



The NERIES Data Portal : integrating distributed heterogeneous data search and access under one roof

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The NERIES project (NETwork of Research Infrastructures for European Seismology) is an EC-funded Integrated Infrastructure Initiative (I3) under the 6th Framework Programme developed to integrate data and service resources for the seismological community. The NERIES data portal (<http://www.seismicportal.eu>) provides a single integrated point of access to distributed data sets available from several of the NERIES activities, including event parametric information, seismic waveforms, and strong motion data. The data portal aggregates data search and access tools from several NERIES participants within a unified access point. These tools operate in a coordinated manner to provide a cohesive distributed search environment, linking data search and access across multiple data providers. In addition, the portal provides a platform from which to integrate access to external tools and processing centers.

The portal provides interactive map-based interfaces to discover, explore, and download available data sets. With distributed tools operating in concert, the user is able to search and make selections from the EMSC event database, adding selections to a private Event Cart, and then search the ORFEUS data center archives for available data for the selected events. Data requests are then packaged and made available for download. The packaged data sets can also be made available for external processing services, such as through the RapidSeis system.

The NERIES data portal is architected as a collection of web portlets operating at the respective data centers, supported by a distributed collection of web services. The portlets access both local and remote web data services. The data services are exposed through standard HTTP access mechanisms and are thus available for direct access by other external clients. This allows the creation of independent applications that access the data center holdings directly through these exposed web data services, such as the SeismoLink web service client which provides a single point of access to the ArcLink-connected European seismological data centers.