

# Supplemental Guide

## SnapSync Getting Started Guide

September 2016



### Summary

This document describes how to configure SnapSync™ on a SnapServer® or SnapCLOUD™ product. SnapSync is a new feature available as a SnapExtension. It is an Enterprise class File Sync & Share (EFSS) feature that allows you to automatically synchronize file between SnapServers and supported desktops, laptops, and mobile devices.

## Required Information, Tools, and Files

SnapServer Appliances (SnapServer XSD 40™, SnapServer XSR 40™, and SnapServer XSR 120™) and SnapCLOUD use the same **GuardianOS®** software. The term **SnapServer** in this document refers to both types of systems and is used interchangeably in this document.

This document refers to the SnapServer Storage Administrator or Storage Administrator. These terms can be used interchangeably. This document covers the role of the Storage Administrator as well as the desktop or mobile users. The tasks used for each of these roles are clearly outlined.

## Prerequisites

- The Storage Administrator is familiar with the Snap Web Management Interface (WMI). Additional information on using and accessing Snap WMI is available in the *SnapServer Administrator's Guide For Appliances Running GuardianOS*.
- The SnapServer NAS must have the latest version of GuardianOS (GOS) installed (GuardianOSImage.gsu). Refer to [Upgrade SnapServer Software](#) on page 16 for additional information on upgrading. Download the latest GOS from the Overland Storage Support portal:  
<http://support.overlandstorage.com/support/snapserver-nas.htm>
- The SnapCLOUD virtual machine must have the latest version of GOS installed (GuardianOSImage.gsu). Refer to [Upgrade SnapServer Software](#) on page 16 for additional information on upgrading. Download the latest GOS from the Overland Storage Support portal:  
<http://support.overlandstorage.com/support/snapserver-nas.htm>
- The SnapServer device must be fully functional and not in a degraded or offline status.
- SnapSync is supported on SnapServer (DX1, DX2, XSD 40, XSR 40 and XSR 120), SnapCLOUD and SnapScale (X2 and X4).
- All SnapSync Platform Agents are available from the Overland Storage Support portal:  
<http://support.overlandstorage.com/support/snapsync.htm>
- All SnapSync desktop (Mac / Windows) and mobile (iOS / Android) documentation can be found on the Support Portal.  
<http://support.overlandstorage.com/support/snapsync.htm>
- Must have administrator access to the SnapServer or SnapCLOUD.
- Purchase SnapSync Business License:  
<http://www.overlandstorage.com/products/snapsync/index.aspx#HowToBuy>
- Make sure all devices and host that are part of a SnapSync configuration have a date and time that are no more than 10 minutes apart.
- Review [SnapSync Considerations](#) on page 21 for additional information on using SnapSync with SnapServer/SnapCLOUD.

## Versions Tested

The SnapSync test environment uses the following versions:

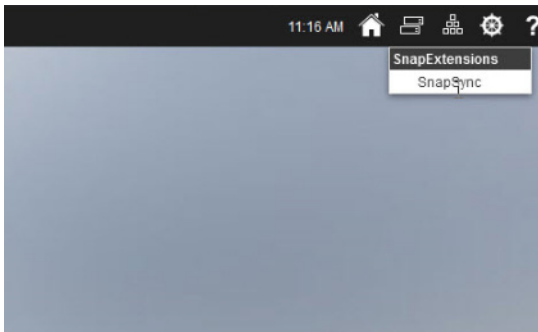
- Microsoft Windows 10.0 (Build 10240)
- Microsoft Windows 8.1 Version 6.3 (Build 9600)
- SnapServer XSR 120 GOS version 7.7.032
- SnapCLOUD GOS version 7.7.032

## Enable SnapSync on SnapServer

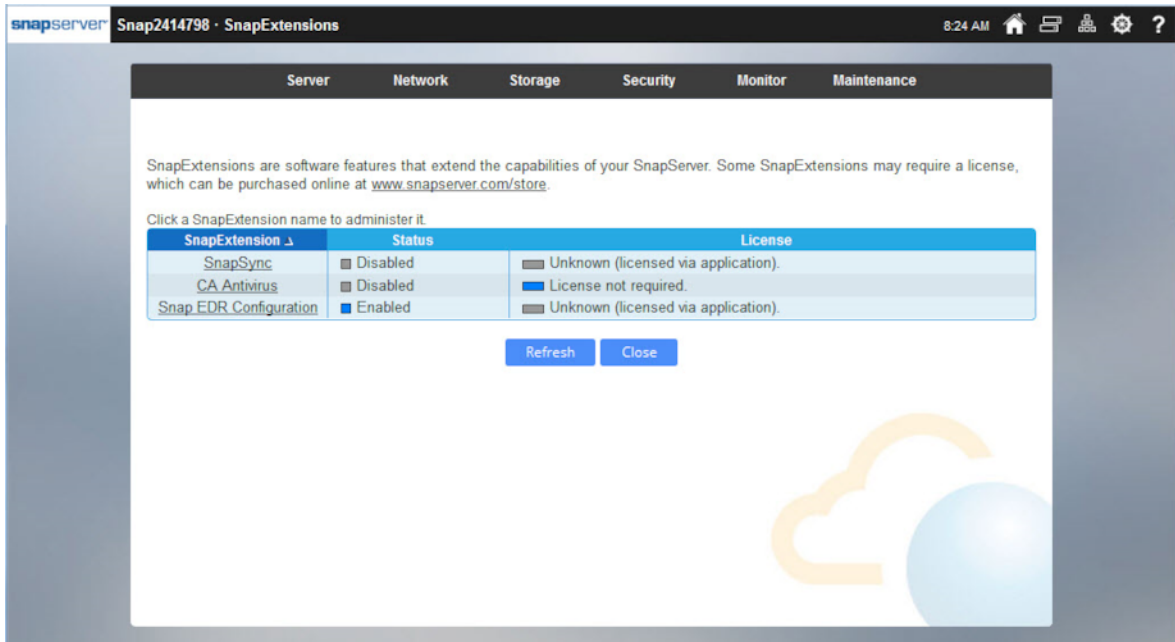
**NOTE:** Before beginning this procedure, verify SnapServer has already been updated to version 7.7.032 or later. If the version of GOS is not at this level or greater, please refer to [Upgrade SnapServer Software](#) on page 16.

The steps outlined here are used for the SnapServer Storage Administrator. Use the following steps in order to enable and configure SnapSync on the SnapServer.

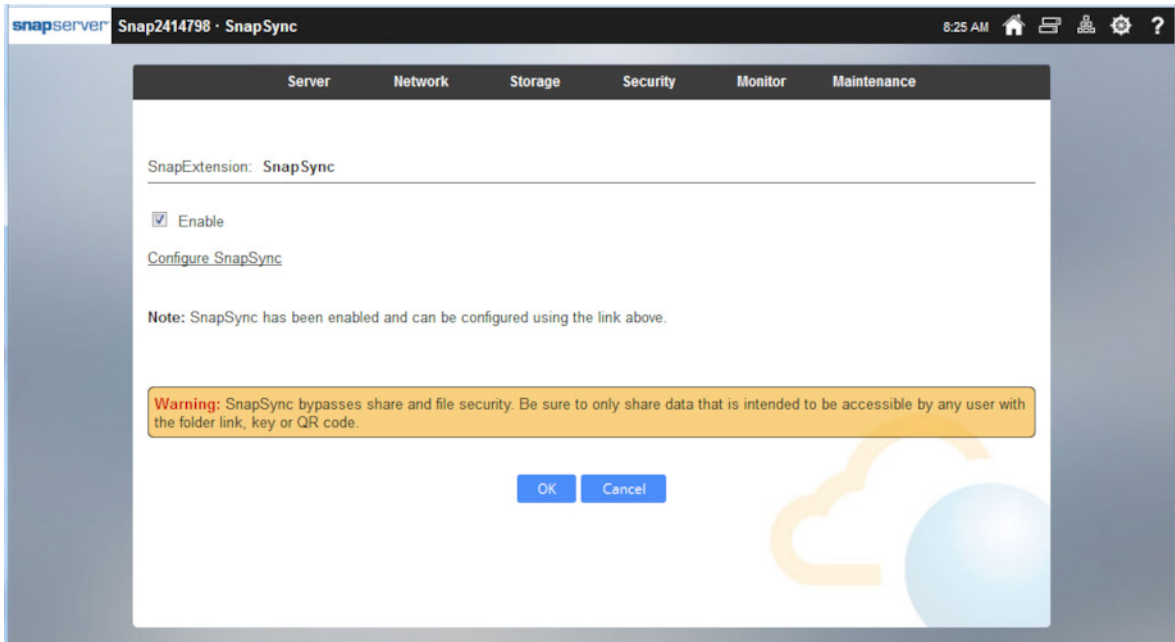
1. Click the SnapExtensions icon and select **SnapSync**.



- The current status shows Disabled for SnapSync. In the SnapExtension column, click **SnapSync**.



- Click the box next to **Enable** and select **OK**.



4. Once SnapSync is enabled, click SnapSync.

Server Network Storage Security Monitor Maintenance

SnapExtensions are software features that extend the capabilities of your SnapServer. Some SnapExtensions may require a license, which can be purchased online at [www.snapserver.com/store](http://www.snapserver.com/store).

Click a SnapExtension name to administer it.

SnapExtension ▾	Status	License
SnapSync	<input checked="" type="checkbox"/> Enabled	<input type="checkbox"/> Unknown (licensed via application).
CA Antivirus	<input type="checkbox"/> Disabled	<input checked="" type="checkbox"/> License not required.
Snap EDR Configuration	<input checked="" type="checkbox"/> Enabled	<input type="checkbox"/> Unknown (licensed via application).

Refresh Close

5. When the following dialog appears, enter a name for the SnapServer that needs to be configured for SnapSync.

By default, the name is root; there are two check boxes that need to be enabled before you select **Get Started**.

Welcome to SnapSync.  
Fast, private file sharing for teams and individuals.

Choose a name to show when you send and receive folders.

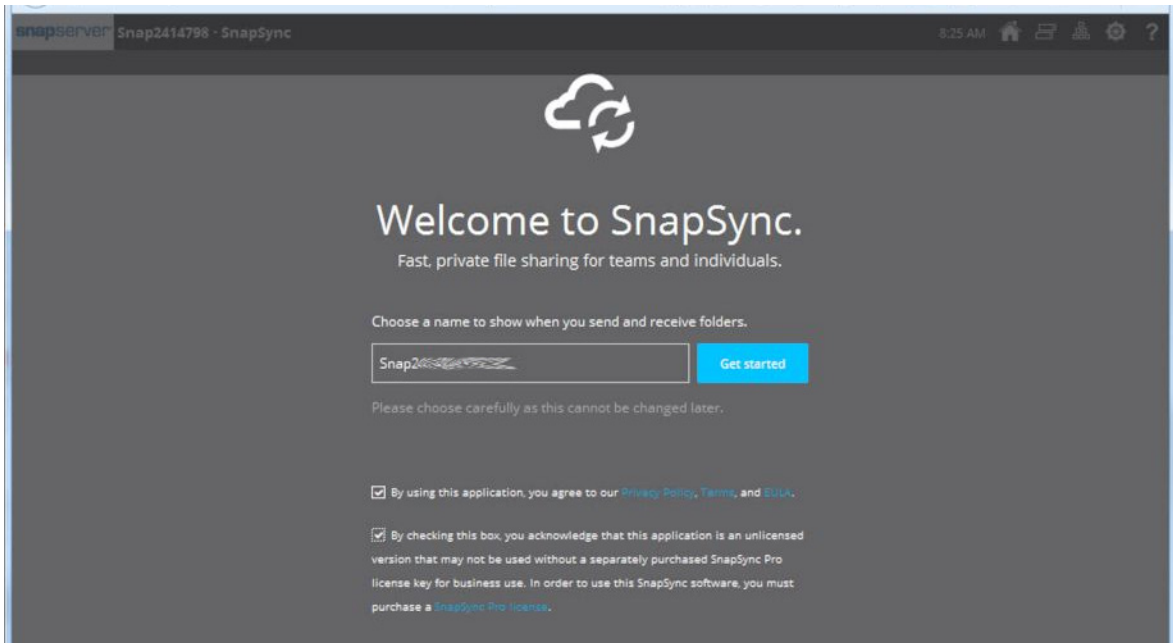
root Get started

Please choose carefully as this cannot be changed later.

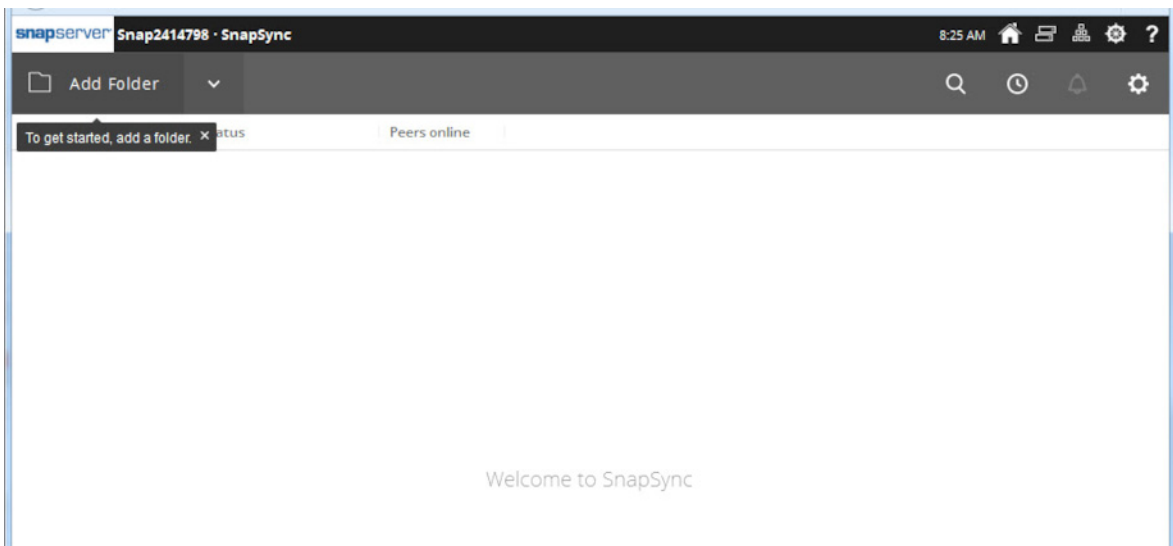
By using this application, you agree to our [Privacy Policy](#), [Terms](#), and [EULA](#).

By checking this box, you acknowledge that this application is an unlicensed version that may not be used without a separately purchased SnapSync Pro license key for business use. In order to use this SnapSync software, you must purchase a [SnapSync Pro license](#).

**NOTE:** As a best practice, provide a unique name for the SnapServer. The example here shows the name of the SnapServer (Snap2414798), the department APPS and the location of this device. This helps organize all SnapServer devices participating in the SnapSync environment as well as when configuring SnapSync desktop or mobile users.



6. When the following page appears, SnapSync base configuration has completed.



## SnapSync License

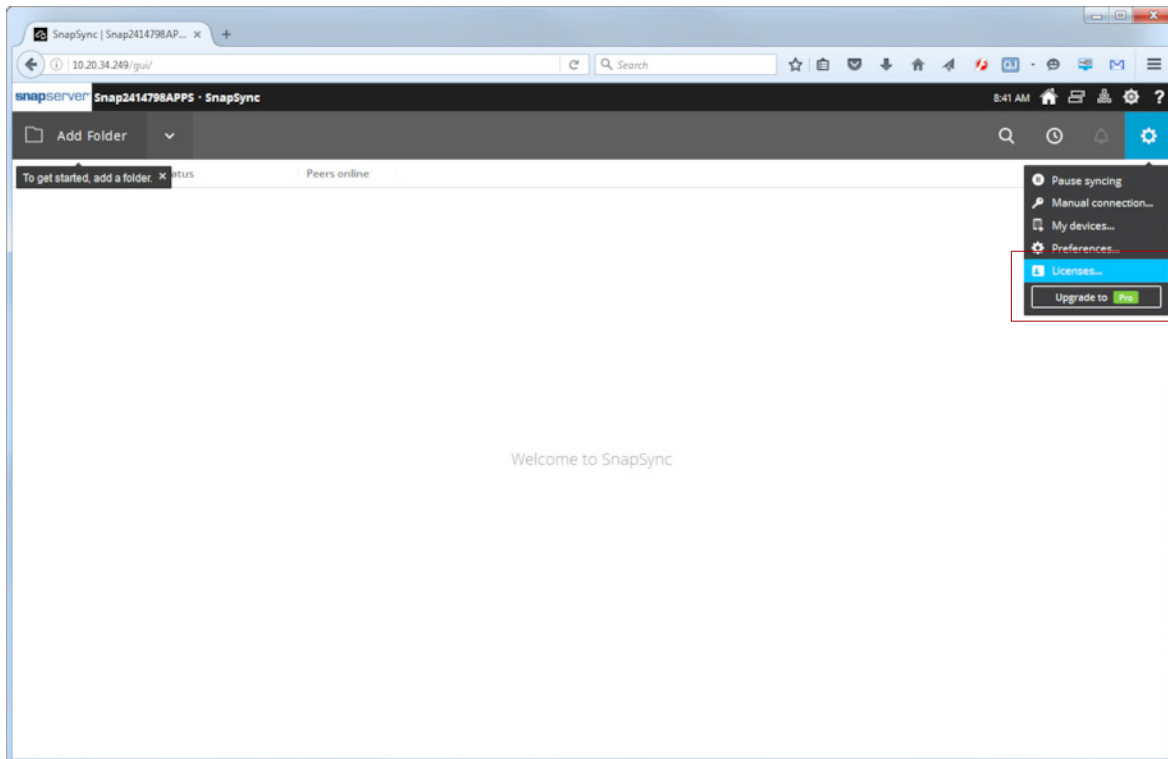
It's important and recommended for current customers who are using SnapSync on SnapServers to upgrade not only GuardianOS, but the supporting desktops and mobile agents configured with their SnapServer. This is imperative for SnapSync features to function correctly.

Also, note that only licensed versions of SnapSync are supported on SnapServer, SnapScale, SnapCLOUD, and Desktops. Before you share files, you must have a SnapSync Business License, available at: <http://www.overlandstorage.com/products/snapsync/index.aspx#HowToBuy>.

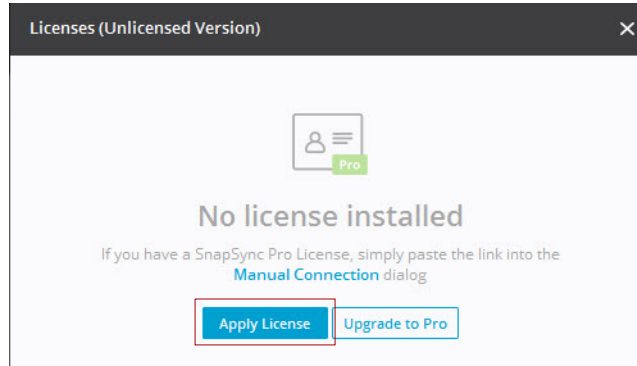
Once purchased, the SnapSync Business License is emailed as a link from Overland Storage Sales.

Log in to the SnapSync Web Management Interface as the Storage Administrator to license SnapSync on the SnapServer.

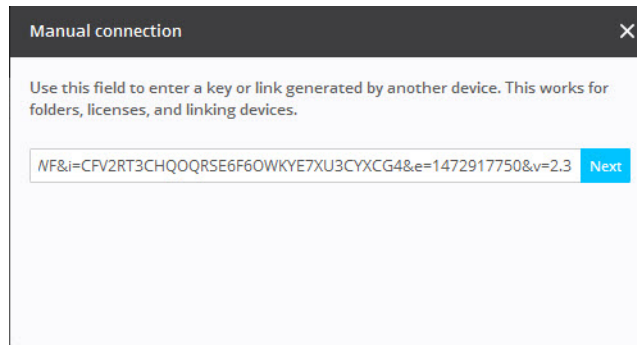
1. Open the email received from Overland Storage Sales and copy the SnapSync link to the clipboard.
2. Navigate to configure **Options > Licenses**.



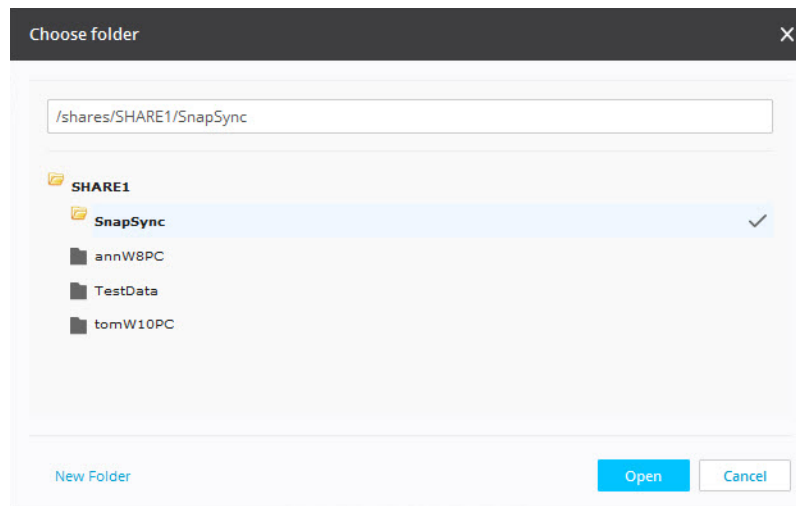
3. Click **Apply License**.



4. Paste the SnapSync link and click **Next**.

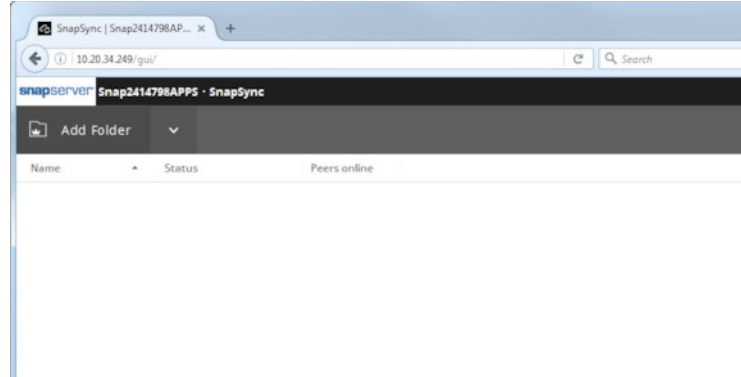


5. Browse the path to use SnapSync share and click **Open**.



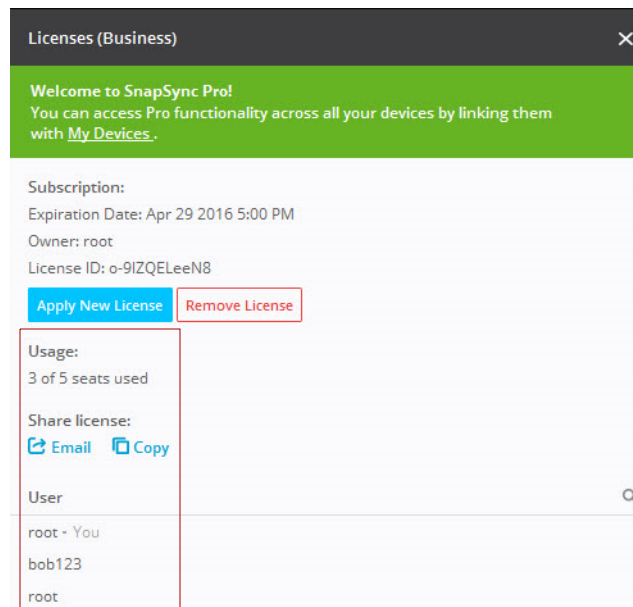


6. Once licensed, the Add Folder icon shows a crown.



Now that SnapSync has a business license, you have the options to **Apply New License** and **Remove the License** from the SnapServer. This window also allows you to share the configured license via Email to the SnapSync users. When the SnapSync user receives the emails, all they would need to do is to click the link they receive in the body of the email. The link is similar to sharing folders via email.

As SnapSync users apply the SnapSync license via link, the summary of all users sharing the current license and a Usage count is updated.



## Create and Share a SnapSync Folder

The following steps are performed by the Storage Administrator. The Storage Administrator uses the Snap Web Management Interface in order to access the SnapSync Management Console and create and share folders with individual users or groups.

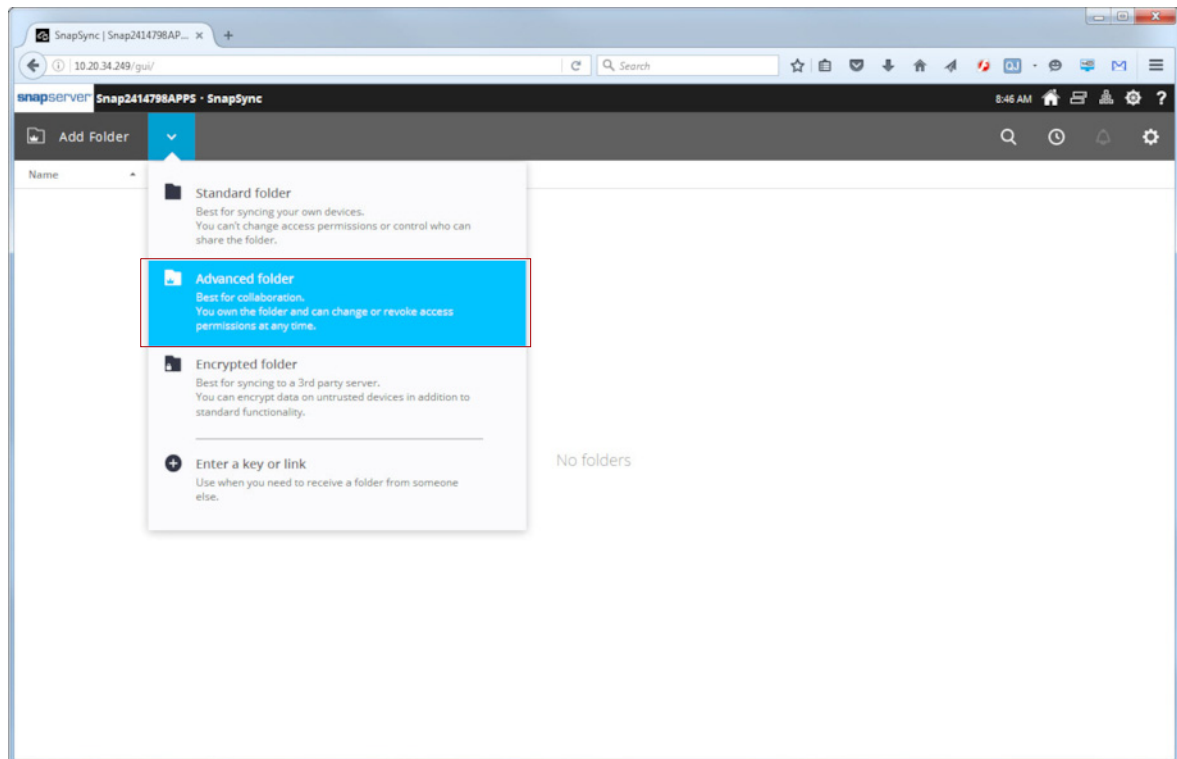


There are three types of SnapSync folders:

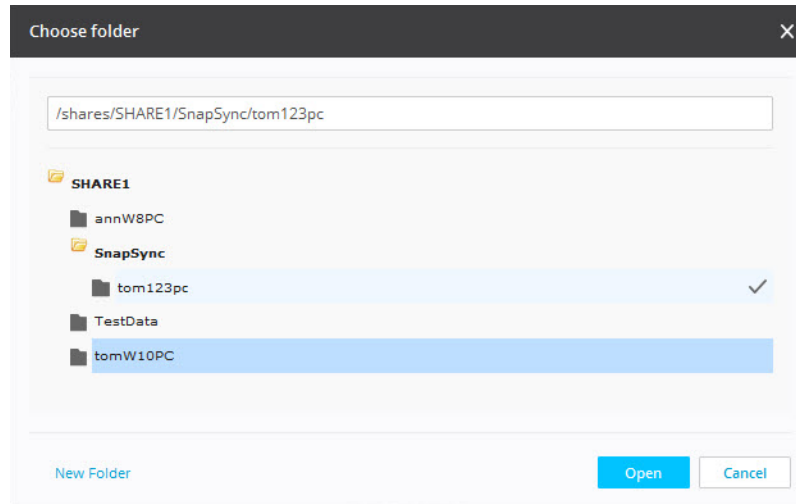
- **Standard Folder** – Simplified folder includes Read Only (RO) and Read & Write (RW) permissions.
- **Advanced Folder** – This folder in addition to the Standard Folder permissions can also provide **Owner** permission which allows you to revoke access to shared folders.
- **Encrypted Folder** – Designed to serve as a backup located in an untrusted environment.

Use the following steps to create an Advanced Folder for an individual user with **Owner** permissions. These steps can also be applied to sharing to a group or department as well.

1. From the drop-down menu, select **Advanced folder**.



2. Create a unique directory name for the user and select **Open**.



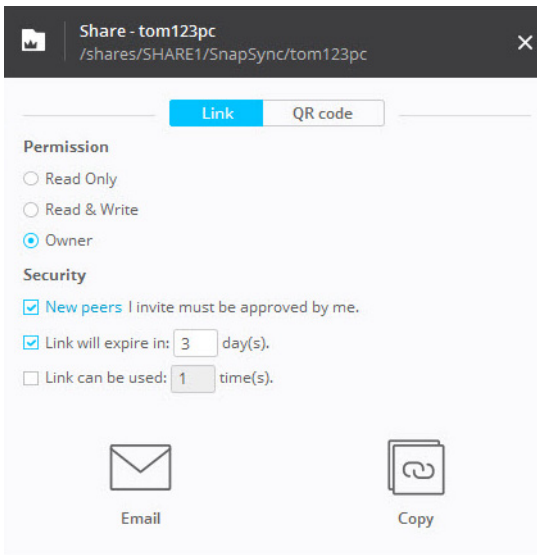
3. There are a few considerations on how a storage administrator shares the SnapServer folder. The following covers the use of the **Link** option to share the secret key:

- Link
- Permission:
  - Read Only
  - Read & Write
  - Owner

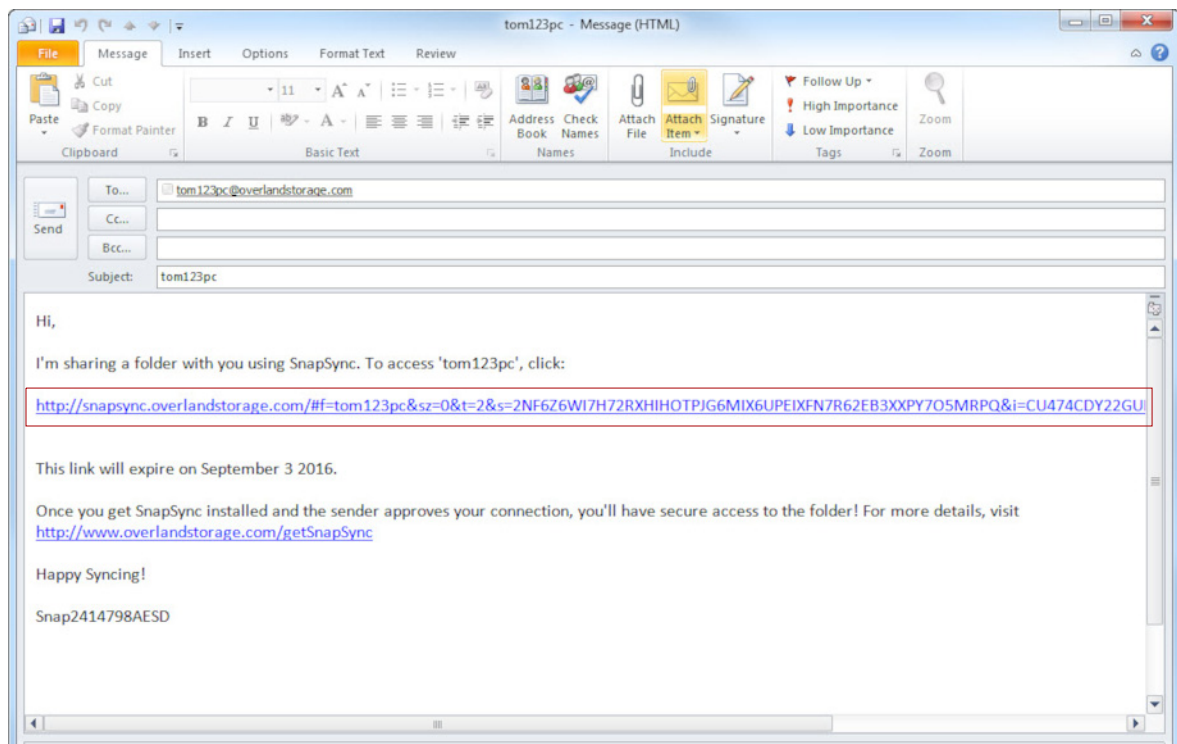


- Security:
  - New Peers I Invite must be approved by me.
  - Link will expire in 3 days (default).
  - Link can be used 1 time (default).
- Method of sharing:
  - Email – Emails the link to users or groups.
  - Copy – Copies the shared link to clipboard.

- The Storage Administrator enables the **Owner** permission for the SnapSync user. Read & Write permissions provide the ability to create, modify and save files for the dedicated folder located on the SnapServer storage. The Storage Administrator can email the link to the user or copy the link to clipboard and send it by some other method.



- The following email is created and is sent to the SnapSync user. The SnapSync user clicks on the first link in the email body.



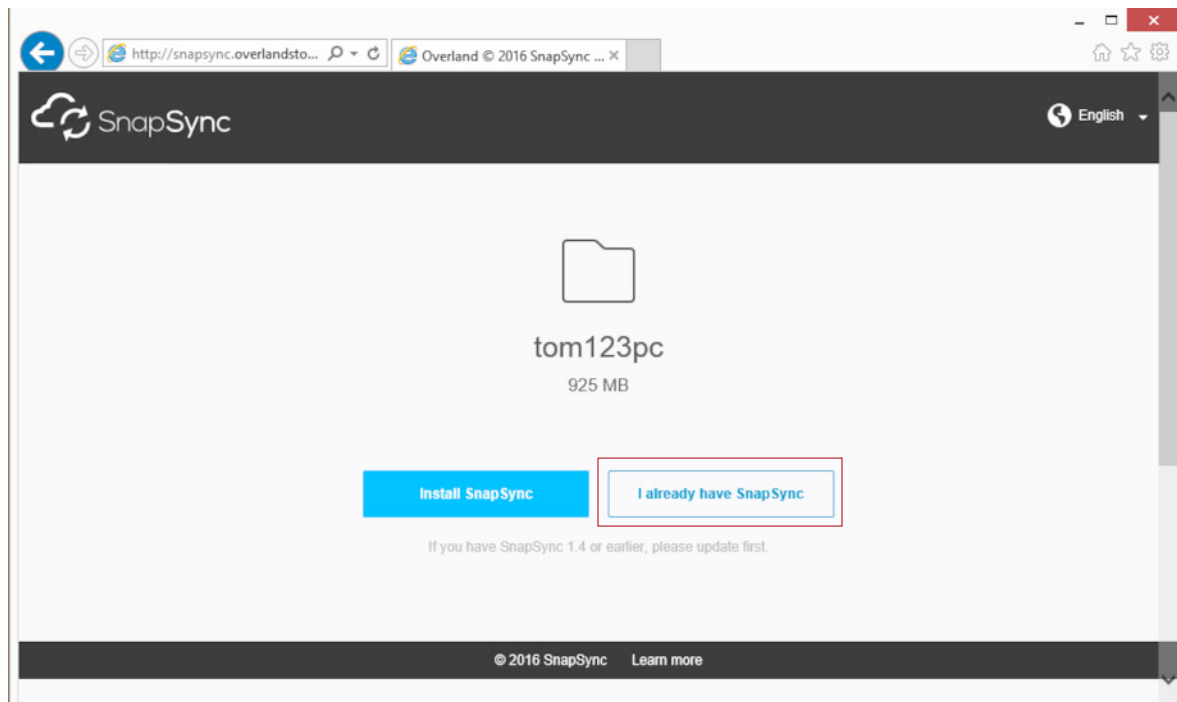
6. The SnapSync user is instructed to click on one of the options:

- Install SnapSync.
- I already have SnapSync.

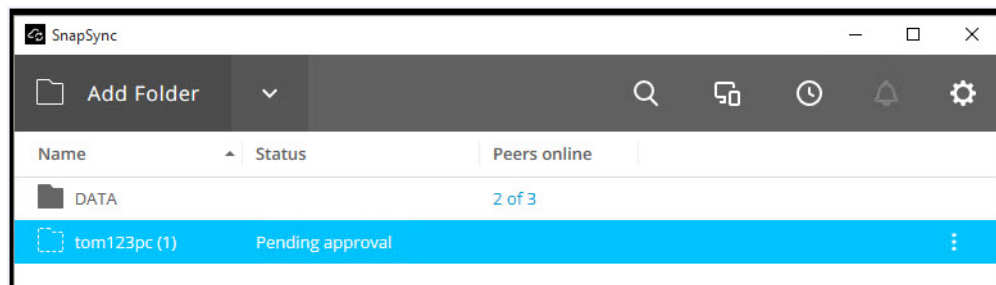
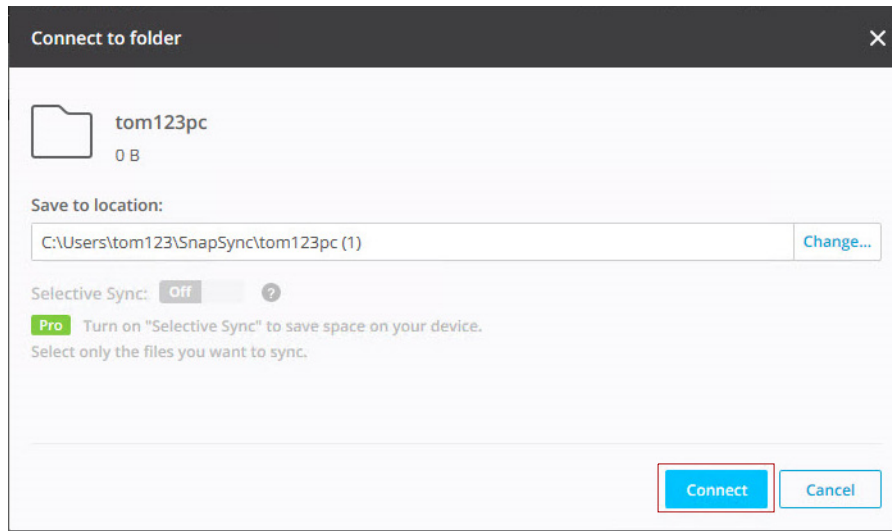
For *Install SnapSync*, refer to the SnapSync Application Notes for the client or mobile device you are working with:

- SnapSync Agent for Mac OS
- SnapSync Agent for Windows
- SnapSync Agent for iOS
- SnapSync Agent for Android

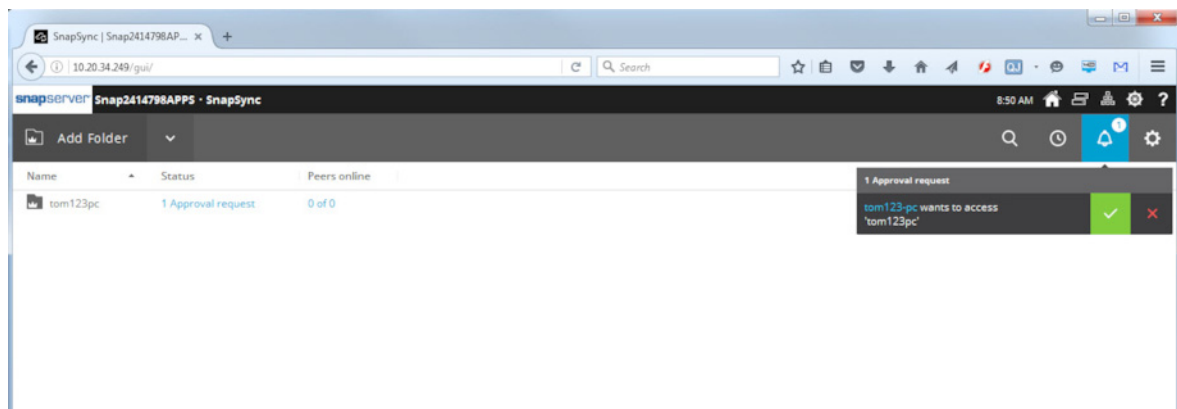
If SnapSync is already installed, select **I already have SnapSync**.



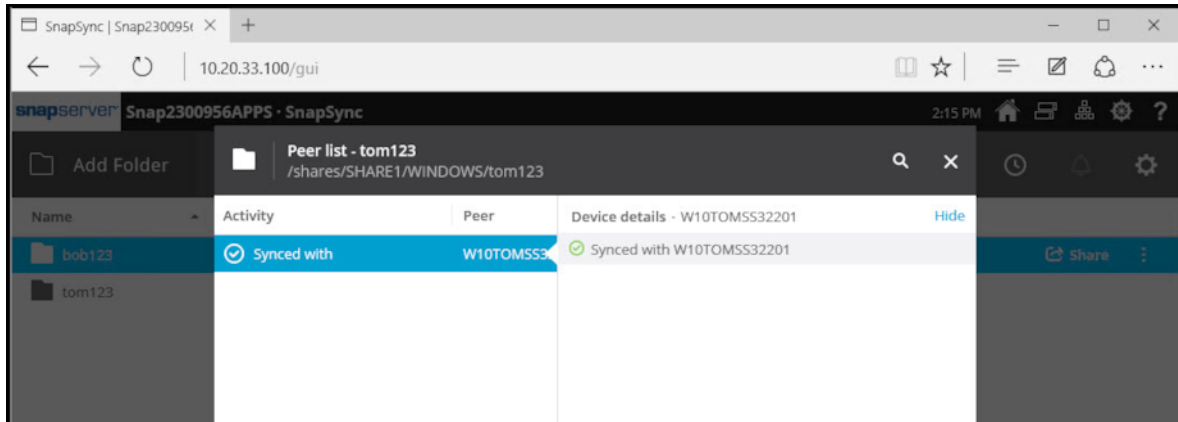
- When the SnapSync applet appears, click **Connect**. The folder is added to the SnapSync user's folder list with a status of Pending approval.



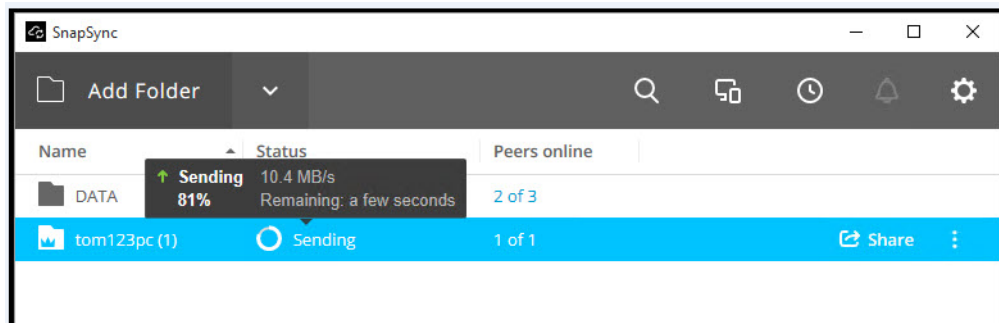
- The SnapSync Web Management Interface shows a new notification based on the connection from the new SnapSync user. The Storage Administrator must click the green check in order for the SnapSync user to access the shared folder.



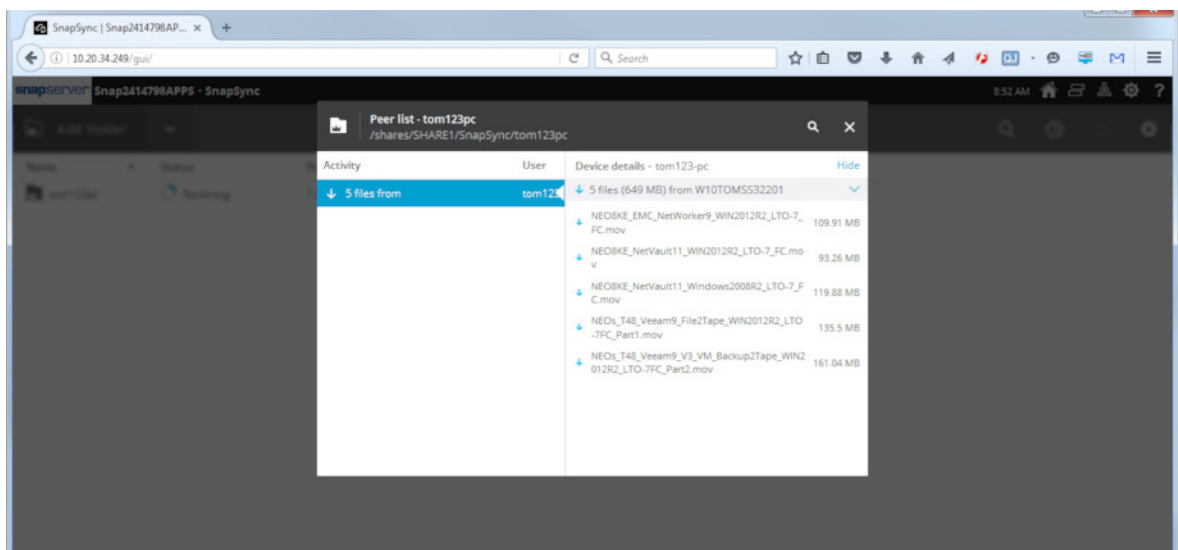
- The SnapSync user and SnapServer are now synchronized. Any user or data files that get created, modified, or moved into the SnapSync folder will automatically get synchronized to the SnapServer.



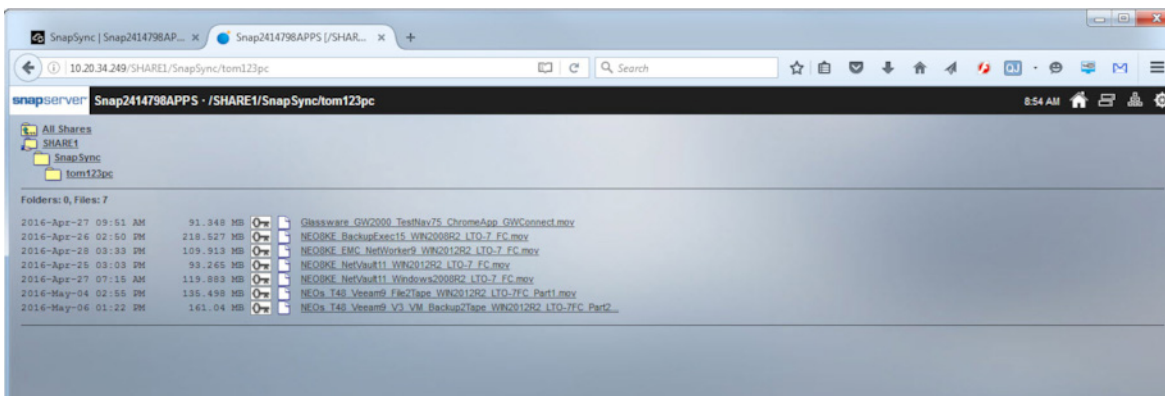
The example below shows a status of **Sending** from the user.



- Once the SnapSync user copies or creates files in the shared folder a status of **Receiving** is displayed in the SnapSync Web Management Interface, the details of the files are also displayed.



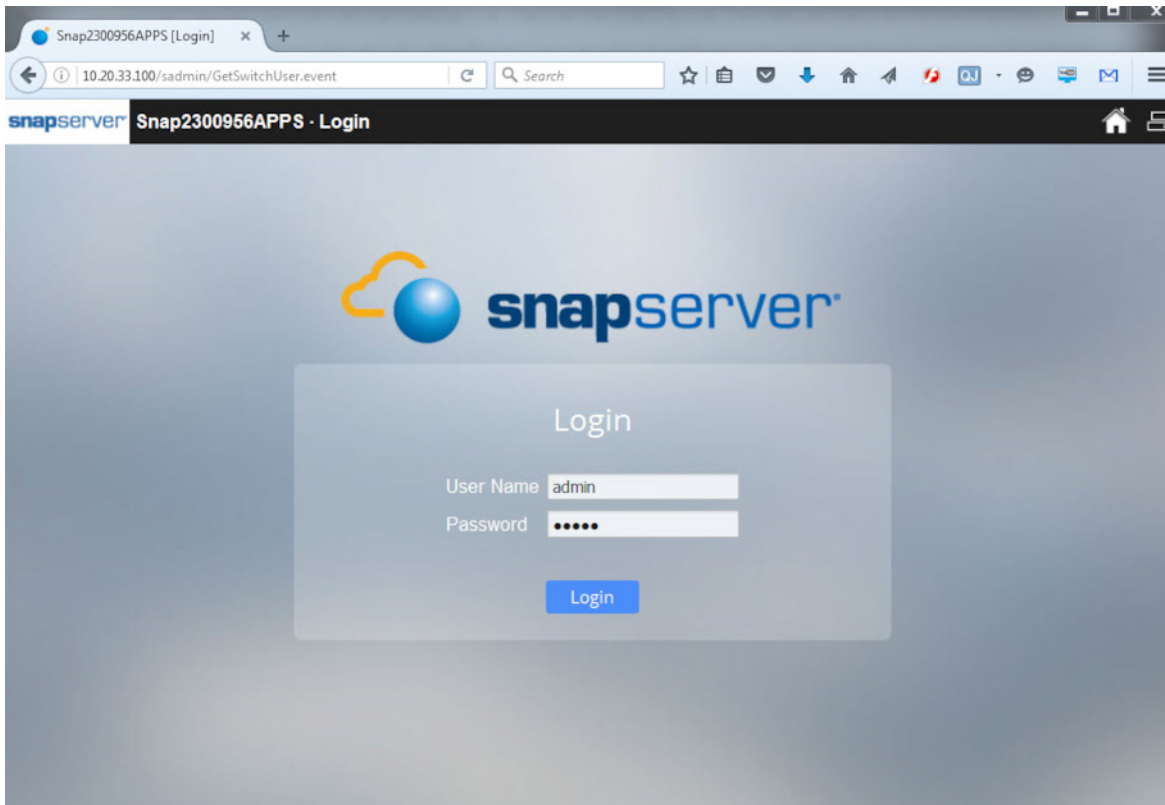
11. The synchronized files can be viewed by browsing the share using Snap Web Management Interface and the location of where the files are located.



## Upgrade SnapServer Software

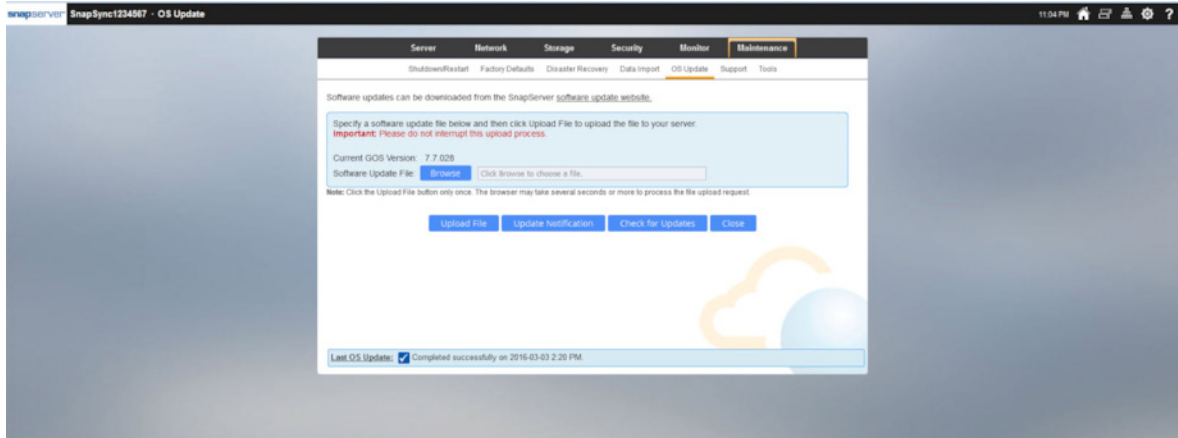
Before upgrading GOS on your SnapServer, make sure the software has already been downloaded. Refer to [Prerequisites](#) on page 2 for the download link. Use the following steps to upgrade GOS on either SnapServer or SnapCLOUD; the steps are identical for these platforms.

1. Browse to the location of the SnapSync executable, double-click it, and login.

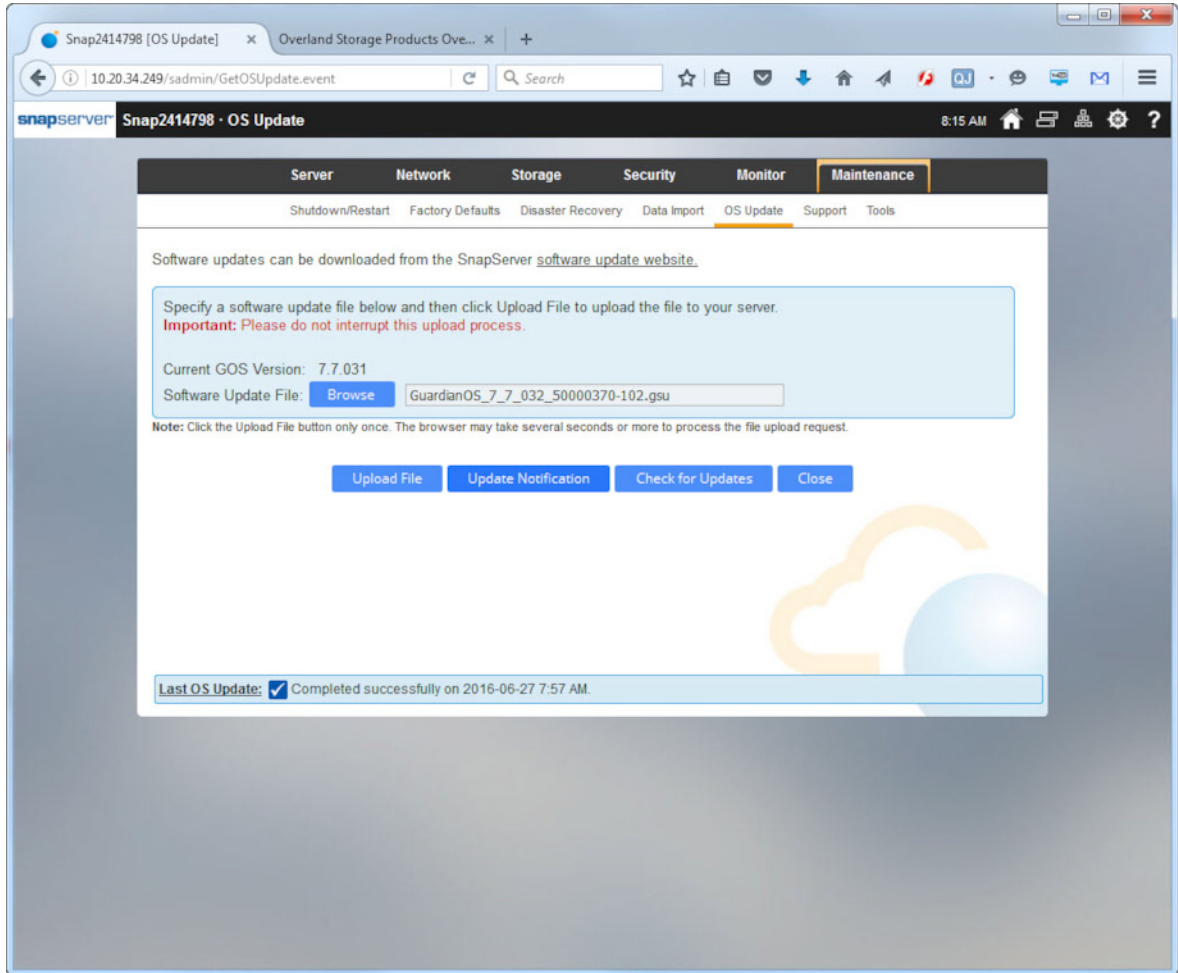




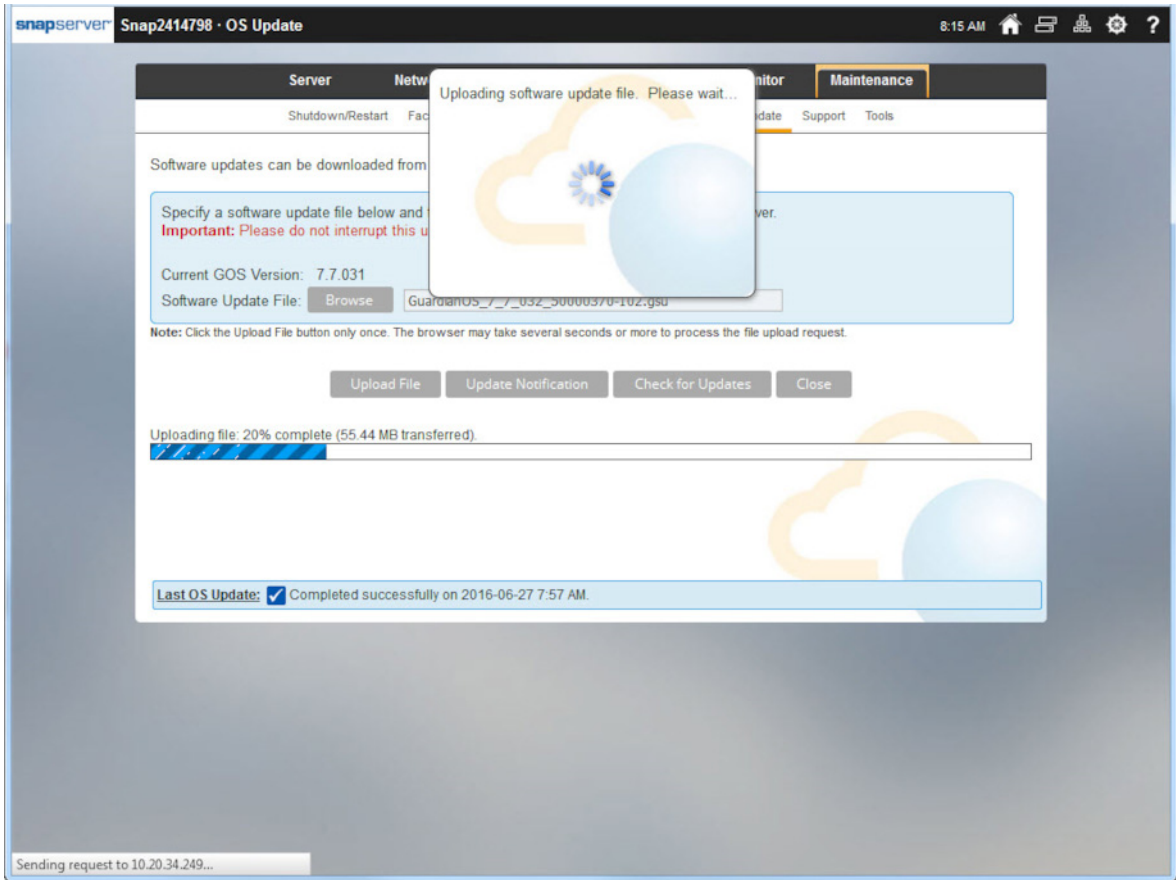
2. Navigate to **Maintenance > OS Update** and click **Browse**.



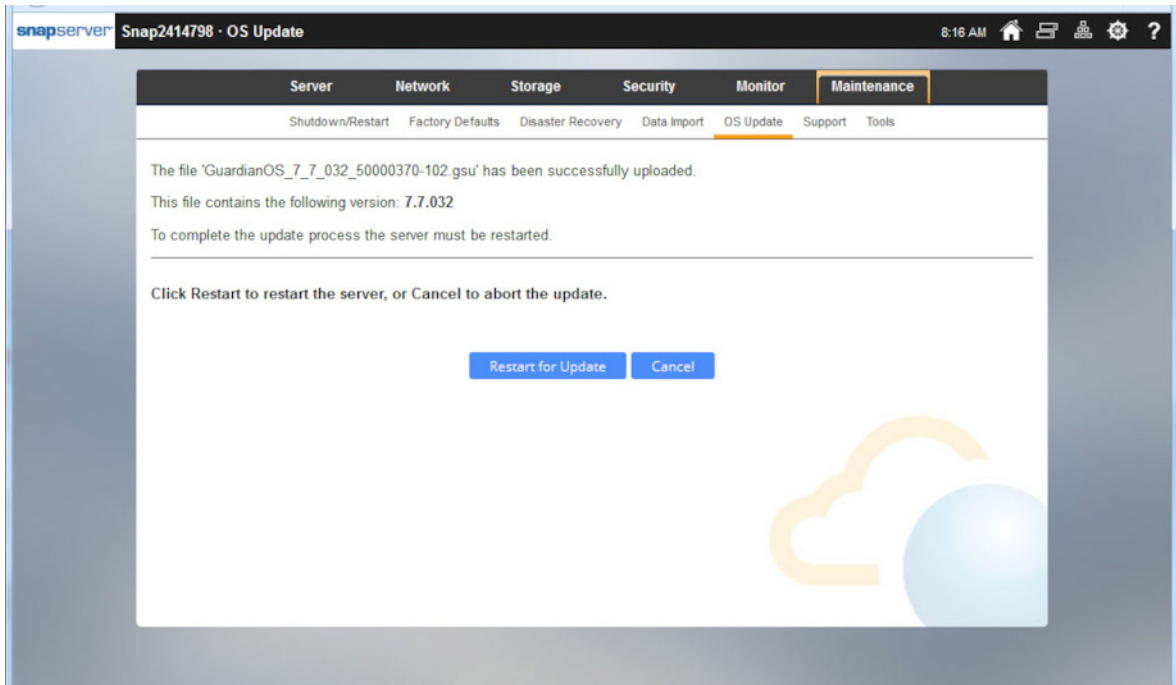
3. Navigate and locate the **GuardianOSImage.gsu** click **Open > Upload File**.



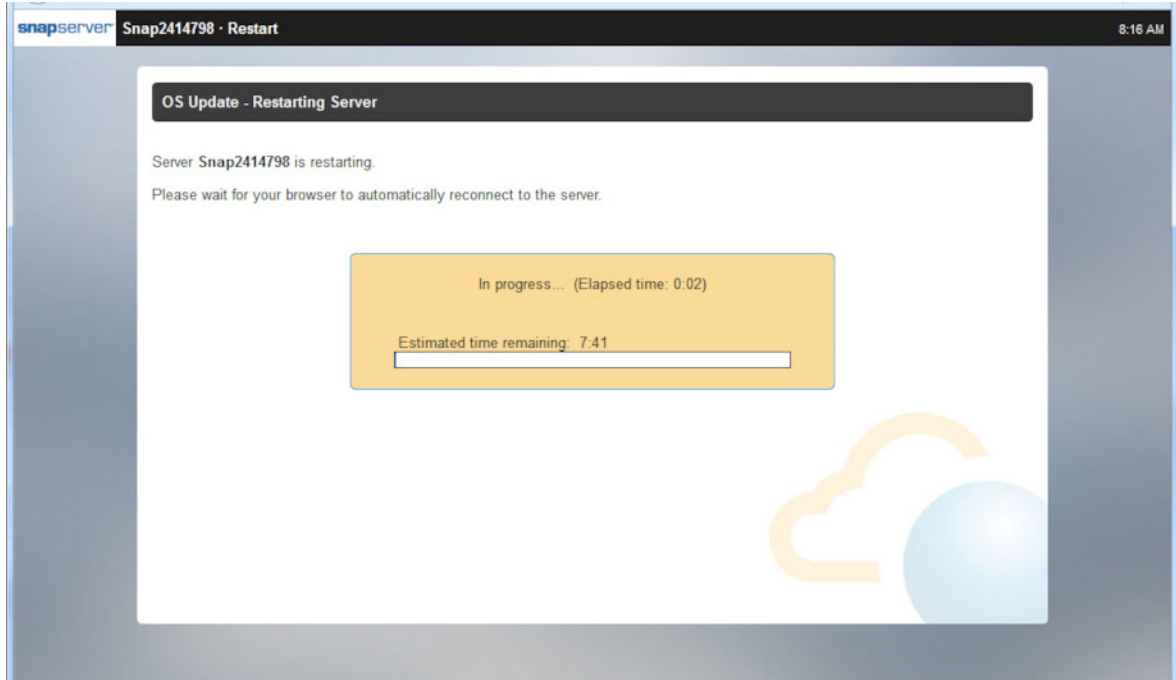
Be patient as the file is uploaded to the SnapCLOUD. Depending on the location of the device, this can take some time to complete.



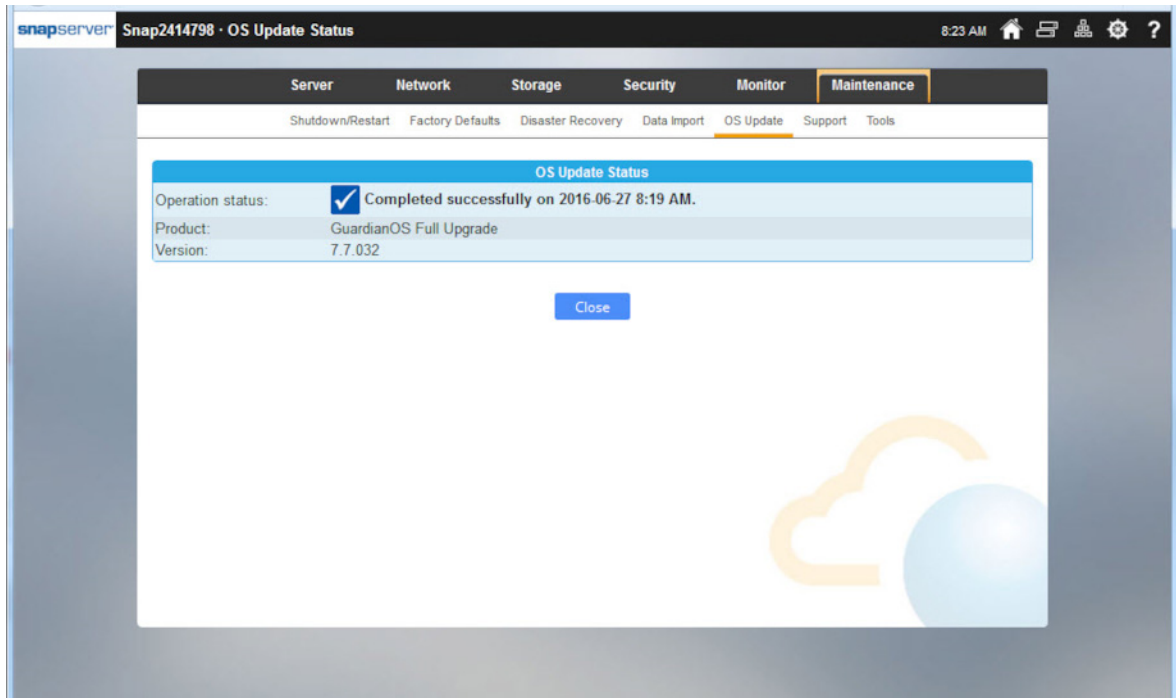
4. Once the following message is displayed, click **Restart for Update**.



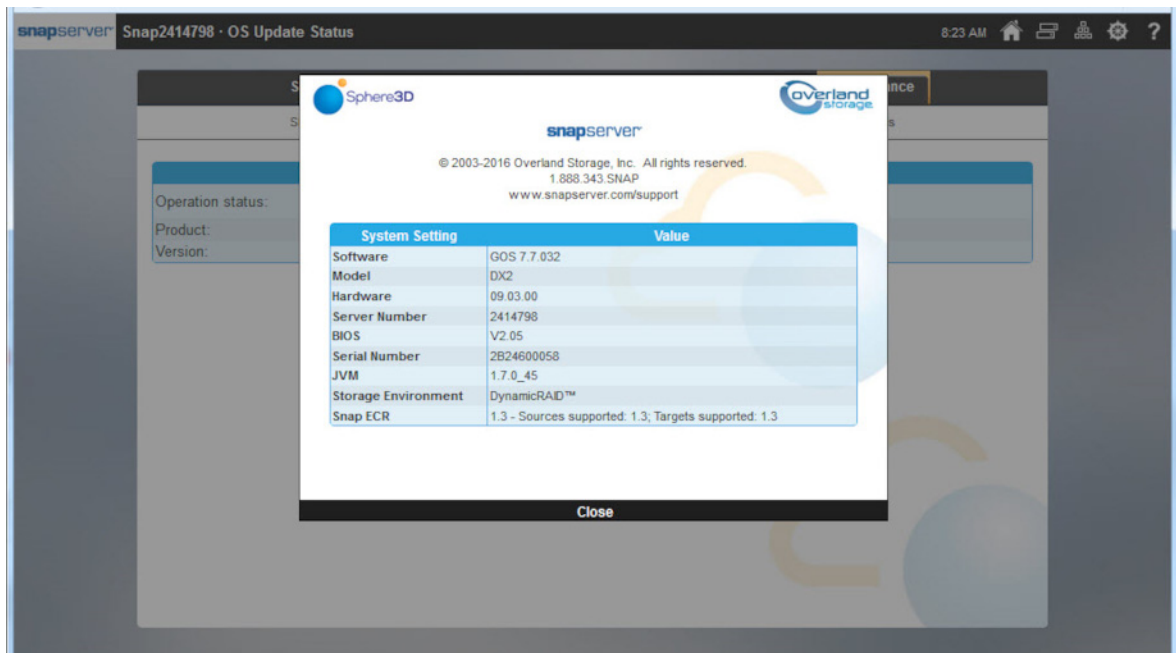
Be patient as the system restarts.



Once the system is up, the following is displayed after login.



5. Click the name of the device in the far left corner to display the current version.



## SnapSync Considerations

For the most recent information and details on SnapSync configuration and use, refer to the documentation on the Overland Storage website.

<http://support.overlandstorage.com/support/snapserver-nas.htm>

- For SnapSync destinations under a UNIX or Mixed security model, SnapSync creates UNIX personality files and directories, and sets the permissions to 644 (files) or 755 (directories) for UNIX owner root/admingrp. As a result, all users and groups can read the files but only root can modify them. It is recommended that Windows-only security models are used at the destination, and that Windows permissions are set at the top level destination directory to apply the desired permissions to all files and subdirectories created by SnapSync.
- SnapSync cannot be used to replicate snapshots because it requires the ability to write to the sync location and snapshots are read only.
- SnapSync installs as a hidden directory on a volume (Traditional RAID) or storage pool (DynamicRAID). If the volume or storage pool is deleted or rolled back from a snapshot, SnapServer attempts to automatically relocate the SnapSync hidden directory to another volume or storage pool. If there are no more volumes or storage pools, or if none can be found that are large enough, SnapSync is disabled and cannot be re-enabled until a suitable volume or storage pool becomes available. Once a re-enabled, SnapSync must be completely reconfigured again.
- There are SnapSync mobile apps that make synced documents available on iOS and Android systems. Refer to our website for details on downloading, configuring, and using SnapSync mobile apps.
- SnapSync changes the files and folders ownership from admin to root after it finishes syncing. If you edit the same file with Administrator credentials on the target server and then try to save it, you will get an “access is denied” error from the windows client.