



Beta Buddies 2.0

Testing with Friends



Us

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Senior IT Endpoint
Engineer



@rebelati

Us

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@aanklewicz



About Thumbtack

Why?

Beta Testing Prevents Problems

Note: Because of dependency on architecture and system changes to any current version of Apple operating systems (for example, macOS 15, iOS 18, and so on), not all known security issues are addressed in previous versions (for example, macOS 14, iOS 17, and so on).

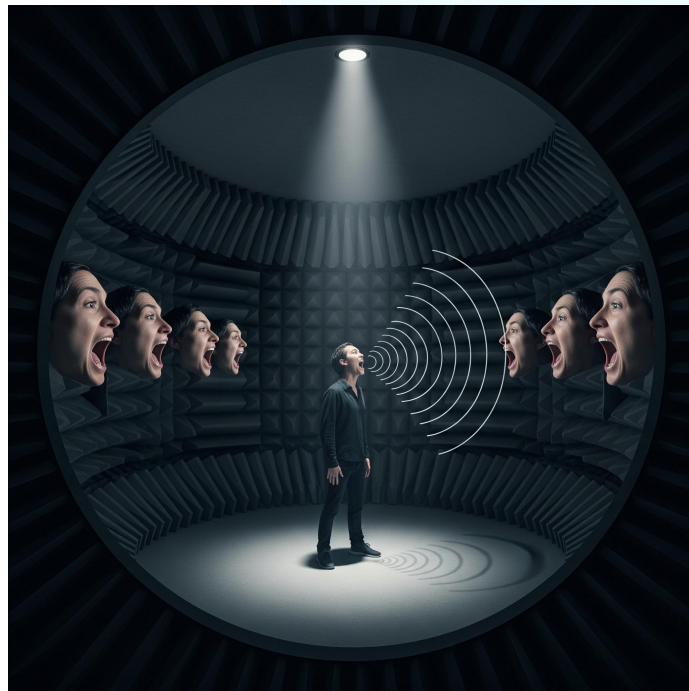
<https://support.apple.com/guide/deployment/about-software-updates-depc4c80847a/web>



Pre-2023

Only IT Testing

- Echo chamber effect
- Small sample size
- No diversity in environments



Our Goals

**5% of Mac
users**

**All
Departments** (that
use macOS)

Feedback



Getting Volunteers

**Teamed up with
comms.**

Communicated to staff.

Incentives?



Our original plan

Our original plan

seedutil **Munki**



seedutil

RIP

You can still use the command to get current seed, but that's it.

Command:

```
/System/Library/PrivateFrameworks/Seeding.framework/Resources/seedutil current
```

```
rlatimer@603e5f78ba08-mac ~ % sudo /System/Library/PrivateFrameworks/Seeding.framework/Resources/seedutil current
Currently enrolled in: CustomerSeed

seedutil is no longer supported. Use Software Update to manage beta enrollment.

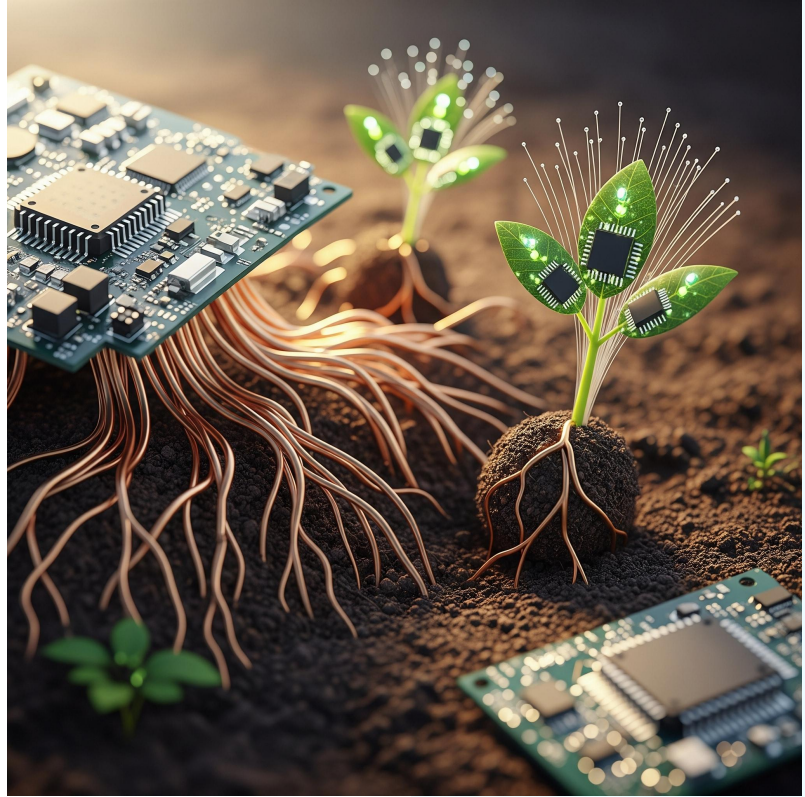
Legacy Program: (null)
Is Enrolled: YES
Build is seed: NO
CatalogURL: https://swscan.apple.com/content/catalogs/others/index-26customerseed-26-15-14-13-12-10.16-10.15-10.14-10.13-10.12-10.11-10.10-10.9-mountainlion-snowleopard-leopard.merged-1.sucatalog.gz
Asset Server URL: https://swscan.apple.com/content/catalogs/others/index-26customerseed-26-15-14-13-12-10.16-10.15-10.14-10.13-10.12-10.11-10.10-10.9-mountainlion-snowleopard-leopard.merged-1.sucatalog.gz/
NSShowFeedbackMenu: YES
DisableSeedOptOut: NO
Asset Audience: 3887527d-63af-453b-af37-67f26a0d156e
rlatimer@603e5f78ba08-mac ~ %
```

Running seedutil on macOS



seedutil whatisaseed

What are the seeds?



**What
happened?**

macOS 13.4

seedutil is dead. Long live... oh no,
there's nothing to replace it.



Elmo

**Our (old) new
plan**

Our old new plan

Munki Hand-crafted artisanal invites



Enroll In BetaThumbs

[Thumbtack](#)

Join Thumbtack's beta program. Get the latest software immediately. If you haven't already done so, once installed sign up with [this Google Form](#).

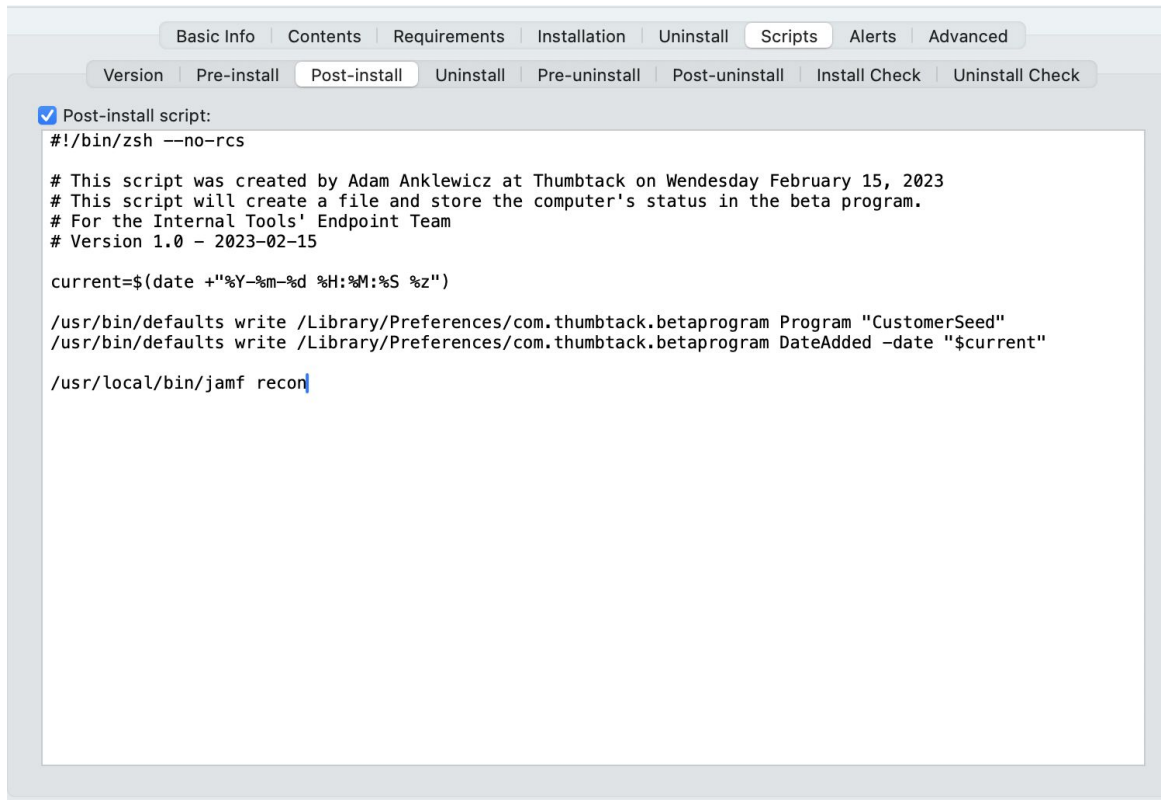
INSTALL



Munki

Nopkg file with scripts

- Install check
- Postinstall
- Uninstall



The screenshot shows the Munki application window with the 'Scripts' tab selected. Below the tab bar, there are sub-tabs: 'Version', 'Pre-install', 'Post-install', 'Uninstall', 'Pre-uninstall', 'Post-uninstall', 'Install Check', and 'Uninstall Check'. The 'Post-install' sub-tab is active, displaying a script with a blue checkmark icon and the text 'Post-install script:'. The script content is as follows:

```
#!/bin/zsh --no-rcs

# This script was created by Adam Ankiewicz at Thumbtack on Wednesday February 15, 2023
# This script will create a file and store the computer's status in the beta program.
# For the Internal Tools' Endpoint Team
# Version 1.0 - 2023-02-15

current=$(date +"%Y-%m-%d %H:%M:%S %Z")

/usr/bin/defaults write /Library/Preferences/com.thumbtack.betaprogram Program "CustomerSeed"
/usr/bin/defaults write /Library/Preferences/com.thumbtack.betaprogram DateAdded -date "$current"

/usr/local/bin/jamf recon
```

Script for enrolling in the beta program, actual file can be found at
[https://github.com/internal-thumbtack/BetaBuddiesResources/blob/main/Beta
%20Buddies/joinbetaprogram.plist](https://github.com/internal-thumbtack/BetaBuddiesResources/blob/main/Beta%20Buddies/joinbetaprogram.plist)



Jamf

Using an Extension Attribute, a smart group is created to hold all the people in CustomerSeed.

Computers : Smart Computer Groups

← Beta Program

Computer Group

Criteria

Reports

☐ Show

AND/OR		CRITERIA	OPERATOR	VALUE
	<div>▼</div>	Last Check-in	<div>less than x days ago ▼</div>	<div>14</div>
<div>and ▼</div>	<div>▼</div>	Operating System Version	<div>greater than or equal ▼</div>	<div>12.0.1</div>
<div>and ▼</div>	<div>▼</div>	CurrentBetaStatus	<div>is ▼</div>	<div>CustomerSeed</div>

Smart Criteria in Jamf



Managed Apple Accounts

Make sure permissions are correct!



Staff

Staff are non-managerial personnel at specific locations within Thumbtack, Inc.. They can be assigned to any location, and can use devices managed by your organization, but may not sign in to Apple Business Manager.

Can act on accounts with these roles:

None

Basic Privileges (required)

- ☒ Participate in AppleSeed for IT
- ☒ Use managed devices
- ☒ Sign in to iCloud.com with a Managed Apple Account
- ☒ Use managed Apps and Books



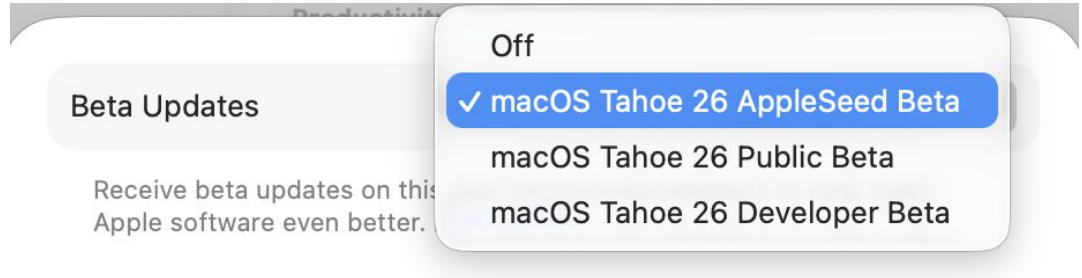
~~appleseed.apple.com~~

~~beta.apple.com/it~~

beta.apple.com/for-it

Opting In

Remember seeds?



Accessing beta updates



Our new new plan

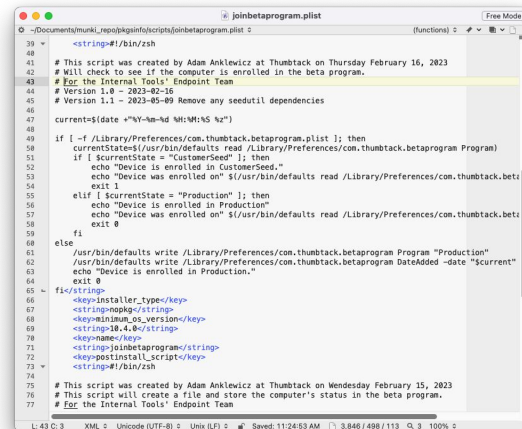
Our new (new) plan

Munki DDM



Munki

Self-service portal



```
39 <string>#!/bin/zsh
40
41 # This script was created by Adam Ankiewicz at Thumbtack on Thursday February 16, 2023
42 # Will check to see if the computer is enrolled in the beta program.
43 # For the Internal Tools' Endpoint Team
44 # Version 1.0 - 2023-02-16
45 # Version 1.1 - 2023-05-09 Remove any seedutil dependencies
46
47 current=$(date +%Y-%m-%d %H:%M:%S %z)
48
49 if [ -f /Library/Preferences/com.thumbtack.betaprogram.plist ]; then
50     currentState=$(/usr/bin/defaults read /Library/Preferences/com.thumbtack.betaprogram Program)
51     if [ $currentState = "CustomerSeed" ]; then
52         echo "Device is enrolled in CustomerSeed."
53         echo "Device was enrolled on" $(/usr/bin/defaults read /Library/Preferences/com.thumbtack.betaprogram DateAdded)
54         exit 1
55     elif [ $currentState = "Production" ]; then
56         echo "Device is enrolled in Production"
57         echo "Device was enrolled on" $(/usr/bin/defaults read /Library/Preferences/com.thumbtack.betaprogram DateAdded)
58         exit 0
59     fi
60 else
61     /usr/bin/defaults write /Library/Preferences/com.thumbtack.betaprogram Program "Production"
62     /usr/bin/defaults write /Library/Preferences/com.thumbtack.betaprogram DateAdded -date "$current"
63     echo "Device is enrolled in Production."
64     exit 0
65 fi
66 <key>installer_type</key>
67 <string>mohg</string>
68 <key>minimum_os_version</key>
69 <string>10.4.0</string>
70 <key>name</key>
71 <string>joinbetaprogram</string>
72 <key>postinstall_script</key>
73 <string>#!/bin/zsh
74
75 # This script was created by Adam Ankiewicz at Thumbtack on Wednesday February 15, 2023
76 # This script will create a file and store the computer's status in the beta program.
77 # For the Internal Tools' Endpoint Team
```

pkginfo file for enrolling in the beta program, actual file can be found at <https://github.com/internal-thumbtack/BetaBuddiesResources>



Fleet Labels

Using a query, a label is created to hold all the people in CustomerSeed.

Name

BetaThumbs

Description

Devices enrolled in CustomerSeed via Munki

Query

```
1 SELECT 1 FROM plist
2 WHERE path = '/Library/Preferences/com.thumbtack.betaprogram.plist'
3       AND value = 'CustomerSeed';
4
```

Label queries are immutable. To change the query, delete this label and create a new one.

Platform

macOS

Label platforms are immutable. To change the platform, delete this label and create a new one.

Cancel

Save



DDM

Send DDM profile to devices with
CustomerSeed label

```
{
  "Type": "com.apple.configuration.softwareupdate.settings",
  "Identifier": "com.thumbtack.configuration.softwareupdate.settings",
  "Payload": {
    "Beta": {
      "ProgramEnrollment": "Allowed",
      "OfferPrograms": [
        {
          "Description": "Thumbtack Tahoe Beta",
          "Token": "This is not the actual token, you need to make one yourself"
        }
      ]
    }
  }
}
```



Pre-2023	Current	Future (maybe now!)
Automatic	Manual	Semi-manual
IT opts users in	Users opt themselves in	Users opt themselves in
Seedutil script	User messaging	DDM command



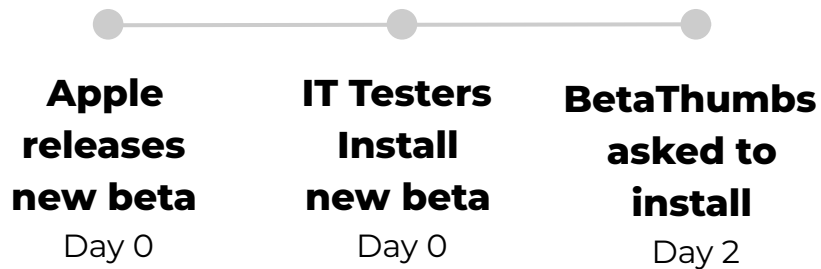
Disaster Plan



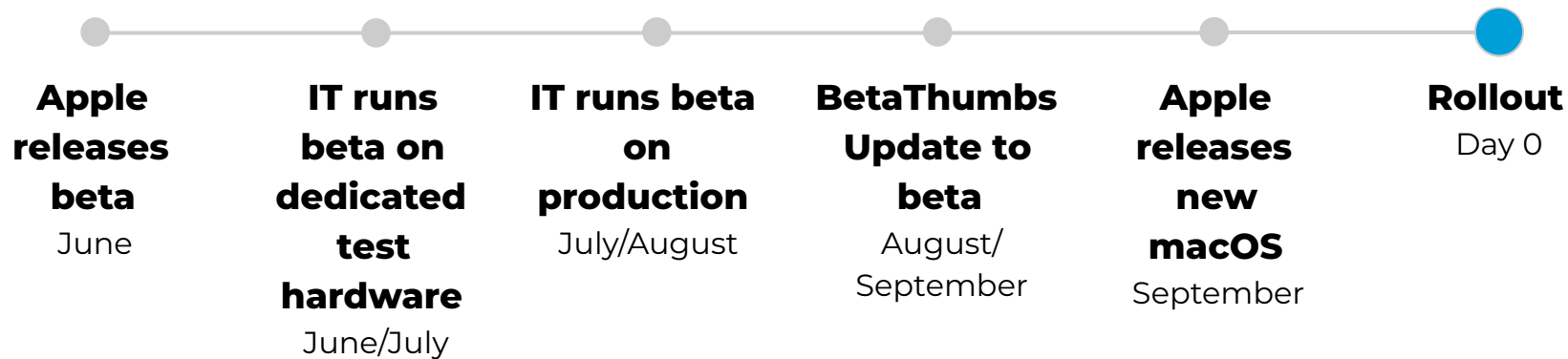
Test machines

Scheduling

Minor releases



Major releases



3rd Party Apps

3rd Party Apps

Munki Stagger releases with random numbers



Stagger

Munki nopkg script to assign each device a random number each quarter.

Labels reading plist

Group assigned to beta Munki catalogue

Name

BetaThumbs

Description

Devices enrolled in CustomerSeed via Munki

Query

1

SELECT 1 FROM plist

2

WHERE path = '/Library/Preferences/com.thumbtack.betaprogram.plist'

3

AND value = 'CustomerSeed';

4

Label queries are immutable. To change the query, delete this label and create a new one.

Platform

macOS

Label platforms are immutable. To change the platform, delete this label and create a new one.

Cancel

Save

Rollout Phase 0



Stagger

**Munki nopkg script to assign
each device a random number
each quarter.**

Labels reading plist

Group assigned to beta Munki
catalogue

```
1 #!/bin/zsh
2
3 ## =====
4 ## Created 2023 03 21
5 ## By Adam Anklewicz for Thumbtack Inc. endpoint team
6 ## aanklewicz@thumbtack.com
7 ## Updated 2023 05 09 - Auto enter the quarter
8 ## =====
9
10 #####
11 # Here are our variables.
12 #####
13
14 defaults="/usr/bin/defaults"
15 file="/Library/Preferences/com.thumbtack.randomnumber.plist" #
16 year=$(date +%Y)
17 month=$(date +%m)
18 quarter=$(( ($month - 1) / 3 + 1 ))
19 quarter="{year}_Q${quarter}"
20 randomNumber=$(jot -r 1 1 1000) # Sets the random number
21
```

Script available at github.com/internal-thumbtack



Stagger

Munki nopkg script to assign each device a random number each quarter.

Labels reading plist

Group assigned to beta Munki catalogue



Name

Phase 1

Description

Macs with a random number from 0 to 100

Query

```
1 SELECT 1
2 WHERE EXISTS (
3     SELECT 1 FROM plist
4     WHERE path = '/Library/Preferences/com.thumbtack.randomnumber.plist'
5     AND key = (
6         strftime('%Y','now') || '_Q' ||
7         (CASE
8             WHEN CAST(strftime('%m','now') AS integer) BETWEEN 1 AND 3 THEN '1'
9             WHEN CAST(strftime('%m','now') AS integer) BETWEEN 4 AND 6 THEN '2'
10            WHEN CAST(strftime('%m','now') AS integer) BETWEEN 7 AND 9 THEN '3'
11            ELSE '4'
12        )
13    )
14    AND CAST(value AS integer) BETWEEN 0 AND 100
15 )
16 AND EXISTS (
17     SELECT 1 FROM plist
18     WHERE path = '/Library/Preferences/com.thumbtack.betaprogram.plist'
19     AND value = 'Production'
20 );
```

Label queries are immutable. To change the query, delete this label and create a new one.

Platform

macOS

Label platforms are immutable. To change the platform, delete this label and create a new one.






Cancel Save

Stagger

Munki nopkg script to assign each device a random number each quarter.

Labels reading plist

Group assigned to beta Munki catalogue

	Munki Phase 0 macOS, iOS, iPadOS • Uploaded 3 months ago	2 labels
	Munki Phase 1 macOS, iOS, iPadOS • Uploaded 5 months ago	6 labels
	Munki Phase 2 macOS, iOS, iPadOS • Uploaded 5 months ago	6 labels
	Munki Phase 3 macOS, iOS, iPadOS • Uploaded 5 months ago	6 labels
	Munki Production macOS, iOS, iPadOS • Uploaded 5 months ago	5 labels

Rollout profiles in Fleet



Stagger

Munki nopkg script to assign each device a random number each quarter.

Labels reading plist

Group assigned to beta Munki catalogue

	AWSCLI	Phase0, Phase1, Phase2, Phase3, Produc
	AWSCLI	Phase0, Phase1, Phase2, Phase3, Produc
	AWSCLI	Phase0, Phase1, Phase2, Phase3, Produc
	AWSCLI	Phase0, Phase1, Phase2, Phase3, Produc
	AWSCLI	Phase0, Phase1, Phase2, Phase3
	AWSCLI	Phase0, Phase1, Phase2
	AWSCLI	Phase0, Phase1, Phase2

Packages in Munki Admin showing multiple phases

What We've Learned

What Went Well

- Communications Partnership
- Lots of engagement (at first)
- Very active beta testers
- Disasters few and far between



Could Be Better

- Continuing engagement
- More iOS devs in the testing pool
- Confusion among support staff
- Managed Apple Account federation



Acknowledgements

None of this would be possible without the Mac Admins Slack!

Please consider contributing to the MAF:

<https://www.macadmins.org/donate>

<https://trade.phobio.com/macadmins>

<https://cottonbureau.com/people/mac-admins-foundation>

TEAM

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RESOURCES

<https://github.com/internal-thumbtack/BetaBuddiesResources>