

Metalogix® StoragePoint 6.2

Hitachi S3 Adapter Guide



© 2022 Quest Software Inc. ALL RIGHTS RESERVED.

This guide contains proprietary information protected by copyright. The software described in this guide is furnished under a software license or nondisclosure agreement. This software may be used or copied only in accordance with the terms of the applicable agreement. No part of this guide may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying and recording for any purpose other than the purchaser's personal use without the written permission of Quest Software Inc.

The information in this document is provided in connection with Quest Software products. No license, express or implied, by estoppel or otherwise, to any intellectual property right is granted by this document or in connection with the sale of Quest Software products. EXCEPT AS SET FORTH IN THE TERMS AND CONDITIONS AS SPECIFIED IN THE LICENSE AGREEMENT FOR THIS PRODUCT, QUEST SOFTWARE ASSUMES NO LIABILITY WHATSOEVER AND DISCLAIMS ANY EXPRESS, IMPLIED OR STATUTORY WARRANTY RELATING TO ITS PRODUCTS INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, OR NON-INFRINGEMENT. IN NO EVENT SHALL QUEST SOFTWARE BE LIABLE FOR ANY DIRECT, INDIRECT, CONSEQUENTIAL, PUNITIVE, SPECIAL OR INCIDENTAL DAMAGES (INCLUDING, WITHOUT LIMITATION, DAMAGES FOR LOSS OF PROFITS, BUSINESS INTERRUPTION OR LOSS OF INFORMATION) ARISING OUT OF THE USE OR INABILITY TO USE THIS DOCUMENT, EVEN IF QUEST SOFTWARE HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. Quest Software makes no representations or warranties with respect to the accuracy or completeness of the contents of this document and reserves the right to make changes to specifications and product descriptions at any time without notice. Quest Software does not make any commitment to update the information contained in this document.

If you have any questions regarding your potential use of this material, contact:

Quest Software Inc.
Attn: LEGAL Dept.
4 Polaris Way
Aliso Viejo, CA 92656

Refer to our Web site (<https://www.quest.com>) for regional and international office information.

Patents


Quest Software is proud of our advanced technology. Patents and pending patents may apply to this product. For the most current information about applicable patents for this product, please visit our website at <https://www.quest.com/legal>.

Trademarks

Quest, the Quest logo, and Metalogix are trademarks and registered trademarks of Quest Software Inc. and its affiliates. For a complete list of Quest marks, visit <https://www.quest.com/legal/trademark-information.aspx>. All other trademarks and registered trademarks are property of their respective owners.

Legend

 **CAUTION:** A caution icon indicates potential damage to hardware or loss of data if instructions are not followed.

 **IMPORTANT, NOTE, TIP, MOBILE OR VIDEO:** An information icon indicates supporting information.

Metalogix® StoragePoint
Updated November 2022
Version 6.2

Contents

Hitachi S3 Adapter Configuration	4
Hitachi S3 Adapter Connection String Parameters	6
Example Storage Endpoint using Hitachi S3	12
Appendix: Troubleshooting	13
Problem: Receive an error message when testing a storage profile.	13
Problem: Receiving errors on storage or retrieval of externalized content.	13
Problem: Newly uploaded content is not being archived as expected.	14
About Us	15
Contacting Quest	15
Technical Support Resources	15

Hitachi S3 Adapter Configuration

This section will provide you details on how to configure a storage endpoint's connection string to utilize the Hitachi S3 Adapter. Please refer to the StoragePoint Reference Guide for information on managing Storage Endpoints.

On the Application Management page, click *Storage and Backup Endpoints*.

Click *Create New Endpoint* or click the name of an existing storage endpoint that you want to edit.

Click the *Show* link next to the Advanced Adapter Settings to see the additional fields.

Name

Type
 Primary Backup

Status

Adapter

Adapter Settings Show Connection String

Host

Use SSL

User

Password

Advanced Adapter Settings *(Hide)*

Root

Strict SSL

Timeout (in seconds)

Verify Hash

Retry

Retention

Delete Allowed
 Permanent
 Indefinite
 Date Format:

Duration/Interval:

HCP-Specific
 Hold

Hitachi S3 Adapter Connection String Parameters

Setting Value/Options
<p>Name Enter the unique name of the Storage or Backup Endpoint.</p>
<p>Type</p> <p>Type</p> <p><input checked="" type="radio"/> Primary <input type="radio"/> Backup</p> <p><i>Primary</i>– this endpoint will be available for externalization when creating storage profiles. <i>Backup</i>– this endpoint will be in the Backup Services dropdown on the profile page.</p> <p>The selection is locked down when saving.</p>

Setting
Value/Options

See Backup Services Settings in the Reference Guide for more information on how Backup Endpoints are used.

Status

Status

Online

Online– Storage Endpoint should be available to associate to a Storage Profile and accept BLOBs. (default)

Offline (Read Only)– A storage endpoint can be configured, but not made available for externalizing content. The BLOBs already on the endpoint are still read only.

Adapter

HitachiS3 

Select the adapter for the endpoint that is being created.

Host

Fully qualified domain name that represents the tenant namespace.

Use SSL

No

(yes/no) – Determines whether or not the adapter negotiates an SSL connection for all data (and metadata) transfers. Default = No.

User

Password

User login and password used to access the Hitachi S3 system.

Setting
Value/Options

Advanced Adapter Settings *(Hide)*

Root

Folder path to use when storing the SharePoint content under this profile. Please remember that paths and folder names are case sensitive.

Strict SSL

(Yes/No) If *UseSSL* is *Yes*, the *StrictSSL* flag controls whether or not the use of "self-issued" or otherwise suspicious certificates on the system will be tolerated.

Timeout (in seconds)

Number of seconds to wait for a response to any request before considering it an excessively long wait and raising an error condition. Default = 120.

Verify Hash

(Yes/No) If set to *Yes*, adds content integrity checking by comparing a locally computed hash for the file bits against the hash returned from Hitachi during upload operations. Default = No.

Retry

Specifies the number of attempts to retry the network connection to the endpoint before returning a failure result in case of network disruption or connectivity issues. Default = 3.

Setting Value/Options

Retention

Delete Allowed

Permanent

Indefinite

Date Format:

Duration/Interval:

If supplied, the adapter will calculate and supply a retention policy when saving content.

Possible settings:

- Delete Allowed - No special permissions are required to delete content on this endpoint.
- Permanent - This maps to -1 or "Infinite retention, cannot be deleted".
- Indefinite - This maps to -2 or "Initial Unspecified". Content cannot be deleted, but retention can be changed at a later time.
- Date Format - This sets a date for the retention policy. Click the calendar icon to select a date, or type it like this example (mm/dd/yyyy): 08/31/2009
- Duration/Interval - Type a number in the first box, and select an interval from the dropdown. The interval may be days (D), months (M) or years (Y). Example: 5D would equal 5 Days

i | **NOTE:** You can NEVER shorten the retention period once it has been established, unless it was initially set to Indefinite.

HCP-Specific

Hold

If Hold is set to true (checked) you can place an object on hold. An object that is on hold cannot be deleted, even by a privileged delete operation. Holding objects is particularly useful when the objects are needed for legal discovery.

Is WORM Device

If the endpoint is on a WORM (Write Once, Read Many) device, Unused BLOB Cleanup will ignore this endpoint.

Setting Value/Options

Folder Content in BLOB Store

No ▼

Folder Scheme

YYYY/MM/DD/HH/MM ▼

No– Externalized content BLOBs are not placed in folders (default).

Yes– Externalized content BLOBs are placed in folders.

If *Folder Content in BLOB Store* is *Yes* then you can select a date/time folder scheme from the dropdown.

YYYY/MM/DD/HH/MM is the default.

Test Storage Settings

The Test Storage Settings button can be used at this point, or after completing the endpoint configuration, to verify that the endpoint is accessible.

Compress Content in BLOB Store

No ▼

Content is compressed using the GZip/Deflate method.

No– Externalized content BLOBs are not compressed (default).

Yes– Externalized content BLOBs are compressed.

Encryption Method for Content in BLOB Store

None ▼

None– Encryption will not be applied to externalized BLOBs (default).

AES (128 bit)– 128 bit AES encryption will be applied to externalized BLOBs.

AES (256 bit)– 256 bit AES encryption will be applied to externalized BLOBs.

Encryption Key Passphrase

Generate Key

*Enter a passphrase to be used to generate a key or leave blank to generate a random key. The passphrase entered is **not** saved with the Endpoint.*

Enter a passphrase to use when generating the encryption key. Using a passphrase will help you

Setting
Value/Options

re-create the encryption key if necessary. You can generate a random key by leaving the box blank and clicking the *Generate Key* button. The encryption key passphrase will be hidden.

Generate warning notification if:

- 10 or more successive errors are encountered
 there is less than 10 MB % of free space

A warning email can be sent if it encounters errors.

Automatically take endpoint offline if:

- 25 or more successive errors are encountered
 there is less than 1 MB % of free space

An online storage endpoint can be automatically taken offline if it encounters errors. If a storage endpoint is taken offline automatically, BLOBs that were intended to be written to that endpoint will go to the content database.

Send Offline Notifications to:

- Use Notification Defaults

Additional Contacts

admin@contoso.com;systems@contoso.com

Provide a semi-colon delimited list of e-mail addresses.

Default email addresses for system error and offline notification can be entered. Check the box to include the list of Default Notification Contacts specified on the General Settings page.

Example Storage Endpoint using Hitachi S3

The screenshot shows the Metalogix StoragePoint configuration interface. It is divided into two main sections: 'EndPoint Information' and 'Storage Settings'. In the 'EndPoint Information' section, there are fields for 'Name' (containing 'HS3'), 'Type' (radio buttons for 'Primary' and 'Backup', with 'Primary' selected), 'Status' (a dropdown menu set to 'Online'), and 'Host' (containing 'dev.eleven23.access.tryhcpnow.com'). In the 'Storage Settings' section, there is a dropdown for 'Adapter' set to 'HitachiS3' and a checkbox for 'Show Connection String' which is currently unchecked.

Click the *Show Connection String* checkbox to edit the connection string. Otherwise, fill in the connection fields shown for the adapter selected. Notice that the connection string parameters are name/value pairs separated by semi-colons.

This screenshot shows the 'Storage Settings' section of the configuration page. The 'Adapter' dropdown is still set to 'HitachiS3'. The 'Show Connection String' checkbox is now checked. Below this, a text area displays the connection string: `HOST=dev.eleven23.access.tryhcpnow.com;USESSL=True;USER=dev;PASSWORD=*****;ROOT=DVA;STRICSSL=False;TIMEOUT=120;VERIFYHASH=False;RETENTION=3;RETENTION=;HOLD=False`. Below the text area, there is a note: 'Provide adapter-specific connection attributes. Please refer to the adapter documentation for connection string details.'

i | **NOTE:** Adapter parameters are not case-sensitive.

i | **NOTE:** You should always use a passphrase when generating encryption keys. The passphrase gives you a means of re-creating keys should they become unrecoverable or corrupt. It is very important to remember or record the passphrase outside of Metalogix StoragePoint. Otherwise, encrypted content could become irretrievable in the event of a database failure.

i | **NOTE:** Clicking the Test Storage Settings button on a storage profile using the HCP Adapter could result in an error. The profile test performs several operations, including a delete operation. If you are setting a retention parameter on the connection string then you will receive an error letting you know that the delete failed. This should not be considered a failure of the test.

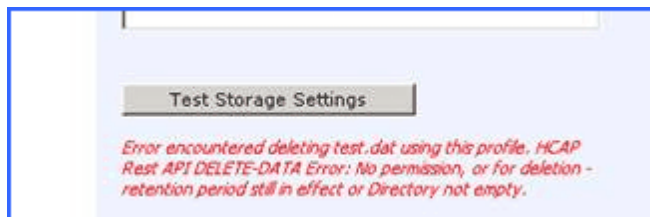
If you choose to externalize content you should test the storage profile settings by clicking the *Test Storage Settings* button. A message under the button will indicate whether or not the test was successful. If the test fails the message will include the error that was the root cause of the failure.

i | **NOTE:** When testing access to an endpoint from within Central Administration, the Identity of the Application Pool hosting the Central Administration Site is the one that is being used for the test. If there are different Identities used for other Web Applications in the Farm then those identities will also need access but cannot be tested from within Central Admin itself. See BLOB Store Security and Metalogix StoragePoint Required Privileges in the Metalogix StoragePoint Reference Guide.

Appendix: Troubleshooting

Problem: Receive an error message when testing a storage profile.

When clicking the *Test Storage Settings* button on a storage profile using the Hitachi S3 adapter you receive an error similar to this:



This error is because a RETENTION value was specified on the storage profile's Connection String and StoragePoint cannot delete the externalized test file. This should be considered a successful test.

Problem: Receiving errors on storage or retrieval of externalized content.

Wherever possible, StoragePoint surfaces error messages returned by Hitachi S3 either directly to the user or within the SharePoint ULS logs. You should refer to your HCP/HCAP documentation for errors logged by the HCP/HCAP Adapter.

Problem: Newly uploaded content is not being archived as expected.

For event based retention to work, the item has to exist before it can be tagged with retention during the archive process. So if content is uploaded with a change to the metadata that would normally archive the item, it won't be archived. However, any subsequent change to the item will flag it for archiving, and the next successful run of the content queue migrator will archive that content.

About Us

Quest creates software solutions that make the benefits of new technology real in an increasingly complex IT landscape. From database and systems management, to Active Directory and Office 365 management, and cyber security resilience, Quest helps customers solve their next IT challenge now. Around the globe, more than 130,000 companies and 95% of the Fortune 500 count on Quest to deliver proactive management and monitoring for the next enterprise initiative, find the next solution for complex Microsoft challenges and stay ahead of the next threat. Quest Software. Where next meets now. For more information, visit www.quest.com.

Contacting Quest

For sales or other inquiries, visit www.quest.com/contact.

Technical Support Resources

Technical support is available to Quest customers with a valid maintenance contract and customers who have trial versions. You can access the Quest Support Portal at <https://support.quest.com>

The Support Portal provides self-help tools you can use to solve problems quickly and independently, 24 hours a day, 365 days a year. The Support Portal enables you to:

- Submit and manage a Service Request
- View Knowledge Base articles
- Sign up for product notifications
- Download software and technical documentation
- View how-to-videos
- Engage in community discussions
- Chat with support engineers online
- View services to assist you with your product