



Hitachi HiCommand® Backup Services Manager

Portal
Installation Instructions
- for -
Microsoft Windows Server

Nov 2007

Version 6.5

DOC ID: MK-95APT005-05

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1. Introduction

This document provides step-by-step instructions for the use of the Hitachi HiCommand® Backup Services Manager Portal Installer. Sections 2 and 3 below provide third party software and system setup information which must be completed before running the HBSM Installer. The step-by-step installer instructions begin in section 5.

This install guide is valid for version 6.5 onward.

If at any time during the install you encounter a problem, or if you simply want to verify a step or have a question about the installation, please contact the Hitachi Data Systems Technical Support Center who will be happy to assist you:

HDS Technical Support Center Information

Phone:

Nth & Latin America 1-800-348-4357

Europe +(44)-175-361-8000

Asia Pacific (call USA GCC) +(1) 858-547-4765

Email: hdsbsmsupport@hds.com

2. Software Repositories

HBSM uses various open-source and third-party software products. The following is a list of the major third-party products that are bundled and included on the HBSM Portal Software CD. This list is simply provided should you need to download a version of the third-party software from the Internet.

Software Product	Version
SUN Java 2 Standard Edition SDK	1.6.0_02
Apache HTTP Web Server	2.2.6
Apache Tomcat Java Servlet Engine	5.5.23
Apache Tomcat Connector	1.2.25
OpenLDAP	2.1.22

3. Pre-Installation Notes

IMPORTANT: THESE STEPS MUST BE EXECUTED PRIOR TO PERFORMING THE INSTALL OTHERWISE THE INSTALL WILL FAIL.

- 3.1. Operating System Verification: Prior to the installation of the HBSM Portal software, please verify that your portal has been loaded and configured with one of the following certified operating systems:
 - 3.1.1. Microsoft Windows 2000 Server or
 - 3.1.2. Microsoft Windows 2000 Advanced Server
 - 3.1.3. Microsoft Windows Server 2003
- 3.2. You will need to login as a **local Administrator** to perform the installation.
- 3.3. **To license the HBSM Portal software, you must provide a license file upon the completion of the install process. Without this license file the software will not operate.** To obtain a license file, please see the instructions in Section 7 - below.
- 3.4. Setup *hbsmportal.yourdomain.com* and *hbsmagent.yourdomain.com* in the enterprise DNS. NOTE: both entries should resolve to the IP address of the HBSM Portal server.
- 3.5. Verify there are no other Web Servers (e.g. IIS) running on the system.
- 3.6. The installer will set up system-wide environment variables for ORACLE_HOME and ORACLE_SID. The PATH environment variable will also be updated. The changes the installer will make are summarized below for your reference:

Variable Name	Variable Value
ORACLE_HOME	C:\opt\oracle
ORACLE_SID	scdb

PATH environment variable will have the following path appended:

C:\opt\oracle\bin

- 3.7. Verify that the following file systems and disk space exists on your HBSM Portal Server:

Directory	Minimum Disk Space
C:\opt	4 GBytes
C:\oradata ¹	16 GBytes
Total	20 GBytes

¹ Note: The installer prompts for the target drive for the oradata directory, so alternate drives are supported.

4. HBSM Installation Overview

The installation process consists of three main steps as follows:

1. Install Oracle application binaries
2. Install the HBSM Portal software components
3. Create the HBSM database and load the schema objects

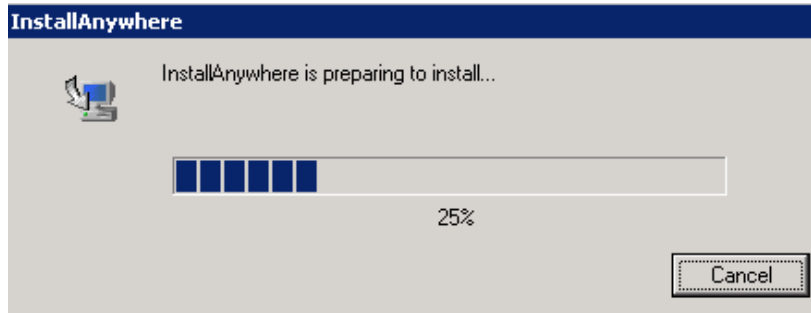
Typically these components are all installed on the same physical server in which case steps two and three are combined. However the installation process also supports splitting the Oracle and HBSM software components across two servers. If you have elected to deploy separate servers you should still follow the install sequence above, but simply execute each step on the appropriate server.

5. Oracle Application Binaries Installation

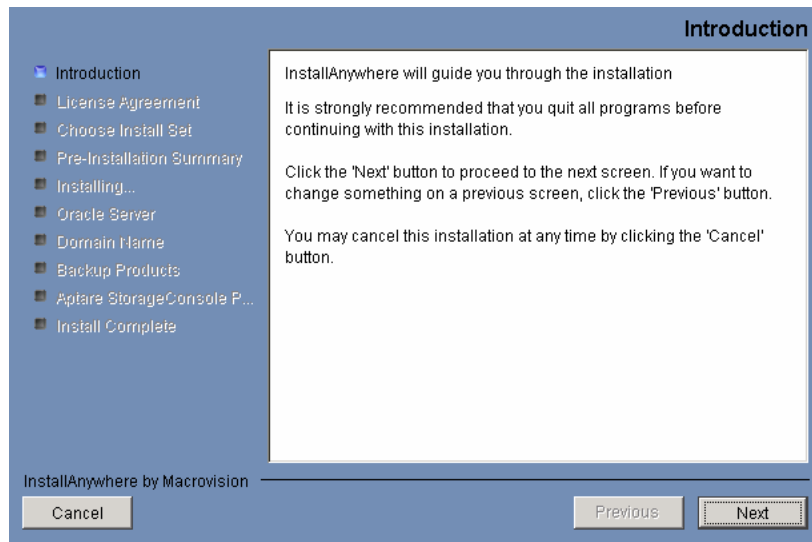
System: *Database Server*
Required CD: *HBSM Oracle Application*
Estimated Time: *5 minutes*

This section covers the installation of the Oracle application binaries. Oracle may be installed on its own server, or on the same server on which you plan to install the Portal Software components (which is more typical).

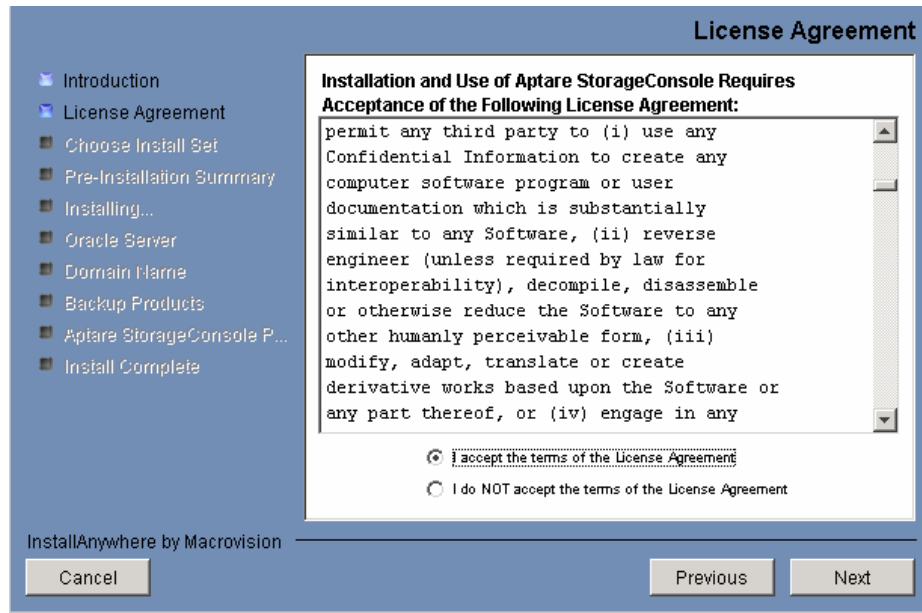
- 5.1. Login to the server as a **local Administrator**
- 5.2. Insert the HBSM Oracle Application CD into the CD-ROM drive of your Windows server.
- 5.3. The installer should launch automatically. If it does not, using Windows Explorer, navigate to the CD drive, and double click on the file "aptarestorageconsoledb.exe". The path to aptarestorageconsoledb.exe can be found in the "autorun.inf" file.
- 5.4. The HBSM Installation Wizard will start up:



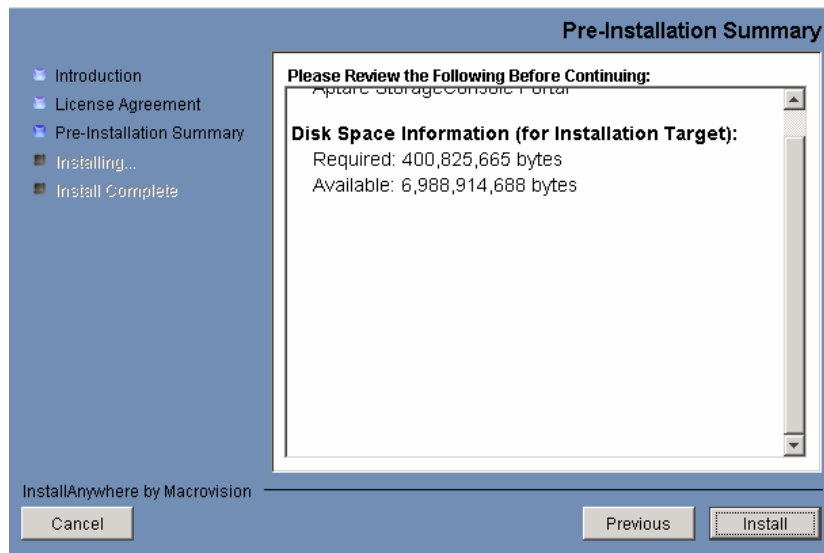
- 5.5. Once the installer has extracted the necessary startup files, the HBSM Installation Wizard will display the following screen:



- 5.6. Click on the "Next" button on the INTRODUCTION screen to start the installation process
- 5.7. The Installer will then display the following LICENSE AGREEMENT screen and prompt you to accept the Hitachi Data Systems End User License Agreement (EULA) to continue



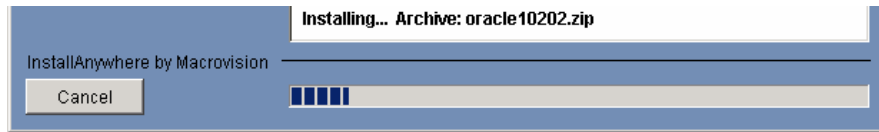
- 5.8. Click on the “I accept the terms of the License Agreement” selector and then click on the “Next” button to continue
- 5.9. The next screen displays the PRE-INSTALLATION SUMMARY. This screen summarizes the product components that will be installed and describes the available and required disk space for these components



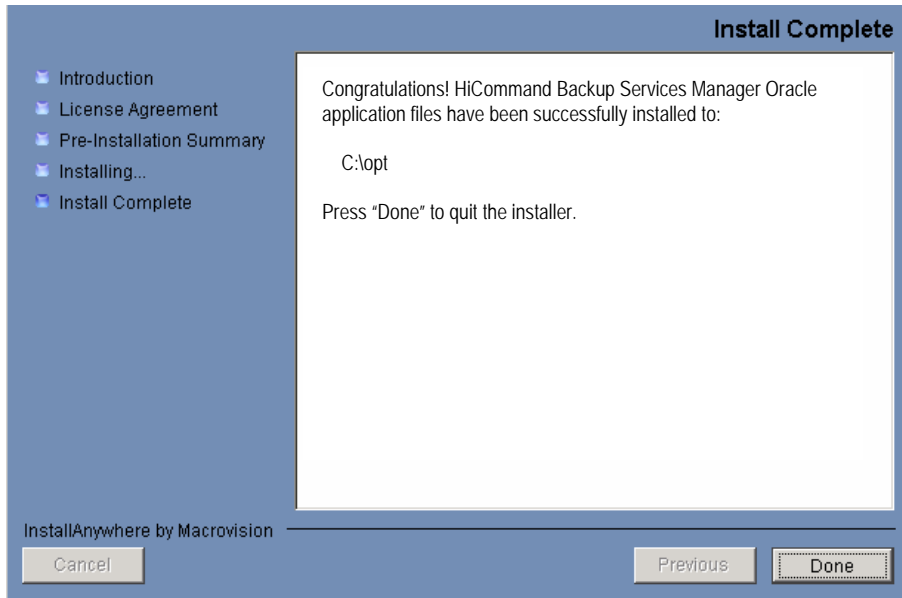
- 5.10. To start the installation of the HBSM Oracle Application in the C:\opt directory on your Windows server, click on the “Install” button.

Note: The application binaries must be installed on the C:\ drive. The database itself however can be created on an alternate drive (see step 6.16 below)

- 5.11. The installer then displays several status screens as the various software binaries are copied into place on your Windows server. The progress bar at the bottom displays the component being installed and the progress of the install overall:



- 5.12. At the completion of this step, the INSTALL COMPLETE screen will appear, click on “Done”



- 5.13. At this stage of the installation process, the Oracle Application binaries have been installed on your server and appropriate Oracle services created. This completes the install of the HBSM Oracle Application component. The next step is to install the HBSM Portal Software components as described in Section 6.

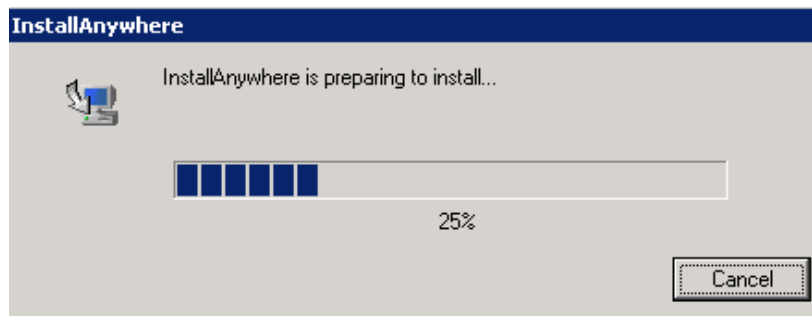
6. HBSM Portal Installer Steps

System: *Web / Application Server*

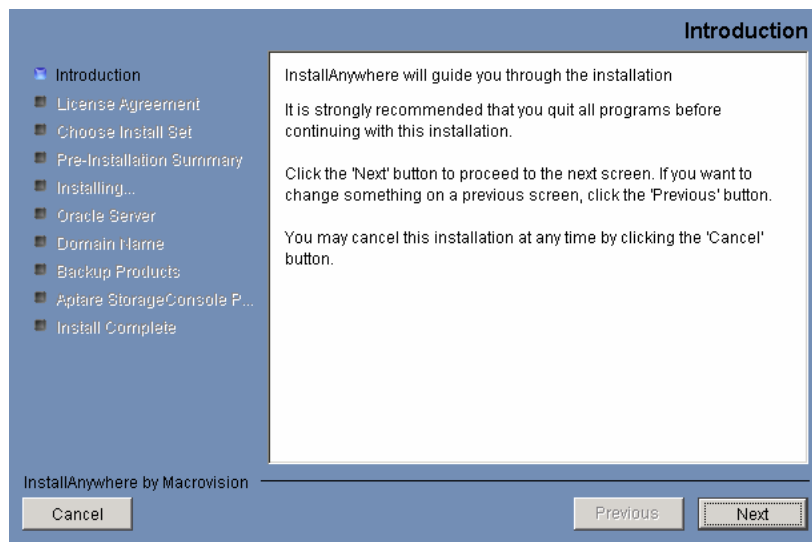
Required CD: *HBSM Portal Software*

Estimated Time: *10-15 minutes*

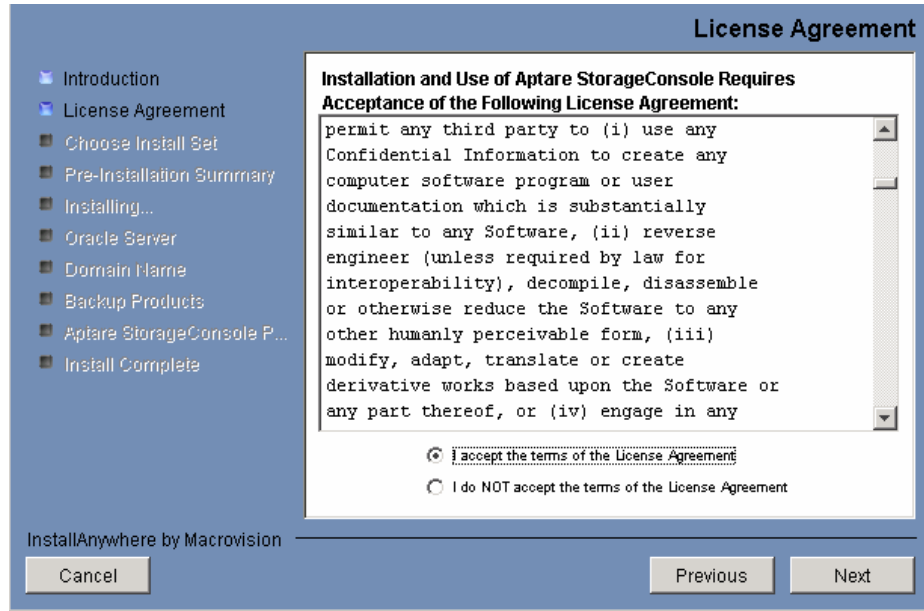
- 6.1. Login to the server as a **local Administrator**
- 6.2. Insert the HBSM Portal Software CD into the CD-ROM drive of your Windows server.
- 6.3. The installer should launch automatically. If it does not, using Windows Explorer, navigate to the CD drive, and double click on the file "aptarestorageconsole.exe". The path to aptarestorageconsole.exe can be found in the "autorun.inf" file.
- 6.4. The HBSM Installation Wizard will start up:



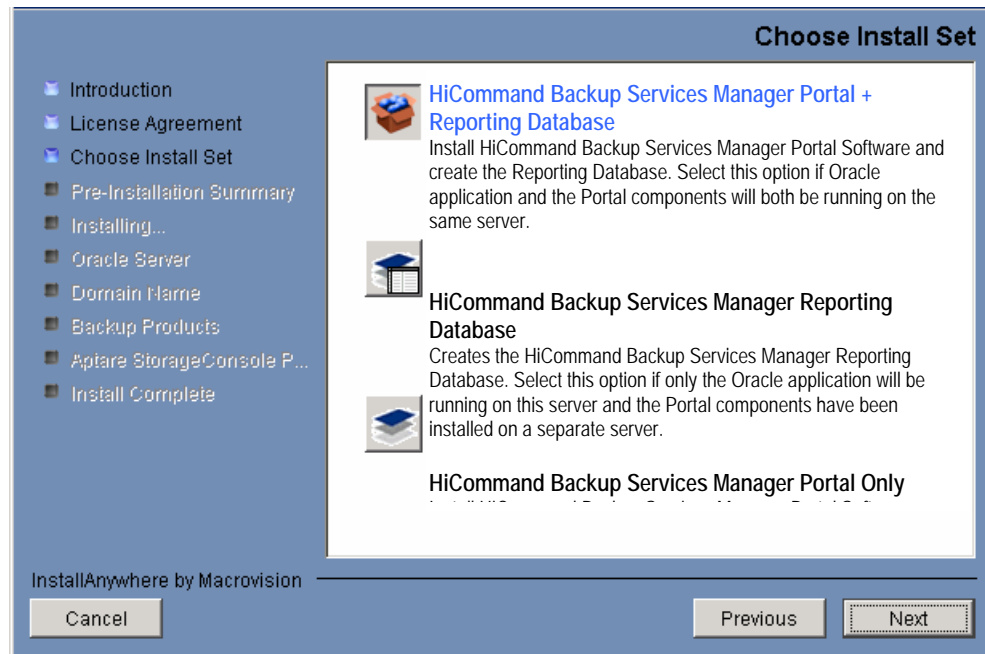
- 6.5. Once the installer has extracted the necessary startup files, the HBSM Installation Wizard will display the following screen:



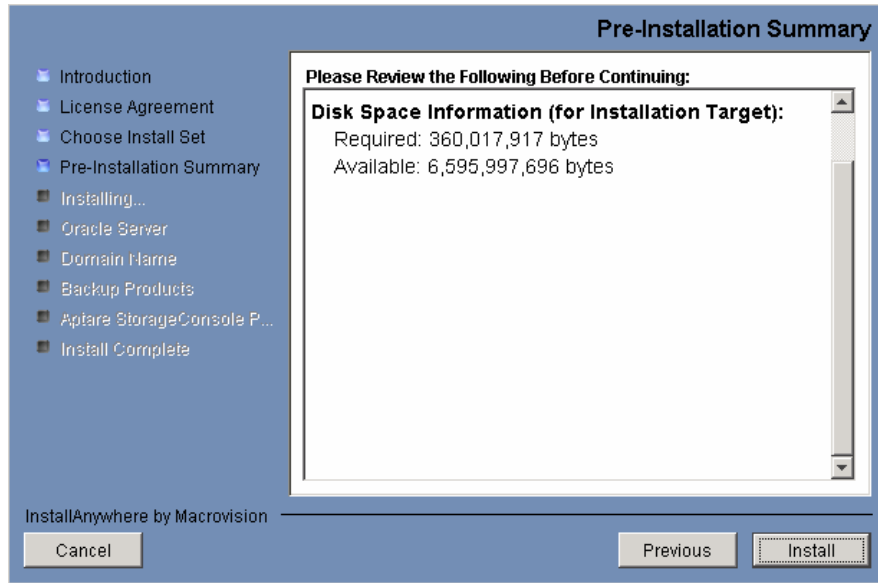
- 6.6. Click on the "Next" button on the INTRODUCTION screen to start the installation process
- 6.7. The Installer will then display the following LICENSE AGREEMENT screen and prompt you to accept the Hitachi Data Systems End User License Agreement (EULA) to continue



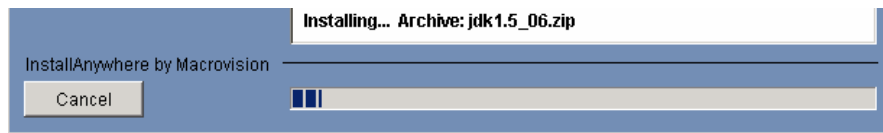
- 6.8. Click on the “I accept the terms of the License Agreement” radio button and then click on the “Next” button to continue
- 6.9. You must now select the appropriate installation option. If you are installing all the components on the same server select the first option. Otherwise, select the option corresponding to the server type (database or portal) the installer is running on.



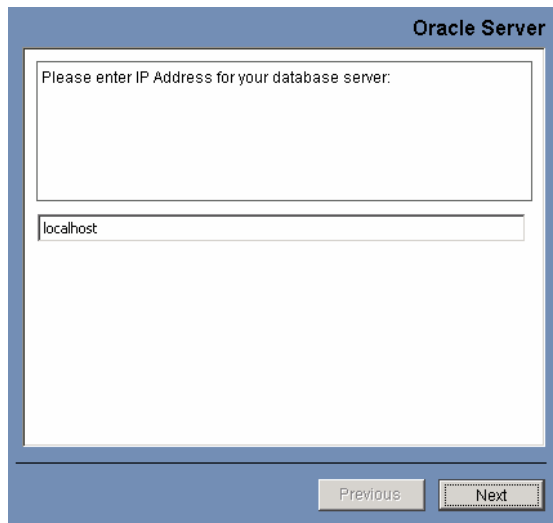
- 6.10. The next screen displays the PRE-INSTALLATION SUMMARY. This screen summarizes the product components that will be installed and describes the available and required disk space for these components



- 6.11. To start the installation of the HBSM program files in the C:\opt directory on your Windows server, click on the “Install” button. Note: The application must be installed on the C:\ drive.
- 6.12. The installer then displays several status screens as the various software binaries are copied into place on your Windows server. The progress bar at the bottom displays the component being installed and the progress of the install overall:



- 6.13. The installer will now prompt for the IP address of your Oracle database server. If Oracle is running on the Portal server, you can enter localhost. Otherwise enter the hostname or IP address of the server on which the Oracle Application binaries have been installed.



- 6.14. You are now prompted for the Domain name and Admin password.

- Domain Name:** The domain name value you enter here determines the URL that will be used to login to the HBSM Web GUI. E.G. if you enter *companyabc.com*, the URL will be *http://hbsmportal.companyabc.com*. You should make a note of the domain value since you will also be asked for this value during the installation of the Data Collection components that collect data from the servers in your enterprise.
- Admin Password:** The admin userid is created during install in the format “admin@domainname” (e.g. *admin@companyabc.com*). You will be prompted for this admin userid and the password you supply below when you first login to the HBSM Portal.

PLEASE MAKE A NOTE OF THE USERID AND PASSWORD FOR FUTURE REFERENCE

AdminMailId: admin@_____

Password : _____

Domain Name

Please confirm the domain name for your network (e.g. yourdomain.com) and provide the password for the portal admin user login. The domain string you enter here will be used to construct the Web browser URL that connects you to the Portal server.

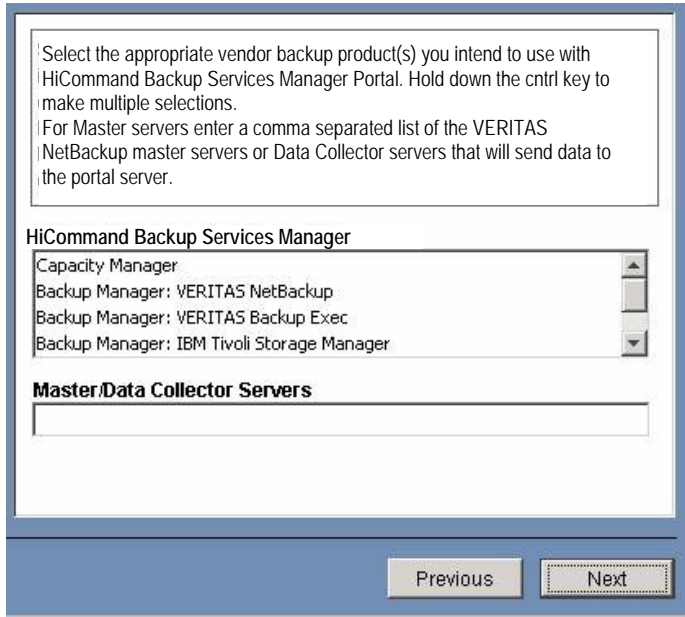
Domain Name:
companyabc.com

Admin Password:

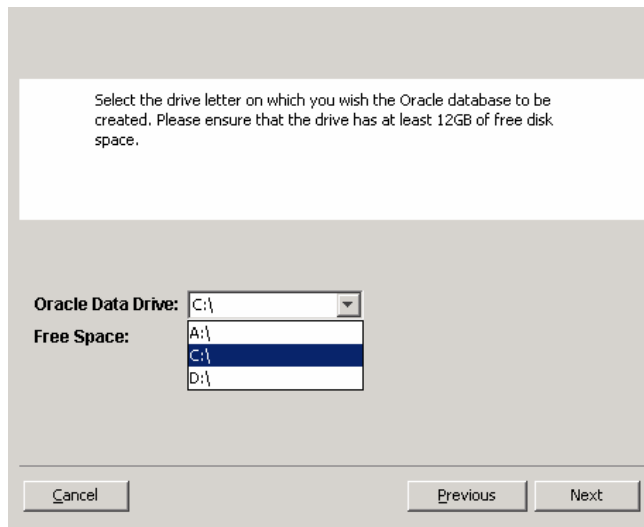
Previous Next

6.15. You are now prompted to select the products you wish to install.

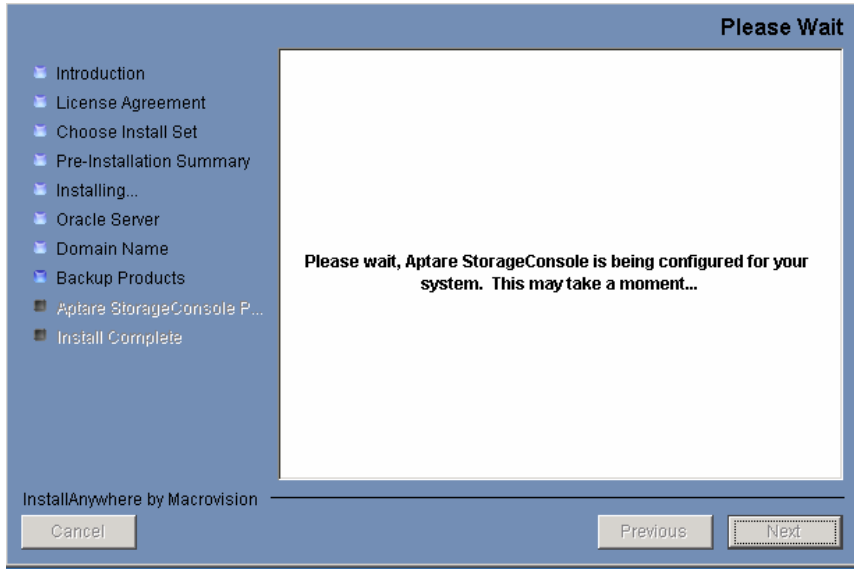
- Products** Select only the products you are licensed for in your environment. If you select a product for which you do not have a valid license, you will not be able to access the reports for that product.
- Master/Data Collectors** Enter a comma separated list of the VERITAS NetBackup master servers or Data Collector servers in your environment that will send data to the portal server. If you do not know the server names at this time, you can manually add them to the file *C:\opt\aptare\dataarcvconf\reload.conf* at a later date.



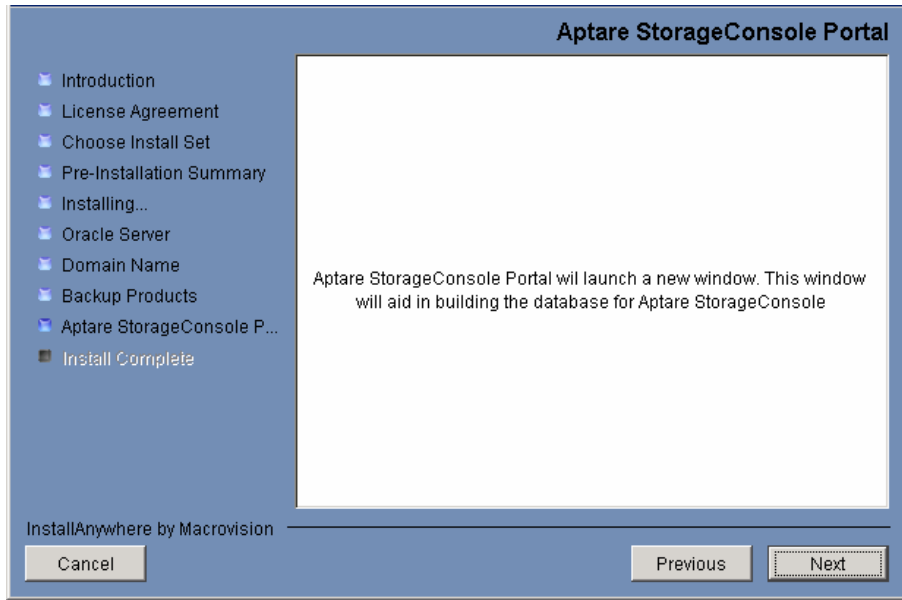
6.16. Select the drive on which the Oracle database will be created:



6.17. The installer now customizes the installation based on the values provided:



6.18. The installer prepares to launch the database creation script.
Click Next to launch the database creation process.



6.19. The Create Database command prompt window opens.
Enter “yes” to continue with the database creation.

```
*****
HBSM DATABASE INSTALLER
*****
You are about to install the HBSM database.
This script will create the Oracle data files and schema and will take
approximately 25-35 minutes to complete depending on system performance.
Please be patient while the various installation steps complete.
Do you wish to continue with this install (enter yes to continue, no to
quit):
yes
```

6.20. The database will be created (this step will take between 5-10 minutes to complete):

```
SQL*Plus: Release 10.2.0.1.0 - Production on Mon Aug 1 14:02:32 2005
Copyright (c) 1982, 2005, Oracle Corporation. All rights reserved.

Connected to an idle instance.

Starting the HBSM Oracle Database instance ...
ORACLE instance started.

Total System Global Area  696254464 bytes
Fixed Size                 1250932 bytes
Variable Size             293603724 bytes
Database Buffers          398458880 bytes
Redo Buffers               2940928 bytes
Creating HBSM Database for Windows Environment ...

Database created.
Creating the HBSM tablespaces and related datafiles, please wait ...

Creating tablespace aptare_tbs_data_1m tablespace, size 256 MBytes ...
Tablespace created.
Creating tablespace aptare_tbs_idx_1m, size 256 MBytes ...
Tablespace created.
Creating tablespace aptare_tbs_data_20m, size 1.0 GBytes ...
Tablespace created.
Creating tablespace aptare_tbs_idx_10m, size 1.0 GBytes ...
Tablespace created.
Creating tablespace aptare_tbs_data_200m, size 1.5 GBytes ...
Tablespace created.
Creating tablespace aptare_tbs_idx_100m, size 1.5 GBytes ...
Tablespace created.

Disconnected from Oracle Release 10.2.0.1.0 - Production
JServer Release 10.2.0.1.0 - Production
Created HBSM tablespaces and related datafiles
```

6.21. The installer will then load the database with Oracle packages (this step will take between 15-25 minutes to complete):

```
Loading Oracle catalog package and related internal Oracle packages ...
The step will take between 3 and 6 minutes to complete depending on system
performance
Completed loading Oracle catalog package into HBSM database schema

Loading Oracle catproc package and related internal Oracle packages ...
The step will take between 10 and 12 minutes to complete depending on system
performance
Completed loading Oracle catproc package into HBSM database schema
Disconnected from Oracle Release 10.2.0.1.0 - Production
JServer Release 10.2.0.1.0 - Production

SQL*Plus: Release 10.2.0.1.0 - Production on Mon Aug 1 14:22:17 2005
Copyright (c) 1982, 2006, Oracle Corporation. All rights reserved.

Connected to:
Oracle9i Release 10.2.0.1.0 - Production
JServer Release 10.2.0.1.0 - Production
```

```
Loading pupbld package ...
```

6.22. The portal users, the database schema are now created:

```
Creating HBSM Portal user ...
Disconnected from Oracle Release 10.2.0.1.0 - Production
JServer Release 10.2.0.1.0 - Production

Creating HBSM base schema tables ...
...
...           (EACH STEP LOGS TO THE screen...)
...
Completed creating HBSM base schema tables
Creating HBSM <backup_product> schema tables ...
```

6.23. The HBSM Packages are now validated:

Note the actual output will vary depending on the products you chose to install.

```
Validating HBSM Packages...

SQL*Plus: Release 10.2.0.1.0 - Production on Sat Aug 6 13:04:11 2005

Copyright (c) 1982, 2006, Oracle Corporation. All rights reserved.

Connected to:
Oracle Release 10.2.0.1.0 - Production
JServer Release 10.2.0.1.0 - Production

Validating Packages...
Validating PACKAGE ALL_ERROR_PKG
Validating PACKAGE ALL_REPORT_PKG
Validating PACKAGE ALL_TAPE_PKG
...
...           (EACH PACKAGE IS LOGGED TO THE CONSOLE...)
...
Validating PACKAGE BODY SLA_PACKAGE
Package specifications have successfully been validated
Successfully validated ALL Packages.

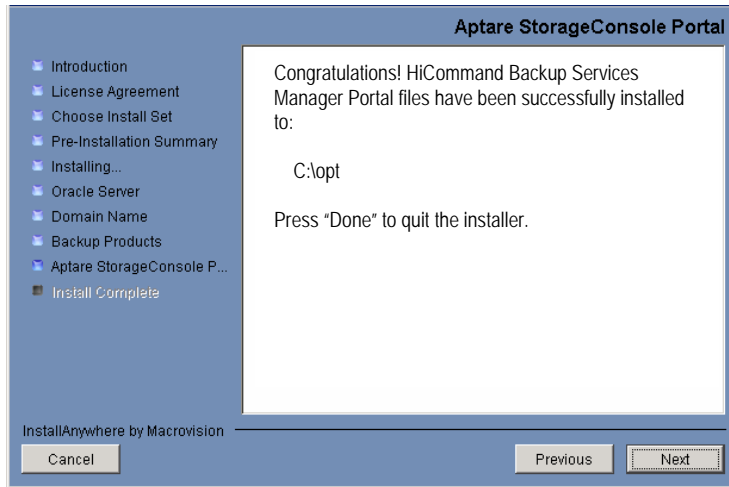
PL/SQL procedure successfully completed.

Disconnected from Oracle Release 10.2.0.1.0 - Production
JServer Release 10.2.0.1.0 - Production
*****
                Creation of HBSM Database completed
*****
C:\opt\oracle\database\ora_scripts>
```

6.24. NOTE: If you do not see the message “Successfully validated ALL Packages” at the end of this step, or if the installer script reported errors during the install, there is a possible problem with the install and you should save a copy of the following log files and contact the Hitachi Data Systems Technical Support Center:

C:\opt\oracle\logs\aptare_installer*.log

- 6.25. At the completion of the database creation, the INSTALL COMPLETE screen will appear, click on “Done” to exit the installer.



- 6.26. At this stage of the installation process, all the third-party and Hitachi Data Systems software components are in place on your Windows Server. You should now ensure that **hbsmportal.mydomain** and **hbsmagent.mydomain** (where *mydomain* is the value entered in step 6.14 above) have been added to DNS or %WINDOWS_HOME%\SYSTEM32\DRIVERS\ETC\HOSTS
- 6.27. This completes the setup of the HBSM Portal and database creation. Continue to the next section for the final step – License Key file installation.

7. License Key file Installation

This section covers the installation of the HBSM License file. A valid license file is required in order to run the HBSM application.

To obtain a license file please send the following information to hbsm.key.request@hds.com and a license file will be mailed back to you within 48 hours:

- Your name, title and phone number
- Company name and address
- Hostname of the Portal server

Then, for each backup product that HBSM will be supporting please also provide the following hostnames:

- VERITAS NetBackup Name(s) of any master server(s) that will be sending data to the Portal server
- IBM Tivoli Storage Manager Name(s) of any TSM Server Instances that the Data Collector will be polling for backup information.
- EMC Legato Names of any Legato server(s) that the Data Collector will be polling for backup information.
- HP Data Protector Names of any HP Data Protector server(s) that the Data Collector will be polling for backup information.
- Backup Exec Hostname of the server that will be running the Data Collector.

Finally, if you have already installed the HBSM Portal software, please also include the output from the following command:

```
C:\opt\aptare\utils\reportconfig.bat
```

7.1. Once you have obtained the license file complete the following steps to install the license

7.2. Open a DOS command prompt window by entering:

```
Start > Run > cmd
```

7.3. Run the license installer utility: C:\opt\aptare\utils\installLicense.bat

7.3.1. When prompted for the name of the license file, enter the complete path to the license key file on your server. For the initial install select “n” when asked if you are installing a supplementary license. A sample dialog is shown below:

```
Enter the name of the license file you wish to install [portal.license] :  
C:\opt\aptare\mycompany.license  
Are you installing a supplementary license (y/n) [n]: n  
Verifying license...  
Copying license...  
Copying license...  
License installed  
SystemConfig. File Name is c:\opt\aptare\portalconf\portalproperties.xml  
DbPool.initilised().Entering. 25 2  
GenericPool.setMaxObjectCount(). Entering 0 0 25  
GenericPool.initializePool(). Entering 0 0 25  
New JDBC connection pool established  
DbHandle.init(). Initialized the DbPool.
```

- 7.4. To complete the install process restart the following services via the Windows Services control panel
- APTARE Portal Tomcat
 - APTARE Agent Tomcat
- 7.5. You can now login to the portal (<http://hbsmportal.yourdomain.com>) using the userid and password you assigned in step 6.14 above.

8. HBSM Portal Un-install

WARNING: Running the following uninstall process will completely erase the HBSM application and database. If you are sure you wish to uninstall the application and remove the data, execute the following steps:

- 8.1. Uninstall the Portal application by navigating to and running the uninstaller application as shown below. Note that files created after the product was installed will not be deleted during this step:
 - 8.1.1. Start -> Programs -> HiCommand Backup Services Manager Portal -> Uninstall HiCommand Backup Services Manager Portal
- 8.2. Uninstall the Oracle application by navigating to and running the uninstaller application as shown below. Note that files created after the product was installed will not be deleted during this step:
 - 8.2.1. Start -> Programs -> HiCommand Backup Services Manager Database -> Uninstall HiCommand Backup Services Manager Oracle Oracle Files
- 8.3. Remove the database and any other files created after the initial install:
 - 8.3.1. Open a windows file explorer window
 - 8.3.2. Delete the folder "C²:\oradata"
 - 8.3.3. Delete the folder "C:\opt"
- 8.4. Reboot the server.

² Use alternative drive letter if you did not choose the default C: during initial install

Appendix A – Apache Software License

HBSM includes software developed by the Apache Software Foundation (<http://www.apache.org/>)

```
/* =====
 * The Apache Software License, Version 1.1
 *
 * Copyright (c) 2000 The Apache Software Foundation. All rights
 * reserved.
 *
 * Redistribution and use in source and binary forms, with or without
 * modification, are permitted provided that the following conditions
 * are met:
 *
 * 1. Redistributions of source code must retain the above copyright
 * notice, this list of conditions and the following disclaimer.
 *
 * 2. Redistributions in binary form must reproduce the above copyright
 * notice, this list of conditions and the following disclaimer in
 * the documentation and/or other materials provided with the
 * distribution.
 *
 * 3. The end-user documentation included with the redistribution,
 * if any, must include the following acknowledgment:
 * "This product includes software developed by the
 * Apache Software Foundation (http://www.apache.org/)."
 * Alternately, this acknowledgment may appear in the software itself,
 * if and wherever such third-party acknowledgments normally appear.
 *
 * 4. The names "Apache" and "Apache Software Foundation" must
 * not be used to endorse or promote products derived from this
 * software without prior written permission. For written
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 * 5. Products derived from this software may not be called "Apache",
 * nor may "Apache" appear in their name, without prior written
 * permission of the Apache Software Foundation.
 *
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 * WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES
 * OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE
 * DISCLAIMED. IN NO EVENT SHALL THE APACHE SOFTWARE FOUNDATION OR
 * ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL,
 * SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT
 * LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES; LOSS OF
 * USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND
 * ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY,
 * OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT
 * OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF
 * SUCH DAMAGE.
 * =====
 *
 * This software consists of voluntary contributions made by many
 * individuals on behalf of the Apache Software Foundation. For more
 * information on the Apache Software Foundation, please see
 * <http://www.apache.org/>.
 *
 * Portions of this software are based upon public domain software
 * originally written at the National Center for Supercomputing Applications,
 * University of Illinois, Urbana-Champaign.
```