

Metalogix® StoragePoint 5.7

## Amazon S3 Adapter Guide



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# Amazon S3 Adapter Configuration

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

Please note that the adapter was upgraded with the release of StoragePoint 5.3 to support the latest protocols. Please upgrade to this version if you are experiencing errors connecting to Amazon storage.

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.

Adapter  
AmazonS3 ?

**Adapter Settings**  **Show Connection String**

Access Key

Secret Key

Bucket Name  
  
*(Lowercase letters and "DNS Friendly" naming highly recommended.)*

**Advanced Adapter Settings** *(Hide)*

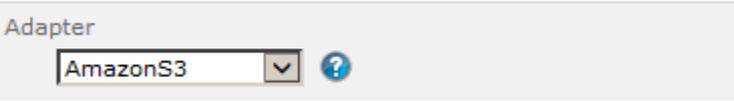
Use SSL

Proxy URI

S3 Host

S3 Port Number

# Amazon S3 Adapter Connection String Parameters

Setting	Value/Options
Name	Enter the unique name of the Storage or Backup Endpoint.
Type  <p>See Backup Services Settings in the Reference Guide for more information on how Backup Endpoints are used.</p>	<p><i>Primary</i>– this endpoint will be available for externalization when creating storage profiles.</p> <p><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>
Status 	<p><i>Online</i>– Storage Endpoint should be available to associate to a Storage Profile and accept BLOBs. (default)</p> <p><i>Offline (Read Only)</i>– A storage endpoint can be configured, but not made available for externalizing content. The BLOBs already on the endpoint are still read only.</p>
Adapter 	Select the adapter for the endpoint that is being created.
Access Key 	The Access Key ID provided by Amazon when you signed up for the S3 service. Required.
Secret Key 	The Secret Access Key provided by Amazon when you signed up for the S3 service. Required.
Bucket Name 	The container within your S3 account where content associated with a storage profile will be stored. Bucket names are case sensitive and unique across the entire S3 service namespace.

Setting	Value/Options
<p><b>Advanced Adapter Settings</b> <i>(Hide)</i></p> <p>Use SSL</p> <p><input type="text" value="True"/> ▼</p>	<p>(<i>true/false</i>) Determines whether or not the adapter negotiates an SSL connection for all data (and metadata) transfers. Default = False.</p>
<p>Proxy URI</p> <p><input type="text"/></p>	<p>Used to take the URL (optionally including a port) of a simple non-authenticating proxy that will be used when communicating with Amazon services.</p>
<p>S3 Host</p> <p><input type="text"/></p>	<p>IP or DNS name that represents the access point for the Amazon AWS service. Default = s3.amazonaws.com</p>
<p>S3 Port Number</p> <p><input type="text"/></p>	<p>Port used to access the Amazon S3 service. Default = 80 (443 if UseSSL is True)</p>
<p>Strict SSL</p> <p><input type="text" value="No"/> ▼</p>	<p>(<i>Yes/No</i>) If <i>UseSSL</i> is <i>Yes</i>, the <i>StrictSSL</i> flag controls whether or not the use of "self-issued" or otherwise suspicious certificates on the system will be tolerated.</p>
<p>Region</p> <p><input type="text" value="Enter Region Name."/></p>	<p>Used in AWS4 request signing, this is an optional property; change it only if the region cannot be determined from the service endpoint.</p> <p>For custom or private clouds or where StoragePoint cannot automatically retrieve the region because of security or permission reasons.</p>
<p>Is WORM Device</p> <p><input type="text" value="No"/> ▼</p>	<p>If the endpoint is on a WORM (Write Once, Read Many) device, Unused BLOB Cleanup will ignore this endpoint.</p>

Setting	Value/Options
<p>Folder Content in BLOB Store</p> <p><input type="button" value="Yes"/> ▾</p> <p>Folder Scheme</p> <p><input type="text" value="YYYY/MM/DD/HH/MM"/> ▾</p>	<p><i>No</i>– Externalized content BLOBs are not placed in folders.</p> <p><i>Yes</i>– Externalized content BLOBs are placed in folders (default).</p> <p>If <i>Folder Content in BLOB Store</i> is <i>Yes</i> then you can select a date/time folder scheme from the dropdown.</p> <p>YYYY/MM/DD/HH/MM is the default.</p>
<p><input type="button" value="Test Storage Settings"/></p>	<p>The Test Storage Settings button can be used at this point, or after completing the endpoint configuration, to verify that the endpoint is accessible. For some adapters, testing the connection will create the bucket if it doesn't already exist.</p>
<p>Compress Content in BLOB Store</p> <p><input type="button" value="No"/> ▾</p> <p><i>Content is compressed using the GZip/Deflate method.</i></p>	<p><i>No</i>– Externalized content BLOBs are not compressed (default).</p> <p><i>Yes</i>– Externalized content BLOBs are compressed.</p>
<p>Encryption Method for Content in BLOB Store</p> <p><input type="button" value="None"/> ▾</p>	<p><i>None</i>– Encryption will not be applied to externalized BLOBs (default).</p> <p><i>AES (128 bit)</i>– 128 bit AES encryption will be applied to externalized BLOBs.</p> <p><i>AES (256 bit)</i>– 256 bit AES encryption will be applied to externalized BLOBs.</p>
<p>Encryption Key Passphrase</p> <p><input type="text"/> <input type="button" value="Generate Key"/></p> <p><i>Enter a passphrase to be used to generate a key or leave blank to generate a random key. The pass phrase entered is <b>not</b> saved with the Endpoint.</i></p>	<p>Enter a passphrase to use when generating the encryption key. Using a passphrase will help you re-create the encryption key if necessary. You can generate a random key by leaving the box blank and clicking the <i>Generate Key</i> button. The encryption key passphrase will be hidden.</p>

Setting	Value/Options
<p>Generate warning notification if:</p> <p><input checked="" type="checkbox"/> <input type="text" value="10"/> or more successive errors are encountered</p> <p><input type="checkbox"/> there is less than <input type="text" value="10"/> <input checked="" type="radio"/> MB <input type="radio"/> % of free space</p>	<p>A warning email can be sent if the endpoint encounters errors.</p>
<p>Automatically take endpoint offline if:</p> <p><input checked="" type="checkbox"/> <input type="text" value="25"/> or more successive errors are encountered</p> <p><input type="checkbox"/> there is less than <input type="text" value="1"/> <input checked="" type="radio"/> MB <input type="radio"/> % of free space</p>	<p>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.</p>
<p>Send Offline Notifications to:</p> <p><input checked="" type="checkbox"/> Use Notification Defaults</p> <p>Additional Contacts</p> <p><input type="text" value="admin@company.com"/></p> <p><i>Provide a semi-colon delimited list of e-mail addresses.</i></p>	<p>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.</p>

# Example Storage Endpoint using Amazon S3 Adapter

**Storage Settings**  
Provide general storage settings in this section

Adapter: AmazonS3

**Adapter Settings**  Show Connection String

Access Key: KAUDH77FGEX656UHND

Secret Key: bGHYfgdcS7uo3Plk4vNMRasFxCvCHivxuwgh3

Bucket Name: 5689 (Lowercase letters and "DNS Friendly" naming highly recommended.)

**Advanced Adapter Settings (Hide)**

Use SSL: False

Proxy URI:

S3 Host:

S3 Port Number:

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.

**Storage Settings**  
Provide general storage settings in this section

Adapter: AmazonS3

**Adapter Settings**  Show Connection String

Connection: ACCESSKEY=KAUDH77FGEX656UHND; SECRETKEY=bGHYfgdcS7uo3Plk4vNMRasFxCvCHivxuwgh3; BUCKET=5689; USESSL=False; PROXY=; HOST=; PORT=;

*Provide adapter-specific connection attributes. Please refer to the adapter documentation for connection string details.*

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

**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.

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.

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: Receiving errors on storage or retrieval of externalized content.

Wherever possible, StoragePoint surfaces error messages returned by the adapter either directly to the user or within the SharePoint ULS logs. You should refer to your storage platform/provider documentation for resolution to errors logged by the adapter.

### Problem: Receiving errors on testing a storage endpoint.

StoragePoint may surface an error message as if the bucket name has already been taken. While this is definitely possible, you should also check that the bucket name is valid.

Amazon S3 has the following expectations for bucket names:

1. The bucket name must start with an alpha or numeric character.
2. The bucket name must be between 3 and 255 characters.
3. The bucket name must be completely lower case.\*
4. Underscore characters are discouraged.

*\* When the UseSubDomains connection option is set to False, this restriction does not apply.*

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## About Us

### We are more than just a name

We are on a quest to make your information technology work harder for you. That is why we build community-driven software solutions that help you spend less time on IT administration and more time on business innovation. We help you modernize your data center, get you to the cloud quicker and provide the expertise, security and accessibility you need to grow your data-driven business. Combined with Quest's invitation to the global community to be a part of its innovation, and our firm commitment to ensuring customer satisfaction, we continue to deliver solutions that have a real impact on our customers today and leave a legacy we are proud of. We are challenging the status quo by transforming into a new software company. And as your partner, we work tirelessly to make sure your information technology is designed for you and by you. This is our mission, and we are in this together. Welcome to a new Quest. You are invited to Join the Innovation™.

### Our brand, our vision. Together.

Our logo reflects our story: innovation, community and support. An important part of this story begins with the letter Q. It is a perfect circle, representing our commitment to technological precision and strength. The space in the Q itself symbolizes our need to add the missing piece — you — to the community, to the new Quest.

### Contacting Quest

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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>

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- 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