



Tiger Bridge Deployment for AWS

A Step-by-step Guide for
Setting Up Tiger Bridge for
Amazon S3

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Table of Contents

Hybrid data infrastructure with Tiger Bridge and AWS S3 storage.....	3
Reference Architecture.....	3
Source and Target Concep.....	4
Tiger Bridge Data lifecycle management mechanisms	4
Common use cases using Tiger Bridge	4
Before you begin	5
Plan your Tiger Bridge Use Case	5
Deployment guides	5
Deployment instructions for server extension.....	5
Deployment instructions for Multi-site collaboration with Tiger Bridge Active Sync	9
Deployment instructions for Continuous Data Protection.....	11

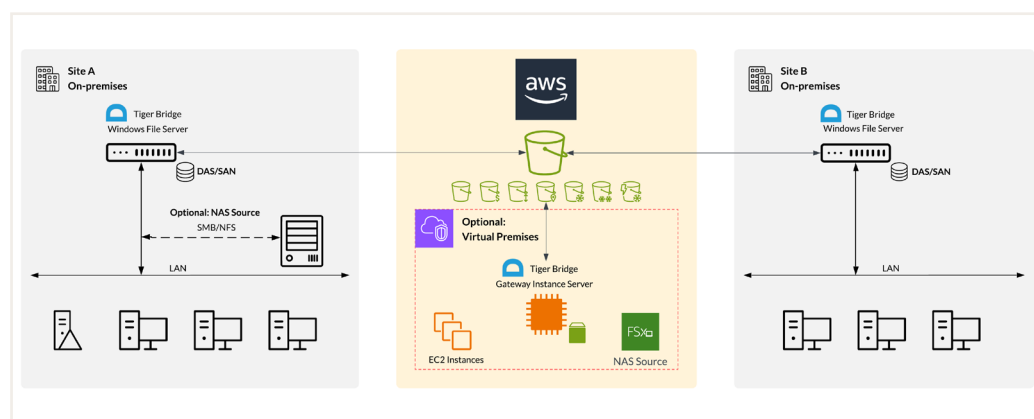
About Tiger Technology

Hybrid data infrastructure with Tiger Bridge and AWS S3 storage

This article will help you set up a Tiger Bridge data management system with Amazon storage services. It includes a setup guide and different use-case considerations. Tiger Bridge is fully integrated with NTFS/ReFS but can also manage volumes via SMB/NFS.

Tiger Bridge is a connector that creates a single namespace between sources and Amazon S3 object storage, allowing replication and tiering, collaboration and direct connectivity to various Amazon and 3rd party services. Tiger Bridge can either use an existing physical or virtual infrastructure or be deployed on a new set of servers. Tiger Bridge stores the files in an open format, removing the vendor lock-in. Tiger Bridge requires only a storage account and S3 buckets. When collaboration is required, Tiger Bridge can provide asynchronous replication with file-locking capabilities between different file systems, including Virtual File or Application servers running both on-prem and in Amazon. Tiger Bridge has an optional Analytics, helping customers to assess their data set and to provision the use of Amazon S3 storage tiers accordingly.

Reference Architecture



Source and Target Concep

- Local Source – NTFS/ReFS file systems (local, distributed or virtualised). In this case Tiger Bride runs on the MS Windows OS Server and creates a single name space with Amazon S3 object storage.
- NAS source – any NAS storage managed by any operating system that can export the storage via SMB/CIFS or NFS. In this scenario Tiger Bridge runs on a small Windows gateway providing the management of data.

Tiger Bridge Data lifecycle management mechanisms

- Data Replication
- Space Reclaiming
- Data Archiving
- Data Synchronization

Common use cases for Tiger Bridge

- Gain insight into your existing data set and access pattern in order to provision the use of Amazon S3 object storage.
- Policy-based tiering that allows transparent migration of cold or archive data from a physical or virtual file system to Amazon S3 object storage based on last access or last modification times.
- Provide disaster recovery capabilities for cluster-based setups and existing infrastructure, including working with Microsoft DFS/DFSR.
- Intelligent data archiving using lifecycle policies based on age or storage free space threshold using Amazon S3 object storage.
- Collaborate between several file systems, including file-locking, using Amazon S3 object storage.
- Provide Continuous Data Protection with retention policies,

integrating Amazon S3 Versioning, using Microsoft Windows Shell extension for transparent control.

- Provide migration between file systems and Amazon S3 object storage.

Before you begin

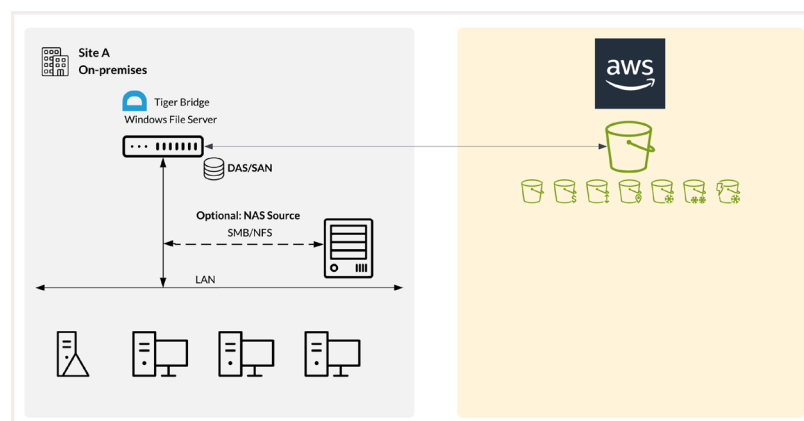
Plan your Tiger Bridge Use Case

- Consider generating a Tiger Technology Storage Assessment Report.
- Consider the cash storage capacity.
- Consider long term planning for your future data workflow.
- Create a separate bucket for each source configured on the same computer.
- Provide IAM user credentials to be used by Tiger Bridge.

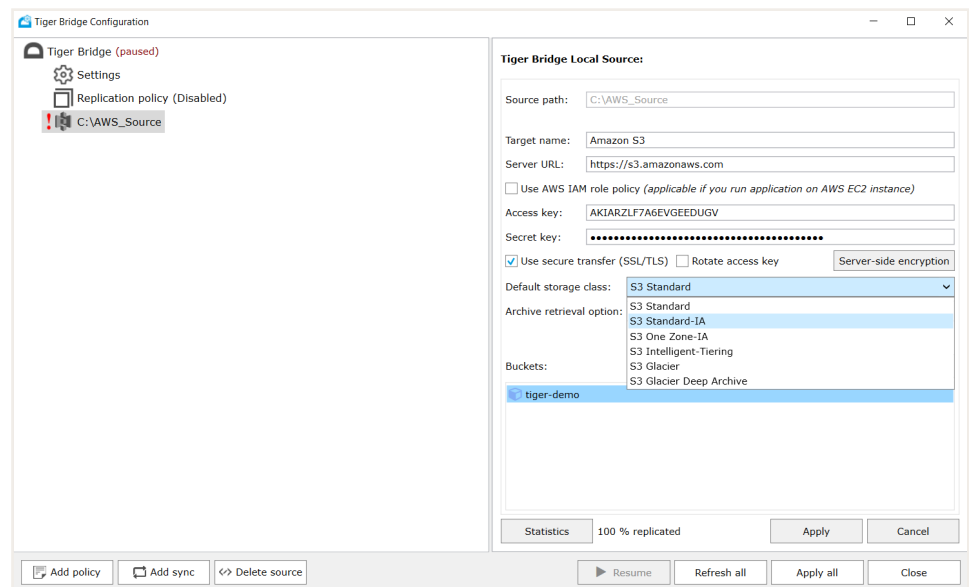
Deployment guides

Deployment instructions for server extension

Estimated time for the deployment: 50 minutes.



1. Install Tiger Bridge on your Windows OS Server
2. Add a local volume source
 - a. In the Tiger Bridge Configuration, click Tiger Bridge in the left pane and then click Local Source.
 - b. Select root of a drive or browse to and select a folder and click OK.
3. Pair the local source with Amazon S3 target.
 - a. In the Tiger Bridge target dialog select Amazon S3 and click OK.



- b. Enter a name for the target.

Tip: Specifying a unique name of the target lets you re-use its parameters, when you pair another source with the same target. The target and its parameters will appear in the Targets drop-down box.

- c. Enter the server URL, Access and Secret keys of the S3 target.

Important: To use Tiger Bridge with an acceleration-enabled buckets, include “accelerate” in the server URL as described in the Amazon documentation.

d. Choose whether to access the target using secure transfer (SSL/TLS) by selecting or clearing the check box.

e. To benefit from Amazon's access key rotation, select the "Rotate access key" check box to let Tiger Bridge update the access key of the IAM user once a week.

Note: Before enabling access key rotation in Tiger Bridge, make sure you have created an Amazon S3 policy that allows IAM users to rotate their own access keys, signing certificates, service specific credentials, and passwords.

Important: If you deploy Tiger Bridge for geo replication, to allow successful access key rotation on each computer running Tiger Bridge you must specify a different IAM account for access to the same bucket(s).

f. In Default storage class, select the storage class to which Tiger Bridge to replicate data directly, omitting any intermediate tiers.

Note: If you do not select a specific storage class, Tiger Bridge uses S3 Standard-IA

g. In Archive retrieval option, select the method for retrieving data from the archival tier of your S3 object storage.

Note: If you do not select a specific archive retrieval option, Tiger Bridge uses Standard as default.

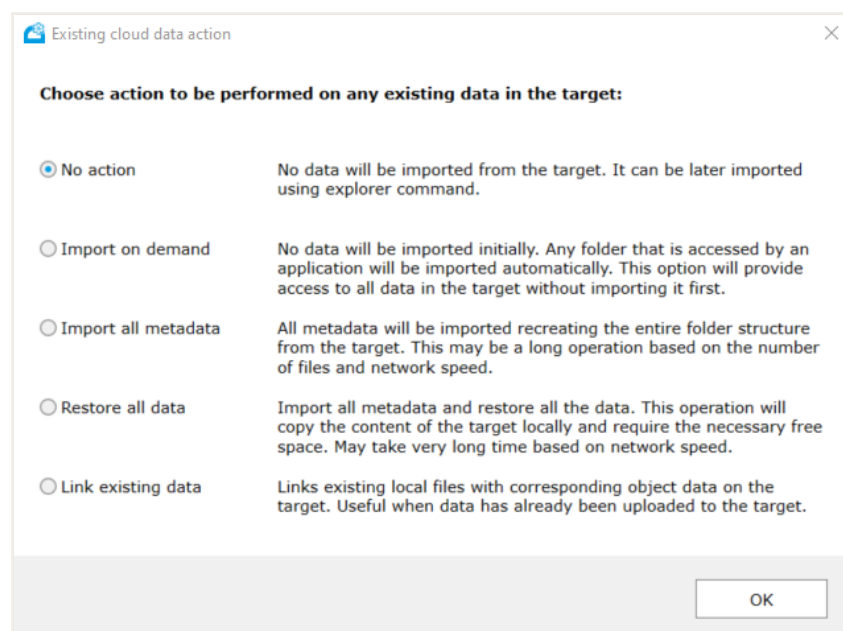
Important: If at the time of data retrieval there is insufficient capacity to process an Expedited request, Tiger Bridge automatically switches to Standard. Expedited retrieval option is not available for S3 Glacier Deep Archive storage class. Make sure you are acquainted with the Amazon pricing model, before changing your archive retrieval option, in order to avoid incurred costs.

- Click List buckets, to display the list of buckets available for the account you have specified and select the bucket on the target, which to be paired with the selected source.

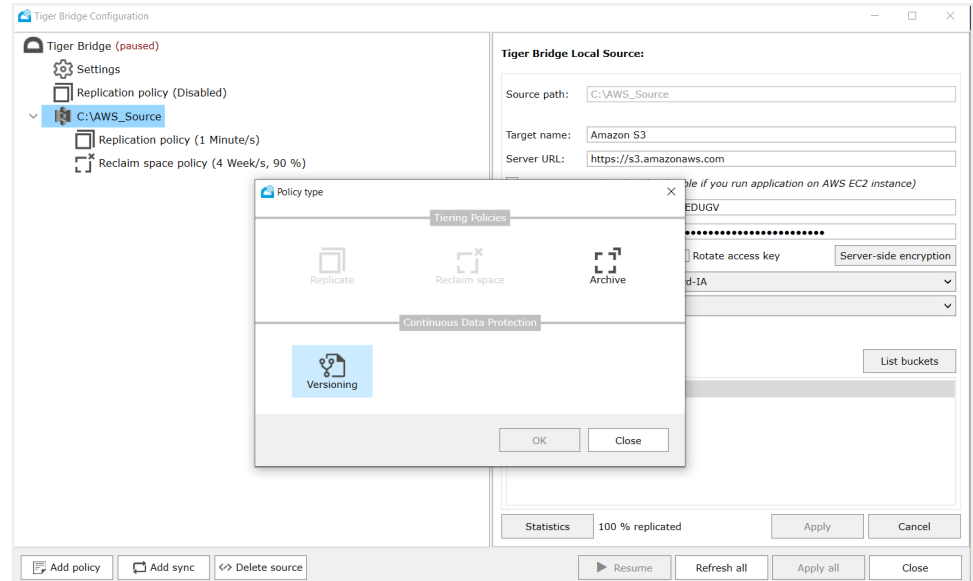
Note: If the user whose credentials you have provided, does not have sufficient permissions to list all buckets, Tiger Bridge displays a text box for you to manually enter the name of the bucket, which will be paired with the source.

Important: Do not use the same bucket for two or more sources on the same computer. You must use the same bucket for multiple sources each on a different computer, when you intend to deploy Tiger Bridge for geo replication (for more information, see [“Configure Active Sync”](#)). Do not change the name of the bucket on the S3 object storage as this may prevent Tiger Bridge replication from operating.

4. In the Existing cloud data action dialog, select what to do with data already existing in the bucket and click OK.

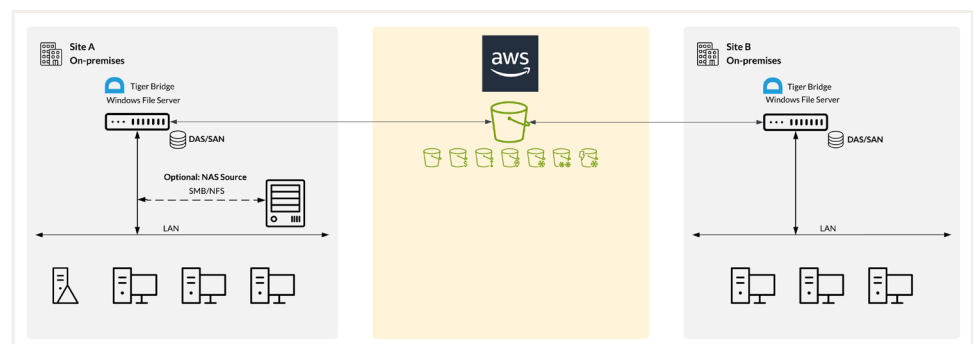


5. Select and set the needed policies - Replication, Reclaim Space, Archive



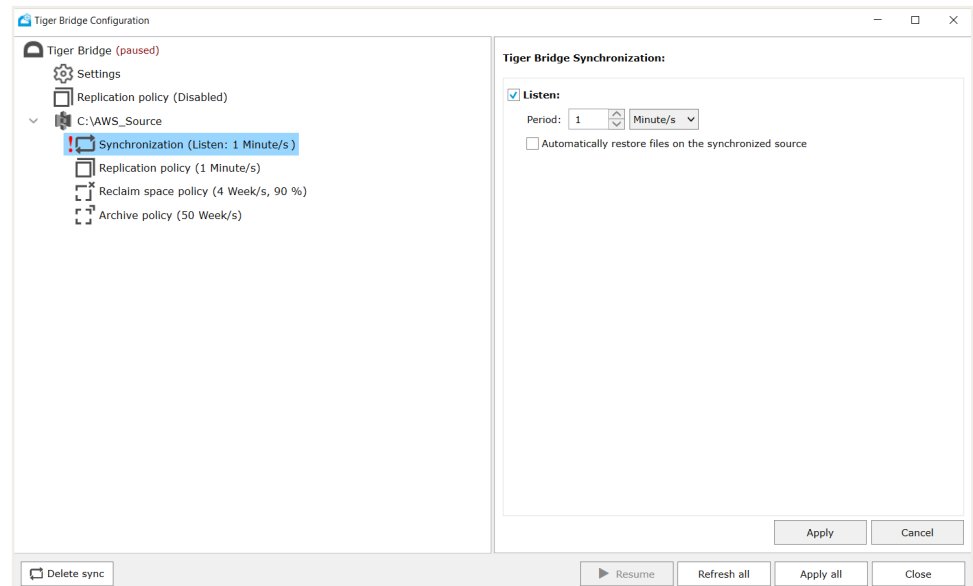
Deployment instructions for Multi-site collaboration with Tiger Bridge Active Sync

Estimated time for the deployment: 60 minutes.



1. On the Bridge server(s) that need to be synchronized follow steps 1 to 5 from the “Deployment instructions for server extension”.

2. On all Tiger Bridge server connected to common Amazon S3 bucket enable Tiger Bridge Synchronization by clicking the Add sync button.



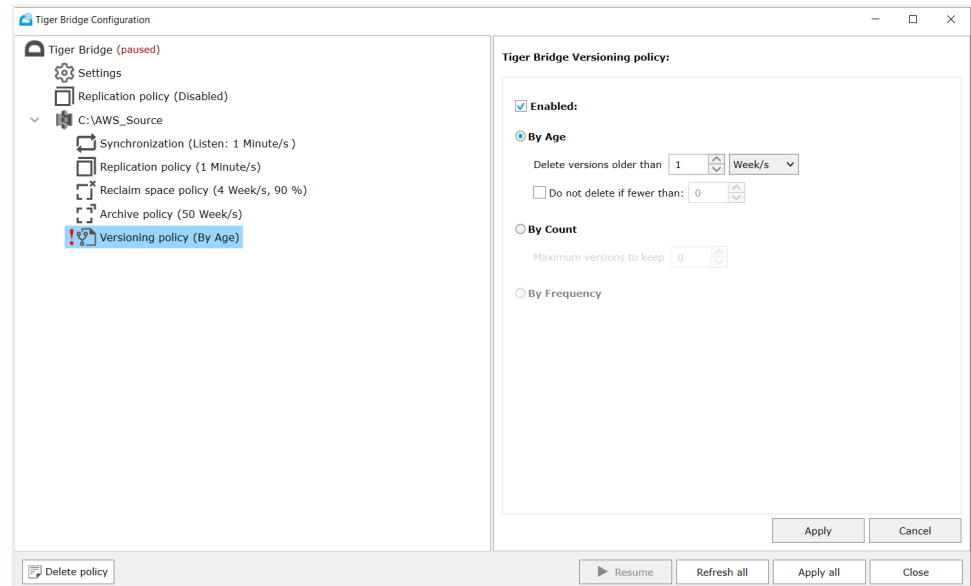
- a. Below Listen, enter the time interval at which the computer should check for notifications from other computers about changes in the contents in the common Amazon S3 bucket and select the unit of measure in the drop-down box beside the Period box.
- b. (optional) Select the “Automatically restore files on the synchronized source” check box, to let Tiger Bridge begin retrieving the files immediately after contents is synchronized.
- c. Click Apply.

Note: Tiger Bridge Policies and Synchronization can be either “global” – for all sources, or per-source.

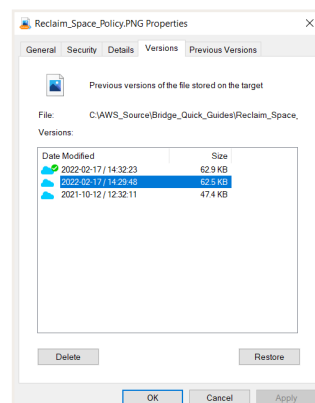
Deployment instructions for Continuous Data Protection.

Estimated time for the deployment: 60 minutes, per server.

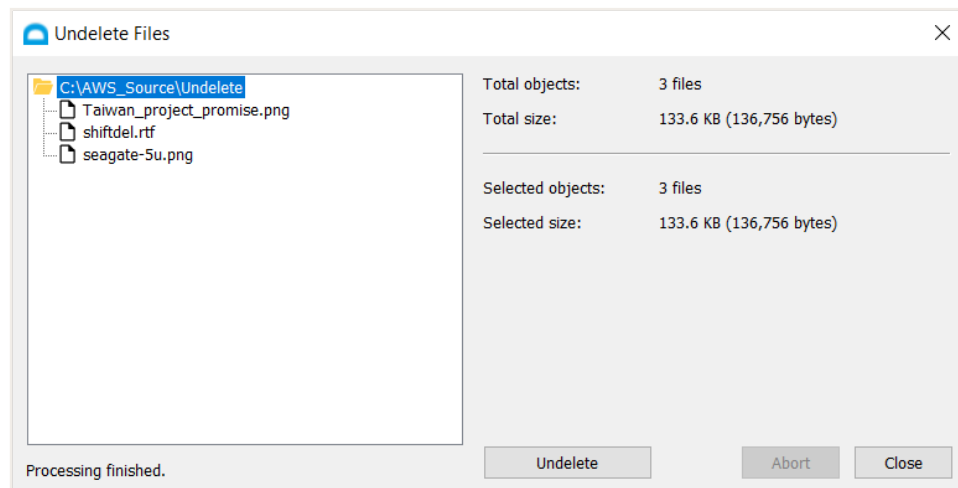
1. Enable versioning on the S3 bucket.
2. In Tiger Bridge Settings enable "Delete replica when source file is removed" and "Keep replica versions"
3. On the Bridge server(s) follow steps 1 to 5 from the ["Deployment instructions for server extension"](#).
4. Set Versioning policy either "By Age" or "By Count".



5. Restore a previous version of a file by opening the Versions tab in the file's Properties.



6. To undelete a file right click a folder and from the Bridge shell extension choose "Undelete"



For more detailed information on how to configure Tiger Bridge for your specific set-up, please refer to the latest Tiger Bridge Administration Guide:

<https://www.tiger-technology.com/software/tiger-bridge/docs/>

Tiger Technology provides 365x24x7 support for Tiger Bridge. To contact support, [create a support ticket](#).

[Tiger Bridge website](#)

About Tiger Technology

Founded in 2003 and headquartered in Sofia, Bulgaria and Alpharetta, GA, USA, Tiger Technology specializes in the underlying technology of hybrid cloud workflows as well as data management software solutions designed to help customers of any size, scale and industry optimize their on-premises storage and enhance their workflows through cloud services. Tiger Technology solutions are admin-friendly, non-disruptive, transparent, and highly cost-effective.

Tiger Technology brings over 15 years of expertise in developing high-performance storage solutions for the most demanding workflows, which includes cross-platform NAS/SAN file system sharing, storage, user, project, and media management.

Throughout the years and the multitude of changes in IT and the digital landscape, Tiger Technology has chosen the path of growth and continual improvement, but it has never lost sight of what it all starts with - data. The company's current focus is bridging the gap between the edge where data is generated and the cloud where data is stored and processed.

Find out more about Tiger Technology [here](#). Catch up on [our blog here](#).

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