dataJARltd.

JAMF NATION user conference

OCTOBER 18-20, 2016

MINNEAPOLIS, MN

Profiles: An IT Admin’s Best Friend

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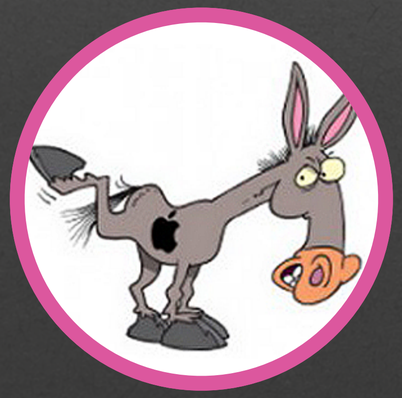
dataJARltd.

James Ridsdale

Director / Systems Engineer
dataJAR Ltd



Bear Tourles

Senior Systems Engineer
dataJAR Ltd / JAMFNation /
macadmins.org Slack

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About dataJAR

- Digital hub, Brighton UK
- Apple Consultants Network
- Host and MSP around 50 JSS’s
- 10,000’s of devices (macOS / iOS)
- JAMF Gold Partner (Reseller)

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Profiles: An IT Admin’s Best Friend

Presentation agenda:

History

Theory

Idiosyncrasies

Usage

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Freebies

https://github.com/dataJAR/jnuc2016.git

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In the beginning…

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In the beginning… 2001

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Property Lists

com.ThomsonResearchSoft.EndNote.plist

```
<?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">
```

com.ThomsonResearchSoft.EndNote.plist

```
<?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">
<dict>
    <key>AcceptedENX7.2EULA</key>
    <string>1</string>
</dict>
</plist>
```

L: 6 C: 23 XML Unicode (UTF-8) Unix (LF) Saved: 20/09/2016, 16:50:29 239 / ... / 9 100%

```
    <key>DefRefType</key>
    <integer>17</integer>
    <key>DefaultLibraries</key>
    <array/>
    <key>DefaultStyleName</key>
    <string>Annotated.ens</string>
    <key>ENDisableModificationDate</key>
    <false/>
    <key>ENDisableUpdateContentsFromEnclosedText</key>
    <false/>
    <key>ENPDFAnnotationFonts</key>
    <dict>
        <key>FreeTextNoteFont</key>
        <dict>
            <key>ENNoteFontName</key>
            <string>LucidaGrande</string>
            <key>ENNoteFontSize</key>
            <real>44</real>
```

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Property Lists: Scripting

```
# Check that we are running this on a MacBook
if [ "$macModel" == "MacBook" ]; then

    # Setup Keychain shared secret granting appropriate access for the OS apps
    /usr/bin/security add-generic-password -a "$groupName" -l "$labelName" -D "IPSec Shared Secret" -w "$sharedSecret" -s "$vpnUuid".SS -T /System/Library/Frameworks/SystemConfigura

    # Write a Network Config containing this keychain item directly to System Config
    /usr/libexec/PlistBuddy -c "Add :NetworkServices:$vpnUuid:DNS dict" /Library/Preferences/SystemConfiguration/preferences.plist
    /usr/libexec/PlistBuddy -c "Add :NetworkServices:$vpnUuid:IPv4 dict" /Library/Preferences/SystemConfiguration/preferences.plist
    /usr/libexec/PlistBuddy -c "Add :NetworkServices:$vpnUuid:IPv4:ConfigMethod string Automatic" /Library/Preferences/SystemConfiguration/preferences.plist
    /usr/libexec/PlistBuddy -c "Add :NetworkServices:$vpnUuid:IPv6 dict" /Library/Preferences/SystemConfiguration/preferences.plist
    /usr/libexec/PlistBuddy -c "Add :NetworkServices:$vpnUuid:Proxies dict" /Library/Preferences/SystemConfiguration/preferences.plist
    /usr/libexec/PlistBuddy -c "Add :NetworkServices:$vpnUuid:Proxies:ExceptionList array" /Library/Preferences/SystemConfiguration/preferences.plist
    /usr/libexec/PlistBuddy -c "Add :NetworkServices:$vpnUuid:Proxies:ExceptionList:0 string \*\.local" /Library/Preferences/SystemConfiguration/preferences.plist
    /usr/libexec/PlistBuddy -c "Add :NetworkServices:$vpnUuid:Proxies:ExceptionList:1 string 169\.254\/16" /Library/Preferences/SystemConfiguration/preferences.plist
    /usr/libexec/PlistBuddy -c "Add :NetworkServices:$vpnUuid:Proxies:FTPPassive integer 1" /Library/Preferences/SystemConfiguration/preferences.plist
    /usr/libexec/PlistBuddy -c "Add :NetworkServices:$vpnUuid:SMB dict" /Library/Preferences/SystemConfiguration/preferences.plist
    /usr/libexec/PlistBuddy -c "Add :NetworkServices:$vpnUuid:UserDefinedName string $labelName" /Library/Preferences/SystemConfiguration/preferences.plist
    /usr/libexec/PlistBuddy -c "Add :NetworkServices:$vpnUuid:Interface dict" /Library/Preferences/SystemConfiguration/preferences.plist
    /usr/libexec/PlistBuddy -c "Add :NetworkServices:$vpnUuid:Interface:Type string IPSec" /Library/Preferences/SystemConfiguration/preferences.plist
    /usr/libexec/PlistBuddy -c "Add :NetworkServices:$vpnUuid:IPSec dict" /Library/Preferences/SystemConfiguration/preferences.plist
    /usr/libexec/PlistBuddy -c "Add :NetworkServices:$vpnUuid:IPSec:AuthenticationMethod string SharedSecret" /Library/Preferences/SystemConfiguration/preferences.plist
    /usr/libexec/PlistBuddy -c "Add :NetworkServices:$vpnUuid:IPSec:LocalIdentifier string $groupName" /Library/Preferences/SystemConfiguration/preferences.plist
    /usr/libexec/PlistBuddy -c "Add :NetworkServices:$vpnUuid:IPSec:LocalIdentifierType string KeyID" /Library/Preferences/SystemConfiguration/preferences.plist
    /usr/libexec/PlistBuddy -c "Add :NetworkServices:$vpnUuid:IPSec:RemoteAddress string $serverName" /Library/Preferences/SystemConfiguration/preferences.plist
    /usr/libexec/PlistBuddy -c "Add :NetworkServices:$vpnUuid:IPSec:SharedSecret string $vpnUuid\.SS" /Library/Preferences/SystemConfiguration/preferences.plist
    /usr/libexec/PlistBuddy -c "Add :NetworkServices:$vpnUuid:IPSec:SharedSecretEncryption string Keychain" /Library/Preferences/SystemConfiguration/preferences.plist
    /usr/libexec/PlistBuddy -c "Add :NetworkServices:$vpnUuid:IPSec:XAuthName string $userName" /Library/Preferences/SystemConfiguration/preferences.plist
    /usr/libexec/PlistBuddy -c "Add :NetworkServices:$vpnUuid:IPSec:XAuthPasswordEncryption string Prompt" /Library/Preferences/SystemConfiguration/preferences.plist

    # At this point, we should have only one Network Set (Automatic) so we find out its UUID - errr, messy
    autoUuid=`/usr/libexec/Plistbuddy -c "Print :Sets" /Library/Preferences/SystemConfiguration/preferences.plist | grep -B1 -m1 Automatic | grep Dict | awk '{ print $1 }'`

    # and we add our newly created config to the default set
    /usr/libexec/PlistBuddy -c "Add :Sets:$autoUuid:Network:Service:$vpnUuid dict" /Library/Preferences/SystemConfiguration/preferences.plist
    /usr/libexec/PlistBuddy -c "Add :Sets:$autoUuid:Network:Service:$vpnUuid:__LINK__ string \/NetworkServices\/$vpnUuid" /Library/Preferences/SystemConfiguration/preferences.plist
    /usr/libexec/PlistBuddy -c "Add :Sets:$autoUuid:Network:Global:IPv4:ServiceOrder: string $vpnUuid" /Library/Preferences/SystemConfiguration/preferences.plist

else
    echo "This mac is not a MacBook… so skipping…"
fi
```

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Property Lists: How do they work?

¯_(ツ)_/¯

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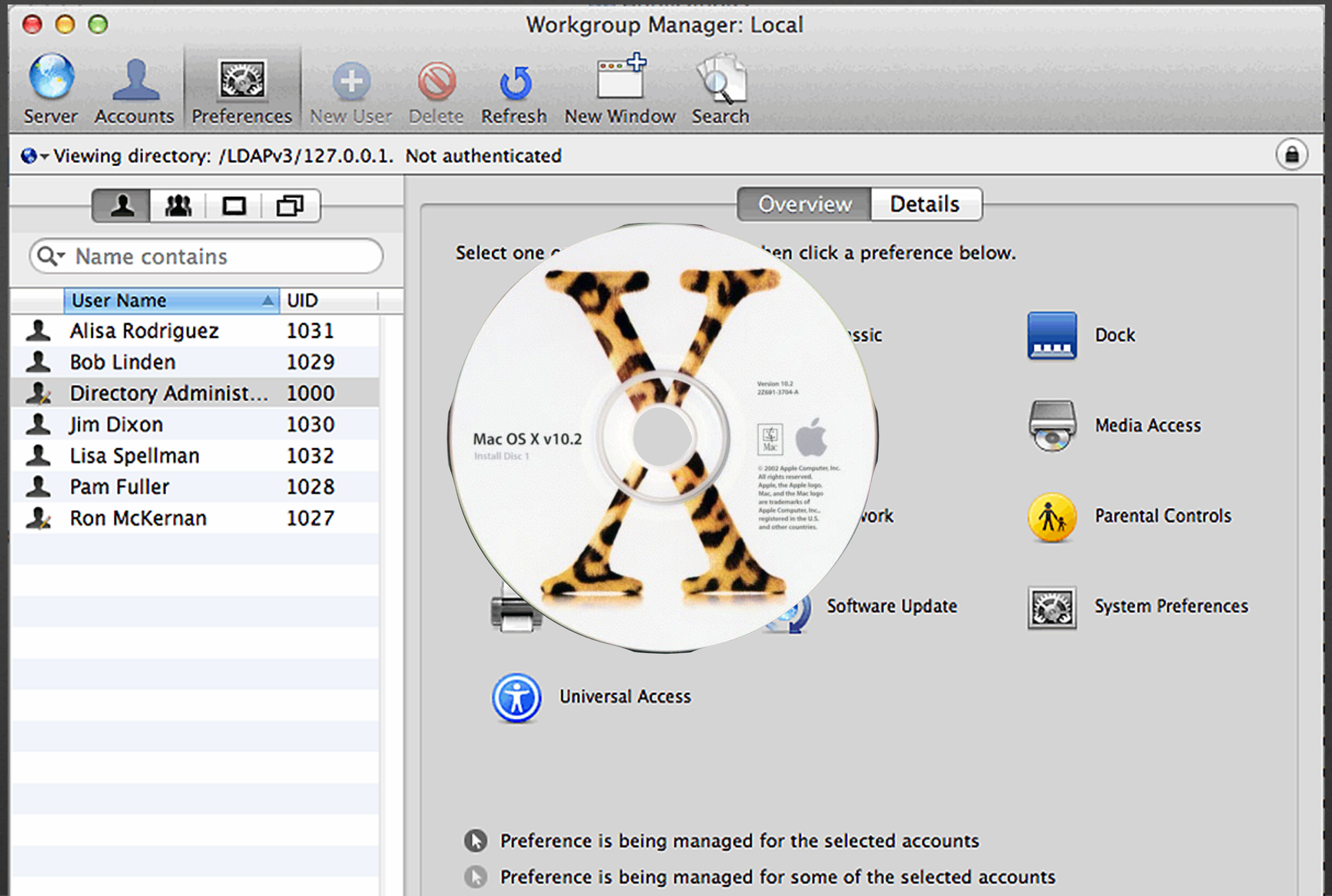
In



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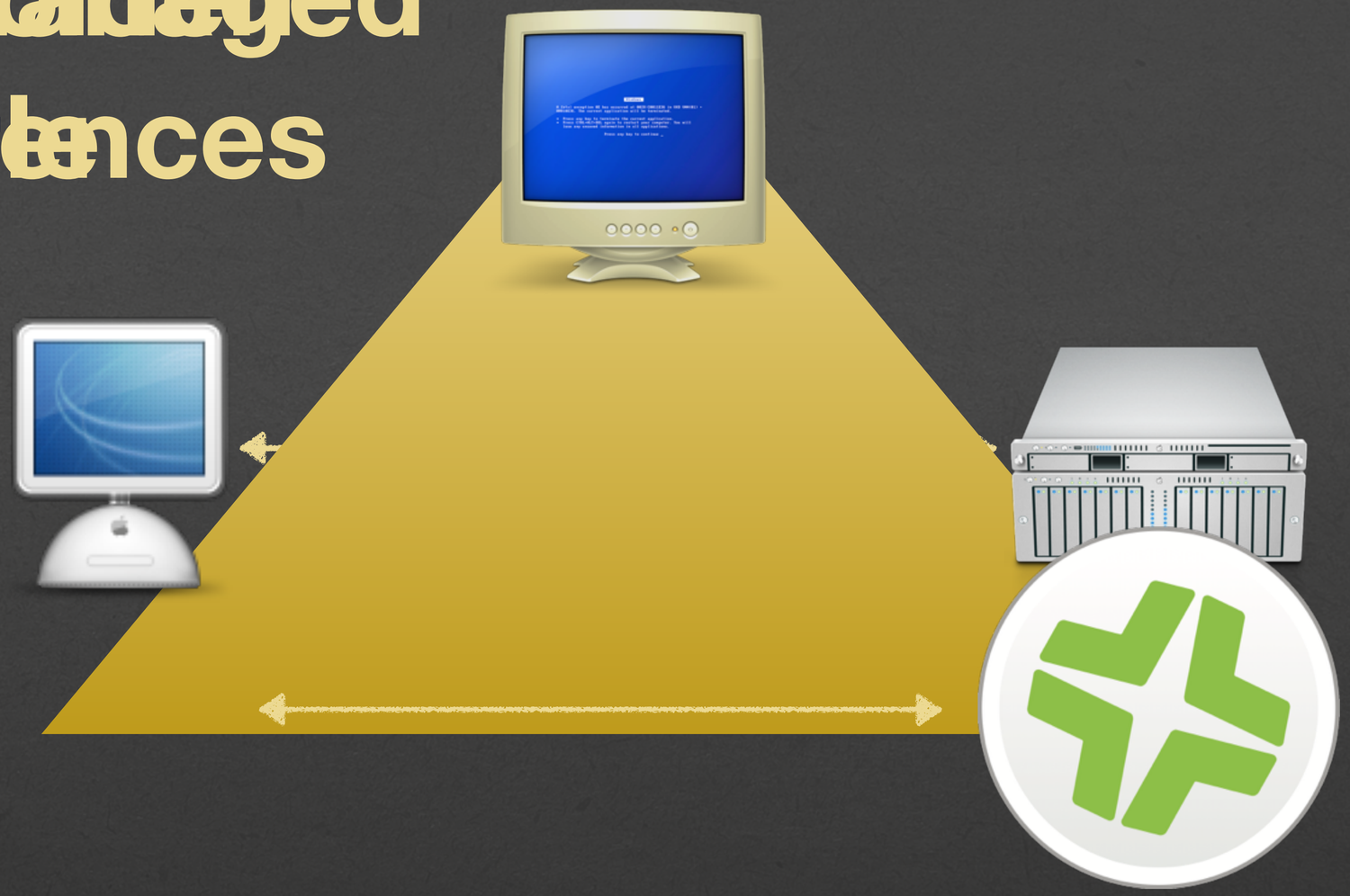
JSS Managed Preferences



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3370
VOTE DOWN
36

Allow policy execution once per computer, per user.

IMPLEMENTED IN 9.8

Posted: 15/11/11 at 15:12 by bentoms

At times it would be handy to run a script not just once per computer but also once per user.

For example,

Whilst MCX etc can set some preferences so they are set at every login etc, it's limited when handling variables.

But a policy that runs once per user per computer could be used to populate plists with the logged in users information.

It may not be desirable/advisable to do this @ every login.

IMPLEMENTED IN 9.8 **Responded:** 16/09/15 at 12:00 by beth.lindner

As of Casper Suite 9.8 there is now a "Once per user per computer" execution frequency available in Policies. This execution frequency will allow the policy to run once for each user, on every computer in scope.

For example, take a policy that is set as a login trigger with an execution frequency of once per user per computer. This policy will execute when UserOne logs onto ComputerA and will execute again when UserOne logs onto ComputerB. However when UserOne logs onto ComputerA tomorrow, this policy will not execute again. But when UserTwo logs onto ComputerA, this policy will execute a second time.

JSS | Policies

1 Duplicate

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Anyways, in 2007… this happened

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#imtoosexyformcx

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In 2008…

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Configuration Profiles: How do they work?

¯_(ツ)_/¯

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2011, the year of MDM…

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#imtoosexyformcx

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Apple Push Notifications Service

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In 2013...

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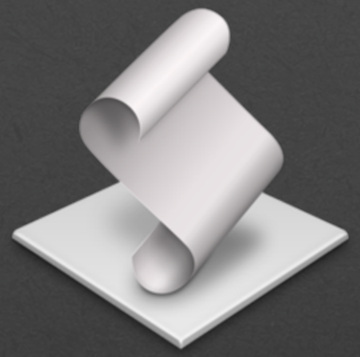
Property Lists: Scripting

/usr/bin/defaults

~~/usr/libexec/PlistBuddy~~



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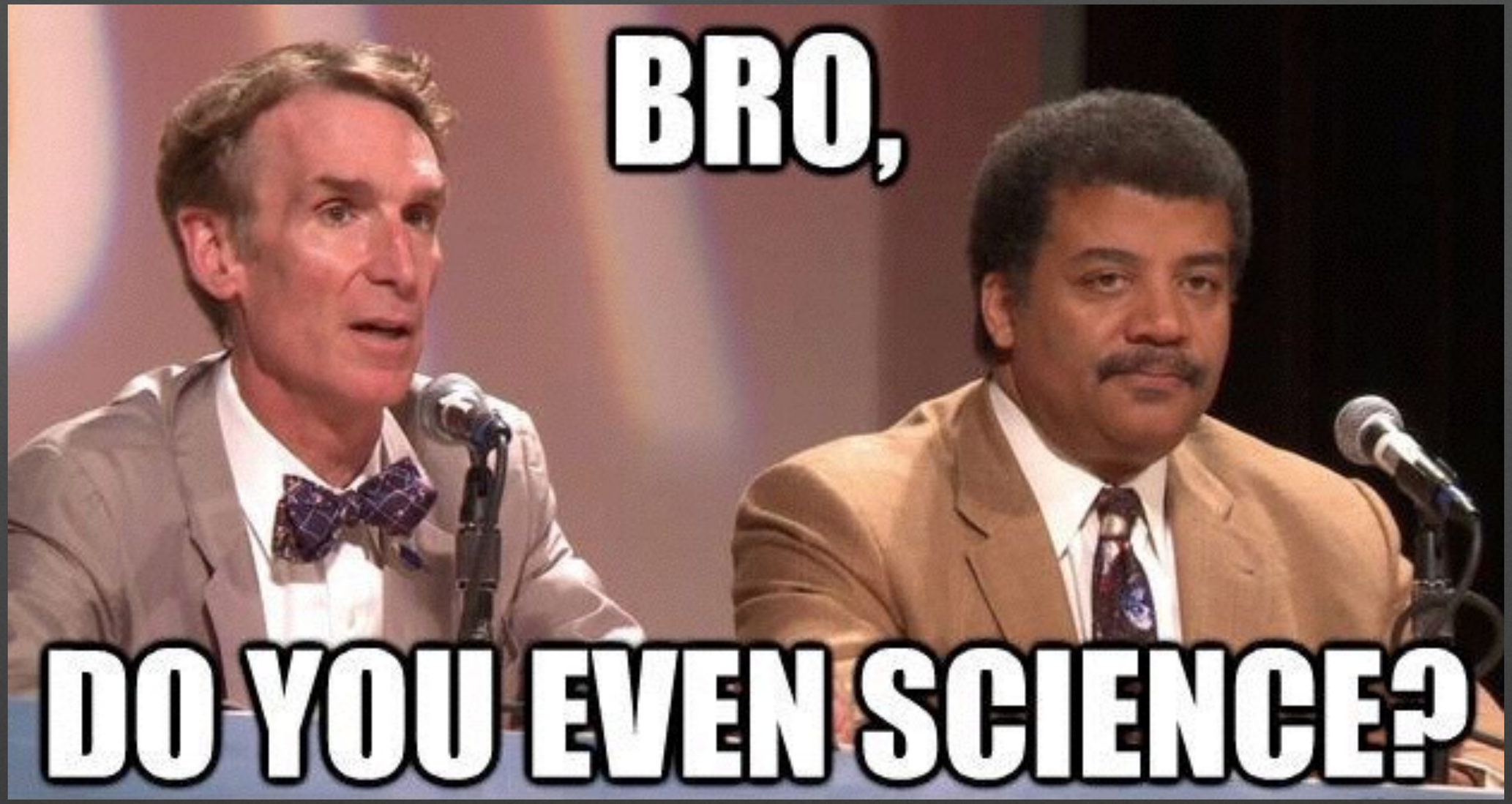

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de-signed-Passcode.mobileconfig

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE plist PUBLIC "-//Apple//DTD PLIST 1.0//EN" "http://www.apple.
<plist version="1.0">
<dict>
    <key>PayloadContent</key>
    <array>
        <dict>
            <key>PayloadDescription</key>
            <string></string>
            <key>PayloadDisplayName</key>
            <string>com.apple.mobiledevice.passwordpolicy</string>
            <key>PayloadEnabled</key>
            <true/>
            <key>PayloadIdentifier</key>
            <string>AB0FF0C0-9E66-469B-B85A-D57FEE8AE001</string>
            <key>PayloadOrganization</key>
            <string>data JAR Ltd</string>
            <key>PayloadType</key>
            <string>com.apple.mobiledevice.passwordpolicy</string>
            <key>PayloadUUID</key>
            <string>AB0FF0C0-9E66-469B-B85A-D57FEE8AE001</string>
            <key>PayloadVersion</key>
            <integer>1</integer>
            <key>allowSimple</key>
            <true/>
            <key>forcePIN</key>
            <true/>
        </dict>
    </array>
    <key>PayloadDescription</key>
    <string></string>
    <key>PayloadDisplayName</key>
    <string>Passcode</string>
    <key>PayloadEnabled</key>
    <true/>
    <key>PayloadIdentifier</key>
    <string>F62F1E6C-684B-4F5A-A019-E40F950DC95E</string>
    <key>PayloadOrganization</key>
    <string>data JAR Ltd</string>
    <key>PayloadRemovalDisallowed</key>
    <true/>
    <key>PayloadType</key>
    <string>Configuration</string>
    <key>PayloadUUID</key>
    <string>F62F1E6C-684B-4F5A-A019-E40F950DC95E</string>
    <key>PayloadVersion</key>
    <integer>1</integer>
</dict>
</plist>
```

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de-signed-Managed EndNote X7.mobilec

~/Downloads/de-signed-Managed EndNote X7.mobileconfig

```
<?xml version="1.0" encoding="UTF-8"?>
<!DOCTYPE plist PUBLIC "-//Apple//DTD PLIST 1.0//EN" "http://www.appl
<plist version="1.0">
<dict>
    <key>PayloadContent</key>
    <array>
        <dict>
            <key>PayloadContent</key>
            <dict>
                <key>com.ThomsonResearchSoft.EndNote</key>
                <dict>
                    <key>Forced</key>
                    <array>
                        <dict>
                            <key>mcx_preference_settings</key>
                            <dict>
                                <key>AcceptedENX7.2EULA</key>
                                <string>1</string>
                            </dict>
                        </dict>
                    </array>
                </dict>
            </dict>
            <key>PayloadDescription</key>
            <string></string>
            <key>PayloadDisplayName</key>
            <string>Custom</string>
            <key>PayloadEnabled</key>
            <true/>
            <key>PayloadIdentifier</key>
            <string>27691957-850A-4CFE-A3CD-16DF262B0DF8</string>
            <key>PayloadOrganization</key>
            <string>dataJAR Ltd</string>
            <key>PayloadType</key>
            <string>com.apple.ManagedClient.preferences</string>
            <key>PayloadUUID</key>
            <string>27691957-850A-4CFE-A3CD-16DF262B0DF8</string>
            <key>PayloadVersion</key>
            <integer>1</integer>
        </dict>
    </array>
    <key>PayloadDescription</key>
    <string></string>
    <key>PayloadDisplayName</key>
    <string>Managed EndNote X7</string>
    <key>PayloadEnabled</key>
```

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But, how do they work?

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Identification: CFBundleIdentifier

“**(iOS, macOS)** uniquely identifies the bundle.

Each distinct app or bundle on the system must have a unique bundle ID.

The system uses this string to identify your app in many ways.”

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#imtoosexyformcx

Identification: CFBundleIdentifier

"For example, the preferences system uses this string to identify the app for which a given preference applies.

https://developer.apple.com/library/content/documentation/General/Reference/"

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Precedence

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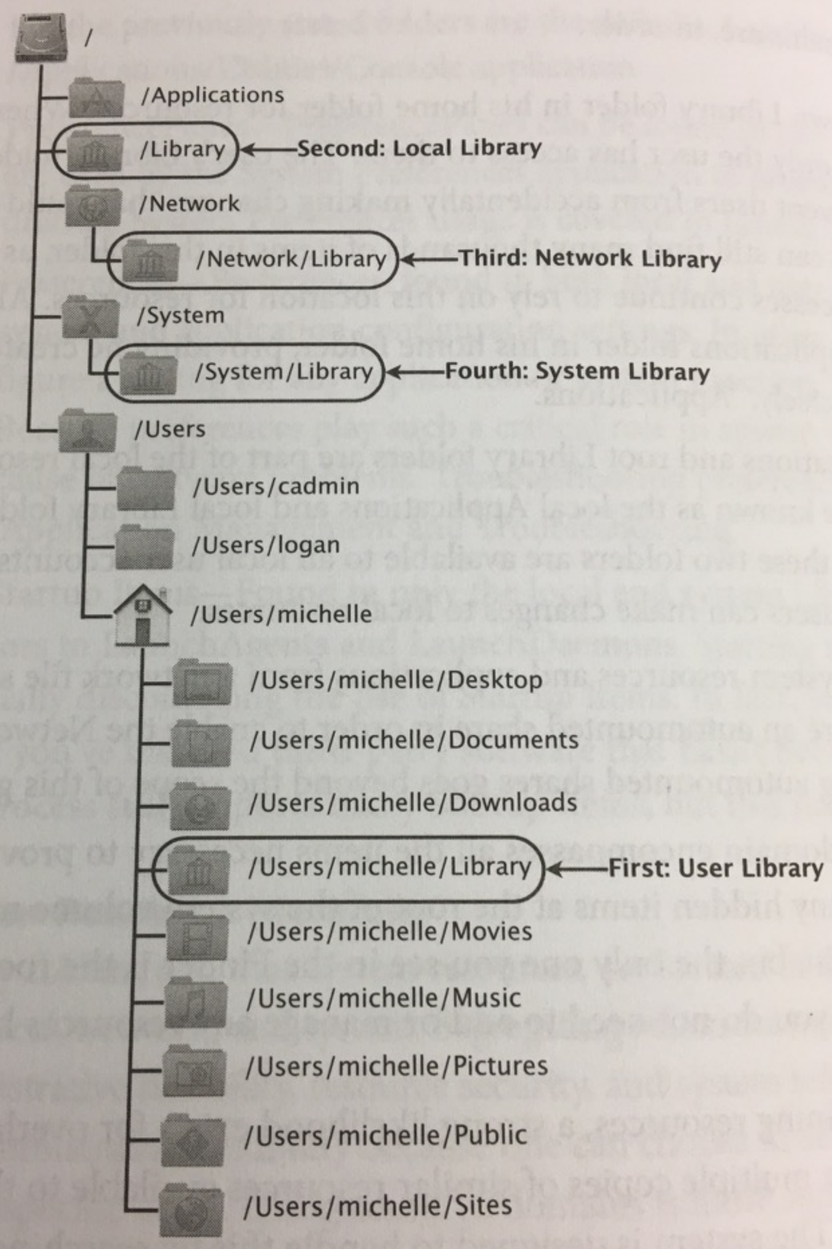

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Precedence: macOS

1. /Users/username/Library/
2. /Library/
3. /Network/Library/
4. /System/Library

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Precedence: macOS - managed

1. /Library/Managed Preferences/
2. /Users/username/Library/
3. /Library/
4. /Network/Library/
5. /System/Library

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Precedence: iOS

1. /A /
   co
2. /A /
   CE

appconfig.org

APPCONFIG COMMUNITY

About Dev Center Members Join AppConfig

Introducing The AppConfig Community

A community focused on providing tools and best practices around native capabilities in mobile operating systems to enable a more consistent, open and simple way to configure and secure mobile apps in order to increase mobile adoption in business. Users benefit with instant mobile productivity and a seamless out-of-the box experience, and businesses benefit with secure work-ready apps with minimal setup required while leveraging existing investments in Enterprise Mobility Management (EMM), VPN, and identity solutions. Ultimately, your apps are simpler to configure, secure and deploy.

IBM MaaS360 JAMF software MobileIron vmware airwatch SOTI BlackBerry

Benefits of AppConfig

ISVs & Developers

Build enterprise-ready apps faster
EMM vendor neutral solution
Reduce need for proprietary SDK
Reduce need for App Wrapping

Enterprises

Leverage existing EMM investments
Use existing VPN and IAM solutions
Better native onboarding user experience
Greater selection of business apps

EMM Providers

Leverage OS best practices
Larger ecosystem of business apps
Simplify app configuration
Ease management workflows

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Composition

com.ThomsonResearchSoft.EndNote.plist

```
<?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">
<dict>
    <key>AcceptedENX7.2EULA</key>
    <string>1</string>
</dict>
</plist>
```

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de-signed-Managed EndNote X7.mobileconfig

~/Downloads/de-signed-Managed EndNote X7.mobileconfig (functions)


```xml
<?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">
<dict>
    <key>PayloadContent</key>
    <array>
        <dict>
            <key>PayloadContent</key>
            <dict>
                <key>com.ThomsonResearchSoft.EndNote</key>
                <dict>
                    <key>Forced</key>
                    <array>
                        <dict>
                            <key>mcx_preference_settings</key>
                            <dict>
                                <key>AcceptedENX7.2EULA</key>
                                <string>1</string>
                            </dict>
                        </dict>
                    </array>
                </dict>
            </dict>
            <key>PayloadDescription</key>
            <string></string>
            <key>PayloadDisplayName</key>
            <string>Custom</string>
            <key>PayloadEnabled</key>
            <true/>
            <key>PayloadIdentifier</key>
            <string>27691957-850A-4CFE-A3CD-16DF262B0DF8</string>
            <key>PayloadOrganization</key>
            <string>dataJAR Ltd</string>
            <key>PayloadType</key>
            <string>com.apple.ManagedClient.preferences</string>
            <key>PayloadUUID</key>
            <string>27691957-850A-4CFE-A3CD-16DF262B0DF8</string>
            <key>PayloadVersion</key>
            <integer>1</integer>
        </dict>
    </array>
    <key>PayloadDescription</key>
    <string></string>
    <key>PayloadDisplayName</key>
    <string>Managed EndNote X7</string>
    <key>PayloadEnabled</key>
```


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An example: ADPassMon

- Profile payloads can be applied via location. This is useful for any subsequent settings for the same key. Which are then ignored.
- This iterates over plists in the order of the precedence shown before.

```
Profile: allowPasswordChange true
User: allowPasswordChange false
Result: allowPasswordChange true
```

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Let’s look at the idiosyncrasies when working with profiles…

…so that’s the theory

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Frequency

- ~~Once - Like FEU/FUT~~
- ~~Often - Applied at every login, settings not forced~~
- Always - Setting forced

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Frequency

de-signed-Managed EndNote X7.mobileconfig

~/Downloads/de-signed-Managed EndNote X7.mobileconfig (functions)

```
<?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">
<dict>
    <key>PayloadContent</key>
    <array>
        <dict>
            <key>PayloadContent</key>
            <dict>
                <key>com.ThomsonResearchSoft.EndNote</key>
                <dict>
                    <key>Forced</key>
                    <array>
                        <dict>
                            <key>mcx_preference_settings</key>
                            <dict>
                                <key>AcceptedENX7.2EULA</key>
                                <string>1</string>
                            </dict>
                        </dict>
                    </array>
                </dict>
            </dict>
            <key>PayloadDescription</key>
```

Frequency

“Except for changing passwords, users generally can’t change settings that are defined in a configuration profile.”

https://help.apple.com/profilemanager/mac/5.2/

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mcxToProfile

https://github.com/timsutton/mcxToProfile

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Identification

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de-signed-Managed EndNote X7.mobileconfig

~/Downloads/de-signed-Managed EndNote X7.mobileconfig (functions)

```
<?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">
<dict>
    <key>PayloadContent</key>
    <array>
        <dict>
            <key>PayloadContent</key>
            <dict>
                <key>com.ThomsonResearchSoft.EndNote</key>
                <dict>
                    <key>Forced</key>
                    <array>
                        <dict>
                            <key>mcx_preference_settings</key>
                            <dict>
                                <key>AcceptedENX7.2EULA</key>
                                <string>1</string>
                            </dict>
                        </dict>
                    </array>
                </dict>
            </dict>
            <key>PayloadDescription</key>
            <string></string>
            <key>PayloadDisplayName</key>
            <string>Custom</string>
            <key>PayloadEnabled</key>
            <true />
            <key>PayloadIdentifier</key>
            <string>27691957-850A-4CFE-A3CD-16DF262B0DF8</string>
            <key>PayloadOrganization</key>
            <string>dataJAR Ltd</string>
            <key>PayloadType</key>
            <string>com.apple.ManagedClient.preferences</string>
            <key>PayloadUUID</key>
            <string>27691957-850A-4CFE-A3CD-16DF262B0DF8</string>
            <key>PayloadVersion</key>
            <integer>1</integer>
        </dict>
    </array>
    <key>PayloadDescription</key>
    <string></string>
    <key>PayloadDisplayName</key>
    <string>Managed EndNote X7</string>
    <key>PayloadEnabled</key>
```

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Applying Profiles

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Preference Application: Caching

> `cfprefsd` - this will composite preferences at intervals, from changes made via the preferences system. Stop killing it!

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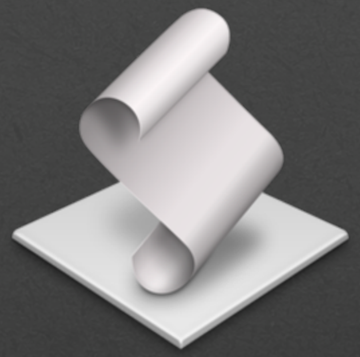
Property Lists: Scripting

/usr/bin/defaults

~~/usr/libexec/PlistBuddy~~



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Checking Preferences

com.apple.appstore.plist

```
<?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">
<dict>
    <key>NSWindow Frame Preferences</key>
    <string>109 0 1073 902 0 0 1680 1027 </string>
    <key>NSWindow Frame window_prefs</key>
    <string>242 0 1240 1028 0 0 1680 1028 </string>
    <key>SeenOSUpdates</key>
    <array/>
    <key>Storefront</key>
    <string>143444,13</string>
    <key>appStoreBadgeCount</key>
    <integer>2</integer>
    <key>com.apple.appstore.WebKit2DeveloperExtrasEnabled</key>
    <true/>
    <key>com.apple.appstore.WebKit2ShowsToolTipOverTruncatedText</key>
    <true/>
    <key>com.apple.appstore.WebKit2SuppressesIncrementalRendering</key>
    <true/>
    <key>com.apple.appstore.WebKit2UserInterfaceDirectionPolicy</key>
    <integer>1</integer>
    <key>primary.WebKit2DeveloperExtrasEnabled</key>
    <true/>
    <key>primary.WebKit2ShowsToolTipOverTruncatedText</key>
    <true/>
    <key>primary.WebKit2SuppressesIncrementalRendering</key>
    <true/>
</dict>
</plist>
```

L: 1 C: 1 XML Unicode (UTF-8) Unix (LF) Saved: 22/09/2016, 09:19:24 1,010 / ... / 31 100%

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Checking Preferences

btoms — -bash — 118×5

```
demo:~ btoms$ defaults read com.apple.appstore restrict-store-require-admin-to-install
2016-09-22 13:13:04.013 defaults[31560:5994099]
The domain/default pair of (com.apple.appstore, restrict-store-require-admin-to-install) does not exist
demo:~ btoms$
```

btoms — -bash — 118×5

```
demo:~ btoms$ defaults read ~/Library/Preferences/com.apple.appstore restrict-store-require-admin-to-install
2016-09-22 13:12:52.629 defaults[31556:5992987]
The domain/default pair of (/Users/btoms/Library/Preferences/com.apple.appstore, restrict-store-require-admin-to-insta
ll) does not exist
demo:~ btoms$
```

btoms — -bash — 136×6

```
demo:~ btoms$ defaults read /Library/Managed\ Preferences/com.apple.appstore.plist restrict-require-admin-to-install
2016-09-23 10:11:39.001 defaults[44982:8767309]
The domain/default pair of (/Library/Managed Preferences/com.apple.appstore.plist, restrict-require-admin-to-install) does not exist
demo:~ btoms$
```

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Checking Preferences

com.apple.appstore.plist

/Library/Managed Preferences/com.apple.appstore.plist (functions)

```xml
<?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">
<dict>
    <key>PayloadUUID</key>
    <string>CDECE84B-5108-494C-BB45-0260209844DF</string>
    <key>_manualProfile</key>
    <true/>
    <key>restrict-store-disable-app-adoption</key>
    <false/>
    <key>restrict-store-require-admin-to-install</key>
    <false/>
    <key>restrict-store-softwareupdate-only</key>
    <false/>
</dict>
</plist>
```

L: 1 C: 1 XML Unicode (UTF-8) Unix (LF) Saved: 23/09/2016, 08:09:10 480 / 63 / 17 100%

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Checking Preferences

cfprefs.py

```
#!/usr/bin/python

import CoreFoundation

domain = 'com.apple.appstore'
key = 'restrict-store-require-admin-to-install'

key_value = CoreFoundation.CFPreferencesCopyAppValue(key, domain)
print 'Key Value = ', key_value

key_forced = CoreFoundation.CFPreferencesAppValueIsForced(key, domain)
print 'Key Forced = ', key_forced
```

L: 12 C: 34 Python Unicode (UTF-8) Unix (LF) Saved: 15/07/2016, 14:10:21

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Checking Preferences

- Key Value = `False`
- Key Forced = `True`

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Apple Push Notifications Service

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Applying Profiles: Scoping

- Computer Level: Generally applied immediately
- User Level: Can be applied immediately or when an MDM enabled user logs in

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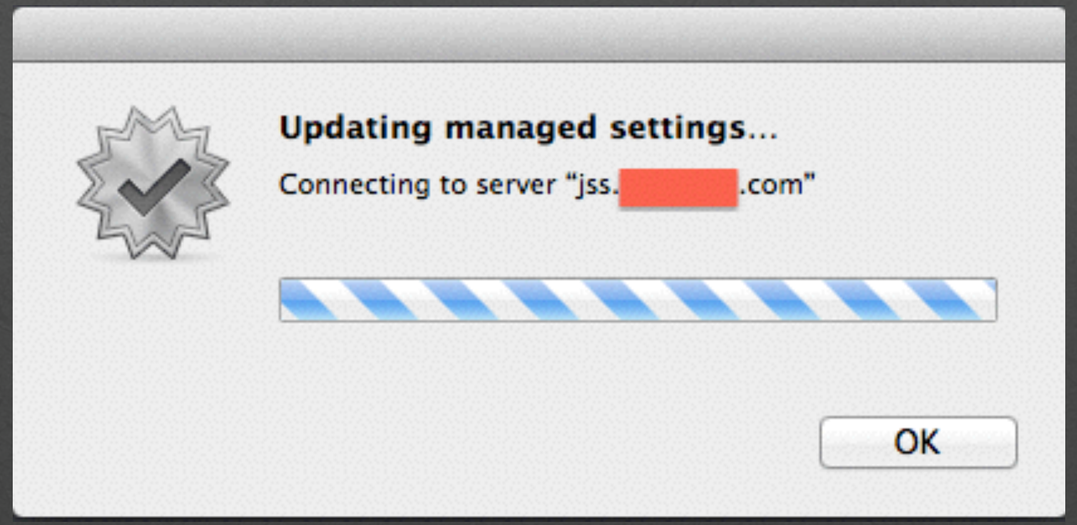
Applying Profiles: User



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Applying Profiles: Networking

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Applying Profiles: Networking

The following happens when updating an SSID via a profile:

1. Original profile is removed
2. Updated profile is applied

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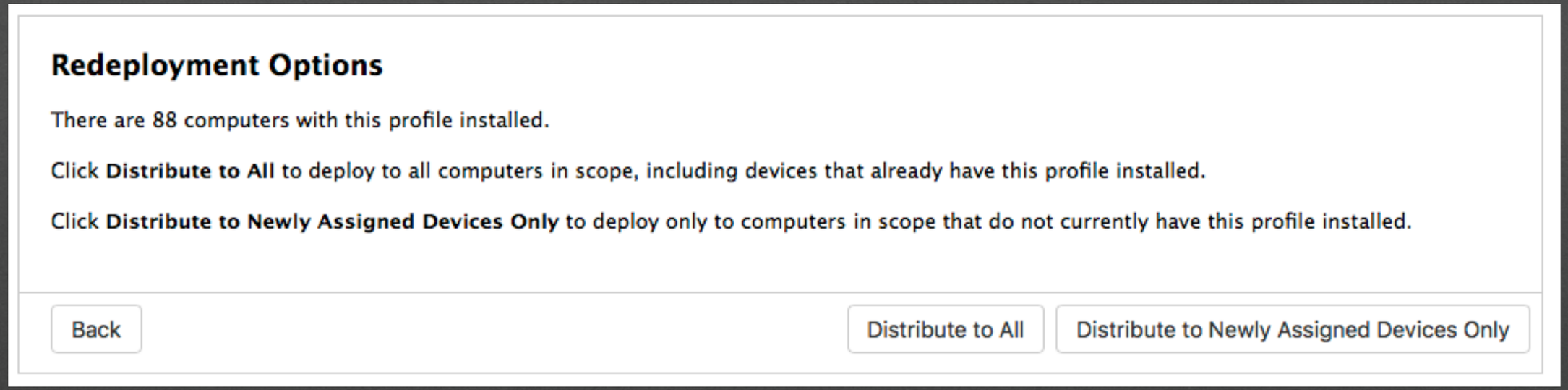
Applying Profiles: Distribution



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Applying Profiles: Context

> If deploying a VPN profile at User level, the user may be prompted for Admin credentials if the profile wants to store a password for the VPN connection in the System.keychain.

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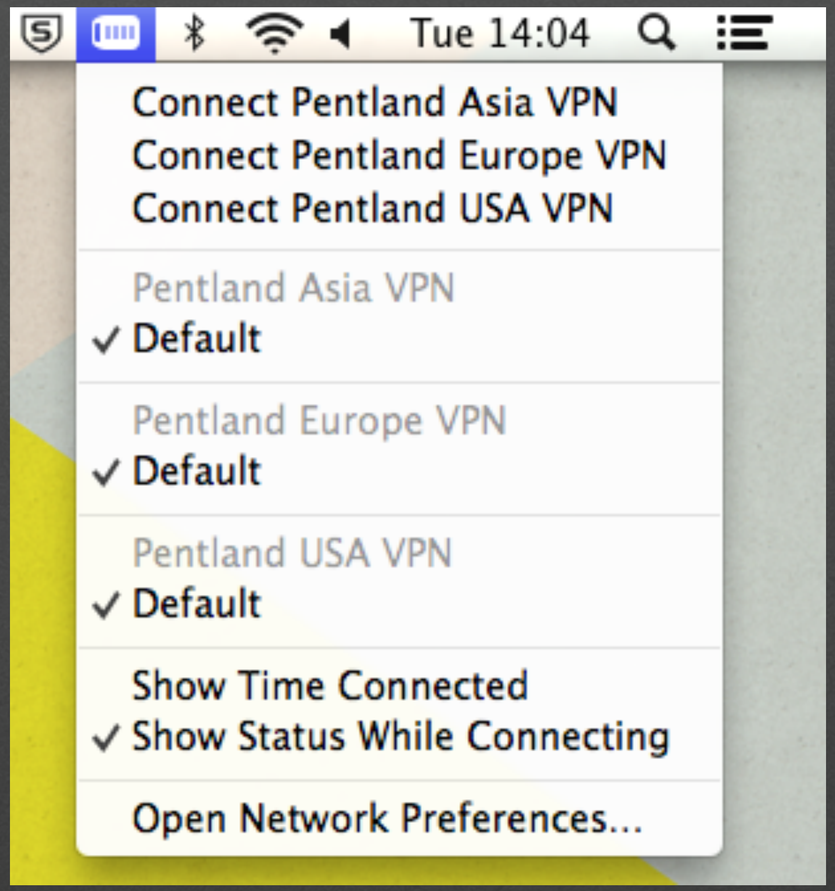
Applying Profiles



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Applying Profiles: Applications

> Whilst Profiles can be deployed at any time, the Applications they are for will may not composite their preferences until they are launched after the profile has been applied.

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Preference Application: Caching

> Bundles can make use of the preferences API to be alerted if a key has been changed. This includes via a Profile.

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WAAAT?!

Managed Security & Privacy, Encryption, Login Window and Restrictions.mobileconfig


```
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¿¿¿†Ä$Ä¿Ç¿Ë<?xml version="1.0" encoding="UTF-8"?><!DOCTYPE plist PUBLIC "-//Apple//DTD PLIST 1.0//EN" "http://www.apple.com/DTDs/Pro
<plist version="1"><dict><key>PayloadUUID</key><string>68FB66C3-930E-4CA9-9EF7-76CD893533E3</string><key>PayloadType</key><string>Co
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190201164235Z0<1¿0
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¿¿+¿¿¿¿¿¿0¿¿¿U¿¿¿¿˘¿¿¿¿¶0¿¿¿U¿¿¿¿˘¿¿0¿¿¿˘0M¿¿U¿¿¿F0D0B†@†>Ü<https://managed.datajar.mobi:8443/datajar//CA/JAMFCRLServlet0¿¿¿U¿#¿¿0
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```


L: 14 C: 68 HTML Western (Mac OS Roman) Legacy Mac OS (CR) Saved: 22/09/2016, 13:24:59 21,450 / 2,700 / 43 100%

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Amsys Automator Action

https://github.com/amsysuk/automator

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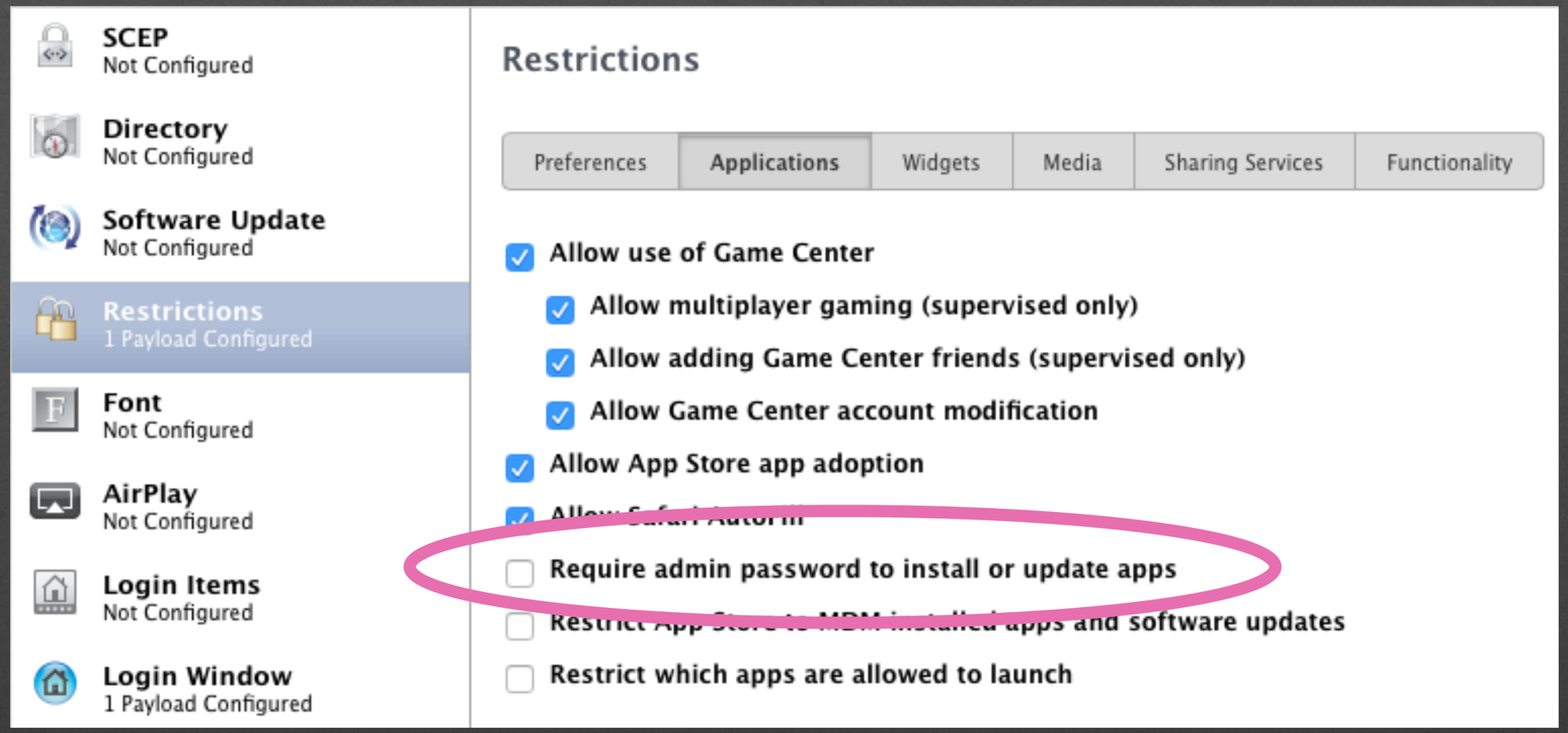
I didn’t select that!

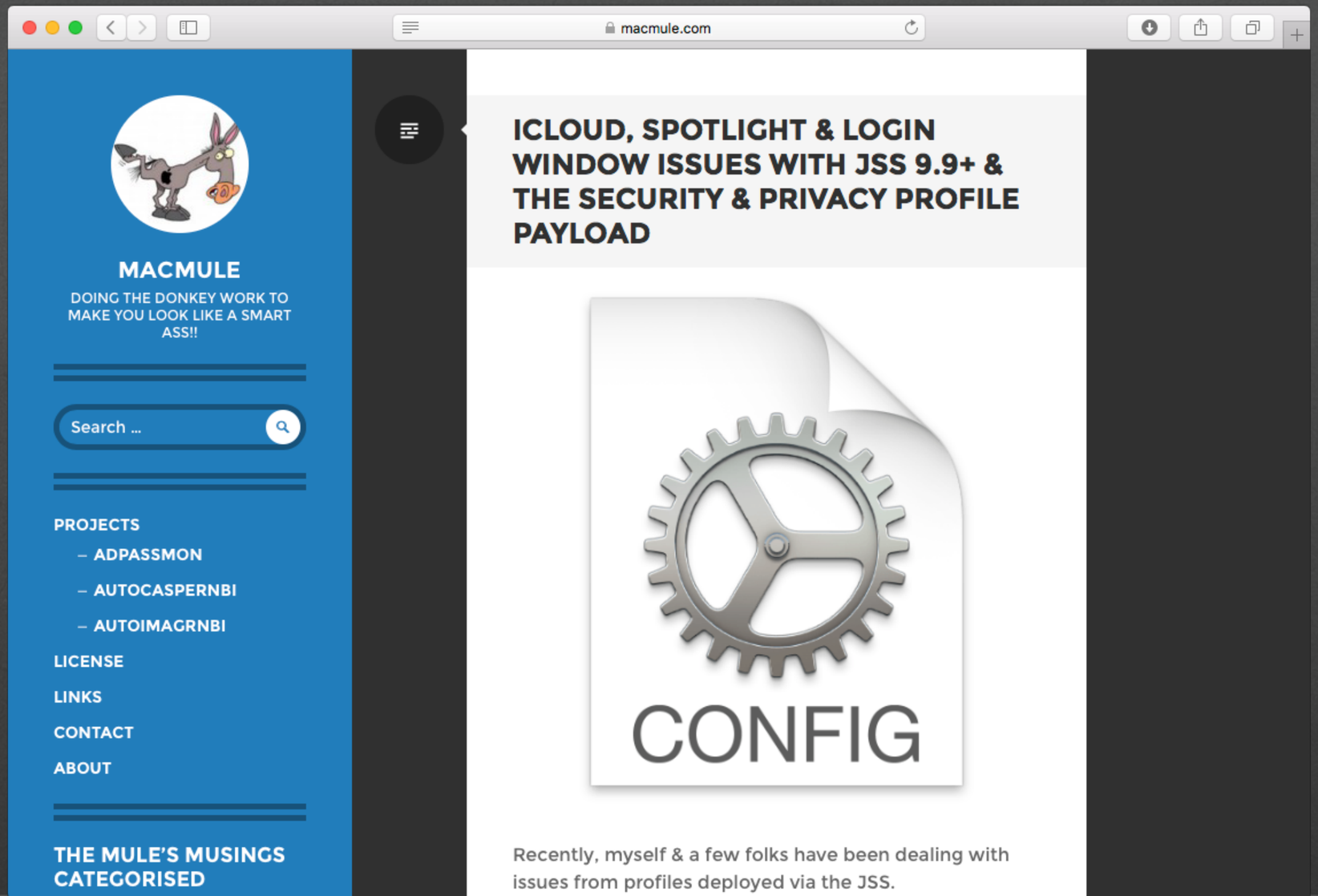


© JAMF Software, LLC

I didn’t select that!

© JAMF Software, LLC

Composition



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Composition

> If two payloads define different network settings for the same SSID, for example, the result is undefined.

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Composition

> If payloads contradict each other, the more restrictive setting is normally used. In some cases, the result is undefined.

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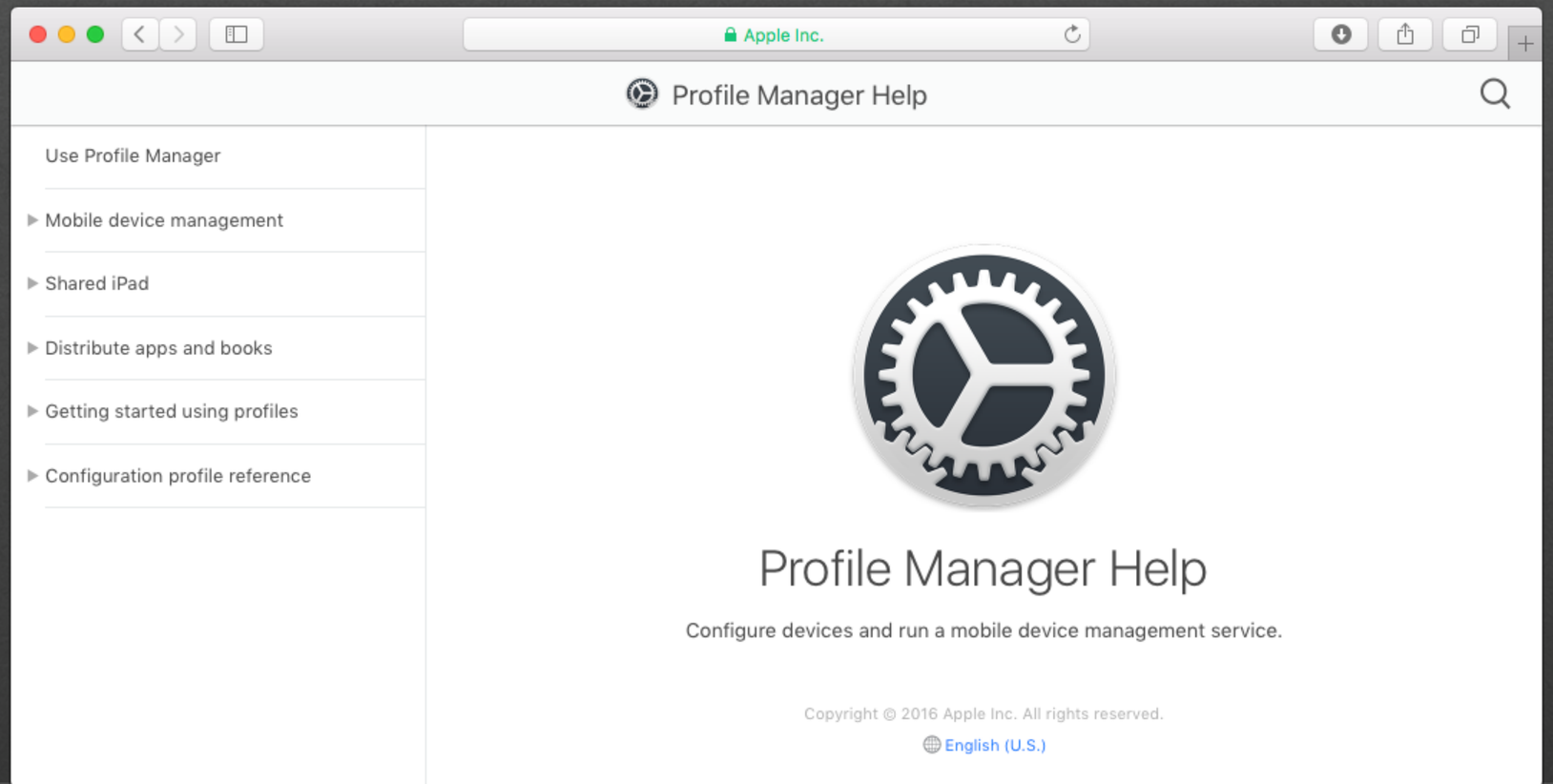
Composition

https://help.apple.com/profilemanager/mac/5.2/



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Let’s look at the some of the cool things we can do…

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Creating Profiles

com.ThomsonResearchSoft.EndNote.plist

```
<?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">
<dict>
    <key>AcceptedENX7.2EULA</key>
    <string>1</string>
</dict>
</plist>
```

L: 6 C: 23 XML Unicode (UTF-8) Unix (LF) Saved: 20/09/2016, 16:50:29 239 / ... / 9 100%

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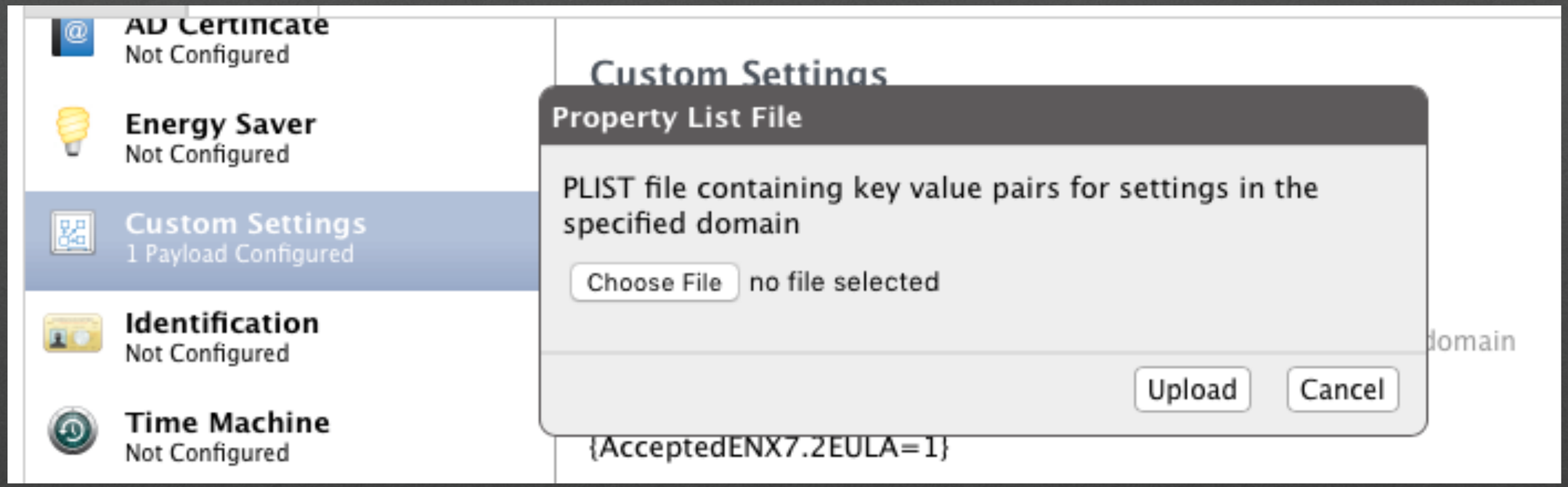
Creating Profiles



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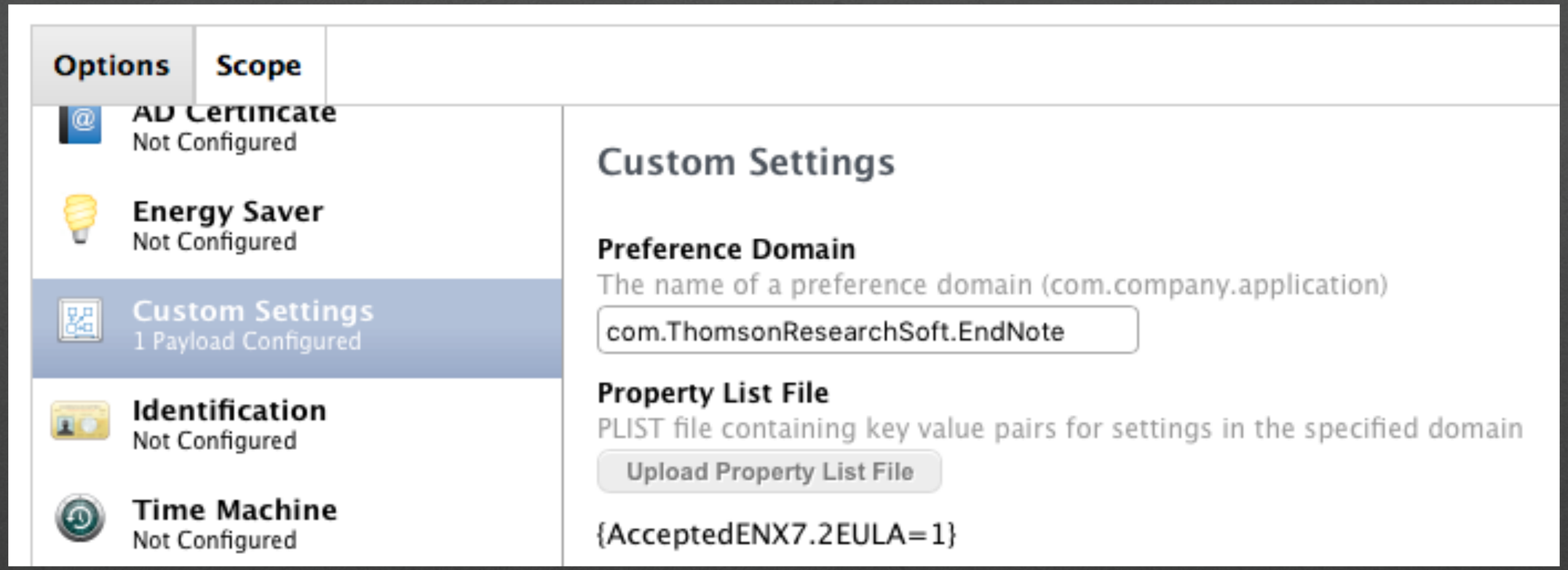
Creating Profiles



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Creating Profiles

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Creating Profiles

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Creating Profiles

http://rustyisageek.blogspot.co.uk/2016/09/profiles-mobileconfig-are-awesome.html

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#imtoosexyformcx

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macOS

Computer

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macOS

User

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iOS

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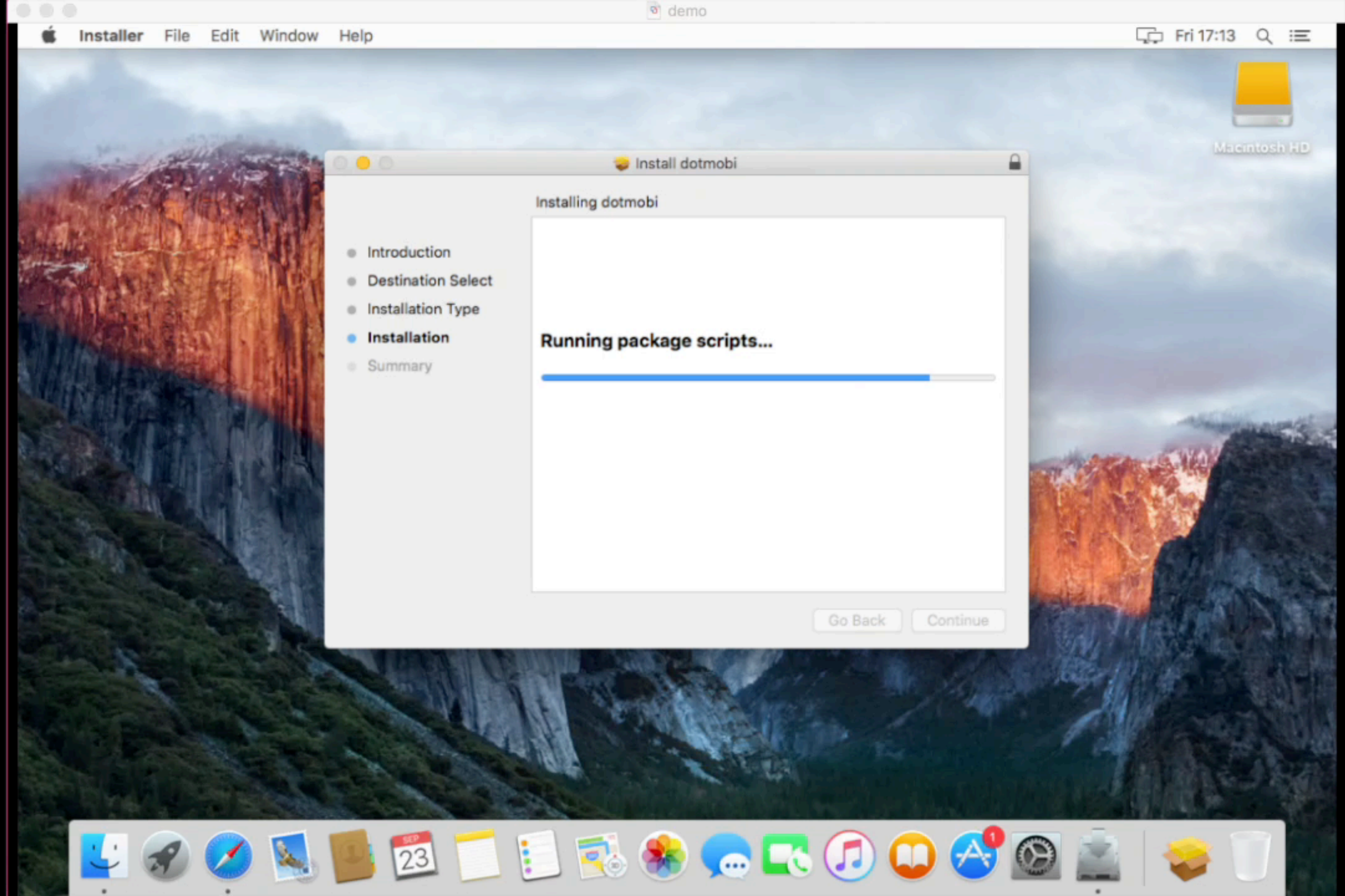
demo
Installer
File
Edit
Window
Help
Fri 17:13
Macintosh HD
Install dotmobi
Installing dotmobi
Introduction
Destination Select
Installation Type
Installation
Summary
Running package scripts...
Go Back
Continue

Thank you!

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Freebies

https://github.com/dataJAR/jnuc2016.git

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