



LINKING TO IFC SPATIAL & TABULAR PRODUCTS



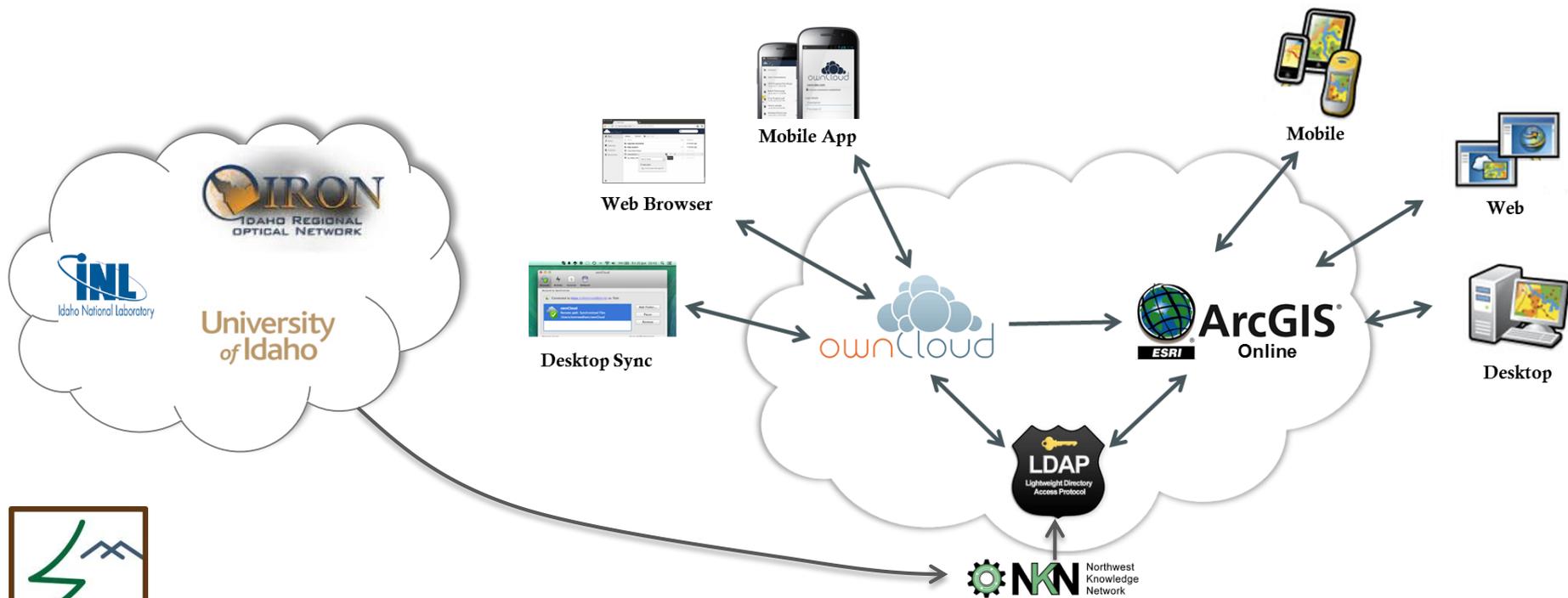
OWNCLOUD & ESRI PORTAL DEMONSTRATION

2016 ANNUAL MEETING
MARK KIMSEY



University of Idaho
Intermountain Forestry Cooperative

ACCESS ARCHITECTURE



ACCESSING OWN CLOUD



- Think of ownCloud as your IFC Dropbox account
 - The go to place for downloading IFC raster/vector/tabular data for use in your organization's GIS/Analytics workshops
 - Access:
 - Web Application - <https://www.northwestknowledge.net/cloud/>
 - Desktop Client (preferred) - <https://owncloud.com/download/#desktop-clients>
 - Mobile App (iOS, Android) - <https://owncloud.com/products/mobileapps/>

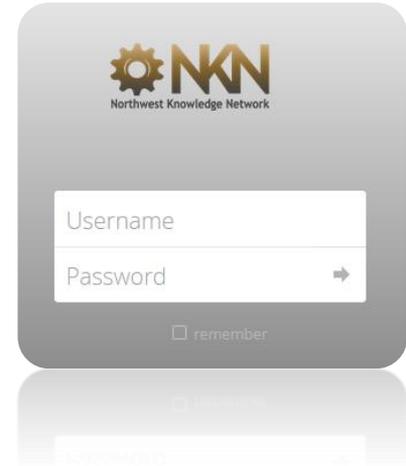


OWNCLOUD – ONLINE



- Web Application – <https://www.northwestknowledge.net/cloud/>
 - Contact your organization’s IFC representative for credentials

Organization	Representative
Bennett Lumber Products	Halli Hemingway
Bureau of Land Management	George McFadden
Hancock Forest Management	Jim Vander Ploeg
Idaho Dept. of Lands	Jim Elbin
Inland Empire Paper Company	Patrick Whalen
Molpus Woodlands Group	Chad McElvany
Stimson Lumber	Don Patterson
Potlatch Corporation	Abbie Acuff
United States Forest Service – Region 1	Andre Snyder
United States Forest Service – Region 6	Robyn Darbyshire
Washington Dept. of Natural Resources	Scott McLeod



OWNCLOUD – DESKTOP



- Desktop Client – Preferred connection method for integrating IFC data into your data management systems
 - Download client at: <https://owncloud.com/download/#desktop-clients>
 - Server URL - <https://www.northwestknowledge.net/cloud>
 - Credentials – Individual/organization ownCloud username/password
- Syncs ownCloud with your data storage network
 - Physically downloads files to your network
 - Retains dynamic link with ownCloud allowing layer updates without you needing to physically delete and upload data revisions



OWNCLOUD – MOBILE

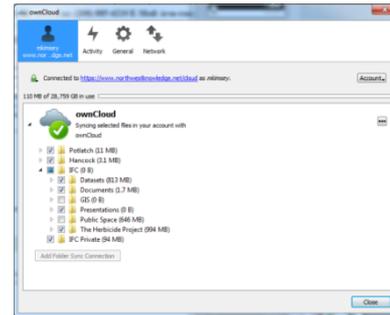


- Mobile App – Download through Google Play or Apple App Store (\$0.99)
 - <https://play.google.com/store/apps/details?id=com.owncloud.android>
 - <https://itunes.apple.com/us/app/owncloud/id543672169?ls=1&mt=8>
 - No Windows Phone app to date
- Server URL – <https://www.northwestknowledge.net/cloud>
- Username/Password – Contact your IFC representative
 - Best used for accessing text documents/presentations/videos



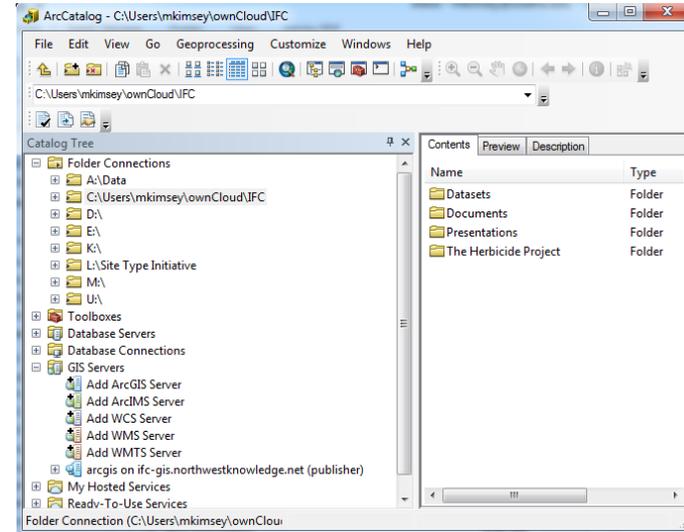
OWNCLOUD – SUMMARY

- Provides access to IFC databases, reports, presentations, videos
- IFC organizations and collaborators are assigned private network storage for add-on project data and reports
- Dynamically links base GIS products with your file management network



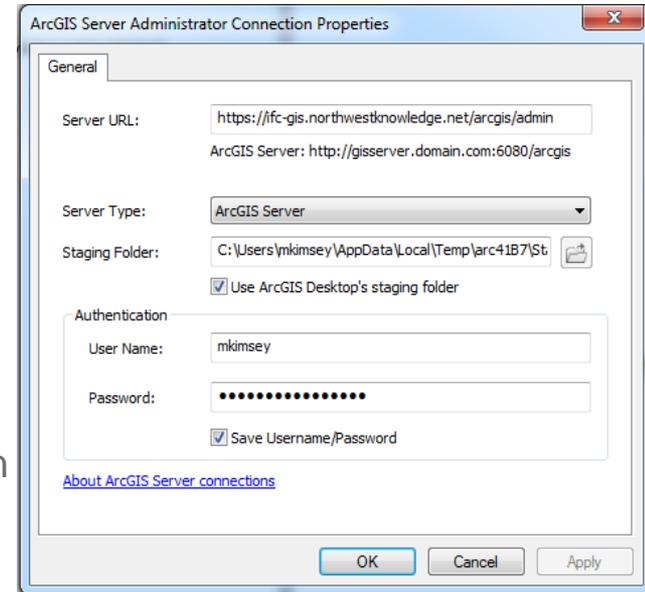
ARCGIS – CATALOG

- Dynamically link ArcGIS to base IFC geospatial products in ownCloud
 - Within ArcCatalog or your ArcGIS file management system:
 - Under Folder Connections, click on Connect to Folder
 - Navigate to the ownCloud root directory you assigned when installing the Desktop Client in your file management network
 - Select and Click OK, it should now appear in your Catalog Tree



ARCGIS – SERVER

- Dynamically link to IFC published (value-added) products through ArcGIS Server in ArcCatalog
 - ArcCatalog
 - Under GIS Servers, click on Add ArcGIS Server
 - Server URL - <https://ifc-gis.northwestknowledge.net/arcgis>
 - Enter individual or organization's ownCloud username/password
 - Provides access to image services designed to be used in a mobile/online format, not in ArcGIS Desktop



ARCGIS – ONLINE SERVER MANAGER

- Link to IFC published (value-added) products through ArcGIS Server Online
 - Online - <https://ifc-gis.northwestknowledge.net/arcgis/manager/>
 - Must be an invited member to access files
 - Must have an organizational ArcGIS online account
 - Enter individual or organization's AGOL username/password
 - To work with IFC data, you will then be prompted to enter your ownCloud credentials
 - Alternatively, we can host end-users through the UI if your organization does not have an ESRI AGOL account

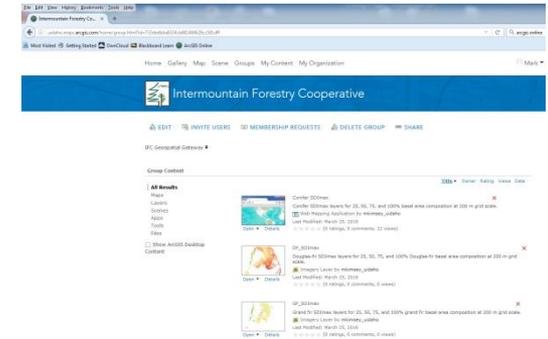
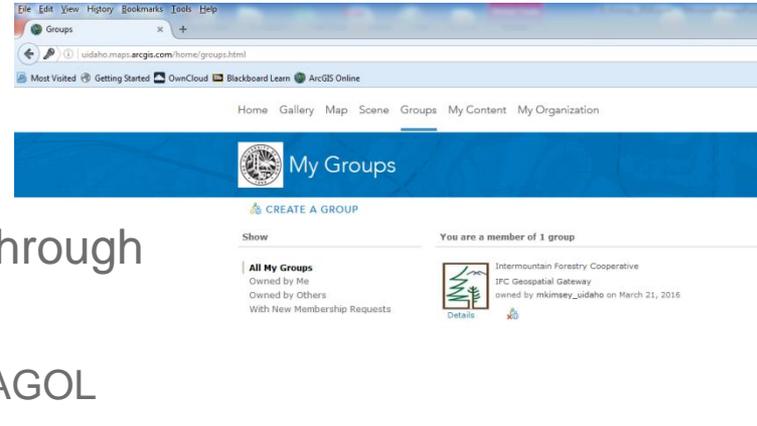


The screenshot shows the ArcGIS Server Manager login page. It features the ArcGIS logo (a globe) and the text "ArcGIS Server Manager". Below this, it says "Enter your ArcGIS Server username and password:". There are two input fields: "Username:" and "Password:". A "Login" button is located at the bottom right of the form.



ARCGIS – ONLINE

- Link to IFC published (value-added) products through ArcGIS Online
 - Each IFC member has been invited to join the IFC AGOL group
 - To access: login at - <https://www.arcgis.com/home/> using your organization's credentials
 - Go to Groups and select Intermountain Forestry Cooperative
 - To work with IFC data, you may be prompted to enter your NKN credentials used to access ownCloud
 - Alternatively, we can host end-users through the UI if your organization does not have an ESRI AGOL account



PRODUCT DEMONSTRATION

1. Accessing ownCloud: <https://www.northwestknowledge.net/cloud/>
2. Linking to ownCloud in ArcCatalog
3. Adding a GIS Server
4. ArcGIS Online: <https://www.arcgis.com/home/>



EQUATIONS FOR USING SDI_{MAX} GRIDS

1. Douglas-fir

- $TPA = (SDI_{max} \text{ at } 10" \times 0.8) / ((\text{Desired QMD} / 10)^{1.31})$

2. Ponderosa pine

- $TPA = (SDI_{max} \text{ at } 10" \times 0.8) / ((\text{Desired QMD} / 10)^{1.42})$

3. Western larch

- $TPA = (SDI_{max} \text{ at } 10" \times 0.8) / ((\text{Desired QMD} / 10)^{1.30})$

4. Grand fir

- $TPA = (SDI_{max} \text{ at } 10" \times 0.8) / ((\text{Desired QMD} / 10)^{1.33})$

Example:

1. Define stand metrics:

- Stand composition: 75% of basal area in DF
- Desired future stand QMD: 16 inches
- SDI_{max} from DF_10_75: 450 TPA

2. Solve for TPA:

- $TPA = (450 \times 0.8) / ((16 / 10)^{1.31})$
- TPA = 195

3. Solve for spacing guidelines:

- Spacing = $\sqrt{43560/195}$
- Spacing = 15 feet

