

HMA for Science Kickoff Meeting EO Data Access Protocol

KO Meeting
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- The EO Data Access Protocol Overview
- The EO Data Access Protocol ATS
- Issues

- The EO Data Access Protocol formalizes as OGC document (possibly Best Practice, otherwise Discussion Paper) the download protocol defined in ngEO project (described in [ngEO-DAGICD]).
- The protocol will support the following scenarios:
 - The product is already available for download;
 - The product is under processing, but not ready yet;
- Additionally the following sub-cases will be supported:
 - Product file available from multiple sources (parallel download);
 - The product is composed of multiple files, each possibly available from multiple sources (multiple download);
 - The product file is reachable via several HTTP redirections from the original URL.
- Any combination of previous options.

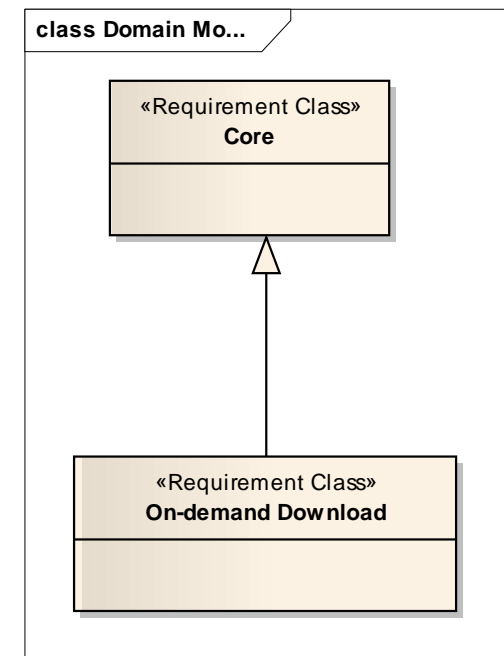
- The protocol will use:
 - HTTP GET for all interactions;
 - HTTP redirections, in case of “virtual URL”;
 - Re-try mechanism according to specific HTTP returned codes, in case of on-demand products;
 - Metalink files for managing the multi-file / multi source download.

- As agreed during negotiation, the document will be prepared as Best Practice, so it will include:
 - Requirements Classes
 - Conformance Classes and Conformance Tests (ATS)
 - Executable test scripts (ETS), prepared by **ASU** and not by TPZ.

➤ Currently envisaged Requirement Classes:

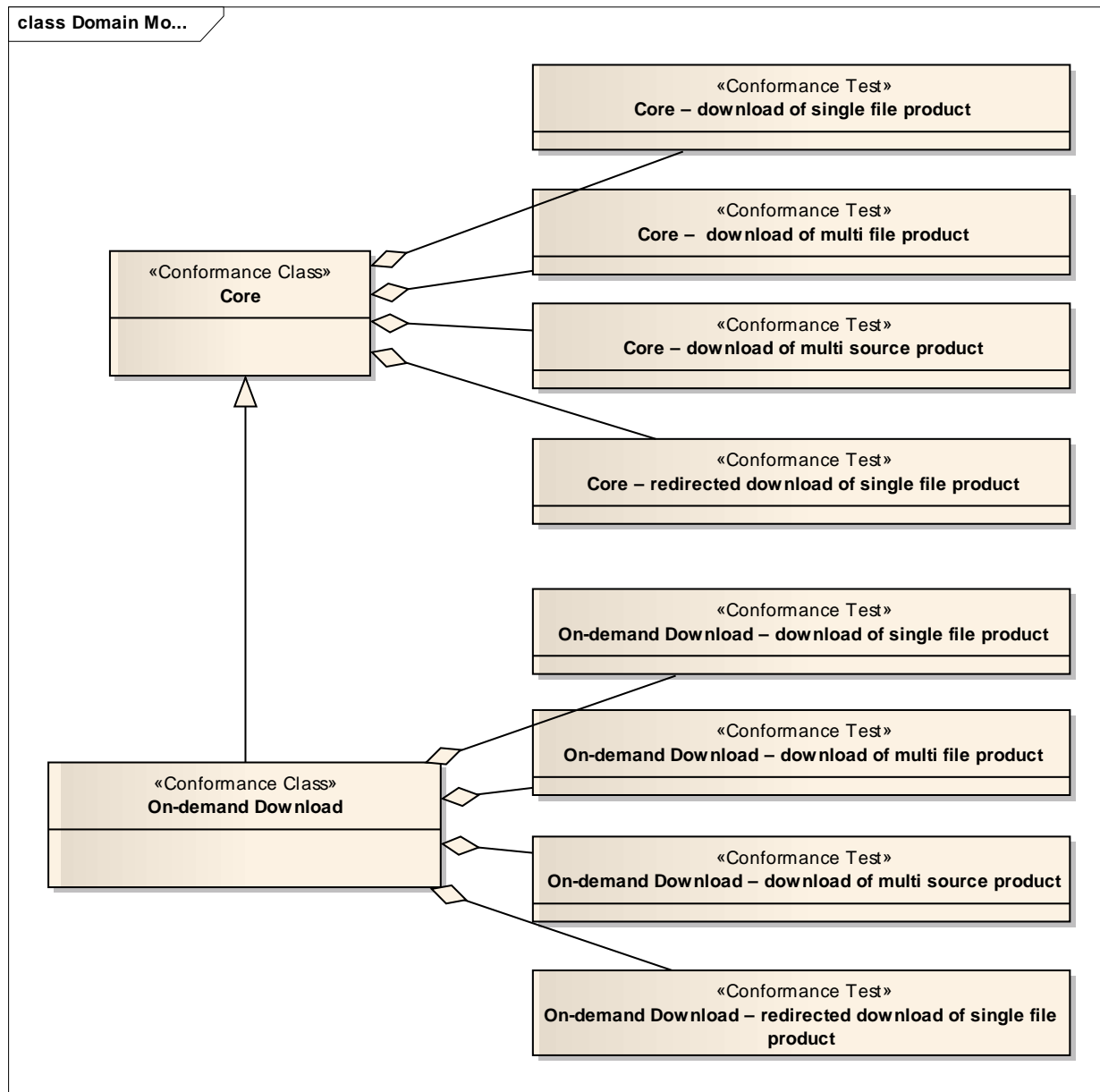
- **Core**, regrouping all requirements for supporting direct download, multi file download (Metalink), multi source download (Metalink), redirection.
- **On-demand Download**, inhering from Core class and including the requirements for allowing download of product files not ready yet .

In this way we cover: servers supporting only already available products (Core class) and also servers supporting on-demand products (Core + On-demand Download).



- **Conformance Classes:** normally there is a 1:1 mapping between Requirement Classes and Conformance Classes, so we will have:
 - **Core** conformance class, regrouping all tests for verifying Core class requirements;
 - **On-demand Download**, regrouping all tests for verifying On-demand Download class requirements.

- **Conformance Tests:** A conformance class is implemented via a set of Conformance Tests, each testing one or more requirements of the corresponding Requirements Class. Preliminary list of conformance tests:
 - **Core:**
 - Single file download
 - Multi file download
 - Multi source download
 - Redirected download
 - **On-demand Download:** same as previous one, but for products to be produced and not ready yet.



- As highlighted in proposal we see risks on adoption as OGC Best Practice:
 - The EO Data Access Protocol is not related to other OGC specifications, but addresses an intelligent use of existing lower-level IETF specifications such as HTTP and Metalink.
 - This specification is not specific for geospatial data, but related to files in general, which seems not the main scope of OGC.
 - As specified in OGC Policy and Procedures, OGC 05-020r16, the submitters of a BP document shall provide evidence of implementation, which includes: commercial implementations, open sources, deployed applications. Also “**A single research related implementation is not proper evidence of implementation.**”