## FDSN WS at RESIF datacentre : <u>http://ws.resif.fr</u>

- 2 FDSN WEBservices implemented : station, dataselect (February 2013)
- 3-tiers architecture :
  - [IRIS] : WebService SHELL
  - [RESIF] : 1 main handler (*python*), acts as a wrapper
  - [RESIF] : 2 working handlers for data and metadata extraction (*shell / SQL*)
- Our implementation is totally independent of EIDA or SC3 tools and database
  - *Network*, *Station* and *Channel* metadata levels are computed and formated directly by the working handler, searching our inventory database
  - *Reponse* metadata level is formated using the IRIS converter (stationxml-converter-0.99.jar)
  - Data is extracted from the main archive and selected using the *dataselect* (IRIS tool)
  - We implement request caching and pre-calculating to improve performance
  - Authentification capabilities for accessing restricted data (at Network level)
- Current WS uses a "basic setup" : i.e. no load balancing, redundancy, etc.
  - Plans for consolidating the WS service: Depends on observed workloads! (VM redundancy ? Clustering on separate VMs ? Consolidation on physical hardwares ?
- End of 2013 : Eida/SC3 FDSN WS will be deployed at RESIF DC for benchs & comparison



FDSN webservices – July 2013