

Modern Bootstrapping

Mike Solin, May 2021

About Me

- Senior Client Platform Engineer at Saint Joseph's University in Philadelphia, PA
- Cofounder of Greater Philadelphia Mac Admins (phillymacadmins.com)
- Lifelong Mac user
- Started off as an Apple certified repair technician in 2008
- Inherited a NetRestore imaging setup, rebuilt it with DeployStudio
- Found the Mac Admin community soon afterwards and switched careers in 2012
- @flammable on MacAdmins Slack



**What this
presentation isn't:**

**It's not a tutorial.
That would be boring!**

**Visit my blog:
mikesolin.com**

mike solin's blog

About



Bootstrapping!

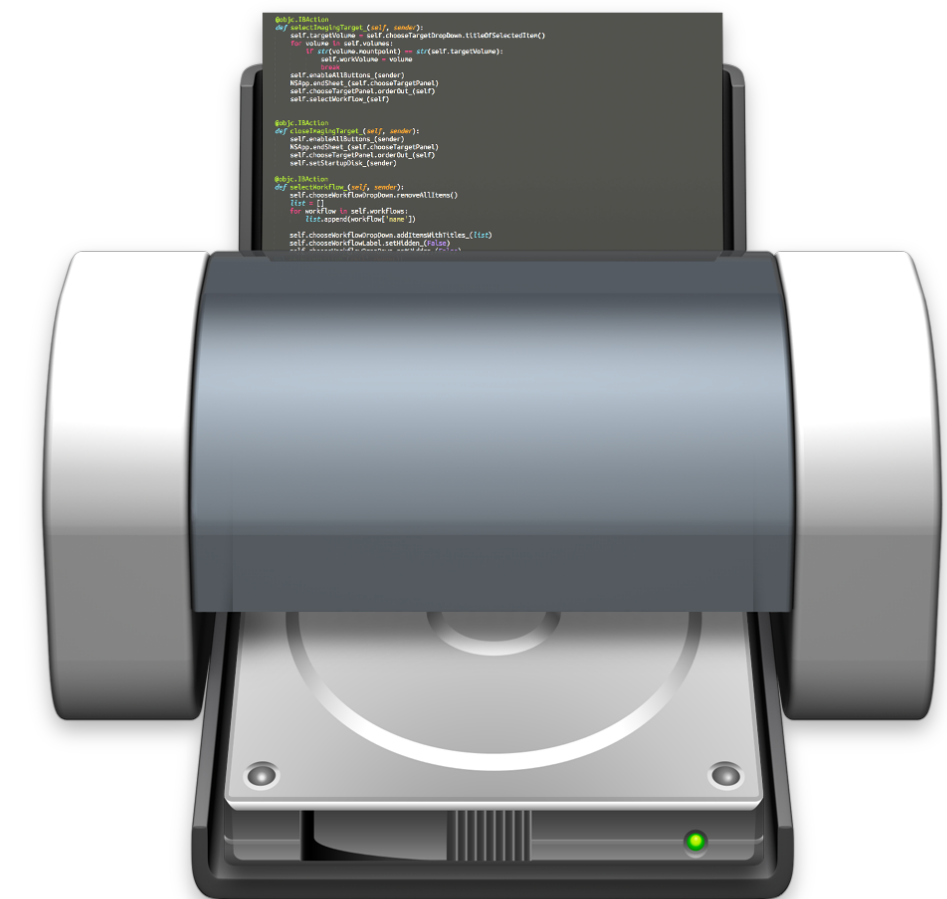
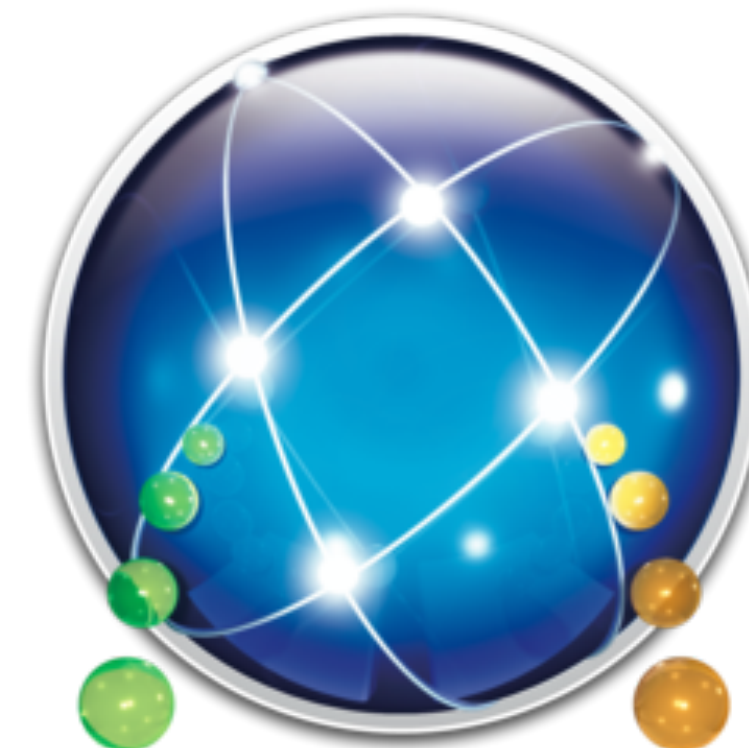
What is it?

- Bootstrapping is whatever you do to get a Mac from “stock” to something you can support.
- Manual provisioning and imaging were older forms of bootstrapping.

Bootstrapping!

Back in MY day...

- Standard tools for bootstrapping
Macs up until a couple years
ago:
 - Disk Utility
 - NetRestore
 - DeployStudio
 - Imagr



Is Imaging Dead?

Yes.

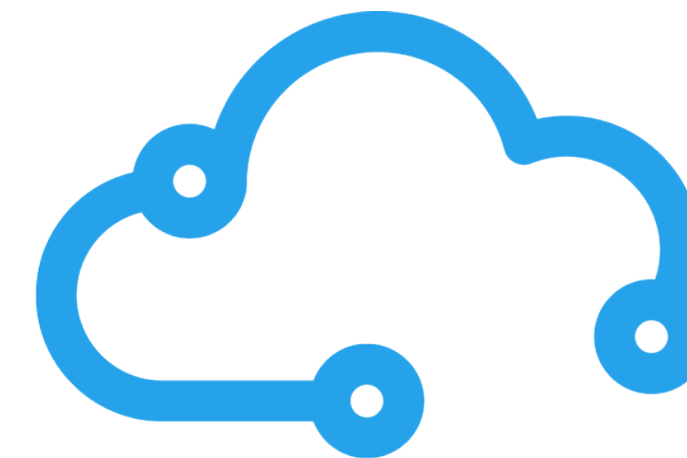
The rise of MDM / DEP

...and how it killed imaging

- Mobile Device Management servers became necessary with the introduction of macOS 10.13 “High Sierra”
- With MDM, a new method of onboarding Apple devices was introduced: the Device Enrollment Program



Workspace ONE™ UEM

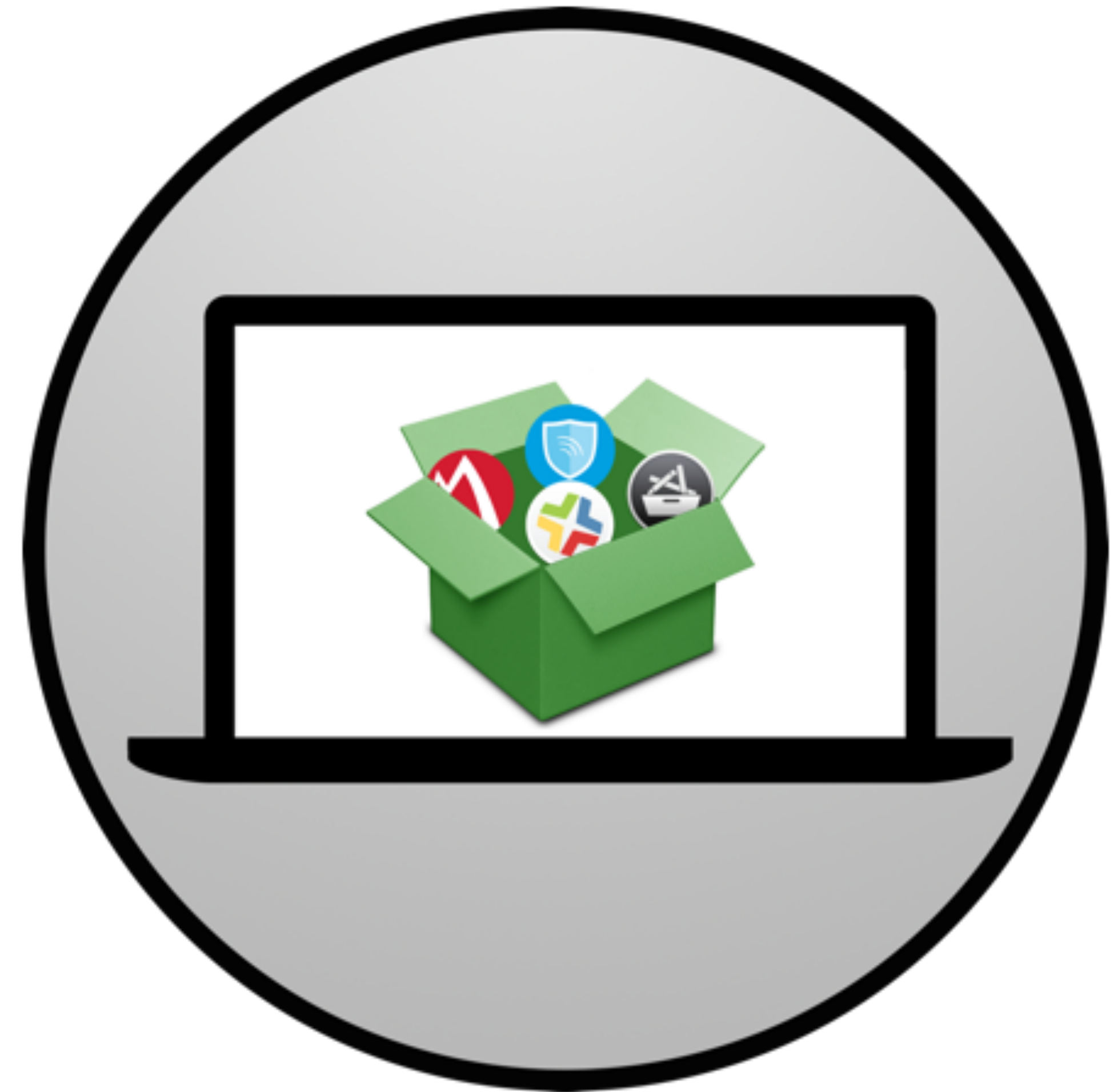


Simple MDM

Bootstrapping!

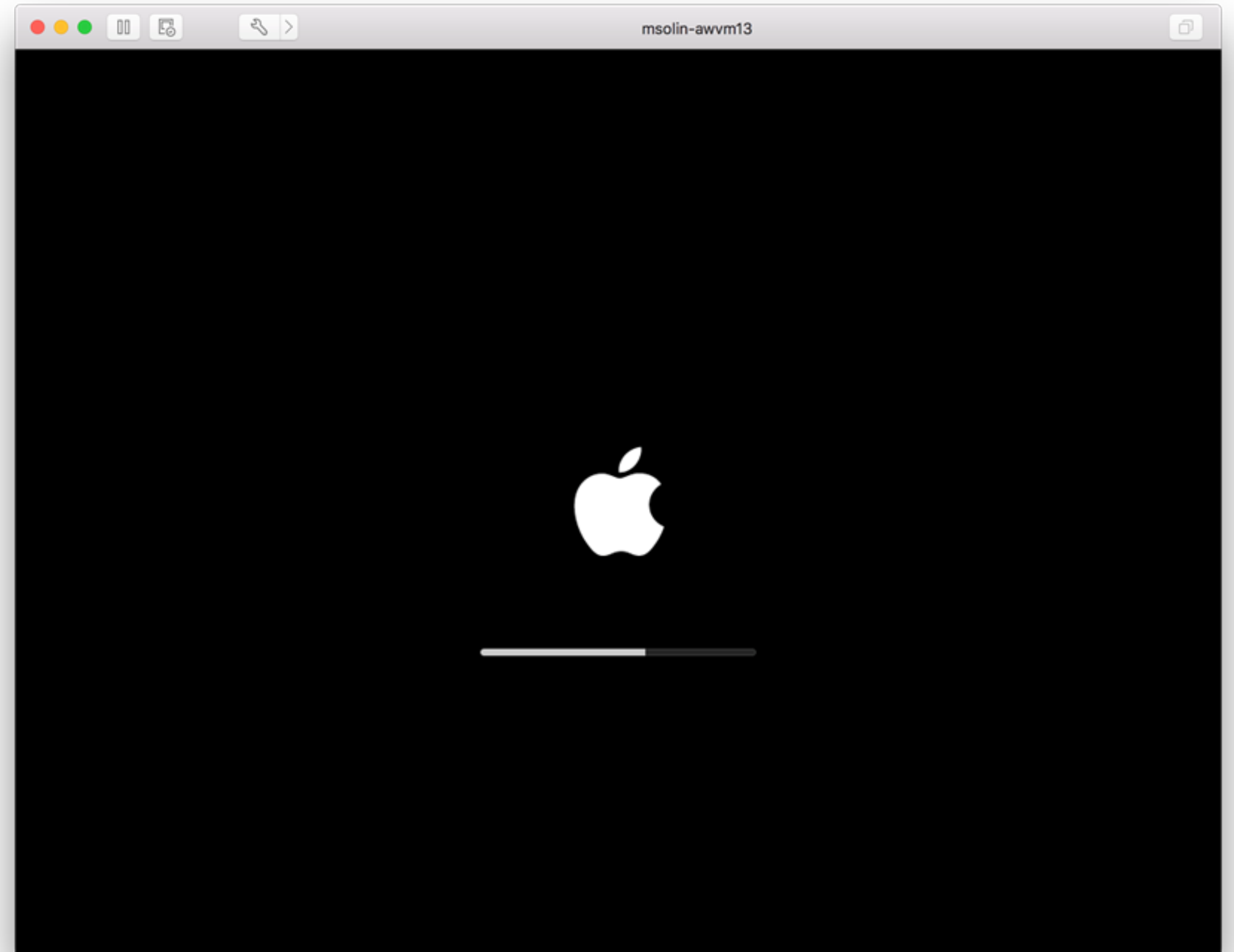
Modernized

- With DEP, the MDM server pushes the bootstrap package to the Mac
 - This allows for installing the bare minimum to get the Mac up and running
- Every MDM implements bootstrapping differently - some let you skip theirs in favor of your own
- At Saint Joseph's University, we're using Workspace ONE UEM for our MDM, and Erik Gomez's InstallApplications as our custom bootstrapping tool

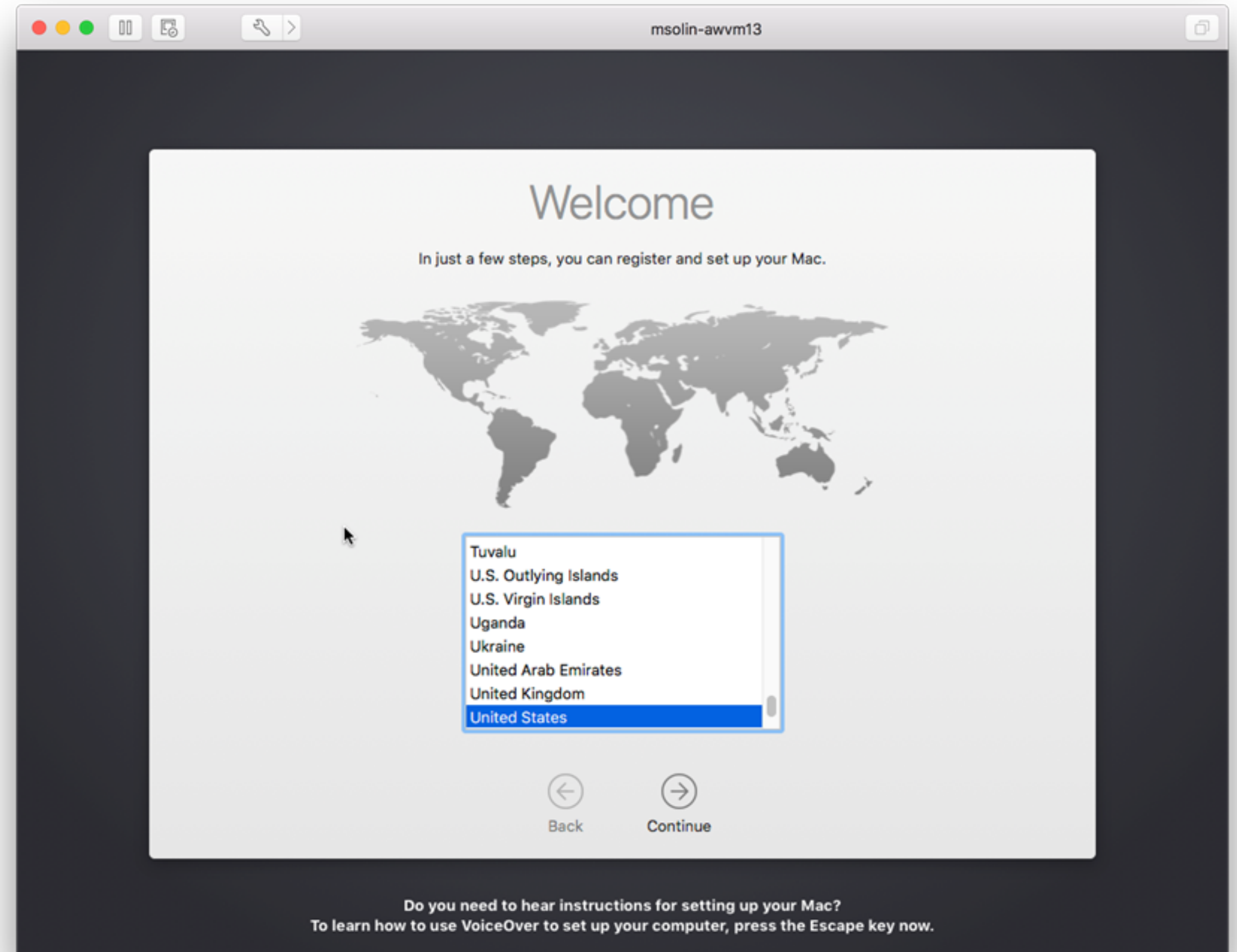


Demo

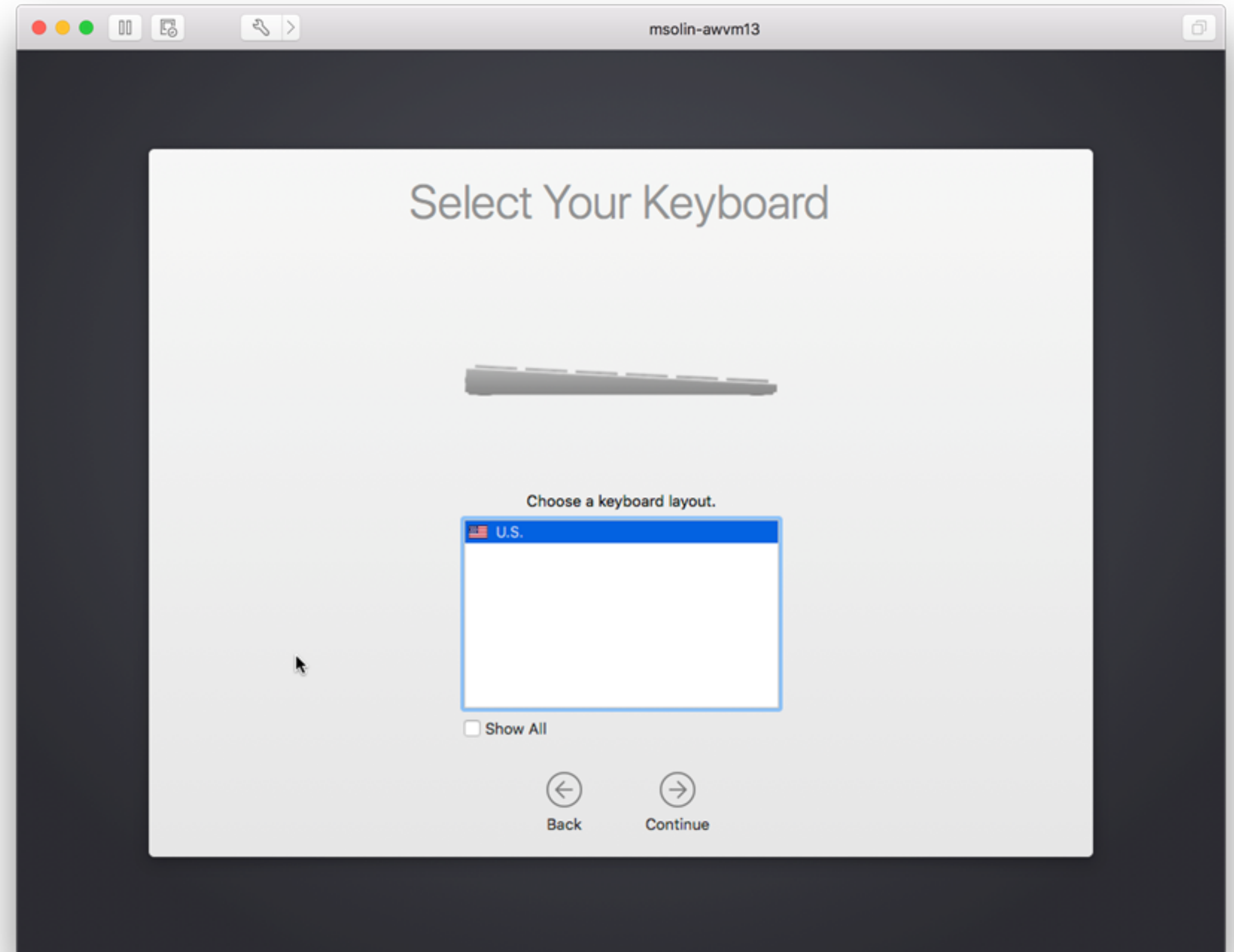
Boot the Mac



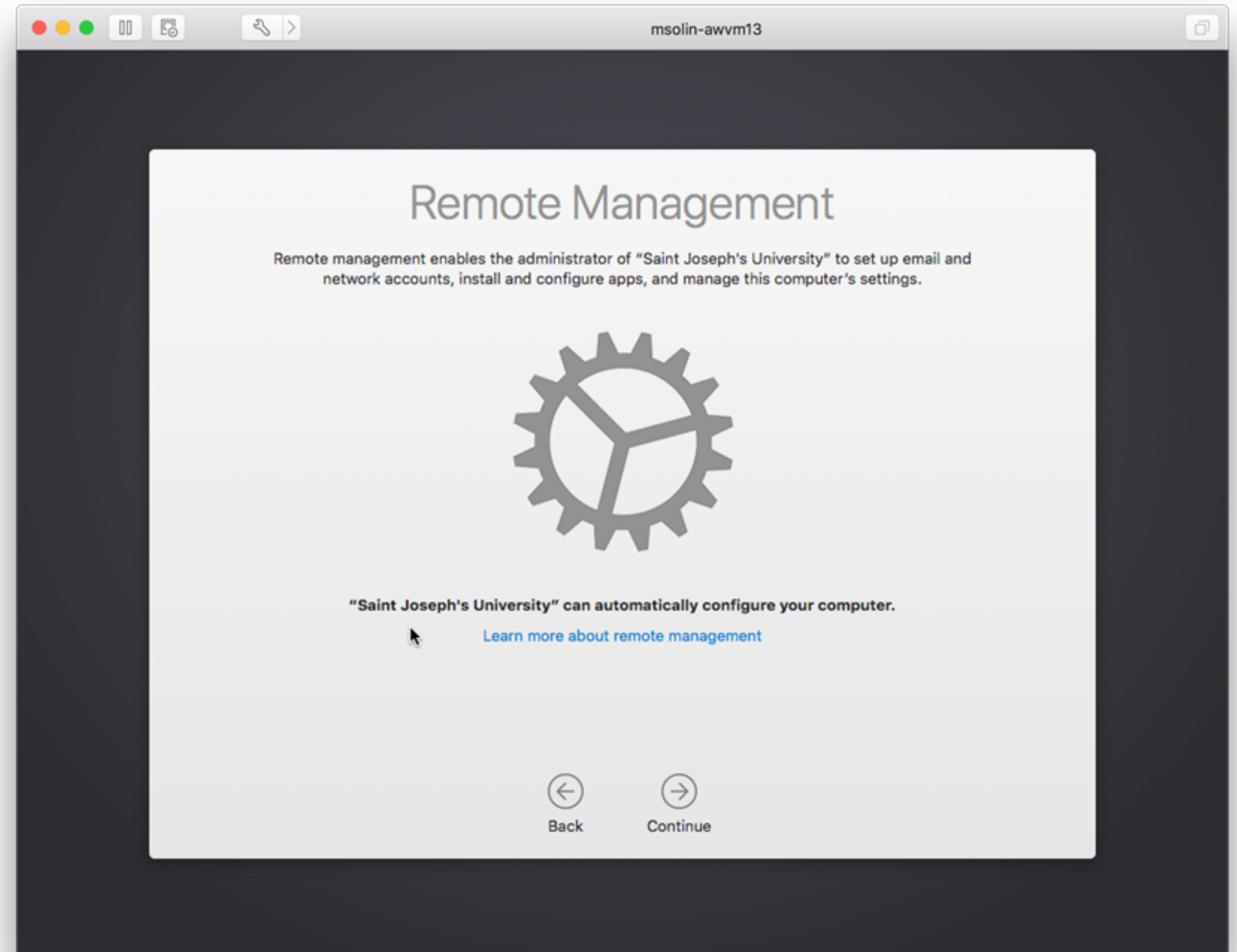
Select your country



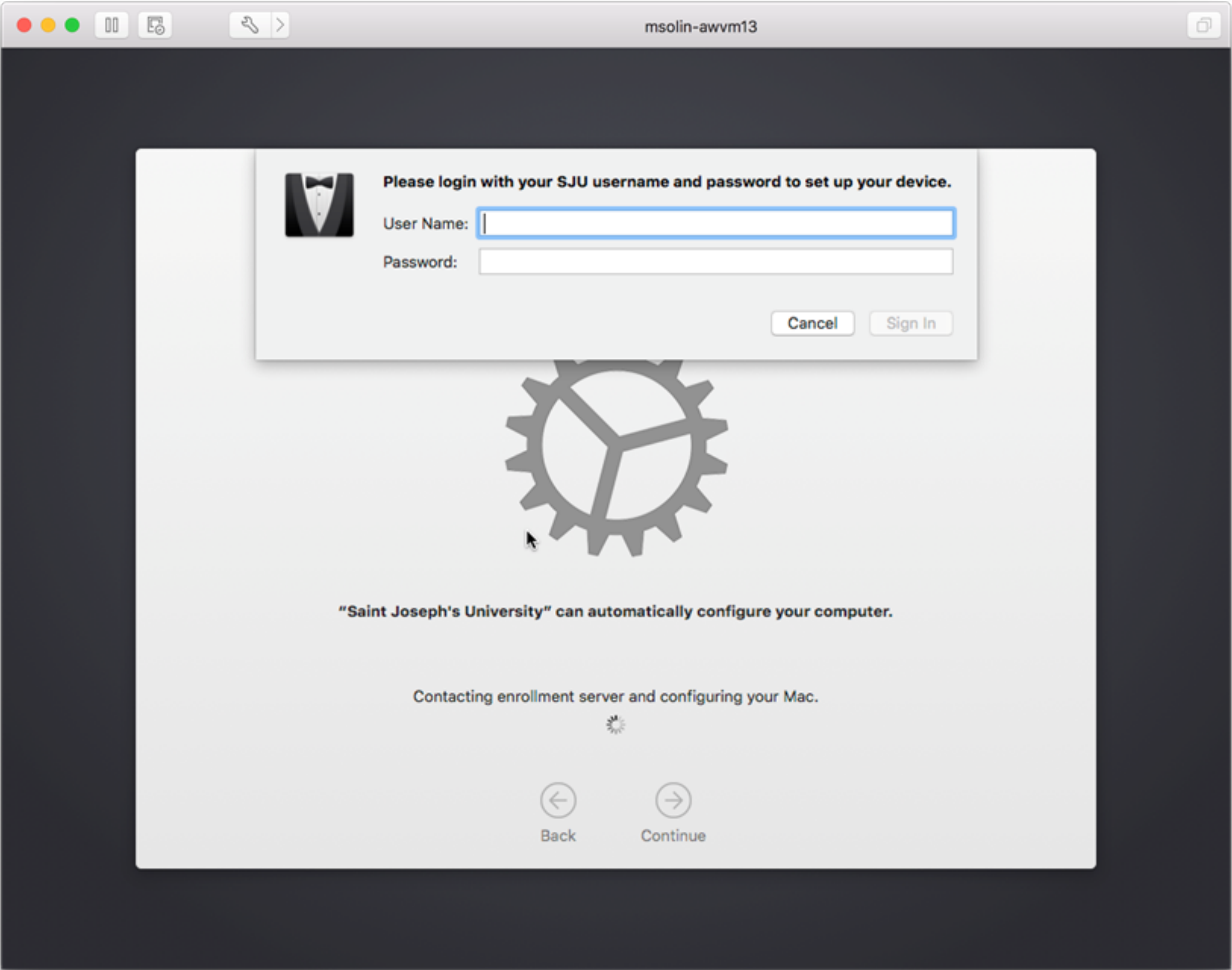
Select your keyboard layout



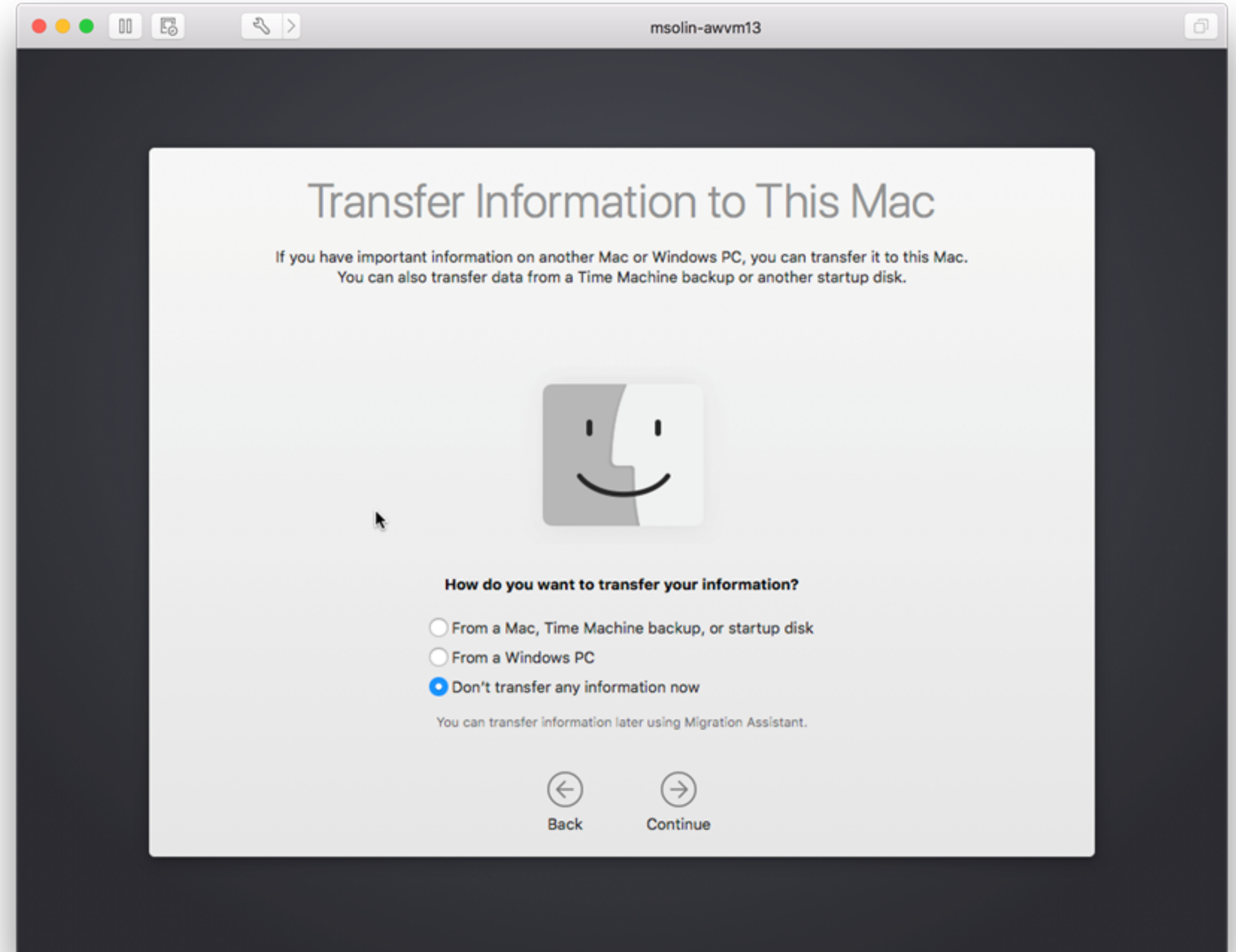
Agree to MDM enrollment



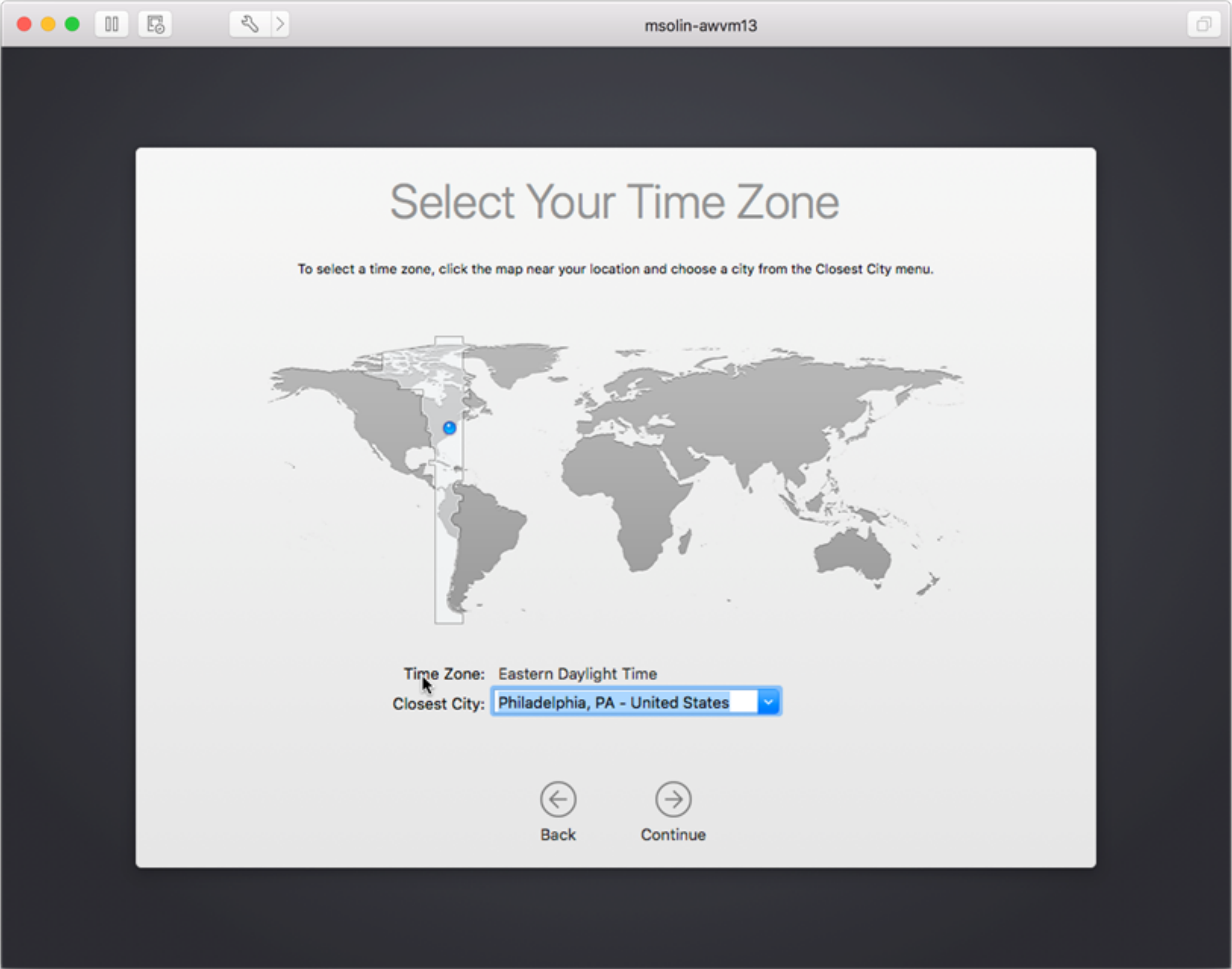
Authenticate to MDM



Skip Time Machine



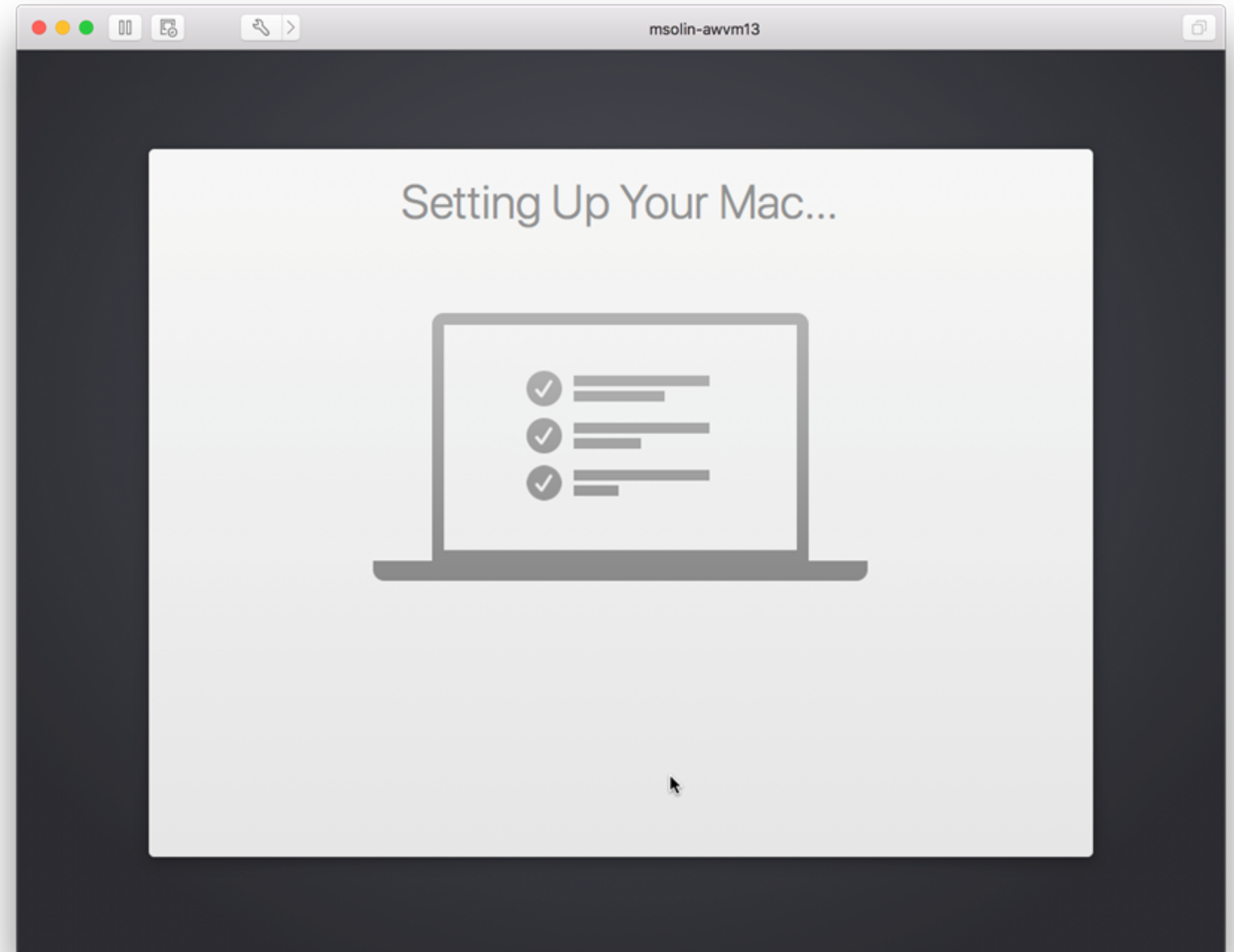
Select your time zone



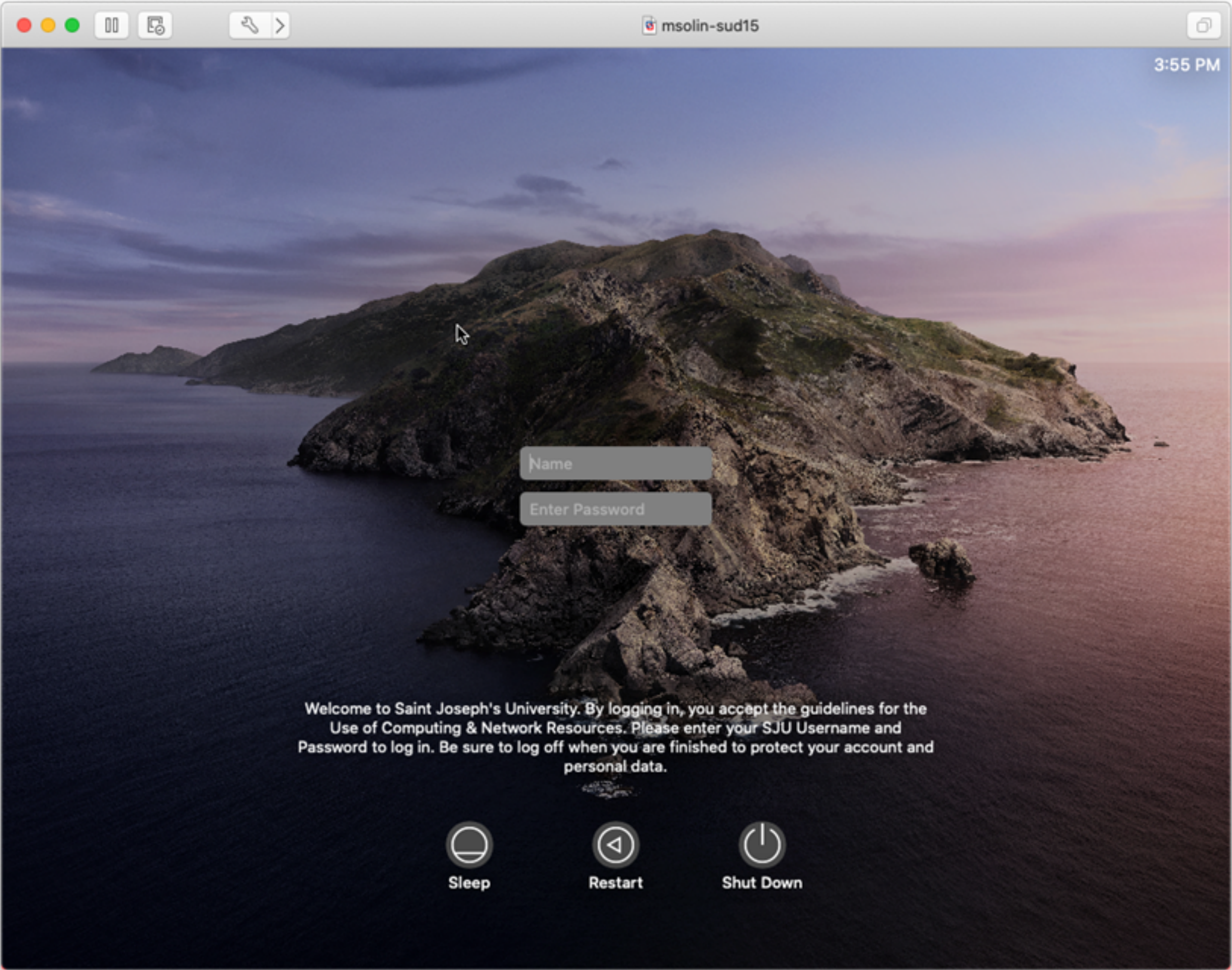
Wait!



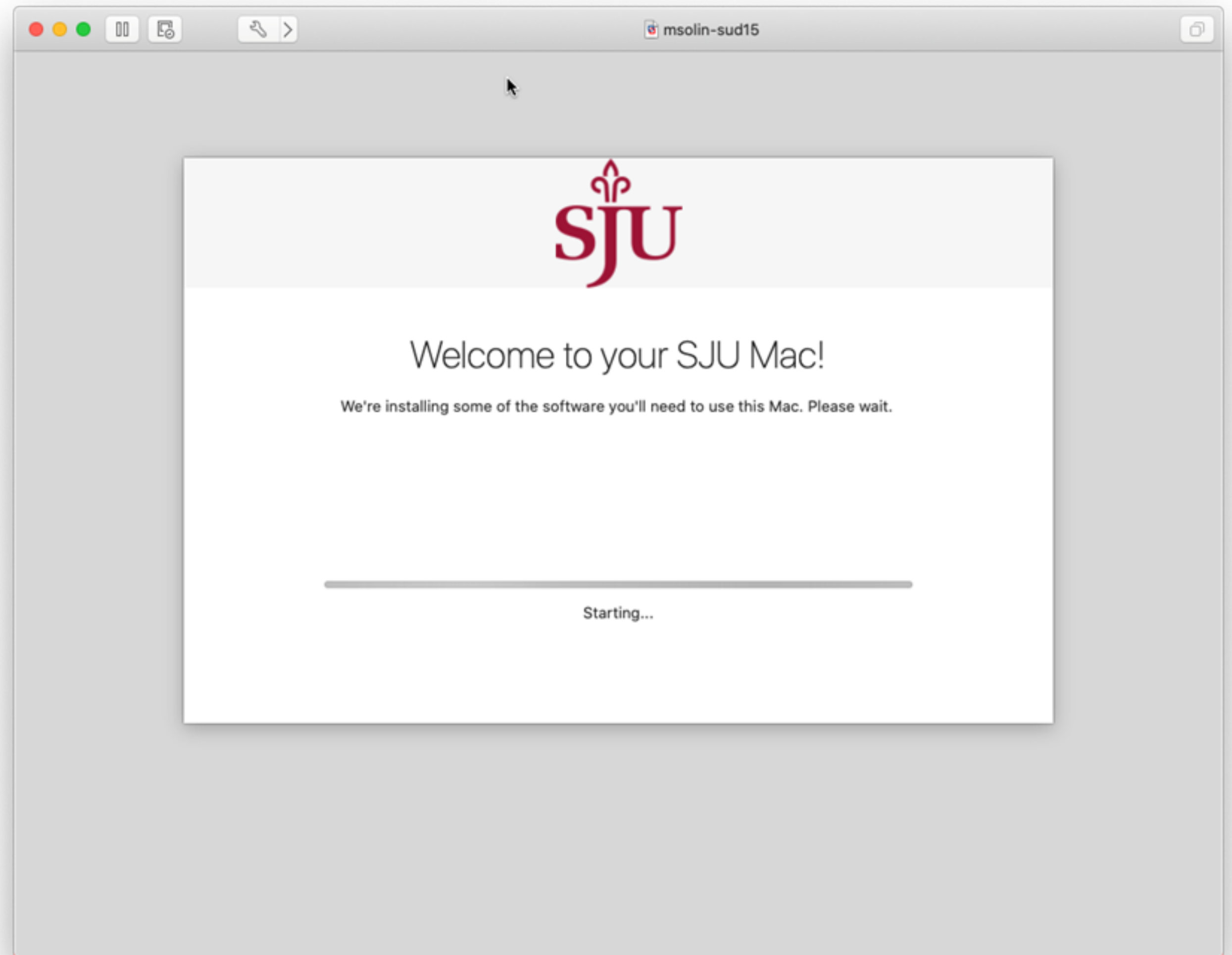
Wait some more!



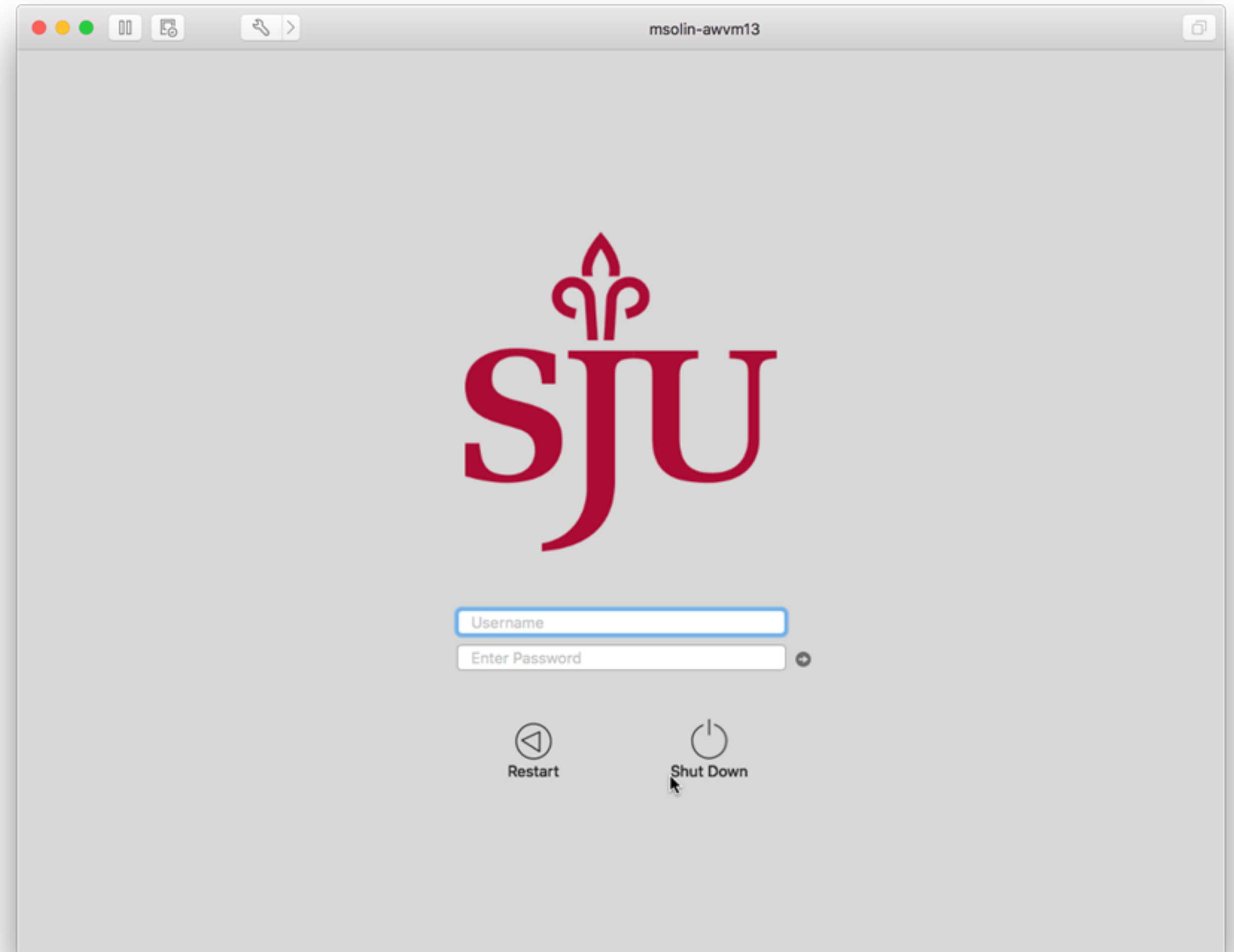
KEEP WAITING



Bootstrap time 😎



Login to desktop



That's it!



Benefits

Why did we do this?

- This process has proven to be stable enough that we can:
 - Allow users to set up their own computers
 - Mail laptops to users in a pandemic
- Paired with our data backup solution, Code42, we have a 100% “zero touch” setup process for our users
- Most Mac setups do not require IT staff

Q&A