

HP-UX virtualization
VSE

HPSIM 5.2 - 가 VSE 4.0 가

2008 7



© 2006 Hewlett-Packard Development Company, L.P.
The information contained herein is subject to change without notice



- HP-UX CMS ()
- HP-UX Client ()
- CMS HPSIM 5.2
- HPSIM Client
- HPSIM
- CMS VSE 4.0
- VSE Client
- vseassist HPSIM VSE Troubleshooting
- VSE

HP-UX CMS

()





HPSIM

	HP 9000 , HP Integrity , HP Integrity ,HPIntegrity Virtual Machine
OS	HP-UX 11i v1, v2, v3
CPU	2 core
	2GB HP-UX 11i v3 - 3GB
	1.5GB
Swap	HP 9000 - 3GB HP Integrity - 4GB



HPSIM+VSE

	HP 9000 , HP Integrity , HP Integrity ,HPIntegrity Virtual Machine
OS	HP-UX 11i v1, v2, v3
CPU	2 core VSE -4 core
	3GB HP-UX 11i v3 - 4GB ** VSE 4GB HP-UX 11i v3 - 5GB
	2GB
Swap	HP 9000 - 4GB HP Integrity - 5GB

Rev. 6.11

5



CMS

1) JAVA Out-Of-Box

max_thread_proc	3000
maxdsiz	2063835136
maxfiles	2048
maxfiles_lim	2048
maxusers(HP-UX 11i v1)	512
ncallout(HP-UX 11i v1)	6000
nfile	4097
nkthread	6000
nproc	2048
tcp_conn_request_max	2048

2) HPSIM

nfile	30000
semms	2048
semnmi	1024
maxssiz	33554432



CMS S/W Patch

1) CMS

S/W	Patch		
Java	http://www.hp.com/go/java	Site information	Patches

2) CMS Client Client S/W Patch CMS

S/W	O/S	Patch
gWLM	11.11	PHCO_37369, PHCO_30030
Application Discovery	11.23	PHCO_37228
Virtualization Manager Capacity Advisor	11.23	PHSS_33349
HP Integrity VM	11.23	PHKL_33752, PHKL_35174
rx8640,rx7640 gWLM	11.23	PHKL_35174

VSE



Client	500
(SRD)	60
(Workload)	500
	500
	100
HP SIM	HP-UX 11i v1(B.11.11) 3
VSE	HP-UX 11i v2 HP-UX 11i v3 5



CMS

HPSIM	280	HTTP
CIM	5989	TCP
SSH Tools	22, 10001	TCP
SNMP Trap Listener	162	UDP
HP SMH	2301	HTTP
gWLM	9617, 9618	
Open SSL	9143	
HPSIM Secure	50000 - 50005	HTTPS
HPSIM Database	50006	TCP
JBoss	50008 - 50010	TCP
HPSIM Web	50013 - 50015	TCP

Rev. 6.11

9

HP-UX Client ()





Client S/W Patch

S/W	O/S	Patch
gWLM	11.11	PHCO_37369, PHCO_30030
Application Discovery	11.23	PHCO_37228
Virtualization Manager Capacity Advisor	11.23	PHSS_33349
HP Integrity VM	11.23	PHKL_33752, PHKL_35174
rx8640,rx7640 gWLM	11.23	PHKL_35174



Client HP-UX S/W

OpenSSL	1. OS Install CD
T1471AA : HP-UX Secure Shell	2. CMS Client S/W CMS
B8465BA : HP WBEM Services for HP-UX	

**) <http://www.hp.com/go/hpsim> 가



Client

S/W

Utilization Provider	
Application Discovery Agent	
Application Discovery WBEM Provider	
gWLM Agent	
nPartition Provider	1. CMS Client Client
VM Provider	S/W Patch CMS
vPar Provider	2.
WBEM Services	HP-UX VSE Management Software 4.0
LDAP	, 2008 5 .pdf
OpenSSH	(http://docs.hp.com)
OpenSSL	
HP Integrity VM	
HP Serviceguard	
VSE Mgmt Suite License	

**) <http://www.hp.com/go/hpsim> 가

CMS

HPSIM

5.2



HPSIM 5.2



1. <http://www.hp.com/go/hpsim>
2. <http://www.software.hp.com>
3. Application Software CD
4. O/S Install CD



HPSIM

- Command : /opt/mx
- Configuration : /etc/opt/mx
- Data and Log : /var/opt/mx

- Startup files for HPSIM:
 - /sbin/init.d/hpsim
 - /etc/rc.config.d/JOOB
 - /etc/rc.config.d/hpsim



CMS HPSIM -1

0. HPSIM

1. Depot HPSIM Install (HPSIM Rebooting)

```
# swinstall -s /tmp/HPSIM_download.depot -x autoreboot=true HPSIM-HP-UX
```

2. HPSIM

```
# /opt/mx/bin/mxinitconfig -a  
: /var/opt/mx/logs/initconfig.log
```

3. mxdomainmgr mxdtf

```
# ps -ef|grep mx
```

Start

```
# /opt/mx/bin/mxstart
```

CMS HPSIM -2



```
4. SNMP CMS
# vi /etc/SnmpAgent.d/snmpd.conf
get-community-name: public
trap-dest : CMS hostname or ip_address
# /sbin/init.d/SnmpMaster stop
# /usr/sbin/snmpd
```

```
5. CMS Client s/w
1) OpenSSL : B8465BA OpenSSL OpenSSL
2) T1471AA : HP-UX Secure Shell
3) B8465BA : HP WBEM Services for HP-UX
```

HPSIM Client





Client

```
1. s/w
   1) OpenSSL : B8465BA   OpenSSL           OpenSSL
   2) T1471AA : HP-UX Secure Shell
   3) B8465BA : HP WBEM Services for HP-UX

2. SNMP
   # vi /etc/SnmpAgent.d/snmpd.conf
   # get-community-name: public
   # trap-dest : CMS hostname or ip_address
   # /sbin/init.d/SnmpMaster stop
   # /usr/sbin/snmpd
```

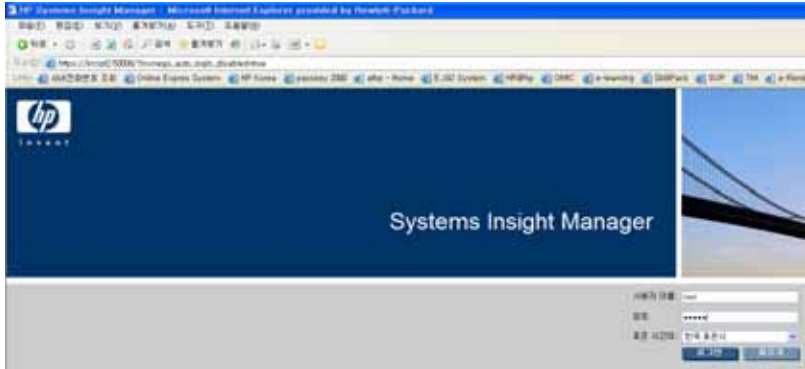
HPSIM





HPSIM

1. .
2. **http://SIM-Host ip_address:280**
SIM-Host HP SIM(HP Systems Insight Manager) CMS
3. (CMS root user password)
Enter

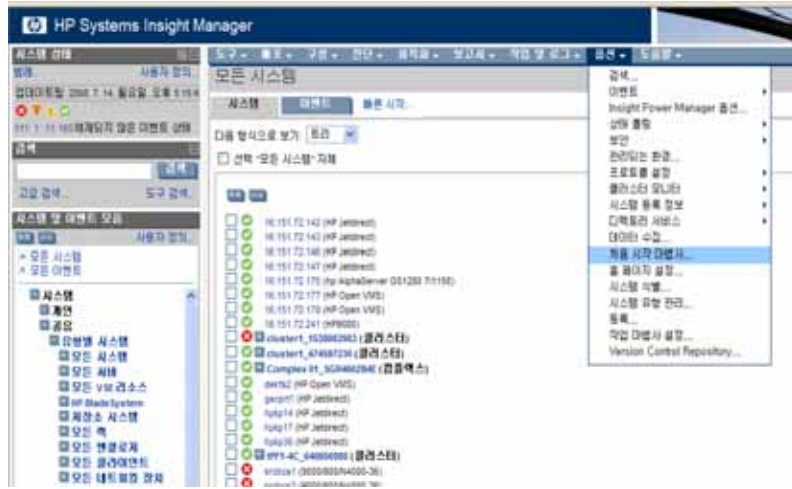


Rev. 6.11

22



- 1



Rev. 6.11

23



CMS

VSE

4.0



VSE 4.0



1. <http://www.hp.com/go/vse>
2. <http://www.software.hp.com>
3. Application Software CD



VSE

- Command : /opt/vse
- Configuration : /etc/opt/vse
- Data and Log : /var/opt/vse
- Capacity Advisor System Utilization Data :
/var/opt/vse/profile/bin
- VSE Assist Log : /var/adm/syslog/vseassist.log



CMS VSE

```
0. VSE 가 HPSIM

1. Depot VSE Install (VSE Rebooting )
# swinstall -s /tmp/HPVSE_download.depot VSEMgmt

2. HP VSE Management
# /opt/vse/bin/vseinitconfig -a
: /var/opt/vse/logs/vseinitconfig.log

3. vseinitconfig가 HP SIM 가 . HP SIM
"y" Enter .
```

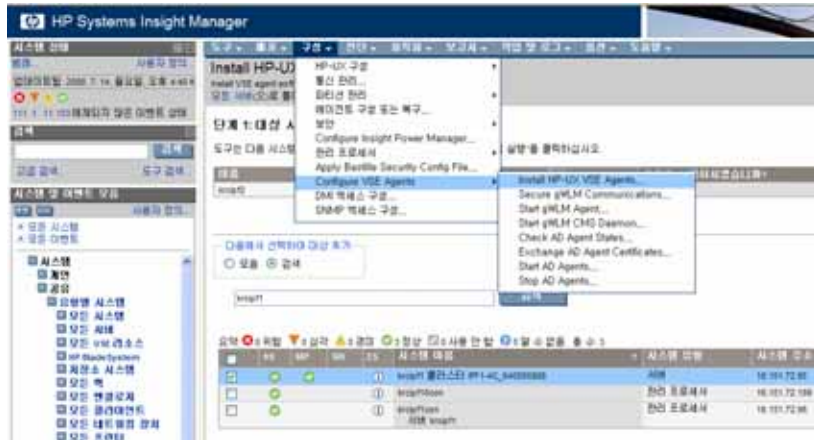
VSE Client



HP-UX

VSE Agent

(HPSIM)-1



Rev. 6.11

30

HP-UX VSE Agent (HPSIM)-2



Install HP-UX VSE Agents
Install VSE agent software on HP-UX managed nodes

Select a VSE agent source: **VSE 4.0 HP-UX Managed Node Software**

Select the software to install on each managed node. Default selections are made when the screen is first entered or when the source is changed. Adjust the selections as necessary. Press the OK button to install the selected software on all target managed nodes.

Note: If any selected software requires a reboot, the installation command will reboot the target managed nodes after the software is installed. Do not select software requiring a reboot unless you are prepared for such target managed nodes to reboot.

Software ID	Description	Reboot Required?	Default File
004050a	VSEDF Service version 4.02.02.01 required to support the installation and configuration features of Virtualization Manager and the collection of utilization data for Capacity Advisor.	No	004050a.agent
004050b	VSEDF Service version 4.02.02.01 required to support the installation and configuration features of Virtualization Manager and the collection of utilization data for Capacity Advisor.	No	004050b.agent
714714a	SecureShell version 4.2a.40.00 for 11v1 and 4.2a.40.00 for 11v2 required on managed nodes in order to install the VSE agent software from HP SW, create additional accounts, and execute commands on managed nodes remotely from the CMC.	No	714714a_4.agent
SecureShell	SecureShell 4.2a.40.00 for 11v1 required on managed nodes in order to install the VSE agent software from HP SW, create restricted workloads, and execute commands on managed nodes remotely from the CMC.	No	714714a_4.agent
ApplicationAgent	Application Discovery Agent for VSE version 4.0 (replaced by Application Discovery 6 Release) application on managed nodes.	No	agentapp.agent
gfsAgent	gfsAgent for VSE version 4.0 required by gfsD to manage workloads. This software is not supported on 11v1/4-00/02.00 systems.	No	gfsAgent.agent
VSPProvider	VM VSPD provider for HP-UX 2.2 hosts and guests required for discovery and management of Virtual Machines. Version 4.02.02.01 is for 11v2 64-bit systems, while version 4.02.02.01 is for 11v1 64-bit systems.	No	vsplnd_2.agent
VSPProvider	VM VSPD Provider for Integrity VM 3.0 hosts and guests required for discovery and management of Virtual Machines. Version 4.02.02.01 is for 11v2 64-bit systems, while version 4.02.02.01 is for 11v1 64-bit systems.	No	vsplnd_2.agent
JavaJRE	Java JRE 1.5.0_01 (Java 1.5) are required by gfsD. In HP-UX If you install JRE 1.5.0.4 it is possible to occur compatibility problems with previous versions of Java related applications.	No	java1_5000.agent

Force reinstallation when the same version is already present.

Rev. 6.11

31



VSE Agent

- 1. VSE Agent Depot
: **/var/opt/vse/depot**
- 2.
 - # rcp ftp
 - # swinstall Windows setup

vseassist
HPSIM VSE Troubleshooting





vseassist

• **vseassist** : VSE Management Software

- 1) CMS VSEMgmt
- 2) CMS
- 3) VSEMgmt

-Log /var/adm/syslog/vseassist.log

1. CMS

2. HPSIM Web GUI



CMS

vseassist

```
# man vseassist
# vseassist -a
- CMS
- CMS
-
# vseassist -a -n client_host
- CMS
- CMS
-
# vseassist -c
- CMS
# vseassist -l -n client_host : link
- CMS
# vseassist -r -n client_host : remote
-
```



HPSIM Web GUI

Rev. 6.11

36

VSE





VSE

Product No	Product
T2786AC	HP-UX 11i LTU HP VSE Suite (T2784AC,T2782AC,T2762AA Product7)
T2784AC	HP-UX LTU HP Capacity Advisor
T2782AC	HP-UX LTU HP Virtualization Manager
T2762AA	HP Global Workload Manager Agent LTU
T2807AC	Integrity Windows HP Capacity Advisor
T2806AC	Integrity Windows HP Virtualization Manager
T2785AC	Integrity Linux HP Capacity Advisor
T2783AC	Integrity Linux HP Virtualization Manager



HP-UX Client

```
1. HP-UX      Client      Application CD      Depot      Product swinstall
# swinstall -s /tmp/T2786AC_VSE_Suite_license.depot
** T2786AC : HP VSE Suite for HP-UX 11i LTU      Capacity Advisor, Virtualization
      Manager, gVLM
2. CMS      Client      core      (client      core 가 4      )
# vselicense -m -c 4 -n client_host
** CMS      Client      CMS      1      2
```

HP Integrity Linux

Windows



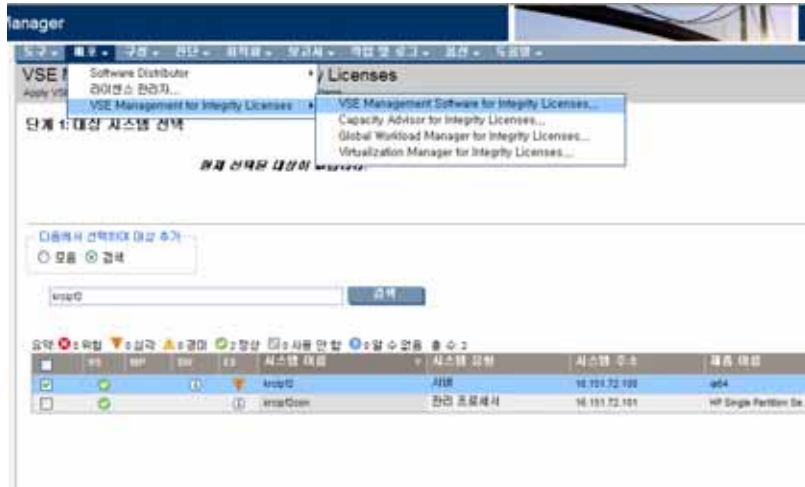
```
1. CMS Delivery Key
# vselicense -l Key -n client_host -p product

2. CMS Client core (client core 가 4 )
# vselicense -m -c 4 -n client_host
```




Client

-1



Rev. 6.11

41

Client

-2



manager HPV: not
18:20

Deploy VSE Management Software for Integrity Licenses
Deploy script

YOUR USE OF THE VSE MANAGEMENT SOFTWARE AND ALL OF ITS COMPONENTS INCLUDING, BUT NOT LIMITED TO, VSE MANAGEMENT COMPONENTS AND AGENTS INSTALLED ON VSE MANAGED SYSTEMS ARE GOVERNED BY THE SOFTWARE LICENSE TERMS AND CONDITIONS FOUND IN suppliers/README.

To license a system, assign as many licenses as that system has CPU cores.

Permanent Licenses Available: 0 Add Lic

Show All Licensed Systems

System Name	Status	Permanent Per Core Licenses	Detected CPU Cores	License Source	OS Name	Product Model
loop2	Licensed	3	Microsoft*	Purchased	HPUI	MLA

Legend: Add License Exp... Apply

- * - Number of cores could not be found. User is responsible for determining the number of cores within the system.
- A - Indicates value in the column has not been applied and differs from the current value saved in the licensing database.
- ! - Indicates number of licenses does not match the number of detected cores. In most cases, these values should match unless Incent Capacity is in effect. See help for assistance.

Add License Key:

Specify a key string: (e.g. 00000-00000-00000-00000-00000)

Add Lic

Rev. 6.11

42

Thank You

