

HP Insight Management Agents for OpenVMS¹

Installation Guide

Version 3.01

This document contains information required for installing and using Version 3.01 of the Management Agents for OpenVMS.

The document contains the following sections:

- Section 1, Installing TCP/IP and Enabling SNMP
- Section 2, Prior to Installing the Management Agents Software
- Section 3, Installing the Management Agents for OpenVMS Software
- Section 4, Working with MultiNet
- Section 5, Working with TCPware
- Section 6, Notes
- Section 7, Trademarks

1 Installing TCP/IP and Enabling SNMP

Before you install the Management Agents for OpenVMS software on your Alpha system, follow these steps:

1. Install TCP/IP

For TCP/IP installation instructions, refer to *TCP/IP Services for OpenVMS – Management*.

2. Enable SNMP

If SNMP is not enabled on your system, follow these steps:

a. Execute the following command procedure:

```
$ @SYS$MANAGER:TCPIP$CONFIG
```

b. On the list of displayed options, select:

```
Option 3 - Server components
```

c. On the next list of displayed options, select:

```
Option 17 - SNMP (for Version 5.1-ECO 4)
```

```
Option 18 - SNMP (for Version 5.3 or later)
```

d. On the next list of displayed options, select:

```
Option 3 - Enable & Start service on this  
node
```

e. Exit from the configuration utility.

3. Enter the following command after the DCL prompt:

```
$ TCPIP SHOW CONFIGURATION -  
_ $ SNMP/FULL
```

¹ Formerly Compaq Management Agents for OpenVMS.

The resulting display should be similar to the following:

```
SNMP Configuration

.
.
.

Community      Type      Address_list
public         Read      0.0.0.0
```

- a. If the "public" Community does not appear in the display, enter the following command:

```
$ TCPIP SET CONFIG -
_$ SNMP/COMMUNITY="public"/ -
_$ type=read
```

- b. Enter the following command again after the DCL prompt to display the "public" Community:

```
$ TCPIP SHOW CONFIGURATION -
_$ SNMP/FULL
```

Note

If you use MultiNet and TCPware from Process Software, refer to Sections 4 and 5 of this document for information on setting up the products to operate with the Management Agents.

2 Prior to Installing the Management Agents Software

Before you install the Management Agents for OpenVMS Version 3.01 kit, you must **stop any Management Agents that are running**. To do so, follow these steps:

1. Enter the following DCL command:

```
$ SHOW SYSTEM
```
2. If **any** of the following processes are running, you must stop them before installing the kit:

Version 1	Version 2 and later
ELM/GINKGO	WBEM\$SERVER
CPQHOST_MIB	WBEM\$CPQHOST
CPQSCSI_MIB	WBEM\$CPQSTORE
CPQSYSINFO_MIB	WBEM\$CPQSYSINFO
CPQSTDEQUIP_MIB	WBEM\$CPQSTDEQUIP
CPQHEALTH_MIB	WBEM\$CPQHEALTH
CPQTHRESH_MIB	WBEM\$CPQTHRESH
CPQNIC_MIB	WBEM\$CPQNIC
	WBEM\$DCLSHOW
	WBEM\$SVRCLU
	WBEM\$CPQIDA

- While logged in to the same account from which you started the agents, enter one of the following:

Prior to Version 2.1	Version 2.1 and later
\$ @SYS\$SPECIFIC: -	\$ @SYS\$SPECIFIC: -
_ \$ [WBEM] STOP_WEBAGENTS	_ \$ [WBEM] WBEM\$SHUTDOWN

- Enter the following command to verify that the Management Agents software is not running:
\$ SHOW SYSTEM
- Remove the existing version of the Management Agents from your system by entering one of the following DCL commands:
\$ PRODUCT REMOVE V72_MGMTAGENTS
or
\$ PRODUCT REMOVE V73_MGMTAGENTS
- Download and install the hp Secure Sockets Layer (SSL) for OpenVMS kit from this web site:
<http://h71000.www7.hp.com/openvms/products/ssl/ssl.html>

3 Installing the Management Agents for OpenVMS Software

Install the Management Agents for OpenVMS software on each system you want to monitor. On an OpenVMS Cluster, the agents need to be installed separately on each node of the cluster.

To install the Management Agents for OpenVMS software, follow these steps:

- Log in to the OpenVMS system using the SYSTEM account. If you need to use another privileged account, it must have the SETPRV privilege or all the following privileges:
AUDIT, CMKRNL, DETACH, DIAGNOSE, LOG_IO, PHY_IO,
NETMBX, OPER, PRMMBX, TMPMBX, SECURITY, SHARE,
SYSLCK, SYSNAM, SYSPRV, WORLD
- Copy the Version 7.2-2 or 7.3 file to SYSS\$UPDATE:
V72_MGMTAGENTS-V0300-30-1.EXE
or
V73_MGMTAGENTS-V0300-30-1.EXE
- To unpack the kit, enter one of the following DCL commands:
\$ RUN V72_MGMTAGENTS-V0300-30-1.EXE
or
\$ RUN V73_MGMTAGENTS-V0300-30-1.EXE
- To install the appropriate PCSI kit, enter one of the following DCL commands:
\$ PRODUCT INSTALL V72_MGMTAGENTS
or
\$ PRODUCT INSTALL V73_MGMTAGENTS
- The file SYSS\$MANAGER:WBEM\$LOGICALS.COM defines the logical names used by the Management Agents for OpenVMS. This file lists all the logical names supported by the agents, but the lines are commented out by default. Using a text editor, open this file, uncomment the lines containing the logical names you require, and edit the parameters if required. The file includes comments that explain the significance of each logical name.
 - To use the DCL SHOW command application, define the following logical name:

```
$ DEFINE/SYSTEM/EXEC WBEM$DCL TRUE
```

- To make your cluster name known to the cluster subagent, define the following logical name:

```
$ DEFINE/SYSTEM/EXEC WBEM$CLUSTER_NODE clustername
```

The cluster name should correspond to a valid TCP/IP cluster alias.

- To modify the default warning temperature for your system, define the following logical name:

```
$ DEFINE/SYSTEM/EXEC WBEM$WARNING_TEMP warningtemperature
```

The warning temperature corresponds to an integer value. If you do not specify this value, a default value will be selected on GS80 and later systems. This value is about 5 degrees C below the shutdown temperature defined for the system.

For all other hardware, you need to specify a value relevant to your system by defining this logical name. If you do not specify this value, the temperature threshold will display as 0 degree C, and SNMP traps will not be generated. Refer to the documentation that came with your system for the appropriate temperature threshold value.

Note

Environmental information (temperature, fan, power supply) will not be available on New Generation Alpha Servers (GS1280, ES47 and so on) until a future release of OpenVMS.

6. Perform one of the following actions:

- If you are running SNMP, you must stop and restart ESNMP. In SYSS\$MANAGER, run the following:

```
$ @TCPIP$SNMP_SHUTDOWN.COM
```

```
$ @TCPIP$SNMP_STARTUP.COM
```

- If you are not running SNMP, you must start ESNMP. In SYSS\$MANAGER, run the following:

```
$ @TCPIP$SNMP_STARTUP.COM
```

7. Use the DCL command SHOW SYSTEM to ensure that SNMP is enabled on the system. The system should display the TCP/IP Version 5.1 or later processes, as shown below:

```
TCPIP$SNMP_1
```

```
TCPIP$OS_MIBS
```

```
TCPIP$HR_MIB
```

If you do not see all of these processes, review your TCP/IP setup and repeat Section 1, if necessary.

8. To view environmental details (temperature, fan, and power supply information) on DS25, ES45 and later systems, you need to have the following on your system:

- OpenVMS Version 7.3 or later
- Firmware revision Version 6.2 or later

To view environmental details on GS80 and later systems, you need to have the following on your system:

- OpenVMS Version 7.3-1 or later

- Firmware revision Version 6.2 or later

If your system meets or exceeds these requirements, you can enable the display of the environmental details by defining this logical name:

```
$ DEFINE/SYSTEM/EXEC WBEM$PRIVATEER TRUE
```

Note

- You do not need to make these entries for older hardware on which environmental information is already displayed.
- If you define this logical name on OpenVMS Version 7.3 systems with older firmware revisions, the system might crash.
- Environmental information will not be available on New Generation Alpha Servers (GS1280, ES47, and so on) until a future release of OpenVMS.

9. To run the Management Agents, enter the following commands:

```
$ SET DEFAULT SYS$SPECIFIC:[WBEM]
$ @WBEM$STARTUP
```

10. To verify that the Management Agents are running, enter the DCL command

```
$ SHOW SYSTEM/PROCESS=WBEM*
```

The system should display the following processes:

```
WBEM$CPQNIC
WBEM$CPQTHRESH
WBEM$CPQHEALTH
WBEM$CPQSTORE
WBEM$CPQSYSINFO
WBEM$CPQSTDEQUIP
WBEM$CPQHOST
WBEM$SERVER
WBEM$DCLSHOW (if you defined the logical name)
WBEM$SVRCLU (if you have a clustered system)
WBEM$GSVIEW (only on a GS-Series Alpha Server)
WBEM$CPQIDA (only if Smart Array 5300A Controllers are installed)
```

11. To ensure that the Management Agents survive a reboot, edit the SYSTARTUP_VMS.COM file. Insert this line in SYS\$STARTUP:SYSTARTUP_VMS.COM, following the entries required to start the TCP/IP and SSL processes:

```
$ @SYS$SPECIFIC:[WBEM]WBEM$STARTUP
```

12. You are now ready to view your OpenVMS system or systems using a web browser or Insight Manager 7. Use either of the following instructions:

- From a web browser, enter the following URL, which will connect you with the management agent of the system you want to manage:

```
https://node_address:2381
```

For *node_address*, substitute the TCP/IP node name or address of the system you want to monitor.

- If you are using Insight Manager 7, add the TCP/IP addresses of your OpenVMS nodes to the device discovery section, perform a device discovery, and select your OpenVMS node.

4 Working with MultiNet

This section describes how to use the Management Agents for OpenVMS with MultiNet TCP/IP Version 4.3 for OpenVMS or later from Process Software. You must install some components of the Compaq or hp TCP/IP product along with MultiNet to ensure that all features of the Management Agents work correctly.

For more information about MultiNet, refer to the MultiNet User documentation.

Follow these instructions to set up MultiNet to work with the Management Agents for OpenVMS:

1. Install MultiNet TCP/IP Version 4.3 for OpenVMS or later, with required patches.
2. Add the following line to the file MULTINET:SNMPD.CONF:

```
AGENTX_PEER 127.0.0.1
```

3. Comment out SMUX_PEER from the file MULTINET:SNMPD.CONF.
4. Extract TCPIP\$ACCESS_SHR.EXE and TCPIP\$ESNMP_SHR.EXE from the Compaq TCP/IP Services V5.1 or later kit and place them in SYSS\$SHARE:

```
$ PRODUCT EXTRACT FILE/SELECT=<filename>
```

Note

Make sure all files extracted from the TCP/IP Services kit have WORLD:RE protection.

5. Copy TCPIP\$ESNMP_SHR.EXE to SYSS\$SHARE:UCX\$ESNMP_SHR.EXE.
6. Extract TCPIP\$HR_MIB.EXE from the TCP/IP Services kit and place it in the SYSS\$SYSTEM directory. Define the following logical names:

```
$ DEFINE/SYSTEM/EXECUTIVE MULTINET_SNMP_AGENTX 1
```

```
$ DEFINE/SYSTEM TCPIP$AGENTX_INET_PORT 705
```

```
$ DEFINE/SYSTEM TCPIP$AGENTX_LOCAL_PORT 705
```

7. Start MultiNet as described in the MultiNet User Manual.
8. Start the Management Agents for OpenVMS using the following command:

```
$ @SYSS$SPECIFIC:[WBEM]WBEM$STARTUP.COM
```

9. Enter the following command:

```
$ RUN/PROCESS=HR_MIB SYSS$SYSTEM:TCPIP$HR_MIB
```

The Host Resources MIB (RFC 1514) supplied with TCP/IP Services will now work with MultiNet.

5 Working with TCPware

This section describes how to use the Management Agents for OpenVMS with TCPware TCP/IP Version 5.5 for OpenVMS or later from Process Software. You must install some components of the Compaq or hp TCP/IP product along with TCPware to ensure that all features of the Management Agents work correctly.

For more information about TCPware, refer to the TCPware User documentation.

Follow these instructions to set up TCPware to work with the Management Agents for OpenVMS:

1. Install TCPware TCP/IP Version 5.5 for OpenVMS or later, with required patches.
2. Add the following line to the file TCPWARE_COMMON:SNMPD.CONF:

```
AGENTX_PEER 127.0.0.1
```

3. Comment out SMUX_PEER from the file TCPWARE_COMMON:SNMPD.CONF.
4. Ensure that the SNMP agent and AGENT X service are enabled during the configuration of SNMP on TCPware.
5. Extract TCPIP\$ACCESS_SHR.EXE and TCPIP\$ESNMP_SHR.EXE from the Compaq TCP/IP Services V5.1 or later kit and place them in SYSS\$SHARE:

```
$ PRODUCT EXTRACT FILE/SELECT=<filename>
```

Note

Make sure all files extracted from the TCP/IP Services kit have WORLD:RE protection.

6. Copy TCPIP\$ESNMP_SHR.EXE to SYSS\$SHARE:UCX\$ESNMP_SHR.EXE.
7. Extract TCPIP\$HR_MIB.EXE from the TCP/IP Services kit and place it in the SYSS\$SYSTEM directory. Define the following logical names:

```
$ DEFINE/SYSTEM TCPIP$AGENTX_INET_PORT 705
```

```
$ DEFINE/SYSTEM TCPIP$AGENTX_LOCAL_PORT 705
```

8. Start TCPware as described in the TCPware User Manual.
9. Start the Management Agents for OpenVMS using the following command:

```
$ @SYSS$SPECIFIC:[WBEM]WBEM$STARTUP.COM
```

10. Enter the following command:

```
$ RUN/PROCESS=HR_MIB SYSS$SYSTEM:TCPIP$HR_MIB
```

The Host Resources MIB (RFC 1514) supplied with TCP/IP Services will now work with TCPware.

6 Notes

1. The following default file locations are used as the launch points for the Availability Manager and the OpenVMS Management Station:

Application	Location
Availability Manager on Windows 2000 or XP	C:\Documents and Settings\All Users\Start Menu\Programs\Availability Manager\dataan~1.lnk
OpenVMS Management Station on Windows	C:\WINNT\Profiles\All Users\Start Menu\Programs\OpenVMS Management Station\openvm~1.lnk
OpenVMS Management Station on Windows 95	C:\Windows\Start Menu\Programs\OpenVMS Management Station\openvm~1.lnk

If you are unable to launch one of these products, the products were probably not installed at the default locations.

2. If you ever need to restart the Management Agents without rebooting, stop and then restart the Management Agents' processes using the following commands:

```
$ @SYSS$SPECIFIC:[WBEM]WBEM$SHUTDOWN
```

```
.
```

```
.
```

```
.
```

```
$ @SYSS$SPECIFIC:[WBEM]WBEM$STARTUP
```

7 Trademarks

Hewlett-Packard and the HP logo are trademarks of Hewlett-Packard Development Company, L.P. in the U.S. and/or other countries.

MultiNet and TCPware are registered trademarks of Process Software.

All other product names mentioned herein may be trademarks of their respective companies.

© Copyright 1997 - 2003 Hewlett-Packard Development Company, L.P.