Feedback from the RESIF datacenter (France)

Data producers : expect services from Data Centers

The data producers are those who should designate where the authoritative datacenter is for their data:

- ensure that the authoritative data reach the user
- obtain statistics on data useage

- be able to improve / correct the datasets for which they are responsible, and make sure those are the data that reach the user

The notion of authoritative, primary, secondary ... datacenter cannot be harvested at present (not in station XML nor in DOI metadata)

Data centers

The Authoritative DC should always receive the requests and deliver (meta)data for the network they are in charge of, regardless of the origin of the request.

This is not ensured at present

End users

- should be sure that any search plan (like f.i. the IRIS *fedcatalog* ws, or the EIDA routing service) will identify clearly the authoritative source of the products.
- should be sure that any search plan will reach all the open FDSN networks.
- should be sure that a routed request will reach the authoritative DC for the data in case of multi-hosting data. Note: This was one of the features of netdc

This is not ensured at present

Examples of requests using IRIS ws-fedcatalog (Harvesting approach): Very confusing (and erroneous) responses - probably multiple causes

Imagine I do not know anything about the internal mechanics between the datacenters. I want to request data from networks FR, XS(2010-2011), XJ (2009) (authoritative version at RESIF DC, but the user doesn't know this)

http://service.iris.edu/irisws/fedcatalog/1/query?net=FR

DATACENTER=BGR,<u>http://eida.bgr.de</u> ==> all stations,locations,channels, wrong dates DATACENTER=IRISDMC,http://ds.iris.edu ==> RUSF only

DATACENTER=LMU,<u>http://www.geophysik.uni-muenchen.de/observatory/seismology</u> ==> 3 stations, wrong dates

DATACENTER=RESIF,<u>http://www.resif.fr</u> ==> all stations,location, channels, dates

DATACENTER=SED, http://www.seismo.ethz.chb ==> 5 stations, no location code, HH channels only

Of all these responses: only RESIF DC has the latest, corrected dataset. Not clear what data is available from BGR, LMU and SED (if any) - and the metadata is incorrect. RUSF data from IRIS are obsolete

http://service.iris.edu/irisws/fedcatalog/1/query?net=XS&startafter=2010-01-01

DATACENTER=BGR,<u>http://eida.bgr.de/</u> ==> all stations DATACENTER=IRISDMC,<u>http://ds.iris.edu</u> ==> all station DATACENTER=LMU,<u>http://www.geophysik.uni-muenchen.de/observatory/seismology</u> ==> 2 HNZ channels **NO RESIF-DC - even though RESIF is the authoritative DC.**

http://service.iris.edu/irisws/fedcatalog/1/query?net=XJ&startafter=2009-01-01&endbefore=2009-12-31

DATACENTER=IRISDMC,<u>http://ds.iris.edu</u> ==> all stations **NO RESIF-DC - even though RESIF is the authoritative DC.**

Getting some answers testing the proposed EIDA routing



We need to urgently stabilise worldwide routing.