

Centrify Infrastructure Services

Centrify for Mac Quickstart Guide

October 2018 (release 18.11)

Centrify Corporation





Legal Notice

This document and the software described in this document are furnished under and are subject to the terms of a license agreement or a non-disclosure agreement. Except as expressly set forth in such license agreement or non-disclosure agreement, Centrify Corporation provides this document and the software described in this document “as is” without warranty of any kind, either express or implied, including, but not limited to, the implied warranties of merchantability or fitness for a particular purpose. Some states do not allow disclaimers of express or implied warranties in certain transactions; therefore, this statement may not apply to you.

This document and the software described in this document may not be lent, sold, or given away without the prior written permission of Centrify Corporation, except as otherwise permitted by law. Except as expressly set forth in such license agreement or non-disclosure agreement, no part of this document or the software described in this document may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, or otherwise, without the prior written consent of Centrify Corporation. Some companies, names, and data in this document are used for illustration purposes and may not represent real companies, individuals, or data.

This document could include technical inaccuracies or typographical errors. Changes are periodically made to the information herein. These changes may be incorporated in new editions of this document. Centrify Corporation may make improvements in or changes to the software described in this document at any time.

© **2004-2018 Centrify Corporation. All rights reserved.** Portions of Centrify software are derived from third party or open source software. Copyright and legal notices for these sources are listed separately in the Acknowledgements.txt file included with the software.

U.S. Government Restricted Rights: If the software and documentation are being acquired by or on behalf of the U.S. Government or by a U.S. Government prime contractor or subcontractor (at any tier), in accordance with 48 C.F.R. 227.7202-4 (for Department of Defense (DOD) acquisitions) and 48 C.F.R. 2.101 and 12.212 (for non-DOD acquisitions), the government’s rights in the software and documentation, including its rights to use, modify, reproduce, release, perform, display or disclose the software or documentation, will be subject in all respects to the commercial license rights and restrictions provided in the license agreement.

Centrify, DirectControl, DirectAuthorize, DirectAudit, DirectSecure, DirectControl Express, Centrify for Mobile, Centrify for SaaS, DirectManage, Centrify Express, DirectManage Express, Centrify Suite, Centrify User Suite, Centrify Identity Service, Centrify Privilege Service and Centrify Server Suite are registered trademarks of Centrify Corporation in the United States and other countries. Microsoft, Active Directory, Windows, and Windows Server are either registered trademarks or trademarks of Microsoft Corporation in the United States and other countries.

Centrify software is protected by U.S. Patents 7,591,005; 8,024,360; 8,321,523; 9,015,103; 9,112,846; 9,197,670; 9,442,962 and 9,378,391.

The names of any other companies and products mentioned in this document may be the trademarks or registered trademarks of their respective owners. Unless otherwise noted, all of the names used as examples of companies, organizations, domain names, people and events herein are fictitious. No association with any real company, organization, domain name, person, or event is intended or should be inferred.



Contents

Centrify for Mac Quick Start Guide	2
Set up the Windows environment	2
Configure Active Directory	3
Download and install Centrify for Mac	3
Enter license keys	4
Configure the agent and join a domain	6
Summary and next steps	8



Centrify for Mac Quick Start Guide

This Quick Start explains how to set up the Windows and Active Directory elements that you must have in place before installing Centrify Management Services for Mac (“Centrify for Mac”), and provides a brief summary of the steps for installing and getting started quickly with Centrify for Mac. For more information about any step, see the appropriate chapters in Centrify’s *Administrator’s Guide for Mac*.

Set up the Windows environment

Centrify for Mac enables you to connect Mac computers to a Windows Active Directory domain and manage them through Active Directory Users and Computers (ADUC) and Group Policy settings. To start, you need a domain-joined Windows computer with Microsoft.NET Framework 4.5.2 installed on which to run ADUC and Group Policy Management tools. You can use *one* of the following computers:

- A **Windows Server**, either Windows Server 2008 R2 or later. You must have administrator rights to this server, or if you don’t, a Windows administrator must enable ADUC and Group Policy Management tools for your use and must install the Centrify administration tools for you.
- A **Windows 7 computer**. Be certain to download and install the [Remote Server Administration Tools for Windows 7 \(RSAT\)](#), which includes the Group Policy Management and ADUC tools that you will need to use with Centrify for Mac.



Configure Active Directory

You must coordinate with your Active Directory administrator to set up a few items in Active Directory that you will need for Centrify for Mac.

Your Active Directory administrator must do the following for you:

- Create an organizational unit for your Mac computers and give you full control of it.

Give this OU a name that makes sense to you, such as 'Mac' or 'Centrify'. Later, when you begin using Centrify for Mac and join your Mac computers to an Active Directory domain, Centrify for Mac creates a computer object for each joined computer in this OU — but the OU must already exist for it to do so.

- Create a Group Policy object (GPO) and link it to the OU that the administrator just created for Mac computers.
- This GPO allows you to manage Mac computers through the set of group policies supplied by Centrify for Mac. The Active Directory administrator should delegate the following permissions to you for this GPO:

- 'Edit settings'
 - 'delete'
 - 'modify security'

- Provide you with two Active Directory DNS IP addresses for the domain controllers and the name of your domain.

You need to make sure that each of your Mac computers is configured with these DNS IP addresses — which should be automatic if the Active Directory environment is set up with a DHCP server.

You are now ready to download and install Centrify for Mac. Centrify for Mac does not require schema extensions or software on domain controllers.

Download and install Centrify for Mac

On your Windows computer, log in to the [Centrify Customer Support Portal](#), then click [Download Center](#) and scroll down to “Centrify Management Services for Mac”. Centrify Management Services for Mac allows you to manage Mac users in Active Directory, configure and apply Group Policy for Mac, run license usage reports, enter licenses for Mac computers, and more.



The full installer of Centrify Management Services is also available if you want all components. This document focuses on the Mac installer, which includes the following.

- Active Directory Users and Computers (ADUC) extension
- Group Policy Management Editor (GPME) extension
- Centrify Licensing Report
- License Licensing Service

To download and install Centrify Management Services for Mac

1. Find Centrify Management Services for Mac on the Customer Support Portal, then select either **Download ISO** or **Download ZIP**.
2. Extract the ISO or zip files to a folder on the Windows computer.
3. Install Microsoft .NET Framework 4.5.2 if it is not already installed. The necessary files are included in the Centrify Management Services for Mac download.
4. Quit any running Windows programs before continuing with the installation.
5. Double-click `setup.exe` to start the Centrify Management Services for Mac installation, then follow the prompts to complete the installation.
6. If the Licensing Service is already installed in the forest, you do not need to install it on this machine.
7. Once the installation is complete, note the message about using the Centrify Licensing Service Control Panel on the machine where the Licensing Service is installed to [Enter license keys](#), then click **Finish** to complete the wizard.

Enter license keys

License keys are added and removed on the machine where you installed the Centrify Licensing Service. This machine should be in the same forest as the machine running Centrify for Mac.



Creating the license container and entering keys requires the following permissions.

Trustee	Target object	Apply to	Permission
Delegated user	Parent container	This object and all descendant objects	Generic Read
			Create Container object
OWNER RIGHTS	Parent container	Descendant Container objects	Generic Read
			Create classStore object
			Modify permissions
		Descendant classStore objects	Generic Read
			Write description property
			Write displayName property

Modifying an existing License container object requires the following permissions.

Trustee	Target object	Apply To	Permission
Delegated user	Licenses container	This object only	Generic Read
			Create classStore object
			Modify permissions
		This object and all child objects	Generic Read
			Write description property
			Write displayName property

Before joining Mac computers to the domain, use License Manager to enter your license keys. For details about licensing, including how to add license key



keys after deployment, check license usage and compliance, and how license counts are determined, see [Managing licenses with the Licensing Service](#).

1. Select **Start > Centrifly Infrastructure Services *release* > Centrifly Licensing Service Control Panel** to open License Manager.

If there are no existing license containers, continue to Step 2. Otherwise, you can immediately add or remove licenses (Step 4).

2. Specify the domain and user credentials to be used in the wizard, then click **Next**.

A root domain administrator or enterprise administrator account is recommended.

3. Click **Next** to accept the default location for the license container, which is *domain_name/Program Data/Centrifly/Licenses*.

4. Enter your license key(s), click the **Add** button, then click **Next**.

You can also remove licenses.

5. Review and confirm the options you selected, then click **Next**.

6. Click **Finish** to complete the wizard.

Configure the agent and join a domain

The next step is to configure the Centrifly agent on a Mac computer and join that computer to the Windows domain. Before you do so, log in to the Mac computer and verify that the DNS settings are configured correctly:

1. Open **System Preferences > Network** and select the interface that is configured for your environment, for example, **Ethernet**.
2. Click the **Advanced** button.
3. Click the **DNS** tab and verify that the IP addresses in **DNS Servers** are those of the Active Directory domain controllers that the Windows administrator identified for you. Note that this should be automatic if the environment is set up with a DHCP server.

Deployment modes

Centrifly for Mac supports two deployment modes:



- Zone mode, which leverages Centrify's unique zones technology for centrally managed access control and administrative separation of duties.
- Auto Zone mode, which enables integration into Active Directory more like a Windows computer in which any Active Directory users can log in without any Mac-specific account information associated with their Active Directory accounts. You can still manage restrictions on users with group policies.

Deploying to Auto Zone

The following instructions describe how to join the Mac computer to Auto Zone since it is the simplest and fastest way to evaluate Centrify for Mac. Be certain that you have root-like access on the Mac computer (through a local administrator account), so that you can join the Mac computer to the domain.

To join a domain, you must be a domain admin or a domain user with permission to create computer objects. If necessary, your domain administrator can use the Delegation Wizard to delegate permission to create computer objects. Refer to <https://blogs.technet.microsoft.com/dubaisec/2016/02/01/who-can-add-workstation-to-the-domain/> for more information about joining workstations to a domain.

To install the agent and join the Mac to a domain

1. Open a browser on your Mac, log in to the [Centrify Customer Support Portal](#), click [Download Center](#), then find and download the version of the agent that is appropriate for your Mac version.
You can select a DMG or TGZ version; for example, `centrifydc-version-macversion.dmg`.
2. If necessary, unzip the archive file, then open the DMG file: `centrifydc-version-macversion.dmg`.
3. Double-click **ADCheck** and enter your Active Directory domain name to specify the domain to analyze.
4. Click **Active Directory Check** to begin analysis of your network and



Active Directory environment.

If all tests pass, go to the next step; otherwise review the tests that failed and fix any that you can. You can ignore warning messages.

5. Double-click the `centrifyDC-version.pkg` to launch the installer; follow the prompts to complete the installation of the agent.
6. When the installation is completed, select **Launch Centrify Join Assistant** and click **Continue** to launch the Centrify Join Assistant.

Note Make sure that the Apple Active Directory plug-in is disabled prior to joining Active Directory in the next step.

7. Under **Licensed Mode**, select **Auto** to specify that the computer join Active Directory through Auto Zone in which a Centrify zone is not required, thus allowing any Active Directory user to log in to the computer without any zones configured within Active Directory.
8. In **Computer Name**, the Join Assistant automatically fills in your computer name. You can enter a different name if you want to. You do not need to set any advanced options.
9. Click **Join** to join the domain.

Your Mac computer is now joined to an Active Directory domain and you can manage it through Active Directory tools, much as you would a Windows computer.

For example, you should now be able to log in to the Mac computer with an Active Directory account:

1. Log out of the administrator's account on the Mac computer.
2. If you have the login screen set to "List of Users," click **Other** to get the user name and password boxes.
3. Enter credentials for an Active Directory user account — for example, a test account — and log in.

Summary and next steps

At this point, you have Centrify for Mac running in a Windows domain and have connected one or more Mac computers to this domain.



From here, if you want to explore further, you can take these further actions, using information available on the Centrify website:

- Set group policies for Mac computers and users; see the [Quick Start Group Policy Demonstration](#) video.
- Create zones for centralized access control and separation of duties; see the [Zone vs Auto Zone Webinar](#).
- Import existing local users and groups into Active Directory; see these two white papers:
 - [Understanding Account Migration on Centrify for Mac OS X](#)
 - [A bit more on knowing when Account Migration is needed, and when it is NOT needed](#)
- Set up Mac computers for smart card login to Active Directory. To read an introduction and watch a video about this, go to the [Smart Card for Mac Part 1 web page](#) and launch the video.

To go directly to the video, click this link: [Smart Card for Mac Part 1](#).

You can also go to [Eval Center for Mac OS X](#) to see additional videos, access customer forums, and search Knowledge Base articles.

Be sure to read the *Administrator's Guide for Mac* for detailed information about how to use Centrify for Mac.