

ownCloud + ArcGIS

A plan for IFTNC data access,
manipulation, and distribution



Luke Sheneman, Ph.D
Bruce Godfrey



Northwest Knowledge Network (NKN)
April, 2015





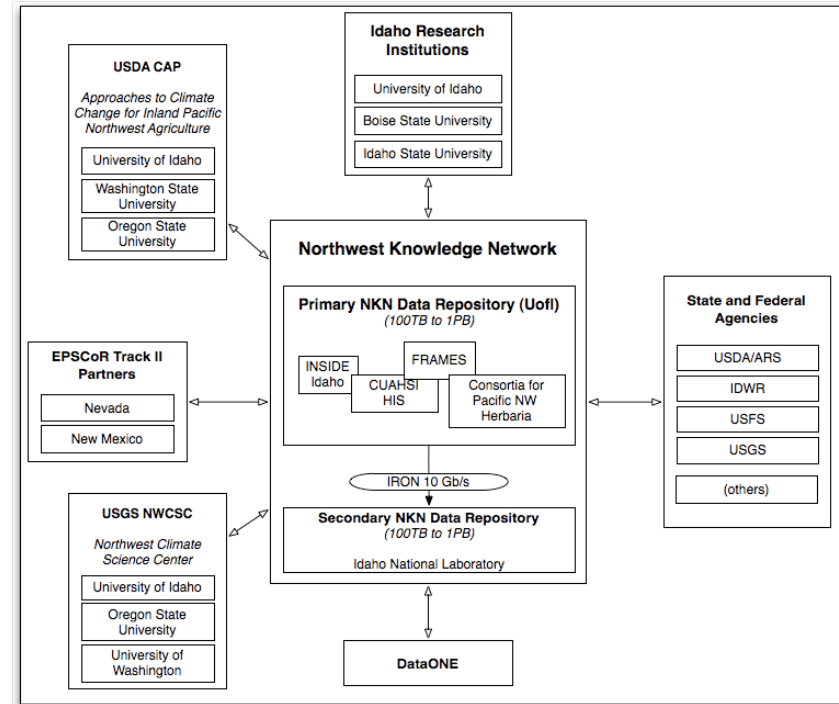
NKN

Northwest Knowledge Network

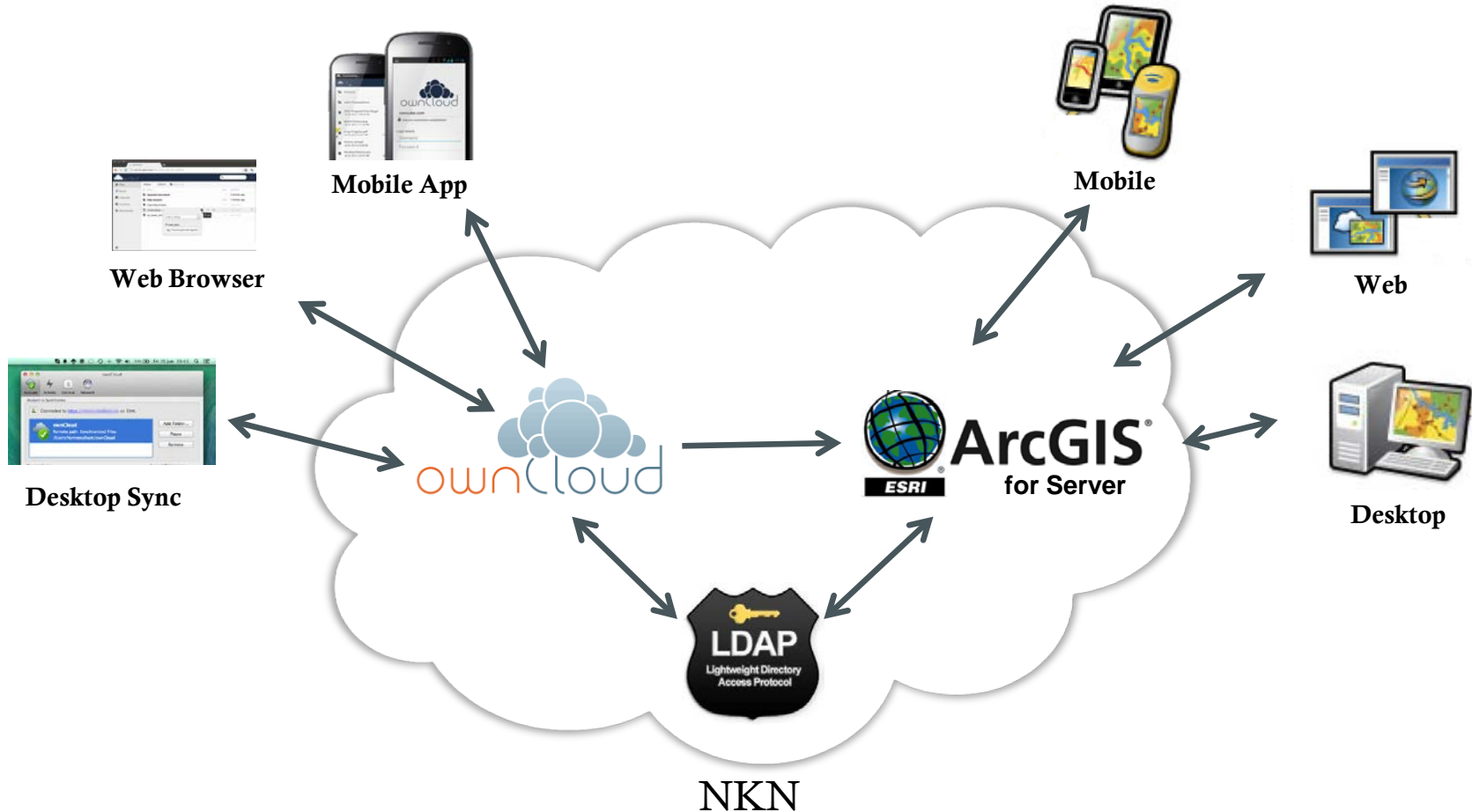
www.northwestknowledge.net



- Unit of UI Research Office
- Staff of systems administrators, data managers, metadata experts, web developers, software engineers
- Collaboration with UI Library, UI ITS, Idaho National Laboratory (INL), and Idaho Regional Optical Network (IRON)
- Operates private cloud infrastructure to enable data intensive science
- Operates as UI academic service center
- Nearly 1PB of enterprise storage synchronized to Idaho National Laboratory
- 10 Gbps end-to-end networking

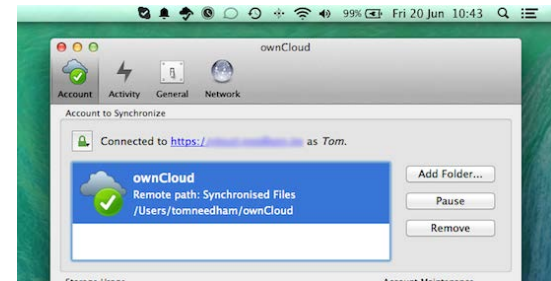
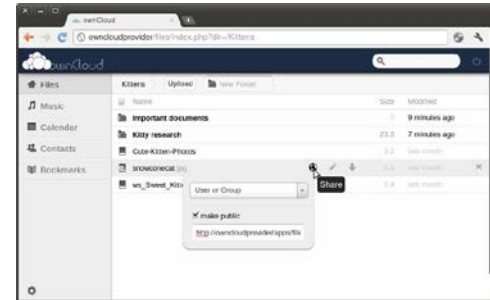


Basic Proposed Architecture



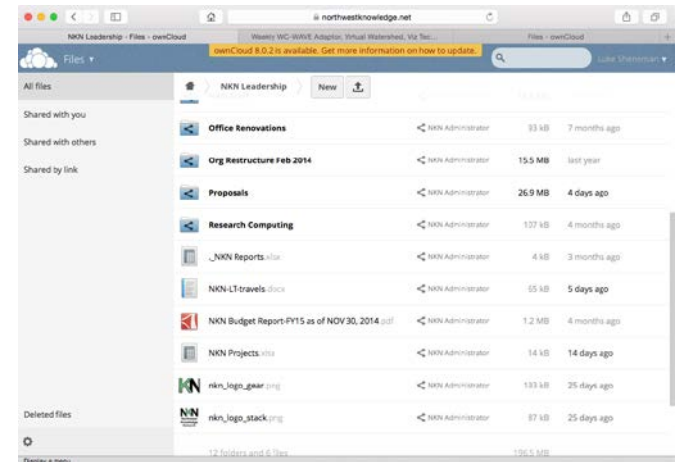
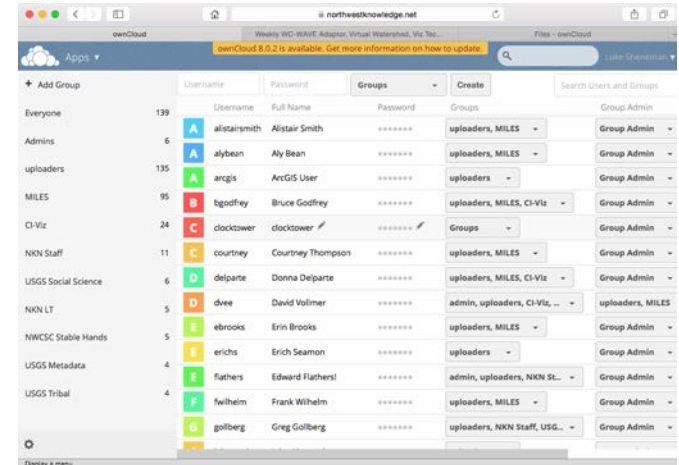
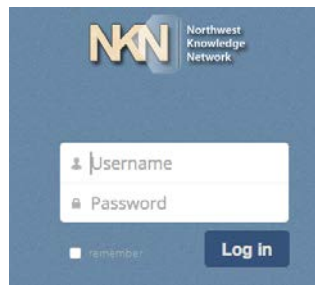


- File sharing similar to DropBox
- Interfaces:
 - Web application
 - Desktop Synchronization Client
 - Windows, Mac, Linux
 - Mobile App
 - iOS, Android
 - WebDAV
- No storage limitations / quotas





- Authentication model
 - Individual Users
 - Collaboration Groups
- Public or Restricted Access
- IFTNC members control hierarchy and access controls

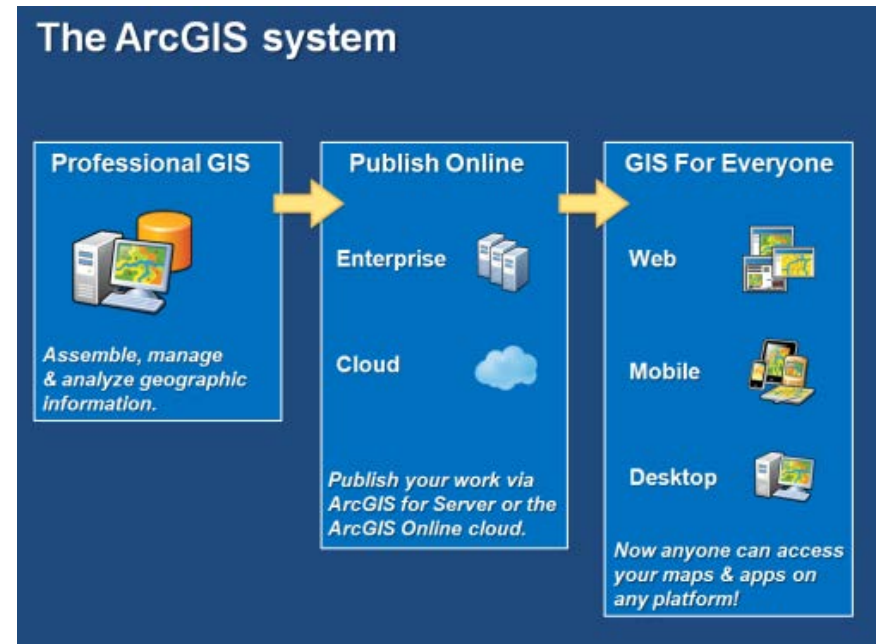




- Integration of ownCloud with ArcGIS Server
 - Dropbox-like folder and file management via ownCloud combined with the geospatial capabilities of ArcGIS Server.
- Expose ownCloud data through ArcGIS Server
 - Web Map Service (WMS)
 - Web Coverage Service (WCS)
 - Geoprocessing services
 - Web Feature Service (WFS)
 - *Requires enterprise geodatabase*

ArcGIS for Server

- Web-based GIS hosted by NKN
- Platform for publishing geospatial information to be accessed anywhere, anytime, on any device
- Interfaces
 - Web applications
 - Smartphones
 - Tablets
 - Desktop applications
- Available for teaching/research (non-commercial use) under the Esri Higher Education Site License for Idaho

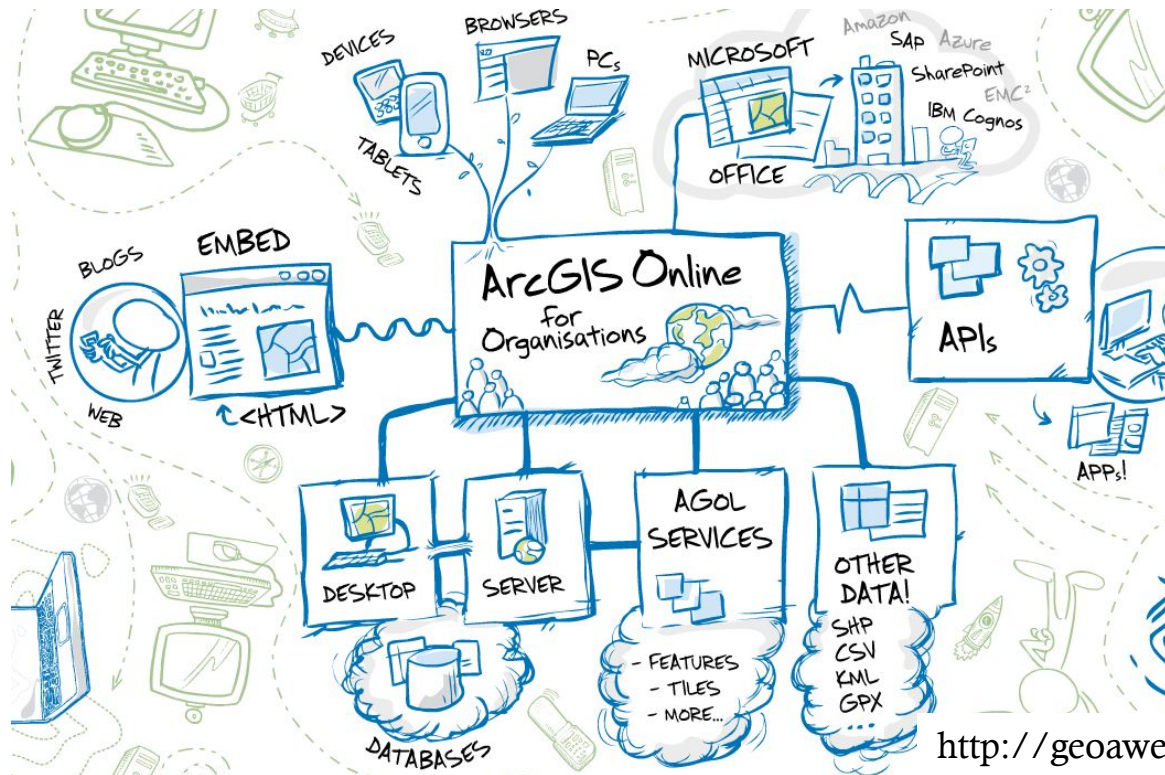


ArcGIS Online

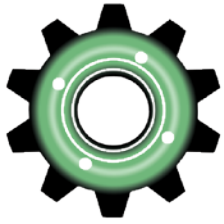
- Web-based GIS hosted by Esri
- Platform that allows users to create, manage, store, and share maps, apps, and data
- Available for teaching/research (non-commercial use) under the Esri Higher Education Site License for Idaho
- Free 60-day trial and organizational subscriptions

ArcGIS Online

- Can be used with/without ArcGIS for Server



<http://geoawesomeness.com/gis-cloud/>



NKN

Northwest
Knowledge
Network

www.northwestknowledge.net



Thank you!

www.northwestknowledge.net

info@northwestknowledge.net

sheneman@uidaho.edu

bgodfrey@uidaho.edu