Archiving Microsoft® Exchange 2010 on Hitachi Content Platform using Storage Adapter for Symantec Enterprise Vault 10

Implementation Guide

By Steven Burns

May 1, 2013
Feedback

Hitachi Data Systems welcomes your feedback. Please share your thoughts by sending an email message to SolutionLab@hds.com. To assist the routing of this message, use the paper number in the subject and the title of this white paper in the text.
Archiving Microsoft® Exchange 2010 on Hitachi Content Platform using Storage Adapter for Symantec Enterprise Vault 10

Implementation Guide

This implementation guide describes how to set up Hitachi Content Platform and Symantec Enterprise Vault to archive data from Microsoft Exchange mailboxes. It covers the configuration steps required to install and configure the following in a Hitachi Content Platform environment:

- Symantec Enterprise Vault 10
- Storage Adapter for Symantec Enterprise Vault
- Hitachi Content Platform v5

This implementation guide does not cover the installation and configuration of Microsoft Exchange. The guide also does not cover the initial installation and configuration of Symantec Enterprise Vault and Hitachi Content Platform. Links to relevant user manuals are included as well as general guidance on configuration of those products.

**Note** - These procedures were developed in a lab environment. Many things affect production environments beyond prediction or duplication in a lab environment. Follow recommended practice by conducting proof-of-concept testing for acceptable results before implementing this solution in your production environment. Test the implementation in a non-production, isolated test environment that otherwise matches your production environment.
Current Environment

Because this implementation guide focuses primarily on the configuration of the components listed previously, this guide addresses different scenarios based on how your current environment is designed and configured. Table 1 gives an overview of the possible current configurations.

Table 1. Current Environment

<table>
<thead>
<tr>
<th>Current Environment</th>
<th>Microsoft Exchange 2010</th>
<th>Symantec Enterprise Vault 10</th>
<th>Hitachi Content Platform v5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Exchange only</td>
<td>Installed</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>2. Hitachi Content Platform installed but not used by Symantec Enterprise Vault</td>
<td>Installed</td>
<td>No</td>
<td>Installed</td>
</tr>
<tr>
<td>3. Symantec Enterprise Vault installed but not used for Exchange archiving</td>
<td>Installed</td>
<td>Installed</td>
<td>No</td>
</tr>
<tr>
<td>4. Symantec Enterprise Vault installed and used for Exchange archiving but using storage other than Hitachi Content Platform</td>
<td>Installed</td>
<td>Installed</td>
<td>No</td>
</tr>
<tr>
<td>5. All components installed but not configured for Exchange archiving</td>
<td>Installed</td>
<td>Installed</td>
<td>Installed</td>
</tr>
</tbody>
</table>

Environment 1

The following must be completed before configuring Symantec Enterprise Vault to use Hitachi Content Platform:

- Install and configure Microsoft SQL Server®. Symantec recommends that it is installed on a server different than the one that will be used for Symantec Enterprise Vault. See the Symantec Enterprise Vault SQL Best Practices 10.0 document for guidance.

- Install and configure Symantec Enterprise Vault using the product documentation. Verify that all of the prerequisite tasks required for Exchange archiving have been completed.

- Hitachi Content Platform has been installed and configured
Environment 2

The following must be completed before configuring Symantec Enterprise Vault to use Hitachi Content Platform:

- Install and configure SQL Server on a server different than the one that will be used for Symantec Enterprise Vault. See the [Symantec Enterprise Vault SQL Best Practices 10.0](#) document for guidance.
- Install and configure Symantec Enterprise Vault using the product documentation. Verify that all of the prerequisite tasks required for Exchange archiving have been completed.

Environment 3

The following must be completed before configuring Symantec Enterprise Vault to use Hitachi Content Platform:

- Verify that all of the prerequisite tasks required for Exchange archiving have been completed for Symantec Enterprise Vault. For this environment use the Symantec Enterprise Vault Administration console to add Vault Store Groups, Vault Stores, and Vault Store Partitions as required.
- Hitachi Content Platform has been installed and configured.

Environment 4

The following must be completed before configuring Symantec Enterprise Vault to use Hitachi Content Platform:

- Hitachi Content Platform has been installed and configured.
- For this environment use the Symantec Enterprise Vault Administration console to add Vault Store Groups, Vault Stores, and Vault Store Partitions as required.

Environment 5

For this environment all prerequisites should already be completed. Use the Symantec Enterprise Vault Administration console to add Vault Store Groups, Vault Stores, and Vault Store Partitions as required.
Solution Components

This section describes the hardware and software components used in the Hitachi Data Systems lab to validate the installation and configuration instructions documented in this implementation guide. The components used in your environment may vary.

Recommended Hardware

For deployment in an environment where Exchange has already been installed and configured, a minimum of two additional servers will be needed. One will be for the Symantec Enterprise Vault application and the other will be for SQL Server. SQL can be installed on the same server as Symantec Enterprise Vault, but this is not recommended by Symantec.

Table 2 describes hardware requirements recommended by Symantec for a production environment. Minimum hardware requirements can be found in the Symantec Enterprise Vault Installing and Configuring Guide. See the Symantec Enterprise Vault Performance Guide for information on how hardware specifications affect the performance of the Enterprise Vault environment.

<table>
<thead>
<tr>
<th>Server</th>
<th>Recommended Hardware Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Symantec Enterprise Vault</td>
<td>8 x 2.8 GHz CPU</td>
</tr>
<tr>
<td></td>
<td>16 GB memory</td>
</tr>
<tr>
<td>Microsoft SQL Server</td>
<td>2 x 2.8 GHz CPU</td>
</tr>
<tr>
<td></td>
<td>4 GB memory</td>
</tr>
<tr>
<td></td>
<td>Disk requirements can be found in the Symantec Enterprise Vault Installing and Configuring Guide</td>
</tr>
</tbody>
</table>

Software Components

Table 3 describes the software components used in the Hitachi Data Systems lab.

<table>
<thead>
<tr>
<th>Software</th>
<th>Version</th>
</tr>
</thead>
<tbody>
<tr>
<td>Windows 2008 Server</td>
<td>R2 Enterprise SP1</td>
</tr>
<tr>
<td>Microsoft SQL Server</td>
<td>2008 R2 SP2</td>
</tr>
<tr>
<td>Symantec Enterprise Vault</td>
<td>10.0.2.1112</td>
</tr>
<tr>
<td>Storage Adapter for Symantec Enterprise Vault</td>
<td>1.1.12</td>
</tr>
</tbody>
</table>
Solution Implementation

The following sections give instructions for configuring Symantec Enterprise Vault and Hitachi Content Platform to support Microsoft Exchange 2010 archiving. These instructions assume the following:

- **Microsoft Exchange 2010** - The Exchange environment is already installed and configured.
- **Symantec Enterprise Vault 10** - Initial installation and configuration tasks are complete. This includes the installation and configuration of Microsoft SQL Server. Follow Symantec best practices when installing and configuring Enterprise Vault 10.
- **Hitachi Content Platform** - Installation and initial configuration are complete.

Configure Hitachi Content Platform

To configure Hitachi Content Platform for Microsoft Exchange 2010 archiving, perform the tasks listed in this section. These procedures assume that the Hitachi Content Platform hardware and software has been installed and that the initial configuration of the Hitachi Content Platform hardware and software is complete. The following procedures describe how to create a new tenant and namespace on Hitachi Content Platform. If Hitachi Content Platform is only going to be used for Exchange, archiving a single tenant is all that is required. Hitachi Data Systems recommends that the default tenant is not used for archiving data.

The following describes how to add a new tenant and namespace to an existing Hitachi Content Platform. This procedure assumes that the Hitachi Content Platform system has been added to DNS and that DNS has been correctly configured.
Create a new Tenant

To create a new tenant, do the following.

1. Connect to Hitachi Content Platform system management console using a web browser

   HTTPS must be used to connect. The DNS name for Hitachi Content Platform should be used. The URL is "https://admin.<DNS name of HCP system>:8000".

2. Login as a user with admin privileges.

3. Point to the Security tab and on the dropdown click on MAPI.

4. Click the box for Enable the Management API.

5. Click Update Settings.

6. Click on the Tenants tab.

7. Click on Create Tenant.

8. Fill in the required fields.

   (1) Enter a name in the Tenant Name field.

   (2) Enter a description for the tenant in the Description field.

   (3) Enter a value in the Hard Quota field and check either GB or TB.

   (4) Enter a value in the Soft Quota field or leave the default of 85.

   (5) Enter a value in the Namespace Quota field or check the box for No quota.

      This quota restricts the number of namespaces that can be created in a tenant.

   (6) Select an Authentication type.

      Microsoft Active Directory® authentication requires additional configuration.

   (7) Select an Initial Security Account.

   (8) Enter a Username and Password.

   (9) For the four items under Enable features for this tenant, only enable Search.

9. Click Create Tenant.
Configure the Tenant

To configure the tenant, do the following.

1. On the **Tenants** home page click on the tenant you created.

2. Click on the URL.

   The URL is https://<tenant name><DNS name of HCP>:8000.

3. On the tenant login screen enter the username and password that you entered in step 5(8) above and click Log In.

4. You must change the password for the account you used to login.

5. Enter the existing password, the new password, and confirm the new password then click **Update Password**.

6. When the successful update message displays, point to the **Security** tab and then click **Users**.

7. On the **Users** screen click on the user that you logged in as.

8. In the **Roles** area check the **Administrator** box and leave **Security** checked.

9. Click **Update User Account**.

   The page will refresh and additional tabs will be added to the menu bar.

10. Point to the **Security** tab and on the dropdown click on **MAPI**.

11. Click the box for **Enable the Management API**.

12. Click **Update Settings**.
Create a new Namespace

To create a new namespace, do the following.

1. Click the **Namespaces** tab.

2. Click on **Create Namespace**

3. Enter the following information:
   
   (1) Namespace Name
   
   (2) Description
   
   (3) Change Data Protection Level (DPL) and Hash Algorithm if needed
   
   (4) Hard Quota
   
   (5) Change Soft Quota if a value other than the default 85% is desired

4. Click **Create Namespace**.

5. After the namespace has been created click on the **Namespaces** tab.

6. Click on the namespace you just created.

7. Record the URL for the namespace.

   This will be in the form https://<namespace name><tenant name><DNS name of HCP>. You will need this information when configuring the Storage Vault Partition in Symantec Enterprise Vault.

8. Log out of Hitachi Content Platform

Additional configuration will be required at the tenant and namespace level depending on your specific environment and requirements. Consult with your Hitachi Data Systems representative to insure that Hitachi Content Platform is configured correctly for your environment.
Install Storage Adapter for Symantec Enterprise Vault

Do the following to install the Storage Adapter for Symantec Enterprise Vault. The storage adapter must be installed on each Symantec Enterprise Vault server connected to Hitachi Content Platform.

1. Download the storage adapter software package to the Symantec Enterprise Vault server.
2. If Symantec Enterprise Vault is already installed, stop the Enterprise Vault Storage Service.
4. Click Next on the welcome screen.
5. On the Select Installation Folder screen accept the defaults by clicking Next.
   
      The folder and Install for option can be changed if required.
   
6. On the Confirm Installation screen click Next.
7. On the Installation Complete screen click Close.

Configure Symantec Enterprise Vault 10

To configure Symantec Enterprise Vault 10 to use Hitachi Content Platform for Microsoft Exchange 2010 archiving, perform the tasks listed in this section. These procedures assume that Symantec Enterprise Vault 10 has been installed and configured following Symantec best practices. Instructions for the installation and configuration of Symantec Enterprise Vault can be found on the Enterprise Vault DVD. Additional documents, including a performance guide and an SQL best practices guide, can be found on the Symantec web site at http://www.symantec.com/business/support/index?page=landing&key=50996. Web based training modules are available for Symantec Enterprise Vault 10 at http://techcenter.symantec.com/ecampus/enterprise?siteName=sena&courseNo=DP6002

The following steps assume that the Symantec Enterprise Vault 10 installation is complete and that the Enterprise Vault Configuration Wizard has been run. For a new installation, after the Enterprise Vault Configuration Wizard completes, you can either use the Getting Started Wizard to configure Vault Store Partitions or you can create them using the Administration Console. To add Vault Store Partitions to an existing Symantec Enterprise Vault environment use the Administration Console.

New Install Using the Getting Started Wizard

To configure a Vault Store Partition on Hitachi Content Platform using the Getting Started Wizard, do the following. This procedure starts on the Storage Configuration page of the Getting Started Wizard.

---
Create a New Vault Store Group

To create a new vault store group, do the following.

1. On the Storage Configuration screen click Next.


3. On the New Vault Store Group information screen click Next.

4. On the New Vault Store Group screen enter the name and description for the new Vault Store Group and click Next.

5. Enter or use the Browse button to select the SQL Server that will be used for the Vault Store Group fingerprint database and click Next.

6. Enter the locations on the SQL Server where you want the fingerprint database and transaction logs created and click Next. Symantec recommends that they be placed on separate spindles.

7. On the verification screen click Next to create the new Vault Store Group and the fingerprint database.

8. Click Next on the screen informing you that the Vault Store Group and fingerprint database have been successfully created.
**Create a new Vault Store**

To create a new vault store, do the following.

1. On the **New Vault Store** information screen click **Next**.

2. Enter the name and description for the new Vault Store and click **Next**.

3. Enter the name of the SQL Server that will be used for the Vault Store database and click **Next**.

4. Enter the locations on the SQL Server where you want the Vault Store database and transaction log to be created and click **Next**. Symantec recommends that they be placed on separate spindles.

5. On the screen asking you to specify when safety copies will be removed, select the option from the dropdown list that is correct for your environment and click **Next**.

6. On the verification screen click **Next** to create the new Vault Store.

7. Click **Next** on the screen informing you that the Vault Store and database have been successfully created.

8. On the **New Partition** information screen click **Next**.
Create a New Vault Store Partition

To create a new vault store partition, do the following.

1. Enter the name and description for the new partition and click Next.
   
   Since this is the first partition you are creating in this Vault Store, verify that the Create this new partition: option is set to Open.

2. On the storage type screen select Hitachi Content Platform (HCP) from the dropdown list.

   Make sure you do not select Hitachi Content Archive Platform (HCAP) as this is for older versions of the product.

3. Click Next.

   If the Storage Adapter for Symantec Enterprise Vault has not been installed on the Symantec Enterprise Vault you will get an error instructing you to install it.

4. Enter the information for the Hitachi Content Platform connection settings.

   Table 4 on page 13 lists the settings, a brief explanation of the setting, and the values to be entered for a Hitachi Content Platform namespace with a URL of https://Exchange.EV.hcp500xl.aselab.org. These values are from a lab environment and will vary depending on your Hitachi Content Platform configuration.

5. Click the Test button to verify connectivity between the Symantec Enterprise Vault server and Hitachi Content Platform.

   The stub zone for the Hitachi Content Platform must be configured correctly in DNS before the connectivity test is run or the test will fail.

   A message will display indicating that the connection test succeeded. This message will also list the storage adapter version and the Hitachi Content Platform version.

6. Click OK to close the connection test succeeded message.

7. Click Next.

8. On the Hitachi Content Platform storage settings screen do the following:

   (1) Check the box for Store data in WORM mode

   (2) Uncheck the box for Device performs data deduplication

   (3) Check the box for Device performs data compression

   (4) Click Next.

9. On the connectivity test screen click the Run Test button.

10. Verify the connection rating for each source and destination pair.

    The rating will be Good, Bad, Very bad, or no response based on the
connection speed. This test uses the ICMP protocol so if it is blocked on your network, the test will result in a connection rating of no response. This does not mean that the environment is configured incorrectly or that it will not work correctly.

11. When the test is complete click **Next**.

12. On the next screen verify that **Partition Rollover** is set to **Not Enabled** and click **Next**.

13. On the next screen check the box for **Scan partition every <value> minutes**, set the value to **60**, and click **Next**.

   Modify the value if required for your environment.

14. On the information screen, verify the information that has been entered and click **Finish** to create the new Vault Store Partition.

15. On the next screen click **Close**.

16. Complete the Getting Started Wizard using the Symantec Enterprise Vault documentation as needed.

Table 4. Partition Settings for Hitachi Content Platform

<table>
<thead>
<tr>
<th>Setting</th>
<th>Purpose</th>
<th>Example Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primary cluster DNS name</td>
<td>DNS of primary Hitachi Content Platform</td>
<td>hcp500xI.aselab.org</td>
</tr>
<tr>
<td>Replica cluster DNS name</td>
<td>DNS of replica Hitachi Content Platform if one is present</td>
<td>Leave blank</td>
</tr>
<tr>
<td>Namespace name</td>
<td>Namespace name</td>
<td>Exchange</td>
</tr>
<tr>
<td>Data access account username</td>
<td>User account used to access Hitachi Content Platform</td>
<td>admin</td>
</tr>
<tr>
<td>Data access account password</td>
<td>User account password</td>
<td>&lt;admin password&gt;</td>
</tr>
<tr>
<td>Local safety copies</td>
<td>Set to the DPL value of the Hitachi Content Platform namespace or lower</td>
<td>2</td>
</tr>
<tr>
<td>Remote safety copies</td>
<td>Set to 0 if no replica exists. If there is a replica set to the DPL value of the namespace on the replica</td>
<td>0</td>
</tr>
<tr>
<td>Tenant name</td>
<td>Tenant name</td>
<td>EV</td>
</tr>
<tr>
<td>Root folder path</td>
<td>May be multi-level. Cannot exceed 31 characters</td>
<td>Evroot/</td>
</tr>
<tr>
<td>Protocol</td>
<td>Enter HTTPS. HTTP can be used if the HTTP protocol is enabled on Hitachi Content Platform</td>
<td>HTTPS</td>
</tr>
</tbody>
</table>
Adding Vault Store Partitions to an Existing Symantec Enterprise Vault Environment

Use the Symantec Enterprise Vault Administration Console to add a new Vault Store Partition to an existing Symantec Enterprise Vault environment.

If the Symantec Enterprise Vault server has not already been configured to connect to Hitachi Content Platform, download and install the Storage Adapter for Symantec Enterprise Vault before proceeding. See the Install Storage Adapter for Symantec Enterprise Vault procedure earlier in this paper for instructions.

To install a new Vault Store Partition that will use Hitachi Content Platform do the following.

1. Open the Symantec Enterprise Vault Administration Console.

2. Navigate to Vault Store Groups under the applicable Enterprise Vault site.

3. If you need to add additional Vault Store Groups or Vault Stores follow the Symantec Enterprise Vault instructions for those tasks.

   For most existing Enterprise Vault environments you will need to add at minimum a new Vault Store since a Vault Store can only have one partition in the Open state at a time. Use the Create a New Vault Store procedure to add an additional Vault Store.

4. Navigate to the Vault Store where the new partition will be added.

5. Right click on the Vault Store and click on New Partition.

   The New Partition Wizard will open.

6. Use the Create a New Vault Store Partition procedure to add the new Vault Store Partition.
Complete Configuration for Archiving

Complete the configuration of Microsoft Exchange 2010 and Symantec Enterprise Vault to support mailbox archiving. Use the documentation available from Microsoft and Symantec. See the Installing and Configuring Guide for Symantec Enterprise Vault for details on performing the required tasks to configure the environment for Exchange Archiving. The high level steps are;

- Configure Exchange Mailbox archiving prerequisites
- Configure Exchange servers
- Verify configuration
- Define targets and tasks
- Create policies and retention categories
- Define Provisioning Groups
- Configure, schedule, and run tasks
For More Information

Hitachi Data Systems Global Services offers experienced storage consultants, proven methodologies and a comprehensive services portfolio to assist you in implementing Hitachi products and solutions in your environment. For more information, see the Hitachi Data Systems Global Services website.

Live and recorded product demonstrations are available for many Hitachi products. To schedule a live demonstration, contact a sales representative. To view a recorded demonstration, see the Hitachi Data Systems Corporate Resources website. Click the Product Demos tab for a list of available recorded demonstrations.

Hitachi Data Systems Academy provides best-in-class training on Hitachi products, technology, solutions and certifications. Hitachi Data Systems Academy delivers on-demand web-based training (WBT), classroom-based instructor-led training (ILT) and virtual instructor-led training (vILT) courses. For more information, see the Hitachi Data Systems Services Education website.

For more information about Hitachi products and services, contact your sales representative or channel partner or visit the Hitachi Data Systems website.