

Disable Unwanted Secure Client Modules for macOS and Windows

Contents

[Introduction](#)

[Overview](#)

[Manual Installation](#)

[Windows Unattended Installation](#)

[Mac OSX Unattended Installation](#)

[Overview](#)

[Step 1. Convert the .dmg Package](#)

[Step 2. Run the Converted File](#)

[Step 3. Generate the install_choices.xml file](#)

[Step 4. Extract the Install Options](#)

[Step 5. Make changes to the ACTransforms.xml file to hide the VPN functionality](#)

[Step 6. Install the Umbrella profile](#)

[Step 7. Convert the package back to read only](#)

[Step 8. Install Secure Client supplying the install_choices.xml](#)

Introduction

This document describes the installation process for Cisco Secure Client and how to choose from the optional security modules.

Overview

Secure Client contains a number of optional security modules including Umbrella. Note that at minimum both the Core VPN module* and Umbrella module must be installed.

**VPN functionality can be optionally disabled during installation but the module must still be installed.*

Manual Installation

During manual installation the user can simply select the desired modules* during the installation wizard.



Select the Cisco Secure Client 5.0.01242 modules you wish to install:

- ☐ Core & AnyConnect VPN
- ☐ Start Before Login
- ☐ Network Access Manager
- ☐ Secure Firewall Posture
- ☐ Network Visibility Module
- ☒ Umbrella
- ☐ ISE Posture
- ☐ Select All
- ☒ Diagnostic And Reporting Tool
- ☐ Lock Down Component Services

Install Selected

27186566210836

** Umbrella must be selected. If "Core & AnyConnect VPN" is disabled then VPN functionality is disabled but the Core VPN module itself is still installed because it provides underlying drivers for Umbrella.*

Windows Unattended Installation

On Windows the pre-deployment package contains different MSI files for each module. Therefore, simply install the desired MSI files (Core + Umbrella).

Details in the article [Cisco Secure Client \(Windows\) - Automated deployment tutorial](#)

Mac OSX Unattended Installation

When run in an unattended way the pre-deployment package for Mac OSX installs all Secure Client

modules. When deployed via automation tools it is likely that other Secure Client modules are installed which could be unwanted. In this scenario, the pre-deployment package must be extracted and customised on MAC endpoints so as to only install the desired modules.

Overview

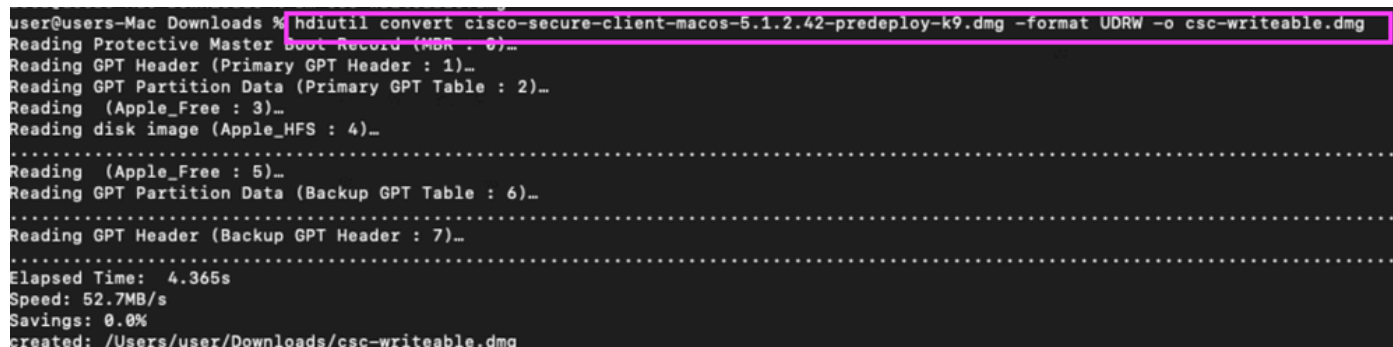
The instructions comprise of these main steps:

1. Create a writeable .dmg package.
2. Create an **install_choices.xml** to use during installation to control which modules are installed.
3. Add a custom **ACTransforms.xml** file to the package which disables the VPN functionality.
4. Add your Umbrella profile (**OrgInfo.json**) to the package which allows the client to register.
5. Convert the package back to a read-only DMG.
6. Install the package via CLI, supplying the custom install_choices.xml file.

Step 1. Convert the .dmg Package

Convert the .dmg package from a read-only state to read-write, with the use of Disk Utility or hdiutil as shown in the image.

```
hdiutil convert cisco-secure-client-macos-<version>-predeploy-k9.dmg -format UDRW -o csc-writeable.dmg
```

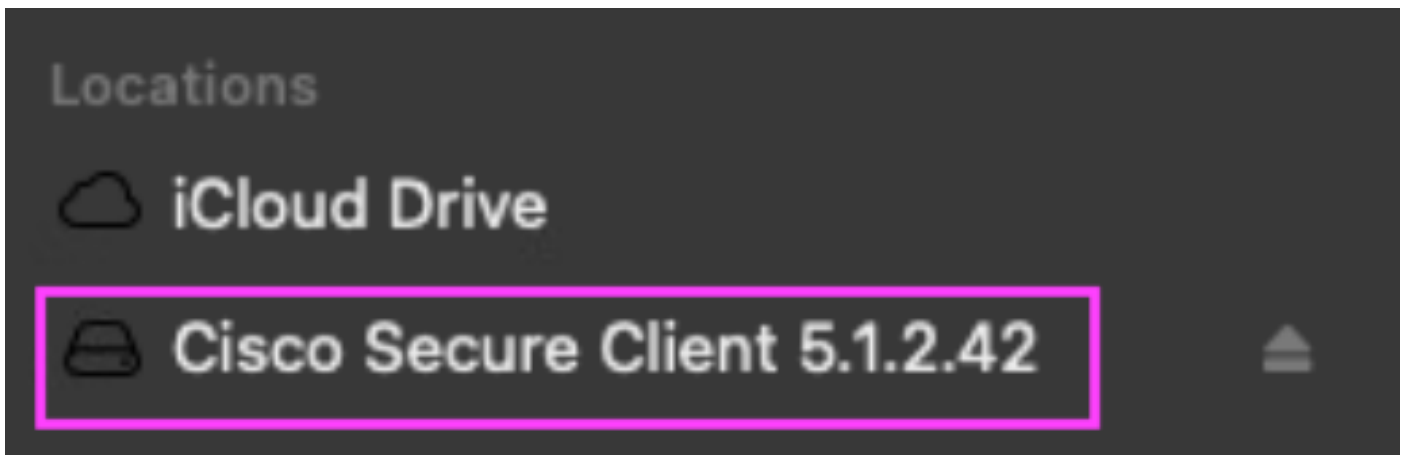
A terminal window screenshot showing the execution of the command `hdiutil convert cisco-secure-client-macos-5.1.2.42-predeploy-k9.dmg -format UDRW -o csc-writeable.dmg`. The command is highlighted with a pink box. The output shows the progress of reading the disk image, including the Master Boot Record (MBR), GPT Header, and Partition Data. The process completes with an elapsed time of 4.365s and a speed of 52.7MB/s.

```
user@users-Mac Downloads % hdiutil convert cisco-secure-client-macos-5.1.2.42-predeploy-k9.dmg -format UDRW -o csc-writeable.dmg
Reading Protective Master Boot Record (MBR : 0)...
Reading GPT Header (Primary GPT Header : 1)...
Reading GPT Partition Data (Primary GPT Table : 2)...
Reading (Apple_Free : 3)...
Reading disk image (Apple_HFS : 4)...
.....
Reading (Apple_Free : 5)...
Reading GPT Partition Data (Backup GPT Table : 6)...
.....
Reading GPT Header (Backup GPT Header : 7)...
.....
Elapsed Time: 4.365s
Speed: 52.7MB/s
Savings: 0.0%
created: /Users/user/Downloads/csc-writeable.dmg
```

27106629330836

Step 2. Run the Converted File

Run the converted file **csc-writeable.dmg** in order to mount the DMG image. This creates a volume with the writeable contents of the DMG.



27106629341972

Step 3. Generate the `install_choices.xml` file

The **`install_choices.xml`** file configures which modules are installed and can be supplied as an installation argument for CLI and scripted installations. The attached **`install_choices.xml`** configures only the required modules (Umbrella + VPN).

You can optionally generate and configure your own `install_choices.xml` file (instead of using the one attached) by using this command:

```
installer -pkg /volumes/Cisco\ Secure\ Client\ <version>/Cisco\ Secure\ Client.pkg -showChoiceChangesXML
```

```
user@users-Mac Downloads % installer -pkg /volumes/Cisco\ Secure\ Client\ 5.1.2.42/Cisco\ Secure\ Client.pkg -showChoiceChangesXML > ~/Downloads/install_choices.xml
```

27106629347732

Step 4. Extract the Install Options

The extracted **`install_choices.xml`** file can be changed to enable the desired module. This example enables the required Umbrella+VPN modules.

```

<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE plist PUBLIC "-//Apple//DTD PLIST 1.0//EN" "http://www.apple.com/DTDs/PropertyList-1.0.dtd">
<plist version="1.0">
<array>

  <dict>
    <key>attributeSetting</key>
    <integer>1</integer>
    <key>choiceAttribute</key>
    <string>selected</string>
    <key>choiceIdentifier</key>
    <string>choice_vpn</string>
  </dict>

  <dict>
    <key>attributeSetting</key>
    <integer>0</integer>
    <key>choiceAttribute</key>
    <string>selected</string>
    <key>choiceIdentifier</key>
    <string>choice_websecurity</string>
  </dict>

  <dict>
    <key>attributeSetting</key>
    <integer>0</integer>
    <key>choiceAttribute</key>
    <string>selected</string>
    <key>choiceIdentifier</key>
    <string>choice_fireamp</string>
  </dict>

  <dict>
    <key>attributeSetting</key>
    <integer>1</integer>
    <key>choiceAttribute</key>
    <string>selected</string>
    <key>choiceIdentifier</key>
    <string>choice_dart</string>
  </dict>

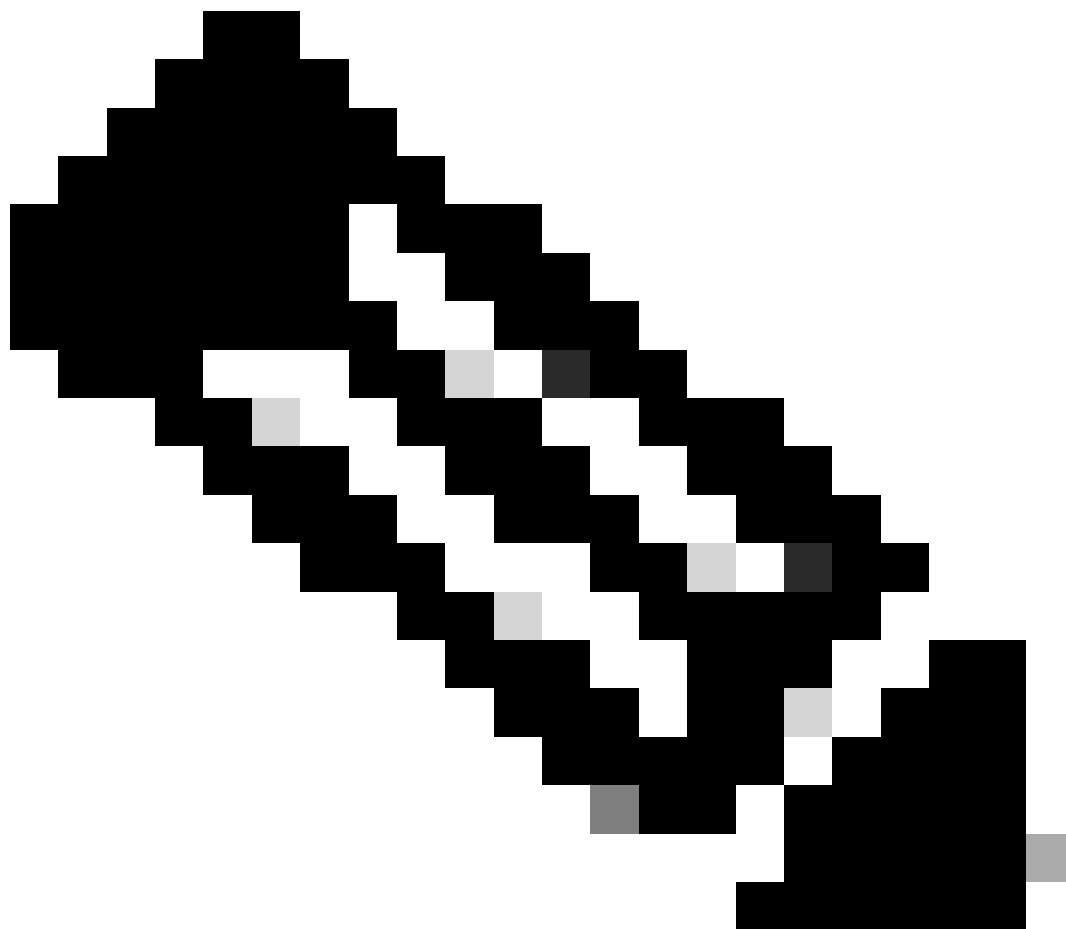
  <dict>
    <key>attributeSetting</key>
    <integer>0</integer>
    <key>choiceAttribute</key>
    <string>selected</string>
    <key>choiceIdentifier</key>
    <string>choice_posture</string>
  </dict>

  <dict>
    <key>attributeSetting</key>
    <integer>0</integer>
    <key>choiceAttribute</key>
    <string>selected</string>
    <key>choiceIdentifier</key>
    <string>choice_iseposture</string>
  </dict>

  <dict>
    <key>attributeSetting</key>
    <integer>0</integer>
    <key>choiceAttribute</key>
    <string>selected</string>
    <key>choiceIdentifier</key>
    <string>choice_nvme</string>
  </dict>

  <dict>
    <key>attributeSetting</key>
    <integer>1</integer>
    <key>choiceAttribute</key>
    <string>selected</string>
    <key>choiceIdentifier</key>
    <string>choice_umbrella</string>
  </dict>
</array>
</plist>

```



Note: The xml file installs the VPN (which are hidden later), Umbrella Roaming Security and DART modules by setting the integer value to 1 and setting the rest to 0.

Step 5. Make changes to the ACTransforms.xml file to hide the VPN functionality

To hide the VPN module edit the ACTransforms.xml:

/Volumes/Cisco\ Secure\ Client\ <version>/Profiles/ACTransforms.xml

Under the profiles folder, ACTransforms.xml file needs to have the line **<disablevpn>true</disablevpn>** *uncommented*.

Contents of ACTransforms.xml file:

```
<!-- Optional AnyConnect installer settings are provided here. Uncomment the setting(s) to perform optional
<Transforms>
<!-- <DisableVPN>true</DisableVPN> -->
<!-- <DisableCustomerExperienceFeedback>true</DisableCustomerExperienceFeedback> -->
</Transforms>
```

Step 6. Install the Umbrella profile

Download your Umbrella module profile (OrgInfo.json) from the Umbrella Dashboard (*Deployments > Roaming Computers > Downloads*). The profile must be provisioned for the client to register with your Umbrella Dashboard and function. Including it in the installation package prevents you having to deploy it as a post install task.

Save the profile to /Volumes/Cisco\ Secure\ Client\ <version>/Profiles/umbrella/OrgInfo.json

```
user@users-Mac Downloads % cp OrgInfo.json /Volumes/Cisco\ Secure\ Client\ 5.1.2.42/Profiles/umbrella
```

27106774340628

Step 7. Convert the package back to read only

Eject the DMG volume and use hdiutil to convert it to 'read only'. The read only package can then be distributed to end users.

```
diskutil eject Cisco\ Secure\ Client\ <version>
hdiutil convert csc-writeable.dmg -format UDRO -o csc-readable.dmg
```

```
user@users-Mac Downloads % hdiutil convert csc-writeable.dmg -format UDRO -o csc-readable.dmg
Preparing imaging engine...
Reading Protective Master Boot Record (MBR : 0)...
(CRC32 $DC45292C: Protective Master Boot Record (MBR : 0))
Reading GPT Header (Primary GPT Header : 1)...
(CRC32 $6AEDD86E: GPT Header (Primary GPT Header : 1))
Reading GPT Partition Data (Primary GPT Table : 2)...
(CRC32 $4A0A1F17: GPT Partition Data (Primary GPT Table : 2))
Reading (Apple_Free : 3)...
(CRC32 $00000000: (Apple_Free : 3))
Reading disk image (Apple_HFS : 4)...
.....
(CRC32 $B47BA102: disk image (Apple_HFS : 4))
Reading (Apple_Free : 5)...
.....
(CRC32 $00000000: (Apple_Free : 5))
Reading GPT Partition Data (Backup GPT Table : 6)...
.....
(CRC32 $4A0A1F17: GPT Partition Data (Backup GPT Table : 6))
Reading GPT Header (Backup GPT Header : 7)...
.....
(CRC32 $9449E069: GPT Header (Backup GPT Header : 7))
Adding resources...
.....
Elapsed Time: 7.251s
File size: 142740102 bytes, Checksum: CRC32 $5A980DA8
Sectors processed: 471040, 278772 copied
Speed: 18.8MB/s
Savings: 40.8%
created: /Users/user/Downloads/csc-readable.dmg
```

27106613679252

Step 8. Install Secure Client supplying the install_choices.xml

The DMG file can be executed as normal (interactively) or pushed out via scripted/automated installation task.

1. In a script, attach the DMG package.
2. Use installer to install Cisco Secure Client.pkg. It is important to also supply our **install_choices.xml** within the -applyChoiceChangesXML argument. This controls which modules are installed.

hdiutil attach ~/Downloads/csc-readable.dmg

sudo installer -pkg Cisco\ Secure\ Client\ <version>/Cisco\ Secure\ Client.pkg -applyChoiceChangesXML ~/Downloads/ins

```
user@users-Mac Downloads % hdiutil convert csc-writeable.dmg -format UDRO -o csc-readable.dmg
Preparing imaging engine...
Reading Protective Master Boot Record (MBR : 0)...
(CRC32 $DC45292C: Protective Master Boot Record (MBR : 0))
Reading GPT Header (Primary GPT Header : 1)...
(CRC32 $6AEDD86E: GPT Header (Primary GPT Header : 1))
Reading GPT Partition Data (Primary GPT Table : 2)...
(CRC32 $4A0A1F17: GPT Partition Data (Primary GPT Table : 2))
Reading (Apple_Free : 3)...
(CRC32 $00000000: (Apple_Free : 3))
Reading disk image (Apple_HFS : 4)...
(CRC32 $B47BA102: disk image (Apple_HFS : 4))
Reading (Apple_Free : 5)...
(CRC32 $00000000: (Apple_Free : 5))
Reading GPT Partition Data (Backup GPT Table : 6)...
(CRC32 $4A0A1F17: GPT Partition Data (Backup GPT Table : 6))
Reading GPT Header (Backup GPT Header : 7)...
(CRC32 $9449E069: GPT Header (Backup GPT Header : 7))
Adding resources...
Elapsed Time: 7.251s
File size: 142740102 bytes, Checksum: CRC32 $5A980DA8
Sectors processed: 471040, 278772 copied
Speed: 18.8MB/s
Savings: 40.8%
created: /Users/user/Downloads/csc-readable.dmg
user@users-Mac Downloads % hdiutil attach csc-readable.dmg
Checksumming Protective Master Boot Record (MBR : 0)...
Protective Master Boot Record (MBR :: verified CRC32 $DC45292C
Checksumming GPT Header (Primary GPT Header : 1)...
GPT Header (Primary GPT Header : 1): verified CRC32 $6AEDD86E
Checksumming GPT Partition Data (Primary GPT Table : 2)...
GPT Partition Data (Primary GPT Table: verified CRC32 $4A0A1F17
Checksumming (Apple_Free : 3)...
(Apple_Free : 3): verified CRC32 $00000000
Checksumming disk image (Apple_HFS : 4)...
disk image (Apple_HFS : 4): verified CRC32 $B47BA102
Checksumming (Apple_Free : 5)...
(Apple_Free : 5): verified CRC32 $00000000
Checksumming GPT Partition Data (Backup GPT Table : 4)...
GPT Partition Data (Backup GPT Table: verified CRC32 $4A0A1F17
Checksumming GPT Header (Backup GPT Header : 7)...
GPT Header (Backup GPT Header : 7): verified CRC32 $9449E069
verified CRC32 $5A980DA8
/dev/disk2 GUID_partition_scheme
/dev/disk2s1 Apple_HFS /Volumes/Cisco Secure Client 5.1.2.42
user@users-Mac Downloads % installer -pkg /volumes/Cisco\ Secure\ Client\ 5.1.2.42/Cisco\ Secure\ Client.pkg -showChoiceChangesXML > ~/Downloads/install_choices.xml
```

27106613687572