

Vbrick Multicast Installation

Quick Reference Guide – v2.1.x



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Vbrick Multicast Overview

Vbrick Multicast (VBM) is a Rev and DME feature that provides plugin-less multicast to Vbrick's Rev Player. Browsers are adopting ever increasing security protocols and sand-boxing of running code – these are all good improvements for the security of our environments. However, browsers cannot natively receive UDP packets that multicast utilizes. Therefore, Vbrick has developed a PC and Mac multicast agent that can be silently installed by corporate IT departments or manually installed using a graphic based (GUI) installation interface.

As such, note that there are two different installation options covered in this document; end user installation via download and administrator silent installation options – see the Windows and Mac Installation sections. Additionally, how to uninstall VBM and troubleshooting with Windows firewalls are also covered.

Note: This reference manual covers Vbrick Multicast v.2.1.x or greater.

Requirements

The following requirements are needed to make sure Vbrick Multicast streams install and function correctly on your Windows PC or Mac:

- ▶ DME v3.18 or greater
- ▶ Rev 7.22 or greater
- ▶ PC (Windows 8/10, 64-bit only)
- ▶ Mac (OSX 10.15/11.X)
- ▶ Minimum Processor: Dual core or dual processor
- ▶ Minimum Memory (RAM): 4GB
- ▶ Minimum Disk Space Available: 500MB

Custom VBM Domain Name

There are two options for installing and running the VBM agent; using the default Vbrick multicast playback domain name (localstreaming.vbrick.com) or using a custom multicast playback domain name. A custom domain name requires Rev 7.29 or greater.

A custom domain name is used other than the default localstreaming.vbrick.com (which resolves to 127.0.0.1) for those cases where the localstreaming.vbrick.com domain cannot be used for playback on your user's computer due to policy restrictions. This is completely optional and is only required in the use case just mentioned.

To use a custom domain, the following must be true:

1. Rev version used should be 7.29 or greater.
2. The custom domain name must resolve to 127.0.0.1 from the user's computer.
3. You have a valid SSL certificate for your custom domain name in a PEM file format. This PEM file should contain a certificate, private key, and any intermediate certificates in a single PEM file. This PEM file will be required by the installer if you want to use your own custom domain name for local multicast streaming.

Downloading the Installer Agent

Vbrick provides the msi or exe files for Windows and pkg for Mac needed to install the Vbrick Multicast agent on the [Downloads](#) site under the Applications tab. These can then be used by IT Desktop management software to automatically push and install the agent on the user's desktop or be silently installed via a terminal. Each method is described below.

Administrator (Silent) Install and Upgrade Options

Administrators have the option of installing (and uninstalling) Vbrick Multicast silently, through a command prompt or via desktop management software, if you do not want your users downloading and installing the program themselves.

Note: The process for installing and upgrading the Vbrick Multicast agent is exactly the same.

Windows Silent Install or Upgrade – With Logging

To begin a Windows silent install or upgrade:

1. Open a command prompt.
2. Navigate to where the VbrickMulticast_XXX.msi is located.
3. Run as an Administrator and ensure that the folder for the log file exists, for example c:\temp.
4. There are *three* options to install or upgrade silently with logging:
 - a. To use the default domain name (localstreaming.vbrick.com) and certificate, use the following command to install:

```
msiexec /i VbrickMulticast_XXX.msi INSTALLDIR="C:\Program Files\Vbrick\"  
/L*V "C:\temp\msilog.log" /qn
```

- b. To use a custom domain name and certificate, use the following command to install:

Note: Make sure to put the SSL certificate of the custom domain in PEM format in location that is set for CERTLOC parameter.

```
msiexec /i VBrickMulticast_XXX.msi INSTALLDIR="C:\Program Files\Vbrick\"  
SERVER_PORT="3443"  
CERTLOC="C:\Users\user\Documents\VBrick\Avenger\VBM\localstreaming-acme-  
com.pem" /L*V "C:\temp\msilog.log" /qn
```

- c. To use a custom log file location, use the following command to install:

```
msiexec /i VBrickMulticast.msi INSTALLDIR="C:\Program Files\Vbrick\"  
SERVER_PORT="3443" LOGFILE_LOCATION="C:\ProgramData\Vbrick\vbrick-  
multicast-agent\logs" DATA_LOCATION="C:\ProgramData\Vbrick\vbrick-  
multicast-agent\data" /L*V "C:\temp\msilog.log" /qn
```

Note: The LOGFILE_LOCATION parameter maps to the LOG_FILE_FILENAME line in the .env file and the DATA_LOCATION maps to the SERVER_DATA_FOLDER line in the .env file.

5. If you want to create the log file in the same directory as the msi, just supply the name of the log file "msilog.log" after /L*V

```
msiexec /i VBrickMulticast_XXX.msi INSTALLDIR="C:\Program Files\Vbrick\"  
/L*V "msilog.log" /qn
```

Note: You can change the default installation directory in this command line and you can combine the custom domain name and Certificate and custom log file locations into one large command line instruction.

Windows Silent Install or Upgrade – No Logging

To install or upgrade silently with no logging:

1. Open an Administrator command prompt.
2. Navigate to where the VbrickMulticast_XXX.msi file is located.
3. Type the commands below.
4. There are two options to install or upgrade silently without logging:
 - a. To use the default domain name (localstreaming.vbrick.com) and certificate, use the following command to install:

```
msiexec /i VbrickMulticast_XXX.msi INSTALLDIR="C:\Program Files\Vbrick\"  
/qn
```

- b. To use a custom domain and Certificate, use the following command to install.

Note: Make sure to put the SSL certificate of the custom domain in PEM format in location that is set for CERTLOC parameter.

```
msiexec /i VBrickMulticast_XXX.msi INSTALLDIR="C:\Program Files\Vbrick\"  
SERVER_PORT="3443"  
CERTLOC="C:\Users\user\Documents\VBrick\Avenger\VBM\localstreaming-acme-  
com.pem" /qn
```

Verify the Windows Install

1. Check the log when complete (Example: c:\temp\msilog.log). Look for the following confirmation:

```
MSI (s) (F4:BC) [13:09:31:600]: Product: VbrickMulticast -- Installation operation completed successfully.
```

```
MSI (s) (F4:BC) [13:09:31:600]: Windows Installer installed the product. Product Name: VbrickMulticast. Product Version: 1.X.X.X.X. Product Language: 1033. Manufacturer: Vbrick Systems, Inc.. Installation success or error status: 0.
```

2. If the installation fails you will see this in the log with more details:

```
MSI (s) (24:24) [13:49:01:590]: Product: VBrickMulticast -- Installation operation failed.
```

3. Verify the files are in the installation folder.
4. (Optional): If you have selected to install using a custom domain name and Certificate, verify the following:
 - a) Verify that the Certificate is installed in C:\Program Files\Vbrick\vbrick-multicast-agent\cert
 - b) Verify that the env file (C:\Program Files\Vbrick\vbrick-multicast-agent) is updated with the new PEM file name and port number.
 - SERVER_PORT=3443
 - SERVER_SSL_CERT=localstreaming-test_vbrick_com.pem
5. Verify that the env file is updated with the new log file locations (or the default values if there is no custom location):
 - LOG_FILE_FILENAME="C:\Vbrick\logs\app.log" or "C:\ProgramData\Vbrick\vbrick-multicast-agent\logs\app.log" (by default)
 - SERVER_DATA_FOLDER="C:\Vbrick\data" or "C:\ProgramData\Vbrick\vbrick-multicast-agent\data\" (by default)
6. Verify Vbrick Multicast Service is running.

Windows Silent Uninstall

To uninstall silently on Windows:

1. Open a command prompt.
2. Navigate to where the msi is located and type the following:

```
msiexec /uninstall {E7363B25-B90D-41E0-8CF4-C0448B9D51AA} /qn (for v1.4.X  
uninstall)
```

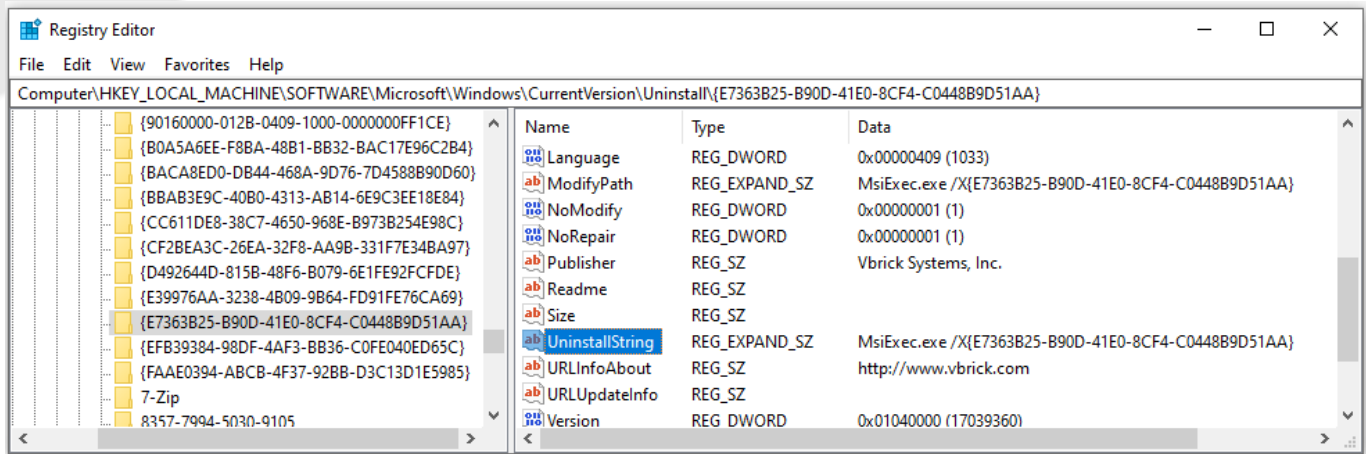
```
msiexec /uninstall {1424C126-18A3-4279-B734-B06E05631025} /qn (for v1.5.X  
uninstall)
```

```
msiexec /uninstall {CA844240-2C89-4199-8129-3E316A07CA62} /qn (for v1.6.X  
uninstall)
```

```
msiexec /uninstall {EA8C5DC4-FEF8-4B29-A4DE-EE6B7FF15903} /qn (for v2.0.X  
uninstall)
```

```
msiexec /uninstall {067A4C37-0FF0-4990-9049-A8A000DC2D32} /qn (for v2.1.X  
uninstall)
```

Note: This number is a unique product code for the Vbrick installer. If you go to HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows\CurrentVersion\Uninstall in the registry and search for VbrickMulticast, this code will be present.



3. After uninstall, verify the following:
 - ▶ vbrick-multicast-agent folder completely removed
 - ▶ Vbrick Multicast Service is removed in Task Manager

Mac Silent Install or Upgrade

There are *three* options to install silently.

1. Using the default domain name (localstreaming.vbrick.com) and certificate.

- a) Download the VbrickMulticast_XXX.pkg file
- b) Open a Terminal window; cd to the directory with the VbrickMulticast_XXX.pkg file and type the following:

```
installer -pkg VbrickMulticast.pkg -target /
```

Caution: Must be run as root.

```
sudo installer -pkg VbrickMulticast.pkg -target /
```

2. Using a custom domain name and certificate.

- a) Download the VbrickMulticast_XXX.pkg file. Put the SSL certificate of the custom domain in PEM format in the same directory as the pkg file. Also put the answer.txt file in the same directory.
- b) Edit the answer.txt and update the port number and the location of the pem file name.
- c) For example:

```
SERVER_PORT=3443  
SERVER_SSL_CERT=localstreaming-acme-com.pem
```

- d) Open a Terminal window; cd to the directory with the VbrickMulticast_XXX.pkg file and type the following:

```
installer -pkg VbrickMulticast.pkg -target /
```

Caution: Must be run as root.

```
sudo installer -pkg VbrickMulticast.pkg -target /
```

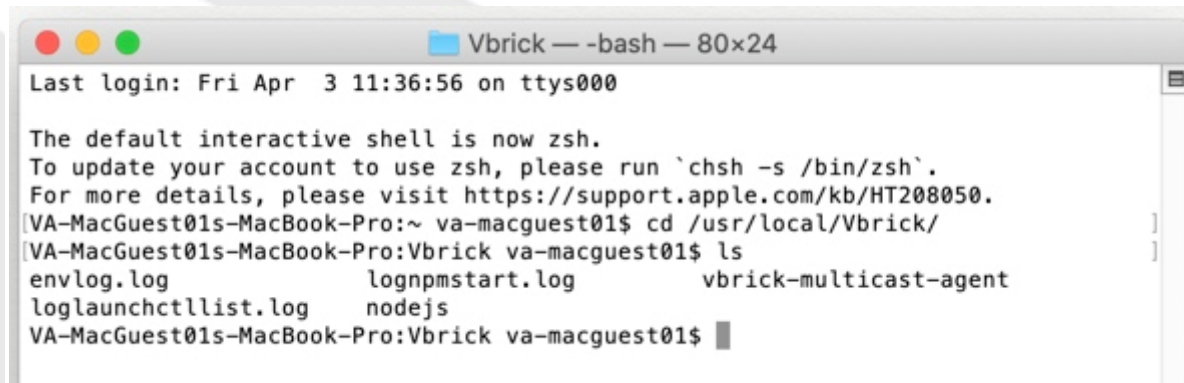
3. Using a custom installation location.

- a. Download the VbrickMulticast_XXX.pkg file and answer.txt file and place them in the same directory.
- b. Edit the answer.txt file and update the INSTALL_LOCATION.
- c. For example:

```
SERVER_PORT=3443  
SERVER_SSL_CERT=localstreaming_acme_com.pem  
INSTALL_LOCATION=/usr/local/VBMagent
```

Verify Mac Install

By default, the VBM Mac installer installs VBM under the `/usr/local/Vbrick` folder.



```
Vbrick — -bash — 80x24
Last login: Fri Apr  3 11:36:56 on ttys000

The default interactive shell is now zsh.
To update your account to use zsh, please run `chsh -s /bin/zsh`.
For more details, please visit https://support.apple.com/kb/HT208050.
[VA-MacGuest01s-MacBook-Pro:~ va-macguest01$ cd /usr/local/Vbrick/
[VA-MacGuest01s-MacBook-Pro:Vbrick va-macguest01$ ls
envlog.log          lognpmstart.log    vbrick-multicast-agent
loglaunchctlstart.log  nodejs
VA-MacGuest01s-MacBook-Pro:Vbrick va-macguest01$
```

Mac Silent Uninstall

Run the following commands to remove VBM agent:

```
sudo rm -r /usr/local/Vbrick
sudo rm -r "/Library/Logs/Vbrick Multicast Service"
sudo rm /Library/LaunchDaemons/vbrickmulticastservice.plist
sudo rm "/Library/Preferences/Application
Support/com.vbrick.pkg.vbmulticast/VbrickMulticast.txt"
sudo pkgutil --forget com.vbrick.pkg.nodejs
sudo pkgutil --forget com.vbrick.pkg.vbmulticast
```

Caution: In order to uninstall the Vbrick Multicast Agent successfully you must not be playing a VBM Stream in Vbrick Rev on your Mac at the time.

GUI Based Install

Windows GUI Install

Note: The process for installing and upgrading the Vbrick Multicast is exactly the same.

To install or upgrade the Vbrick Multicast agent, you can use either the VBrickMulticast_XXX.msi file or the SetupVbrickMulticast_XXX.exe file.

Install/Upgrade using the VBrickMulticast_XXX.msi file:

- ▶ Double click on the VBrickMulticast_XXX.msi file to begin the installation process. (You do not need to run this as administrator).
- ▶ Continue with the installation process as shown below.

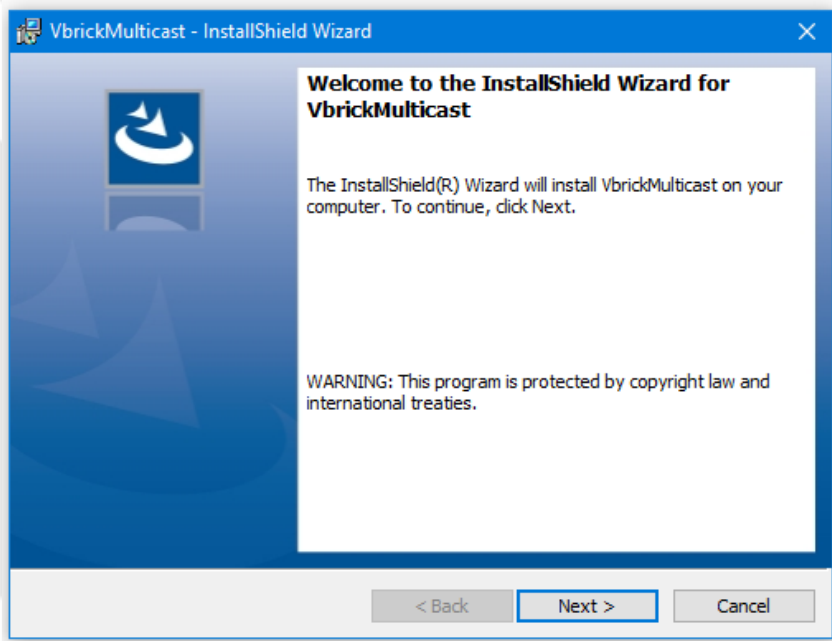
Note: For silent installations you must deploy using the MSI file. See below for more information regarding the silent install and uninstall process.

Install/Upgrade using SetupVbrickMulticast_XXX.exe:

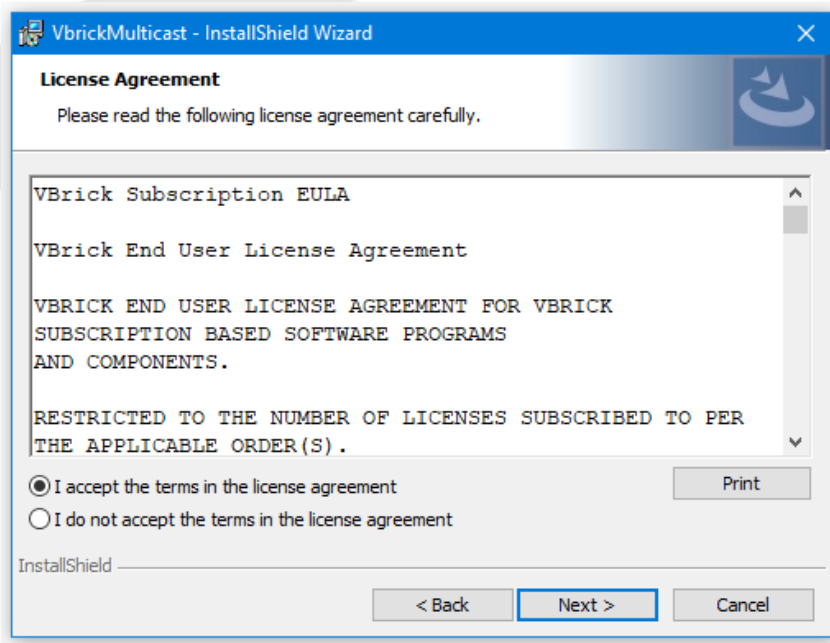
- ▶ Double click on the SetupVBrickMulticast_XXX.exe file to begin the installation process. (You do not need to run this as administrator).
- ▶ Continue with the installation process as shown below.
- ▶ Select Yes if prompted by User Account Control at any stage during the installation.

To install Vbrick Multicast on a Windows PC using the downloaded installation agent, complete the following steps:

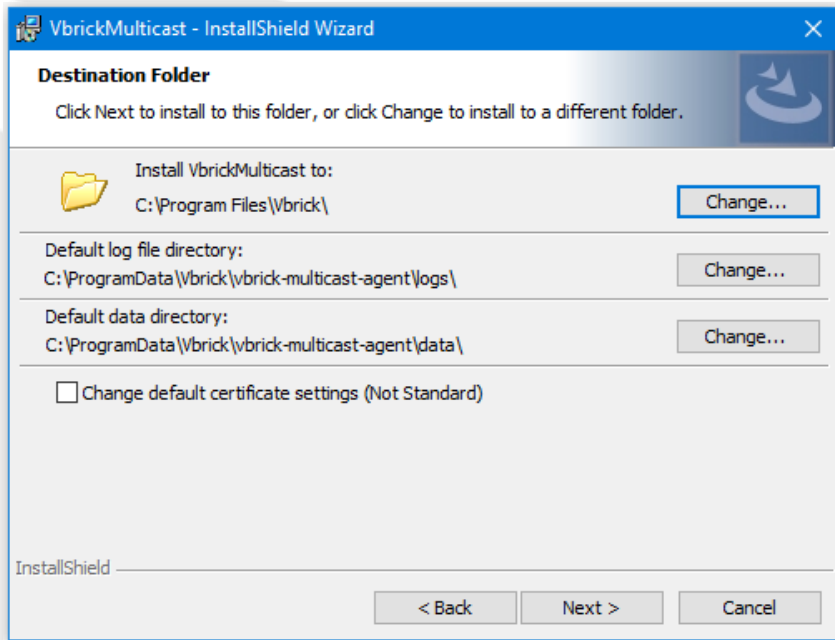
1. **Double-click on the msi or exe file. You do not need to Run as Administrator.**



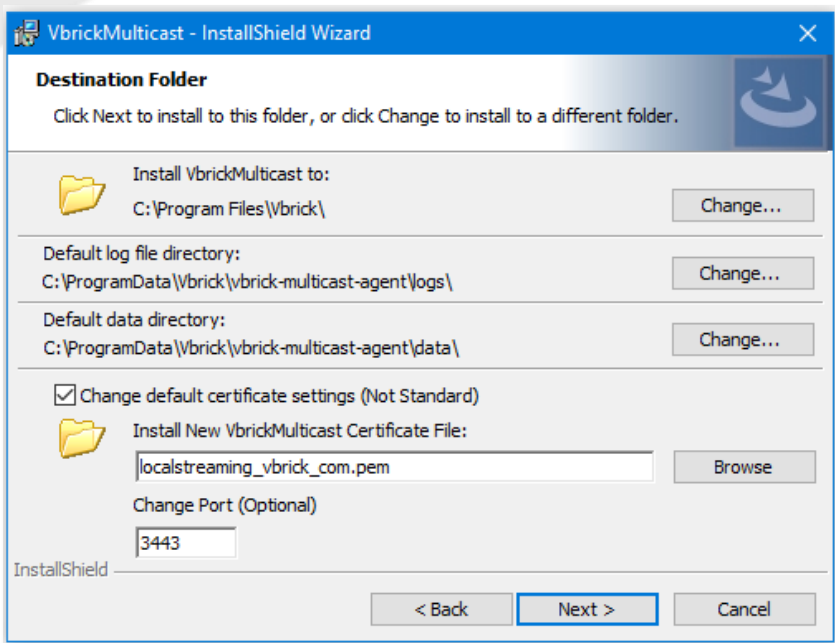
2. **Accept the License Agreement and click Next to begin the installation process.**



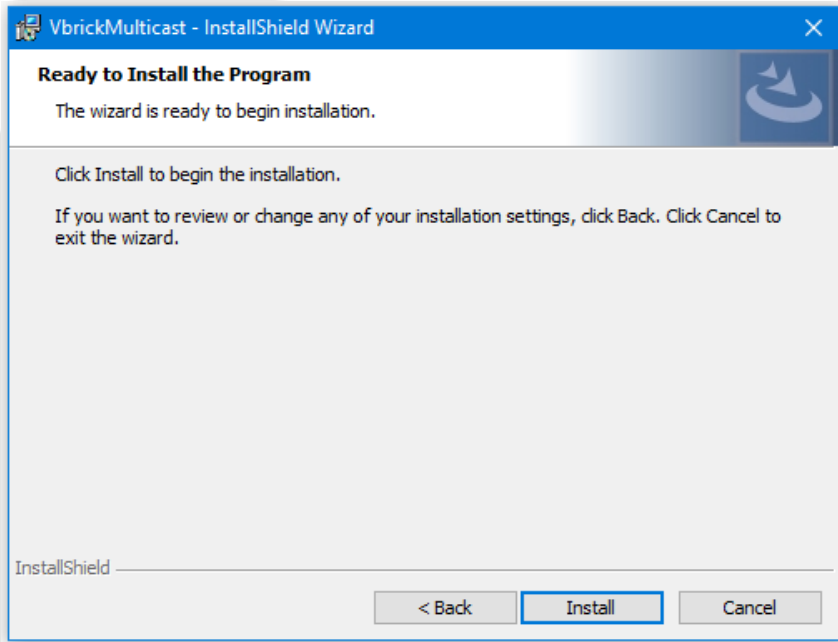
3. **Click Next to select the default Destination Folders. Or click Change to choose different installation folders if desired.**



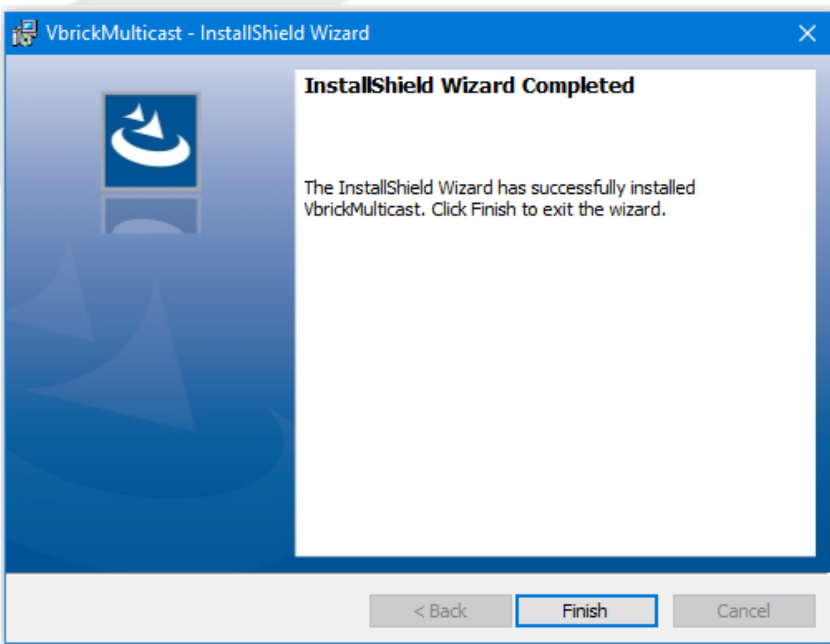
4. **Changing the default certificate settings: If you choose to use custom domain name for Vbrick Multicast playback, check Change default certificate settings (Not Standard) checkbox. Custom domain name feature is only applicable if you are on Rev 7.29 or greater.**
5. **Browse to the location of the new VbrickMulticast Certificate File (*.pem file).**
6. **Enter a new Port number if you want to change it from the default of 3443.**
7. **Click Next to proceed.**



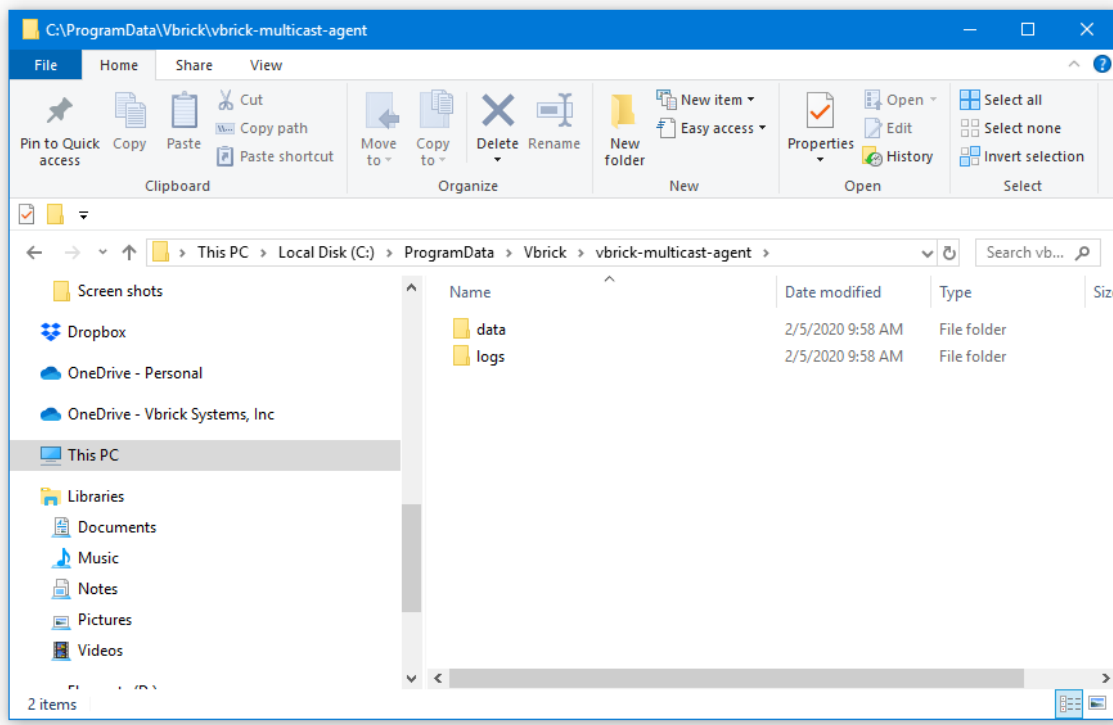
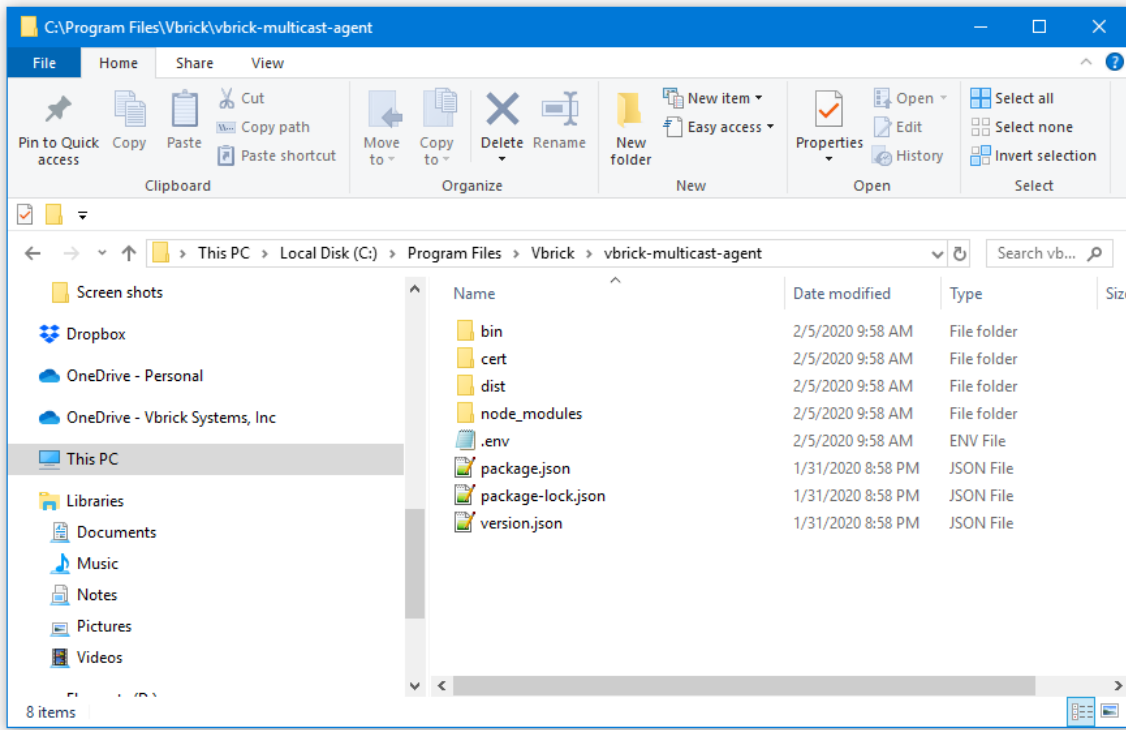
8. **Click Install to begin once your installation location has been set.**



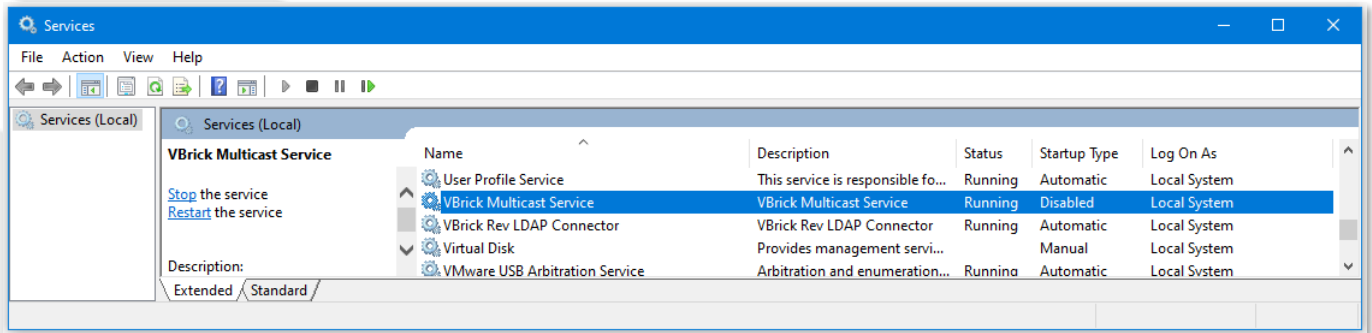
9. Installation status will be noted on your screen and may take several minutes.
10. Click the Finish button when it appears to complete the installation.



11. Verify that the files in the image(s) below have been installed to your destination directories.



12. Verify that the Vbrick Multicast Service is running in the Windows Task Manager. (Start Menu > type “Task Manager” in the Search box > Services tab).



13. If the user's computer is protected by a firewall or some other endpoint software, make sure that the Vbrick Multicast Agent's NodeJS process is allowed to listen to the multicast streams on the UDP ports. See: [Windows Firewall](#).
14. You have successfully installed the Vbrick Multicast Service and are ready to enable Vbrick Multicast in Rev. See the Rev online help sub-topic: [Add a Dynamic Stream](#).

Windows GUI Uninstall

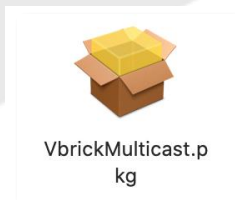
To uninstall from Windows:

1. Run VbrickMulticast_XXX.msi again.
2. After you uninstall:
 - ▶ vbrick-multicast-agent folder completely removed.
 - ▶ VBM Service is removed.

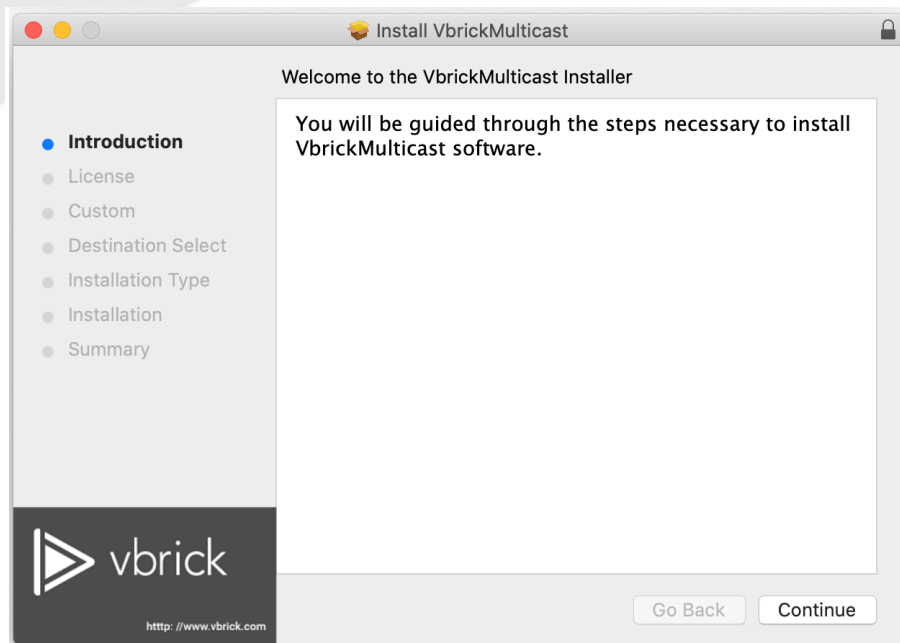
Note: You can also uninstall from the Windows Control Panel if this is your preference.

Mac GUI Install

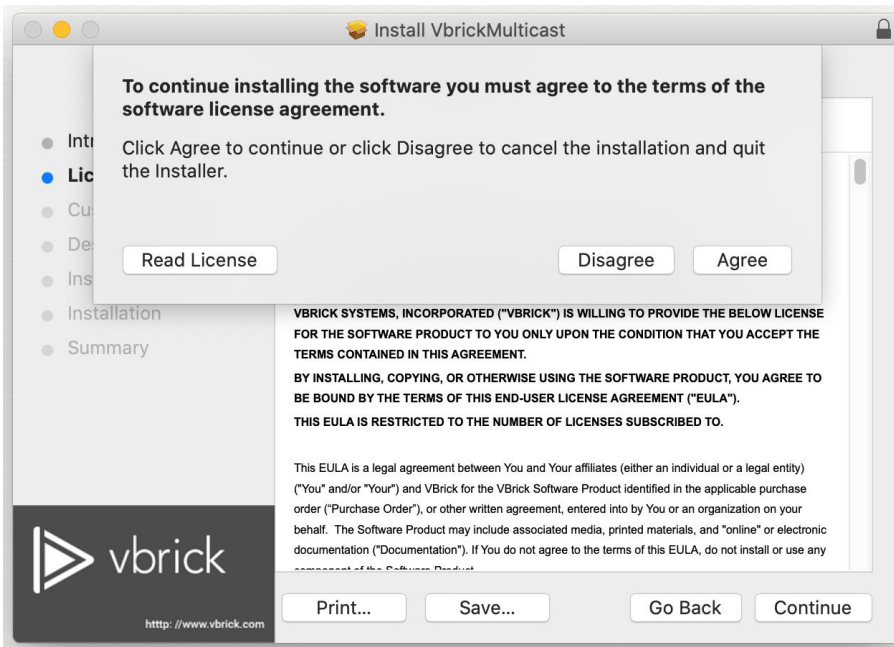
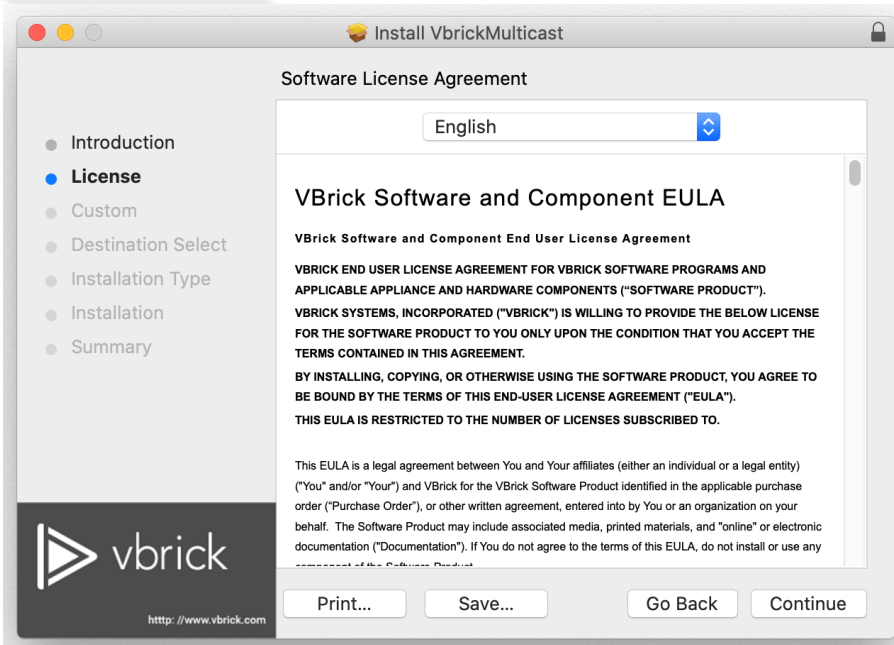
1. Double click on the VbrickMulticast_XXX.pkg to launch the installer.



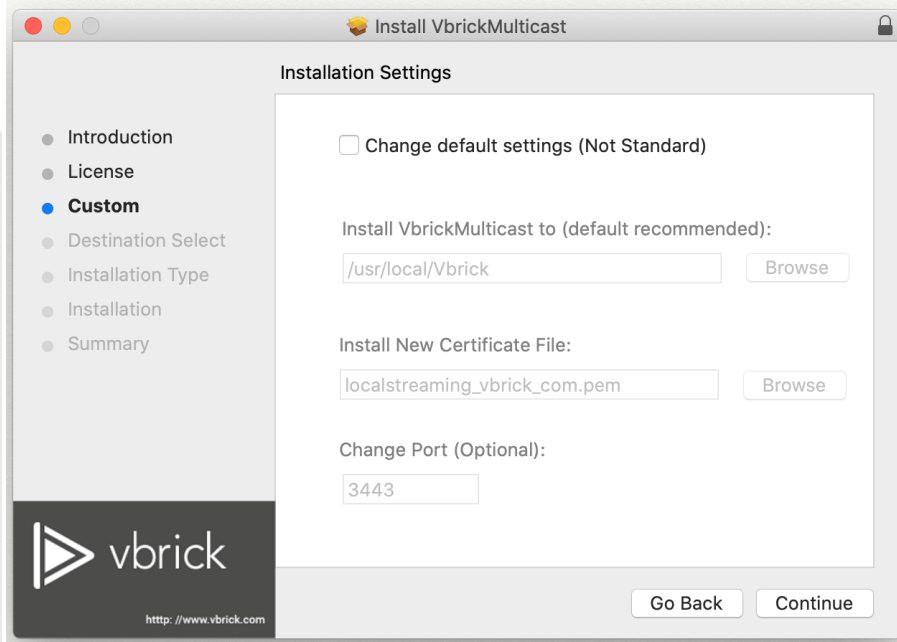
2. Continue with the installation process.



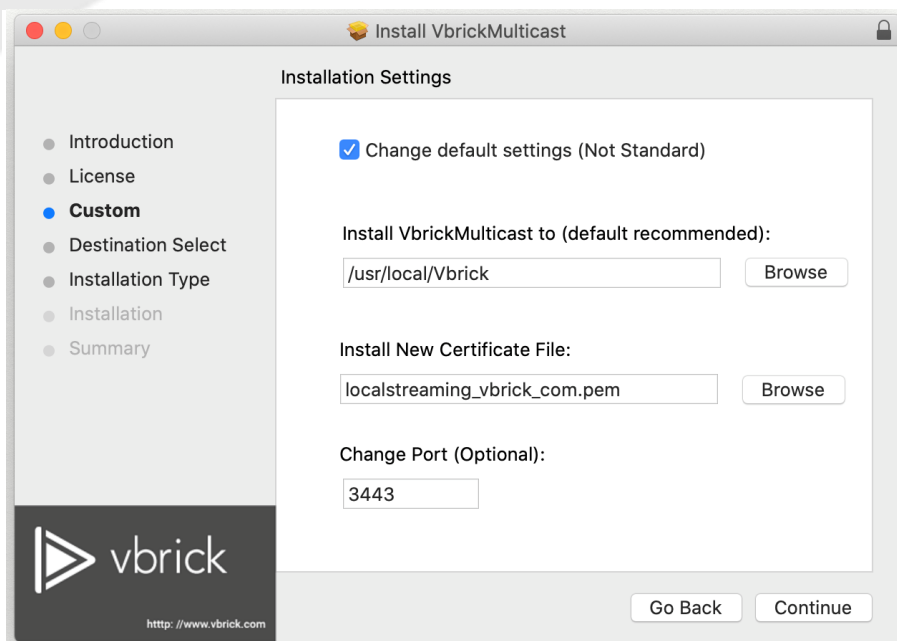
3. Select Continue and then Agree to accept the Software License Agreement.



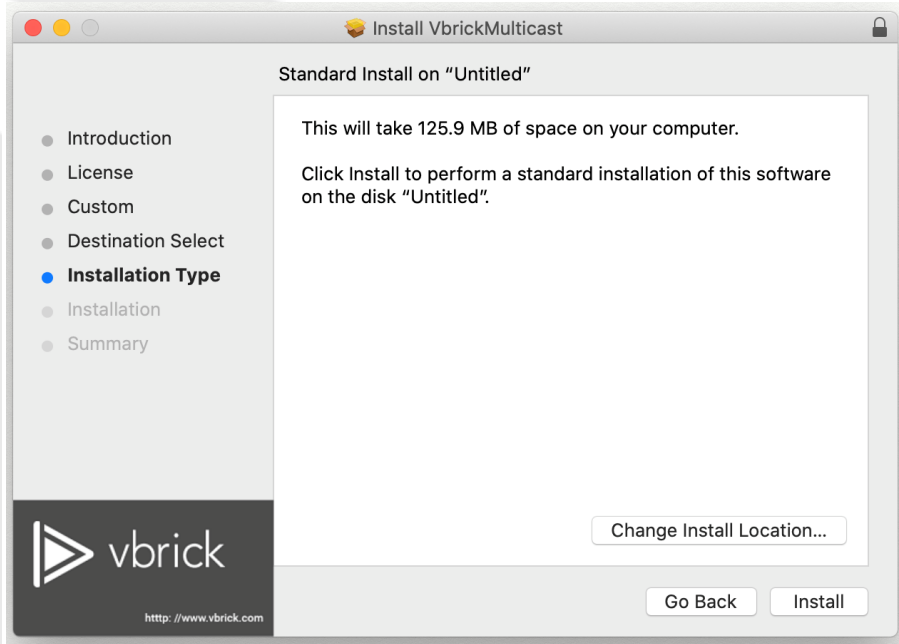
4. **Click Continue to use the default Certificate settings or click Change default certificate settings (Not standard) to choose a different certificate or install directory.**



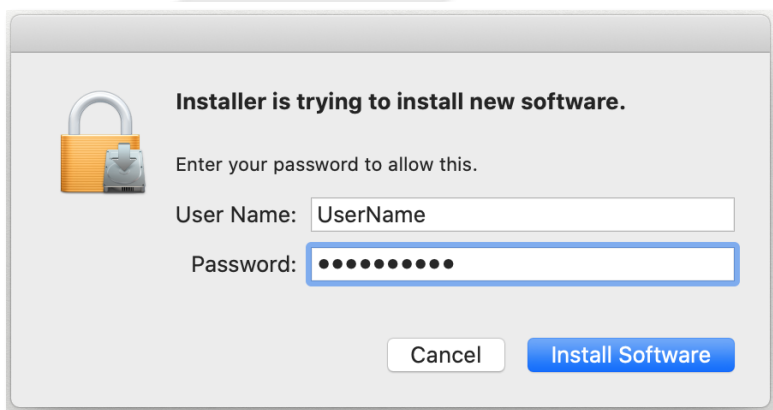
- 5. Changing the default certificate settings: If you choose to change the default settings, check Change default certificate settings (Not Standard) checkbox. Browse to the location of the new Install location, if necessary.**
- 6. Browse to the location of the new VbrickMulticast Certificate File (*.pem file), if necessary.**
- 7. Enter a new Port number if necessary.**
- 8. Click Continue to proceed.**



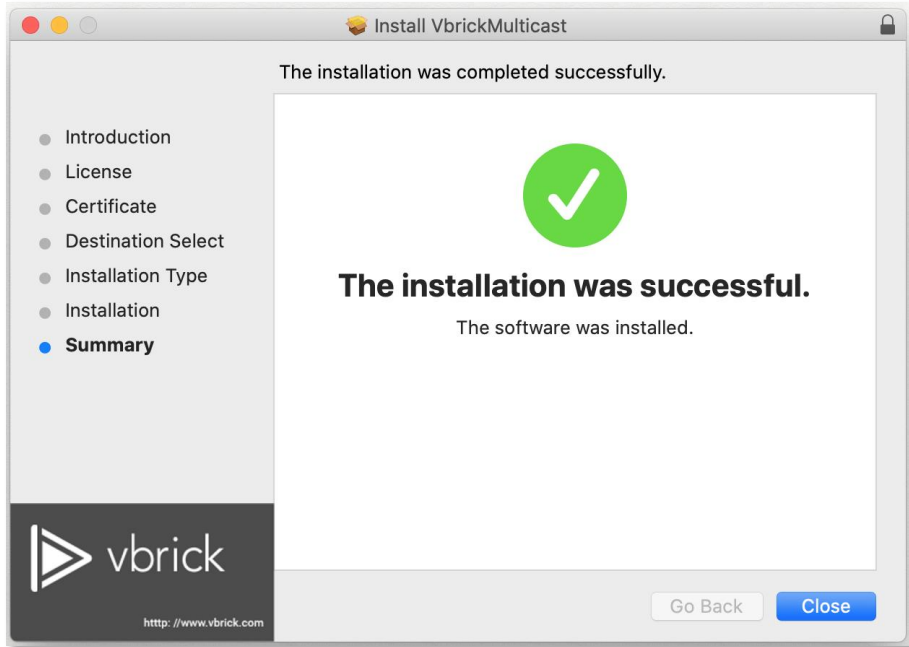
- 9. Click Install to start the installation. Or select Change Install Location to install to a different location.**



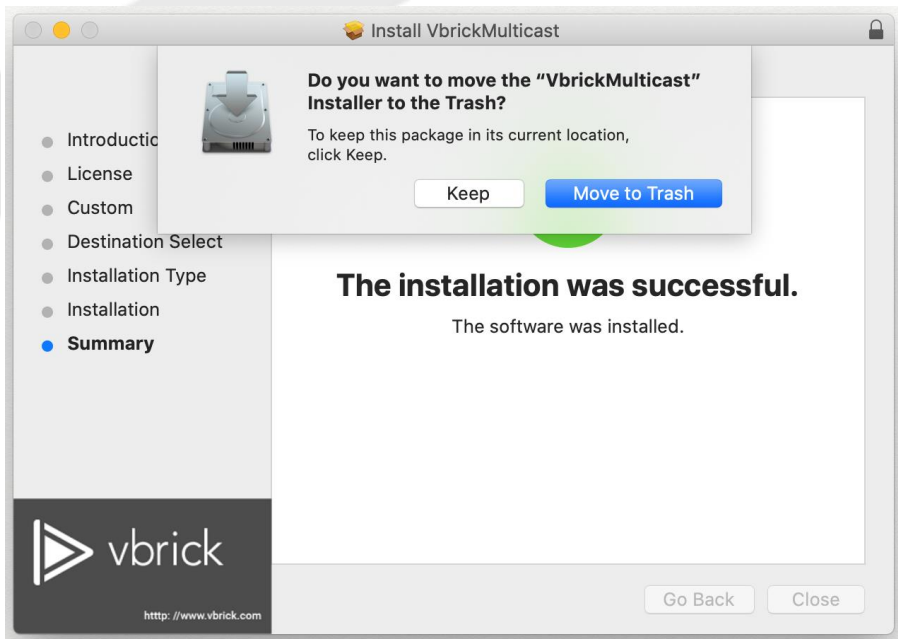
10. You may be prompted to enter a password to allow the installation to proceed.



11. Upon completion select Close to close the Installer.



12. At this point, you will be prompted to either keep the installer or move it to the Trash. When a selection is made, the installer will close.



Troubleshooting

Windows Firewall

Remember, if the user's computer is protected by firewall or some other endpoint software, make sure that the Vbrick Multicast Agent's NodeJS process is allowed to listen to the multicast streams on the UDP ports.

For example, run the Windows firewall command below to allow Vbrick Multicast Agent access to UDP port if Windows firewall is enabled on user's computer.

```
netsh advfirewall firewall add rule name="VBM Allow UDP" dir=in action=allow  
program="<VBRICK_MULTICAST_AGENT_INSTALL_LOCATION>\nodejs\node.exe" enable=yes protocol="udp"
```

Where **<VBRICK_MULTICAST_AGENT_INSTALL_LOCATION>** is where you have installed Vbrick Multicast.

Mac Firewall

If you use stealth mode with your Mac firewall, Vbrick Multicast streams may not load and play correctly. Disabling this feature in your Mac firewall will correct this issue and allow you to use the VBM agent.

Details on stealth mode and how to disable it may be seen in the [MacOS User Guide](#).