

Lightspeed Smart Agent Deployment (macOS 2023)

Description

Need to deploy Lightspeed Smart Agent along with your configurations. FileWave has got you covered in this step-by-step guide to creating the required Filesets to deploy to your macOS devices. Be sure that you have access to your administrative account on relay.school.com.

▲ If you are using the new method with Lightspeed Certificate Manager please review: [Lightspeed Smart Agent Deployment \(macOS v2.3.1+ using Certificate Manager\)](#)

Ingredients

- FileWave Central
- Lightspeed Smart Agent DMG installer
- Lightspeed Smart Agent PKG installer
- Lightspeed mac deploy script
- Lightspeed install script
- Lightspeed certificate

▲ Web Content Filter - In creating a Web Content Filter within FileWave Central it changes the UDID and is unsuccessful in deployment. The issue can be resolved by re-creating the Web Content Filter in FileWave Anywhere as a workaround. The issue should be resolved in the next release. See [Known Issues](#)

Download Lightspeed Relay Filter Agent

1. Login to your Lightspeed Filter account at relay.school.com
 1. Navigate to Settings > Software
 2. Choose Lightspeed Filter
 3. Select the Mac tab
 4. Select the version of the Relay Filter Agent by clicking on the download icon
 5. Place the downloaded SmartAgent.dmg into your Downloads Folder

Download the macOS deploy script

1. Download the mac_deploy.sh script, found here: [mac_deploy.sh](#)
2. Place the downloaded mac_deploy.sh script into your Downloads
3. Unzip the downloaded mac_deploy.sh script
4. Open Terminal to run the script

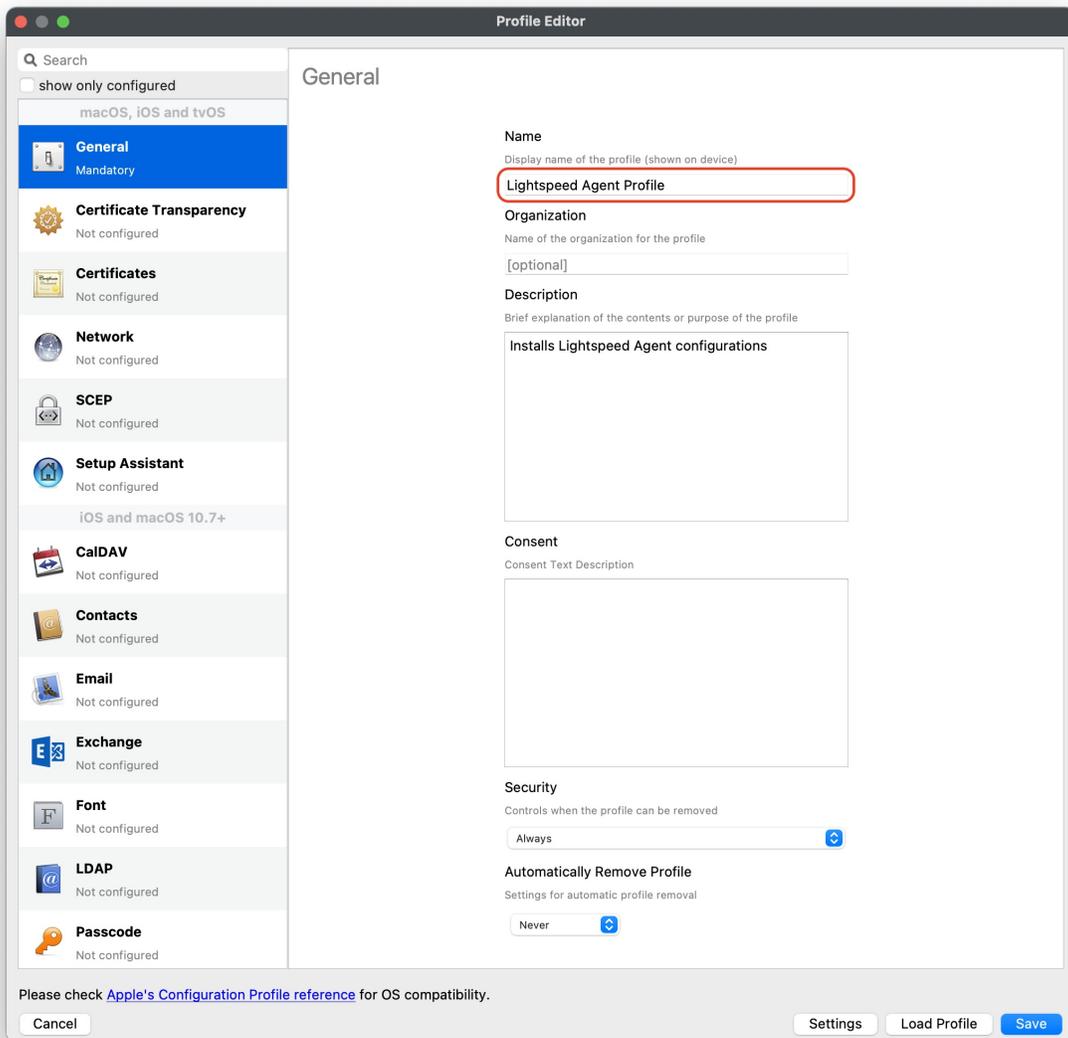
```
# enter as root
$ sudo -s
# navigate to your Downloads folder
$ cd ~/Downloads
# run the script to create three files on the Desktop
$ ./mac_deploy.sh
```

5. Once the script has been executed, it has created three files on your Desktop; ca.cer, deployment.zip and SmartAgent.pkg

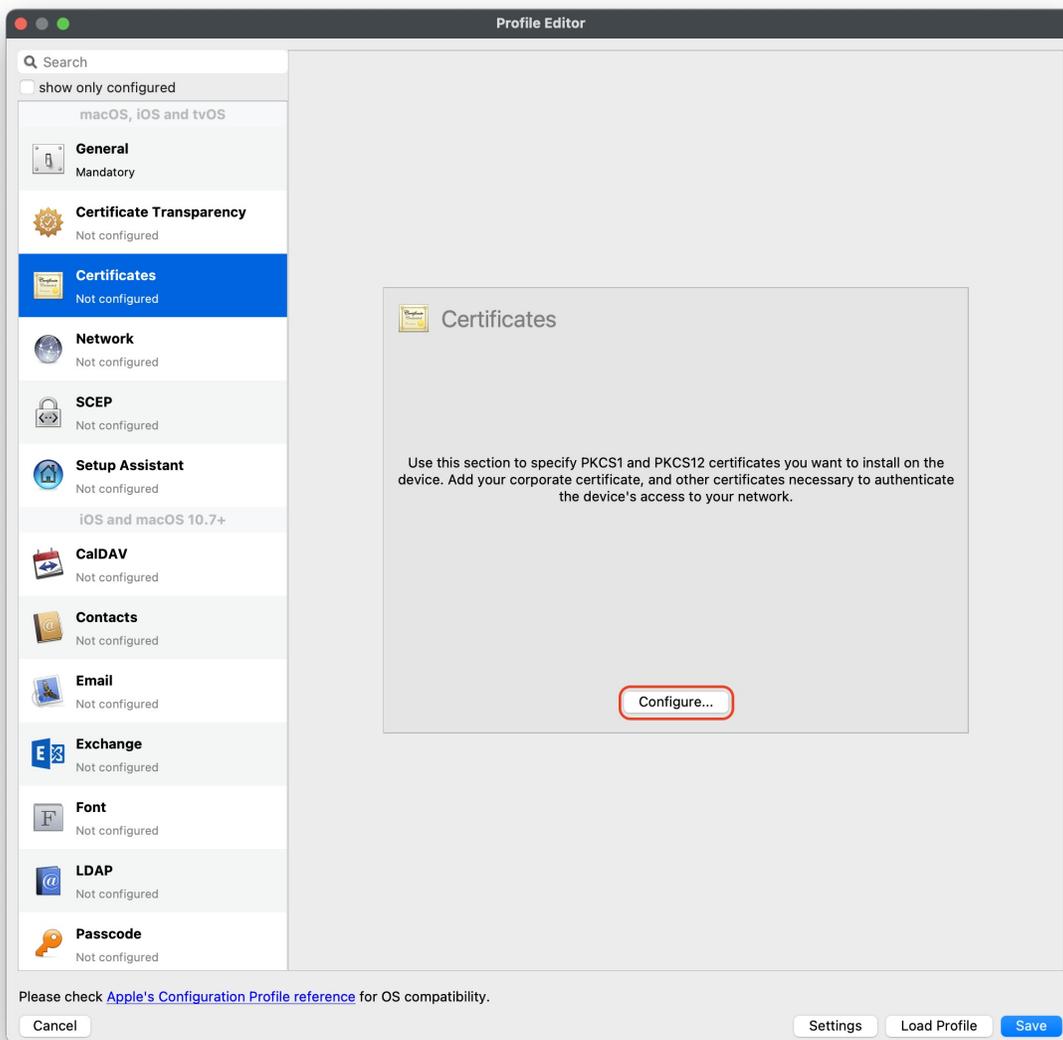
Note: Be sure both SmartAgent.dmg and mac_deploy.sh are in the same directory, i.e. Downloads folder for the mac_deploy script to successfully create the deployment files and certificate.

Create the Configuration Profile

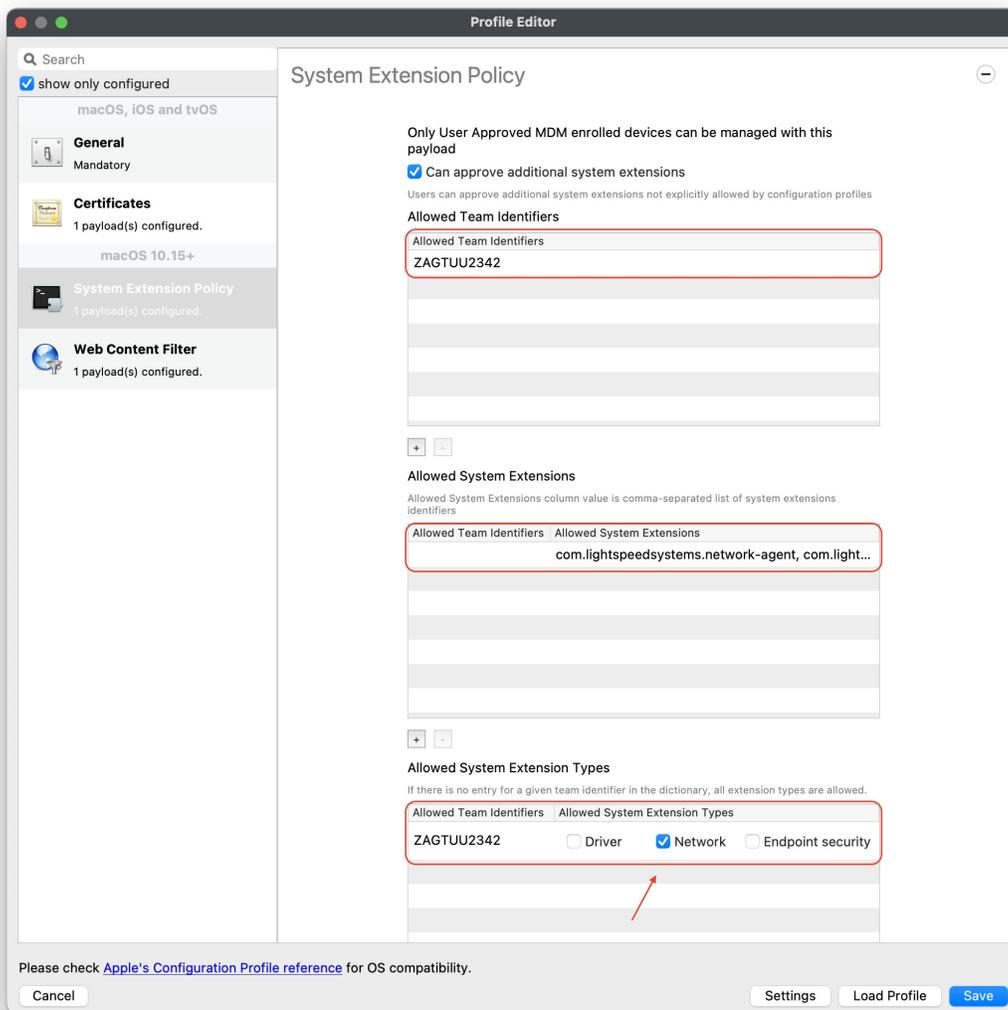
1. Open FileWave Central or FileWave Anywhere
2. Navigate to Filesets > Select New Desktop Fileset > Click on Profile
3. Enter the name of the Profile: General > Name: Lightspeed Agent Profile



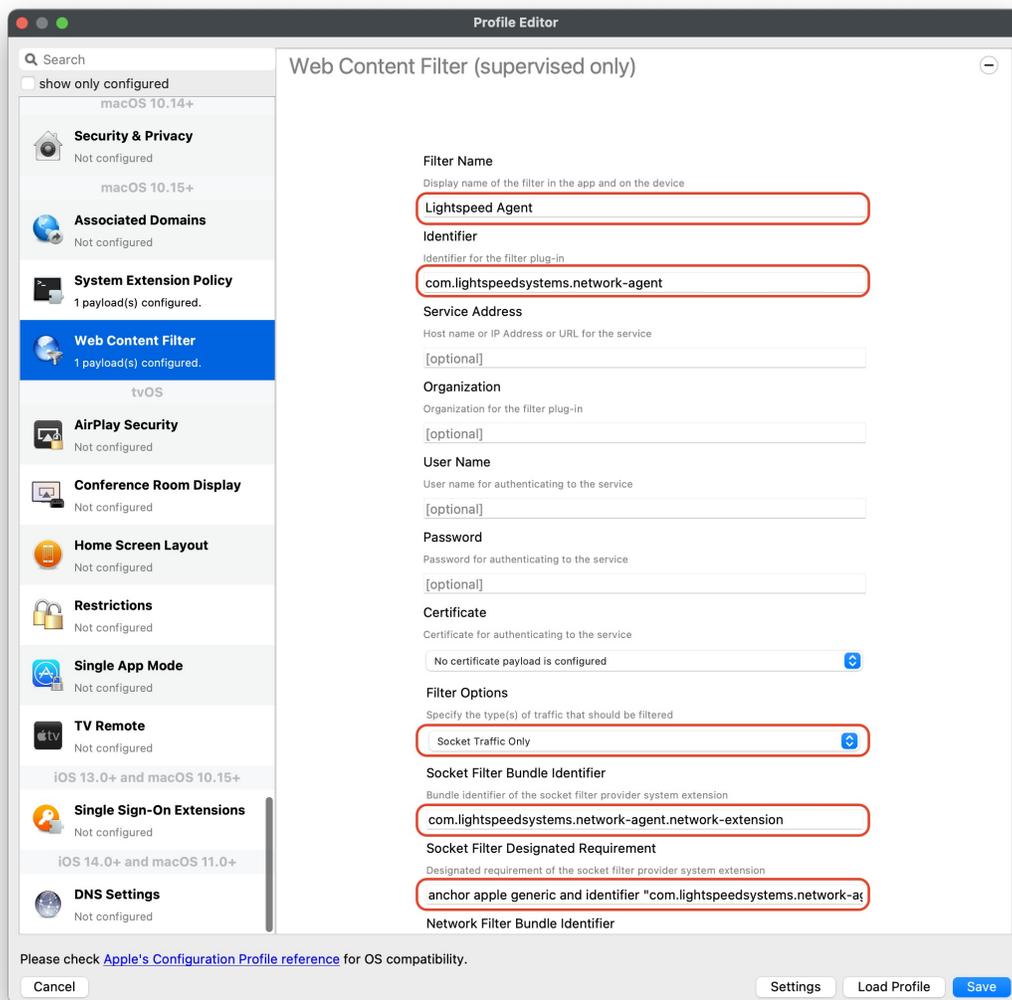
4. Select Certificates payload to add your ca.cer certificate



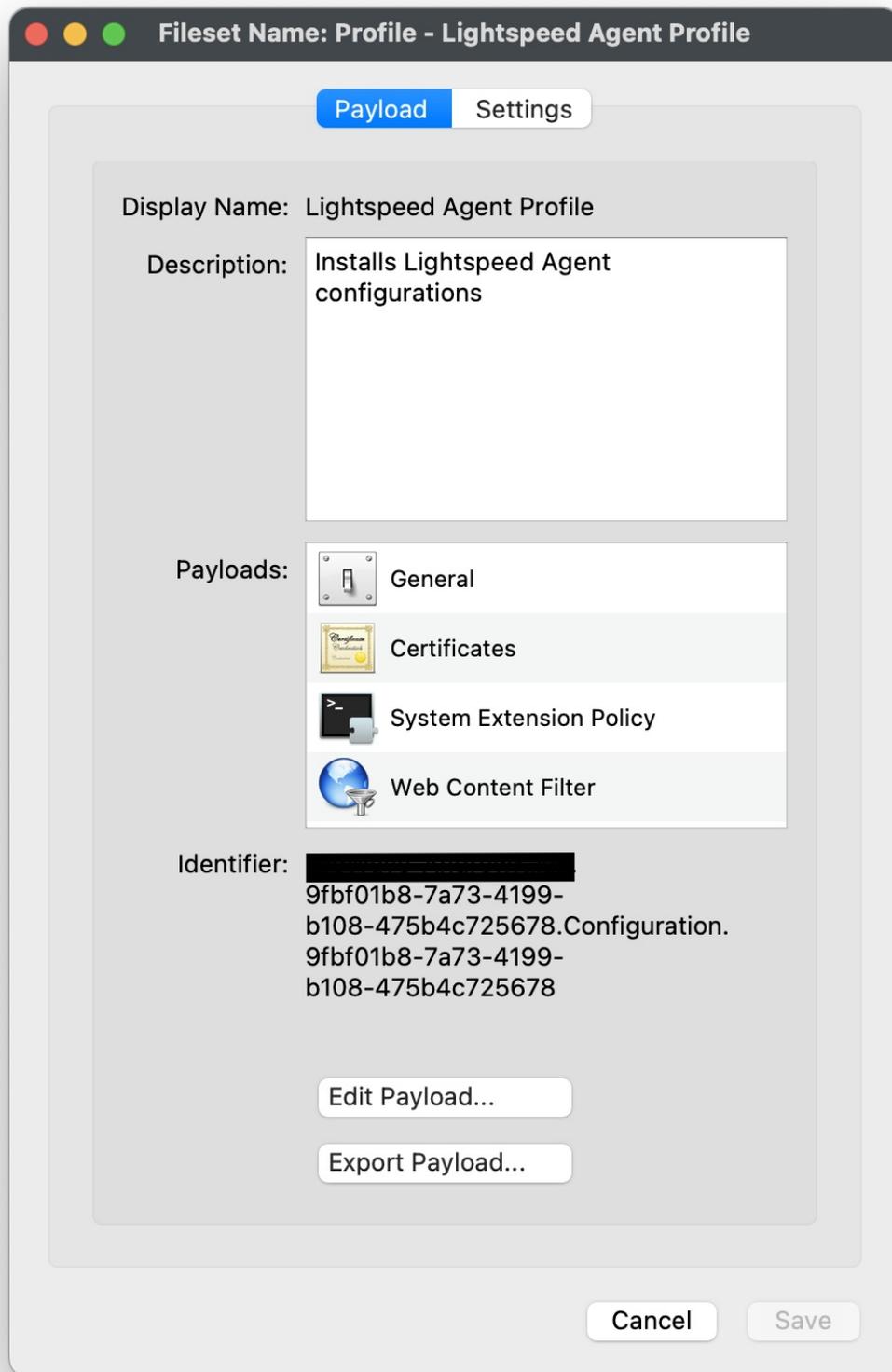
5. Navigate to System Extension Policy payload, add and enter in the following:
 1. Click + to add Allowed Team Identifiers:
Team Identifier: ZAGTUU2342
 2. Click + to add Allowed System Extensions:
1st Allowed System Extensions: com.lightspeedsystems.network-agent
Enter add 2nd Allowed System Extensions with comma after 1st Allowed System Extensions
2nd Allowed System Extensions: com.lightspeedsystems.network-agent.network-extension
 3. Click + to add Allowed System Extension Types and check box for Network:
Team Identifier: ZAGTUU2342



6. Navigate to Web Content Filter and enter in the following:
 1. Filter Name: Lightspeed Agent
 2. Identifier: com.lightspeedsystems.network-agent
 3. Filter Options: Socket Traffic Only
 4. Socket Filter Bundle Identifier: com.lightspeedsystems.network-agent.network-extension
 5. Socket Filter Designated Requirement: anchor apple generic and identifier "com.lightspeedsystems.network-agent.network-extension" and (certificate leaf[field.1.2.840.113635.100.6.1.9] /* exists / or certificate 1[field.1.2.840.113635.100.6.2.6] / exists / and certificate leaf[field.1.2.840.113635.100.6.1.13] / exists */ and certificate leaf[subject.OU] = ZAGTUU2342)



7. The completed configuration profile will have three payloads; these include: Certificates, System Extension Policy and Web Content Filter



Editing the Install script

1. Download and unzip the Install script, found here: [install_lightspeed.sh](#)
2. Open the install.sh in TextEdit or compatible Text Editor, for example Sublime Text
3. Enter in your URL to the hosted file in line 3 of the Install Script; between the quotes, where it says, "Your FQHN HERE to the deployment.zip"

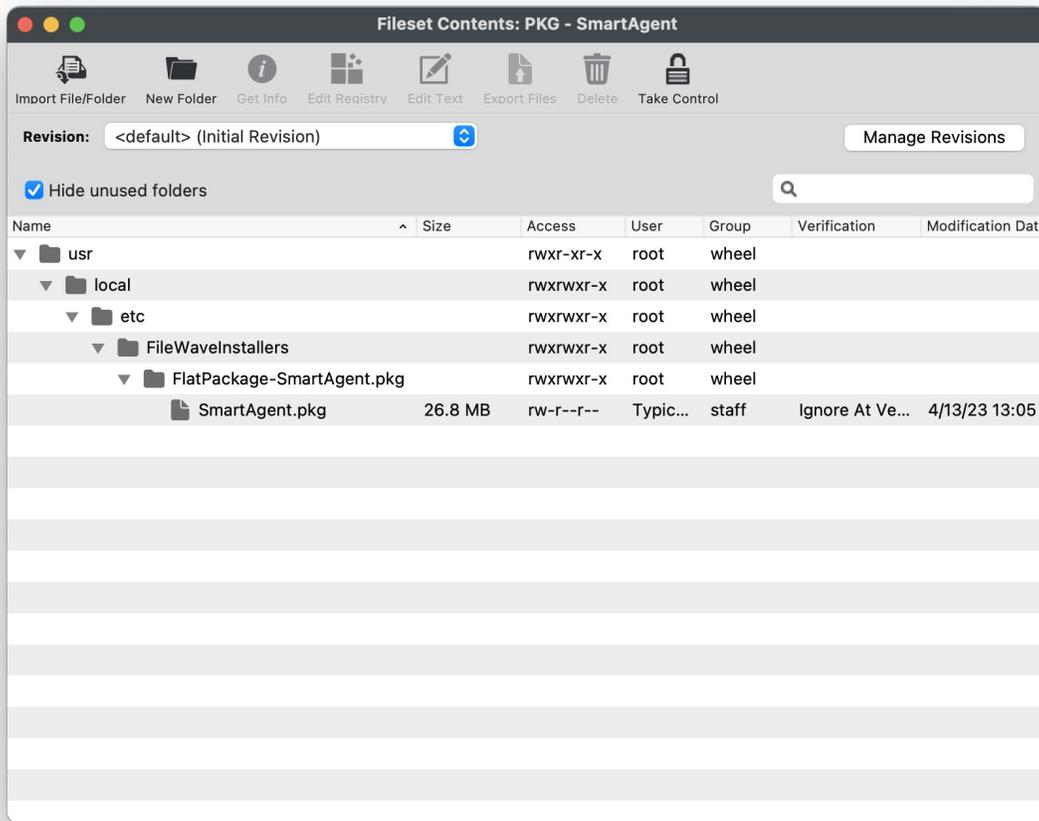
```
install.sh
1 #!/bin/bash
2 #
3 FQHN="Your FQHN HERE to the deployment.zip"
4 #
5 # Do not modify anything below this line
6 #
7 #
8 #
9 # if config file is present, we don't need to continue
10 if [ -e /usr/local/etc/ca_key.pem ]
11 then
12     echo "Already installed" >> /tmp/output.txt
13     exit 0
14 fi
15 #
16 # Determine the architecture of the macOS device
17 processorBrand=$(/usr/sbin/sysctl -n machdep.cpu.brand_string)
18 if [ "${processorBrand}" = *"Apple*" ] && /usr/bin/pgrep oahd >/dev/null 2>&1;
19 then
20     echo "Apple Processor is present, Rosetta folder exists and the service is running." >> /tmp/output.txt
21 elif [ "${processorBrand}" = *"Apple*" ];
22 then
23     echo "Rosetta Folder does not exist or Rosetta service is not running. Installing Rosetta.." >> /tmp/output.txt
24     /usr/sbin/softwareupdate --install-rosetta --agree-to-license
25 else
26     echo "Apple Processor is not present. Rosetta not required." >> /tmp/output.txt
27 fi
28 #
29 cd /tmp
30 # Curl the deployment.zip.
31 # Replace "Your FQHN HERE to the deployment.zip" with your shared URL that the devices will be able to reach.
32 curl -L -o deployment.zip "$FQHN"
33 #
34 # Unzip files
35 mkdir /tmp/MacSA
36 unzip -d /tmp/MacSA deployment.zip
37 #
38 # Change directories to the unzipped file.
39 cd /tmp/MacSA
40 #
41 # copy files to /usr/local/etc.
42 mkdir /usr/local/etc
43 mkdir /usr/local/etc/lfilter
44 cp * /usr/local/etc
45 cp lsconfig.json /usr/local/etc/lfilter
46 # del files
47 rm /tmp/deployment.zip
48 rm -rf /tmp/MacSA
49 sleep 5
50 # restarting filtering services
51 sudo killall smartagentjs
52 sudo killall lsfilter
53 sudo killall lsproxy
54 sudo killall mobilefilter
55 sudo killall "Lightspeed Agent"
56 #
57 exit 0
```

4. Save the changes to the install.sh script

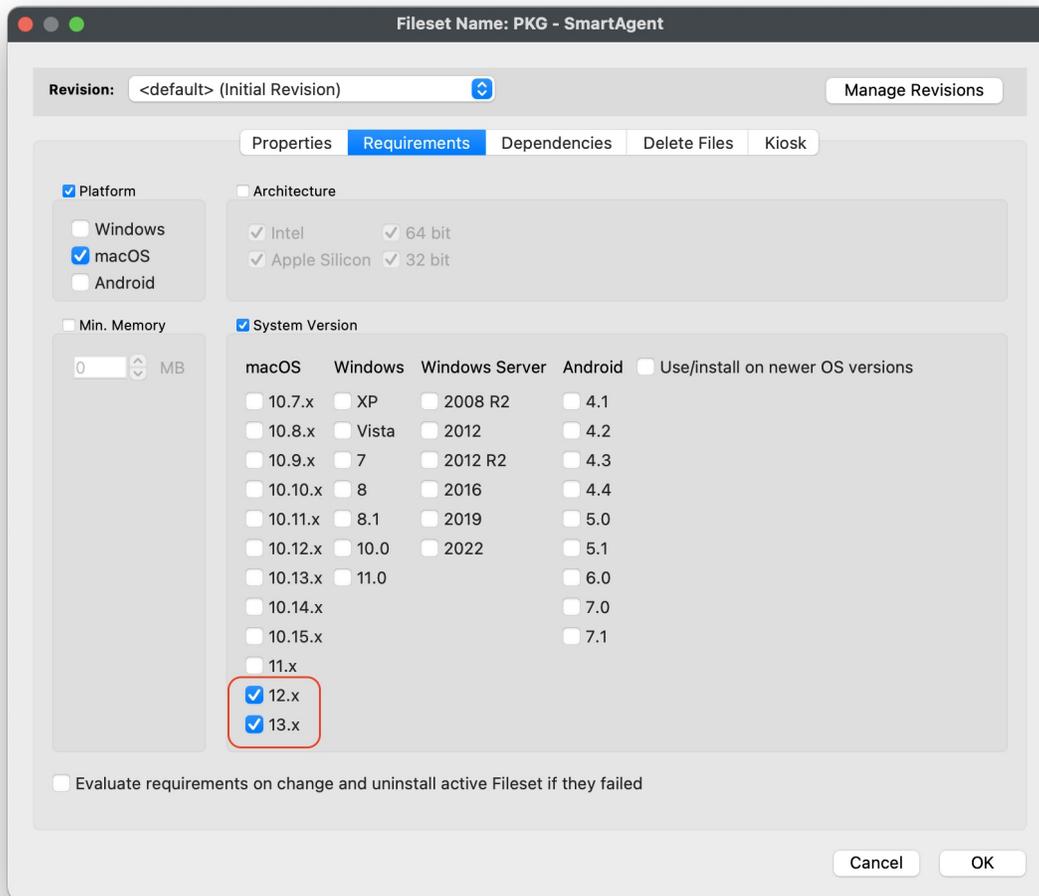
Note: The deployment.zip file created on the desktop must be hosted for the deployment to succeed. (This can be accomplished with Google Drive (may use [Google Drive Direct Link Generator](#)), Microsoft OneDrive, Amazon S3, etc.) Be sure the deployment.zip file is accessible for the install.sh script to download successfully, otherwise this will not complete the installation of the Lightspeed Filter.

Import the Smart Agent PKG

1. Navigate to Filesets > Create New Desktop Fileset > Select MSI / PKG
2. Navigate to your downloaded SmartAgent.pkg to upload into the Fileset
3. Please wait a few moments for the PKG installer to upload into your FileWave server



4. After successfully uploading, highlight the Fileset > Select Properties
5. Under the Requirements tab, check the box Platform and check macOS only, then under System Version and checkboxes only for macOS 12.x and 13.x

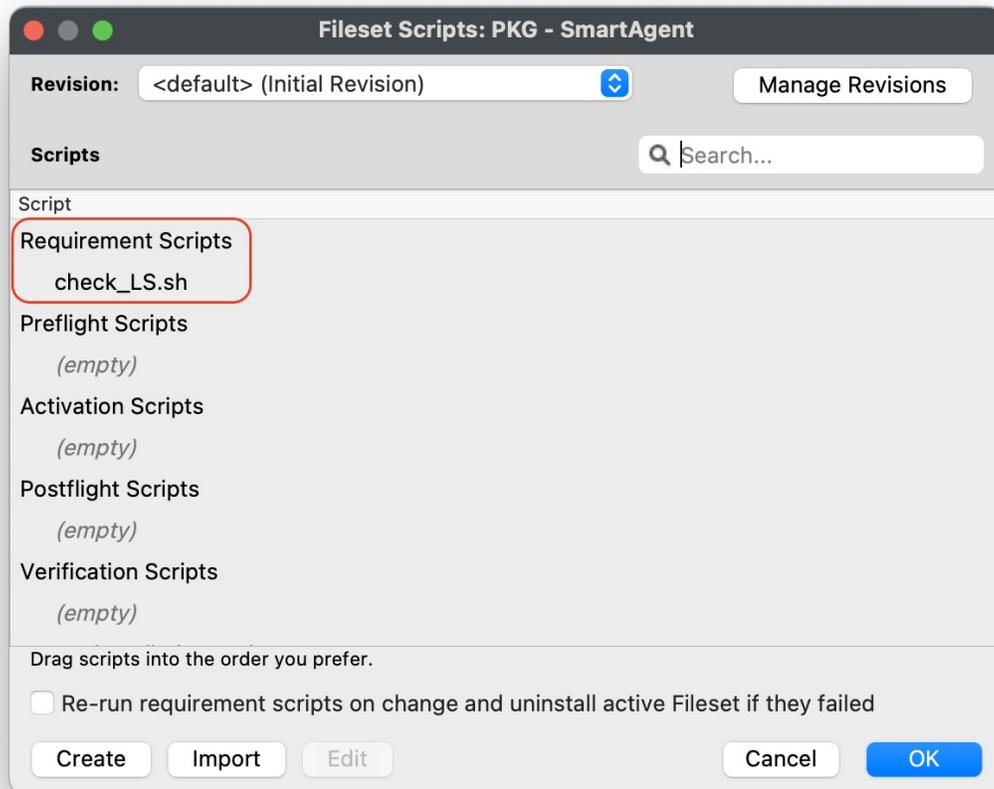


6. Click OK to save

Note: If all of your devices are not on macOS 12 or greater, you will want to set the Requirements for the Fileset for macOS 12 and above

Editing the Smart Agent PKG Fileset

1. Highlight the newly created Fileset with your Smart Agent PKG
2. Click on Script in the menu to open Script dialogue window
3. Highlight Requirement Scripts and click on the Create button



4. Label script, check_LS.sh
5. Copy and paste the entire check profile script below:

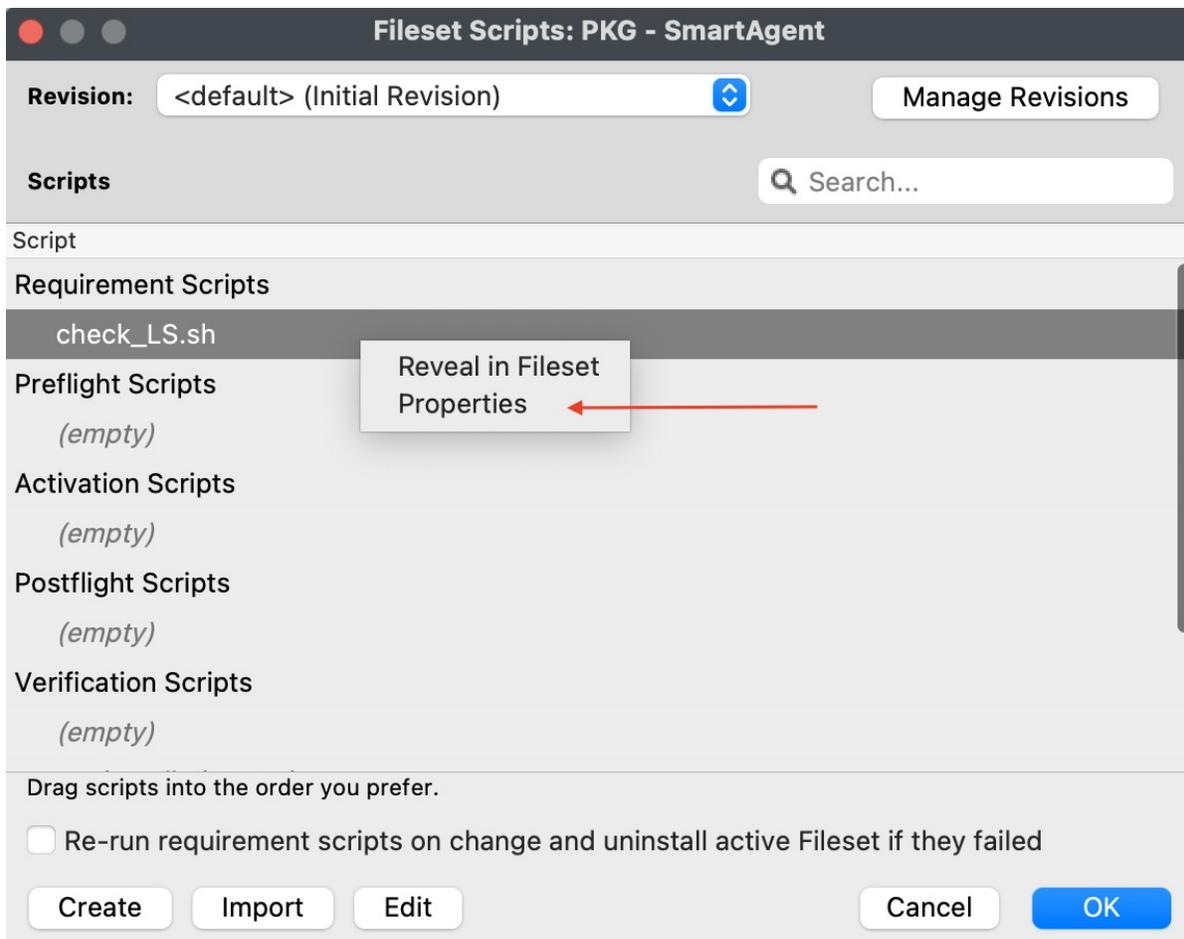
```
#!/bin/zsh

found_profile=""

while [ $# -gt 0 ]
do
    found_profile=$(profiles list all | awk -v search=$1 '$0 ~ search {print $NF}')
    if [ ! -z $found_profile ]
    then
        echo "Found installed profile: $found_profile"
        exit 0
    else
        echo "Did not find $1"
    fi
    shift
done

exit 1
```

6. Click OK to save the script
7. Highlight the check_LS.sh and right-click to select Properties



8. Select the Executable tab, under the Launch Arguments tab, click on the + button to add your Lightspeed Agent Profile's Identifier (found by double-clicking on your Lightspeed Agent Profile)

Info - PKG - SmartAgent : check_LS.sh

 check_LS.sh

Kind: File

Created: Mon Jul 24 2023 06:14 pm

Modified: Mon Jul 24 2023 06:14 pm

Permissions | ACLs | Verification | **Executable** | Flags

Execution Control

Execute at requirements step

- Interactive (ignored in non Windows™ clie)
- Non-interactive (background)

Wait for executable to finish

Wait for: Infinite

Launch Arguments | Environment Variables

+ -

The values of the command line arguments are set just before the script execution. To use an inventory field value to set a command line argument value. use the svntax

Note: Log files will be collected for synchronous non-

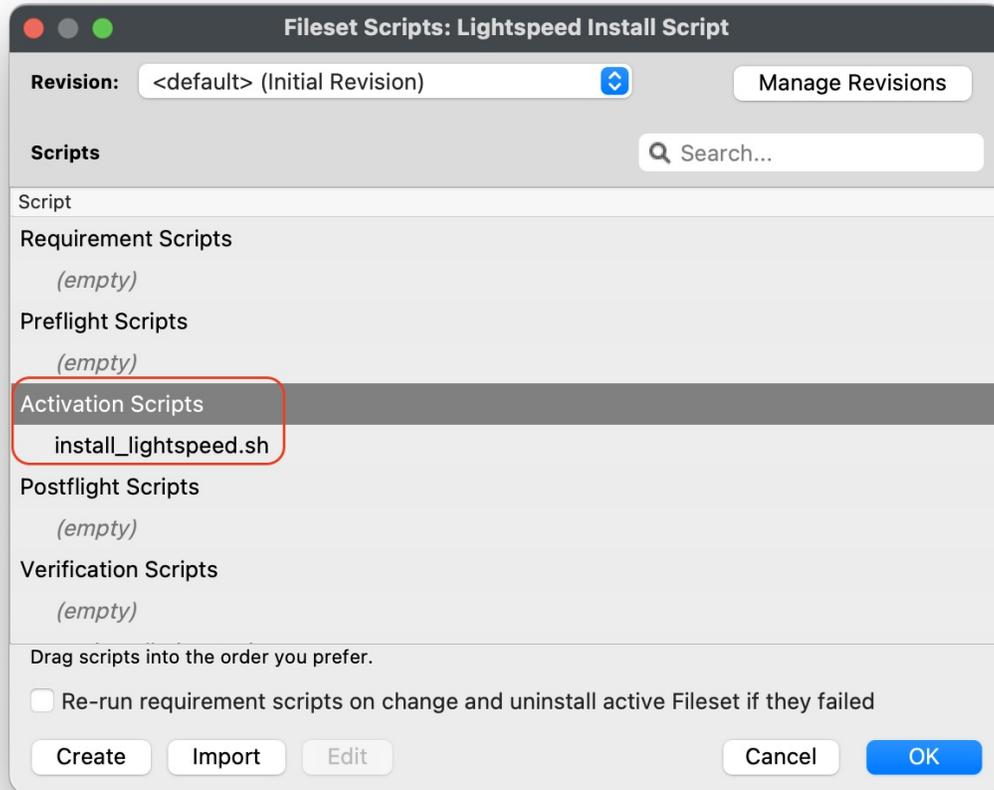
Apply

 Reserved by the parent Fileset

10. Close out Properties of the Requirement Script
11. Click OK to save changes to Smart Agent PKG Fileset

Creating the Installation Fileset

1. Navigate to Filesets > Create New Desktop Fileset > Empty Fileset > label Lightspeed Install Script
2. Click on Script in the menu to open the Script dialogue window
3. Highlight Activation Scripts and click on the Create button



4. Label script, install_lightspeed.sh
5. Copy and paste the entire install.sh script that you saved your URL to hosted file from previous step on Editing the Install Script.

```
Editing install_lightspeed.sh

install_lightspeed.sh

#!/bin/bash
#
FQHN="Your FQHN HERE to the deployment.zip"
#
# Do not modify anything below this line
#

# if config file is present, we don't need to continue
if [ -e /usr/local/etc/ca_key.pem ]
then
    echo "Already installed" >> /tmp/output.txt
    exit 0
fi
#
# Determine the architecture of the macOS device
processorBrand=$(/usr/sbin/sysctl -n machdep.cpu.brand_string)
if [[ "${processorBrand}" = *"Apple"* ]] && /usr/bin/pgrep oahd >/dev/null 2>&1;
then
    echo "Apple Processor is present, Rosetta folder exists and the service is running." >> /tmp/output.txt
elif [[ "${processorBrand}" = *"Apple"* ]];
then
    echo "Rosetta Folder does not exist or Rosetta service is not running. Installing Rosetta..." >> /tmp/output.txt
    /usr/sbin/softwareupdate --install-rosetta --agree-to-license
else
    echo "Apple Processor is not present. Rosetta not required." >> /tmp/output.txt
fi

cd /tmp
#
# Curl the deployment.zip.
# Replace "Your FQHN HERE to the deployment.zip" with your shared URL that the devices will be able to reach
curl -L -o deployment.zip "$FQHN"

#
# Unzip files
mkdir /tmp/MacSA
unzip -d /tmp/MacSA deployment.zip
#
# Change directories to the unzipped file.
cd /tmp/MacSA
#
# copy files to /usr/local/etc.
mkdir /usr/local/etc
mkdir /usr/local/etc/lfilter
cp * /usr/local/etc
cp lsconfig.json /usr/local/etc/lfilter
#
# del files
rm /tmp/deployment.zip
rm -rf /tmp/MacSA
sleep 5
#
# restarting filtering services
sudo killall smartagentjs
sudo killall lsfilter
sudo killall lsproxy
sudo killall mobilefilter
sudo killall "Lightspeed Agent"

exit 0

Line Endings:  Unix  Windows
Cancel OK
```

11. Click OK to save script
12. Highlight Requirement Scripts and click on Create button
13. Label script, check_LS_profile.sh
14. Copy and paste the entire check profile script below:

```
#!/bin/zsh

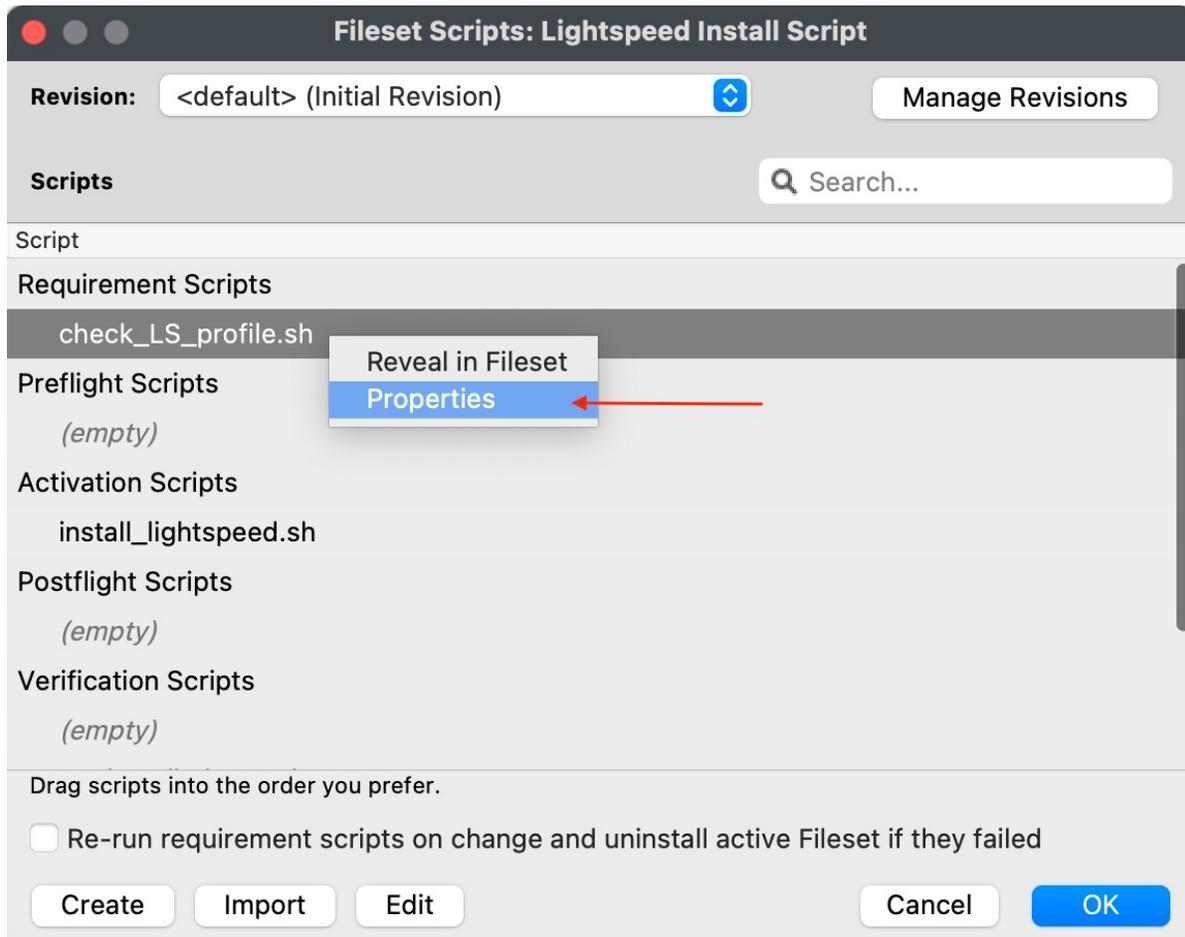
found_profile=""

while [ $# -gt 0 ]
do
    found_profile=$(profiles list all | awk -v search=$1 ' $0 ~ search {print $NF}')
    if [ ! -z $found_profile ]
    then
        echo "Found installed profile: $found_profile"
        exit 0
    else
        echo "Did not find $1"
    fi
done
shift

done

exit 1
```

15. Click OK to save the script
16. Highlight the check_LS_profile.sh and right-click to select Properties



17. Select the Executable tab, under the Launch Arguments tab, click on the + button to add your Lightspeed Agent Profile's Identifier (found by double-clicking on your Lightspeed Agent Profile)



check_LS_profile.sh

Kind: File

Created: Fri Apr 14 2023 04:06 pm

Modified: Fri Apr 14 2023 04:06 pm

Permissions

ACLs

Verification

Executable

Flags

Execution Control

Execute at requirements step

- Interactive (ignored in non Windows™ clie
- Non-interactive (background)

Wait for executable to finish

Wait for: Infinite

Launch Arguments

Environment Variables

Bundle.Identifier.lan.9fbf01b8-7a73-4199-b108-475



The values of the command line arguments are set just before the script execution. To use an inventory field value to set a command line argument value. use the svntax

Note: Log files will be collected for synchronous non-

Apply

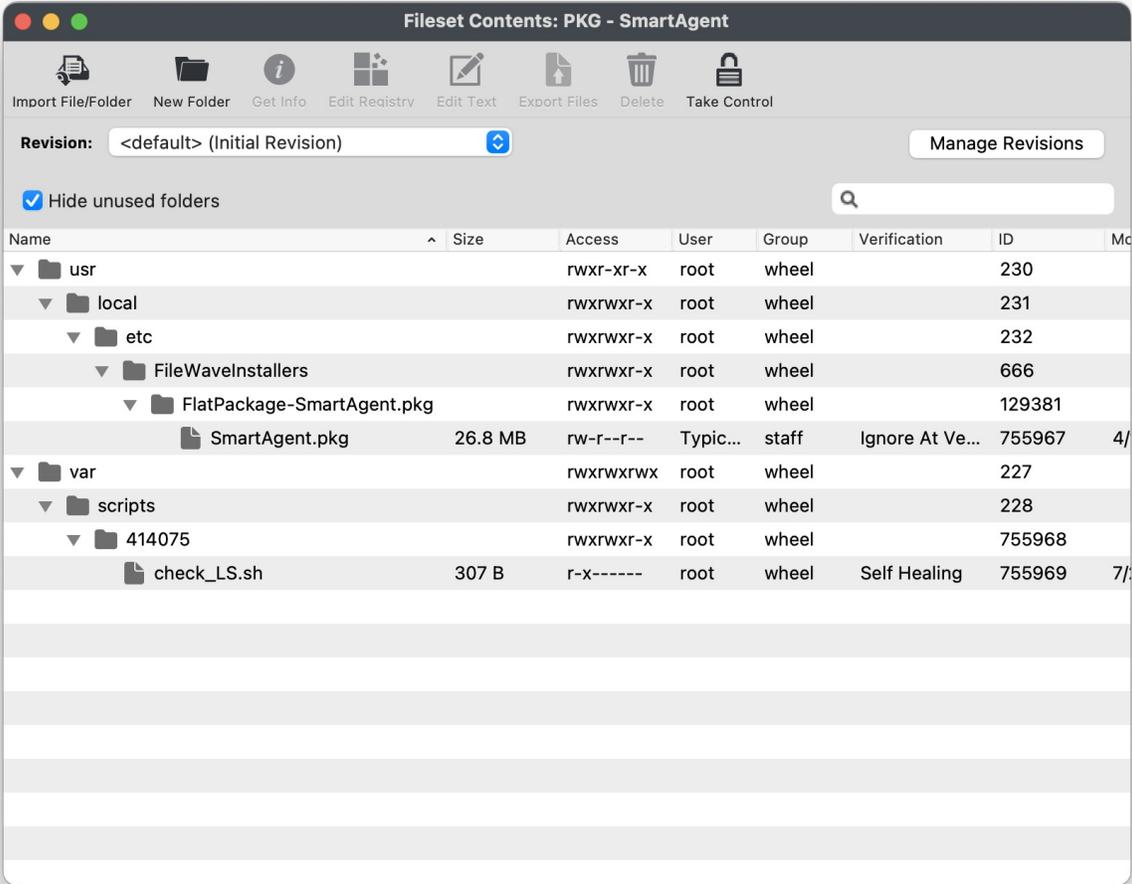


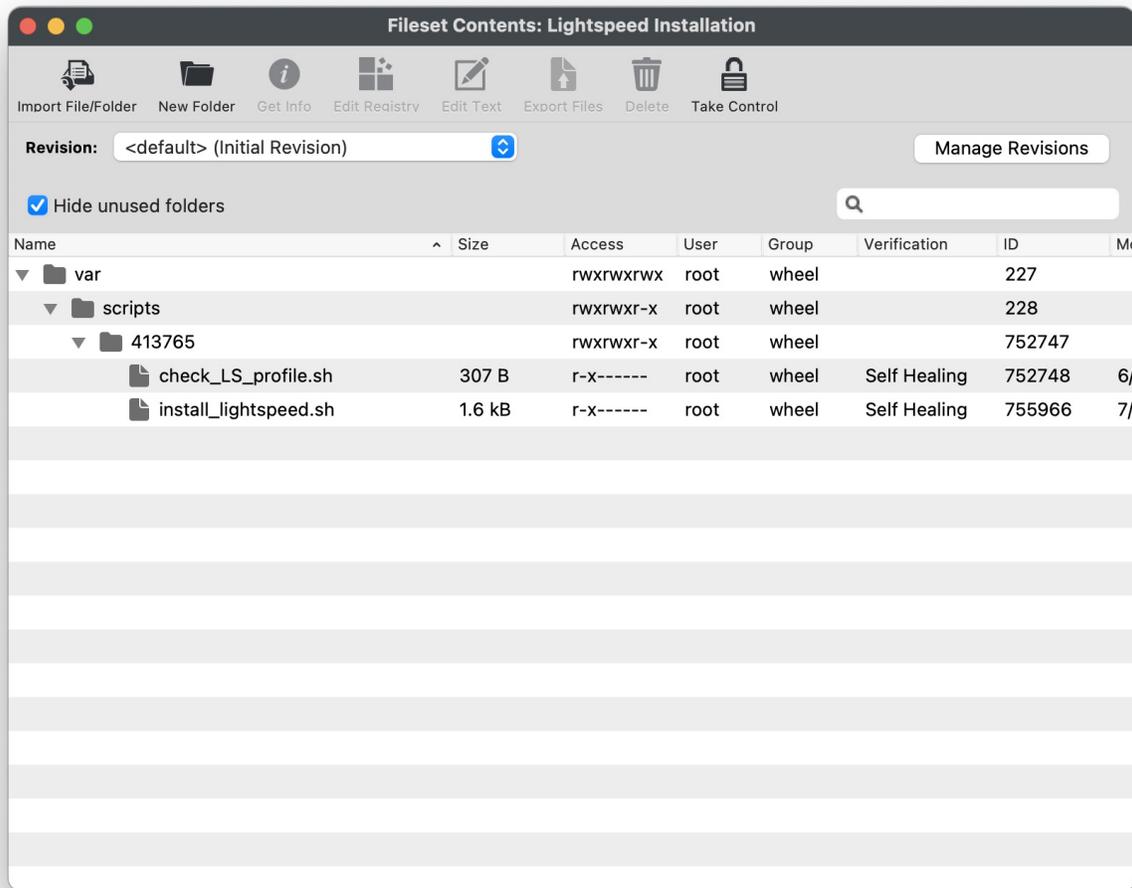
Reserved by the parent Fileset

18. Click Apply to save changes
19. Close out Properties of the Requirement Script
20. Click OK to save changes to Lightspeed Installation Fileset

Note: This Requirement scripts verifies that the Lightspeed Agent Profile is installed successfully BEFORE running the installation of Lightspeed.

When all completed, the Fileset contents will include your Smart Agent PKG, Lightspeed Install and Profile.





Creating Fileset Group for your Lightspeed Filter Agent Filesets

Keeping your Filesets organized is good practice, especially if there are multiple Filesets for software deployment. You may create a New Fileset Group, label it Lightspeed Filter Agent (macOS 2023), and move all the Filesets you created into that Fileset Group. Then you may associate the Fileset Group labeled Lightspeed Filter Agent (macOS 2023) to your devices versus individual Filesets.



Once all the Filesets and Profile have been created, you may associate the Fileset Group labeled Lightspeed Filter Agent macOS 2023 to a few devices as a test. This is to verify and confirm that the filter is installed and filtering properly based on your configurations. For best practice, always test a few devices before mass deployment.

Lightspeed Smart Filter Deployment (iOS 2023)

Needing to deploy Lightspeed for iOS devices? Review the KB article here: [Lightspeed Smart Filter Deployment \(iOS 2023\)](#).

Lightspeed Smart Filter Deployment (macOS v2.3.1+ using Certificate Manager)

Needing to deploy Lightspeed for macOS using Certificate Manager? Review the KB article here: [Lightspeed Smart Filter Deployment using Certificate Manager](#).

🔗Revision #25

★Created 23 June 2023 16:27:45 by Andrew Kloosterhuis

✍Updated 8 March 2024 18:23:20 by Zachary Butterfield