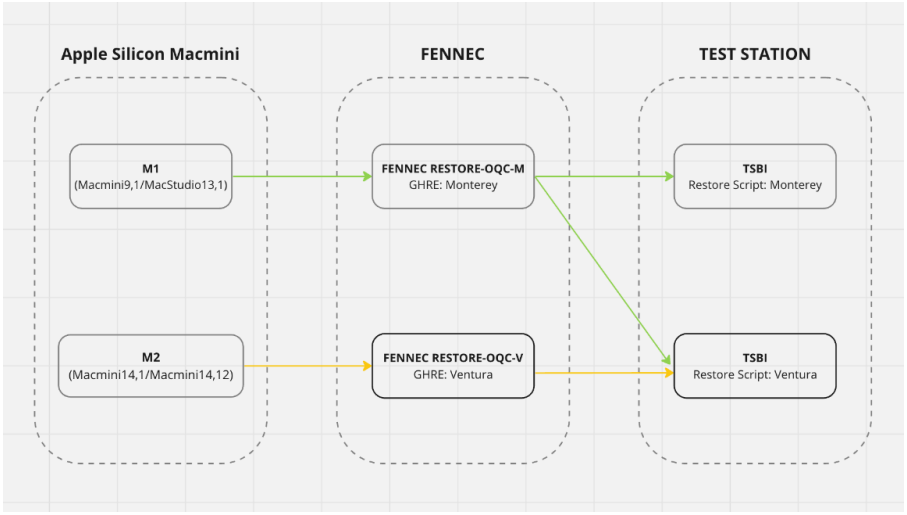
November 13, 2023

Apple Silicon Macmini GHRE Provisioning(CM)

When apple silicon Macminis - J274(M1 Macmini), J375(M1 Mac Studio) and J473/4(M2 Macmini) supported at labs or CMs, you will see a new project code “FENNEC” along with station types “FENNEC RESTORE-OQC-M”(Monterey GHRE) and “FENNEC RESTORE-OQC-V”(Ventura GHRE) created in target GHLS already. Then you will need to create line name and add station unit under project “FENNEC” in the next step and start to provision GHRE for your silicon Macminis.

HW & GHRE & TSBI Mapping



GHRE Provisioning

1. SETUP FENNEC RESTORE-OQC STATION

1.1 Create a line name for project FENNEC in GHLS,
1.2 Create station unit for FENNEC RESTORE-OQC-M/V in GHLS,
1.3 Restore FENNEC RESTORE-OQC-M/V station,

- Macmini: J174 (recommended)
- Restore Script: default (Catalina Restore Script)
- Station Overlay: default
- Core Overlay: default
- OSX Overlay: default
- Live/DTI: default

Note: After the 1st FENNEC RESTORE-OQC-M/V station restored successfully online, email to System Support

Groundhog <groundhog_support@group.apple.com> team to push station Live files.(only required when the first FENNEC RESTORE-OQC-M/V station is up)

1.4 Keep Fennec stations connected to line/pdca network always.

2. PROVISION GHRE FOR SILICON MACMINIS

If you use Spartan cable then go to step 2.1; if you use Thunderbolt(USB-C) cable, please skip to step2.2.

2.1 Provision with Spartan Cable

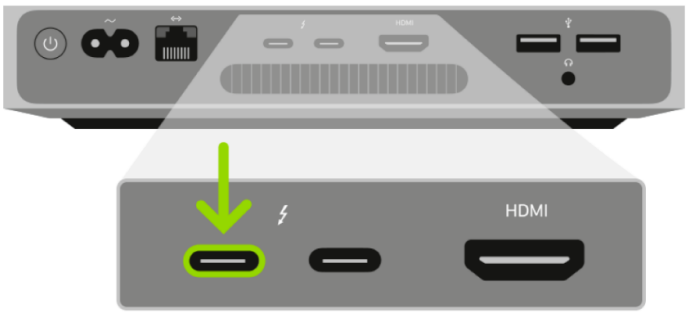
2.1.1 Upgrade Spartan cable firmware and launch atlas application

- connect Spartan cable(black side cord) to FENNEC RESTORE-OQC-M/V station(J174),
- double click “UpdateSpartanFW.command” on Fennec station desktop
- double click “startAtlas2.command” on Fennec station desktop

2.1.2 Provision GHRE for Silicon Macmini

- connect power cable to target Silicon Macmini - J274(M1 Macmini), J375(M1 Mac Studio), J473/4(M2 Macmini),
- plug in Spartan cable(purple side cord) to target Silicon Macmin,(closest MacMini power cord USB-C),

Mac mini (M1 or M2)



- when target Silicon Macmin connected to FENNEC RESTORE-OQC-M/V station , it will auto-detect the device and start the provision process.
  - it may take ~15 minutes to complete the provision,
  - once provision completed, Groundhog Restore Environment (GHRE) installed into the Silicon Macmini,
  - silicon macmini will powered off automatically once provision completed.

2.2 Provision with Thunderbolt(USB-C) Cable

2.2.1 Launch atlas application

- connect USB-C to FENNEC RESTORE-OQC-M/V station(J174),
- double click “startAtlas2.command” on Fennec station desktop

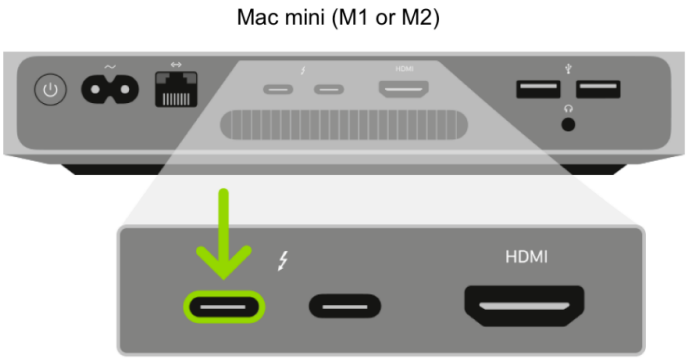
2.2.2 Set Silicon Macmini to DFU mode

- Disconnect the Silicon Macmini from power for at least 10 seconds,

- Press and hold the power button,
- Reconnect power while still holding the power button,
- Release the power button.
- The status indicator light should turn amber.

2.2.2 Provision GHRE for Silicon Macmini

- plug in Thunderbold(USB-C) cable to target Silicon Macmin,(closest MacMini power cord USB-C),



- when target Silicon Macmin connected to FENNEC RESTORE-OQC-M/V station , it will auto-detect the device and start the provision process.
  - it may take ~15 minutes to complete the provision,
  - once provision completed, Groundhog Restore Environment (GHRE) installed into the Silicon Macmini,
  - silicon macmini will powered off automatically once provision completed.

After the Silicon Macmini provisioning succeeded, you can disconnect it from Fennec station and connect it to your target project stations with PDCA network, then start up silicon macmini and you will be able to restore it to your station host.

Re-Groundhoging Apple Silicon Macminis

1. Once an Apple Silicon Mac has been through the Fennec process and fully setup using groundhog, it may be manually re-groundhogged as follows:
   a. Open Finder and navigate to Applications → Groundhog.
   b. Launch the GHRE.app to reboot into the Groundhog Restore Environment.
2. Once back in the GHRE, you can make your software selections via the usual Groundhog NetBoot Console Browser window that will automatically launch on reboot.
3. Alternatively, if you have chosen the GHRE by mistake and wish to boot back into the OSX volume, you can select the Applications → Groundhog → OSX.app to boot back into the previous TSBI without modifications.
4. If you are having trouble re-groundhogging, and the system is stuck after some minutes with no feedback in the browser, you may use Applications → Groundhog → Serval.app to clear Serval's cache and retry the restore after a reboot.
   a. Please note that this does not include the percentage counter depicted during restores. This step could take up

to 15 minutes to complete. Please show patience once your restore has successfully kicked-off.

Always email to Groundhog Support team at Groundhog_support@group.apple.com or radar to “Groundhog Support | All” to report any issue you have when provisioning GHRE to a Silicon Macmini.