



# Protecting Organization Data

Managing Organization Data  
Managing Organization Apps  
Preventing App Removal and Installation  
Encryption with FileVault



# Managing Organization Apps & Data

Lecture



# Data Separation

- ✦ Organization data is cryptographically separated from personal data on Apple devices.
- ✦ Managed apps are always removed during un-enrollment including their container and documents.
- ✦ Apps installed before enrollment can't be converted to become managed apps.
- ✦ User persona remains the same, but organizational owned data and apps get their own APFS volume.
- ✦ Managed Apple ID data coexists with personal Apple ID data in Apps.



# Managed Content & Data

- ✦ Device Restrictions
- ✦ Managed Accounts (ie: Exchange, Google Workspace)
- ✦ Managed Apps (and their associated data)
- ✦ Managed Domains
- ✦ Managed Open in (iOS / iPadOS)
- ✦ iCloud Restrictions



# Configuring Data Restrictions

Practical Exercise



# App Management

Practical Exercise



# FileVault

## Lecture



# FileVault

- ✦ Data encryption for Mac computers.
- ✦ Enforces the following...
  - ✦ Encrypts data at rest.
  - ✦ Requires a password to access encrypted data.
  - ✦ Requires a password to login and unlock/wake a Mac.



# Volume Ownership

- ✦ Introduced with Apple Silicon.
- ✦ Doesn't have anything to do with physical ownership of the device.
- ✦ Refers to the user who first configured the Mac from initial setup.
- ✦ Organizations can also configure a *bootstrap* token to be an additional volume owner.
- ✦ The owner and the *bootstrap* token generate a *secure token* to use to create the recovery key for FileVault.



# Recovery Keys

- ✦ A string of letters and numbers that the Mac creates to secure a FileVault Volume. Needed to turn off encryption.
- ✦ Enabling FileVault on Unmanaged Mac: Personal Recovery Key (PRK).
- ✦ Organizations can create and use an Institutional Recovery Key (IRK).
- ✦ MDM solutions can escrow the Recovery Key and also rotate them.



# FileVault Management

- ✦ MDM payload options include...
  - ✦ Recovery Key Management
  - ✦ When to turn-on FileVault and if it's required.
  - ✦ If a user can defer enabling encryption.
  - ✦ Token management.



# Configuring FileVault

Practical Exercise