



Hitachi HiCommand® Backup Services Manager

Data Collector Installation Guide for IBM Tivoli Storage Manager

November 2007

Version 6.5

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1. Introduction

This document provides detailed step-by-step instructions for the installation of the Hitachi HiCommand® Backup Services Manager Data Collector for IBM Tivoli Storage Manager. This install guide is valid for HBSM Portal version 6.5 onward.

This document assumes either:

1. The HBSM Portal has already been successfully installed in your enterprise, and that the reader of this document is aware of the password for the HBSM admin user (e.g. admin@yourdomain.com). This is referred to as an *IN-HOUSE* installation. Or,
2. The HBSM Portal hosted by Hitachi Data Systems or a third-party service provider will serve as your portal. This option typically applies only to evaluation or hosted customers and is referred to as a *HOSTED* installation.

Separate instructions are provided as necessary for Windows and UNIX.

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 HDS Technical Support Center which will be happy to assist you:

Technical Support Center Contact Information

Phone:

Nth & Latin America 1-800-348-4357

Europe +(44)-175-361-8000

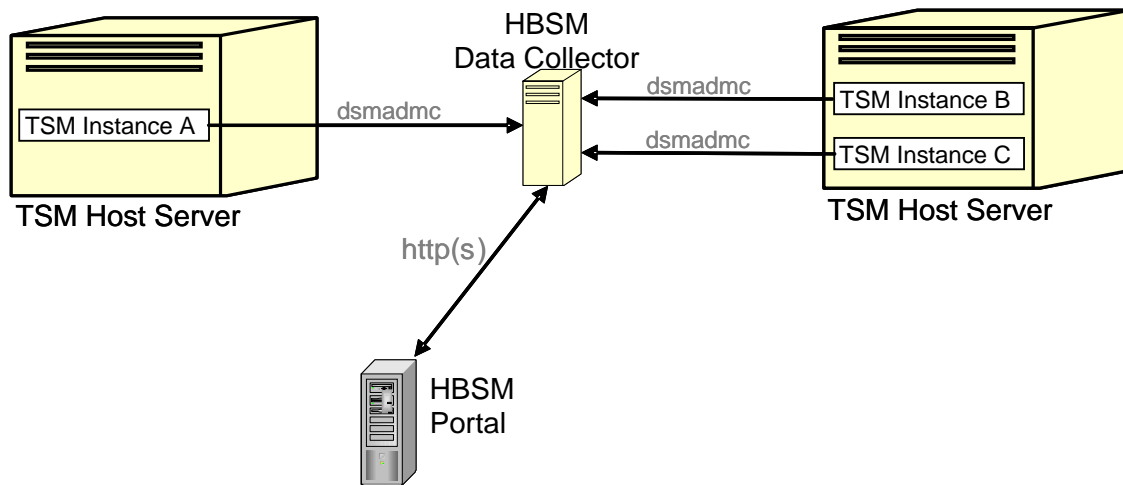
Asia Pacific (call USA GCC) +(1) 858-547-4765

Email: hdshbsmsupport@hds.com

2. Architecture Overview

The HiCommand Backup Services Manager product uses a centralized and remotely managed data collection mechanism called the *HBSM Data Collector*. Throughout this document it will be referred to simply as the **Data Collector**. The Data Collector is a software component of the *HBSM* product that is responsible for interfacing with one or many TSM Instances and querying those Instances for information related to the backup & recovery environment. The Data Collector software module can reside on any server within your network that is Java 1.5 compatible, and has a working copy of the Tivoli Storage Manager Administration command line utility (i.e. *dsmadm*) already installed.

The following diagram is an example of how the *HBSM* Data Collector could be deployed in your environment:



The Data Collector will obtain all of its monitoring rules from a configuration file maintained in the HBSM database. This file is called the *Data Collector Configuration File* and is stored in the database in an XML format.

When the Data Collector is first started, it will download the Data Collector Configuration File from the HBSM database. The Data Collector will use this file to determine the list of TSM Instances that are to be monitored and included in its data polling.

A single installation of the Data Collector can support any number of TSM Instances. The only real limitation is the memory and CPU processing power of the server on which the Data Collector resides.

For each TSM Instance, the Data Collector will establish connections using the command “dsmadm”. The Data Collector Configuration file contains all the connection information for each TSM Instance including such parameters as the TSM user name and password to login with, the TSM Instance name, IP address of the TSM Host Server, the TSM Port, etc.

The Data Collector will use various QUERY and SELECT commands via dsmadm to obtain its information from each separate TSM Instance. The information is then sent via http(s) to the HBSM Portal. A user can then launch any major web-browser at the HBSM Portal and see a global view of all of their TSM Host Servers and TSM Instances.

Throughout this document, there are references to key terms, such as *TSM Instance*. The following is a list of these terms and a detailed explanation of each:

2.1 Data Collector

This is the software component within the HBSM product that interfaces with IBM Tivoli Storage Manager backup and recovery systems to extract meta-data about the underlying backup & recovery environment. The Data Collector will interface with TSM using the TSM administration utility dsmadm. Through this utility, the Data Collector will issue QUERY and SELECT statements against the underlying TSM databases.

2.2

Data Collector Server

The physical server on which the Data Collector is installed. Can be any server within your network that is Java 1.5 compatible and with dsmadm installed.

2.3 TSM Host Server

The TSM Host Server is the physical system that is running the IBM Tivoli Storage Manager server software. This physical system will often be known by its hostname or IP address.

2.4 TSM Instance

The TSM Instance is a separate instance of the TSM server software that is running on a TSM Host Server. A single TSM Host Server can run multiple TSM Instances. This is normally implemented by setting up a separate set of client and administration ports for each TSM Instance. In the example above, we have two TSM Host Servers with a single TSM Instance running on one of the systems and two TSM Instances running on the second TSM Host Server.

3. Pre-installation Setup

This section contains the instructions to prepare your system for the Data Collector installation.

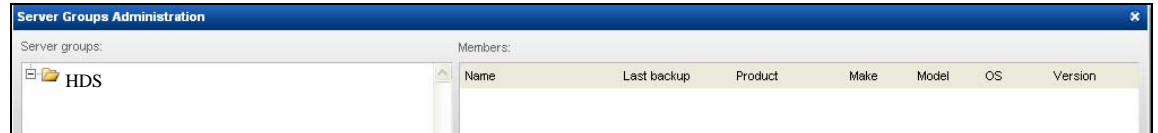
The steps in this section only apply if you are performing an IN-HOUSE Installation. In the case where Hitachi Data Systems or a third party service provider will be hosting your portal (HOSTED installation) e.g. for a product evaluation, skip the rest of this section and contact your hosting organization's representative to configure the hosted portal for your TSM data collector.

- 3.1. To help prepare the information you will need to install and configure the Data Collector please first complete the HBSM Data Collector Pre-Installation worksheet listed in the Appendix in Section 10 below.
- 3.2. Add the Portal IP Address to Local Hosts File

Adding the HBSM Portal IP Address to the local hosts file on the **Data Collector Server** (or on another available client with web browsing capabilities) will make it possible to view the portal application in a browser and perform key steps of the data collector installation process. NOTE: you should only edit the local hosts file in the event that a DNS entry hasn't already been set up in your enterprise to resolve both `http://hbsmportal.yourdomain.com` and `http://hbsmagent.yourdomain.com` to the HBSM Portal IP address.

 - 3.2.1. Login to your **Data Collector Server**, then:
 - 3.2.2. On a UNIX Server:
 - 3.2.2.1. `edit /etc/hosts`
 - 3.2.2.2. add entries for `hbsmportal.yourdomain.com` and `hbsmagent.yourdomain.com` (both resolving to the ip address of the HBSM Portal server)
 - 3.2.3. On a Windows Server:
 - 3.2.3.1. `edit C:\WINNT\System32\drivers\etc\hosts`
 - 3.2.3.2. add entries for `hbsmportal.yourdomain.com` and `hbsmagent.yourdomain.com`
- 3.3. For each TSM Host Server specified in the HBSM Data Collector Pre-Installation worksheet in Section 10 below add the **TSM Host Server(s)** to HBSM by following the steps outlined in this section (3.3). You will have to repeat these steps for each TSM Host.

- 3.3.1. Open a browser window and point it to your instance of HBSM Portal (e.g. <http://hbsmportal.yourdomain.com>).
- 3.3.2. Login as the admin user (e.g. admin@yourdomain.com). (The password for this user is the one you specified during the installation of the HBSM Portal in Section 4.)
- 3.3.3. In the Portal toolbar at the top of the window, select:
Admin → Server Groups
The Server Groups Administration window displays.



- 3.3.4. Click on the first server group folder (The default group name when the portal is first installed is HDS).
NOTE: If a server group hierarchy has already been established in the application, you can drilldown to the server group to which you would like the **TSM Host Server** to belong, although we recommend adding the **TSM Host Server** to the top-level HDS folder.
- 3.3.5. In the Server Groups Administration window, under the Members pane, click *Add*.
- 3.3.6. You will see the Server Administration window:

Name	Value
Continent	<input type="text"/>
TestAttr1	<input type="text"/>

- 3.3.7. Enter values for all of the *required* fields (denoted by an *) in the Server Administration window and click *OK*. The field Internal Name needs to match the host name of the TSM Host Server. Ensure you select “TSM Host Server” as the Type. The fields External Name, Make and Model are not used by the application for anything other than informational display purposes.
- 3.3.8. The server will be added to the server group. The Server Group Screen will load in the content pane, and the **TSM Host Server** should now be included in the list of servers belonging to the group.

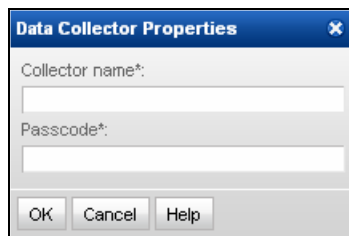
3.4. Configure the **TSM Host Server** configuration parameters

The key parameters that the Data Collector uses to connect to the backup product management servers are contained in *Data Collector Policies*. These policies are configured through the web based GUI and are stored in the HBSM Portal database. Prior to installing the Data Collector you must create and configure a new policy with the appropriate values. The process for creating this policy is described below:

3.4.1. In the Portal toolbar at the top of the window, select:

Admin → Data Collector Policies

3.4.2. In the Data Collector Administration window, click *Add Collector* to display the Data Collector Properties window, as shown below.



Enter the following parameters and click *OK*.

Field	Description	Sample Value
Collector Name	A unique name assigned to this Data Collector. The Data Collector will use this value for authentication purposes.	TSMdc1
Passcode	A passcode assigned to this Data Collector. Can be any character sequence. The Data Collector will use this passcode for authentication purposes.	password1

3.4.3. In the Data Collector Administration window, make sure the collector name is selected and then click *Add Child* to initiate a child policy record.

3.4.4. Step 1 – Select Product Type

Select the backup product you wish to monitor (in this case, NetWorker) and click *Next*.

3.4.5. Step 2 – Specify Child Data Collector Properties.

Note: If you have more than one TSM Host Server to configure, you can add additional Child Collector Policy records upon completing the setup of this record.

In this step you will need to add or select the following parameters. Mandatory parameters are denoted by an asterisk (*):

Field	Description	Sample Value
Domain	This domain identifies the top level of your server group hierarchy. The name was supplied during the installation process. All newly discovered servers are added to the root server group associated with this domain. If you are a Managed Services Provider, each of your customers will have a unique domain with its own server group hierarchy.	yourdomain
Backup Management Server*	Select the backup product management server (i.e. TSM Host Server) the Data Collector needs to communicate with. The TSM Host Server(s) you added in step 3.3 above should all be listed here. Select the one you want the Data Collector to communicate with and verify that the IP address	

Field	Description	Sample Value
	and OS information are correct.	
Instance Name*	The value of the Instance name as listed in Appendix B – HBSM Data Collector Pre-Installation Worksheet. This field is only applicable for UNIX TSM Host Servers. (For MS Windows the IP address will be used.)	TSMSEVER
Server Port*	Port used by dsmadm to communicate with the TSM Host Server	1500
Backup s/w Location*	The home directory of the TSM Admin Client software – i.e. the dsmadm command - on the Data Collector Server .	Typically C:\Program Files\Tivoli\TSM\baclient for Windows, or /opt/tivoli/tsm/client/ba/bin for Unix
User Id*	TSM Admin user ID	TSMADMIN
Password*	TSM Admin user password	adminpassword

Click *OK* to save the Policy and return to the Child Collector Configuration screen where the Child Policy will be listed. From here you can add an additional Child Policy record (for example, if the data collector needs to communicate with other TSM Host Servers), or make changes to the Child Policy you just created.

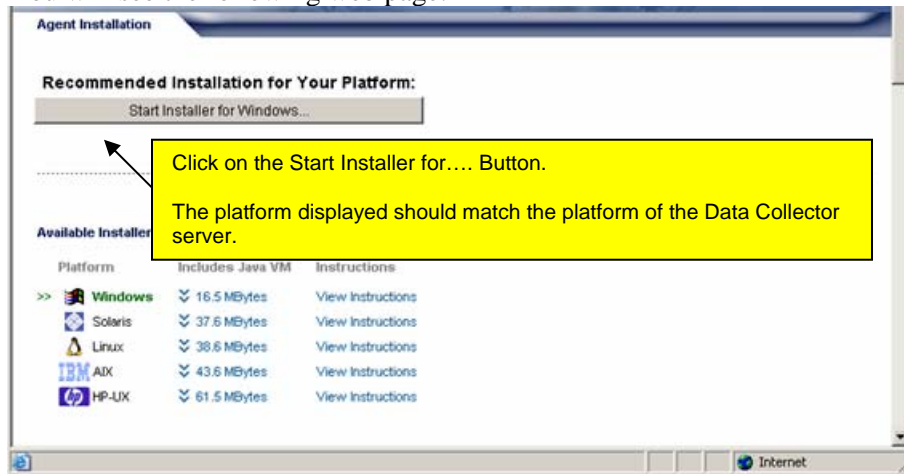
4. Install the HBSM Data Collector

- 4.1. This section will lead you through the instructions to install the HBSM Data Collector on the **Data Collector Server**. The particular sequence of instructions you follow will depend on your environment. Most installs will occur from the Data Collector (Agent) Installation CD. However, if you are installing remotely, or your HBSM Portal system is being HOSTED, you may need to download the Data Collector software via the Internet.
- 4.2. In addition to the GUI version, the installer also supports a console (command line) interface for UNIX systems which don't have X-Windows installed. You will be directed to the console interface section if appropriate.
- 4.3. **Installation from the Hitachi HiCommand® Backup Services Manager Data Collector (Agent) CD**
 - 4.3.1. Installation should be performed as user root, or as an Administrator user on Windows.
 - 4.3.2. Note the Platform/OS of the **Data Collector Server** on which you want to install the Data Collector
 - 4.3.3. Mount the Hitachi HiCommand® Backup Services Manager Data Collector CD
 - 4.3.4. On Windows:
 - 4.3.4.1. The installer should load automatically. If not, navigate to the file CD_DRIVE/install.htm and open it in a browser.
 - 4.3.4.2. Proceed to step 4.6.1 of the GUI Installation Instructions below.
 - 4.3.5. On UNIX: If the **Data Collector Server** has X-Windows
 - 4.3.5.1. Open the file CD_DRIVE/install.htm in a browser
 - 4.3.5.2. Proceed to step 4.6.1 of the GUI Installation Instructions below.
 - 4.3.6. On UNIX: If the **Data Collector Server** *does not have* X-Windows
 - 4.3.6.1. Copy the file CD_DRIVE/InstData/{OS}/VM/aptareagentinstall.bin to a temporary directory on the **Data Collector Server**
 - 4.3.6.2. Proceed to the Console Installation Instructions in section 4.7 below.
- 4.4. **Installation via the internet**

Follow these instructions if you don't have a CD and you are installing on a **Data Collector Server** which has internet access and a web browser installed. If your **Data Collector Server** does not have internet access, or no web browser access (e.g. doesn't have X-Windows) proceed to instructions in section 4.5 below.

 - 4.4.1. Start the web browser on the **Data Collector Server**.
 - 4.4.2. Point the browser to the data collector installer web page:
<http://my.backup.servicesmanager.com/agent/install.htm>

4.4.3. You will see the following web page:



4.4.4. Click on the *Start Installer for <Platform>...* button.

4.4.5. Proceed to step 4.6.1 of the GUI Installation Instructions below.

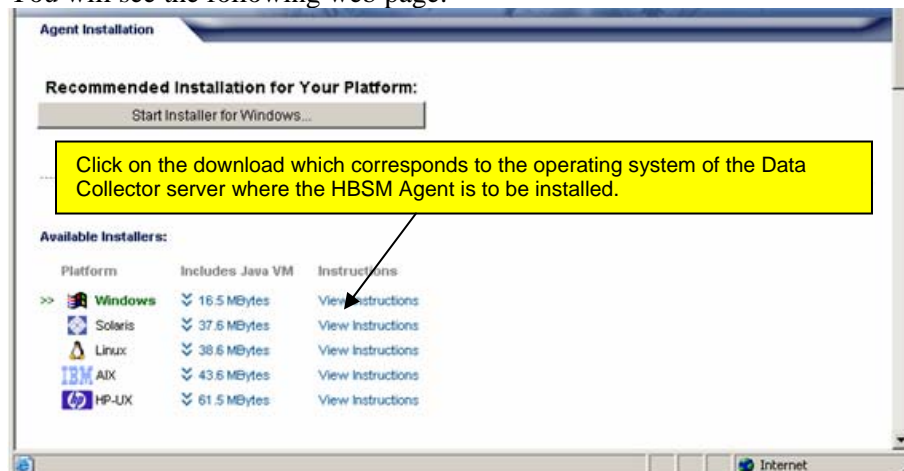
4.5. **Installation via the internet (where internet access is not available from master backup server)**

4.5.1. Note the Platform/OS of the **Data Collector Server** you want to install the HBSM Data Collector on.

4.5.2. Open a browser on a client with web access (you will download the installer to this client, and then FTP it to the **Data Collector Server**).

4.5.3. Point the browser to the data collector installer web page:
<http://my.backupservicesmanager.com/agent/install.htm>

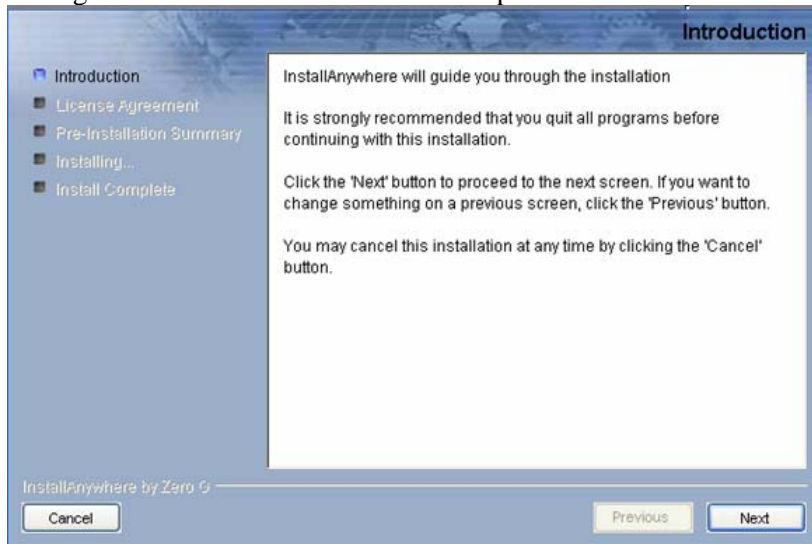
4.5.4. You will see the following web page:



4.5.5. Click on the download which corresponds to the platform of the **Data Collector Server**.

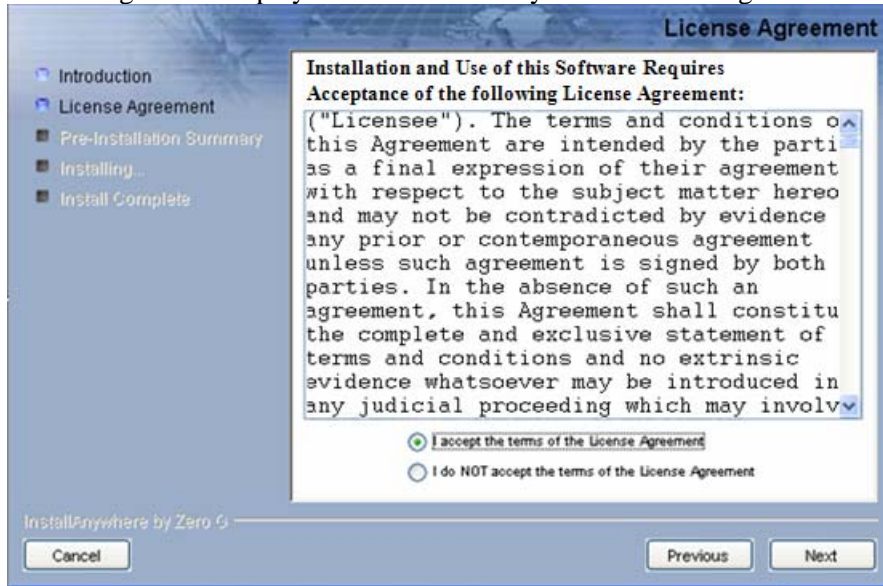
4.5.6. At the prompt, save the Data Collector Installer to a directory on the client.

- 4.5.7. FTP the Data Collector Installer to the **Data Collector Server** where the Data Collector is to be installed.
- 4.5.8. Go to the **Data Collector Server** and run the Data Collector Installer
- 4.5.8.1. On Windows:
Execute `aptareagentinstall.exe`
Proceed to step 4.6.1 of the GUI Installation Instructions below
- 4.5.8.2. On UNIX: If the **Data Collector Server** has X-Windows
`chmod +x aptareagentinstall.bin`
`sh ./aptareagentinstall.bin -i swing`
Proceed to step 4.6.1 of the GUI Installation Instructions below.
- 4.5.8.3. On UNIX: If the **Data Collector Server** *does not have X-Windows*
Proceed to the Console Installation Instructions in section 4.7 below.
- 4.6. **GUI Installation Instructions**
- 4.6.1. Install Anywhere will prepare to install the Data Collector Software. An Introduction Dialogue box will outline the installation process:



- 4.6.2. Review the installation process and click the *Next* button

- 4.6.3. The dialogue will display the Hitachi Data Systems License Agreement:

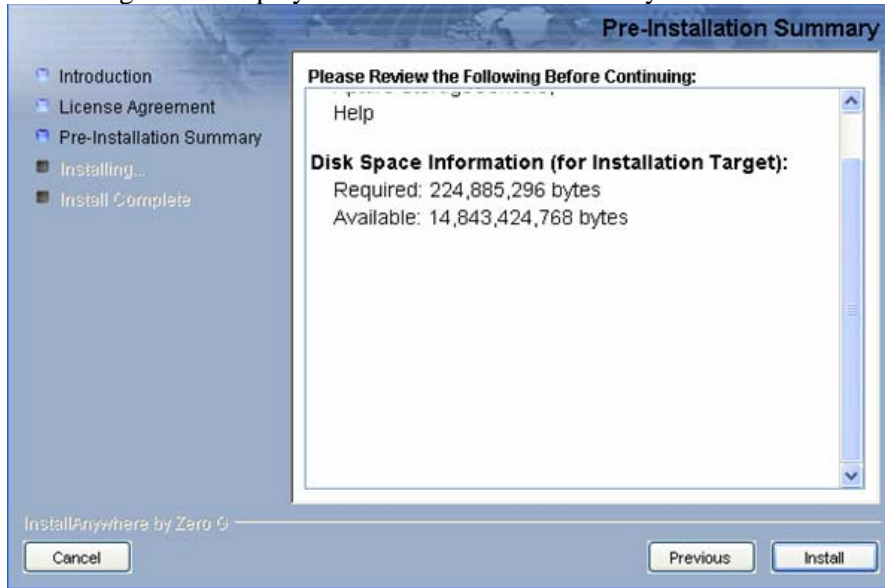


- 4.6.4. Read the agreement
- 4.6.5. Click on the "I accept the terms of the License Agreement" radio button
- 4.6.6. Click the *Next* button
- 4.6.7. The dialogue will display the "Where to Install" screen:



- 4.6.8. Specify the directory where you would like to install the Data Collector software.
Default for Windows: C:\Program Files\Aptare
Default for UNIX: /opt/aptare
- Note: Accepting the default paths is recommended**
- 4.6.9. Click the *Next* button.

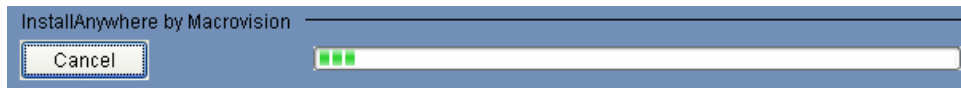
4.6.10. The dialogue will display the Pre-Installation Summary:



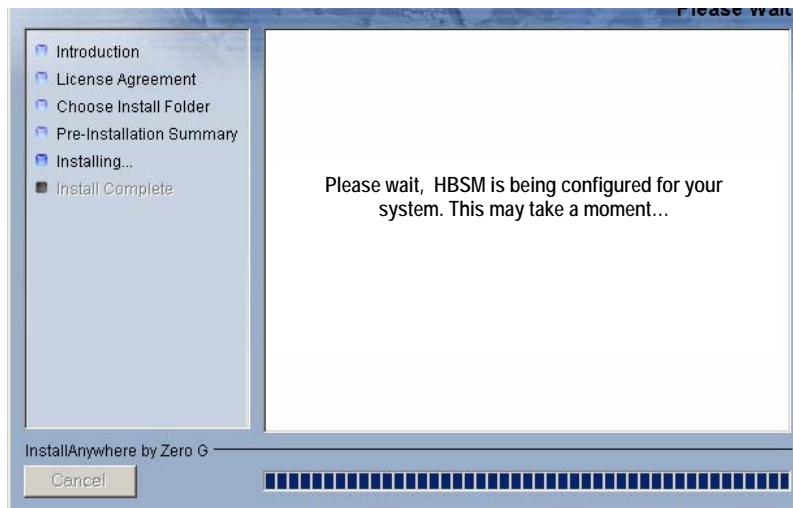
4.6.11. Review the summary.

4.6.12. Click the *Install* button.

4.6.13. The dialogue will track the installation as it progresses:



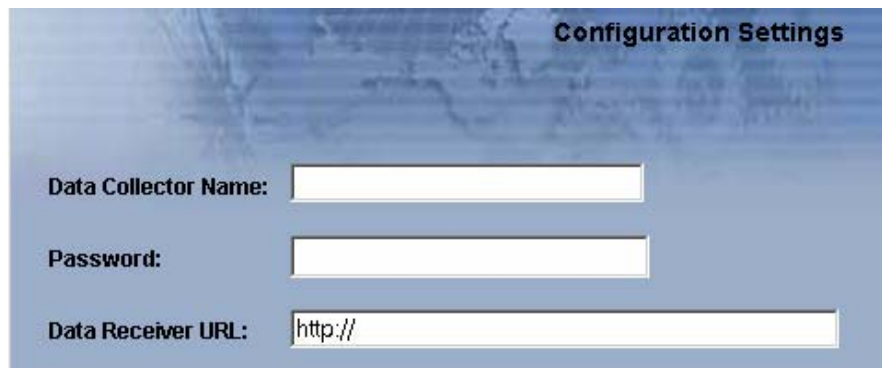
4.6.14. The dialogue will track the configuration as it progresses:



- 4.6.15. When prompted to select the Backup Product, select IBM Tivoli Storage Manager and click the *Next* button:



- 4.6.16. The following dialog captures the configuration settings for your particular environment as explained below.



- 4.6.17. Fill out the configuration fields:

- 4.6.17.1. **Data Collector Name** - This is the ID and the password field that will be used by the on the Portal side to authenticate the Data Collector. This name should be the same value you configured on the Portal during the Pre-Installation step 3.4.2 above.
- 4.6.17.2. **Password** - This is the password field that will be used on the Portal side to authenticate the Data Collector. This name should be the same value you configured on the Portal during the Pre-Installation step 3.4.2 above.
- 4.6.17.3. **Data Receiver URL** – This is the URL the Data Collector uses to communicate to the Portal server. The format of this URL should be `http://hbsmagent.yourdomain.com` similar to the `http://hbsmportal.yourdomain.com` URL you use to access the web-based GUI.

- 4.6.18. Click the *Finish* button. The following dialog will be displayed indicating that the installer has completed the install.



- 4.6.19. Click the *Done* button.
- 4.6.20. The GUI Installer is now complete. Continue to section 5 to perform the final steps of the install.
- 4.7. **Console Installation Instructions**

Follow these instructions when installing on a UNIX master server which does not have X-Windows. The Installer will guide you through the sequence of steps to install and configure the Data Collector. If at any time you need to go back a step, simply type 'back' at the prompt.

Note the HBSM Data Collector installer does not support console based installation for the Windows operating system.

- 4.7.1. From your telnet session cd to the location where the aptareagentinstall.bin file has been saved.

```
chmod +x aptareagentinstall.bin
sh ./aptareagentinstall.bin -i console
```

- 4.7.2. Install Anywhere will prepare to install the Data Collector Software. An Introduction page will outline the installation process:

```
=====
(created with InstallAnywhere by Macrovision)
-----
Introduction
-----

InstallAnywhere will guide you through the installation of
the Hitachi HiCommand® Backup Services Manager Data
Collector.
```


It is strongly recommended that you quit all programs before continuing with this installation.

Respond to each prompt to proceed to the next step in the installation. If you want to change something on a previous step, type 'back'.

You may cancel this installation at any time by typing 'quit'.

PRESS <ENTER> TO CONTINUE:

4.7.3. The Hitachi Data Systems License Agreement will be displayed:

License Agreement

Installation and use of Hitachi HiCommand® Backup Services Manager requires acceptance of the following License Agreement:

Hitachi Data Systems Software License Agreement

PLEASE READ THIS SOFTWARE LICENSE AGREEMENT CAREFULLY. BY DOWNLOADING, INSTALLING OR USING THE SOFTWARE YOU INDICATE ACCEPTANCE OF AND AGREE TO THE TERMS AND CONDITIONS OF THIS AGREEMENT...<etc.>

4.7.4. Read the agreement

4.7.5. Type “Y” to accept the agreement

4.7.6. The installer will prompt for the install location:

Choose Install Folder

Where would you like to install?

Default Install Folder: /opt/aptare

ENTER AN ABSOLUTE PATH, OR PRESS <ENTER> TO ACCEPT THE DEFAULT

: /opt/aptare

INSTALL FOLDER IS: /opt/aptare

IS THIS CORRECT? (Y/N): y

4.7.7. The page will display the Pre-Installation Summary:

=====
Pre-Installation Summary

Please Review the Following Before Continuing:

Product Name:

Hitachi HiCommand® Backup Services Manager

Install Folder:
/opt/aptareagent

Link Folder:
/tmp/install.dir.30662/Do_Not_Install

Product Components:
Hitachi HiCommand® Backup Services Manager Agent,
Help

Java VM Installation Folder:
/opt/aptareagent/jre

Disk Space Information (for Installation Target):
Required: 136,083,162 bytes
Available: 3,786,149,888 bytes

PRESS <ENTER> TO CONTINUE:

4.7.8. The page will track the installation as it progresses:

```
=====
Installing...
-----

[=====|=====|=====]
[-----|-----|-----]
```

4.7.9. The installer will prompt for the backup product that the Agent/Data Collector will be supporting. Select Option 2 for IBM Tivoli Storage Manager.

Enter Backup Product
(Choose the Backup Product for which you want to install
the Agent/Data Collector.)
(Required Field)

- >1- VERITAS NetBackup
- 2- IBM Tivoli Storage Manager
- 3- EMC LEGATO NetWorker
- 4- VERITAS Backup Exec
- 5- HP Data Protector
- 6- Hitachi Storage Arrays
- 7- EMC Storage Arrays
- 8- Host Resources

ENTER THE NUMBER FOR YOUR CHOICE, OR PRESS <ENTER> TO
ACCEPT THE DEFAULT:
: 2

4.7.10. The installer will prompt for the **Data Collector Name**. This is the ID that will be used on the Portal side to authenticate the Data Collector. This value should be the same value you configured on the Portal for the field "ID" during the Pre-Installation step 3.4.5 above.

Enter Data Collector Name
(Required Field)

Data Collector Name (DEFAULT:): TSMdc1

- 4.7.11. The installer will prompt for the **Data Collector Password**. This is the password that will be used on the Portal side to authenticate the Data Collector. This value should be the same value you configured on the Portal for the field “passcode” during the Pre-Installation step 3.4.2 above.

Configuration Settings - 2

Enter Data Collector Password:
(Please enter the Password, which will be used to
authenticate the Data
Collector with the Data Receiver)
(Required)

Data Collector Password: password1

- 4.7.12. The installer will prompt for the **Data Receiver URL**. This is the URL the Data Collector uses to communicate to the Portal server. The format of this URL should be <http://hbsmagent.yourdomain.com> similar to the <http://hbsmportal.yourdomain.com> URL you use to access the web-based GUI.

Configuration Settings - 3

Enter Data Receiver URL
(Required Field)

Data Receiver URL (DEFAULT:):
<http://hbsmagent.yourdomain.com>

- 4.7.13. The installer will perform a post-install validation:

The installer will now configure and validate the
installation.
This may take a few minutes.

PRESS <ENTER> TO CONTINUE:

=====
Installation Complete

Congratulations! the Hitachi HiCommand® Backup Services
Manager Agent for IBM Tivoli Storage Manager has been
successfully installed to: /opt/aptare

- 4.7.14. Press ENTER to exit the installer.

- 4.7.15. Continue to the next section to complete the install.

5. Validating the HBSM Data Collector Installation

- 5.1. The following directions assume that the Data Collector files have been installed in their default location for Windows (C:\Program Files\Aptare) or UNIX (/opt/aptare).

If you have installed the files in a different directory, please make the necessary path translations as you follow these testing instructions.

NOTE: running some of these commands can take up to several hours depending on the size of your enterprise.

- 5.2. **Windows:** open a command prompt window

UNIX: open a telnet session logged in as root to the **Data Collector Server**

- 5.3. **Windows:**

in the command prompt type `cd C:\Program Files\Aptare\mbs\bin <enter>`

UNIX:

in telnet session 1 - type `cd /opt/aptare/mbs/bin <enter>`

- 5.4. **Windows:** in the command prompt `checkinstall.bat <enter>`

UNIX: in the telnet session type `./checkinstall.sh <enter>`

- 5.5. Check for output similar to the following:

```
Install Status
=====
10 Aug 2007 16:55:12,602 INFO
InventoryDetailsChildThread.processReturnString - Got output from
Servlet --> SUCCESS_PERSISTING_INVENTORYDETAILS
10 Aug 2007 16:56:07,895 INFO
StoragePoolChildThread.processReturnString - Got output from Servlet
--> SUCCESS_PERSISTING_STORAGEPOOLDETAILS
10 Aug 2007 16:56:35,985 INFO
TapeDetailsChildThread.processReturnString - Got output from Servlet
--> SUCCESS_PERSISTING_TAPEDETAILS
10 Aug 2007 16:56:54,604 WARN
DriveStatusDetailChildThread.processReturnString -
SUCCESS_PERSISTING_TAPESTATUS
10 Aug 2007 16:57:18,036 INFO
ClientNodesChildThread.processReturnString - Got output from Servlet
--> SUCCESS_PERSISTING_CLIENTNODEDETAILS
10 Aug 2007 16:57:55,098 INFO PolicyChildThread.processReturnString
- Got output from Servlet --> SUCCESS_PERSISTING_POLICIES
```

- 5.5.1. If the output in the above steps contain the word “FAILED”, then contact the HDS Technical Support Center and have the files

<install_dir>/mbs/logs/metadata.log and

<install_dir>/mbs/logs/watchdog.log ready for review.

6. Start up the Data Collector

6.1. The installer configures the HBSM Data Collector to start automatically, but does not actually start it upon completion of the install. The followings steps will allow you to start the service manually:

6.2. **Windows:**

6.2.1. On a Windows **Data Collector Server**, the installer configures the Data Collector process as a Service. To view the HBSM Data Collector Status:

6.2.1.1. Click on Start > Settings > Control Panel

6.2.1.2. Click on Administrative Tools

6.2.1.3. Click on Services

6.2.1.4. The Microsoft Services Dialogue will be displayed. It should include entries for "Aptare Agent". Start this service if it is not running.

6.3. **UNIX:**

6.3.1. On a UNIX **Data Collector Server**, the installer will automatically copy the agent "start" and "stop" scripts to an appropriate directory based on the vendor Operating System. To start the agent on the respective platforms use the following command:

OS	Command
Linux / Solaris	/etc/init.d/aptare_agent start
AIX	/etc/aptare_agent start
HP-UX	/sbin/init.d/aptare_agent start

6.4. The installation is now complete.

7. Uninstalling the Data Collector - UNIX

7.1. Login to the **Data Collector Server** as root

7.2. Stop the HBSM Data Collector

OS	Command
Linux / Solaris	<code>/etc/init.d/aptare_agent stop</code>
AIX	<code>/etc/aptare_agent stop</code>
HP-UX	<code>/sbin/init.d/aptare_agent stop</code>

7.3. Delete the aptare_agent files:

OS	Command
UNIX	<code>find /etc -name aptare_agent -print xargs rm</code>
HP-UX	<code>find /sbin -name aptare_agent -print xargs rm</code>

7.4. Delete the HBSM Data Collector directory structure (default installation path is /opt/aptare):

```
rm -rf /opt/aptare/installlogs /opt/aptare/jre /opt/aptare/lib  
/opt/aptare/mbs /opt/aptare/UninstallerData
```

8. Uninstalling the Data Collector - Windows

8.1. Login to the **Data Collector Server**. (User should have Administrator privileges)

8.2. Stop the agent services (see section 6.2.1 above for help with navigating to the services).

8.3. Click on “Uninstall HiCommand Backup Services Manager Agent” in “Start Menu/Programs/HiCommand Backup Services Manager Agent”

8.4. Follow the prompts on the Un-install screens.

8.5. The uninstaller may not delete the entire Data Collector directory structure – sometimes new files created after the install along with their parent directories are not removed. You may need to remove the root install folder (default C:\Program Files\Aptare) and its subfolders manually after the uninstaller completes.

9. Appendix A - Troubleshooting

If the post-installation validation failed, this is often due to some simple configuration issues that can be fairly easily resolved. This section reviews some of the common configuration issues that can occur. If the issue cannot be resolved by following the steps in this section, please contact the HDS Technical Support Center. Be sure to include the log files that were generated during the install.

9.1. Validate the Data Collector configuration file.

The Data Collector configuration file contains key information captured during the install process. If the information was entered incorrectly, this may be the cause of the failure. Key configuration parameters are validated below:

9.1.1. Edit the configuration file:

Windows:

Edit "C:\Program Files\Aptare\mbs\conf\wrapper.conf"

UNIX:

Edit "/opt/aptare/mbs/conf/wrapper.conf"

9.1.2. Verify the values of the parameters "wrapper.app.parameter.2" and "wrapper.app.parameter.3" match the ID and passcode specified in step 3.4.2 above.

9.1.3. Verify the values of the parameter "wrapper.app.parameter.4". This parameter should have a value as follows:

<code>http://hbsmagent.yourdomain.com</code>	for IN-HOUSE install, or
<code>http://hbsmagent.hds.com</code>	for HITACHI DATA SYSTEMS HOSTED install
<code>http://hbsmagent.domain.com</code>	for third-party HOSTED install with appropriate value for <i>domain.com</i> .

If this value is incorrect, please update it, restart the Data Collector service as per instructions in section 6, and re-run the installation verification utility as described in section 5 above.

10. Appendix B – HBSM Data Collector Pre-Installation Worksheet

Please complete the worksheet below for each of the TSM Host Server(s) and the TSM Instances on the TSM Host Server that will be reported on by HBSM. The TSM Instance name referenced below is the value of the “Server Name” field returned by the dmadmc command “q status” for the instance to which you are connected.

Make additional copies of this page for each TSM Host Server that will be report on by HBSM.

TSM Host Server Details

Field		Value				
Internal Name (Server host name)						
The following five fields are not used by the application for anything other than display purposes only						
External Name (Display Server name used in reports)						
IP Address						
Make (Unknown, Sun, Dell, HP - Compaq, IBM, Other)						
Model (e.g. P650)						
Operating System (e.g. AIX 5.1)						
TSM Instance(s)						
#	TSM Instance Name	TCP Server Address	TCP Server Port	TSM User ID	TSM User Password	TSM User Privileges
Example Instance	TSMSERVER	203.23.10.10	1500	TSMADMIN	adminpassword	Analyst
1						
2						
3						
4						
5						
6						
7						
8						
9						
10						
11						
12						