The Uniform Product Distribution System
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The IRIS DMC is currently developing the Uniform Product Distribution System (UPDS) for the USArray. The UPDS will provide a coherent Web Services-based system to manage the submission, searching, and access of USArray XML-based Data and Informational Products. A Data Product is any information that is routinely derived from or calculated from raw seismic (or other) data. At another level, a Data Product can be essentially anything, including derived information, images, station information, etc., and even raw data. While targeting USArray products, the UPDS will be able to manage products from other components of EarthScope.

Producers will create and submit XML-encoded products to a UPDS archive, which will extract searchable metadata from the product. Users of the system will then be able to query for available products based on the extracted metadata and download their selections. The UPDS will be structured such that new and as-yet unforeseen product types can be added to the Archive with minimal effort. Different producers will be able extend the standard product definitions by adding any additional information in their products.

UPDS will have both a web browser-based interface as well as a Web Services-based programmatic interface (API) that will allow client programs to be written that can access the UPDS system. The programmatic interface will support the development of stand-alone GUI applications, command-line clients suitable for use in scripted environments, and background monitoring processes such as Standing Order-type applications. The web interface will provide an interactive method for searching and accessing the archived products. Web forms customized for each product type will be presented that will allow users to browse and query the archived products by their associated metadata.

The Uniform Product Distribution System will provide Web Services-based submission and query/access servers to support the archiving, discovery, and access of XML-based data products.