

Introduction to Munki



Munki

- A set of tools to manage software installs and removals on OS X
- Written in Python (mostly)
- Free and open source – Apache 2 licensed
- <https://github.com/munki/munki>

Who is using Munki?

- Disney Animation
- Google (over 50K Macs)
- Facebook (over 10K Macs)
- Dropbox, Square, Pinterest
- Universities, colleges and K-12 schools worldwide

Munki needs:

- Munki “server” can be any web server on any platform



- Current client tools run on OS X 10.8–10.13



Munki does:



Installs and removes Apple packages



Installs and removes items on “drag-n-drop” disk images



Installs and removes Adobe software



Installs Apple updates



Installs and removes configuration profiles

Desired state

- Client manifest describes what should be on (or not on) a machine.
- Munki figures out how to get the machine into that state.

Latest is greatest

- Munki ensures each client has the latest version of every piece of software it manages

Latest is greatest

- Vendor (or internal developer) releases new version:
 - Import it into your Munki server.
 - That's it.

But, wait!

Munki catalogs

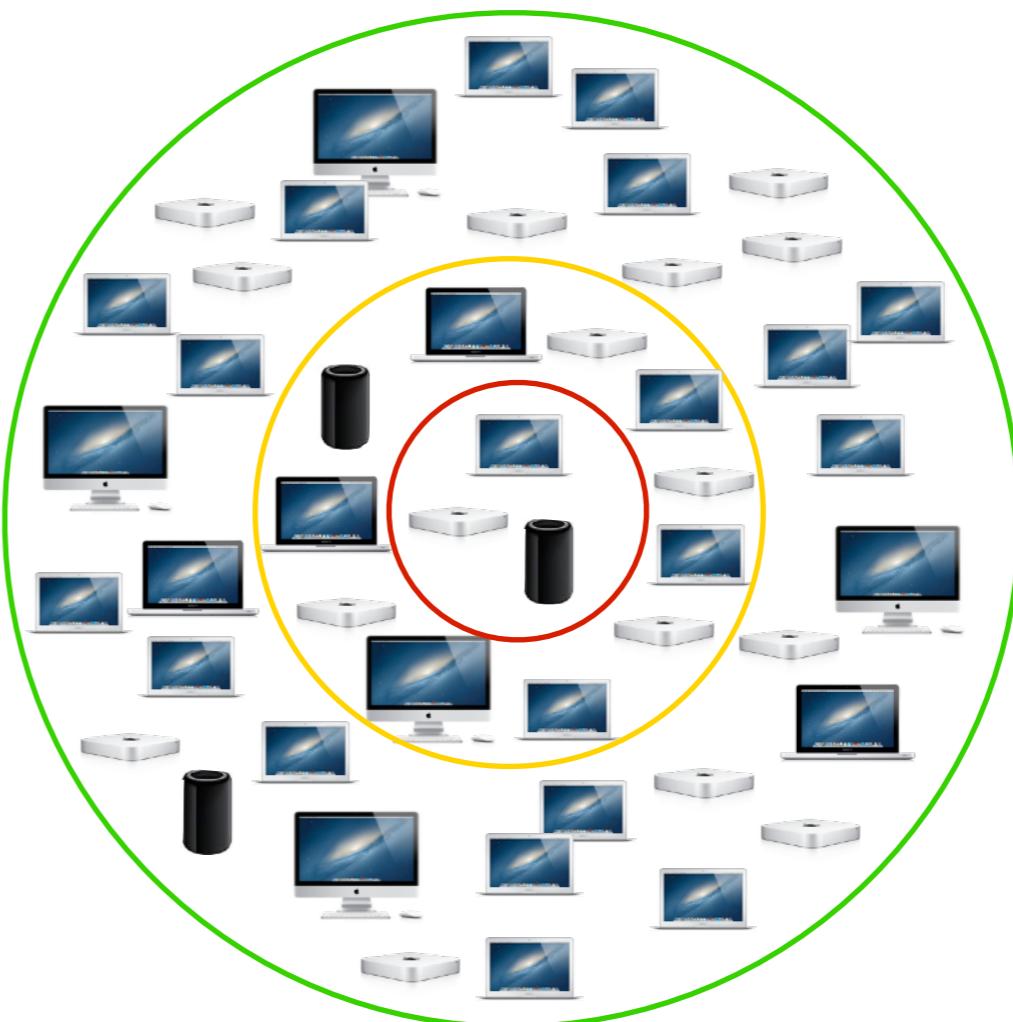
WhizBang 2.0



Development

Testing

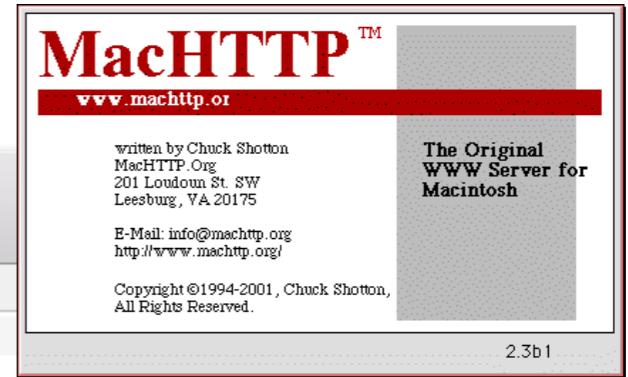
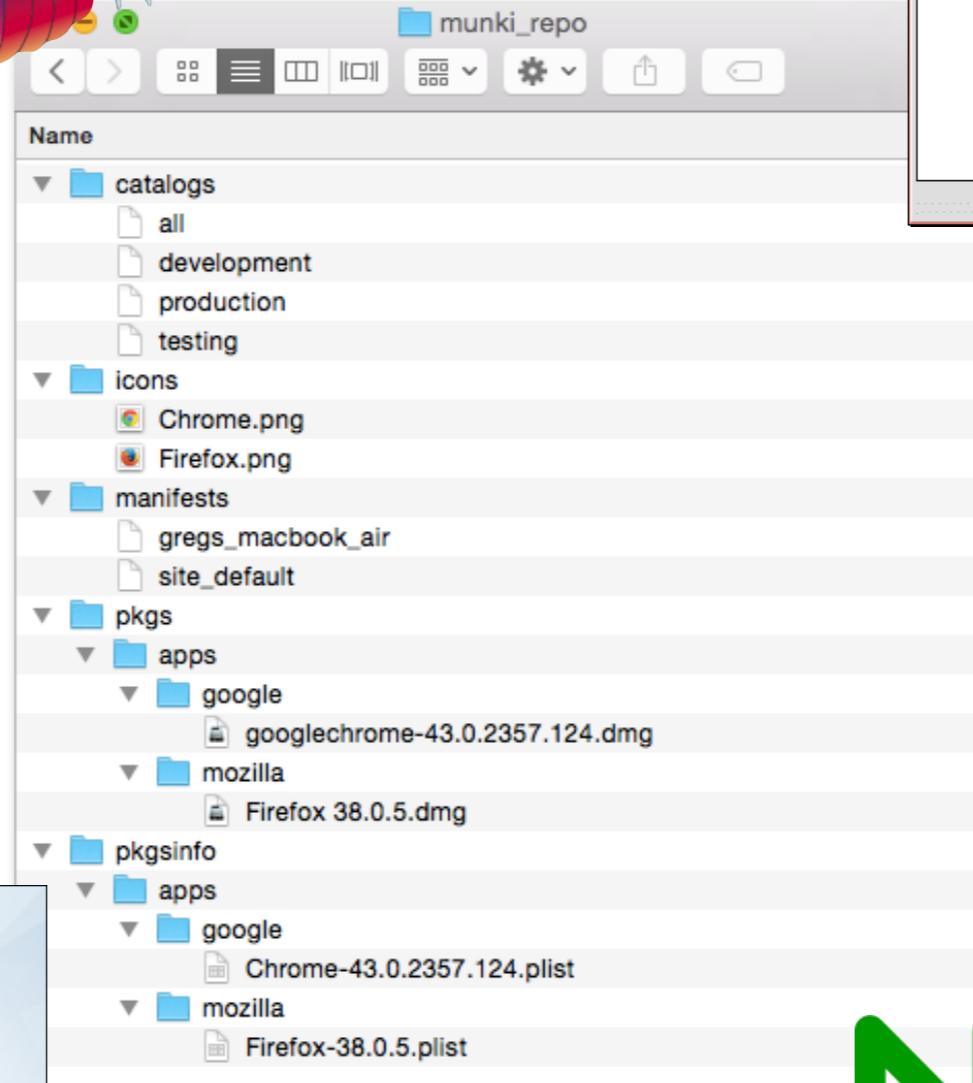
Production



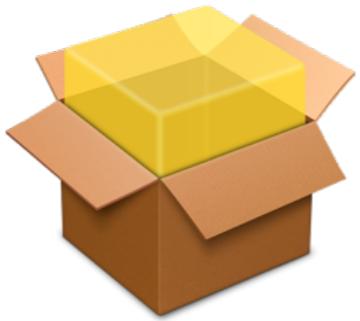
New/Updated software

- Admin can mark items to install silently in the background
- Or users can be prompted when updates are available
- “Self-service” option

Server



NGINX



User interface

Managed Software Center

Software Categories My Items Updates

Search

Managed Software Center

Your source for software for your Mac.



All items

 1Password Utilities - AgileBits Inc. INSTALL	 Acorn 4 INSTALL	 Adium Communication - The Adium Team INSTALL	Admin tools
 Adobe Acrobat Reader DC Uncategorized INSTALL	 Adobe Flash Player Internet - Adobe Installed REMOVE	 Adobe Reader Productivity - Adobe INSTALL	Audio
 Adware Medic Utilities - Thomas Reed INSTALL	 Airfoil Media - Rogue Amoeba INSTALL	 Alfred 2 Utilities - Running with Crayons Ltd INSTALL	Communication
 Alinof Timer Productivity - Alinof Software Sàrl INSTALL	 Amadeus Lite Uncategorized INSTALL	 Android Studio Developer - Google INSTALL	Developer
 Apache OpenOffice Productivity INSTALL	 AppCleaner Uninstaller Utility OS Utilities - FreeMacSoft INSTALL	 AppCode Uncategorized INSTALL	Developer Tools

Categories

- Admin tools
- Audio
- Communication
- Developer
- Developer Tools
- Development
- Drivers
- Editors
- Email
- Graphics & Rendering
- Internet
- Mail Clients
- Mathematics
- Media
- Media Players
- Munki Tools
- Network Utilities
- OS Utilities
- Organization
- Productivity
- Remote Access
- SFTP Clients
- Science
- Security
- Social Networking

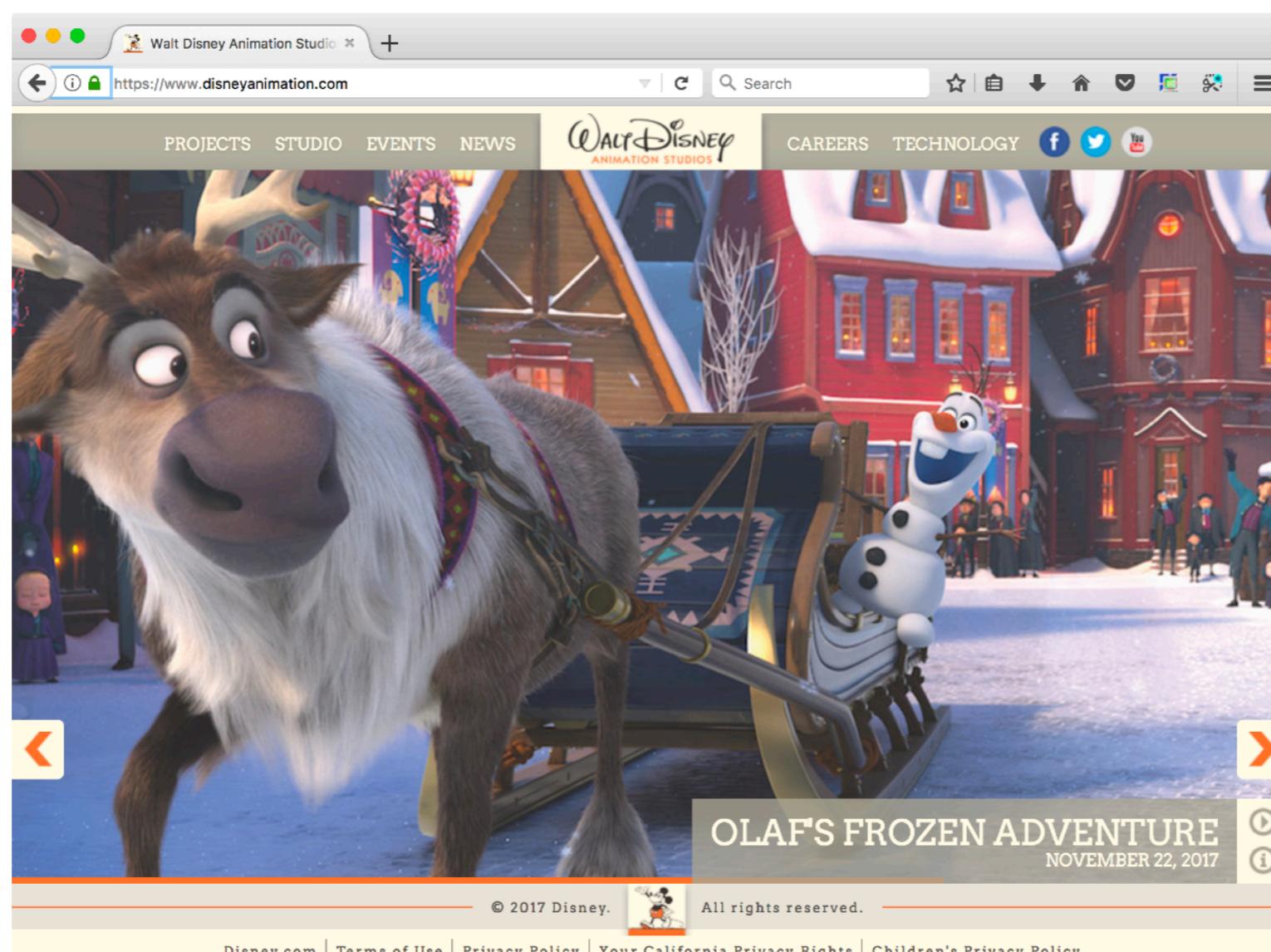
Managed Software Center

Software Categories My Items Updates

Search

Mozilla Firefox

Mozilla Firefox is a free and open source web browser.



The screenshot shows the Mozilla Firefox browser window. The address bar displays "https://www.disneyanimation.com". The main content area shows a scene from the movie Frozen featuring Sven and Olaf. The top navigation bar of the browser includes links for "PROJECTS", "STUDIO", "EVENTS", "NEWS", "CAREERS", and "TECHNOLOGY", along with social media icons for Facebook, Twitter, and YouTube. A "Remove" button is visible on the left side of the Firefox icon.

Information

Category: Internet
Version: 56.0.2
Size: 55.4 MB
Developer: Mozilla
Status: Installed

More in Internet

- TeamViewer TeamViewer GmbH
- Google Earth Google
- Flowdock Rally Software Developme...
- TeamViewer QuickSupp... TeamViewer GmbH

Software | Categories | Updates

Managed Software Center

Software Categories My Items Updates

Search

2 pending updates

UPDATE ALL

 Google Chrome
Google
Version 62.0.3202.89

Google's web browser.

 Mozilla Firefox
Version 56.0.2

Mozilla Firefox is a free and open source web browser.

Other available updates

 Install macOS High Sierra
Apple
Version 10.13
Restart Required

Installs macOS version 10.13.

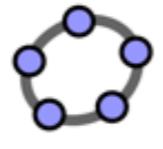
Software | Categories | Updates

Discovery

Managed Software Center

Software Categories My Items Updates

Search

 <p>Communication Adium Skype Limechat</p>	 <p>Developer R for Mac OS X SourceTree CodeRunner 2</p>	 <p>Developer Tools Sublime Text 3 Iceberg Package Builder</p>
 <p>Development Versions</p>	 <p>Drivers Wacom Tablet WacomTablet</p>	 <p>Editors Chocolat</p>
 <p>Email ItsyCal</p>	 <p>Graphics & Rendering Blender</p>	 <p>Internet Google Earth Google Chrome Flowdock</p>
 <p>Mail Clients Postbox</p>	 <p>Mathematics GeoGebra RStudio LyX</p>	 <p>Media VLC Studiocode 5 Picasa</p>
 <p>Media Players MPlayerX</p>	 <p>Munki Tools Captur MunkiAdmin - GUI tools for Munki</p>	 <p>Network Utilities Wireshark 1.12.6 Intel 64</p>
 <p>OS Utilities AppCleaner Uninstaller Utility</p>	 <p>Operating Systems Install macOS High Sierra</p>	 <p>Organization Papers</p>
 <p>Productivity Gephi Numbers Alinof Timer</p>	 <p>Remote Access Chicken CoRD ThinLinc Client</p>	 <p>SFTP Clients Fetch - Full featured file transfer c...</p>

Managed Software Center

Software Categories My Items Updates

Search

Communication

Adium
Communication - The Adium Team
 [INSTALL](#)

Colloquy
Communication
 [INSTALL](#)

Google Voice and Video plugin
Communication - Google
 [INSTALL](#)

Limechat
Communication - Limechat
 [INSTALL](#)

Lync 14.0.11 Update
Communication - Microsoft
 [INSTALL](#)

Mozilla Thunderbird
Communication - Mozilla
Installed
 [REMOVE](#)

Skype
Communication - Microsoft
Installed
 [REMOVE](#)

Slack
Communication - Slack Technolog...
 [INSTALL](#)

Categories

Admin tools
Audio
Communication
Developer
Developer Tools
Development
Drivers
Editors
Email
Graphics & Rendering
Internet
Mail Clients
Mathematics
Media
Media Players
Munki Tools
Network Utilities
OS Utilities
Operating Systems
Organization
Productivity
Remote Access
SFTP Clients
Science
Security
Social Networking
System Administration
TeX
Testing
Text Editors
Uncategorized
Utilities
Utility

Managed Software Center

Software Categories My Items Updates

Search results for video

Categories

Search bar: video

 Adobe Flash Player Internet - Adobe Installed REMOVE	 Camtasia Uncategorized INSTALL	 Dropbox Uncategorized Installed REMOVE	Admin tools
 Fuzemeeting Uncategorized INSTALL	 Google Voice and Video plugin Communication - Google INSTALL	 HandBrake Uncategorized INSTALL	Audio
 Jing Media - Techsmith INSTALL	 Skype Communication - Microsoft Installed REMOVE	 StudioCode 5 Media - StudioCode Business Group INSTALL	Communication
 VLC Media - VideoLAN Installed REMOVE			Developer
			Developer Tools
			Development
			Drivers
			Editors
			Email
			Graphics & Rendering
			Internet
			Mail Clients
			Mathematics
			Media
			Media Players
			Munki Tools
			Network Utilities
			OS Utilities
			Operating Systems
			Organization
			Productivity
			Remote Access
			SFTP Clients
			Science
			Security
			Social Networking
			System Administration
			TeX
			Testing
			Text Editors
			Uncategorized
			Utilities
			Utility

Managed Software Center

Software Categories My Items Updates

Search

Mozilla Firefox

Mozilla Firefox is a free and open source web browser.

Remove

The screenshot shows the Mozilla Firefox interface with the title bar "Walt Disney Animation Studio". The address bar displays "https://www.disneyanimation.com". The main content area shows a promotional image for the movie "Ralph Breaks the Internet: Wreck-It Ralph 2". The image features Ralph and Vanellope standing in front of a cityscape composed of various digital icons and platforms like Google, Amazon, and Disney. Below the image, the text "RALPH BREAKS THE INTERNET: WRECK-IT RALPH 2" and "NOVEMBER 21, 2018" is visible. At the bottom of the browser window, there's a footer with links to Disney.com, Terms of Use, Privacy Policy, Your California Privacy Rights, and Children's Privacy Policy.

Information

Category: Internet
Version: 56.0.2
Size: 55.4 MB
Developer: Mozilla
Status: Installed

More in Internet

Flowdock Rally Software Developme...
Google Earth Google
Google Chrome Google
TeamViewer QuickSupp... TeamViewer GmbH

Software | Categories | Updates

Customization

Managed Software Center

Software Categories My Items Updates

Search

Managed Software Center

Your source for software for your Mac.



All items

 1Password Utilities - AgileBits Inc. INSTALL	 Acorn 4 INSTALL	 Adium Communication - The Adium Team INSTALL
 Adobe Acrobat Reader DC Uncategorized INSTALL	 Adobe Flash Player Internet - Adobe Installed REMOVE	 Adobe Reader Productivity - Adobe INSTALL
 Adware Medic Utilities - Thomas Reed INSTALL	 Airfoil Media - Rogue Amoeba INSTALL	 Alfred 2 Utilities - Running with Crayons Ltd INSTALL
 Alinof Timer Productivity - Alinof Software Sàrl INSTALL	 Amadeus Lite Uncategorized INSTALL	 Android Studio Developer - Google INSTALL
 Apache OpenOffice Productivity INSTALL	 AppCleaner Uninstaller Utility OS Utilities - FreeMacSoft INSTALL	 AppCode Uncategorized INSTALL

Categories

- Admin tools
- Audio
- Communication
- Developer
- Developer Tools
- Development
- Drivers
- Editors
- Email
- Graphics & Rendering
- Internet
- Mail Clients
- Mathematics
- Media
- Media Players
- Munki Tools
- Network Utilities
- OS Utilities
- Organization
- Productivity
- Remote Access
- SFTP Clients
- Science
- Security
- Social Networking

Managed Software Center

Software Categories My Items Updates

Search

Operating Systems - Apple
Update available
UPDATE

Productivity - Apple
Installed
REMOVE

Internet - Mozilla
Installed
REMOVE

Development
Drivers
Editors
Email
Graphics & Rendering
Internet
Mail Clients
Mathematics
Media
Media Players
Munki Tools
Network Utilities
OS Utilities
Operating Systems
Organization
Productivity
Remote Access
SFTP Clients
Science
Security
Social Networking
System Administration
TeX
Testing
Text Editors
Uncategorized
Utilities
Utility
Virtualization
Web Development
eBooks

Mozilla Thunderbird
Communication - Mozilla
Installed
REMOVE

Numbers
Productivity - Apple
Installed
REMOVE

Pages
Productivity - Apple
Installed
REMOVE

Skype
Communication - Microsoft
Installed
REMOVE

Slack
Communication - Slack Technolog...
INSTALL

VLC
Media - VideoLAN
Installed
REMOVE

Software | Categories | Updates

Managed Software Center

Software Categories My Items Updates

Search

Managed Software Center

Featured items

 Adobe Acrobat Reader DC Uncategorized INSTALL	 Citrix Receiver Virtualization - Citrix Systems, Inc. INSTALL	 Google Chrome Internet - Google INSTALL
 Install macOS High Sierra Operating Systems - Apple Update available UPDATE	 Keynote Productivity - Apple Installed REMOVE	 Mozilla Firefox Internet - Mozilla Installed REMOVE
 Mozilla Thunderbird Communication - Mozilla Installed REMOVE	 Numbers Productivity - Apple Installed REMOVE	 Pages Productivity - Apple Installed REMOVE
 Skype Communication - Microsoft Installed REMOVE	 Slack Communication - Slack Technolog... INSTALL	 VLC Media - VideoLAN Installed REMOVE

Quick Links

Help
Support
Contact Tech Support

Featured

What's new in OS X
Apple
Disney Animation Web
Change your passwords