Syncthing

A Ship to Shore File Syncing Tool

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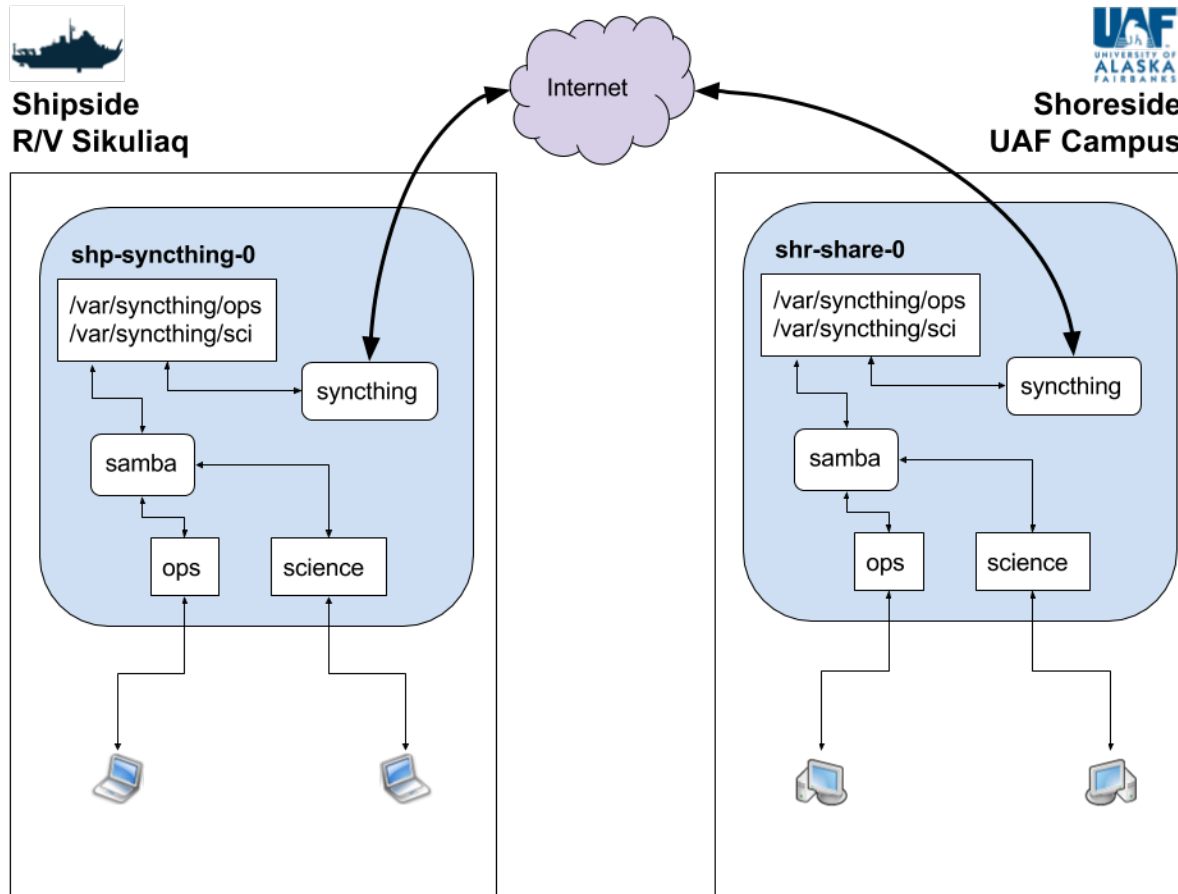University of Alaska Fairbanks

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https://www.sikuliaq.alaska.edu

Sikuliaq Ship to Shore (S2S) File Sync Service

http://share.sikuliaq.alaska.edu/s2s/

Syncthing Web UI

Sikuliaq S2S Operations Directory Structure

Sikuliaq Ship to Shore (S2S)
File Sync Service

Pro's

- Cross Platform (Win, Mac, Linux, Android, RPi)
- Bi-Directional Directory Synchronization
- Bandwidth Throttle
- Secure Transport / No Cloud Deps
- Stable and Robust
- Fault Tolerant of Intermittent connectivity
- Eventually Consistency
- Mature Web UI
- Feature Full
- Directory Versioning

Con's

- Filesystem Limitations
  - Filenames
  - Symlinks
- Requires Internet to establish connections
- Moderate Learning Curve
- Free space is needed on all nodes

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Sikuliaq Ship to Shore (S2S)
File Sync Service

Use Cases
- File Sharing
- Personal Device Synchronization
- Mobile Photo Sync
- Application Replication
- Software Distribution
- Near Real Time Data Sync

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RVTEC 2017 Hands on Demo

Client Side

1. Connect to **SQK RVTEC** WiFi Hotspot
2. Open:
   http://shpdev-syncthing-0/software/Syncthing
3. Download the **Syncthing** version for your operating system
4. Extract the syncthing.[tgz|zip] file on your computer
5. Navigate to the extracted files and run the **syncthing** binary.
   a. This will launch your browser at:
      http://localhost:8384
6. Allow access by your local firewall to ports:
   a. TPC/22000
   b. UDP/21027
7. Click Add Remote Device
8. Enter **Device ID**:
   a. G67T47T-EWOO5M2-DM7PRHE-ACQXA3Q-QPQZYOJ-MWKE2ET-GIKHBCU-NEYTWAK

9. Device Name: shpdev-syncthing-0
10. Click **Save**

Server Side

11. Go to: http://shpdev-syncthing-0:8384/
12. Wait for connection request to show up (~2 min)
13. Add device and share **RVTEC17** Folder

Client Side

14. Wait for folder share request to show up (~2 min)
15. Create an RVTEC17 folder on you computer, note the path e.g: C:\User\me\Desktop\RVTEC17
16. Accept the folder share request and associate with the local path on your computer.

References

- https://syncthing.net/
- https://docs.syncthing.net/intro/getting-started.html
- https://docs.syncthing.net/users/firewall.html#firewall-setup

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