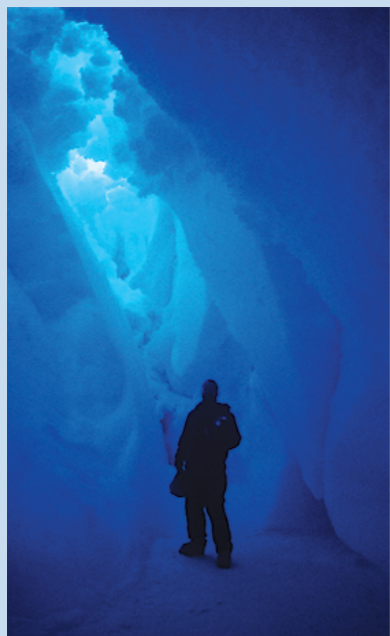




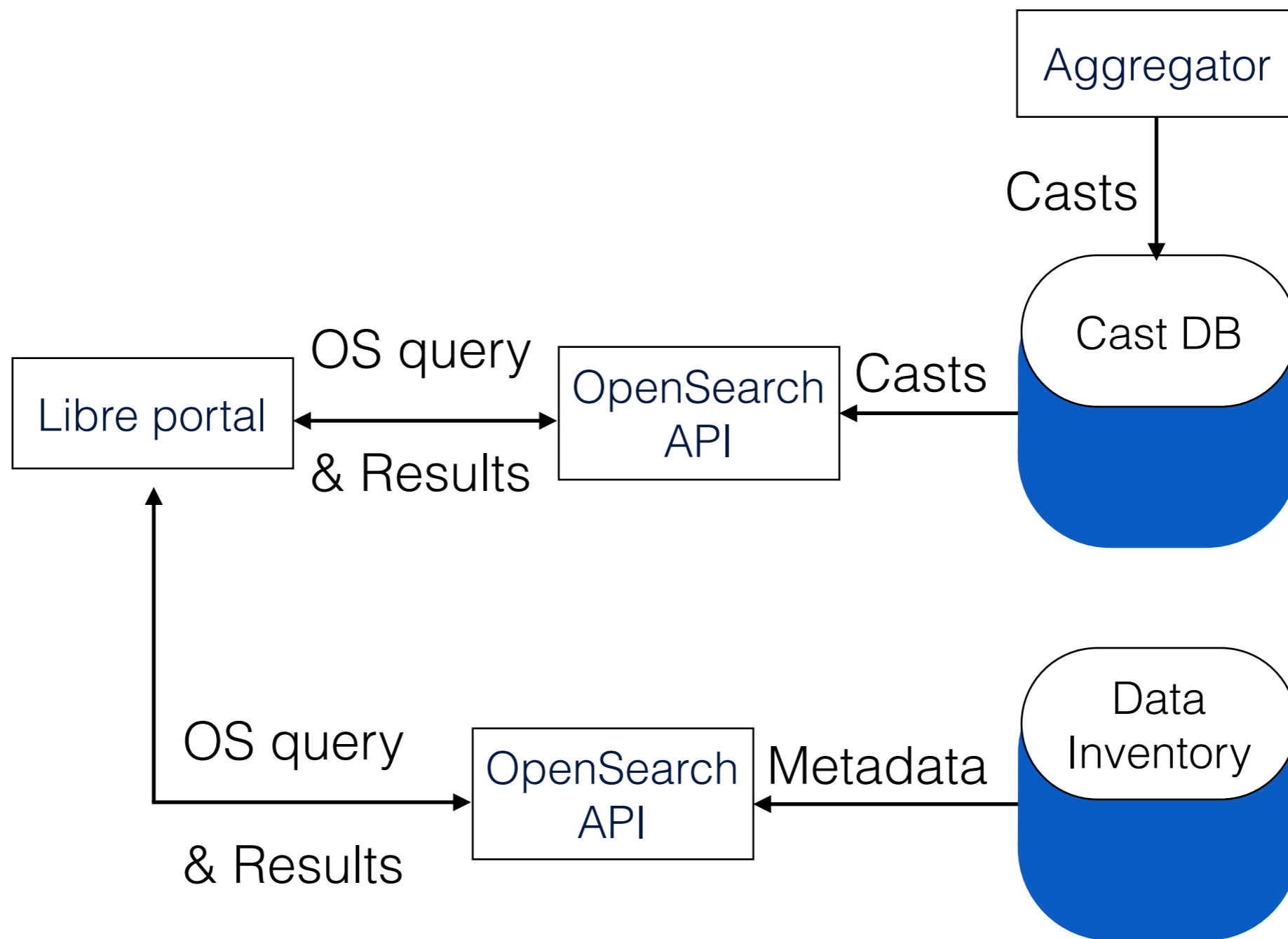
National Snow and Ice Data Center
Supporting Cryospheric Research Since 1976

Integrating OpenSearch and Casting

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Notional Libre Portal Architecture



Scenarios

- An investigator starting a new ice-sheet mass balance project uses the Libre portal to obtain a list of data and services using spatial, temporal, and free text restrictions.
- The investigator examines several data sets and subscribes to be notified whenever new services or service updates for those data sets become available
- The investigator also subscribes to be notified when new a data set meeting their query criteria is announced or when a data set already on their subscription list is updated.
- The investigator finds results from two locations that are of interest. They retrieve the data from the first location using the link to the data set provided.

Scenarios

- While perusing the service descriptions available for one of the data sets, the investigator realizes that a granule level OpenSearch service produces KML output compatible with their favorite GIS analysis tool, so they use that tool to browse the latest data, decide that the data is adequate, and download it all from within their analysis environment.
- One morning, while perusing their feed reader, the investigator becomes aware that a new data set meeting their criteria has been published. They examine that data set and add it to their data set subscriptions.
- The investigator examines the services available for the new data set and is disappointed to find that no granule OpenSearch or equivalent service is available but that one is planned. They subscribe to receive service updates for the data set.

Scenarios

- Eventually the service they were interested in is released and they are automatically notified of that event (when the service cast is updated)
- As a part of her work, the investigator generates a new data set that she decides should be published. She chooses to use NSIDC's web-based data cast creator to announce availability of the data via ftp from her web site.
- The Libre aggregation crawler discovers the new cast while searching the web and adds the cast to the aggregation. Other investigators subscribed to the Libre feed, are notified of the new data and start using it for their research.