Tiger Technology

Surveillance Bridge Quick Start Guide

Thank you for your choosing Surveillance Bridge. This document provides step-by-step instructions for installing and configuring the software. Please refer to the Surveillance Bridge Administration Guide for additional information.

Tiger Technology

License

1) Download the **Surveillance Bridge** executable and manuals from the Tiger Technology licensing server

    a. Go to:
    https://license.tiger-technology.com/
    Username: **XXX**
    Password: **xxx**

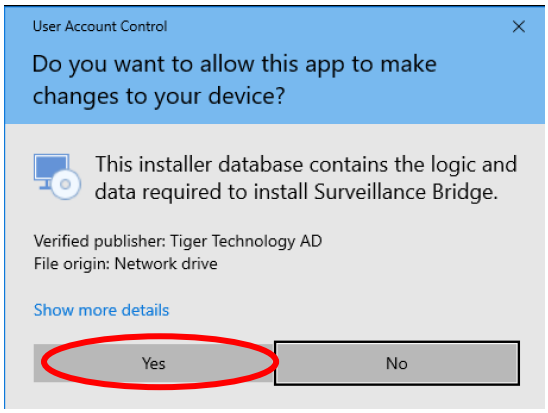
    ***NOTE**: This license is activated until **xx xxx 2021**:*

    b. Once you have logged in, you might have to enter additional contact details
    c. To download the manuals, click on "**Documentation**" (bottom left)
    d. To download the executable, click on "**Current Version**" (bottom left)

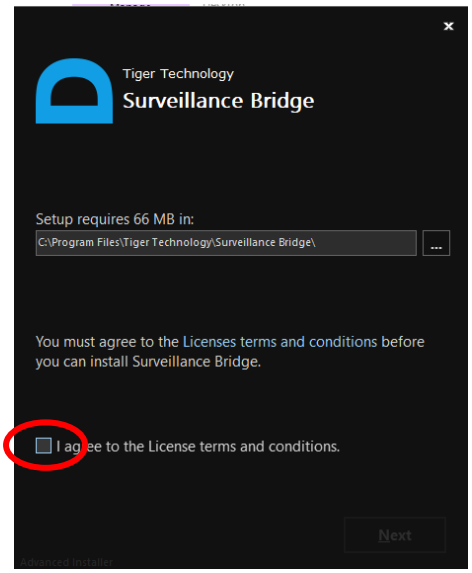
Installation

Surveillance Bridge can be installed on a live Windows server. It does not require a reboot and there is no need to stop your VMS software from recording.

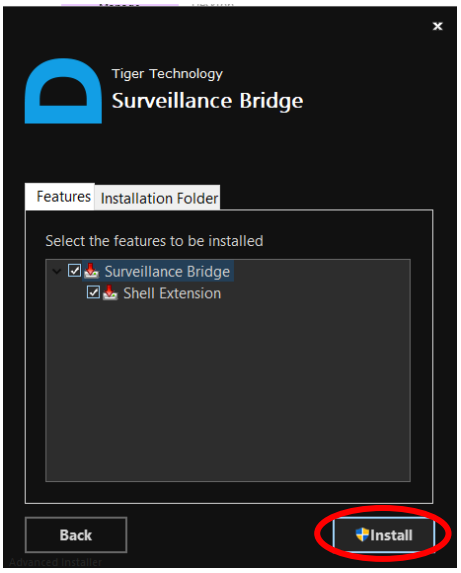
1. Run the Surveillance Bridge installer as an administrator:



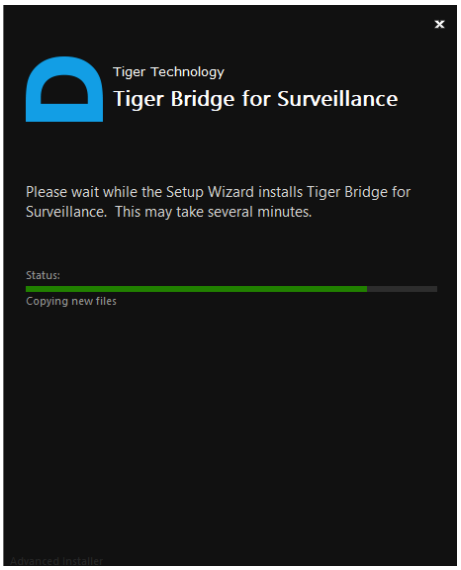
2. Click in the 'License Terms and Conditions' agreement box to accept, and then click Next.



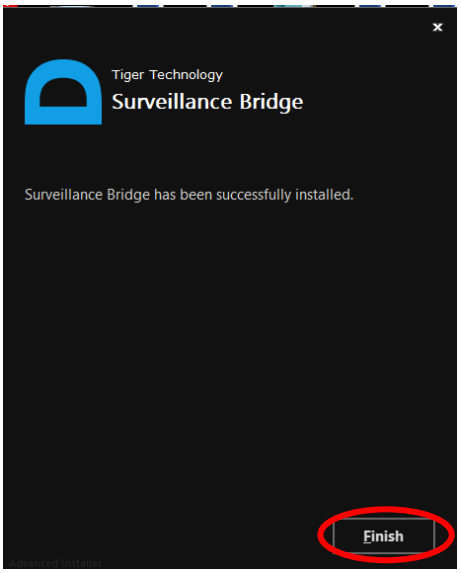
3. Click ‘Install’ to continue the installation process.



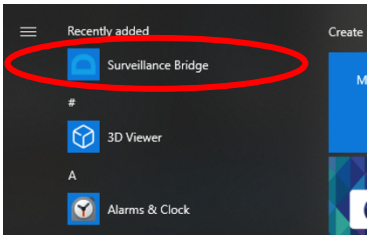
4. The installation takes a couple of minutes to finish.



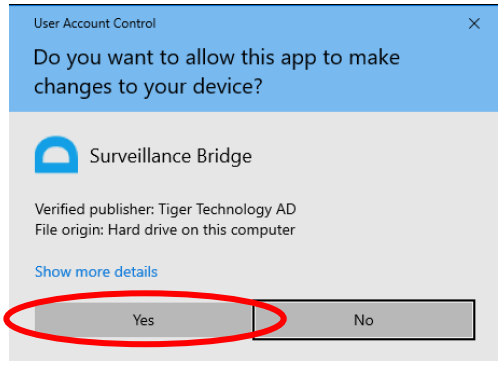
5. Click ‘Finish’ to close the installation screen. Surveillance Bridge is now installed and ready for configuration.



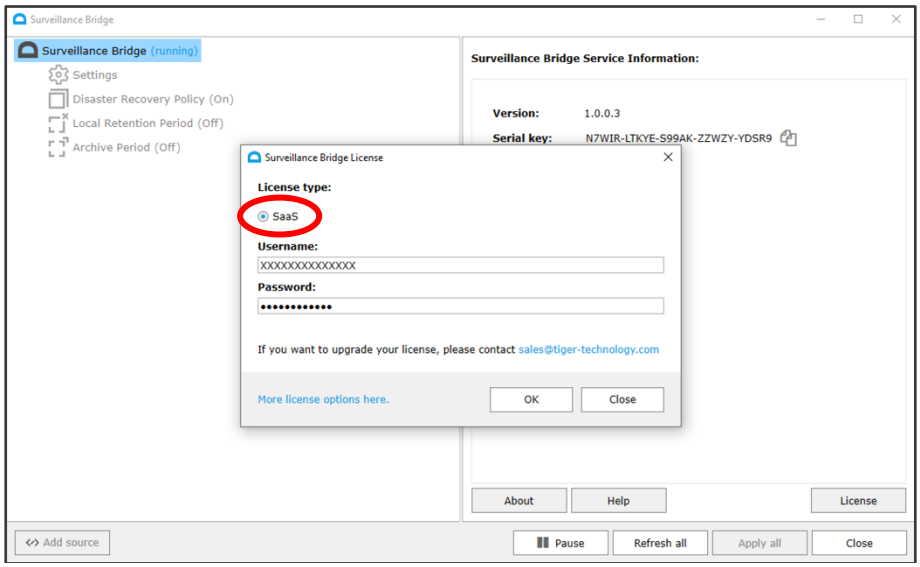
6. In order to access the configuration interface, run the application from your Windows Programs menu.



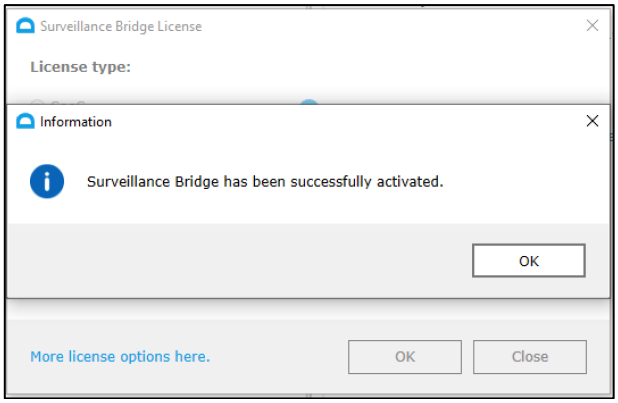
7. Click Yes to the user control Windows warning prompt that appears.



8. Select the type of license (SaaS is standard) and enter the credentials listed above to activate Surveillance Bridge and click Connect.



9. You should see a confirmation of successful activation. Check Troubleshooting Tips if you are having issues activating.



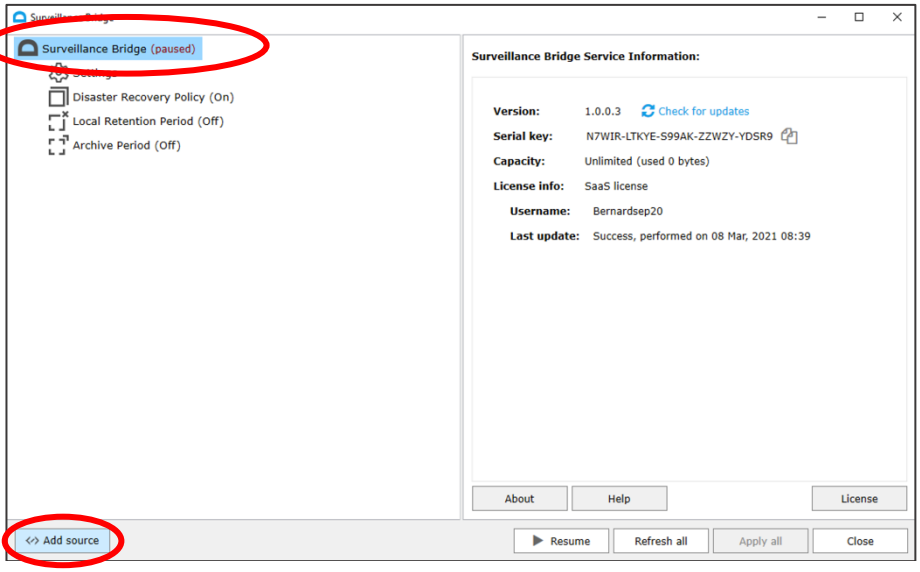
Configuration

Surveillance Bridge is designed to replicate your camera data to the cloud. It can be used with virtually all VMS software that runs on a Windows OS.

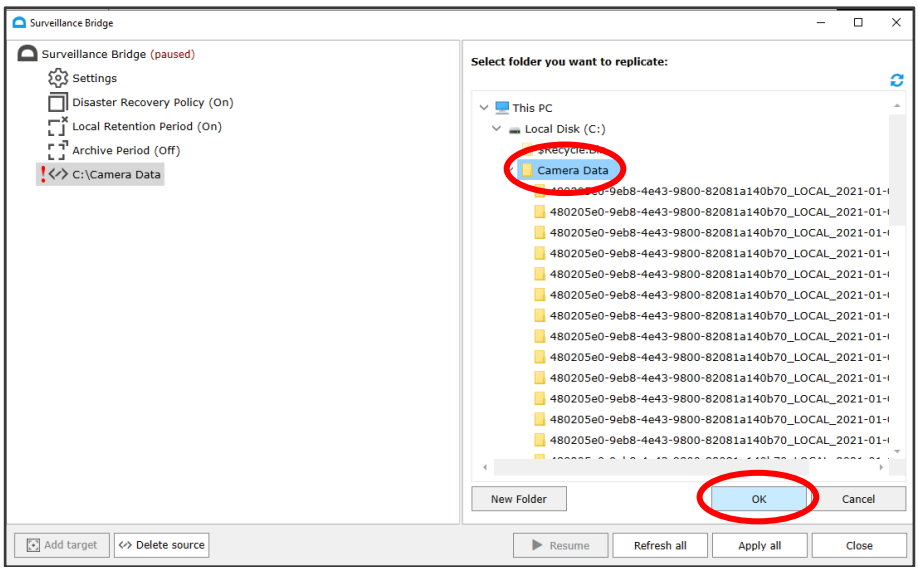
IMPORTANT: **Milestone XProtect** is an exception. If you are using Milestone, you should consider Storage Bridge to ensure successful replication and Disaster Recovery.

Local Source

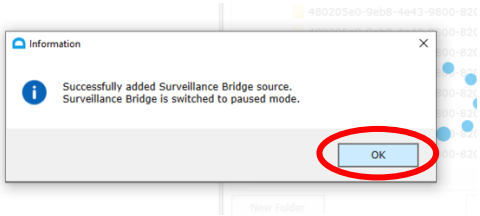
You must point Surveillance Bridge to one or more camera repositories. Note that a folder whose parent folder is already paired with a target cannot be used as a new source.



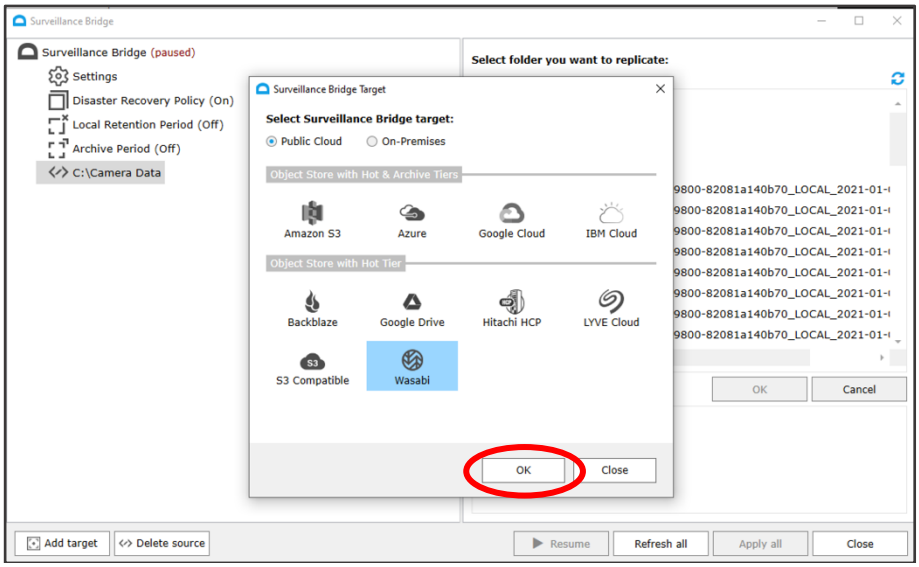
a. Select the folder you want to sync with the cloud or create a New Folder



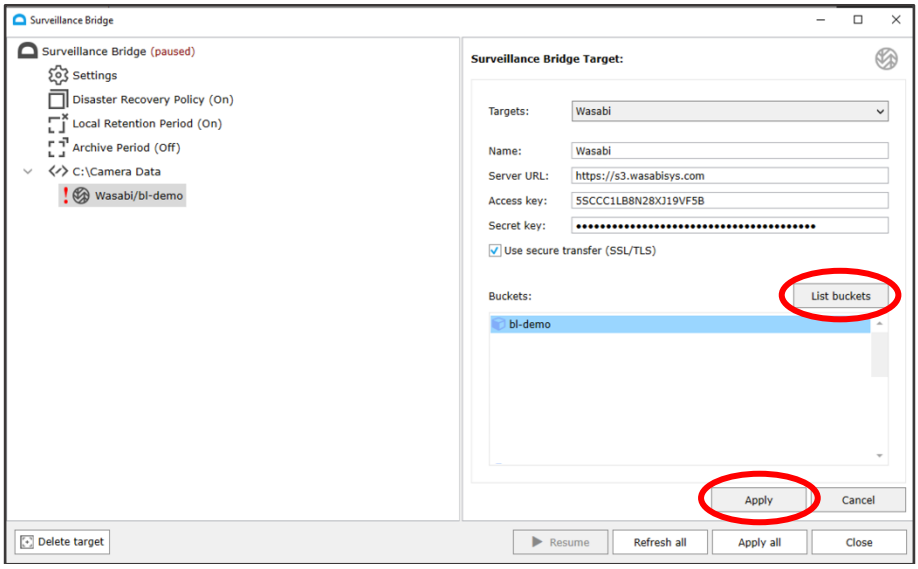
c. Confirmation screen



2. Next, select the target you want to replicate to (in this example, Wasabi cloud)

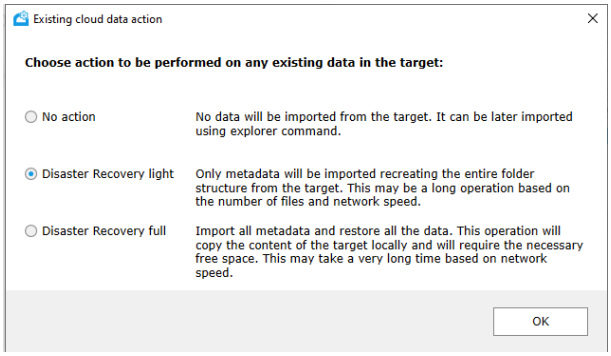


3. For a cloud target, enter your credentials then click on “List buckets”. Surveillance Bridge will display the buckets that are available on this account.

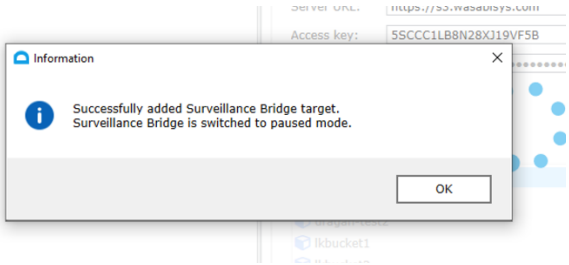


IMPORTANT: Make sure to choose a different bucket for every repository of every recording server.

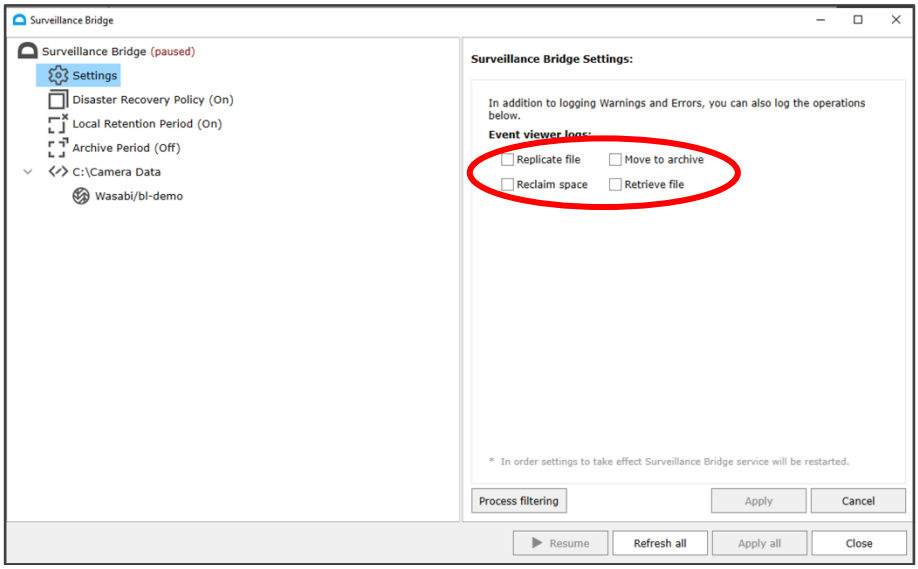
If the bucket name is available, the following selection dialog will open. Choose the operation you want to perform. If your bucket is empty, all options will yield to the same result.



Clicking Ok will initiate the desire operation.

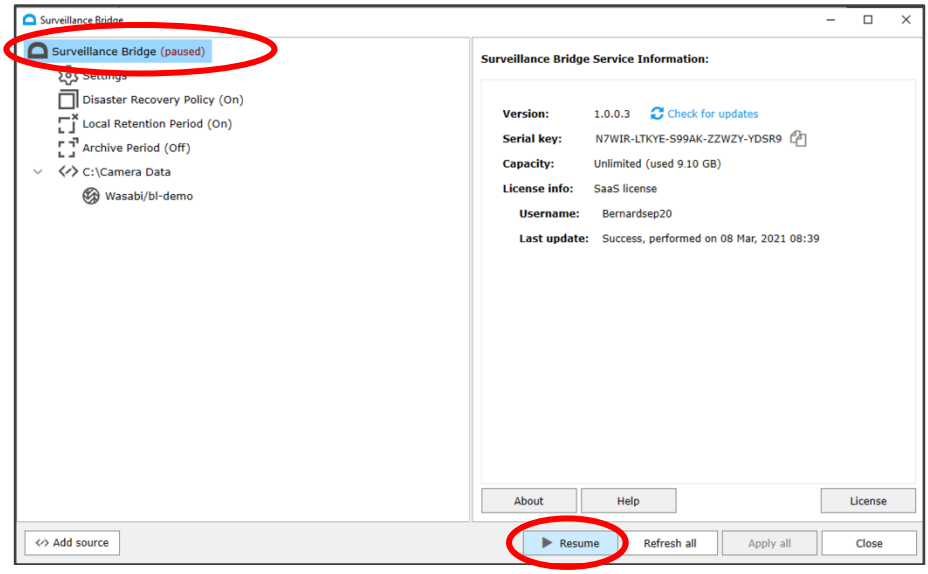


4. Configure the Settings tab according to your needs:



Event viewer logs – Any error and warning are automatically logged in the Event Viewer. In addition, you can choose to log successful operations of your choice.

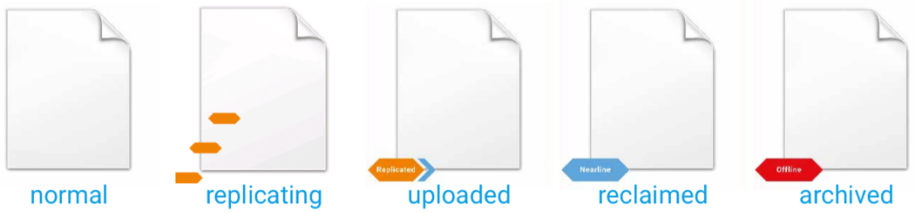
Click “Apply” and select ‘Surveillance Bridge’ at the top, and then hit ‘Resume’ at the bottom (as shown below) to set Surveillance Bridge to Operational mode.



5. Congratulations! You have now successfully configured Surveillance Bridge. Seconds after they are closed by the VMS software, camera data files from your source folder will automatically start replicating to the cloud.

When navigating your camera repository, you should now see the following file/folder icons:

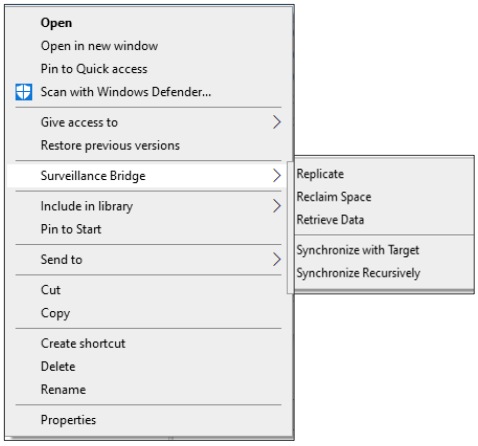
- Orange **<Replicated>** overlay indicates the file is replicated successfully to your cloud bucket.
- Blue **<Nearline>** overlay indicates the file space has been reclaimed on local storage and only stored in the hot tier of your cloud bucket (readily available).
- Red **<Archive>** overlay indicates the file space has been reclaimed on local storage and only stored in the archive tier of your cloud bucket (requires rehydration before it can be accessed).



Manual Operations

Surveillance Bridge allows you to perform manual data management operations on your files.

1. By right-clicking on a file or folder, you can access the Surveillance Bridge shell extension menu:

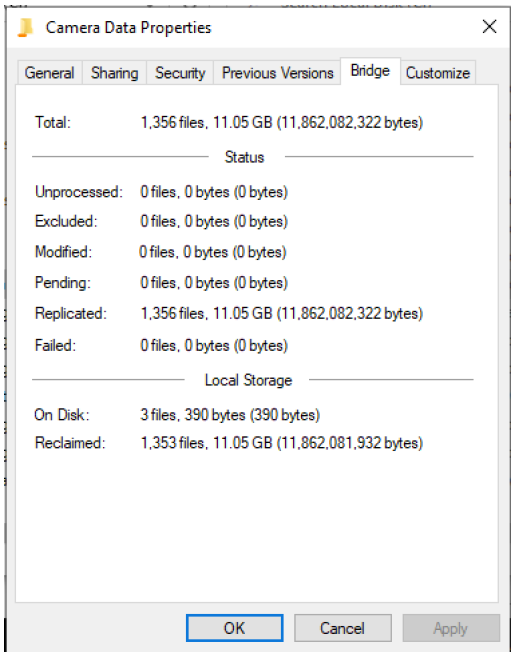


   a. **Replicate** - Triggers an immediate replication of un-replicated files
   b. **Reclaim Space** - Deletes data on local drive and replace file with zero-byte stub file that behaves exactly like the original file.
   c. **Retrieve Data** - Triggers the restoration of the original file
   d. **Move to Archive** - Triggers a move from a hot tier to a frozen tier in the cloud. Nothing happens if the cloud provider does not support multiple tiers in the cloud.
   e. **Rehydrate from Archive** - Triggers a rehydration of content from frozen tier to hot tier in the cloud. Nothing happens if the cloud provider does not support multiple tiers in the cloud.

f. **Synchronize with Target** - Scans the target for any discrepancies between cloud bucket and local folder.
g. **Synchronize Recursively** - Scans the target for any discrepancies between cloud bucket and local folder as well as sub-folders.

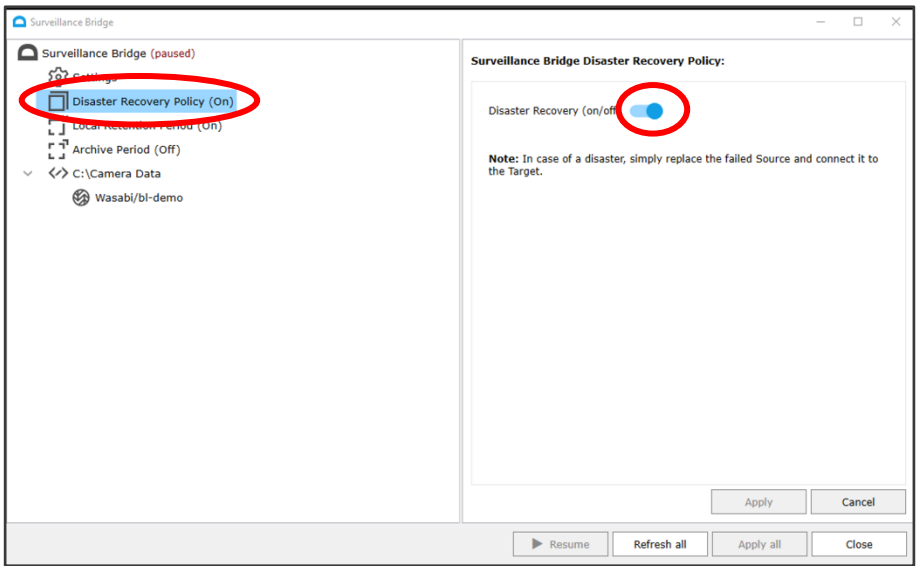
2. By right-clicking on your camera repository folder, you can access the Properties dialog:

   a. Select the “Bridge” tab to reveal the status of operations:



Disaster Recovery

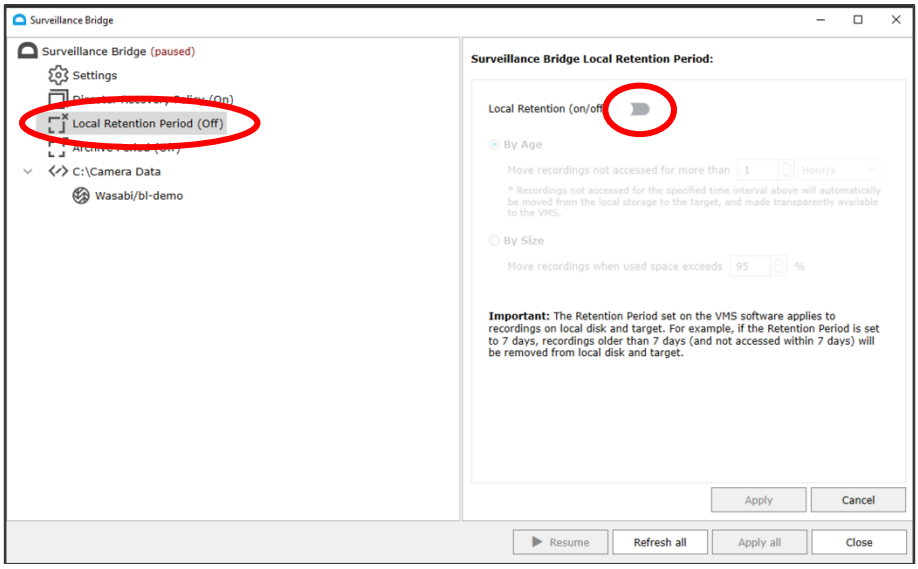
When **Disaster Recovery** is **enabled** (default), camera data gets replicated as soon as the VMS closes the file. By enabling Disaster Recovery, you are ensuring that ALL your camera data will be replicated to the cloud. In the event of a disaster, you will be able to easily restore everything. Only disable Disaster Recovery if you ONLY want to use the cloud as an extension to your local drive.



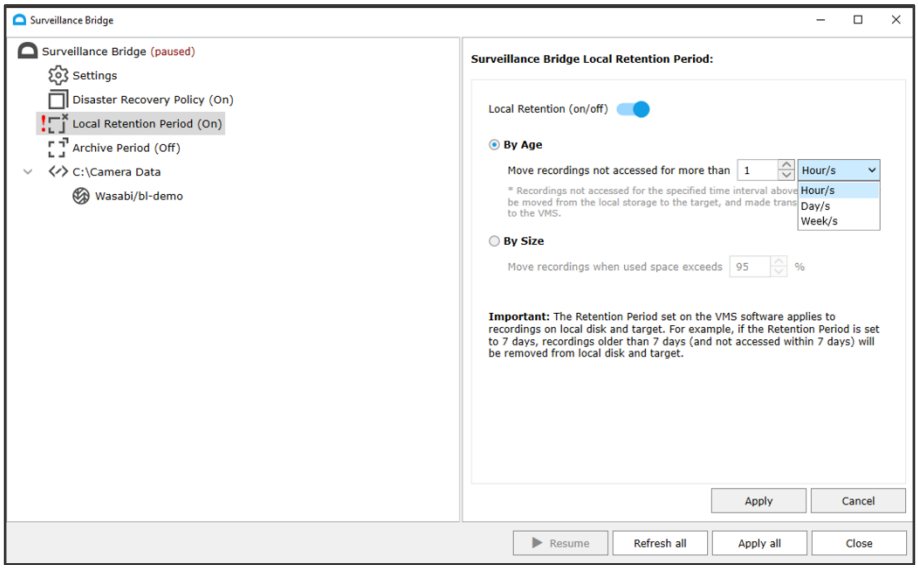
Local Retention Period

When **Local Retention Period** is **disabled** (default), Surveillance Bridge will keep ALL camera data on your local drive. If Disaster Recovery is enabled, you will have two copies of your data.

If your goal is to extend the total retention period beyond the capacity of your local drive, you should first enable Local Retention Period.



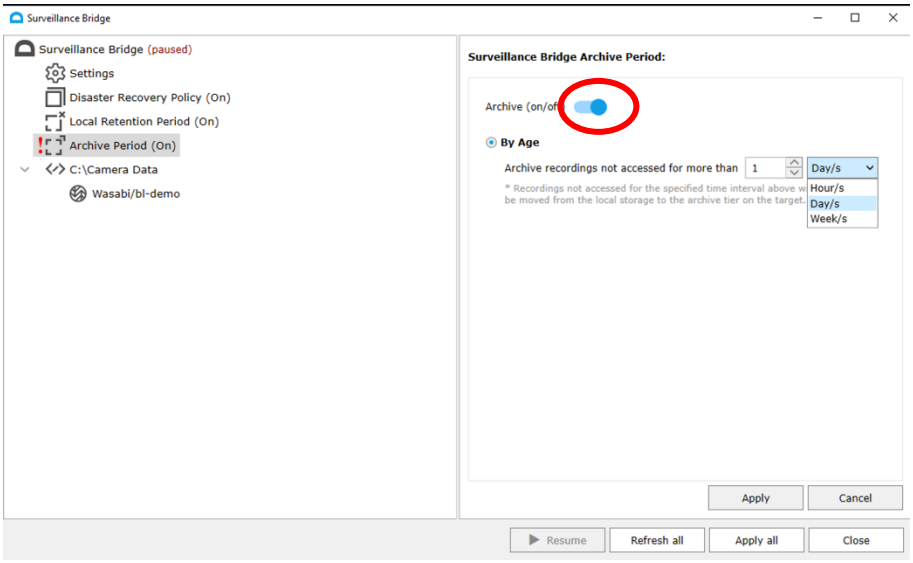
Once enabled, you can choose to reclaim space "By Age" or "By Size". Setting "By Age" will dictate how long a file will stay local before it is being reclaimed (i.e. free space). Setting "By Size" will dictate how full your drive can get before it older files start being reclaimed. For example, if you set the "By Age" to 3 days, Surveillance Bridge will free space on the source by removing any file that has not been accessed for 3 days. If your local drive does is not large enough to keep the amount of data you specify, Surveillance Bridge will make sure it never exceeds 95% capacity.



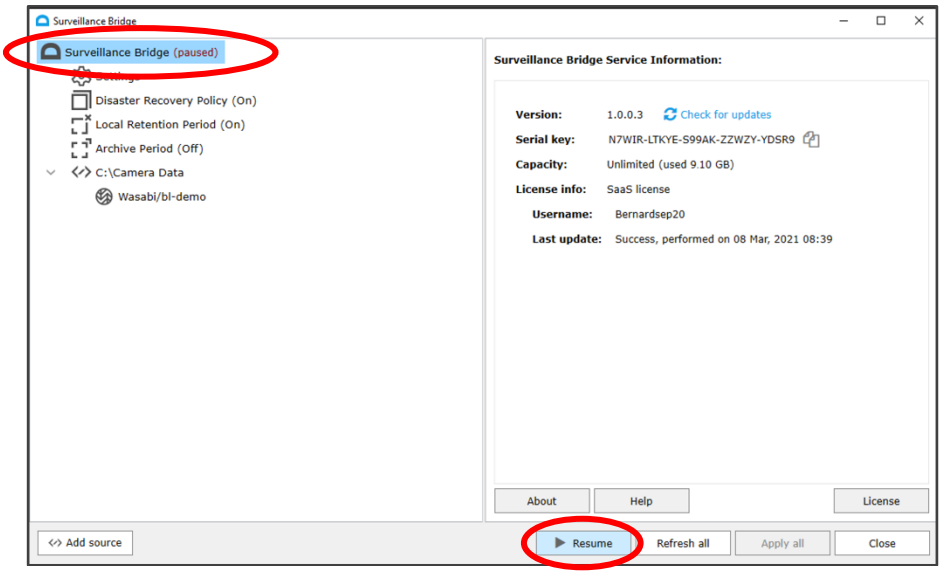
IMPORTANT: The Retention Period set on your VMS should account for both local AND cloud retention. When your VMS reaches the desired retention period it will delete local files (or stub files if data has been reclaimed locally). In all cases, Surveillance Bridge will, in turn, delete the data in the cloud.

Archive Period

On cloud targets that support an archive/frozen tier (ex: Azure, AWS, Google, etc.) you can specify the amount of time after which camera data should automatically be moved to the archive tier. Because files that are archived can take hours to retrieve, they must be manually retrieved.



Finally, click on “Apply All” ‘Surveillance Bridge’ at the top, and then hit ‘Resume’ at the bottom (as shown below) to set Surveillance Bridge to Operational mode.



When is data in the cloud deleted?

Your data in the cloud is extremely safe with Surveillance Bridge. Data in the cloud is deleted automatically when the corresponding local file is deleted (i.e. when the VMS deletes the file after retention period has been reached or if someone deletes camera files locally).

"Deleting" a connection between a source and a target does not delete any data in the cloud. A warning message will let you know if you are about to end up with orphan stub files (in case you want to retrieve any associated data back from the cloud before deleting the pair). As long as the bucket remains untouched in the cloud, it is always easy to reconnect to it to regain access to your data.

WARNING: IF YOU DELETE FILES IN THE CLOUD BUCKET DIRECTLY, SURVEILLANCE BRIDGE WILL NOT BE AWARE AND ASSUME THAT THE DATA IS STILL THERE (SURVEILLANCE BRIDGE WILL NOT RE-REPLICATE THESE FILES AGAIN AND WILL ASSUME THAT ANY LOCAL STUB FILES ARE STILL POINTING TO VALID DATA). ALWAYS DELETE THE SOURCE-PAIR ASSOCIATION FIRST TO BREAK THE CONNECTION WITH THE CLOUD OR DELETE THE ASSOCIATED LOCAL FILE (SEE CONDITIONS ABOVE).

Troubleshooting tips

Here is a list of the most frequent setup issues and how to address them:

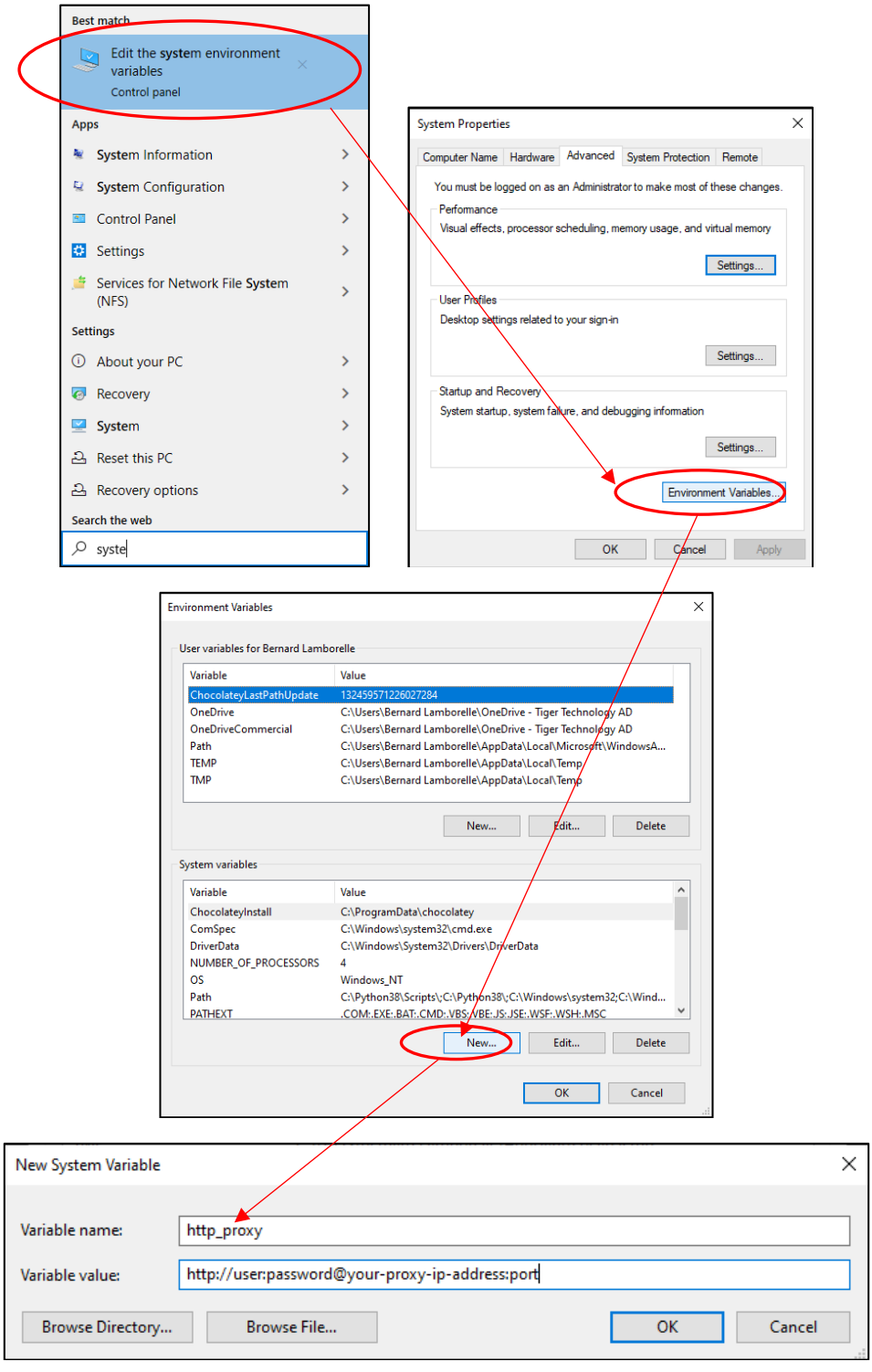
1) If activation for Surveillance Bridge fails:

    a. Make sure you can successfully reach the Azure service running at https://saas.tiger-technology.com. If not, you will need to whitelist this domain name for activating and for keeping your license activated.

    b. Check your firewall. For a quick test, try disabling Windows Defender on Management Server and Recording Server. The following ports must be open:
    - (for object storage target over http connection) **80** - outbound rule only
    - (for SaaS activation and/or communication with object storage target over https) **443** - outbound rule only
    - (for a network target) **445** - outbound rule only
    - (for remote connection) **8536** - inbound and outbound rules
    - (for remote connection) **8537** - inbound and outbound rules

2) If you are using a proxy server, you may need to set two System Variables and configure Tiger Bridge for proxy. Please repeat the steps below for each variable:

    a. To configure your System Environment Variables:

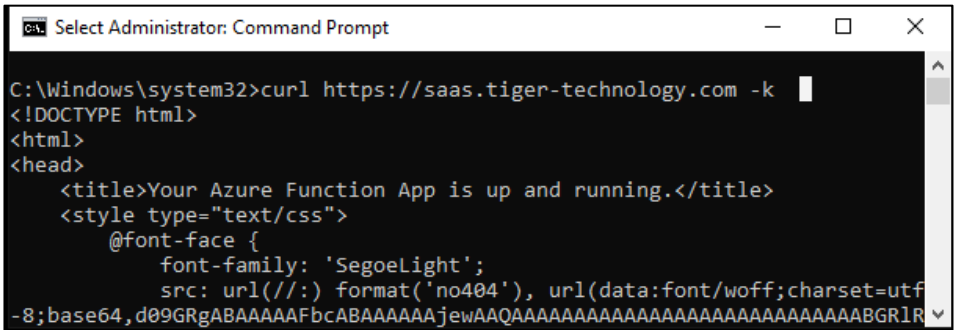

Best match
Edit the system environment variables
Control panel
Apps
System Information
System Configuration
Control Panel
Settings
Services for Network File System (NFS)
Settings
About your PC
Recovery
System
Reset this PC
Recovery options
Search the web
syste
System Properties
Computer Name
Hardware
Advanced
System Protection
Remote
You must be logged on as an Administrator to make most of these changes.
Performance
Visual effects, processor scheduling, memory usage, and virtual memory
Settings...
User Profiles
Desktop settings related to your sign-in
Settings...
Startup and Recovery
System startup, system failure, and debugging information
Settings...
Environment Variables...
OK
Cancel
Apply
Environment Variables
User variables for Bernard Lamborelle
Variable
Value
ChocolateyLastPathUpdate
132459571226027284
OneDrive
C:\Users\Bernard Lamborelle\OneDrive - Tiger Technology AD
OneDriveCommercial
C:\Users\Bernard Lamborelle\OneDrive - Tiger Technology AD
Path
C:\Users\Bernard Lamborelle\AppData\Local\Microsoft\WindowsA...
TEMP
C:\Users\Bernard Lamborelle\AppData\Local\Temp
TMP
C:\Users\Bernard Lamborelle\AppData\Local\Temp
New...
Edit...
Delete
System variables
Variable
Value
ChocolateyInstall
C:\ProgramData\chocolatey
ComSpec
C:\Windows\system32\cmd.exe
DriverData
C:\Windows\System32\Drivers\DriverData
NUMBER_OF_PROCESSORS
4
OS
Windows_NT
Path
C:\Python38\Scripts\;C:\Python38\;C:\Windows\system32;C:\Wind...
PATHEXT
.COM;.EXE;.BAT;.CMD;.VBS;.VBE;.JS;.JSE;.WSF;.WSH;.MSC
New...
Edit...
Delete
OK
Cancel
New System Variable
Variable name:
http_proxy
Variable value:
http://user:password@your-proxy-ip-address:port
Browse Directory...
Browse File...
OK
Cancel

Variable name	Variable value (try the following formats)
http_proxy	proxyserver:port ***or*** http://user:password@your-proxy-ip-address:port/
https_proxy	proxyserver:port ***or*** https://user:password@your-proxy-ip-address:port/

b. When you have created both variables, you can test the connection to the licensing server by issuing the following command in an elevated Command prompt:

```
C:\Program Files\cURL\bin>curl https://saas.tiger-technology.com -k
```

Output should look like this:



c. While in the Command prompt, you can configure the Bridge engine to also use the proxy server to communicate with the cloud target:

```
C:\Windows\system32\tiercli config global proxy <proxyserver:port> [username] [password]
```

Got questions? Feel free to contact our Technical Support (support@tiger-technology.com).