New federated seismological services within EIDA

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The ORFEUS European Integrated Data Archive (EIDA) [1] federates data from 10 major European seismological data centres into a common organisational and operational framework, while 4 other data centres entered in the application process to become a member. Some of the goals of EIDA are to offer: (a) transparent and uniform access tools, advanced services and products for seismological waveform data; (b) a platform for establishing common policies for the curation of seismological waveform data and the description of waveform data by standardised quality metrics; (c) proper attribution and citation (e.g. data ownership).

Besides the collection and distribution of large amounts of seismological data, a major task of EIDA is the ongoing improvement of the services, tools and products portfolio in order to meet the increasing requirements of our users. EIDA is currently in a new operational phase (EIDA-NG) and will become the reference infrastructure for seismological waveform data in the pan-European infrastructure for solid-earth science: EPOS (European Plate Observing System) [2].

EIDA-NG comprises a number of services and products, already in production, on top of the standard FDSN-WS running at each EIDA data centre. Namely, Routing Service, WFCatalog (waveform availability and quality parameters), and Station Book to mention only a few of them. Two of the last developments being deployed in production are: 1) the EIDA Federator, which is a web service implementing the standard FDSN-WS specifications (Dataselect, Station), as well as the WFCatalog specification, and offering a single entry point for all data federated in EIDA; 2) the EIDA Authentication Service (EAS), which is a novel AAI approach allowing users to use EIDA services with the credentials from their home institutions (or create a local account) and also to decentralize the management of access control lists on restricted data.

In this contribution we will present the current status of the EIDA-NG developments and details about the new services and their potential impact on the user community.

[1] http://www.orfeus-eu.org/data/eida/
[2] http://www.epos-ip.org