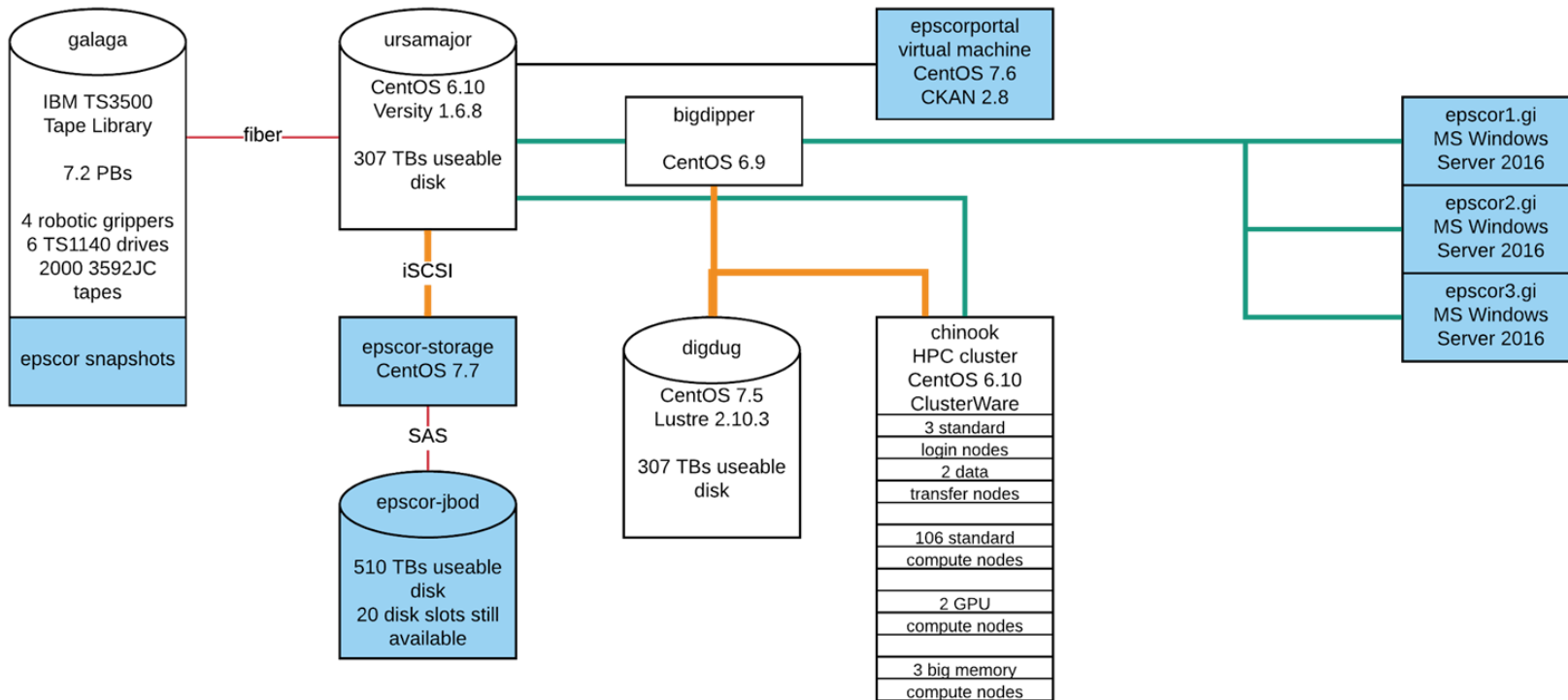




# UAF GI Research Computing Systems Support for Alaska EPSCoR Fire & Ice Data Management

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# Data Storage





# Data Processing



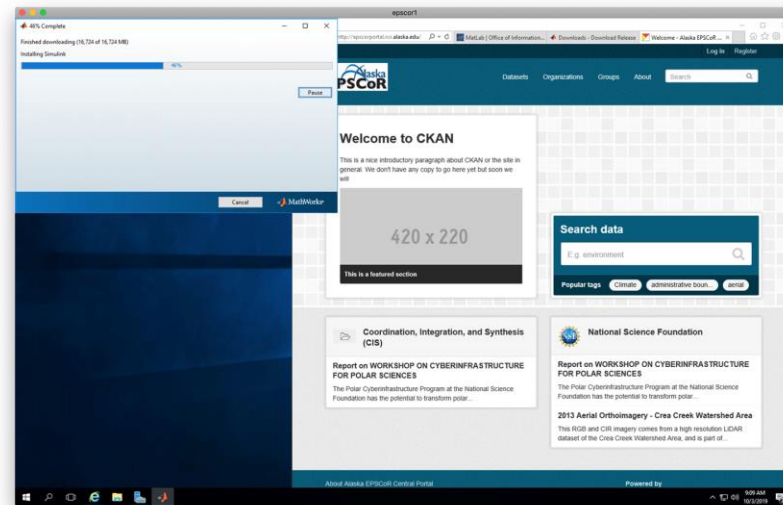
3x SuperServer 7049-TR tower workstations,  
rack mountable, from Silicon Mechanics

- Dual 4-core Intel Skylake processors
- 192GB DDR4 ECC memory
- 1.92TB Intel SSD for local scratch data
- NVIDIA GeForce RTX 2080

Software:

- MS Windows 2016 Server w/ Remote Desktop Services for up to 7 sessions
- hyperspectral processing proprietary apps, Matlab, ArcGIS, ...

Located in the Butrovich Computing Facility w/ direct, 10Gbps connect to RCS hosted EPSCoR storage.  
Annual OIT Service Level Agreement for rack space and Windows support.





# Data Publishing, Sharing, Finding, Using

Prototype data portal based on [CKAN 2.8](http://epscorportal.rcs.alaska.edu/): <http://epscorportal.rcs.alaska.edu/>

The screenshot displays the EPSCoR data portal interface. At the top, there is a navigation bar with the EPSCoR logo and links for 'Datasets', 'Organizations', 'Groups', and 'About'. A search bar is located on the right side of the navigation bar. Below the navigation bar, the main content area is titled 'Datasets'. On the left side, there is a 'Filter by location' section with a map and a 'Clear' button. Below the map, there is a list of organizations and groups, each with a count of datasets. The main content area shows a search bar with the text 'Search datasets...' and a search button. Below the search bar, it indicates '7 datasets found' and an 'Order by: Relevance' dropdown menu. The first dataset listed is 'Barrow Historical Monthly Climate Summary - Alaska Climate Research Center', with a description: 'Historical monthly summaries for Barrow 1992 to present.' and a 'Website' link. The second dataset is 'Eastern Kuparuk Meteorological Data - WERC', with a description: 'WERC has two monitoring sites on the eastern border of the Kuparuk River watershed: Sagwon monitoring station, located at 69° 25' 27.5" N latitude and 148° 41' ...' and 'Website' and 'WMS' links. The third dataset is 'BLM Alaska - Spatial Data Management System WMS', with a description: 'Data layers include: Easement Quad Index, towns, roads, major rivers, NHD, surveyed lands, easement site, easement access, native allotments, section grid, townships, mining...' and 'Website' and 'WMS' links. The fourth dataset is 'Age validation of big (Raja binoculata) and longnose (R. rhina) skates using ...', with a description: 'Recently, directed fisheries for big (Raja binoculata) and longnose (R. rhina) skates have re-emerged in the Gulf of Alaska. Because of their unique biological traits (e.g. long...' and 'PDF' and 'Website' links. The fifth dataset is 'Report on WORKSHOP ON CYBERINFRASTRUCTURE FOR POLAR SCIENCES', with a description: 'The Polar Cyberinfrastructure Program at the National Science Foundation has the potential to transform polar research by facilitating the transmission and integration of data...' and a 'PDF' link.