

Apple Business — Manually Adding a Device with Apple Configurator (Working Draft)

Companion to Doc 2 — the full drill-down on On-ramp 2

Guide set — Apple Business device management. *You are here: Configurator companion.* Three enrollment guides plus this hands-on companion:

1. [Account-Driven Enrollment — BYOD + OOD](#) — enroll a device already in use, from Settings.
2. [Automated Device Enrollment](#) — new or erased org devices via Setup Assistant.
3. [Lifecycle & Offboarding](#) — un-enroll, release, transfer, erase/reassign.

Companion (this doc): Manual Add with Apple Configurator — the step-by-step On-ramp 2 drill-down that feeds Doc 2.

Scope: This doc covers **only** the **manual on-ramp**: taking a **used/existing device that isn't in your inventory** and getting it into **Apple Business** with **Apple Configurator**, then through management assignment, Blueprint, and first setup. It's the detailed version of **Doc 2's "On-ramp 2"** — pulled out so Doc 2 doesn't get bloated.

Once the device is in Apple Business and assigned, it rejoins the normal **Automated Device Enrollment** flow in **Doc 2** — this doc just gets it *to* that point, drilled all the way down.

Status: draft built from Apple's official docs (Apple Business User Guide, Apple Configurator for Mac User Guide, April 2026) and corrected against David's real walkthrough — the errors he hit are written up in Troubleshooting. Items still needing confirmation are flagged inline.

The one thing to get right: ORDER

Almost every failure in this process is an **ordering** problem. The device must be **fully staged in Apple Business before you ever swipe through Setup Assistant on the phone**. If you proceed on the device too early, it has nothing to download and setup errors out.

The correct sequence is four phases, in this order:

Phase	Where	What happens
1	Mac — Apple Configurator	Erase/prepare the device and add it to Apple Business (it lands in an "Apple Configurator" group)
2	Apple Business (web)	Assign the device to a management service (Built-in <i>or</i> Jamf)
3	Apple Business (web)	Assign a Blueprint (Built-in path) or confirm a Jamf PreStage (Jamf path)
4	The device	Run Setup Assistant — <i>only now</i> — and it pulls its configuration

Do not touch Setup Assistant on the device until Phases 1–3 are done. This is the single most common cause of *"Configuration for your iPhone could not be downloaded from the organization."*

Two sign-in prompts people confuse (this bites everyone)

There are **two completely different "sign in" moments** with the same managed admin account, and they are **not** interchangeable:

Prompt	Where it lives	What it's for	Use it here?
Account > Sign In (Configurator menu bar)	Apple Configurator app menu	Signing in to get apps & books for content distribution	No — not part of adding a device
Device Management Service sign-in	Inside the Prepare > Manual Configuration wizard	Authorizes adding this device to Apple Business	Yes — this is the one

Account > Sign In is a **dead end for enrollment**. It only loads your apps-and-books content. Signing your managed admin account in there can throw **AMSErrorDomain error 100** and gets you nowhere toward adding a device. The credential that matters is entered **later, inside the Prepare wizard**. See Troubleshooting.

Requirements & what Configurator can add

macOS / Configurator version (check the Mac first). Apple Configurator for Mac needs a **current macOS** — 2.20 requires macOS 15.7+, 2.19 requires macOS 15.6+. It runs **only on a Mac**.

You want to add...	Use	Notes
iPhone, iPad, Apple TV (HD or later)	Apple Configurator for Mac	The path this doc covers
Mac (Apple silicon or T2)	Apple Configurator for iPhone	Different app — not covered here

Account/role you need: a Managed Apple Account with the **Administrator** or **Device Enrollment Manager** role (permission to add devices with Apple Configurator). The apps-and-books permission is a *different* permission and is **not** what this process needs.

Phase 0 — Stage the Mac and the device

Two separate computers are involved — don't mix them up: - **The admin Mac** = the Mac running Apple Configurator (your workstation). Steps 1–2 are about *this* Mac. - **The target device** = the iPhone/iPad being enrolled. Step 3 is about *this* device.

On the admin Mac (the one running Apple Configurator):

1. Confirm the macOS/Configurator versions above and install **Apple Configurator**.
2. **Your Mac's own Apple Account doesn't matter — leave it signed in.** Whatever account you use for iCloud on this Mac (even if it's the same email as your ABM admin) is **irrelevant** to Apple Configurator; the app never uses the Mac's iCloud login to add devices. The only macOS requirement is that your user is a **local administrator** (you authenticate as the Mac admin during Prepare). The **ABM admin account** is entered **only inside the Prepare wizard** (Phase 1) — never in System Settings, never on the iPhone. (*Managed Apple Accounts aren't OS-level/iCloud logins in the first place.*)

On the target device (the iPhone/iPad being enrolled):

1. If it's already in use: sign out of iCloud, **turn off Find My**, and be ready to erase. **Activation Lock must be clear** or it can't be set up as new.
2. **Plug the device into the Mac by USB and keep it connected** for the entire process.

Phase 1 — Add the device to Apple Business (Apple Configurator, on the Mac)

Mode that pairs with the rest of this doc: leave "**Activate and Complete Enrollment**" *unchecked*. That leaves the device parked at **Setup Assistant** so the user (you) completes it in Phase 4 — which is exactly what we want, because the config isn't ready until Phases 2–3 are done.

1. In Apple Configurator, **select the connected device**, then **Prepare** (toolbar, *Actions > Prepare*, or right-click > **Prepare**).
2. Choose **Manual Configuration** and select **Add to Apple Business Manager**.
3. **Deselect "Activate and Complete Enrollment."** Click **Next**.
4. Under **Device Management Services**, choose **New Server**. Click **Next**.
5. **Name the server** (e.g., "Apple Business Manager"). Leave the **Device Management Service URL unchanged** (it won't verify — that's expected). Click **Next**.
6. **Don't add a certificate**. Click **Next**.
7. Select your **organization** (or **New Organization**). Click **Next**.
8. **Sign in with your Managed Apple Account** (Administrator or Device Enrollment Manager). ← *This is the real enrollment sign-in — not **Account > Sign In***. Click **Next**.
9. Complete sign-in, then **Generate a new supervision identity**.
10. Choose which **Setup Assistant panes to skip**. Click **Next**.
11. Select a **Wi-Fi configuration profile** (so the device can reach Apple Business). Click **Next**.
12. Authenticate with your **macOS administrator** account, then **Update Settings**.
13. **Unlock the device** if prompted. If it says the device is already set up, click **Erase**. → Result: the device is wiped and **left at Setup Assistant**, and its serial is now in Apple Business under an "**Apple Configurator**" group.

30-day provisional period. Devices added via Configurator can be **released** by the user from Apple Business / supervision / management **within 30 days** of enrollment. Purchased devices have no such escape hatch.

Phase 2 — Assign the device to a management service (Apple Business, web)

This is a fork, and it's where the Blueprint-vs-Jamf confusion comes from. A device pulls its setup config from **whichever service you assign it to** — *either* Apple's **Built-in Device Management** or **Jamf**. Not both. The next phase depends on which one you pick here.

1. Sign in to **business.apple.com** as **Administrator** or **Device Enrollment Manager**.
2. Go to **Devices** and open the device. A Configurator-added device shows **Device Management Service: "Devices Added by Apple Configurator"** until you assign it. *(If you can't find it, filter Source > "Manually Added" / "Apple Configurator" and refresh.)*



iPhone SE

iOS



Assign
Device
Manageme...



Release
from
Organization



Turn Off
Activation
Lock



Unassign
Device
Manageme...

Overview

Device Management Service Devices Added by Apple Configurator

Device Model

iPhone SE

Serial Number



Details

1. Click **Assign Device Management**. In the dialog, open the **Device Management Service** menu.

Assign Device Management ✕

Choose a device management service for Automated Device Enrollment. This service is used for initial enrollment and for reenrollment if a deadline is set. [Learn More](#)

Device Management Service ▼

[+](#) Add Deadline

Cancel

Continue

1. Choose your service — here, **Built-in device management** — then click **Continue**.

Assign Device Management



Choose a device management service for Automated Device Enrollment. This service is used for initial enrollment and for reenrollment if a deadline is set. [Learn More](#)

Device Management Service

Built-in device management



+ Add Deadline

Cancel

Continue

1. Confirm the change. Read the dialog's own wording: *"Assignment changes will take effect the next time the device uses Automated Device Enrollment in Setup Assistant."* That sentence is exactly why you stage everything **before** running Setup Assistant on the phone.

Assign Device Management



Are you sure you want to change the device management service this device is assigned to?

You are attempting to change the device management service for **1 iPhone**.

Assignment changes will take effect the next time the device uses Automated Device Enrollment in Setup Assistant.

Cancel

Confirm

1. You'll get a success confirmation — the device is now assigned.

Device management service assignment updated



1
Completed

The device was successfully updated.

View in Activity

Done

If you assign to...	Then the config comes from...	Next phase
Built-in Device Management	An ABM Blueprint	Phase 3A
Jamf	A Jamf PreStage enrollment	Phase 3B

Order still matters: assigning the service is **not** optional and must happen **before** Setup Assistant. An unassigned device = no config = the download error.

Phase 3A — Assign a Blueprint (Built-in Device Management path)

Blueprints exist **only** in Built-in Device Management. Because a test device has **no assigned user**, you assign the Blueprint **directly to the device by serial number**.

Requirement: a Blueprint assigned by serial number requires **Automated Device Enrollment** as the enrollment method — which is exactly what a Configurator-added device uses.

Create a Blueprint and add the device to it:

1. In Apple Business, sign in with a role that can **manage Blueprints**.
2. **Devices > Blueprints > Add (+)**.
3. Choose a type: - **Blueprints for service devices** — right choice for a **test / kiosk / shared** device with no user. (*Recommended for your test iPhone.*) - **Create your own Blueprint** — full custom. - (*Blueprints for users — for devices tied to a person.*)
4. **Continue**, then set up **default configurations**, add **apps** if desired, and — key step — open the **Devices** section and **add your iPhone's serial number**.
5. **Add Blueprint** to save.

Assigning an existing Blueprint instead: **Devices > Blueprints** → select the Blueprint → **Devices** → add the serial → **Save**.

Phase 3B — Confirm the Jamf PreStage (Jamf path)

If you assigned the device to **Jamf** in Phase 2, there is **no Blueprint**. Instead, in **Jamf** make sure the device's serial is scoped to a **PreStage Enrollment** with the desired settings. Without a matching PreStage, the device hits the **same "couldn't download" error** in Phase 4.

To validate against David's Jamf setup: exact PreStage scoping path and whether the device auto-appears in Jamf after ABM assignment or needs a sync.

Phase 4 — Run Setup Assistant on the device (only now)

1. If the device already failed a setup attempt, **Erase All Content and Settings** first — a poisoned setup session won't retry on its own.
2. Power on; connect to **Wi-Fi / internet**.
3. Proceed through **Setup Assistant**. At **Remote Management**, the device checks Apple Business, finds its assigned service + Blueprint (or Jamf PreStage), and **downloads the configuration**.
4. Finish setup. The device is now **supervised and fully managed**. - **Built-in + Blueprint-to-device**: no Managed Apple Account sign-in required; a personal Apple Account may optionally be added later in Settings.

Verified: on the real test run the Blueprint pulled down **automatically at Remote Management, with no Apple Business app involved** — because the Blueprint was assigned **to the device by serial**, not to a user.

Aside — when you *do* see the Apple Business app. If a Blueprint is assigned to a **user** (Fork 1) rather than a device serial, the **Apple Business app** appears on the device as the per-user storefront for assigned apps. That's a different path from this guide's device-by-serial flow, but here's what it looks like so the distinction is concrete:

6:21



Apps

All

Books

Business

Education

Fi



Bible

Daily Study, Audio & Prayer

Open



Calvary Chapel
Vero Beach

Education

Installed



Planning Center

Planning Center in your pocket

Installed



Planning Center
Check-Ins

Child and Volunteer Check-In

Installed



Planning Center Services

Retrying a failed setup — erase, DON'T re-Prepare

If the device is **already in Apple Business, assigned to Built-in, and on a Blueprint**, you do **not** re-run the full **Prepare** wizard to try again — that just repeats the add-to-ABM steps you've already done. The serial stays enrolled in ABM through an erase, so all you need is a **clean wipe** so Setup Assistant runs fresh.

Easiest — erase through Apple Configurator: connect the device, select it, **Actions > Advanced > Erase All Content and Settings**. (*This is "Erase," not "Prepare."*) The device stays enrolled in ABM and re-runs Setup Assistant.

Alternative (no Mac needed): on the phone, **Settings > General > Transfer or Reset iPhone > Erase All Content and Settings**.

Then on the device: go through Setup Assistant and **join WiFi when the "Choose a Wi-Fi Network" screen appears** (or use a phone hotspot). Once online, **Remote Management** reaches Apple and pulls the Blueprint.

Only re-run the full "Prepare" if you specifically want to **bake in a Wi-Fi profile** (so the device comes up online by itself) or **change which Setup Assistant panes are skipped**. If you're there to tap the WiFi network by hand, a plain **Erase** is enough.

Fastest retry test: Erase All Content & Settings (via Configurator) → on setup, join WiFi / hotspot → let Remote Management run. If it still hangs after the phone is confirmed online, the problem is the **network filtering Apple's hosts/ports**, not your ABM/Blueprint setup.

How the configuration actually reaches the device (network, NOT the cable)

This is the part that's easy to get wrong, so read it carefully.

Apple Configurator does not push the Blueprint to the device. The USB cable's only job was back in **Phase 1:** erase the device and **register its serial number in Apple Business** with a pointer to your org. After that, Configurator and the Mac are **completely out of the picture**. You could unplug the cable and throw the Mac in a drawer — it changes nothing.

The Blueprint/MDM configuration is pulled by the device itself, over the internet (WiFi or cellular), from Apple's cloud. Here's the actual sequence at the **Remote Management** screen:

1. The phone is already on WiFi (see below for *how* it got there).
2. It contacts **Apple's activation/MDM servers** and effectively asks, *"Who do I belong to?"*

3. Apple's cloud answers, "*Org X — your management service is Built-in Device Management,*" and hands over the enrollment profile.
4. The phone then **downloads its Blueprint configuration over the network** and applies it.

So the config travels: Apple's cloud → WiFi → device. Never through the cable. If the device can't reach Apple's servers over the network, **nothing downloads — and you get a Remote Management timeout**, even though everything in Apple Business is set up perfectly.

At what point does the device get WiFi? (the likely cause of a *timeout*)

Because the config arrives over the network, **the device must have working internet at the Remote Management screen.** There are only **two** ways it gets WiFi, and an admin controls both:

Way 1 — A Wi-Fi profile baked in during Configurator Prepare. Back in **Phase 1, step 11**, Configurator asked you to **"Select a Wi-Fi configuration profile."** If a *valid* profile was attached there, the device installs it during preparation and comes up **already online** at Remote Management — no one has to type a WiFi password on the phone. If that step was left blank/skipped, the device has **no baked-in WiFi**.

Way 2 — Joined by hand during Setup Assistant. Normally a **"Choose a Wi-Fi Network"** pane appears *before* Remote Management. Whoever is setting up the phone taps the network and enters the password, and the device is online from that point.

The trap that causes a silent timeout. In **Phase 1, step 10** you chose **which Setup Assistant panes to skip**. If the **"Choose a Wi-Fi Network"** pane was **skipped** *and* **no Wi-Fi profile was attached (Way 1)**, the phone reaches **Remote Management with no network path at all**. It then tries to contact Apple, can't, and **times out** — with no obvious "you have no internet" message. This single misconfiguration explains a Remote Management timeout perfectly.

If you don't know what was done (someone else ran it, days ago)

You don't need the history — just verify it cleanly on the **next** attempt. Erase the phone and watch the setup screens yourself:

1. **Did a "Choose a Wi-Fi Network" screen appear, and did you connect to a network? - No screen appeared and it went straight toward Remote Management** → WiFi was skipped and no profile was attached. **That's the timeout cause.** Fix: re-Prepare in Configurator and **attach a valid Wi-Fi profile**, *or* make sure the **WiFi pane is NOT in the skip list** so you can join by hand. - **A screen appeared and you joined a network** → the device *has* internet, so the timeout is **not** a "no WiFi" problem — move to the network-filtering check below.

2. **Confirm the network actually has internet** — open Safari on a *different* device on the same WiFi. A captive-portal / sign-in WiFi (hotel/guest style) will *look* connected but block the phone.
3. **Confirm the network isn't filtering Apple's servers** (next section).
4. **Re-confirm Apple Business is staged:** device assigned to **Built-in**, and its **serial is in the Blueprint's Devices list**. Then **erase and retry**.

Fastest isolation test: run the setup on a **known-open network or an iPhone personal hotspot** from another phone. If it enrolls there but fails on the office WiFi, the problem is the **office network filtering Apple's hosts/ports**, not your ABM setup.

How to build a Wi-Fi configuration profile in Apple Configurator (Way 1 detail)

A Wi-Fi profile is a small settings file you make **once** that holds your network name + password. Attach it during Prepare and Configurator installs it on the device during preparation, so the phone comes up **already online** at Remote Management — nobody types anything on the phone. (No device needs to be plugged in to *build* the profile.)

Build it:

1. In Apple Configurator, choose **File > New Profile**.
2. In the **General** pane, set a **Name** (e.g., "Office WiFi") and an **Identifier** (e.g., `net.ccvb.wifi`).
3. In the payload list on the left, select **Wi-Fi**, click **Configure**, and enter: - **SSID** (Service Set Identifier) — the network name, **exactly** (case-sensitive). - **Security Type** — for a normal password network, **WPA2/WPA3 Personal**. - **Password** — the network password. - Turn on **Auto Join**.
4. **File > Save**, name it, and save it somewhere easy to find. (*Signing is optional — skip it.*)

Use it: in the **Prepare** wizard at "**Select a Wi-Fi configuration profile**" (Phase 1, step 11), choose this saved profile.

Two ways it silently fails to connect: the **SSID doesn't match exactly**, or the **Security Type doesn't match** the real network. If your WiFi is **802.1X / Enterprise** (username + certificate rather than a shared password), use the **Enterprise** Wi-Fi settings instead — a Personal profile won't join an Enterprise network.

When it's worth it: a Wi-Fi profile pays off for **hands-off setups or multiple devices**. For a single device you're standing in front of, **joining WiFi by hand during Setup Assistant is faster**.

Required network access (for filtered/corporate WiFi)

If the device is online but still times out, the WiFi is almost certainly **blocking Apple's deployment endpoints**. The network the phone enrolls on must allow outbound access to:

Purpose	Hosts	Ports
Apple Push Notification service (the core of MDM)	*.push.apple.com	TCP 5223 (primary), TCP 443 (fallback), 2197 (server side)
Activation / enrollment & Apple Business	*.apple.com, incl. albert.apple.com, gdmf.apple.com, axm-adm-enroll.apple.com, axm-adm-scep.apple.com, mdmenrollment.apple.com, business.apple.com	TCP 443
Apps & content / software updates	*.itunes.apple.com, *.mzstatic.com, *.apps.apple.com, swcdn.apple.com, gs.apple.com	TCP 443

Apple publishes the authoritative, maintained list — give it to whoever runs the firewall/WiFi: **"Use Apple products on enterprise networks" (Apple Support 101555)**. Notes: APNs **must** have **TCP 5223** open (it falls back to 443 but is less reliable); you can scope these to Apple's **17.0.0.0/8** IP block; and **content filters / TLS-inspection proxies** that intercept these connections will break enrollment — Apple's endpoints should be **bypassed** from SSL inspection.

Troubleshooting (real errors from the walkthrough)

Remote Management screen times out / spins and fails. The device reached Setup Assistant but **couldn't pull its config over the network**. In order of likelihood: **(1)** the device has **no WiFi** because the WiFi pane was skipped *and* no Wi-Fi profile was attached (see "At what point does the device get WiFi?" above) — most common; **(2)** the WiFi it's on is **filtering Apple's hosts/ports** (see "Required network access"); **(3)** ABM assignment hadn't **propagated** yet — wait ~15 min, erase, retry; **(4)** Built-in service off or **Blueprint serial not attached**. Isolate fast by retrying on an open network / personal hotspot.

The operation couldn't be completed. (AMSErrorDomain error 100.) on Account > Sign In. You're in the **wrong menu**. **Account > Sign In** is for **apps & books**, not enrollment. It can throw error 100 with a managed admin account and is irrelevant to adding a device. Ignore it; do the enrollment sign-in **inside the Prepare > Manual Configuration wizard** (Phase 1, step 8). If you *do* need apps-and-books content there later, confirm the account has that permission, set the Mac's **date/time/zone** correctly, and retry — error 100 is often an Apple-side media-services hiccup.

Configuration for your iPhone could not be downloaded from the organization. The device reached **Remote Management** but had **nothing to pull**. Almost always one of: - The device wasn't

assigned to a management service yet (Phase 2), **or** - It's assigned to **Built-in** but has **no Blueprint** with its serial (Phase 3A), **or** - It's assigned to **Jamf** but has **no matching PreStage** (Phase 3B), **or** - You **ran Setup Assistant too early** (before Phases 2–3). Fix the missing piece, then **erase** and re-run Setup Assistant.

Device shows in ABM and Configurator but won't finish setup. Expected if Phases 2–3 aren't complete. Being *in* ABM only means Phase 1 succeeded. Finish service assignment **and** Blueprint/PreStage, then erase and retry.

"User not authorized" / can't sign in during Prepare. The account lacks the right role. Use **Administrator** or **Device Enrollment Manager** (permission to add devices with Apple Configurator).

Quick reference — the whole flow on one line

Plug in → Configurator Prepare (Manual, *uncheck* Activate) → device in ABM "Apple Configurator" group → **ABM: assign to service (Built-in/Jamf)** → **ABM: Blueprint-to-serial (or Jamf PreStage)** → erase → Setup Assistant downloads config → managed.

Verified on a real device — June 30, 2026

The full four-phase flow was run end-to-end on David's test iPhone and **worked**: Configurator add → assign to **Built-in Device Management** → **Blueprint assigned to the device by serial** → **Erase All Content & Settings** (via Configurator) → join **WiFi by hand** during Setup Assistant → **Remote Management pulled the Blueprint automatically** and the device supervised itself. Confirmed along the way: - [x] **Four-phase order is correct** — staging in ABM *before* touching Setup Assistant is what makes it work. - [x] **WiFi must be live at Remote Management** — joining WiFi manually during Setup Assistant was enough; the earlier failures were the device reaching Remote Management with no/blocked network. - [x] **Blueprint-to-serial (service-device Blueprint)** is the right path for a device with no assigned user, and it applies **without** the Apple Business app (that app only appears for Blueprint-to-*user* app delivery). - [x] **Erase, don't re-Prepare** — a plain Erase All Content & Settings re-runs Setup Assistant while the serial stays enrolled in ABM. - [x] **Mac's own Apple Account is irrelevant** — no need to sign the admin Mac out of iCloud.

Open items to resolve before publishing

- [x] ~~Confirm exact ABM labels~~ — confirmed from screenshots: the button is **Assign Device Management** (dialog title "Assign Device Management").
- [] Jamf path (3B): confirm PreStage scoping + whether ABM→Jamf needs a manual sync (*not yet tested* — *Built-in was used for the verified run*).
- [] Confirm current **Configurator/macOS** version numbers at time of publishing.
- [] Decide how this cross-links back into Doc 2 (replace the inline On-ramp 2 section with a pointer).

Apple documentation index

- [Add devices using Apple Configurator to Apple Business Manager](#)
- [Add devices to Apple School Manager or Apple Business Manager in Apple Configurator for Mac](#)
- [Prepare an iPhone, iPad, or Apple TV manually in Apple Configurator for Mac](#)
- [Manage the built-in device management service in Apple Business](#)
- [Enrollment methods for built-in device management](#)
- [Apply Blueprints in Apple Business](#)
- [Assign, reassign, or unassign devices in Apple Business](#)
- [Add apps to a device in Apple Configurator for Mac \(what **Account > Sign In** is for\)](#)
- [Requirements for Apple Configurator for Mac](#)
- [Use Apple products on enterprise networks \(required hosts & ports\)](#)
- [Configure your network for device management](#)
- [Manage Setup Assistant \(which panes can be skipped\)](#)