

dataJAR
Beyond Device Management





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Nudging Users

For fun and for profit

A person is sitting at a wooden desk, typing on a silver laptop. Their left hand is on the keyboard, and their right hand is resting on the trackpad. They are wearing a black watch on their left wrist and a black bracelet on their right wrist. A black mug is on the desk to the right of the laptop, and a white smartphone is lying flat on the desk in front of the laptop. The background is a blurred indoor setting.

Challenges



Tools of the trade

softwareupdate binary

MDM commands

MDM Profile to enable macOS's native behaviour.



Nudge



Nudge - Components

Application

LaunchAgent

Logger (optional) - `/var/log/Nudge.log`

Preferences (Configuration Profile or JSON)



Getting ready to Nudge

[https://github.com/macadmins/nudge/blob/main/Example%20Assets/
com.github.macadmins.Nudge.mobileconfig](https://github.com/macadmins/nudge/blob/main/Example%20Assets/com.github.macadmins.Nudge.mobileconfig)



Demo time!



Using Nudge



Nudge's Stages

Inactive

Initial

Approaching

Imminent

Elapsed



Inactive

OS is up to date (matches or exceeds **requiredMinimumOSVersion**)

OS not defined in **targetedOSVersions**

Window not displayed



Initial

OS not up to date and targeted (below **requiredMinimumOSVersion** and in **targetedOSVersions**)

approachingWindowTime hours greater than time remaining until **requiredInstallationDate**

Window refresh/deferral rate based on number of seconds set in **initialRefreshCycle**

Window is displayed with primary quit button



Approaching

OS not up to date and targeted (below **requiredMinimumOSVersion** and in **targetedOSVersions**)

approachingWindowTime hours less than time remaining until **requiredInstallationDate**

Window refresh/deferral rate based on number of seconds set in **approachingRefreshCycle**

Window is displayed with primary and secondary quit buttons



Imminent

OS not up to date and targeted (below **requiredMinimumOSVersion** and in **targetedOSVersions**)

imminentWindowTime hours less than time remaining until **requiredInstallationDate**

Window refresh/deferral rate based on number of seconds set in **imminentRefreshCycle**

Window is displayed with primary and secondary quit buttons



Elapsed

OS not up to date and targeted (below **requiredMinimumOSVersion** and in **targetedOSVersions**)

requiredInstallationDate passed

Window refresh/deferral rate based on number of seconds set in **elapsedRefreshCycle**

Window is displayed with no quit buttons

A person is sitting at a wooden desk, typing on a silver laptop. Their left hand is on the keyboard, and their right hand is resting on the trackpad. They are wearing a black watch on their left wrist and a black bracelet on their right wrist. A black mug is on the desk to the right of the laptop, and a white smartphone is lying flat on the desk in front of the laptop. The background is a blurred indoor setting.

Deferrals



Deferral Levels

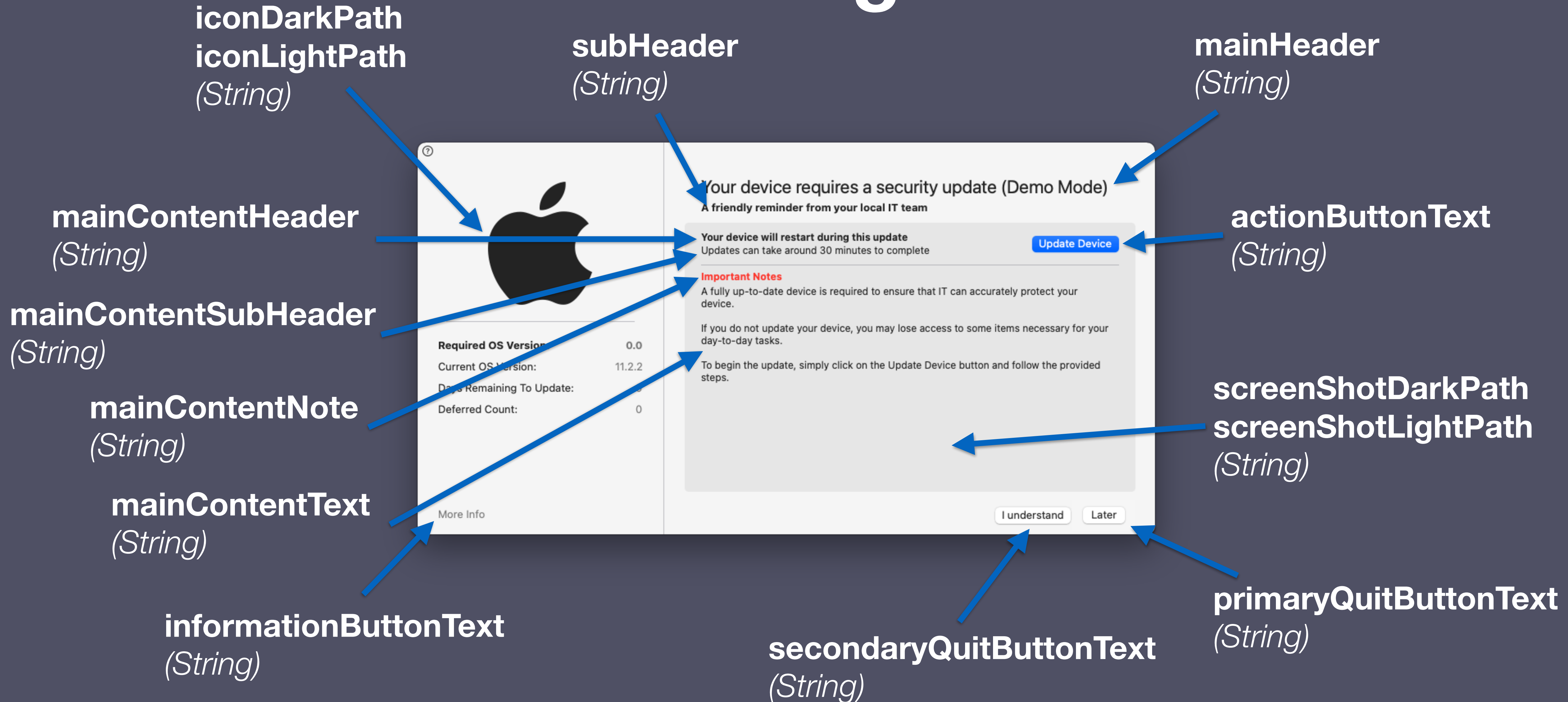
allowedDeferralsUntilForcedSecondaryQuitButton

allowedDeferrals



But we didn't have time for...

Customising the UI



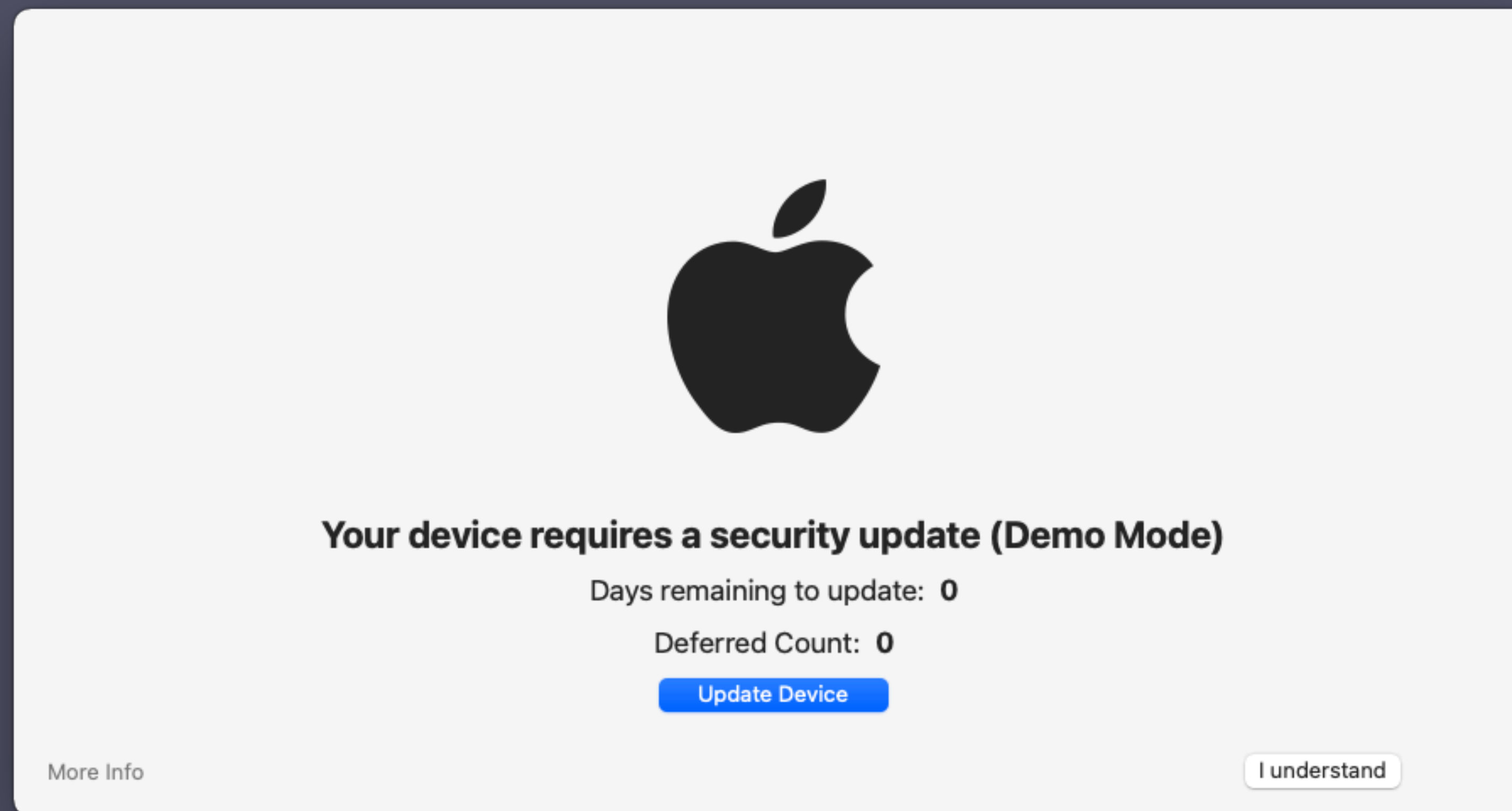


Localisation

<https://github.com/macadmins/nudge/wiki/updateElements>

Simple Mode

```
/Applications/Utilities/Nudge.app/Contents/MacOS/Nudge \
-simply-mode
```



<https://github.com/macadmins/nudge/wiki/userInterface#simplemode---type-boolean-default-value-false>



Major macOS Upgrades (soon!)

<https://github.com/macadmins/nudge/wiki/optionalFeatures#attempttofetchmajorupgrade---type-boolean-default-value-true>

<https://github.com/macadmins/nudge/wiki/osVersionRequirements#majorupgradeapppath---type-string-default-value--required-no>

Resources

- **GitHub Repo** - <https://github.com/macadmins/nudge>
- **Wiki** - <https://github.com/macadmins/nudge/wiki>
- **Releases** - <https://github.com/macadmins/nudge/releases>
- **#nudge** on the MacAdmins Slack
- **Erik's Texas Apple Admins Talk** -
<https://blog.eriknicolasgomez.com/2021/03/30/Nudge-Swift-Texas-macadmins-presentation/>

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