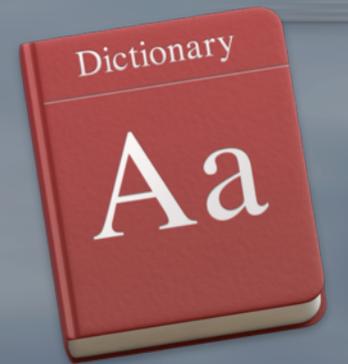


Automation

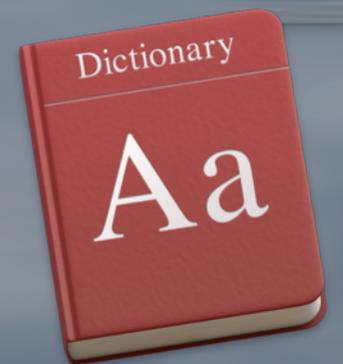
Automation:



the use of largely
automatic equipment in a
system of manufacturing
or other production
process



Automation:



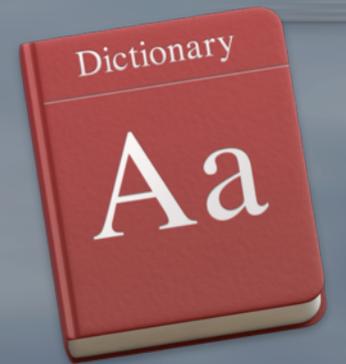
the use of largely **automatic** equipment
in a system of manufacturing or other
production **process**

ORIGIN

1940s (originally US): irregular
formation from automatic + -ation.



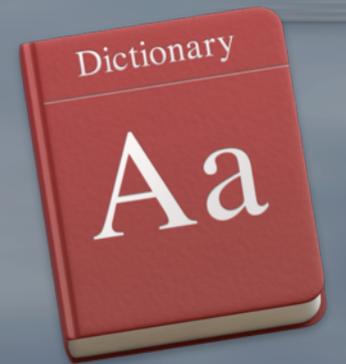
Automagically:



(especially in relation to the operation of a **computer process**)
automatically and in a way that seems ingenious, inexplicable, or
magical



Automagically:



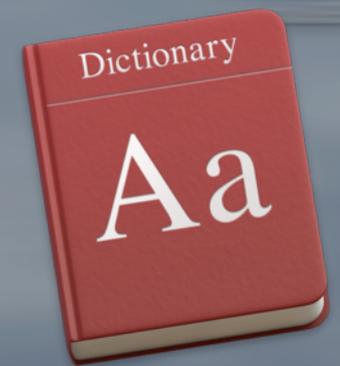
(especially in relation to the operation of a **computer process**) **automatically** and in a way that seems ingenious, inexplicable, or **magical**

ORIGIN

1940s: blend of automatic and magically.



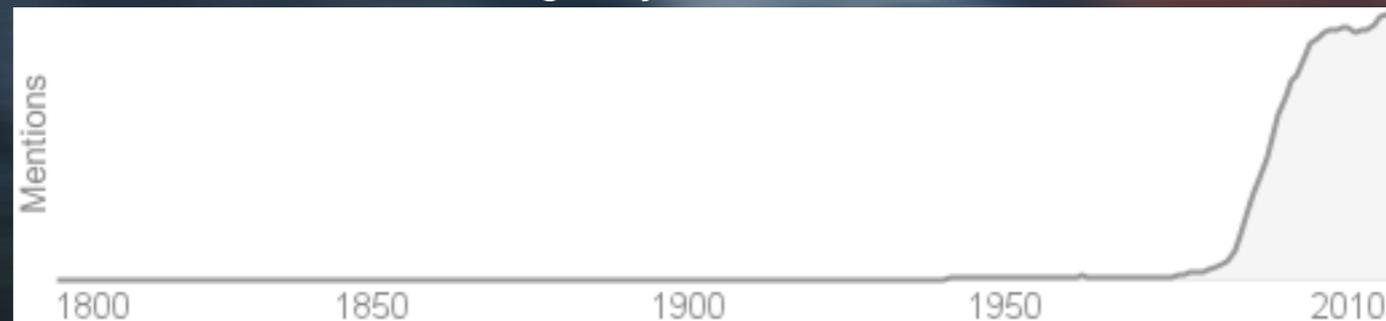
Dork out:



Use over time for: Automatic



Use over time for: Automagically



-Google



Sal Soghoian:



- Product Manager for Automation Technologies @ Apple Inc.
(godfather of Automation)



Sal Soghoian:



- "...automation can give you the speed, the accuracy, the consistent output, and the scalability that you need when you're dealing with solutions."

-WWDC 2015



Marc Grayson:



- Product Manager of Apple Support and Development Team @ Montefiore Medical Center



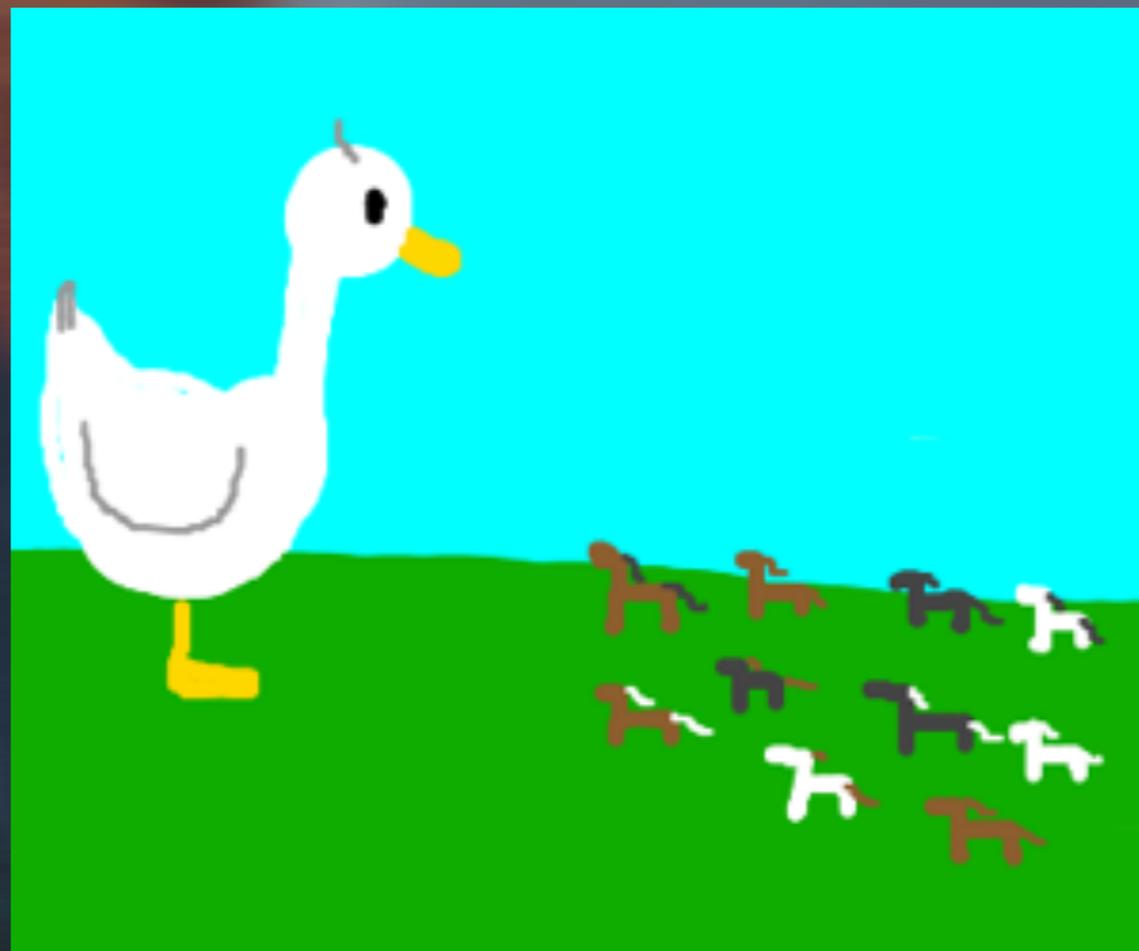
Marc Grayson:



- “If you have to do it more than once try to automate it.”

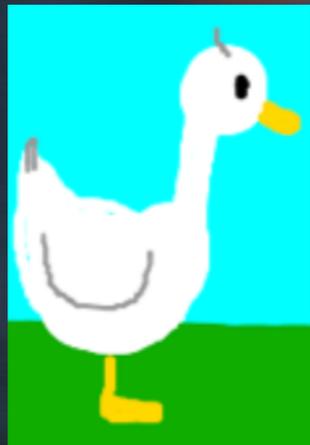


Economy of Scale:



Economy of Scale:

- Migrate a set of OD users to AD.



Duck ~~Automate~~ size Horse



Economy of Scale:

- Re-image iPads for a classroom each period.

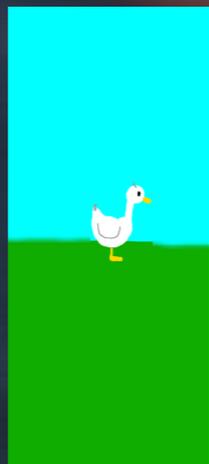


Duck Automate Horses



Economy of Scale:

- Install the **Hack F0nt** for that **one** Developer that will not leave you alone.



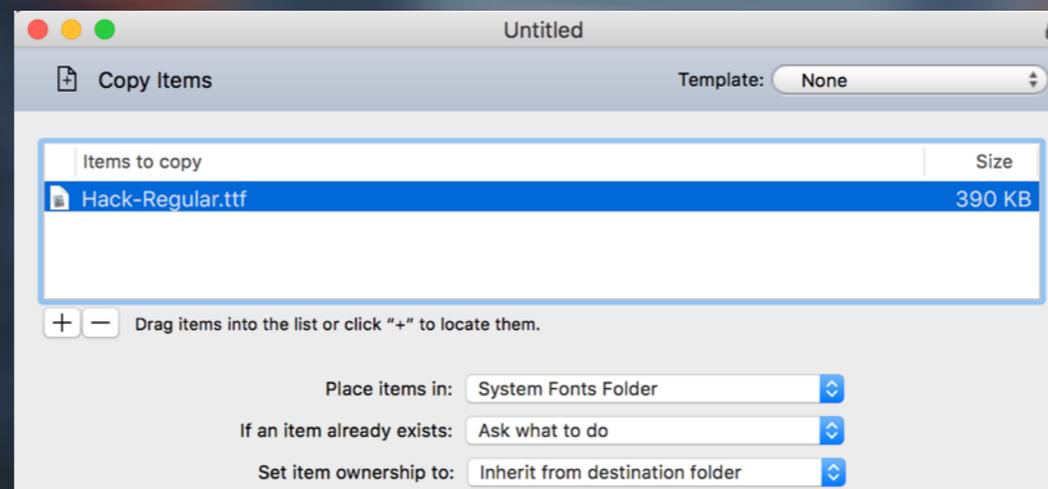
Manually



Economy of Scale:



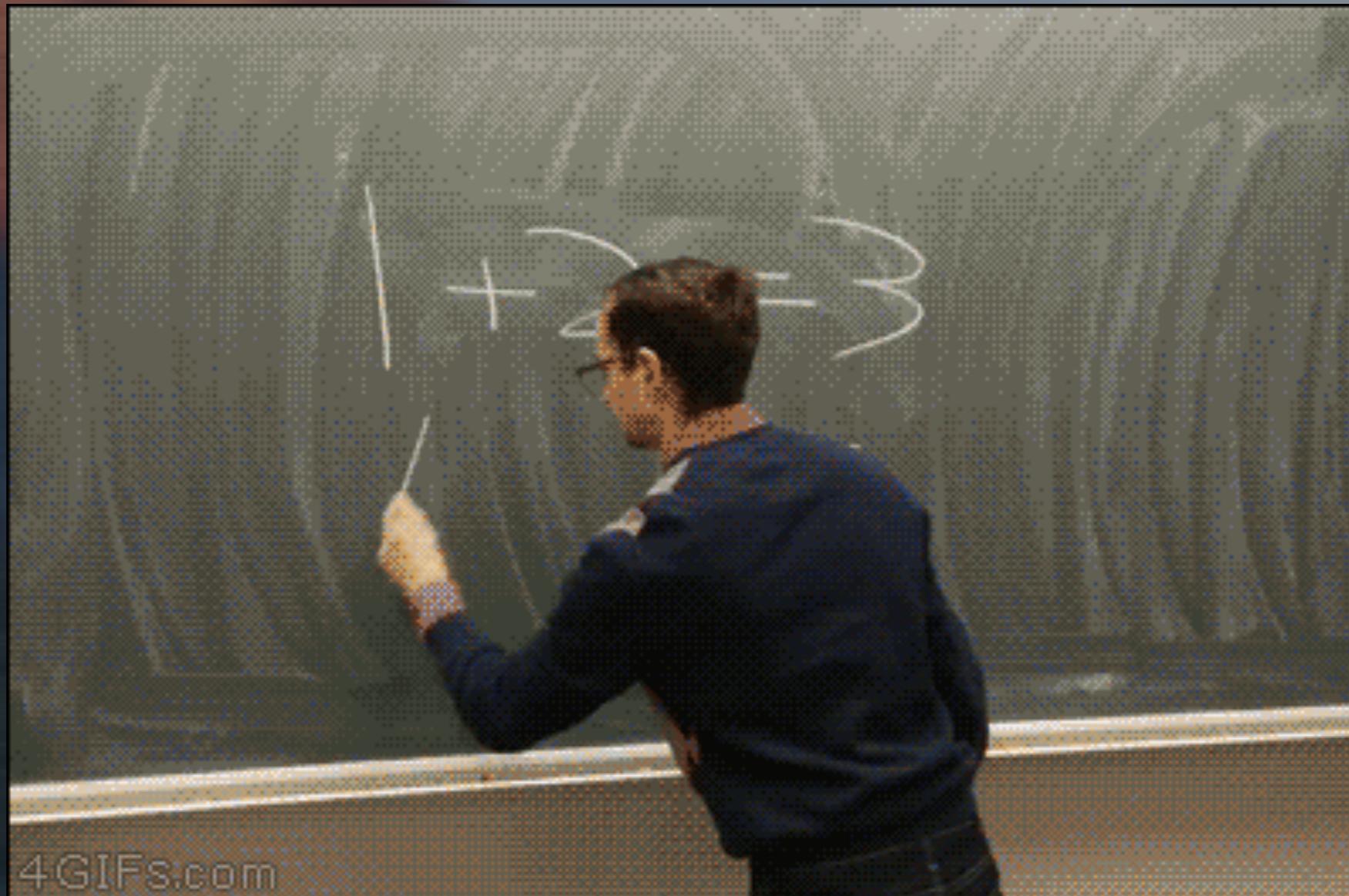
Hack F0nt



Existing Workflow



Tools:

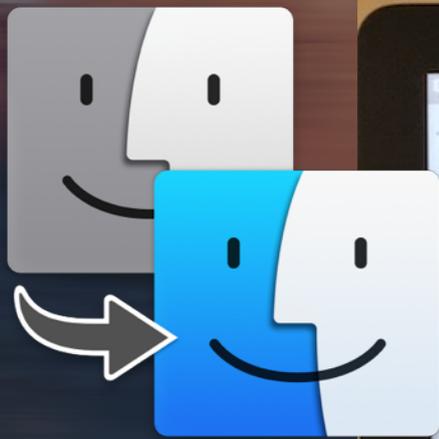


4GIFs.com

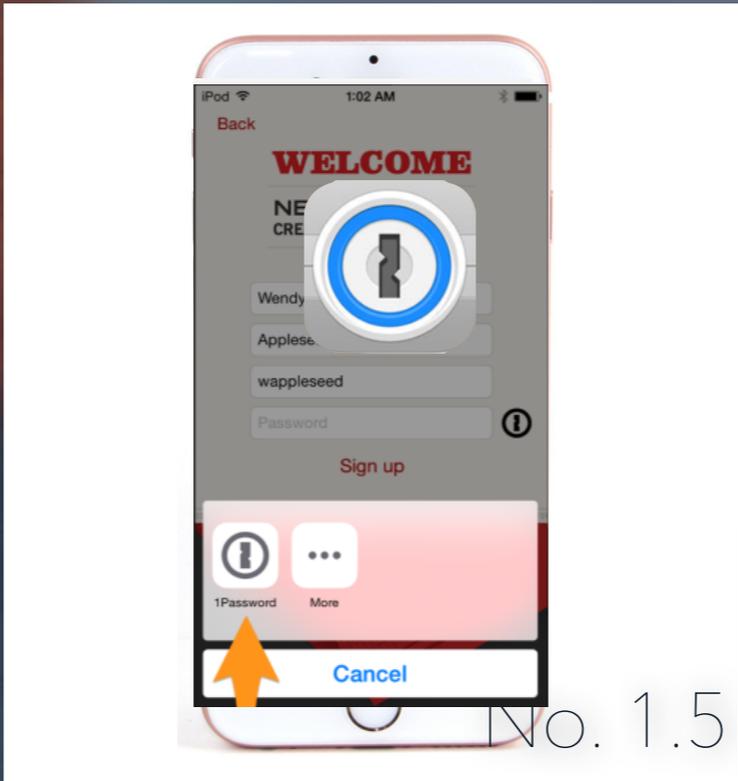
Simple → Complex



Tools:



Tools:



Tools:



Tools:



	Build Order	
1	pasted-image.tiff	Appear
2	Group	Scale
3	Group	Move
4	Group	Move
5	pasted-image.png	Move In
6	pasted-image.tiff	Move
7	Group	Move In
8	pasted-image.tiff	Move
9	Group	Move
10	pasted-image.png	Disappear
11	pasted-image.tiff	Scale
12	Group	Scale
13	Group	Disappear
14	pasted-image.tiff	Disappear
15	Manually	Dissolve
16	Group	Move In
17	pasted-image.png	Move In

Start	Delay
<input type="text"/>	<input type="text"/>

Preview ▶

Economy of Scale:

Manually

Hack F0nt

Copy Items

Items to copy	Size
Hack-Regular.ttf	390 KB

Place items in: System Fonts Folder

If an item already exists: Ask what to do

Set item ownership to: Inherit from destination folder

Existing Workflow



Tools:

Transitions

 **Magic Move** Change Preview ▶

Duration
 2.00 s

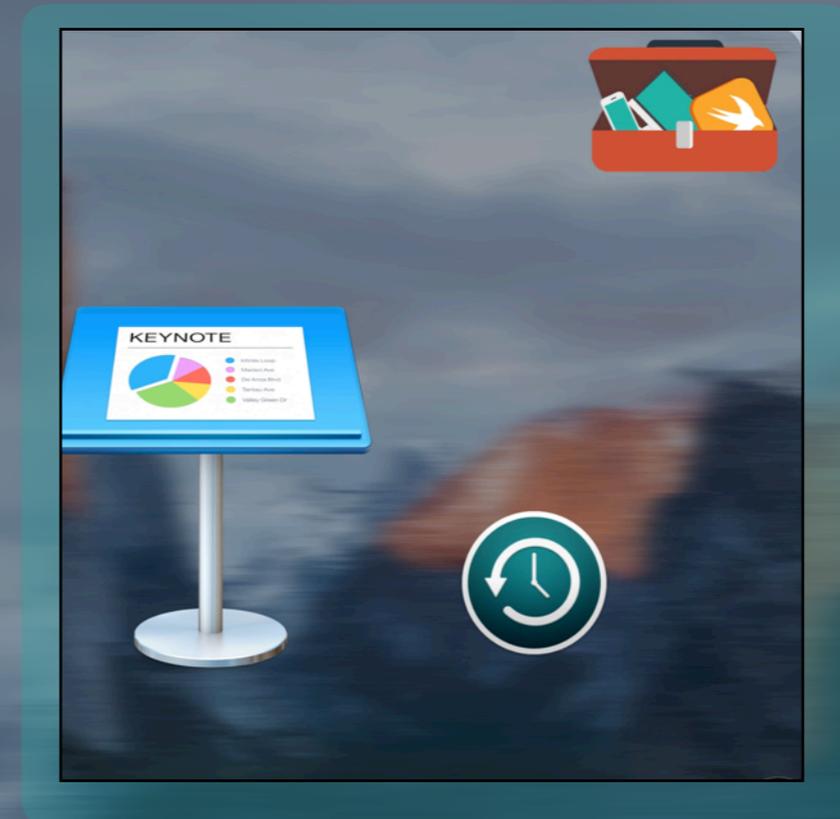
Fade Unmatched Objects

Match
By Object By Word By Character

Acceleration
Ease In & Ease Out

Start Transition On Click Delay 0.50 s

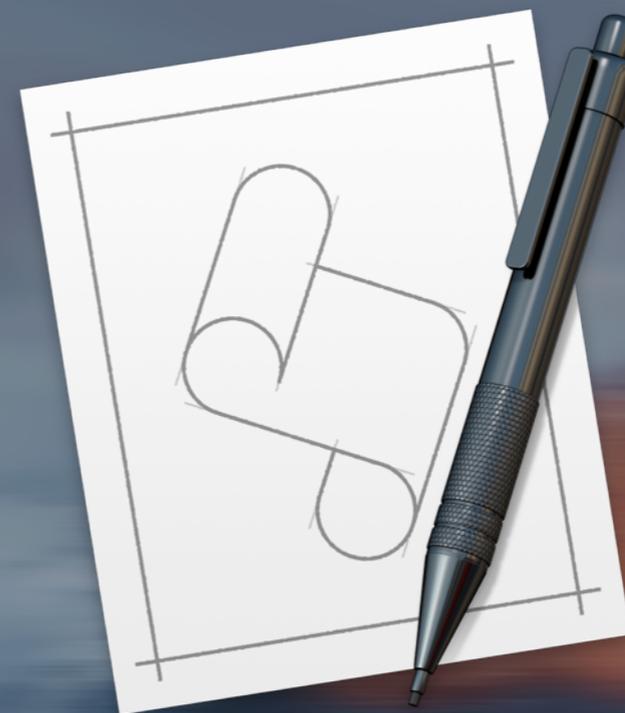
Build Order



Tools:



AppleScript



AppleScript Editor



Tools:



“AppleScript is a scripting language created by Apple. It allows users to directly control scriptable Macintosh applications, as well as parts of OS X itself.”

-AppleScript Language Guide



Tools:



Save As: ▼

Tags:

Where: ▲

File Format: Script
Script bundle
Application
Text

Options: Stay open after run handler



Tools:



```
Untitled — Edited v
AppleScript <No selected element>
do shell script "sudo scutil --set
    ComputerName `hostname` "
    password "NoWayJose" with
    administrator privileges
Description
```



Tools:



Tools:



Untitled

Library Media

Record Step Stop Run

Actions Variables

Library

- Calendar
- Contacts
- Developer
- Files & Folders
- Fonts
- Internet
- Mail
- Movies
- Music
- PDFs
- Photos
- Presentations
- System
- Text
- Utilities
- Most Used
- Recently Added

Activate Fonts

This action activates the fonts passed from

Input: Font Book typeface
Result: Font Book typeface
Version: 5.0
Copyright: Copyright © 2004–2015 by Apple Inc. All rights reserved.

Choose a type for your document:

- Workflow
- Application
- Service
- Print Plugin
- Folder Action
- Calendar Alarm
- Image Capture Plugin
- Dictation Command

Workflow

Workflows can be run from within Automator.

Open an Existing Document... Close Choose

	Duration



Tools:



Untitled — Edited ▾

Library Media

Record Step Stop Run

Actions Variables

- Library
 - Calendar
 - Contacts
 - Developer
 - Files & Folders
 - Fonts
 - Internet
 - Mail
 - Movies
 - Music
 - PDFs
 - Photos
 - Presentations
 - System
 - Text
 - Utilities
 - Most Used
 - Recently Added
- Ask for Confirmation
- Burn a Disc
- Choose Computer List
- Choose from List
- Choose Remote Computer
- Close Every Safari Window
- Close Every Window in Finder
- Copy Items to Computer Lists
- Copy Items to Computers
- Copy to Clipboard
- Delete Desktop Items
- Display Notification
- Eject All Disks
- Empty Trash
- Enable-Disable Dashboard
- Execute AppleScript
- Execute New UNIX Task
- Filter Remote Desktop Items
- Find Remote Desktop Items
- Force Quit All Applications
- Force Quit Remote Application
- Get Contents of Clipboard
- Get Every Computer

Ask for Confirmation

This action displays a dialog with a message, an explanation, and two buttons. If the user selects the affirmative button the action continues. The negative button stops the workflow.

Input: Anything
Result: Anything
Version: 1.0.2
Copyright: Copyright © 2004-2012 Apple Inc. All rights reserved.

Choose Computer List

Select the computer lists:

Computer Lists

All Computers

All None Update

Results Options

Execute New UNIX Task

Task Name:

Script

User name: Show output

Results Options

Restart Computers

User can save changes or cancel

Results Options



Resources:



MACOSXAUTOMATION.COM

OS NOTES: Lion | Mavericks | Yosemite

The Mac OS X Automation Sites

PhotosAutomation.com

A website about automating the Photos application using Automator and AppleScript



MacOSXAutomation.com/Automator

Learn how to use OS X's Automator application to create "automation recipes"

iWorkAutomation.com

A website about automating the iWork suite of applications using AppleScript and Automator



MacOSXAutomation.com/AppleScript

An English-like scripting language for controlling the OS and the applications that run on it

ConfigAutomation.com

Automating the setup and management of iOS devices using the Apple Configurator application



Mac Automation Scripting Guide

Apple's official documentation for the Automation languages in OS X.

DictationCommands.com

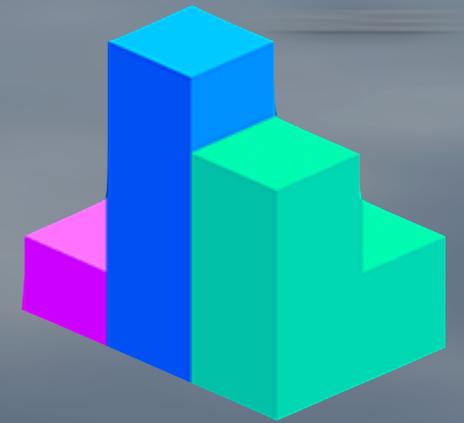
Total voice control of the Mac. Free command set with hundreds of commands for iWork, Photos, and the Finder.



<https://macosxautomation.com/index.html>



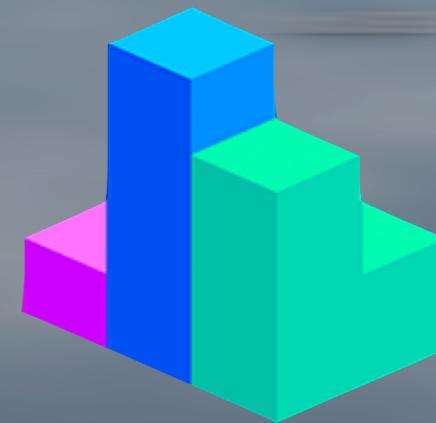
iOS EnterpriseTools:



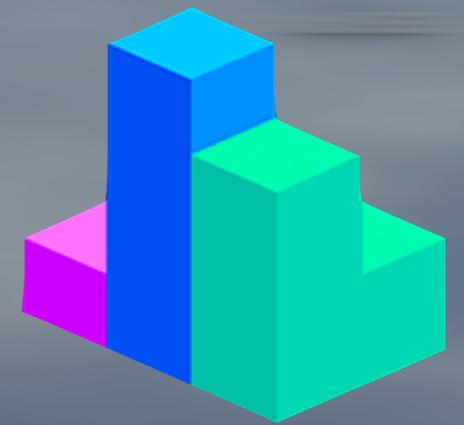
**In the beginning
Apple said unto thee;
thou shalt not have
, ergo no
automation.**



iOS EnterpriseTools:



iOS EnterpriseTools:



MDM APIs



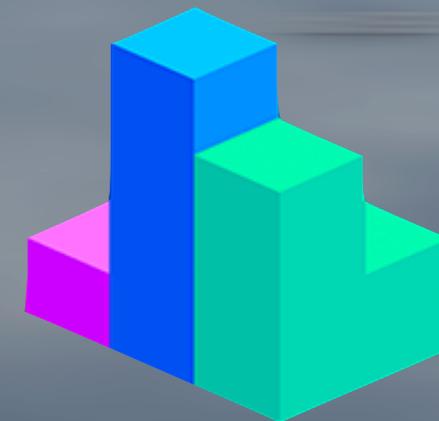
Over The Air Updates



VPP Managed
Distribution



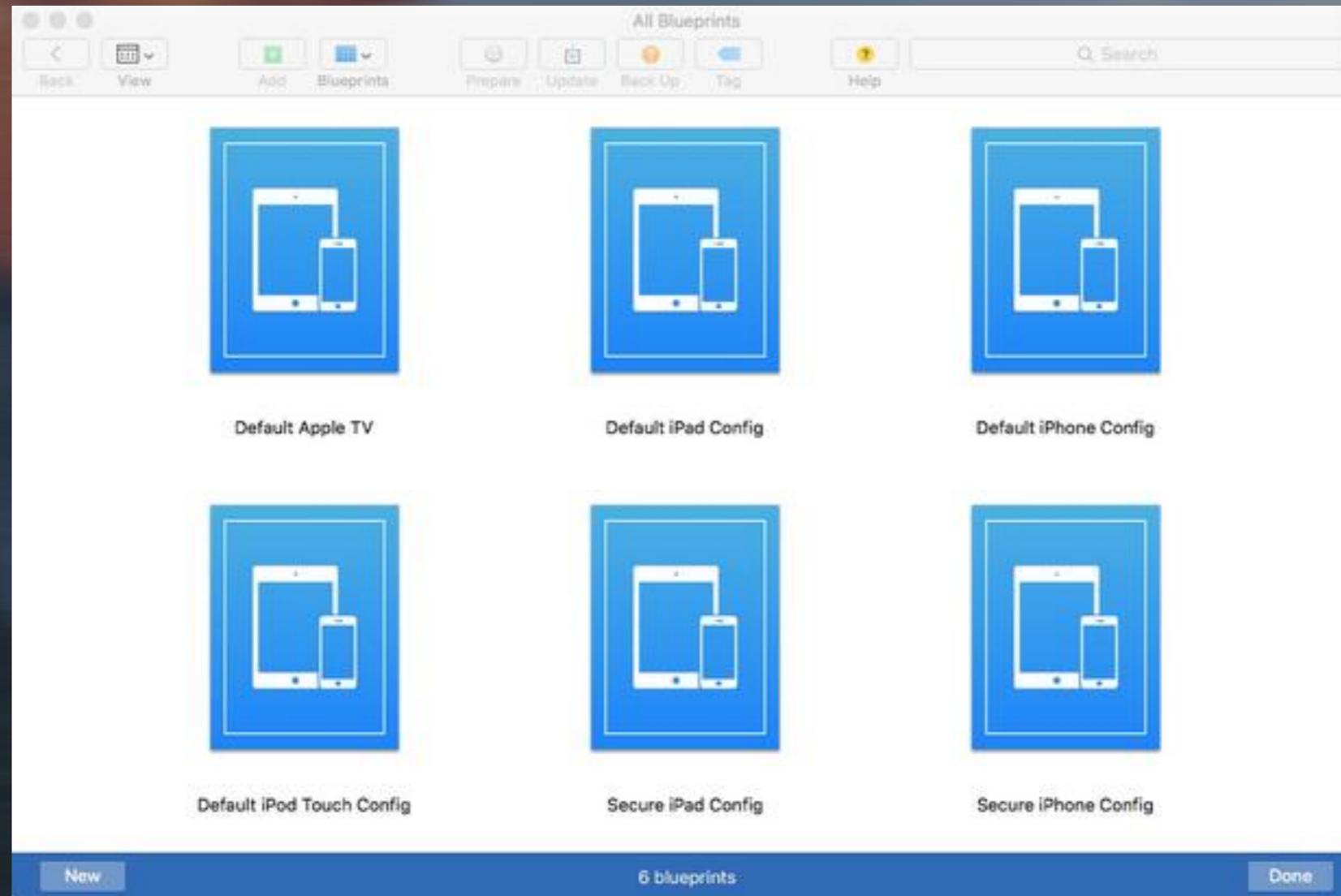
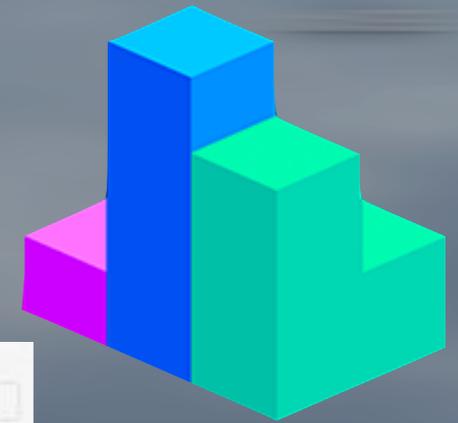
iOS EnterpriseTools:



Apple Configurator 2



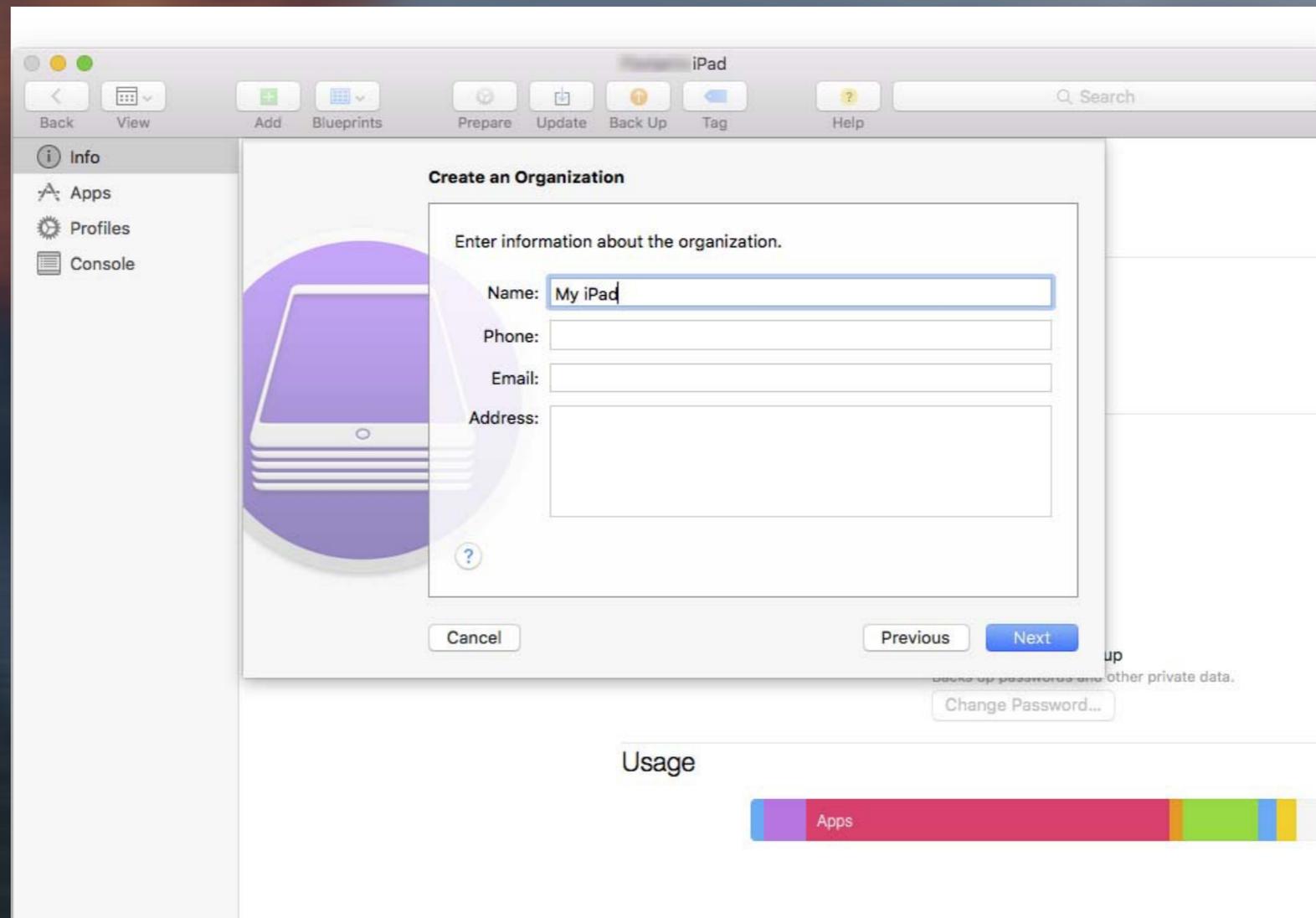
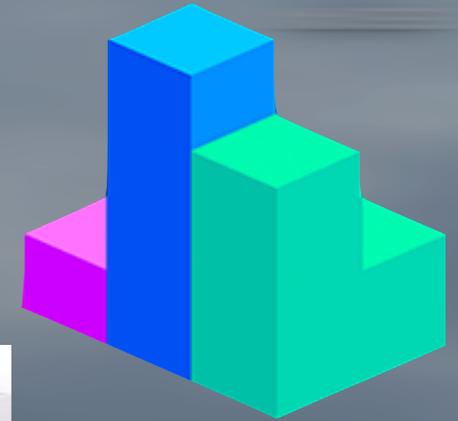
iOS EnterpriseTools:



Apple Configurator 2



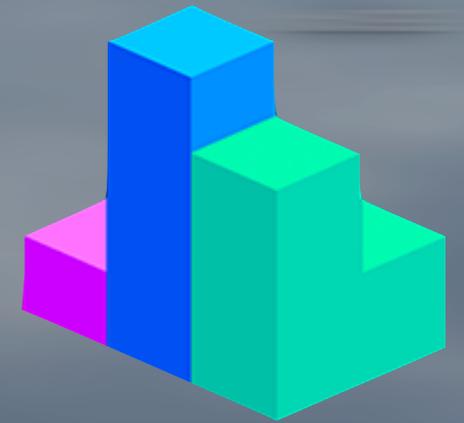
iOS EnterpriseTools:



Apple Configurator 2



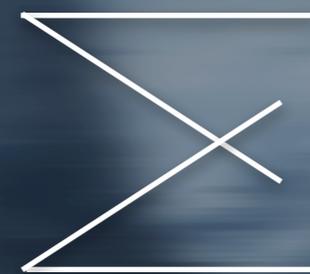
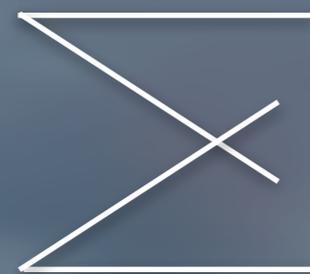
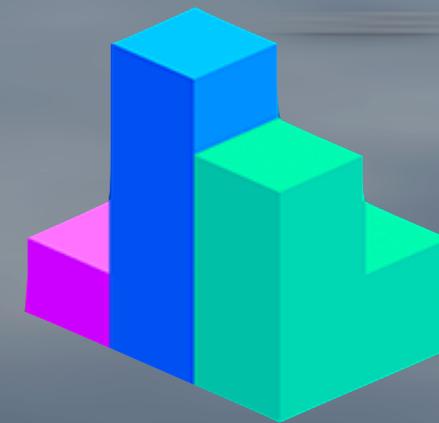
iOS EnterpriseTools:



Apple Configurator 1



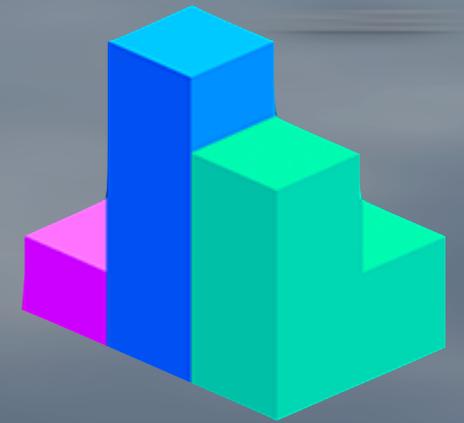
iOS EnterpriseTools:



Apple Configurator 2



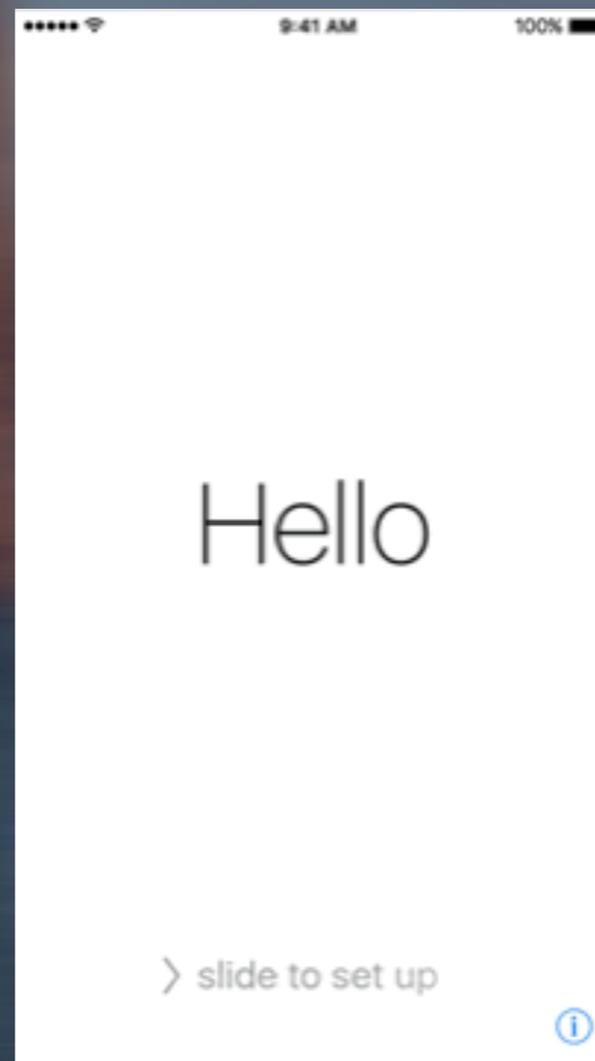
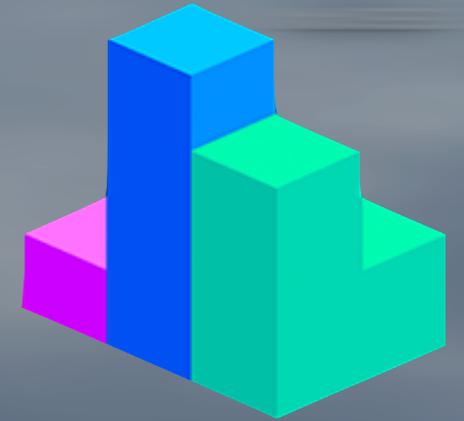
iOS EnterpriseTools:



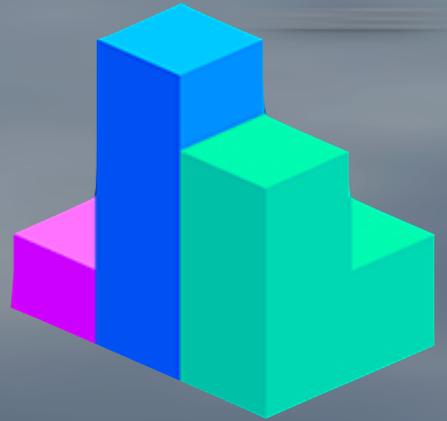
Device Enrollment Program
Automated



iOS EnterpriseTools:



iOS EnterpriseTools:



General Configuration

Initial device group

Default

- Force MDM enrollment
- Allow MDM removal by user
- Place device in Supervised mode
- Allow pairing with OS X computers
- Disable Siri
- Disable sending diagnostics info

Organization Details

This information is presented to the user of the device during the setup process.

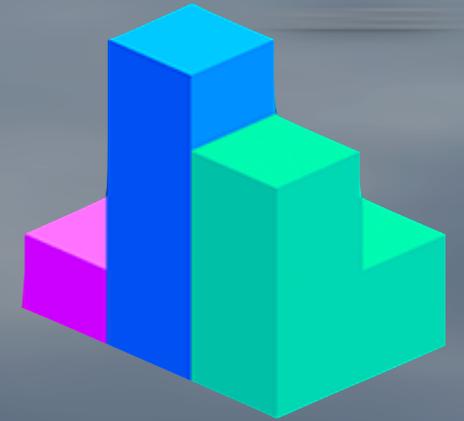
Optional Setup Panes

You can choose to skip any of the setup steps below.

- Skip passcode setup
- Skip location services
- Skip restoring from backup
- Remove "Move from Android" from restore options
- Skip signing in to Apple ID and iCloud
- Skip Terms and Conditions
- Skip Touch ID setup
- Skip Apple Pay setup
- Skip zoom setup
- Skip registration screen (OS X)
- Disable FileVault setup assistant (OS X)



EnterpriseTools:

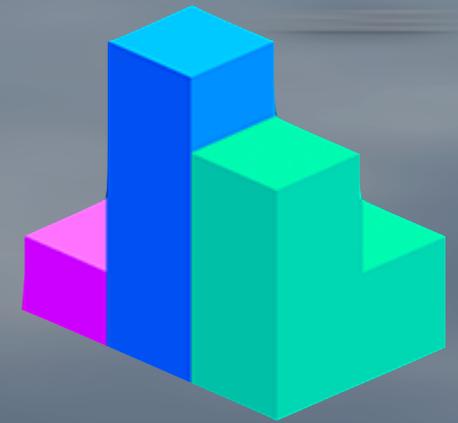


Deploy Studio



EnterpriseTools:

Deploy Studio



DeployStudio Admin connected to server11.pretendco.com

Runtime Control Logs

Search

ACTIVITY	1	Title	Description	Identifier	Access group	Publish
COMPUTERS	67	- Restore naar Restore10f	partition disk, restore10d	ADB358FD-34CF-49BE-BD26-00659A20F4...	-	✓
WORKFLOWS	9	-Restore and tweak SIP	Restore 10.11, create use...	25B8F048-874F-48F0-9514-D5DA9D6952EF	-	✓
MASTERS	5	Create a master from a volume	This simple workflow en...	04062220-1111-BBBB-2222-000000000000	-	✓
PACKAGES	1	Create a master from a volume no intermediate files o...	This simple workflow en...	38AEC8F3-4413-4376-88F0-08B00C267B3F	-	✓
SCRIPTS	6	Install a package (pkg)	This simple workflow en...	04062220-1111-BBBB-2222-000000000020	-	✓
		Restore 10.11.2 and configure		29DD72C6-5418-4174-ACDF-DDE4617DCE4E	-	✓
		Restore a master on a volume	This simple workflow en...	04062220-1111-BBBB-2222-000000000010	-	✓
		Restore naar Restore10e	partition disk, restore10d	68C316C5-02C0-49D1-BD26-27386322011B	-	✓
		Triple-OS restoration	This workflow shows the...	04062220-1111-BBBB-2222-000000000030	-	✓

Configure

Target volume: Previous task target

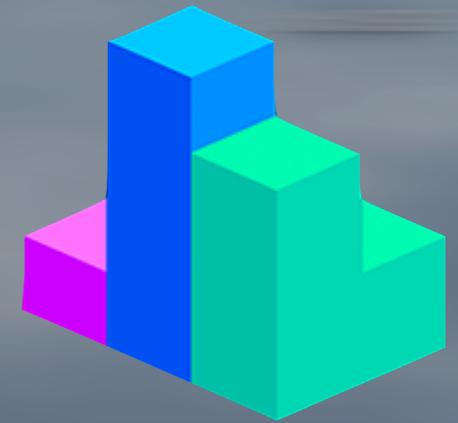
- Rename computer
- Set computer information
- Set software licenses
- Configure network
- Create local users
- Rename ByHost prefs
- Automate
- Freeze home directories content (restored at reboot)
- Skip Apple Setup/Server Assistant
- Enable ARD agent
- Enable Firewall
- Disable Gatekeeper

Revert Save



EnterpriseTools:

Deploy Studio



Active Directory binding

Target volume: Previous task target

Computer ID: Computer name

Domain: newdomain.com

Computers node: OU=Mac,OU=Workstations,OU=Machines,DC=newdomain,DC=com

Active Directory computers' administrator login: serviceaccount Password: Show

Security: sign packets Disable encrypt packets Disable password change interval 10 days

Enable mobile accounts (Require user confirmation) Force local home directories

Use UNC path from Active Directory with network protocol: CIFS

Authenticate to domain: All Domains

Allow administration by: domain admins,enterprise admins

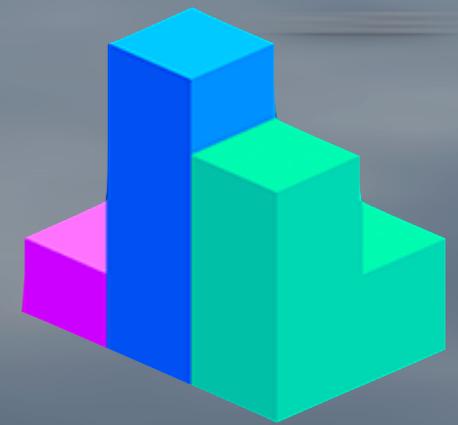
Custom mappings: UID: Optional GID: Optional GGID: Optional

Automate



EnterpriseTools:

Deploy Studio

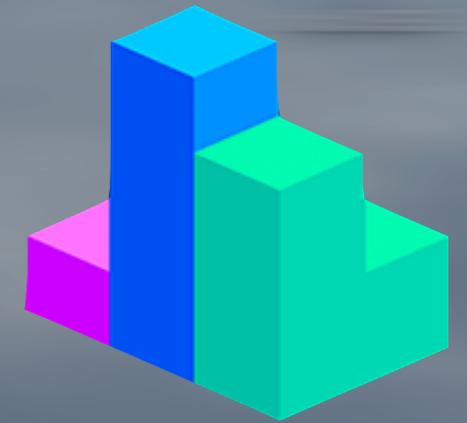


```
DeployStudio Finalize script log

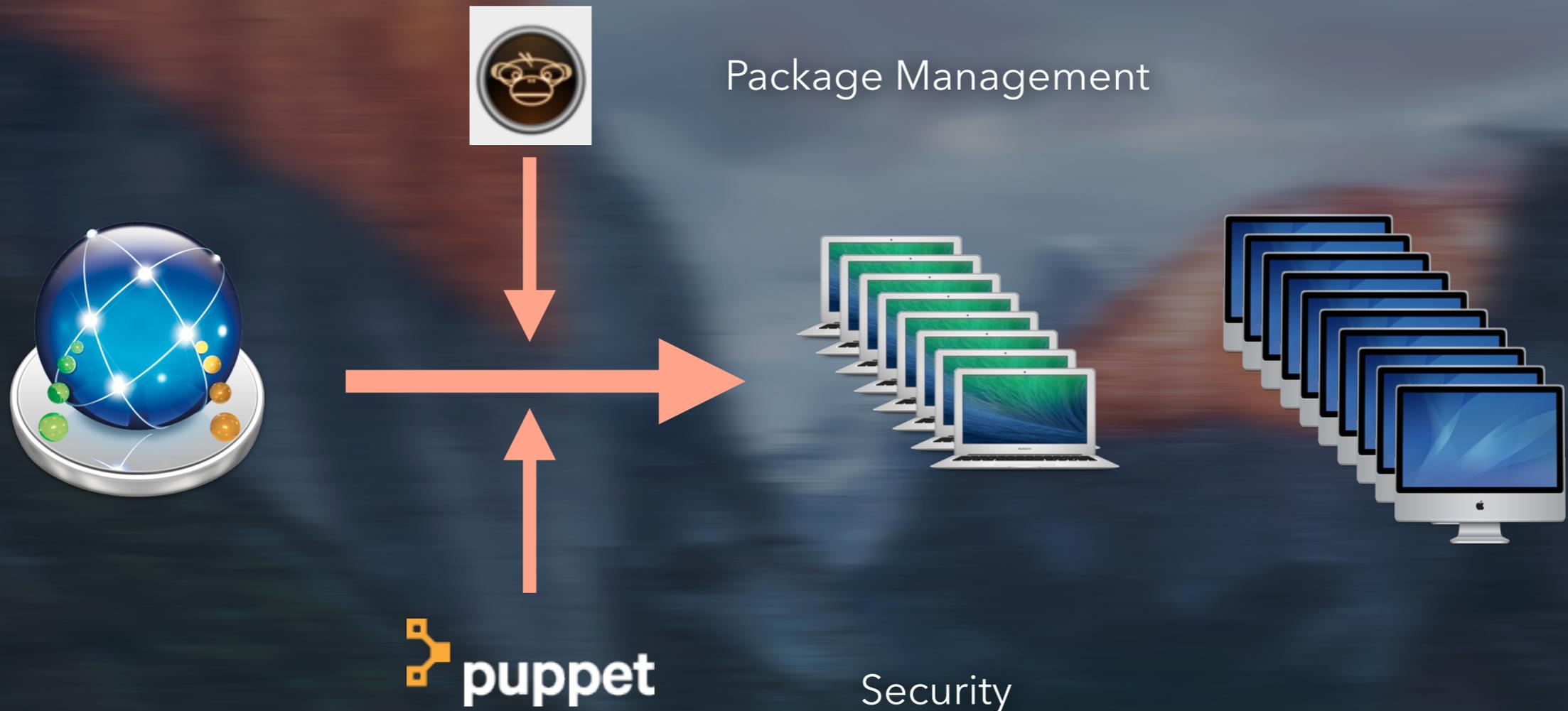
ds_finalize.sh - v1.35 (Thu Feb 26 07:52:12 PST 2015)
ds_finalize.sh - disabling Spotlight indexing...
ds_finalize.sh - updating dyld shared caches...
ds_finalize.sh - running /etc/deploystudio/bin/ds_rename_computer.sh
ds_rename_computer.sh - v1.7 (Thu Feb 26 07:52:54 PST 2015)
Setting local hostname to 'ds-workflow-test'...
Setting computer name to 'DS-WORKFLOW-TEST'...
ds_finalize.sh - running /usr/libexec/configureLocalKDC
ds_finalize.sh - Disabling iCloud and gestures preference panes auto-launch at first login.
ds_finalize.sh - Finalize script completed, system will automatically reboot.
ds_finalize.sh - end
ds_finalize.sh - v1.35 (Thu Feb 26 08:06:37 PST 2015)
ds_finalize.sh - disabling Spotlight indexing...
ds_finalize.sh - updating dyld shared caches...
ds_finalize.sh - running /etc/deploystudio/bin/ds_rename_computer.sh
ds_rename_computer.sh - v1.7 (Thu Feb 26 08:07:23 PST 2015)
Setting local hostname to
Setting computer name to
ds_finalize.sh - running /usr/libexec/configureLocalKDC
ds_finalize.sh - Disabling iCloud and gestures preference panes auto-launch at first login.
ds_finalize.sh - Finalize script completed, system will automatically reboot.
ds_finalize.sh - end
ds_finalize.sh - v1.35 (Thu Feb 26 08:20:21 PST 2015)
ds_finalize.sh - disabling Spotlight indexing...
ds_finalize.sh - updating dyld shared caches...
ds_finalize.sh - running /usr/libexec/configureLocalKDC
ds_finalize.sh - running /etc/deploystudio/bin/ds_active_directory_binding.sh
ds_active_directory_binding.sh - v1.26 (Thu Feb 26 08:21:06 PST 2015)
Checking for the default route to be active...
Testing      reachability on address
round-trip min/avg/max/stddev = 3.725/3.725/3.725/0.000 ms
Ping successful!
Unbinding computer...
dsconfiqad: This computer is not Bound to Active Directory. You must bind it first.
Binding computer to domain
```



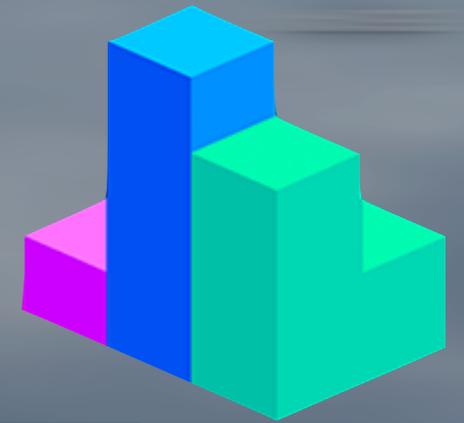
EnterpriseTools:



Automate My Image



EnterpriseTools:



Business Units

- Acme Corp: 89
- Big Kahuna Burger: 127
- Kwik-E-Mart: 78
- Moe's Tavern: 14
- OCP: 69
- pebble.it: 31
- SkyNet: 10
- + New Business Unit

Activity

- 204 Last hour
- 268 Today
- 16 Month
- 9 3 months

Status

- Clients with errors: 19
- Clients with warnings: 104
- Clients with activity: 148
- All machines: 435

Operating System breakdown

- 10.10: 9
- 10.7.5: 12
- 10.8.5: 23
- 10.9.2: 2
- 10.9.3: 4
- 10.9.4: 60
- 10.9.5: 325

Munki Version

2.0.1.2253
322

Uptime

- 249 < 1 Day
- 212 < 7 Days
- 11 7 Days +

Memory

- 349 8GB +
- 80 4GB +
- 6 < 4GB

Disk Space

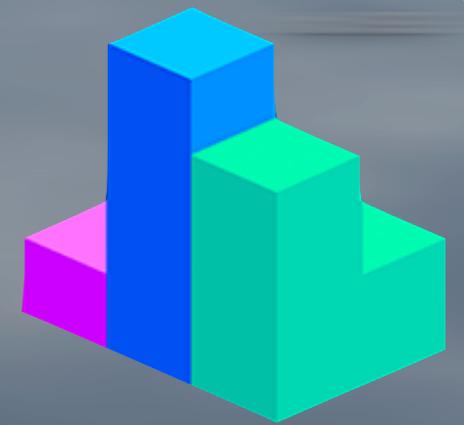
- 398 < 80%
- 11 80% +
- 5 90% +

MSU Repository | **Pending 3rd Party Updates** | **Pending Apple Updates**

Sal



Enterprise Tools:



The screenshot shows the Jenkins dashboard with a search bar and navigation links. The main content is a table of jobs with columns for status, name, last success, last failure, and last duration. The jobs listed are Adobe Flash Player, Firefox, Google Chrome, Office 2011 Updates, Start autopkg run, and VLC. The interface also includes a build queue section and a build executor status table.

S	W	Name ↓	Last Success	Last Failure	Last Duration
●	☀	Adobe Flash Player	3 hr 3 min - #27	20 days - #2	5.1 sec
●	☀	Firefox	3 hr 3 min - #23	N/A	35 sec
●	☀	Google Chrome	3 hr 3 min - #22	19 days - #1	22 sec
●	☀	Office 2011 Updates	3 hr 3 min - #21	N/A	3.4 sec
●	☀	Start autopkg run	3 hr 4 min - #22	N/A	1 sec
●	☀	VLC	3 hr 3 min - #21	N/A	49 sec

Jenkins

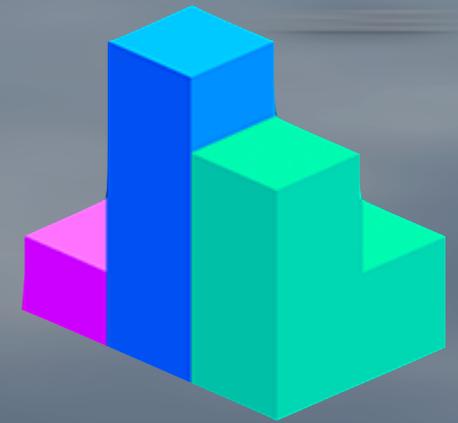
Canaries

Testers

Production



Enterprise Tools:



Managed Software Center

Software Categories My Items Updates

Managed Software Center

All items

Adobe Flash Player Internet - Adobe Installed REMOVE	Adobe Reader Productivity - Adobe Installed REMOVE	Alinof Timer Productivity - Alinof Softwar... INSTALL
Evernote Organization - Evernote Installed REMOVE	Flip4Mac Media - Telestream Installed REMOVE	Google Chrome Internet - Google Installed REMOVE
Google Earth Internet & Cloud - Google INSTALL	Microsoft Silverlight Internet - Microsoft Installed REMOVE	Mozilla Firefox Internet - Mozilla Installed REMOVE
Mozilla Thunderbird Communication - Mozilla Update available UPDATE	Skype Communication - Microsoft Installed REMOVE	TextWrangler Productivity - Bare Bones Installed REMOVE
ThinLinc Client Utilities - Cendio INSTALL	VLC Media - VideoLAN Installed REMOVE	XQuartz Utilities Installed REMOVE

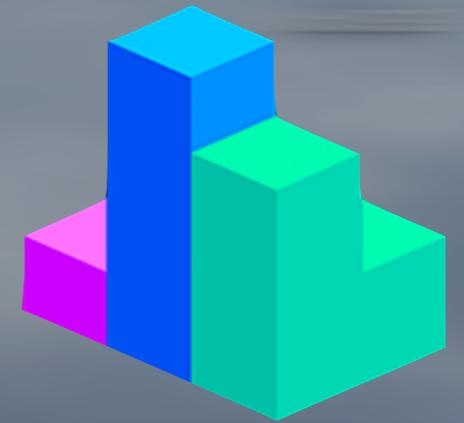
Categories

- Communication
- Internet
- Internet & Cloud
- Media
- Organization
- Productivity
- Utilities

Munki



EnterpriseTools:



Margarita Apply queued changes 2 Hide commonly listed updates Filter...

Software Update Product	Version	Post Date	Apple branch	production branch	testing branch
BootCamp Deprecated	1.0	2015-05-19	Unlisted	Unlisted	Unlisted
XProtectPlistConfigData Deprecated	1.0	2015-04-21	Unlisted	Unlisted	Unlisted
BootCamp	1.0	2015-05-29	Listed	Listed	Listed
XProtectPlistConfigData	1.0	2015-05-28	Listed	Listed	Listed
Chinese Word List Update	3.16	2015-05-26	Listed	Listed	Listed
BootCamp	1.0	2015-05-19	Listed	Unlisted	Unlisted
Command Line Tools (OS X 10.10)	6.3	2015-05-18	Listed	Unlisted	Listed
Remote Desktop Client Update	3.8.4	2015-05-18	Listed	Listed	Delisting queued
Remote Desktop Client Shell	3.8.0	2015-05-18	Listed	Listing queued	Listed
Gatekeeper Configuration Data	67	2015-05-15	Listed	Listed	Listed

< < 1 2 3 4 5 6 7 8 9 10 > >

New branch name... **Create New Branch**

Reposado + Margarita



Q&A

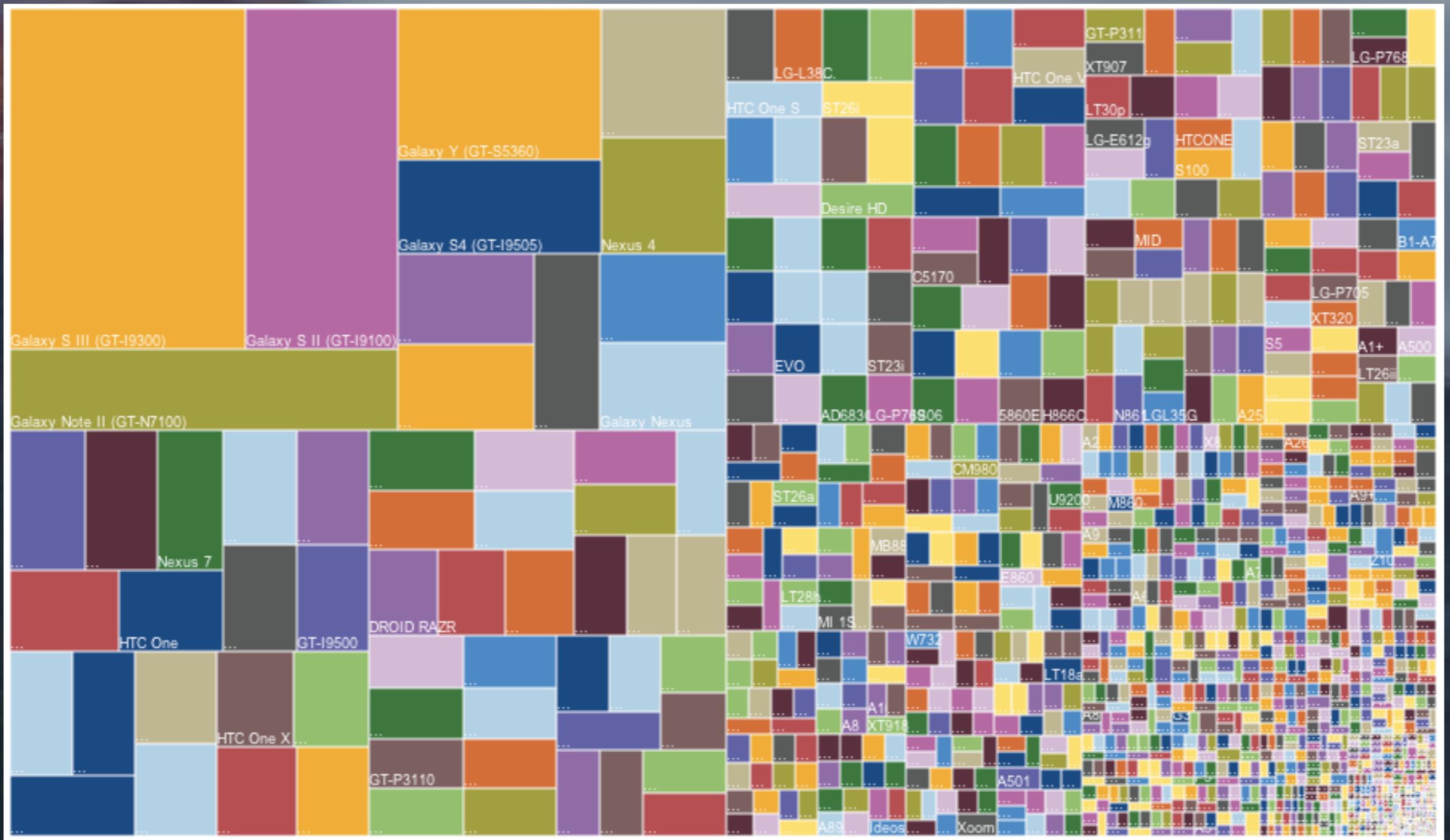


Go forth and Automate



Q&A





Automate This

