

# **Aimetis Symphony™**

## **SAN Failover**

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Applies to v6.14.3.5 and later.

## Configuration

Symphony supports SANs for failover and will copy data from the redundant server to the main server when an operator moves the cameras back after a failover situation has been resolved.

The following configuration must exist in the redundancy group supporting SAN failover:

1. All servers must have the same number of SAN LUNs mapped to them.
2. The LUNs must be mapped to the same drive letters.
3. The "SAN Failover mode" checkbox must be checked for all servers.
4. All Data folders must be shared as DATA<sub>X</sub>, where X is the drive letter, and all other servers must have read and write permissions to these shares.

The system automatically determines each camera's main server based on file count. Hence it is recommended that you configure the system and leave it running for a few days to build up the file count and establish camera ownership before testing any failovers and copy backs. If time is not available, restart all Tracker processes several times to increase the file count.

While the system is copying data back from the redundant SAN to the camera's home SAN, system performance might be degraded slightly. The yellow information bar will appear in the client to highlight this activity so you can see the progress and know when it is complete.

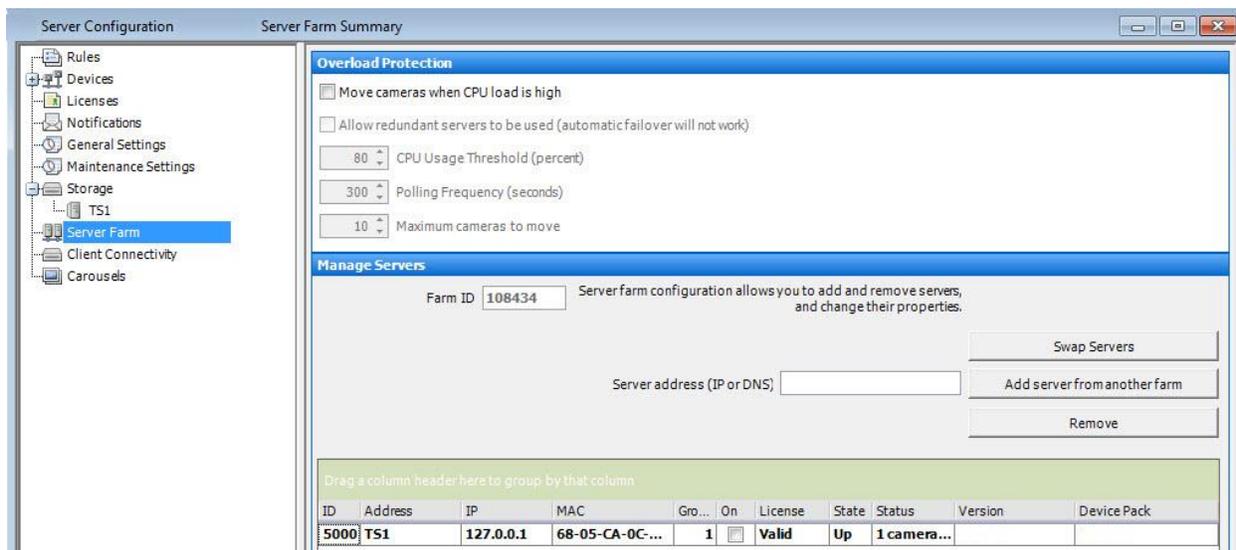
# Managing Server Farms

A Server Farm is a collection of computer servers used to accomplish server needs beyond the capability of one machine. Server farms often have backup (redundant) servers, which can take over the function of primary servers in the event of a primary server failure.

**Important! If a new server is added to the farm using SAN storage and existing cameras are transferred to it contact Aimetis Support to ensure that old data is accessible, camera ownership changes successfully, and SAN failover continues to work.**

## To manage your Server Farm:

1. From the **Server** menu, select **Configuration**. The Configuration dialog appears.
2. In the left pane, click **Server Farm**. The Server Farm Summary is displayed in the right pane. The server named displayed in bold is the Master server.



## Failover

A down server is detected within 30 seconds, but can be configured for any time threshold. Windows operating system updates or other maintenance that cause a reboot may be reason to increase this threshold to several minutes. Failover will transfer all the camera processes from running on the down server to running on a redundant server. It will transfer only cameras that are **Movable** according to the camera configuration as defined in the **Device** settings. Some devices are not movable by nature (USB devices, or analog cameras plugged into a video card on the down server for example). When a down server comes back up, and its cameras have been failed over to another server, it will now be considered a redundant server, since it has no cameras.

Failover works best if you are using a file storage device (for example, NAS) instead of block storage (such as SAN or a local disk) because the pool of storage does not follow the camera when it is moved. If you have central storage (with a NAS), the storage is always accessible from any server. If your storage system is a SAN, Symphony can be configured to copy data to a camera's primary server when it is manually swapped back after a failover occurs. For details, see Customizing Storage Settings.

# Customizing Storage Settings

Symphony allows you to customize where video is stored, how much storage to use, and when video should be deleted. Video and logs should be stored in separate folders. Ideally, no more than 5000 files per folder. You can group them in a logical way so that you do not have to manage hundreds or thousands of folders.

## To view the storage settings:

1. From the **Server** menu, select **Configuration**.
2. Using the tree view in the left pane, select **Storage**. The **Storage Summary** is displayed in the right pane.
3. Click on one of the storage devices in the tree. **Disk Usage Limits** and **Footage Storage** information are displayed.

Storage	Task
<b>Disk Usage Limits</b>	
<b>Minimum Disk Space</b>	Specify the minimum amount of free disk space on the hard disk. Symphony starts deleting video as soon as free disk space is below this setting.
<b>Minimum Disk Percentage</b>	Specify a percentage of free disk space to maintain.
<b>Availability</b>	Allows you to define whether the second storage path is for failover or for redundant mode.
<b>Failover</b>	Write to one storage path. An alternative location if the primary location fails. For Failover recording, it is recommended that you are using a NAS if you have multiple servers on the farm. Failover works if you are using a file storage device (e.g. NAS) instead of block storage (such as SAN or a local disk) because the pool of storage does not follow the camera when it is moved. If you have central storage (with a NAS), the storage is always accessible from any server.)
<b>Redundant</b>	Write to all storage paths. Simultaneously record to two locations.
<b>SAN Failover Mode</b>	If your storage system is a SAN, Symphony can be configured to copy data to a camera's primary server when it is manually swapped back after a failover occurs. To enable this feature, you must share each server's SAN volume as <b>DATA<sub>X</sub></b> , where X is the drive letter (i.e. <u>\\server\DATA<sub>X</sub></u> ), and this share must be accessible from all other servers using the account that Aimetis' services run under. Once the share is made, enable the feature by checking the <b>SAN Failover mode: Copy files to owner server</b> check box. Ensure this check box is selected for all servers.

Storage	Task
<b>Footage Storage</b>	
<b>Limit the number of days video is stored</b>	Specify a global setting ( <b>Default max storage days</b> field) or <b>Max Storage Days</b> for each camera in the <b>Footage Storage</b> section. In certain situations, disk space may be available to record more video, but you may want to artificially have the video removed. This may be the case in certain jurisdictions where you are legally required to delete video after a certain time.
<b>Default max storage days (global setting)</b>	If the <b>Limit the number of days video is stored</b> option is enabled, specify the default value in days when video is over written, even if extra hard disk space exists. Alternatively, by adjusting the <b>Max Storage Days</b> value per camera, individual camera settings supersede the global settings.
<b>Keep metadata longer</b>	Specify that metadata can be stored longer than video. This is useful in order to maintain reporting capability.
<b>Default metadata storage days</b>	Specify how long metadata will be stored.
<b>Default path</b>	The default path location where video will be recorded is displayed (as defined at installation). You can adjust the path for an individual camera under the <b>Storage Path</b> column in the camera table.
<b>Storage Path</b>	<p>A semicolon separated list of paths to write to. If the <b>Storage Path</b> per <b>Camera ID/Name</b> is blank, the settings in the <b>Default max storage days</b> and <b>Default path</b> fields will be used.</p> <p>Symphony can be forced to read from a specific path by prefixing the path with an *. Example: "c:\data;*d:\data" means write to both paths and always read from d:\data.</p> <p>If a device has multiple streams, then <b>Max storage days</b> can be a semicolon separated list of days. Example: "3;20" means store 3 days for the first stream and store 20 days for the second stream.</p>