

HP Insight Management Agents for OpenVMS¹ Installation Guide

This document contains information required for installing and using Version 2.4 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
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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. Depending on whether you are using TCP/IP or UCX, execute one of the following command procedures:

TCP/IP Command Procedure	UCX Command Procedure
\$ @SYS\$MANAGER:TCPIP\$CONFIG	\$ @SYS\$MANAGER:UCX\$CONFIG

- b. On the list of displayed options, select:

Option 3 - Server components

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

Option 10 - SNMP (for Version 5.0a or earlier)

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

Option 18 - SNMP (for Version 5.3)

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

Option 1 - Enable service on this node

3. Enter one of the following commands after the DCL prompt:

TCP/IP Command	UCX Command
\$ TCPIP SHOW CONFIGURATION -	\$ UCX SHOW CONFIGURATION -
_\$ SNMP/FULL	_\$ 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 one of the following commands:

TCP/IP Command	UCX Command
\$ TCPIP SET CONFIG -	\$ UCX SET CONFIG -
_\$ SNMP/COMMUNITY="public"/ -	_\$ SNMP/COMMUNITY="public"/ -
_\$ type=read	_\$ type=read

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

TCP/IP Command	UCX Command
\$ TCPIP SHOW CONFIGURATION -	\$ UCX SHOW CONFIGURATION -
_\$ SNMP/FULL	_\$ SNMP/FULL

Note

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

2 Prior to Installing the Management Agents Software

Before you install the Management Agents for OpenVMS Version 2.4 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

- 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
```

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:

- Copy the Version 7.1, 7.2, or 7.3 file to SYSS\$UPDATE:

```
V71_MGMTAGENTS-V0204-11-1.EXE
```

or

```
V72_MGMTAGENTS-V0204-11-1.EXE
```

or

```
V73_MGMTAGENTS-V0204-11-1.EXE
```

- To unpack the kit, enter one of the following DCL commands:

```
$ RUN V71_MGMTAGENTS-V0204-11-1.EXE
```

or

```
$ RUN V72_MGMTAGENTS-V0204-11-1.EXE
```

or

```
$ RUN V73_MGMTAGENTS-V0204-11-1.EXE
```

- To install the appropriate PCSI kit, enter one of the following DCL commands:

```
$ PRODUCT INSTALL V71_MGMTAGENTS
```

or

```
$ PRODUCT INSTALL V72_MGMTAGENTS
```

or

```
$ PRODUCT INSTALL V73_MGMTAGENTS
```

- Define two logical names as follows:

- 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, you need to 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 based on the model of hardware you use, on DS20, DS25, ES40, ES45, GS80 and later systems. This value is about 5 degrees C below the shutdown temperature defined for the system.

For older 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.

4. Perform one of the following actions:

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

TCP/IP Command Files	UCX Command Files
\$ @TCP\$SNMP_SHUTDOWN.COM	\$ @UCX\$SNMP_SHUTDOWN.COM
\$ @TCP\$SNMP_STARTUP.COM	\$ @UCX\$SNMP_STARTUP.COM

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

TCP/IP Command Files	UCX Command Files
\$ @TCP\$SNMP_STARTUP.COM	\$ @UCX\$SNMP_STARTUP.COM

5. Use the DCL command SHOW SYSTEM to ensure that SNMP is enabled on the system. The system should display the UCX, TCP/IP Version 5.0, or TCP/IP Version 5.1 or later processes, shown in the following table:

UCX Processes	TCP/IP Version 5.0 Processes	TCP/IP Version 5.1 or later Processes
UCX\$ESNMP	TCP\$ESNMP	TCP\$SNMP_1
UCX\$OS_MIBS	TCP\$OS_MIBS	TCP\$OS_MIBS
UCX\$HR_MIB	TCP\$HR_MIB	TCP\$HR_MIB

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

6. Older versions of the Management Agents did not display environmental details (temperature, fan, and power supply information) on the newer generations of Alpha systems in the DS, ES and GS Series. This release of the Management Agents allows you to view this information on DS25, ES45 and later systems, if your system has:

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

To view environmental details on GS80 and later systems, your system should have:

- 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/SYS/EXEC WBEM$PRIVATEER TRUE
```

Important Notes:

- 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, a system crash might result.
7. To run the Management Agents, enter the following commands:

```
$ SET DEFAULT SYS$SPECIFIC:[WBEM]  
$ @WBEM$STARTUP
```
 8. 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)
```
 9. 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 processes:

```
$ @SYS$SPECIFIC:[WBEM]WBEM$STARTUP
```
 10. 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:

```
http://node_address:2301
```

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. Some components of the Compaq TCP/IP product must be installed 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.
2. Add the following line to the file MULTINET:SNMPD.CONF:

```
AGENTX_PEER 127.0.0.1
```
3. 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>
```
4. Copy TCPIP\$ESNMP_SHR.EXE to SYSS\$SHARE:UCX\$ESNMP_SHR.EXE.
5. 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
```
6. Start MultiNet as described in the MultiNet User Manual.
7. Start the Management Agents for OpenVMS using the following command:

```
$ @SYSS$SPECIFIC:[WBEM]WBEM$STARTUP.COM
```
8. 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. Some components of the Compaq TCP/IP product must be installed 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.
2. Add the following line to the file TCPWARE_COMMON:SNMPD.CONF:

```
AGENTX_PEER 127.0.0.1
```
3. Ensure that the SNMP agent and AGENT X service are enabled during the configuration of SNMP on TCPware.
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>
```
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 TCPIP$AGENTX_INET_PORT 705
$ DEFINE/SYSTEM TCPIP$AGENTX_LOCAL_PORT 705
```
7. Start TCPware as described in the TCPware 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 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:\WINNT\Profiles\All Users\Start Menu\Programs\Availability Manager\dataan~1.lnk
OpenVMS Management Station on Windows NT or Windows 2000	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, it is probably because the products were 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
```

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