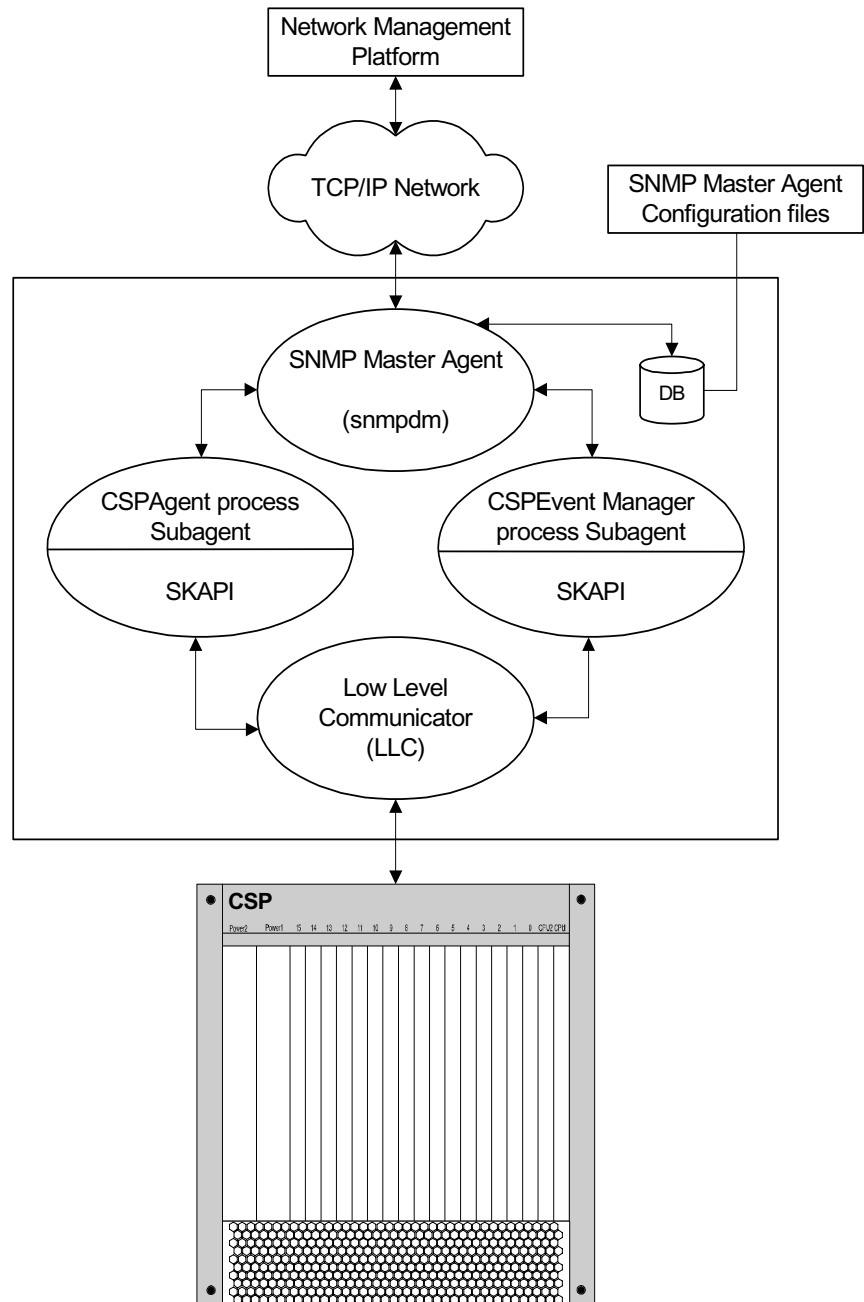
### CAUTION

*Do not run the Network Management System (NMS) and the SNMP Agent software on the same system for any reason. As this diagram shows, the NMS and the Host system are separate physical systems connected by the network.*

*Do not run the SNMP Agent on a Windows system that has or ever had HP OpenView installed.*

The following shows the flow of information between a Network Management System and devices being managed:

**Figure 1-1 SNMP Setup Diagram**



SNMP\_Architecture\_051401.vsd

Initial requests for data are generated by the Network Management System (HP OpenView in this example). SNMP requests travel to the destination system (the host system in this example) where the SNMP

master agent (snmpdm) receives them. The master agent sends the SNMP requests to the appropriate subagent (either CSPAgent process or CSPEventManager process) where the SNMP message processing occurs. Based on the information contained in the request, the subagent process either processes the request itself or requests information from the Low Level Communications (LLC).

Completed SNMP responses, successful or not, are routed back through the SNMP master agent (snmpdm) which is responsible for sending the response message back to the originating system.

When an event occurs on either the switch or host system that warrants outside notification, the CSPEventManager process subagent creates an SNMP notification and sends it to the master agent. The master agent then forwards the SNMP notification to the configured destination(s).

### Supported Operating Environments

#### EXS SwitchKit Run-time Environment

The table that follows shows the operating systems and versions supported by EXS SwitchKit in a run-time environment.

**Table 1-1 Operating System Requirements**

<b>Operating System</b>	<b>EXS SwitchKit is supported on...</b>
Solaris	Version 8.0 for the SPARC platform
Windows/NT	Version 4.0, service pack 5 or greater
Windows/2000	Windows/2000

**Hardware Support**

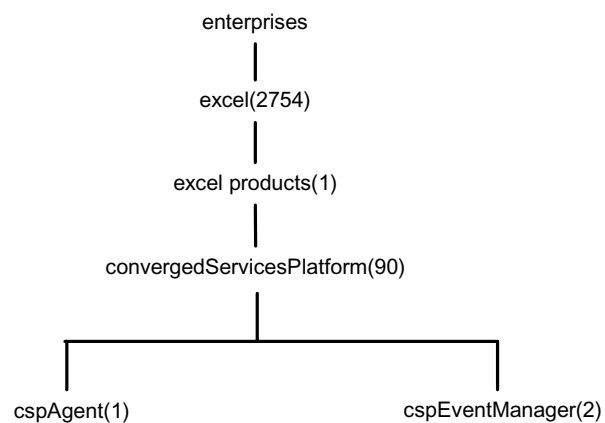
All of the cards included with this Excel platform release are recognized by the SNMP Agent and have alarms associated with them. When you do a "get" of cspCardType, you generate a response, for example ds3 (31). See the file csp.mib. Common card groups within cspHardware contain objects representing the card. Highly specialized cards, such as: the Matrix Controller Series 3, EXNET-ONE, T-ONE, E-ONE, DS3, SS7, ISDN and VDAC; contain specific groups within the cspProtocol group.

## Excel platform SNMP Agent MIB

---

**Overview** For the Management Information Bases (MIBs), all objects are organized into two major groups underneath the node, convergedServicesPlatform (excelProducts 90). The cspAgent group contains all of the notifications, objects, and tables associated with the CSPAgent process. The cspEventManager group contains all of the notifications, objects, and tables associated with the CSPEventManager process.

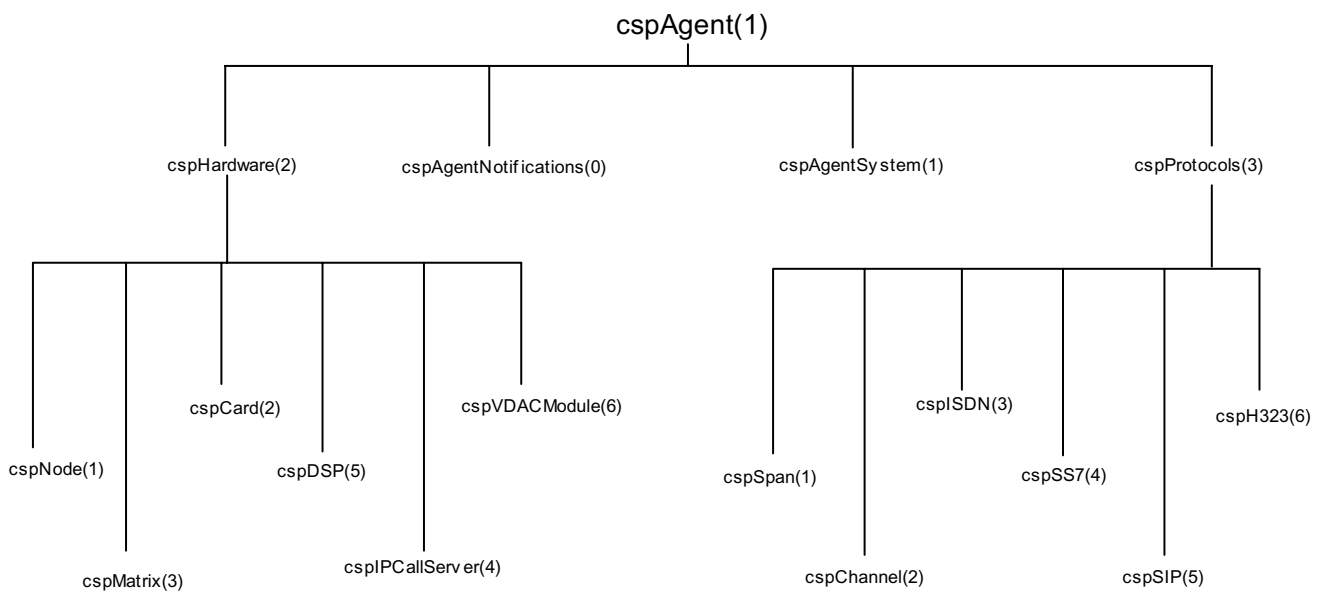
**Important!** In this user guide, references to CSPAgent or CSPEventManager (note the capitalization) indicate the executable files. References to cspAgent or cspEventManager indicate the ASN.1 group names in the csp.mib file. In some instances, output from SNMP tools refers to notifications as *traps*.





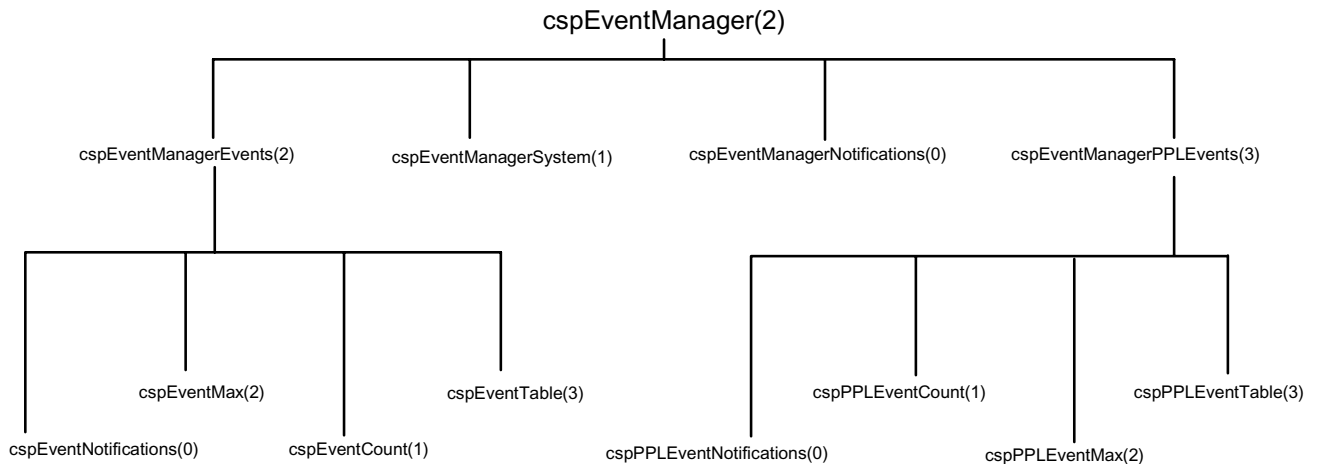
**cspAgent** This branch is divided into four groups:

Group	Description
cspAgentNotifications(0)	For all notifications sent by the CSPAgent process
cspAgentSystem(1)	For agent configuration, the only object currently present is cspAgentSystemVerbose
cspHardware(2)	Objects describing proprietary CSP hardware (includes chassis, cards, dsps, and matrix cards.)
cspProtocols(3)	Objects describing public/standard protocol stacks on CSP hardware. (such as, T1, ISDN, and SS7.)



**cspEventManager** This branch is divided into four groups:

Group	Description
cspEventManagerNotifications(0)	For the connection notifications sent by the CSPEventManager process.
cspEventManagerSystem(1)	For event manager configuration. Currently, the only object present is cspEventManagerSystemVerbose.
cspEventManagerEvents (2)	For notifications and cspeventTable used to process most switch-initiated events.
cspPPLEventManagerEvents(3)	For notifications and pplEventTable used to process the <i>PPL Event Indication</i> message



**One-based Addresses**

Zero-based indexing of tables is not allowed because of the constraint of the ASN.1 syntax in which all SNMP MIBs are defined. All addressing on the Excel platform is zero-based. All addressing information represented as an index in the MIB is one-based, meaning that it has been converted from the zero-based representation on the switch to the one-based MIB representation by adding a one. All index objects in the cspAgent group are represented this way. In other words, if you would like to find out card information about the card in slot 0 on node 5, you would submit a command similar to the following, with the specific indices 6.1:

```
[c:\]getone -v2c 135.119.36.107 public cspCardType.6.1
cspCardType.6.1 = dsp_one(21)
```

In the `cspEventManager` group, addressing of switch entities is handled mostly as variables bound to notifications. As such, these addresses are zero-based because they are not table indices. When the card in slot 0 on node 5 comes into service, the `cspCardUp` notification would contain the following information:

```
Received SNMPv2c Trap:
Community: public
From: 127.0.0.1
sysUpTime.0 = 30773
snmpTrapOID.0 = cspCardUp
cspEventNode = 5
cspEventSeverity = informative(1)
cspEventAddressType = slot(3)
cspEventAddressData1 = 0
cspEventStatus = cardInService(5)
```

### Event Handling

The SNMP uses User Datagram Protocol (UDP) as its transport protocol. UDP is not a connection-based, guaranteed delivery network protocol. Therefore, notifications are not guaranteed delivery. So notifications are not always the most reliable way to find out about extraordinary events occurring on a device. Because of this, all switch events are logged and archived by the `CSPEventManager` process. All switch events are logged to a file named, `CSPEventManager.log`. The file is created in the directory: `$(SK_LOG_DIR)`, if defined. If `SK_LOG_DIR` is not defined, this log is created in the directory from which the `CSPEventManager` process is executed. This log is managed in a similar way to `SwitchKit` logs. All switch events are archived to either the `cspEventTable` or the `cspPPLEventTable`. The `cspPPLEventTable` archives all occurrences of PPL Event Indication messages. The `cspEventTable` archives all other switch-initiated messages that are defined as notifications under `cspEventNotifications` (`cspEventManagerEvents 0`). Both tables have associated with them a count object and a max object. The count object indicates how many events have been archived in the table at a given time. Count objects are ideal for event polling. The max object indicates the maximum number of events that are archived before the table index rolls over. The max object is a maximum of 500, but is read/writable, and you can set it to as low as ten. You can set this object by issuing the following command at the command line:

```
setany -v2c localhost cspAdmin cspEventMax.0 -i 300
```

### Dynamic Addressing Scheme

Addressing information on the switch is handled in the EXS API by a dynamic addressing scheme using Address Information Blocks (AIBs). When event-driven messages arrive from the Excel platform, entities

involved in the event are addressed by the AIB. The AddressType textual-convention is an attempt at representing this dynamic scheme in the static environment of ASN.1. AddressType is defined in csp.mib. The AddressType enumerates all of the possible entities, including:

- Some hardware
- Some software that is addressed by alarms
- PPL Event Indications
- Card Status Reports
- Server Status Change messages

An AddressType object is bound to notifications and is archived in the event tables. The address type object is always accompanied by three data objects. The value of these data objects depends on the value of the AddressType Object. For example, in the cspCardUp notification above, cspEventAddressType equals slot(3). The definition of AddressType in csp.mib contains a table that explains the meaning of each data object. For slots, cspEventAddressData1 represents the zero-based slot number.

In the following example, the cspPPLEventAddressType is ss7Link(9). In the AddressType table, it implies that cspPPLEventAddressData1 is the SS7 Stack and cspPPLEventAddressData2 is the SS7Link. Because SS7 Links need only two data objects to represent the address, the third data object is unused and initialized to (-1).

```
Received SNMPv2c Trap:
Community: public
From: 127.0.0.1
sysUpTime.0 = 191067
snmpTrapOID.0 = cspPPLEvent
cspPPLEventNode = 5
cspPPLEventComponentID = ss7mtp3_lsac(46)
cspPPLEventID = 1
cspPPLEventDescription = PPLEventIndication Evt=0x 1 on
    LinkID = 1, StackID=0, Comp=0x2E: MTP3 LSAC: Link
    Activation Failure
cspPPLEventAddressType = ss7Link(9)
cspPPLEventAddressData1 = 0
cspPPLEventAddressData2 = 1
cspPPLEventAddressData3 = -1
```

To obtain a full list of the CSP MIB objects, you can use your Network Management Station to do a MIB walk.

## SNMP Components

---

**Overview** The SNMP Agent enables you to monitor the Excel CSP using SNMP. You can distribute events and monitor card status across the enterprise.

**SNMP Components** The following tables show the executables, tools, and files required to provide the management and monitor functions.



### CAUTION

*Do not install the SNMP Agent on a system that has or ever had HP OpenView Network Node Manager installed.*

MIB File	Description	Default Directory
csp.mib	Excel Converged Services Platform private MIB.	winnt:snmp\srconf\agt Unix:/etc/srconf/agt

SNMP Module	Description	Default Directory
CSPAgent.exe	Excel-developed process. Responds to requests for objects under the cspAgent branch in the csp.mib. Generates notifications defined under the cspAgent branch.	Windows: snmp\srconf\bin Unix: /etc/srconf/exe
CSPEventManager.exe	Excel-developed process. Responds to requests for objects under the cspEventManager branch. Generates notifications defined under the cspEventManager branch.	Windows: <i>snmp\srconf\bin</i> Unix: /etc/srconf/exe
snmpdm.exe	SNMP master agent purchased from SNMP Research. This process receives SNMP requests from an end user (possibly an NMS) and routes the request to the appropriate subagent process (in this case either CSPAgent or CSPEventManager). It routes SNMP responses and SNMP notifications to the appropriate destinations.	Windows: <i>snmp\srconf\bin</i> Unix: /etc/srconf/exe
msnsaagt.exe	Third party purchased process. Responsible for processing all MIB-II queries in Windows.	Windows: <i>snmp\srconf\bin</i>

SNMP Module	Description	Default Directory
mib2agt.exe	Third party purchased process. Responsible for processing all MIB-II queries in Solaris SPARC.	Unix: /etc/srconf/exe

SNMP Tools	Description	Default Directory
getmany.exe	Third party purchased component. Tool used by customers to perform a mib-walk on either sub-agent.	Windows: snmp\srconf\bin\exe  Unix: /etc/srconf/dir
getnext.exe	Third party purchased component. Tool used by customers to send a get-next SNMP-PDU to either sub-agent. Specifying a node number larger than any present in the system may result in a query timeout. This can be avoided by specifying a valid node number, or using the timeout parameter (-timeout 30) when executing getnext.exe.	Windows: snmp\srconf\bin\exe  unix: /etc/srconf/dir
getone.exe	Third party purchased component. Tool used by customers to send a get SNMP-PDU to either sub-agent.	Windows: snmp\srconf\bin\exe  unix: /etc/srconf/dir
setany.exe	Third party purchased component. Tool used by customers to set SNMP information accessible from CSPAgent.	Windows: snmp\srconf\bin\exe  Unix: /etc/srconf/dir
traprcv.exe	Third party purchased component. This process is used to receive SNMP notifications generated by the CSPAgent and CSPEventManager on a host. It is typically used to check the system and make sure notifications can be received. It would be used only if an NMS was unavailable to receive notifications.	Windows: snmp\srconf\bin\exe  Unix: /etc/srconf/dir

Configuration Files	Description	Default Directory
snmpd.cnf	Configuration file used by the SNMP master agent. Contains SNMP notification destination information and user security information. Refer to the <i>System Customization (4-1)</i> for detailed information on how to update this file.	Windows:snmp\srconf\agt  Unix:/etc/srconf/agt

Configuration Files	Description	Default Directory
snmpinfo.dat	Read-only configuration file used by the SNMP master agent. Contains information on available MIB objects. <b><i>Do not change this file!</i></b>	Windows:snmp\srconf\mgr Unix:/etc/srconf/mgr
mgr.cnf	snmpdm configuration file. <b><i>Do not change this file.</i></b>	Windows:snmp\srconf\mgr Unix:/etc/srconf/mgr
hpov__csp.conf	A configuration file that configures alarms in HP Openview Network Node Manager. <b><i>Do not change this file!</i></b>	Windows:snmp\srconf\mgr Unix:/etc/srconf/mgr

### Valid Command Line Arguments

The SNMP Agent supports one command line argument which prints out version information:

-v

### Assumptions

Because the SNMP components are EXS SwitchKit applications, they require a connection to the LLC to receive information, events, and alarms from the CSP.

The SNMP master agent (snmpdm.exe) and the SNMP subagent processes must reside on the same physical system. There is no such requirement for the SNMP subagent components and the LLC.

Do not run the Network Management System and the SNMP software on the same system for any reason. The NMS and the Host system are separate physical systems connected by the network.

## Viewing CSP Alarms in HP Openview

---

**Purpose** If you are using HP Openview Network Node Manager (NNM) to manage your CSP, this procedure will help you format the alarms.

By default, NNM does not print out notifications to the alarm viewer log window. If you want to enable this printout, you must update the *trapd.conf* file that is part of NNM. You can do this by changing the configuration through the **Event Configuration** dialog box for each notification. Excel has provided a configuration file that can be installed in the NNM so you do not need to configure each notification individually.

**Before you begin** Start NNM. Make sure that the bin directory of the NNM installation is in your path.

**Steps for Viewing and Formatting Alarms** The steps below describe how to load a MIB and install a configuration file so that you can view alarms.

---

**1** From the **Options** menu, go to **Load** → **Unload MIBs: SNMP**.

---

**2** Click **Load**.

---

**3** Open *your installation/snmp/srconf/agt/csp.mib*.

---

**4** Get to a command line prompt.

---

**5** Change directory to *your installation./snmp/srconf/mgr*.

Enter the following commands:

```
xnmevents -replace hpov_csp.conf
xnmevents -event
END OF STEPS
```

---





## 2 Installation

**Purpose** This chapter contains the procedures for the installation of the SNMP Agent on Windows and Solaris SPARC systems.

## Installing the SNMP Agent on Windows

---

**Purpose** This procedure describes the installation of the SNMP Agent on a Windows system.

**Before you begin** EXS SwitchKit must be installed before you start the SNMP installation. Please refer to the installation instructions in the *EXS SwitchKit Installation and Maintenance Guide*.

If you have a previous version of the SNMP Agent installed on your system, you must first remove that installation with the Add/Remove Programs utility under the Control Panel.

### Installing SNMP on Windows

To install the SNMP Agent, follow the steps below:



#### CAUTION

*You must reboot your system after the installation in order to run all SNMP Agent components properly.*

---

- 1** Log on to your target machine with an administrative account.  

---
- 2** Insert the EXS SwitchKit Installation CD. In the folder: */snmp/windowsnt*; double-click the file *cspSnm.exe* to start the installation. During the installation, the following environment variables are created on your system:
  - SR\_MGR\_CONF\_DIR
  - SR\_AGT\_CONF\_DIR
  - SR\_BIN\_CONF\_DIR

---
- 3** Refer to the verification procedures after the installation is finished.  

---
- 4** Reboot your machine.

END OF STEPS

---

## Verifying the SNMP Installation on Windows

---

**Purpose** This procedure describes the verification of your SNMP installation on a Windows system.

**Before you begin** EXS SwitchKit must be installed and the LLC needs to run. Refer to the *EXS SwitchKit Installation and Maintenance Guide* for further information. In some instances, output from SNMP tools refers to notifications as *traps*.

**Installation Verification on Windows** To verify your installation follow the steps below:

- 
- 1 To verify that the ENANATE® Master Agent installed successfully, open the *snmpdm.out* file with a text editor. The file is located in your installation directory, which by default is *C:\Program Files\Excel Switching Corporation\SNMP\srconf\bin*.

The first entry in the file should read as follows:

```
# SNMP EMANATE Master Agent service installed  
successfully.
```

If you don't see this entry, refer to the troubleshooting section and see *No snmpdm.out After Installation (3-4)*

---

- 2 Start the Trap Receive program by doing one of the following:
  - Click **Start**→**Programs**→**Excel SNMP**→**Trap Receive**
  - Open Windows Explorer and go to your installation directory, which by default is: *C:\Program Files\Excel Switching Corporation\SNMP\srconf\bin*. Double-click *traprcv.exe*. A new window opens with the following message:

```
# Waiting for traps.
```

If you don't see this message, refer to the troubleshooting section.

---

- 3 Start the cspAgent by doing one of the following:
  - Click **Start**→**Programs**→**Excel SNMP**→**Excel CSPAgent**

- From the same directory, double-click *cspAgent.exe*. If the process is started successfully, the following notifications appear in the **traprcv** window:

```
Received SNMPv2c Trap:
Community: public
From: 127.0.0.1
sysUpTime.0 = 336668
snmpTrapOID.0 = cspAgentMasterAgentConnect
```

```
Received SNMPv2c Trap:
Community: public
From: 127.0.0.1
sysUpTime.0 = 336673
snmpTrapOID.0 = cspAgentLLCConnect
```

---

**4** Start the *cspEventManager* by doing one of the following:

- Click **Start**→**Programs**→**Excel SNMP**→**Excel CSPEventManager**
- From your installation directory, by default *C:\Program Files\Excel Switching Corporation\SNMP\srconf\bin*, double-click *CSPEventManager.exe*. If the process is successfully started, the following notifications appear in the **traprcv** window:

```
Received SNMPv2c Trap:
Community: public
From: 127.0.0.1
sysUpTime.0 = 356816
snmpTrapOID.0 = cspEventManagerLLCConnect
```

```
Received SNMPv2c Trap:
Community: public
From: 127.0.0.1
sysUpTime.0 = 356820
snmpTrapOID.0 = cspEventManagerMasterAgentConnect
```

---

**5** Open a **Command Prompt** window and type the following:

```
# cd C:\Program Files\Excel Switching Corporation
  \SNMP\srconf\bin
# getmany -v2c localhost public cspCardType
```

This indicates that you can communicate with the CSP and see information pass back from the CSP. The output from this command should be as follows:

```
cspCardType.6.1 = dsp_one(21)
cspCardType.6.2 = t_one16_span(24)
```

---

```
cspCardType.6.4 = mfdsp(3)
cspCardType.6.5 = e_one16_span(25)
cspCardType.6.7 = j_one16_span(30)
cspCardType.6.9 = ss7Series3(113)
cspCardType.6.10 = ss7Series3(113)
cspCardType.6.16 = exnet_one(84)
cspCardType.6.17 = lowerFanTray(248)
cspCardType.6.19 = powerSupply(240)
cspCardType.6.20 = midplane(250)
cspCardType.6.21 = ex_cpuIO(243)
cspCardType.6.22 = ex_cpuIO(243)
cspCardType.6.33 = matrixControllerSeries3(115)
cspCardType.6.53 = e_one120ohmStandbyIO(229)
cspCardType.6.54 = e_one120ohmRedundantIO(226)
cspCardType.6.57 = ccsIOSeries3(216)
cspCardType.6.58 = ccsIOSeries3(216)
```

END OF STEPS

---

**Reference** You can now change the destination of the notifications, the Structure of Management Information (SMI) version of the notification sent or change the community string, see *System Customization (4-1)*.

# Installing the SNMP Agent on a Solaris SPARC

---

**Purpose** This procedure describes the installation of the SNMP Agent on a Solaris SPARC system.

**Before you begin** If an SNMP Agent is already installed, you must first uninstall it before continuing. Please refer to the procedure *Uninstalling the SNMP Agent on Solaris SPARC*. If you are not sure if there is a previous version installed, check for one with the following command:

```
> /etc/srconf/exe/CSPAgent -v
```

If this command works, then there is an SNMP agent already installed. If `snmpdx` process or other SNMP processes are running, then stop the processes and uninstall them.

EXS SwitchKit must be installed and the LLC needs to run. Refer to the *EXS SwitchKit Installation and Maintenance Guide* for further information.

## Installing SNMP on Solaris SPARC

To install the SNMP Agent, follow the steps below:

---

**1** Log in as user root.

---

**2** Go to */etc directory*.

```
mkdir srconf
```

---

**3** Go to */etc/srconf*

```
copy cspSnmp.tar from media to this directory
```

---

**4** Extract files

```
tar -xvf cspSnmp.tar
```

---

**5** Run the installation script with the command:

```
#!/solarisInstall.sh
```

If you try to run this script and you are not logged in as root, the following message is displayed.

```
# Need to be root to execute this script
```

If this message appears, log in as root and try the command again.

- 6 If you try to run the script and the *tar* file is not found, the following message is displayed:

```
# Installation media not found
```

- 7 The following lists the output of the installation script with comments to describe what occurs during the installation:

Message Displayed	Meaning
Stopping Native SNMP daemon	This stops the native snmp daemon.
Stopping MIBII daemon	This stops the native mib II daemon.
Emanate SNMP daemon not running	This verifies the excel snmp daemon is not running.
mib2agt daemon not running	This verifies the excel mibII daemon is not running
CSPAagent not running	This verifies CSPAagent process is not running.
CSPEventManager not running	This verifies CSPEventManager process is not running.
\etc\sronf directory not found. Creating it.	This creates the \etc\sronf directory.
\etc\sronf\agt directory not found. Creating it.	This creates agt subdirectory and populates it.
\etc\sronf\exe directory not found. Creating it	This creates exe subdirectory and populates it.
\etc\sronf\mgr directory not found. Creating it.	This creates mgr subdirectory and populates it.

- 
- 8** When the installation is complete, **snmpdm** and **mib2agt** will be executing. You can verify this with the following commands:

```
# ps -ef | grep snmp  
# ps -ef | grep mib2
```



## Verifying the SNMP Installation on a Solaris SPARC

---

**Purpose** This procedure describes the verification of your SNMP installation on a Solaris SPARC system.

**Before you begin** EXS SwitchKit must be installed and the LLC and SwitchManager need to be running, with the CSP configured. Refer to the *EXS SwitchKit Installation and Maintenance Guide* for further information. In some instances, output from SNMP tools refers to notifications as *traps*.

**Installation Verification on Solaris SPARC** To verify your installation, follow the steps below:

- 
- 1 Verify that `mib2agt` and `snmpdm` are running. You can verify this with the following commands:

```
# ps -ef | grep snmp
# ps -ef | grep mib2
```

If `mib2agt` and `snmpdm` are not running, go to `/etc/srconf/exe` and use these commands:

```
# ./snmpdm&
# ./mib2agt&
```

- 
- 2 Change directories and start the `traprcv` process with the following command:

```
# cd /etc/srconf/exe
# ./traprcv&
```

A new window appears with the following message:

```
# Waiting for traps
```

- 
- 3 Verify that the environmental variables required for these processes to execute properly have been defined. Type the following command:

```
# env | grep SR
```

The command should produce the following output:

```
SR_MGR_CONF_DIR=/etc/srconf/mgr
SR_AGT_CONF_DIR=/etc/srconf/agt
```

- 
- 4** If this command returns nothing, then the environmental variables are not defined. Add the following to the */etc/profile* file at the end of the file:

```
SR_MGR_CONF_DIR=/etc/srconf/mgr
export SR_MGR_CONF_DIR
SR_AGT_CONF_DIR=/etc/srconf/agt
export SR_AGT_CONF_DIR
```

---

- 5** Then, log in as **root** again, and verify using:
- ```
env/grep/sr
```
- 

- 6** From the same directory, */etc/srconf/exe*, start the CSPAgent daemon with the following command:

```
# ./CSPAgent&
```

This command starts the process using SNMPv2c notifications as the communications protocol. If the process is successfully started, the following notifications appear in the **traprcv** window:

```
Received SNMPv2c Trap:
Community: public
From: 127.0.0.1
sysUpTime.0 = 599440
snmpTrapOID.0 = cspAgentMasterAgentConnect
```

```
Received SNMPv2c Trap:
Community: public
From: 127.0.0.1
sysUpTime.0 = 599444
snmpTrapOID.0 = cspAgentLLCConnect
```

---

- 7** From the same directory, */etc/srconf/exe*, start the CSPEventManager daemon with the command:

```
# ./CSPEventManager&
```

This command starts the process using SNMPv2c notifications as the communications protocol. If the process is successfully started, the following notifications appear in the **traprcv** window:

```
Received SNMPv2c Trap:
Community: public
From: 127.0.0.1
sysUpTime.0 = 606971
```

---

```
snmpTrapOID.0 = cspEventManagerLLCConnect

Received SNMPv2c Trap:
Community: public
From: 127.0.0.1
sysUpTime.0 = 606975
snmpTrapOID.0 = cspEventManagerMasterAgentConnect
```

---

**8** At the command line, type the following:

```
# cd /etc/srconf/exe
# ./getmany -v1 localhost public cspCardType
```

The response to this command should be similar to the following:

```
cspCardType.6.1 = dsp_one(21)
cspCardType.6.2 = t_one16_span(24)
cspCardType.6.4 = mfdsp(3)
cspCardType.6.5 = e_one16_span(25)
cspCardType.6.7 = j_one16_span(30)
cspCardType.6.9 = ss7Series3(113)
cspCardType.6.10 = ss7Series3(113)
cspCardType.6.16 = exnet_one(84)
cspCardType.6.17 = lowerFanTray(248)
cspCardType.6.19 = powerSupply(240)
cspCardType.6.20 = midplane(250)
cspCardType.6.21 = ex_cpuIO(243)
cspCardType.6.22 = ex_cpuIO(243)
cspCardType.6.33 = matrixControllerSeries3(115)
cspCardType.6.53 = e_one120ohmStandbyIO(229)
cspCardType.6.54 = e_one120ohmRedundantIO(226)
cspCardType.6.57 = ccsIOSeries3(216)
cspCardType.6.58 = ccsIOSeries3(216)
```

---

**9** To stop the processes that were started up, type at the command line:

```
# ps -ef | grep CSP
```

This gives you the CSPAgent and CSPEventManager PIDs, then type:

```
# kill -9 <CSPAgent PID> <CSPEventManager PID>
```

This kills the CSPAgent and CSPEventManager processes.

END OF STEPS

---

**Reference** You can now change the destination of the notifications, the Structure of Management Information (SMI) version of the notification sent or change the community string, see *System Customization (4-1)*.

# Uninstalling the SNMP Agent on Solaris SPARC

---

**Purpose** This procedure describes how to uninstall the SNMP Agent on a Solaris SPARC system.

**Before you begin** Make sure that none of the SNMP Agent processes are currently running.

**Uninstalling the SNMP Agent on Solaris SPARC** To uninstall the SNMP Agent, follow the steps below:

---

**1** Log on as user root.

---

**2** Change directory to:  
/etc/srconf

---

**3** Run the install script by typing the following:  
./solarisDeinstall.sh

If you try to run the script and you are not logged on as root, the following message is displayed:

```
# Need to be root to execute this script
```

If this message appears, log on as root and try the command again.

If you get an output similar to the following example, the uninstall was successful:

```
User = root
Stopping emanate snmp daemon
Stopping emanate mib2agt daemon
CSPAgent not running
CSPEventManager not running
Uninstall Complete
E N D   O F   S T E P S
```

---

# Uninstalling the SNMP Agent on Windows

---

**Purpose** This procedure guides you through uninstalling SNMP on Windows.

**Before you begin** None of the SNMP components should be running on the system when you uninstall SNMP (CSPAgent, CSPEventManager, and Trap Receive).

If you previously saved customized files in your installation directory such as snmpd.cnf, move the files to a temporary location of your choice.

**Uninstalling SNMP** Follow the steps below to uninstall SNMP on Windows systems.

- 
- 1** Log on using an administrative account.

---

  - 2** If the SNMP Emanate Adapter and SNMP Emanate Master Agent are running as services, they must be stopped prior to starting the uninstall. Go to **Control Panel**→**Administrative Tools**→**Services**.

---

  - 3** To remove your current *SNMP Network Management* installation from your system, use the **Add/Remove Programs** feature under the **Control Panel**.

END OF STEPS

---

SNMP Network Management is now uninstalled.

## SNMP Configuration: Valid Queries

---

**Valid Queries** The following types of `getmany`/`setany` queries are valid with the current `snmpd.cnf` configuration. The file `snmpd.cnf` is found in this directory: `/etc/srconf/agt`.

Community strings used in SNMPv1 and SNMPv2c, and user names, used in SNMPv3 are defined in `agt/snmpd.cnf`. This is a configuration file, and its format is defined by SNMP Research International (SRI) to be used by the master agent. By default, queries in SNMPv1 and SNMPv2c can be made using the community string `public`. A query in SNMPv3 must be associated with the user name `cspAdmin`. Sets in all three versions must be associated with the user name `cspAdmin`.

### **getmany**

```
getmany -v1 localhost public cspCardType
getmany -v2c localhost public cspCardType
getmany -v3 localhost cspAdmin cspCardType
```

### **setany**

```
setany -v1 localhost cspAdmin cspAgentSystemVerbose.0-i1
setany -v2c localhost cspAdmin cspAgentSystemVerbose.0-i1
setany -v3 localhost cspAdmin cspAgentSystemVerbose.0-i1
```



# 3 Troubleshooting

**Purpose** This chapter contains possible errors and resolutions for the SNMP Agent on Windows and Solaris SPARC systems.

# Troubleshooting the SNMP Agent on Windows

---

**Overview** The following is a collection of errors and solutions for the SNMP Agent on a Windows operating system.

**Important!** In some instances, output from SNMP tools refers to notifications as *traps*.

**Error at Start-up of CSPAgent and CSPEventManager**

You get error messages at start-up of *CSPAgent.exe* or *CSPEventManager.exe*. Refer to the following example output.

```
InitSubagent() connect successful
InsertIIOData:bad parameter (at line 245 in file common.c)
fd=-1, buf=00341a40, n=292 (at line 246 in file common.c)
Connect trap successfully sent
InsertIIOData:bad parameter (at line 245 in file common.c)
fd=-1, but=00345900, n=376 (at line 246 in file common.c)
```

**Resolution**

Go to **Control Panel**→**Administrative Tools**→**Services** and start SNMP EMANATE Master Agent and SNMP EMANATE Adapter. These two services should start automatically at reboot. If Windows cannot locate them, you must ensure the following:

- The files are in your installation directory, which by default is *C:\Program Files\Excel Switching Corporation\SNMP\srconf\bin*.
- The location indicated in the registry under *System/CurrentControlSet/Services/msnsa* matches the path of the *msnaagt.exe* file.
- The location indicated in the registry under *System/CurrentControlSet/Services/SNMPDM* matches the path of the *snmpdm.exe* file.

If the files are not listed, try reinstalling the SNMP Agent.

**Error at Start-up of traprcv.exe**

If you receive these errors, it is an indicator that another process may be trying to read the SNMP notification port. Refer to the following example output.

```
traprcv: bind: No error
traprcv: bind: No error
traprcv: bind: No error
traprcv: bind: No error
traprcv: bind: No error
Waiting for traps.
```



```

ParseType, past end of packet.
  at line 797 in file prse_pkt.c
process_trap: Error parsing packet
  at line 351 in file traprcv.c
ParseType, past end of packet.

```

### Resolution

- Stop any process running, such as SNMPc, HP OpenView, or SNMP Trap Service.
- To start, *Traprcv.exe* needs the files *mrg.cnf* and *snmpinfo.dat* in your installation directory, which by default is *C:\Program Files\Excel Switching Corporation\SNMP\srconf\mgr*. Make sure that they are installed correctly.
- The installation should have set the environment variable *SR\_MGR\_CONF\_DIR* to the installation directory. Make sure that the variable is listed.

### No Traps at Start-up of Agent

If you do not receive any notifications after starting up the *CSP Agent.exe*, the reasons could be as follows:

- You did not reboot your system after you installed the SNMP Agent.
- The environment variables are not set correctly.

### Resolution

Try to reboot your system.

Check that the environment variables are set correctly and point to your installation directory.

```

SR_MGR_CONF_DIR
SR_AGT_CONF_DIR

```

Check the file *c:\temp\snmpd.log*. The file contains warnings or errors from a routine called *ProcessConfigRecord* in the *snmpdm* process. The warnings or errors from that routine refer to problems in *snmpd.cnf*. Line numbers map back to *snmpd.cnf*. See the following example:

From *snmpd.log*:

```

ProcessConfigRecord: Error, incomplete entry at line 13
  at line 772 in file scanfile.c
ProcessConfigRecord: Error, incomplete entry at line 18
  at line 772 in file scanfile.c
ProcessConfigRecord: Error, incomplete entry at line 23
  at line 772 in file scanfile.c

```

From `snmpd.cnf`, which is found in the directory: *C:\Program Files\Excel Switching Corporation\SNMP\srconf\agt*:

```
# Entry type: sysLocation
# Entry format: octetString
line 13: sysLocation ""
# Entry type: sysContact
# Entry format: octetString
line 18: sysContact ""
# Entry type: sysName
# Entry format: octetString
line 23: sysName ""
```

**Important!** `snmpd.cnf` must be a writable file.

To fix errors, put text between quotation marks.

**No snmpdm.out After Installation**

The `snmpdm.out` file does not appear in your installation directory, *C:\Program Files\Excel Switching Corporation\SNMP\srconf\bin*.

**Resolution**

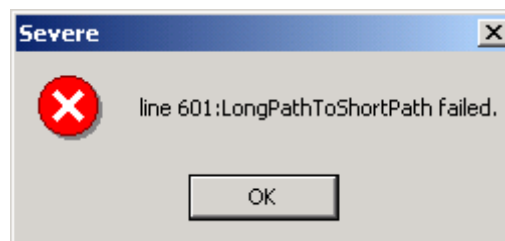
Verify that that the following three environment variables were set. Go to **Control Panel**→**System**→**Advanced**. Click the **Environment Variables** button and then check the **System Variables** for the following:

- SR\_AGT\_CONF\_DIR
- SR\_BIN\_CONF\_DIR
- SR\_MGR\_CONF\_DIR

If these environment variables are not shown, rerun the SNMP installation.

**LongPathToShortPath Error**

You may encounter the following error during the SNMP installation, in particular, after the **choose destination location** window opens:



**Resolution**

To resolve this issue, delete the environment variables:

- SR\_AGT\_CONF\_DIR
- SR\_BIN\_CONF\_DIR
- SR\_MGR\_CONF\_DIR

Next, restart the SNMP installation *cspSNMP.exe*.

# Troubleshooting the SNMP Agent on a Solaris SPARC

---

**Overview** The following is a collection of errors and solutions for the SNMP Agent on a Solaris SPARC system.

**Important!** In some instances, output from SNMP tools refers to notifications as *traps*.

**Error at Start-up of CSPAgent process and CSPEventManager process**

You get an error message at start-up of *CSPAgent.exe* or *CSPEventManager.exe*, stating that *snmpd.exe* and *msnaagt.exe* cannot start:

```
InitSubagent() connect successful
InsertIOData:bad parameter (at line 245 in file common.c)
fd=-1, buf=00341a40, n=292 (at line 246 in file common.c)
Connect trap successfully sent
InsertIOData:bad parameter (at line 245 in file common.c)
fd=-1, buf=00345900, n=376 (at line 246 in file common.c)
```

**Resolution**

The *snmpdm* process stopped or has problems and needs to be restarted. See *Verifying the SNMP Installation on a Solaris SPARC (2-9)*. Log in as root and stop the previous *snmpdm* processes. Then start *snmpdm* again. Do the same with the *mib2agt* process.

If this does not work, try uninstalling using the *solarisDeinstall.sh* script, and then reinstalling.

**Permissions error at Start-up of CSPAgent and CSPEventManager**

You get an error message at start up of *CSPAgent* or *CSPEventManager* that looks something like this:

```
AgentSocketConnect: connect: Permission denied
                                at line 174 in file uds.c
InitSubagent() connect successful
InsertIOData: bad parameter
    line 247 in file common.c
fd = -1, buf = 009d3560, n = 156
                                at line 248 in file common.c
Connect trap unsuccessfully sent
InsertIOData: bad parameter
    line 247 in file common.c
fd = -1, buf = 009f2d80, n = 156
                                at line 248 in file common.c
AgentSocketConnect: connect: Permission denied
                                at line 174 in file uds.c
```

### Resolution

The root user must begin the subagent processes: CSPAgent process and CSPEventManager process. These messages probably indicate that another user has unsuccessfully attempted to start the subagents.

#### **Error at Start-up of traprcv.exe**

If you receive these errors, it is an indicator that another process may be trying to read the SNMP notification port. See the following example output:

```
traprcv: bind: No error
traprcv: bind: No error
traprcv: bind: No error
traprcv: bind: No error
traprcv: bind: No error
Waiting for traps.
ParseType, past end of packet.
  at line 797 in file prse_pkt.c
process_trap: Error parsing packet
  at line 351 in file traprcv.c
ParseType, past end of packet.
```

### Resolution

Stop any processes running. *Traprcv.exe* needs the files *mrg.cnf* and *snmpinfo.dat* in “*your installation directory*”/SNMP/srconf/mgr to start. Make sure they are installed correctly and SR\_MGR\_CONF\_DIR points to that directory.

#### **No Traps at Start-up of Agent**

You do not receive any notifications after starting up the *CSP Agent*. The reason could be that the environment variables are not set correctly.

### Resolution

Check that the environment variables are set correctly and that they point to your installation directory:

```
SR_MGR_CONF_DIR
SR_AGT_CONF_DIR
```

Check the file */tmp/snmpd.log*. The file contains warnings or errors from a routine called ProcessConfigRecord. The warnings or errors from that routine refer to problems in *snmpd.cnf*. Linenumbers map back to *snmpd.cnf*. See the example:

From *snmpd.log*:

```
ProcessConfigRecord: Error, incomplete entry at line 13
  at line 772 in file scanfile.c
```

```
ProcessConfigRecord: Error, incomplete entry at line 18
  at line 772 in file scanfile.c
ProcessConfigRecord: Error, incomplete entry at line 23
  at line 772 in file scanfile.c
```

**From snmpd.cnf:**

```
# Entry type: sysLocation
# Entry format: octetString
line 13: sysLocation ""
# Entry type: sysContact
# Entry format: octetString
line 18: sysContact ""
# Entry type: sysName
# Entry format: octetString
line 23: sysName ""
```

**Important!** snmpd.cnf must be a writable file.



# 4 System Customization

**Purpose** This chapter contains the procedures for customizing the SNMP Agent on Windows and Solaris SPARC systems.

## Changing Destination of Notifications on Windows

---

**Purpose** This section describes how to change an existing destination to a new NMS destination. To add a new destination without changing the existing destination, see the procedure *Adding a New Destination for Notifications on Windows*.

**Before you begin** To deliver notifications to the correct destination, you must know whether your destination uses SNMPv1 or SNMPv2c. If you do not know which version you are using (v1 or v2), find out before you change the destination of the notifications. If you do not set the destination on a line of the file containing the correct version of SNMP, you will receive no notifications.

### Changing Destination of Notifications on Windows

To change the destination of notifications, do the following:

---

**1** Use a text editor to open the `C:\Program Files\Excel Switching Corporation\SNMP\srconf\agt\snmpd.cnf` file, located in the directory, `snmp\srconf\agt`.

---

**2** Search for and edit the *snmpTargetAddrEntry* object in the *snmpd.cnf* file. The entry will look similar to the following:

```
#Entry type: snmpTargetAddrEntry
#Format: snmpTargetAddrName (text)
#       snmpTargetAddrTDomain (snmpUDPDomain, snmpIPX
#       Domain, etc.)
#       snmpTargetAddrTAddress (transport address,
#       i.e. 192.147.142.254:0)
#       snmpTargetAddrTimeout (integer)
#       snmpTargetAddrRetryCount (integer)
#       snmpTargetAddrTagList (text)
#       snmpTargetAddrParams (text)
#       snmpTargetAddrStorageType (nonVolatile,
#       permanent, readOnly)
#       tgtAddressMask (transport mask,
#       i.e. 255.255.255.255:0)
snmpTargetAddrEntry 31 snmpUDPDomain 127.0.0.1:0 100 3
localhost_v1 v1ExampleParams nonVolatile
255.255.255.255:0
```



```
snmpTargetAddrEntry 32 snmpUDPDomain 127.0.0.1:0 100 3
localhost_v2 v2cExampleParams nonVolatile
255.255.255.255:0
```

The first 10 lines of the entry (all lines beginning with pound (#) signs) describe the format of the *snmpTargetAddrEntry* fields. They are informational only.

If your destination uses SNMP v1 protocol, edit the following lines:

```
snmpTargetAddrEntry 31 snmpUDPDomain 127.0.0.1:0 100 3
localhost_v1 v1ExampleParams nonVolatile
255.255.255.255:0
```

Note the destination: localhost\_v1.

If your destination uses SNMP v2 protocol, edit the following lines:

```
snmpTargetAddrEntry 32 snmpUDPDomain 127.0.0.1:0 100 3
localhost_v2 v2cExampleParams nonVolatile
255.255.255.255:0
```

Note the destination: localhost\_v2.

Do not change all these lines, only the ones that apply to the version of the protocol you are using (v1 or v2).

- 
- 3 Modify the IP address on the appropriate line to the new destination IP address. The IP address of the destination is the **snmpTargetAddrTAddress** field. It is the fourth field in the line. The IP address must be followed by **:0**. For example, an IP address might be 192.143.43.22:**0**.

---

  - 4 If localhost\_v1 or localhost\_v2 are not acceptable names for the new notification destination, then see the procedure *Adding a New Destination for Notifications on Windows*.

---

  - 5 Save the *snmpd.cnf* file. Make a copy of this file and store it in another directory. The SNMP Master Agent overwrites modified or added entries.

---

  - 6 Stop the SNMP Master Agent by opening a Command Prompt window and typing the following:  

```
net stop snmpdm
```

After stopping the SNMP Master Agent, the following messages should be displayed:

```
# The SNMP EMANATE Master Agent service is stopping.  
# The SNMP EMANATE Master Agent service was stopped  
  successfully.
```

---

- 7 Restart the SNMP Master Agent by opening a Command Prompt window and typing the following:

```
# net start snmpdm
```

After the restart, the following message should be displayed:

```
# The SNMP EMANATE Master Agent service was started  
  successfully.
```

---

- 8 You should not need to stop and restart the LLC and *traprcv*. You should now see notifications at the new destination.

END OF STEPS

---

**Outlook** Once the system is running, you can direct notifications to a corporate SNMP system such as HP OpenView or Castlerock.

## Adding a Destination for Notifications on Windows

---

**Purpose** This procedure describes how to add a new destination for notifications on Windows, in addition to the other destinations that are configured.

**Important!** In some instances, output from SNMP tools refers to notifications as *traps*.

**Before you begin** To deliver notifications to the correct destination, you need to know whether your destination uses SNMPv1 or SNMPv2c. If you do not know which version you are using (v1 or v2), find out before you change the destination of the notifications. If you do not set the destination on a line of the file containing the correct version of SNMP, you will receive no notifications.

**Add a New Destination for Notifications on Windows** To add a new destination for notifications, do the following:

- 
- 1 Stop the SNMP Master Agent by opening a **Command Prompt** window and typing the following:

```
# net stop snmpdm
```

After stopping the SNMP Master Agent, the following messages should be displayed:

```
# The SNMP EMANATE Master Agent service is stopping.  
# The SNMP EMANATE Master Agent service was stopped  
  successfully.
```

- 
- 2 Using a text editor, open the C:\Program Files\Excel Switching Corporation\etc\srconf\agt\snmpd.cnf file.

- 
- 3 To add a new destination for notifications, copy and edit lines in the *snmpTargetAddrEntry* and the *snmpNotifyEntry* objects in this file.

- 
- 4 Search for *snmpTargetAddrEntry*. The entry will look similar to the following:

```
#Entry type: snmpTargetAddrEntry  
#Format: snmpTargetAddrName (text)
```

```
# snmpTargetAddrTDomain (snmpUDPDomain, snmpIPX
# Domain, etc.)
# snmpTargetAddrTAddress (transport address,
# i.e. 192.147.142.254:0)
# snmpTargetAddrTimeout (integer)
# snmpTargetAddrRetryCount (integer)
# snmpTargetAddrTagList (text)
# snmpTargetAddrParams (text)
# snmpTargetAddrStorageType (nonVolatile,
# permanent, readOnly)
# tgtAddressMask (transport mask,
# i.e. 255.255.255.255:0)
snmpTargetAddrEntry 31 snmpUDPDomain 127.0.0.1:0 100 3
localhost_v1 v1ExampleParams nonVolatile
255.255.255.255:0
snmpTargetAddrEntry 32 snmpUDPDomain 127.0.0.1:0 100 3
localhost_v2 v2cExampleParams nonVolatile
255.255.255.255:0
```

The first 10 lines of the entry (all lines beginning with pound (#) signs), describe the format of the *snmpTargetAddrEntry* fields. They are informational only.

The last four lines of the file are the lines that you actually copy and edit. If your destination uses SNMP v1 protocol, copy and edit the following lines:

```
snmpTargetAddrEntry 31 snmpUDPDomain 127.0.0.1:0 100 3
localhost_v1 v1ExampleParams nonVolatile
255.255.255.255:0
```

Note the destination: localhost\_v1.

If your destination uses SNMP v2 protocol, copy and edit the following lines:

```
snmpTargetAddrEntry 32 snmpUDPDomain 127.0.0.1:0 100 3
localhost_v2 v2cExampleParams nonVolatile
255.255.255.255:0
```

Note the destination: localhost\_v2.

- 
- 5 Copy the lines associated with SNMP v1 or v2 and paste them at the bottom of the *snmpTargetAddrEntry*.
- 

- 6 Increment the *snmpTargetAddrName*, the second field in the line, to 33 (or to the next number in sequence).

- 
- 7** Modify the IP address of the line to the new destination IP address. The IP address of the destination is the *snmpTargetAddrTAddress* field. It is the fourth field in the line. The IP address must be followed by **:0**. For example, an IP address might be 192.143.43.22:**0**.
- 

- 8** Modify the *snmpTargetAddrTagList*, the seventh field in the line, to the name of the new target destination. The name must be unique. Use underscores for spaces in the name. The name must be followed by **\_v1** or **\_v2** depending on the SNMP protocol you are using.

For example, the new name might be: Boston\_v2.

---

- 9** The entry above the *snmpTargetAddrEntry* is the *snmpNotifyEntry*. Search for *snmpNotifyEntry* in the file. It should look similar to the following:

```
#Entry type: snmpNotifyEntry
#Format: snmpNotifyName (text)
#       snmpNotifyTag (text)
#       snmpNotifyType (trap(1), inform(2))
#       snmpNotifyStorageType (nonVolatile, permanent,
#                               readOnly)
# snmpNotifyEntry 31 localhost_v1 trap nonVolatile
# snmpNotifyEntry 32 localhost_v2 trap nonVolatile
```

The last two lines of this entry are the lines that you copy and edit when you add a new destination for notifications. As above, if your destination uses SNMP v1, copy and edit the line:

```
# snmpNotifyEntry 31 localhost_v1 trap nonVolatile
```

If your destination uses SNMP v2, copy and edit the line:

```
# snmpNotifyEntry 32 localhost_v2 trap nonVolatile
```

---

- 10** Copy the line associated with either SNMP v1 or v2 and paste it to the bottom of the *snmpNotifyEntry*.
- 

- 11** Increment the *snmpNotifyName*, the second field in the line, to 33 (or to the next number in sequence).
-

- 
- 12** Modify the *snmpNotifyTag*, the third field in the line, to match name of the new target destination that you included in the *snmpTargetAddrEntry* above (see Step 7). These names must match exactly.
- 

- 13** Save the *snmpd.cnf* file. Save a backup copy of the file. The Master Agent will modify the file if there are any errors.
- 

- 14** From the same Command Prompt window, start the SNMP Master Agent by opening a Command Prompt window and typing the following:

```
# net start snmpdm
```

After restarting the SNMP Master Agent, the following message should be displayed:

```
# The SNMP EMANATE Master Agent service was started  
  successfully.
```

---

- 15** If you have stopped the CSPAgent process, restart the process by opening a Command Prompt window and typing:

```
# cd C:\Program Files\ExcelSwitching Corporation\  
  SNMP\srconf\bin  
# cspAgent
```

---

- 16** If you have stopped the CSPEventManager process, restart the process by opening a Command Prompt window and typing:

```
# cd C:\Program Files\ExcelSwitching Corporation\  
  SNMP\srconf\bin  
# cspEventManager
```

You should not need to stop and restart the LLC and *traprcv*. You should now see notifications at the new destination.

END OF STEPS

---

Once the system is running, you can point to a corporate SNMP system, such as HP OpenView or Castlerock.

## Changing the Password on Windows

---

**Purpose** This procedure describes how to change the password for your SNMP Agent on a Windows system.

**Before you begin** Decide what password you want to use. The password should contain a maximum of eight alphanumeric characters.

**Changing the Password on Windows** Follow the steps below to change your SNMP Agent password on Windows:

---

- 1 Stop the SNMP Master Agent by opening a Command Prompt window and typing the following:

```
# net stop snmpdm
```

After stopping the SNMP Master Agent, the following messages should be displayed:

```
# The SNMP EMANATE Master Agent service is stopping.  
# The SNMP EMANATE Master Agent service was stopped  
  successfully.
```

---

- 2 With a text editor, open *snmpd.cnf* which is found in the directory:  
*C:\Program Files\Excel Switching Corporation\SNMP\srconf\agt*.
- 

- 3 Using the editor, search for CSPAdmin (or the current password).

Replace all instances of CSPAdmin (or the password) with the new password. The password should contain a maximum of eight alphanumeric characters.

---

- 4 Save the *snmpd.cnf* file. Save a backup copy. The Master Agent will modify the file if there are any errors.
- 

- 5 From the same Command Prompt window, start the SNMP Master Agent by typing the following:

```
# net start snmpdm
```

---

After starting the SNMP Master Agent, the following message should be displayed:

```
# The SNMP EMANATE Master Agent service was started
  successfully.
```

You do not need to start and stop CSPEventManager and CSPAgent. Once the password has been changed, this is the password that you must use whenever you want to do a Set command. Changing the password only applies to the local system. If you want to change the password globally, you must do this on each destination.

---

- 6** To test the new password, open a Command Prompt window and type the following:

```
# cd c:\Program Files\Excel Switching Corporation\
  SNMP\srconf\bin
```

---

- 7** Type the following:

```
# setany -v1 localhost <new password> cspEventMax.0 -i
  300
```

The result of this command should be:

```
# cspEventMax.0 = 300
```

```
END OF STEPS
```

---



## Editing Fields in Configuration File on Windows

---

**Purpose** This procedure describes how to edit values in the SNMP configuration file on a Windows system.

**Before you begin** Open *snmpd.cnf* with a text editor.

**Editing Configuration File on Windows** The following steps explain how to edit values such as the following in a configuration file:

- *sysLocation*
  - *sysContact*
  - *sysName*
- 

- 1 Using the text editor, search for the name of each field you want to change. You will see an entry that looks similar to one of the following:

```
# Entry type: sysLocation
# Entry format: octetString
# sysLocation "Concord NH"
# Entry type: sysContact
# Entry format: octetString
# sysContact "Joe Smith"
# Entry type: sysName
# Entry format: octetString
# sysName system_74
```

In the last line of the entry, type the new information that you want to add. Enter character strings inside quotation marks.

---

- 2 Save the *snmpd.cnf* file.
- 

- 3 Restart the SNMP daemon by opening a Command Prompt window and typing the following:

```
# net stop snmpdm
```

After stopping the SNMP daemon, the following messages should be displayed:

```
# The SNMP EMANATE Master Agent service is stopping.
# The SNMP EMANATE Master Agent service was stopped
  successfully.
```

- 
- 4** From the same Command Prompt window, restart the SNMP daemon by opening a Command Prompt window and typing the following:

```
# net start snmpdm
```

After restarting the SNMP daemon, the following message should be displayed:

```
# The SNMP EMANATE Master Agent service was started  
  successfully.
```

You do not need to stop and start CSPEventManager and CSPAgent.

## Changing the Notifications Version

---

**Purpose** By default, the *snmpd.cnf* file configures the SNMP Research International (SRI) master agent to send SNMPv2c notifications only. You can change this so that the master agent sends the SNMPv1 notifications. This section describes how to change the notification version.

**Before you begin** Open the file: *snmpd.cnf*. This file is found in the following directories:

Windows: *snmp\srconf\agt*

Unix: */etc/srconf/agt*

**Changing the Notification Version** Follow the steps below to change the notification version from SNMPv2c to SNMPv1 notifications.

---

**1** Find the line that looks like this:

```
snmpTargetAddrEntry 32 snmpUDPDomain 127.0.0.1:0 100 3
  Console
v2cExampleParams nonVolatile 255.255.255.255:0 2048
```

---

**2** Change the field containing the entry *v2cExampleParams* to:  
*v1ExampleParams*

This causes only SNMPv1 notifications to be sent.

- 
- 3** If you want both versions of notifications, then duplicate the entire line:

v1ExampleParams

Then on one line, set the first entry to the following:

v2cExampleParams

On the other line set the first entry to the following:

v1ExampleParams

On the new line, increment the snmpTargetAddrName.

END OF STEPS

---

# Changing the Destination of Notifications on Solaris SPARC

---

**Purpose** This procedure describes how to change an existing destination to a new NMS destination.

**Before you begin** To deliver notifications to the correct destination, you must know whether your destination uses SNMPv1 or SNMPv2c. If you do not know which version you are using (v1 or v2), find out before you change the destination of the notifications. If you do not set the destination on a line of the file containing the correct version of SNMP, you will receive no notifications.

**Changing Destination of Notifications on Solaris SPARC** To change the destination of notifications, do the following:

---

**1** Use a text editor to open the */etc/srconf/agt/snmpd.cnf* file.

---

**2** To change the destination of notifications, edit the ***snmpTargetAddrEntry*** object in this file. The entry will look similar to the following:

```
#Entry type: snmpTargetAddrEntry
#Format: snmpTargetAddrName (text)
#       snmpTargetAddrTDomain (snmpUDPDomain, snmpIPX
#       Domain, etc.)
#       snmpTargetAddrTAddress (transport address,
#       i.e. 192.147.142.254:0)
#       snmpTargetAddrTimeout (integer)
#       snmpTargetAddrRetryCount (integer)
#       snmpTargetAddrTagList (text)
#       snmpTargetAddrParams (text)
#       snmpTargetAddrStorageType (nonVolatile,
#       permanent, readOnly)
#       tgtAddressMask (transport mask,
#       i.e. 255.255.255.255:0)
snmpTargetAddrEntry 31 snmpUDPDomain 127.0.0.1:0 100 3
localhost_v1 v1ExampleParams nonVolatile
255.255.255.255:0
snmpTargetAddrEntry 32 snmpUDPDomain 127.0.0.1:0 100 3
localhost_v2 v2cExampleParams nonVolatile
255.255.255.255:0
```

The first 10 lines of the entry (all lines beginning with pound (#) signs) describe the format of the `snmpTargetAddrEntry` fields. They are informational only.

If your destination uses SNMP v1 protocol, edit the following lines:

```
snmpTargetAddrEntry 31 snmpUDPDomain 127.0.0.1:0 100 3
    localhost_v1 v1ExampleParams nonVolatile
    255.255.255.255:0
```

Note the destination: `localhost_v1`.

If your destination uses SNMP v2 protocol, edit the following lines:

```
snmpTargetAddrEntry 32 snmpUDPDomain 127.0.0.1:0 100 3
    localhost_v2 v2cExampleParams nonVolatile
    255.255.255.255:0
```

Note the destination: `localhost_v2`.

**Important!** Do not change all these lines, only the ones that apply to the version of the protocol you are using (v1 or v2).

- 
- 3 Modify the IP address on the appropriate line to the new destination IP address. The IP address of the destination is the *snmpTargetAddrTAddress* field. It is the fourth field in the line. The IP address must be followed by **:0**. For example, an IP address might be **192.143.43.22:0**.

- 
- 4 If `localhost_v1` or `localhost_v2` are not acceptable names for the new notification destination, see the procedure *Adding a New Destination for Notifications on Solaris SPARC*.

- 
- 5 Save the *snmpd.cnf* file.

- 
- 6 Stop the SNMP by typing the following at the command line:

```
# ps -ef | grep snmpdm
```

A message is displayed indicating the process number of the `snmpdm`. To kill that process from Solaris, type the following:

```
# kill -9 <process number>
```

- 
- 7** Restart the SNMP daemon by typing the following at the command line:

```
# /etc/srconf/exe/snmpdm&
```

```
END OF STEPS
```

---

**Outlook** When the system is running, you can direct notifications to a corporate SNMP system, such as HP OpenView or Castlerock.

## Adding a Destination for Notifications on Solaris SPARC

---

**Purpose** This procedure describes how to set a new destination for notifications on a Solaris SPARC system in addition to other destinations that are configured.

**Important!** In some instances, output from SNMP tools refers to notifications as *traps*.

**Before you begin** To deliver notifications to the correct destination, you need to know whether your destination uses SNMPv1 or SNMPv2c. If you do not know which version you are using (v1 or v2), find out before you change the destination of the notifications. If you do not set the destination on a line of the file containing the correct version of SNMP, you will receive no notifications.

### Adding a New Destination for Notifications on Solaris SPARC

To add a new destination for notifications, do the following:

- 
- 1 Stop the SNMP Master Agent by typing the following at the command line:

```
# ps -ef | grep snmpdm
```

A message is displayed indicating the process number of the snmpdm. To kill that process, type the following:

```
# kill -9 <process number>
```

---

- 2 Using a text editor, open the */etc/srconf/agt/snmpd.cnf* file.
- 

- 3 To add a new destination for notifications, copy and edit lines in the *snmpTargetAddrEntry* and the *snmpNotifyEntry* objects in this file.
- 

- 4 Search for *snmpTargetAddrEntry*. The entry will look similar to the following:

```
#Entry type: snmpTargetAddrEntry  
#Format: snmpTargetAddrName (text)
```



```
#      snmpTargetAddrTDomain (snmpUDPDomain, snmpIPX
      Domain, etc.)
#      snmpTargetAddrTAddress (transport address,
      i.e. 192.147.142.254:0)
#      snmpTargetAddrTimeout (integer)
#      snmpTargetAddrRetryCount (integer)
#      snmpTargetAddrTagList (text)
#      snmpTargetAddrParams (text)
#      snmpTargetAddrStorageType (nonVolatile,
      permanent, readOnly)
#      tgtAddressMask (transport mask,
      i.e. 255.255.255.255:0)
snmpTargetAddrEntry 31 snmpUDPDomain 127.0.0.1:0 100 3
      localhost_v1 v1ExampleParams nonVolatile
      255.255.255.255:0
snmpTargetAddrEntry 32 snmpUDPDomain 127.0.0.1:0 100 3
      localhost_v2 v2cExampleParams nonVolatile
      255.255.255.255:0
```

The first 10 lines of the entry (all lines beginning with pound (#) signs), describe the format of the *snmpTargetAddrEntry* fields. They are informational only.

The last four lines of the file are the lines that you actually copy and edit. If your destination uses SNMP v1 protocol, copy and edit the following lines:

```
snmpTargetAddrEntry 31 snmpUDPDomain 127.0.0.1:0 100 3
      localhost_v1 v1ExampleParams nonVolatile
      255.255.255.255:0
```

Note the destination: localhost\_v1.

If your destination uses SNMP v2 protocol, copy and edit the following lines:

```
snmpTargetAddrEntry 32 snmpUDPDomain 127.0.0.1:0 100 3
      localhost_v2 v2cExampleParams nonVolatile
      255.255.255.255:0
```

Note the destination: localhost\_v2.

- 
- 5** Copy the lines associated with SNMP v1 or v2 and paste them at the bottom of the *snmpTargetAddrEntry*.
- 

- 6** Increment the *snmpTargetAddrName*, the second field in the line, to 33 (or to the next number in sequence).

- 
- 7** Modify the IP address of the line to the new destination IP address. The IP address of the destination is the *snmpTargetAddrTAddress* field. It is the fourth field in the line. The IP address must be followed by **:0**. For example, an IP address might be 192.143.43.22:**0**.
- 

- 8** Modify the *snmpTargetAddrTagList*, the seventh field in the line, to the name of the new target destination. The name must be unique. Use underscores for spaces in the name. The name must be followed by **\_v1** or **\_v2** depending on the SNMP protocol you are using.

For example, the new name might be: Boston\_v2.

---

- 9** The entry above the *snmpTargetAddrEntry* is the *snmpNotifyEntry*. Search for *snmpNotifyEntry* in the file. It should look similar to the following:

```
#Entry type: snmpNotifyEntry
#Format: snmpNotifyName (text)
#       snmpNotifyTag (text)
#       snmpNotifyType (trap(1), inform(2))
#       snmpNotifyStorageType (nonVolatile, permanent,
        readOnly)
snmpNotifyEntry 31 localhost_v1 trap nonVolatile
snmpNotifyEntry 32 localhost_v2 trap nonVolatile
```

The last two lines of this entry are the lines that you copy and edit when you add a new destination for notifications. As above, if your destination uses SNMP v1, copy and edit the following line:

```
snmpNotifyEntry 31 localhost_v1 trap nonVolatile
```

If your destination uses SNMP v2, copy and edit the following line:

```
snmpNotifyEntry 32 localhost_v2 trap nonVolatile
```

---

- 10** Copy the line associated with either SNMP v1 or v2 and paste it to the bottom of the *snmpNotifyEntry*.
- 

- 11** Increment the *snmpNotifyName*, the second field in the line, to 33 (or to the next number in sequence).
-

---

**12** Modify the *snmpNotifyTag*, the third field in the line, to match name of the new target destination that you included in the *snmpTargetAddrEntry* above (see Step 7). These names must match exactly.

---

**13** Save the *snmpd.cnf* file. Save a backup copy of the file.

---

**14** From the same Command Prompt window, start the SNMP Master Agent by typing the following at the command line:

```
# /etc/srconf/exe/snmpdm&
```

```
END OF STEPS
```

---

**Outlook** Once the system is running, you can point to a corporate SNMP system, such as HP OpenView or Castlerock.

## Changing the Password on Solaris SPARC

---

**Purpose** This procedure describes how to change the password on a Solaris SPARC system.

**Before you begin** Open *snmpd.cnf* with a text editor.

**Changing the Password on Solaris SPARC** Follow the steps below to change the password on a Solaris SPARC system:

- 1 Stop the SNMP Master Agent by typing the following on the command line:

```
# ps -ef | grep snmpdm
```

A message is displayed indicating the process number of the snmpdm. To kill that process from Solaris, type the following:

```
# kill -9 <process number>
```

- 2 Using a text editor, search for `cspAdmin` (or the current password). Replace all instances of `cspAdmin` (or the password) with the new password. The password should contain a maximum of eight alphanumeric characters.

- 3 Save the *snmpd.cnf* file. Save a backup copy of the file.

- 4 From the same Command Prompt window, start the SNMP Master Agent by typing the following at the command line:

```
# /etc/srconf/exe/snmpdm&
```

You do not need to start and stop CSPEventManager and CSPAgent.

Once the password has been changed, this is the password that you must use whenever you want to do a Set command.

Changing the password applies to the local system only. If you want to change the password globally, you must do this on each destination.

---

**5** To test the new password, type the following at the command line:

```
# cd /etc/srconf/exe
```

---

**6** Type:

```
# setany -v1 localhost <new password> cspEventMax.0 -i  
300
```

The result of this command should be the following:

```
# cspEventMax.0 = 300  
E N D O F S T E P S
```

---

## Editing Fields in Configuration File on Solaris SPARC

---

**Purpose** This procedure describes how to edit fields in the *snmpd.cnf* file.

**Before you begin** Open *snmpd.cnf* with a text editor.

**Editing Fields on Solaris SPARC** Follow the steps below to edit fields in the configuration file on a Solaris SPARC system.

---

**1** Open *snmpd.cnf* with a text editor.

Using the editor, search for the name of each field you want to change (*sysLocation*, *sysContact*, or *sysName*). You will see an entry that looks similar to one of the following:

```
# Entry type: sysLocation
# Entry format: octetString
# sysLocation "Concord NH"
# Entry type: sysContact
# Entry format: octetString
# sysContact "Joe Smith"
# Entry type: sysName
# Entry format: octetString
# sysName system_74
```

In the last line of the entry, type the new information that you want to add. Enter character strings inside quotation marks.

---

**2** Save the *snmpd.cnf* file.

---

**3** Restart the SNMP daemon by typing the following at the command line:

```
# ps -ef | grep snmpdm
```

A message is displayed indicating the process number of the *snmpdm*. To kill that process from Solaris, type the following:

```
# kill -9 <process number>
```

---

**4** Restart the SNMP daemon by typing the following at the command line:

# /etc/srconf/exe/snmpdm&

You do not need to start and stop CSPEventManager and CSPAgent.

END OF STEPS

---