

Metalogix® StoragePoint 5.9

Amazon S3 Adapter Guide



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Metalogix® StoragePoint

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Amazon S3 Adapter Configuration

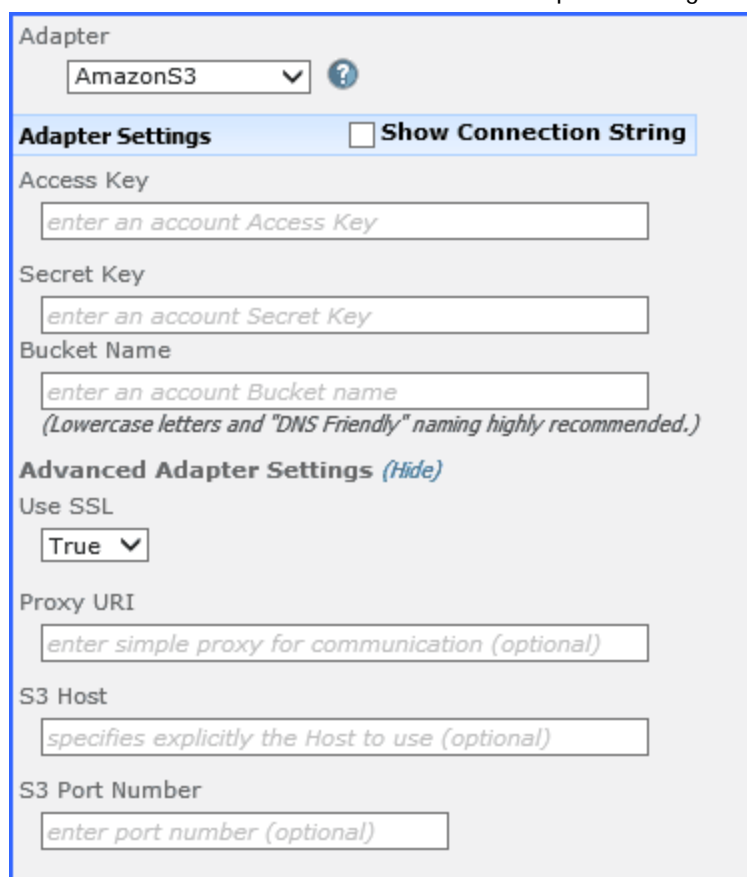
This section will provide you details on how to configure a storage endpoint's connection string to utilize the S3 Adapter. Please refer to the StoragePoint Reference Guide for information on managing Storage Endpoints.

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.

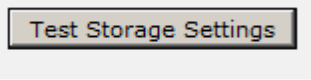



The screenshot shows a configuration form for the Amazon S3 Adapter. At the top, there is a dropdown menu for the Adapter, currently set to 'AmazonS3'. Below this is a section for 'Adapter Settings' with a checkbox for 'Show Connection String'. The form includes several input fields: 'Access Key' (placeholder: 'enter an account Access Key'), 'Secret Key' (placeholder: 'enter an account Secret Key'), and 'Bucket Name' (placeholder: 'enter an account Bucket name', with a note: '(Lowercase letters and "DNS Friendly" naming highly recommended.)'). There is also an 'Advanced Adapter Settings (hide)' section with a 'Use SSL' dropdown set to 'True', and input fields for 'Proxy URI' (placeholder: 'enter simple proxy for communication (optional)'), 'S3 Host' (placeholder: 'specifies explicitly the Host to use (optional)'), and 'S3 Port Number' (placeholder: 'enter port number (optional)').

Amazon S3 Adapter Connection String Parameters

Setting	Value/Options
<p>Name</p>	<p>Enter the unique name of the Storage or Backup Endpoint.</p>
<p>Type</p> <div data-bbox="204 645 544 745"> <p>Type</p> <p><input checked="" type="radio"/> Primary <input type="radio"/> Backup</p> </div> <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>
<p>Status</p> <div data-bbox="204 1111 611 1227"> <p>Status</p> <p>Online</p> </div>	<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>
<p>Adapter</p> <div data-bbox="204 1559 563 1630"> <p>AmazonS3</p> </div>	<p>Select the adapter for the endpoint that is being created.</p>
<p>Access Key</p> <div data-bbox="204 1684 890 1787"> <input type="text"/> </div>	<p>The Access Key ID provided by Amazon when you signed up for the S3 service. Required.</p>
<p>Secret Key</p> <div data-bbox="204 1859 879 1962"> <input type="text"/> </div>	<p>The Secret Access Key provided by Amazon when you signed up for the S3 service. Required.</p>

Setting	Value/Options
<p>Bucket Name</p> <input type="text" value="8192"/> <p><i>(Lowercase letters and "DNS Friendly" naming highly recommended.)</i></p>	<p>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.</p>
<p>Advanced Adapter Settings <i>(Hide)</i></p> <p>Use SSL</p> <input type="text" value="True"/>	<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> <input type="text"/>	<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> <input type="text"/>	<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> <input type="text"/>	<p>Port used to access the Amazon S3 service. Default = 80 (443 if UseSSL is True)</p>
<p>Strict SSL</p> <input type="text" value="No"/>	<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> <input type="text" value="Enter Region Name."/>	<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>

Setting	Value/Options
	<p>For custom or private clouds or where StoragePoint cannot automatically retrieve the region because of security or permission reasons.</p>
	<p>If the endpoint is on a WORM (Write Once, Read Many) device, Unused BLOB Cleanup will ignore this endpoint.</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>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><i>No</i>– Externalized content BLOBs are not compressed (default).</p> <p><i>Yes</i>– Externalized content BLOBs are compressed.</p>

Setting	Value/Options
<p>Encryption Method for Content in BLOB Store</p> <p>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>Generate Key</p> <p><i>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.</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>
<p>Generate warning notification if:</p> <p><input checked="" type="checkbox"/> 10 or more successive errors are encountered</p> <p><input type="checkbox"/> there is less than 10 MB % 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"/> 25 or more successive errors are encountered</p> <p><input type="checkbox"/> there is less than 1 MB % 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>

Setting	Value/Options
<p>Send Offline Notifications to:</p> <p><input checked="" type="checkbox"/> Use Notification Defaults</p> <p>Additional Contacts</p> <p><u>admin@company.com</u></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

bGHYfgfdcS7uo3Plk4vNMRasFxCvCHIvxuwgh3

Bucket Name

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

Advanced Adapter Settings *(Hide)*

Use SSL

False

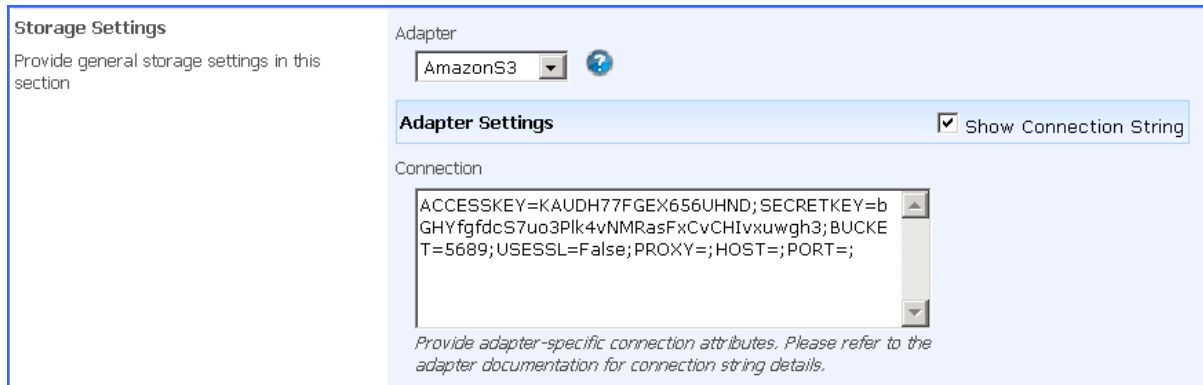
Proxy URI

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=bGHYfgfdcS7uo3Plk4vNMRasFxCvCHIvxuwgh3; 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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