

How Do I CONFIGURE NAS COMPRESSION

NAS Compression is an optional, licensed component of your Red Box system and provides an audio compression capability in order to increase your NAS storage capacity. This Quick Question topic is targeted at System Administrators and describes how NAS Compression works and how to configure the service.

Overview

NAS Compression from Red Box is used to compress call audio that has been captured in non-compressed G.711 audio format. This allows you to store up to five times more audio on a NAS device.

Note that encrypted call audio is **not** supported by NAS Compression. This includes audio encrypted by your telephony system, as well as audio encrypted using the Red Box Media Encryption facilities.

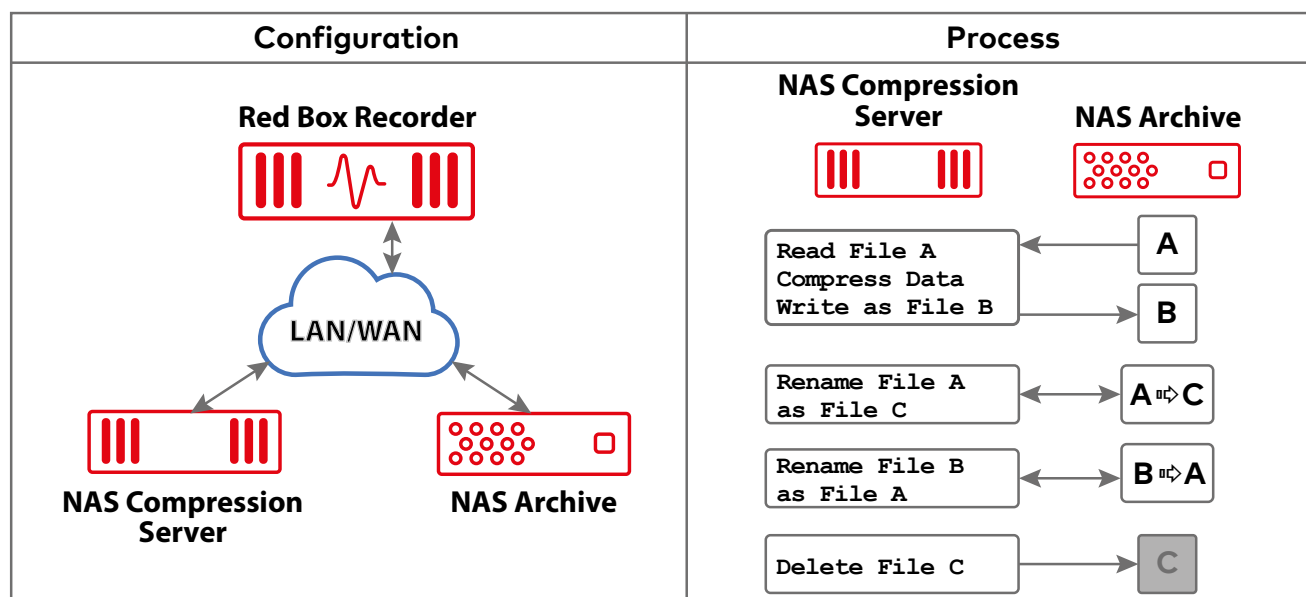
The NAS Compression application runs on it's own server and can access multiple NAS devices from multiple recorders. Since audio compression is a processor intensive process, the following limits apply:

- For most recording systems, a single NAS Compression application can be configured for up to three concurrent NAS locations. To handle more than three locations, you can have multiple NAS Compression applications running on different servers.
- For recording systems that capture a relatively small number of calls, a single NAS Compression application can be configured for up to ten concurrent NAS locations.

A fail-safe compression process is used so that if a server or network failure occurs (or another issue), no data is lost:

- File A is read, the data is compressed, and written back as File B.
- File A is renamed as File C.
- File B is renamed as File A.
- Finally, File C is deleted.

Similarly there is little or no impact on search and replay requests.



NAS Compression Configuration

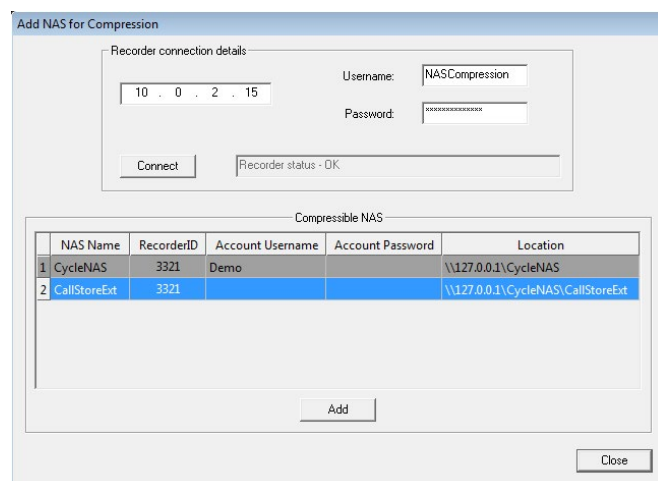
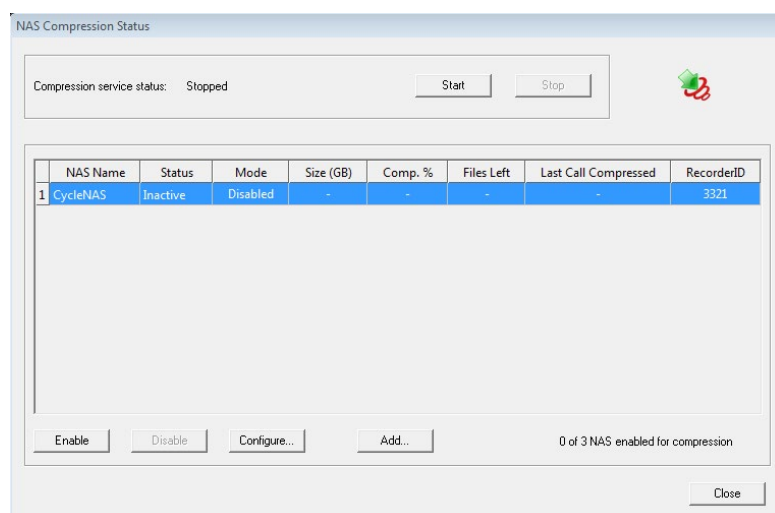
Say that ten times fast :-)

As part of the installation performed by your Red Box Engineer or Reseller Engineer, your NAS Compression system and settings would have already been configured, and it's unlikely you'll need to modify these. Of course, things change — recorder and NAS capacity changes, network changes, account ownership, and more.

To configure NAS Compression:

1. On your NAS Compression server, right click the **NAS Compression** icon in the Windows System Tray and select **NAS Compression Status**. If you don't see the icon, locate and run the **NasCompressionConfig.exe** file and then right click the icon in the Windows System Tray.
2. All previously added NAS locations are shown in the NAS list:
 - The **Mode** column indicates which NAS locations are currently **Enabled** or **Disabled** for NAS Compression.
 - The **Status** column indicates the current compression state (for enabled locations).
3. To add a NAS location:
 - Click **Add**, enter the recorder details, and click **Connect**. For recorder account details, you must use a system administrator account – we also recommend that you use a dedicated account with a static password.
 - All NAS devices “owned” by the recorder are now listed in the **Compressible NAS** panel. To add a NAS for compression, first enter the **Username** and **Password** for the NAS device, then click the list number (on the left) to highlight the entire row, and finally click the **Add** button.
 - The new NAS device is now shown in the NAS list with **Mode** set to **Disabled**.
4. To enable, disable or update a NAS location:
 - Highlight the NAS device in the NAS list – click the list number (on the left) to highlight the entire row.
 - Click the **Enable** or **Disable** button to enable/disable the NAS device for compression.
 - Click the **Configure** button to modify the device details (e.g. recorder login). Note that the NAS device must be **Disabled** before any changes can be made.
5. When you're done, simply close the **NAS Compression Status** window.

Note that the illustrative screens below show the NAS Compression Service as “**Stopped**”. Once a NAS is **Enabled**, click **Start** to start the service. See “Compression Status” on page 4 for more details on status information.



WORM Considerations



Your Red Box recorder supports use of a WORM (Write Once Read Many) NAS device as a NAS Archive. Quantify 5A and above supports NAS compression with WORM NAS devices (restrictions listed below). If you plan to make use of a WORM NAS Archive with NAS compression, please note the following:

- The feature works by disabling the **Read-Only** flag for media files on the WORM NAS device, until after the NAS Compression process is complete.
- To allow WORM NAS devices to be used with NAS compression, edit the **C:\LTR\NAS.ini** file on the recorder server and add/edit the following – you'll need to restart the recorder for the changes to take effect.

```
[Settings]
DisableReadOnlyFrameFilesForNASCompression=1
```

Note that this is a global setting and will be applied to all NAS devices currently being written to by that recorder, whether they're being compressed or not. However, the setting is **not** applied retrospectively to any existing files on a NAS.

- If the WORM NAS device does not allow the **Read-Only** flag to be toggled, or toggling is based on a timer or timeout, then that device type is **not** supported for NAS Compression. For clarification, refer to your device specification.
- For "general" WORM considerations, please refer to the Call Storage Quick Question topic.

NAS Compression Licensing

As stated, NAS Compression is an optional, licensed component of your Red Box system. All licensing is handled within the recorder and therefore any recorder that you "connect to", to add a NAS location, must have a NAS Compression license. This is rechecked every time the NAS Compression Service is started/restarted.

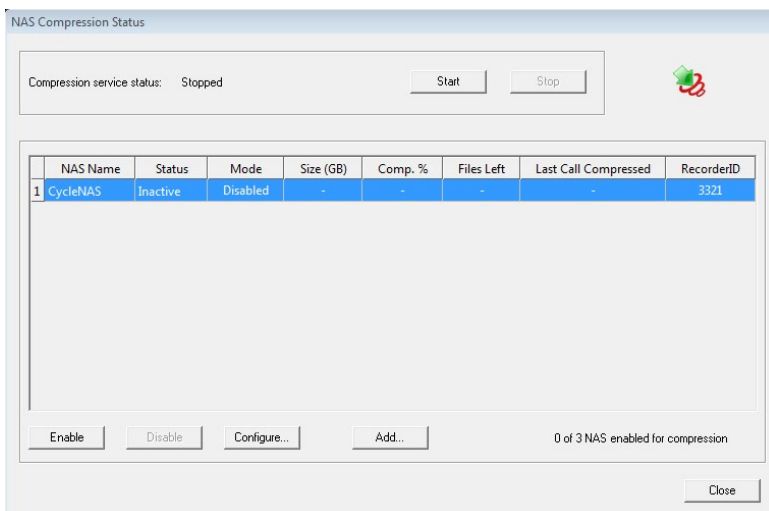
To check your recorder licenses, login to your recorder (using Quantify) with an administrator account, and go to **Configuration > Setup > Licensing**. Check the Recorder Licenses panel and make sure **NAS Compression** is showing as "Yes" (licensed). If not, please contact Red Box or your supplier for license upgrades.

Compression Status

Since NAS Compression runs on a separate server to your recorder, most status information is only available on the NAS Compression server. Although the service is robust, we recommend that you check the status information periodically to make sure there are no issues. You can also add “Compression Status” to your regular system health checks — refer to the “Health Checks” Quick Question topic for details.

To check the compression status, open the **NAS Compression Status** windows on your NAS Compression server — right click the **NAS Compression** icon in the Windows System Tray and select **NAS Compression Status**. Now check the following:

Status	Description
Compression Service Status	Stopped: Service is not running. Click the Start button to start. Started: Service is running. Click the Stop button to stop. Other than during installation and maintenance, you shouldn't need to start or stop the NAS Compression service manually.
NAS Status	Current compression state. Note that Disabled NAS devices will always indicate Inactive . Inactive: Compression is not running. OK: Compression is active and working. Errors: Relevant errors such as No NAS Connection .
NAS Mode	Enabled: NAS device is enabled for compression. Disabled: NAS device is disabled for compression.
Completed	Percentage of NAS data compressed so far. NAS Compression will process approximately 200MB of data per minute, so initially this figure could take some time to reach 100% depending on how much data is currently stored on the NAS.
Files Left	Number of files still to be compressed.
Last Call	Start time of the most recent call to be compressed.



Troubleshooting

Unsurprisingly, NAS Compression is very resilient and requires little attention. Most issues result from network or account changes. The following are a few common troubleshooting issues.

Issue:	NAS Status reports “ Recorder login failed. ” or “ Invalid NAS account details. ” Usually indicates that the recorder login or NAS account credentials have changed.
Solution:	<ol style="list-style-type: none"> 1. In the NAS Compression Status window on your NAS server, highlight the NAS device showing the error – click the list number (on the left) to highlight the entire row. 2. Click Disable to disable compression and then highlight the NAS again and click Configure to make your changes. 3. When you’re done, highlight the NAS again in the NAS list and click Enable to re-enable NAS compression.

Issue:	NAS Status reports “ No NAS Connection ” Usually indicates that the NAS UNC path has changed. This will also generate errors on your recorder.
Solution:	<ol style="list-style-type: none"> 1. Login to your recorder (using Quantify) with an administrator account, and go to Configuration > Management > Network Storage. 2. Click the Configure (cogs) icon for the NAS, and make your changes as needed. You may need to bring the NAS back online — click the Bring Online button. 3. If needed, re-enable NAS compression for the device — highlight the NAS in the NAS Compression Status window on your NAS server and click Enable.

Issue:	Compression/NAS capacity issues: <ul style="list-style-type: none"> • Completed status consistently showing well below 100% and File Left status consistently showing well above zero. • Can’t enable any more NAS locations for compression.
Solution:	<ul style="list-style-type: none"> • For most recording systems, a single NAS Compression application can be configured for up to three concurrent NAS locations. To handle more than three locations, you can have multiple NAS Compression applications running on different servers.

www.redboxvoice.com

info@redboxrecorders.com

+44 (0)115 937 7100



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