

# **Supplemental Guide**

March 2017

## Installing and Configuring SnapSync Agent for Mac



### Summary

This document describes how to install and configure SnapSync for Mac desktops. It also covers the installation of the SnapSync Agent for Mac operating systems from Apple. SnapServer NAS appliances or SnapCLOUD are used as primary storage targets in a peer-to-peer SnapSync configuration.

### Information, Tools, and Files

Before you begin these procedures, the following information should be noted:

- This guide covers both SnapServer appliances (models XSD40, XSR40, and XSR120) and SnapCLOUD servers which use the Guardian OS software. The term "SnapServer" in this document refers to both types of systems and is used interchangeably in the document.
- This document uses the terms "SnapServer Administrator" and "Administrator" interchangeably. When more than one type of administrator is used (such as a System Administrator), the references in this document are for the Storage Administrator.
- This document also covers the roles of both the Administrator and the Mac desktop user, and the tasks that are used for each of these roles.

#### Prerequisites

• The Administrator should be familiar with the SnapServer Web Management Interface. Additional information on using and accessing the Web Management Interface is found in the *SnapServer Administrator's Guide* for GuardianOS. Refer to the Overland Knowledge Base for the appropriate guide:

https://community.sphere3d.com/community/documentation/nas/snapserver

- Download the SnapSync Agent for Mac from the Overland Storage SnapSync website: http://support.overlandstorage.com/support/snapsync.htm
- Make sure all devices and the host that are part of a SnapSync environment have a date and time that are no more than 10 minutes apart.
- For the purposes of this guide, the following processes are considered to have been done:
  - A SnapSync user folder (mike123-Mac) for the Mac Client on the SnapServer appliance or SnapCLOUD has already been created by the Administrator for sharing.
  - The SnapSync secret key is available for the Mac desktop client to access the SnapServer storage used as a repository for shared SnapSync files.
  - The SnapSync license keys are managed by the Administrator and are distributed to SnapSync desktop agents using the SnapSync license manager on the SnapServer. SnapSync licenses must be enabled on the SnapServer prior to licensing any desktop clients.

Additional information on SnapSync folder sharing, security key sharing, and SnapSync licensing can be found in the *SnapSync Getting Started Supplemental Guide* or the *SnapSync 2.3 User Guide*.

https://community.sphere3d.com/docs/DOC-3933 (Getting Started) https://community.sphere3d.com/docs/DOC-3839 (User Guide)

#### **Versions Tested**

The SnapSync test environment uses the following versions:

- MacBook Pro running Apple Mac OS X version 10.11.3
- SnapSync Agent for Mac version 2.3.7.446
- SnapServer XSR120 running GuardianOS version 7.7.032
- SnapCLOUD server running GuardianOS version 7.7.032

### **Requirements Before Starting**

As noted in the Prerequisites section, before installing the agent, it is recommended that these three processes be complete. They must be done by an Administrator.

- Create a SnapSync user folder.
- Create a secret key for sharing files.
- Manage SnapSync license keys.

#### SnapSync User Folder Creation

To create SnapSync user folders on the SnapServer so data can be shared, the Administrator uses the Web Management Interface SnapExtensions icon (
) to access the SnapSync Management Console to add the folder.

The following example shows a user folder called *mike123-Mac*.

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	SnapSync		SnapSync	Snap23009	56APPS		+
snapserver <sup>®</sup> Snap2	300956APPS · SnapSync			8:53 AM	<b>a</b> E		♦ ?
🗋 Add Folder	~			Q	0		¢
Name	▲ Status	Peers online					
bob123		1 of 1					
mike123-mac	8 No peers					🔁 Shar	
tom123		1 of 1					

It is recommended that a unique name based on the device type be used to distinguish the device type. This user may also have a mobile device with which to sync.

#### **SnapServer Secret Key Creation**

A SnapSync secret key is needed for the Mac desktop client to access the SnapServer storage used as a repository for shared SnapSync files.

NOTE: A preconfigured SnapSync user folder is required. See SnapSync User Folder Creation.



1. At the right end of the user folder line, click **Share** to show the options screen.

- 2. Select Link at the top of the Share options dialog.
- **3.** To share the secret key, select from the following **options**.

NOTE: Some are selected by default but can be changed.

Option	Choices	Default
Permission	Choose one: • Read Only • Read & Write	Read Only.
Security	<ul> <li>Check all that apply:</li> <li>New peers I invite must be approved by me.</li> <li>Link will expire in [3] day(s).</li> <li>Link can be used [1] time(s).</li> <li>Numbers in square brackets can be changed.</li> </ul>	New peers and expiration date are checked by default.
Share Method	Click one of these buttons: • Email • Copy	None.

**4.** The Administrator enables the **Read & Write** permission for the Mac users. Read & Write permissions provide the ability to create, modify, and save files to the dedicated folder located on the SnapServer storage. **5.** The Administrator can either **Email** the link to the user or **Copy** the link to the clipboard. The **Copy** option allows the Administrator to copy the link displayed (by pressing Command+C to save it the clipboard) and send it by a method other than email. For example, send it via a chat session.



The **Email** option allows an Mac user to click the link in the body of the email. Here is a sample of an email sent from the Administrator to the Mac user.

Hi,
I'm sharing a folder with you using SnapSync. To access 'mike123-mac', click:
http://snapsync.overlandstorage.com/#f=mike123_ mac&sz=0&t=1&s=FSHWS2O7R5I7T5AVPY7YSMIS4FYI32J5&i=CS3E4Y6XALHJ4ZJNHWHT72Z2G5N7TCZYD&e=1466880429&v=2.3&b=2
This link will expire on June 25 2016.
Once you get SnapSync installed and the sender approves your connection, you'll have secure access to the folder! For more details, visit <a href="http://www.overlandstorage.com/getSnapSync">http://www.overlandstorage.com/getSnapSync</a>
Happy Syncing!
root

#### **SnapSync License Application**

Only licensed versions of SnapSync are supported on SnapServer, SnapScale, SnapCLOUD, and user 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 Administrator to license SnapSync on the SnapServer.

### Installation of the SnapSync Agent for Mac

NOTE: If the SnapSync Agent for Mac is already installed, continue with the SnapSync Agent for Mac Synchronization section.

The SnapSync Agent for Mac can be installed when the Administrator provides the secret key via the link to the Mac user.

1. Either click the emailed **link** or paste it into a browser, and a window similar to this one is displayed:



2. If SnapSync is not currently installed on Mac, click Install SnapSync.

	snapsync.overland	storage.com	C	(
C <sup>+</sup> C <sup>+</sup> SnapSyr	Install Sync			🕒 English 🝷
	Once Sync is installed, return to this pag	ge to get the folder.	Ok	
	Install SnapSync	l already have Sna	pSync	
	© 2016 SnapSync	Learn more		

**3.** At the dialog window, click **OK** to start the install.

You are directed to the SnapSync website in order to download the Mac SnapSync application. The following link is the URL to the SnapSync website. http://support.overlandstorage.com/support/snapsync.htm

SnapSync SnapSync enables secure, on-de sharing from on-premise IT mana any device anywhere. Buy SnapSync licenses	arn More
Downloads	
Desktop	
Mac OS X 10.8 Mountain Lion or later SnapSync 2.3.7.446 (.dmg) Free Download	Windows Windows 7 or later SnapSync 2.3.7.446 (.exe) Free Download, 32-bit Free Download, 64-bit
Mobile	
iOS 7 or later App <u>Store</u>	Android Android 4.0 or later <u>AppStore</u>

- **4.** Click **Free Download** under the (Desktop) Mac heading, and save the SnapSync Agent for Mac installation file where it can easily be accessed.
- **5.** Once downloaded, click the **SnapSync DMG file** and the installer will extract and automatically mount itself to the Mac desktop.



**6.** When the dialog window appears, drag and drop the **SnapSync** icon to the **Applications** folder shortcut.



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• • •	Applications		
Name	Date Modified	Size	Kind
📁 Notes	Apr 9, 2016, 12:18	3 PM 9.6 MB	Application
👪 Photo Booth	Apr 9, 2016, 12:18	3 PM 6.3 MB	Application
See Photos	Apr 9, 2016, 12:18	3 PM 54 MB	Application
Preview	Apr 9, 2016, 12:18	3 PM 37.2 MB	Application
😋 QuickTime Player	Apr 9, 2016, 12:18	3 PM 16.2 MB	Application
Reminders	Apr 9, 2016, 12:18	3 PM 6.8 MB	Application
🧭 Safari	Apr 9, 2016, 12:18	3 PM 47.3 MB	Application
SnapSync	Apr 28, 2016, 2:4	9 AM 20.5 MB	Application
Stickies	Apr 9, 2016, 12:18	3 PM 6.1 MB	Application
System Preferences	Apr 9, 2016, 12:18	3 PM 5.9 MB	Application
📝 TextEdit	Apr 9, 2016, 12:18	3 PM 6.4 MB	Application
Time Machine	Apr 9, 2016, 12:18	3 PM 1.3 MB	Application
🔻 🔀 Utilities	Jan 22, 2016, 2:0	7 PM	Folder
Activity Monitor	Apr 9, 2016, 12:18	3 PM 11.3 MB	Application
AirPort Utility	Apr 9, 2016, 12:18	3 PM 186.6 MB	Application

The **SnapSync** icon is now located in the **Applications** group.

7. When the confirmation dialog window appears, click **Open**.

		"SnapSync" is an Internet. Are you	application downloaded from th sure you want to open it?	e
	<u> </u>	"SnapSync" is on the downloaded this disk support.overlandstor	disk image "SnapSync-2.3.7.446.dmg". image today at 9:16 AM from age.com.	Safari
? Snap		Don't warn me	when opening applications on this	disk imag
	?	Cancel	Show Web Page	Open
			~	
	SnapSy	Inc	Applications	

When the SnapSync interface opens, the SnapSync Agent for Mac has been successfully installed.



No folders

### SnapSync Agent for Mac Synchronization

Use the following steps to synchronize the SnapSync Agent for Mac to the SnapServer storage.

- 1. Click or paste the **link** provided by the Administrator in your browser.
- 2. When the SnapSync window appears, click I already have SnapSync.

	snapsync.overlan	dstorage.com C	0 1 0 +
CC SnapSync			🔇 English 👻
	mike12	3-mac	
	Install SnapSync	I already have SnapSync	
	lf you have SnapSync 1.4 or e	arlier, please update first.	
	© 2016 SnapSync	Learn more	

**3.** At the Connect to folder dialog, click Connect.

SnapSync links to the existing local folder in the default user directory.



**4.** If the New peers I invite must be approved by me option was enabled, a Pending approval status is displayed.

The Administrator must approve it before continuing.



**5.** When alerted about the pending approval, the Administrator clicks the **check mark** to allow access to the Mac SnapSync folder located on the share of the SnapServer.

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	SnapSync	SnapSync	Snap2300	956APPS		+
snapserver <sup>®</sup> Snap2	300956APPS · SnapSync		9:26 AM	A E		∌?
Add Folder	~		Q	0	<b>1</b>	¢
Name	▲ Status	Pee 1 Approval request				
bob123		1 of admin wants to access			$\overline{\frown}$	
mike123-mac	1 Approval request	'mike123-mac' 0 of				
tom123		1 of 1				

Once synchronized, the **Peers online** column shows 1 of 1. This means the SnapServer is in sync with the Mac desktop.

	SnapSync					
~		Q	5	©		<b>¢</b>
<ul> <li>Status</li> </ul>	Peers online					
	1 of 1				🔁 Share	÷
	► Status	SnapSync  Status Peers online  1 of 1	SnapSync Q Status Peers online 1 of 1	SnapSync QG Status Peers online	SnapSync C G O Status Peers online	SnapSync C G O O Status Peers online I 1 of 1 C Share

6. Click the folder name to open the SnapSync applet.

• •		SnapSync					
Add Folder	~		Q	S	0		¢
Name	▲ Status	Peers online					
mike123-mac						🔁 Share	

**7.** In the SnapSync applet, click the **folder name** to make the Mac user folder appear so files can be copied or moved to this location.



Eventually the file automatically synchronizes with the SnapServer and the SnapSync Agent for Mac status changes to **Sending**.

•••			SnapSync					
🗋 Add Folde	er 🗸			Q	ፍ	0		۵
↑ S Name 1	ending 10.5 7% Rem	5 MB/s naining: a few second	Peers online	1				
mike123-mac	0	Sending	1 of 1				🔁 Share	÷

At the SnapServer, the SnapSync status shows **Receiving**.

		10.20.33.100	Ċ			0 1	ð
	SnapSync		SnapSync	Snap23009	956APPS		+
snapserver <sup>.</sup> Snap23	300956APPS · SnapSync			9:31 AM	🕋 E	🤇	₹?
Add Folder	~			Q	0		¢
Name	<ul> <li>Status</li> </ul>	Peers online					
bob123		1 of 1					
mike123-mac	O Receiving					🖸 Share	÷
tom123		1 of 1					

Once synchronization completes, a status is displayed from the SnapSync Agent for Mac showing that it is in sync with the SnapServer.



Also, the SnapServer shows it is synchronized with the Mac user.

•	• <>			10.20.33.100	¢)			0	₫	đ
		SnapSync			SnapSync	Snap23009	56APPS	(		+
<b>snap</b> s	server <sup>.</sup> Snap	2300956APPS	• SnapSync			9:31 AM	Â.		品 🔇	} ?
	Pee /sh	er list - mike123 ares/SHARE1/M	<b>-mac</b> AC/mike123-mac				3	۹	×	0
Nam	Activity		Peer	Device details	SD32232MACF	РΒ			Hide	
	Synced v	vith	SD32232MAC	Synced with	SD32232MACPI	3				

The synchronize data is displayed on the SnapServer at the Home screen for the share.

	10.20	0.33.100	Ċ		0	1	ð
Snap2300956APPS [/SHARE1/M	AC/mike123-mac]	:	SnapSync   Snap2	300956APP	S		+
snapserver <sup>®</sup> Snap2300956APPS	· /SHARE1/MAC/mik	e123-mac		9:33 AM	Â		⊛
Ball Shares         SHARE1         MAC         mike123-mac							
Folders: 0, Files: 1							
2016-Mar-10 04:31 PM 230.4	09 MB 💽 📑 SnapSer	ver_BackupExec15_R	MAL_NEOsT24_	LTO7SAS.m	<u>ov</u>		

### **SnapSync Agent for Mac License**

The SnapServer Administrator is responsible to license the SnapSync Agent for Mac. Assuming the SnapServer is already licensed for SnapSync, the following steps are used to license the SnapSync Agent for Mac.

1. The Administrator clicks the **Settings icon** to access the **Licenses** option.



**2.** Just like sharing a security key for folder access, the Administrator shares the **license key** in the same manner using email or copy options to send to the Mac user.

Licenses (Business		×
Subscription: Expiration Date: Apr Owner: root License ID: o-9IZQEL	29 2016 5:00 PM =eN8	
Apply New License	Remove License	
Usage: 1 of 5 seats used		
Share license:		
User		c
root - You		

**3.** The Mac user can either click the **email link** or navigate to **Licenses** option in SnapSync.

□ SnapSync   W10BOBSS32 × +		- 🗆 X
$\leftarrow$ $\rightarrow$ $\circlearrowright$   127.0.0.1:88	88/gui	
🗋 Add Folder 🗸 🗸		ଦ ତ 🗅 🗢
Name 🔺 Status	Peers online	Pause syncing
Accounting	1 of 1	🔎 Manual connection
HNBT	2 of 5	My devices
Misc	5 of 7	🌣 Preferences
Secure	1 of 1	Licenses
Videos	3 of 3	Upgrade to Pro

4. When the dialog window appears, click Apply License.



**5.** When the Manual connection dialog window appears, paste the previously copied **license key**, and click **Next**.

Use this field to folders, licenses	enter a key or link generated by another device. T , and linking devices.	'his works f	or
WVhSeklqb2dO	WDE5TENBaVpYaHdJam9nTVRRMk1UazNORFF3TU	gwPSJ9 ×	Next

**6.** When the following dialog window appears, click **Apply New License**. The Mac desktop is now licensed with SnapSync.

Welcome to SnapSync Pro!         You can access Pro functionality across all your devices by linking them with My Devices.         Subscription:         Expiration Date: Apr 29 2016 5:00 PM.         Owner: bob123         License ID: o-9IZQELeeN8         Apply New License         Usage:         3 of 5 seats used         Share license:         Email □ Copy         User       Q         bob123 - You         root	Licenses (Business)	×
Subscription: Expiration Date: Apr 29 2016 5:00 PM Owner: bob123 License ID: o-9IZQELeeN8 Apply New License Remove License Usage: 3 of 5 seats used Share license: Email C Copy User Q bob123 - You root	Welcome to SnapSync Pro! You can access Pro functionality across all your devices by linking them with <u>My Devices</u> .	
Expiration Date: Apr 29 2016 5:00 PM Owner: bob123 License ID: o-9IZQELeeN8 Apply New License Usage: 3 of 5 seats used Share license: E Email C Copy User Q bob123 - You root	Subscription:	
Owner: bob123 License ID: o-9IZQELeeN8 Apply New License Usage: 3 of 5 seats used Share license: Email C Copy User Q bob123 - You root	Expiration Date: Apr 29 2016 5:00 PM	
License ID: o-9IZQELeeN8          Apply New License         Usage:         3 of 5 seats used         Share license:         È Email © Copy         User         bob123 - You         root         root	Owner: bob123	
Apply New License Usage: 3 of 5 seats used Share license: Email Copy User Q bob123 - You root	License ID: o-9IZQELeeN8	
Usage: 3 of 5 seats used Share license: Email Copy User Q bob123 - You root	Apply New License Remove License	
3 of 5 seats used Share license: Email C Copy User Q bob123 - You root root	Usage:	
Share license: Email Copy User Q bob123 - You root	3 of 5 seats used	
Email Copy User Q bob123 - You root	Share license:	
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root	root	
1000	root	

### **SnapSync Considerations**

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

www.overlandstorage.com/getsnapsync

Additional information is available in the Overland Knowledge Base:

https://community.sphere3d.com/community/documentation/nas/snapserver

• 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 either 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 mobile devices. 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.