GIRO Mirror today and tomorrow

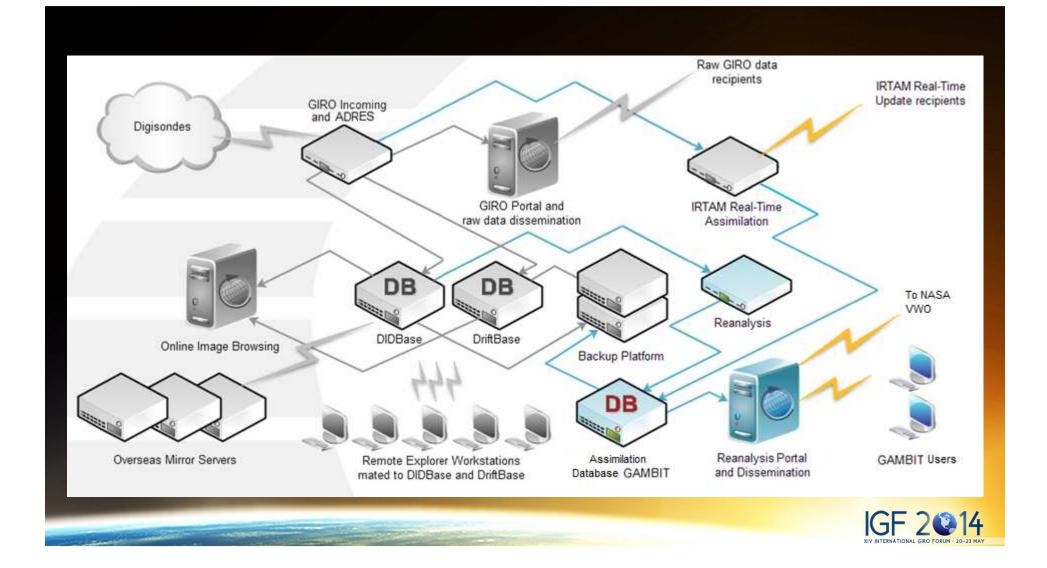
IGF 2014

XIV INTERNATIONAL GIRO FORUM · 20-23 MAY



Alexander Kozlov

University of Massachusetts Lowell Center for Atmospheric Research



Goals of mirror sites

- Increase the speed of access
- Increase reliability of access
- Though speed of access can be improved by creating WEB application with more user control then we have now in DIDB/DRIFT portal.



Installation of DIDB and DRIFT

- We recommend Linux server for each of database
- Hardware specs: 4TB contemporary disk storage, 16GB RAM (more for faster performance), 1GB ethernet
- Software specs: Linux SuSE 12 (or higher), Firebird 2.5.3
- For backup: Linux server, 8TB disk storage, 16GB RAM
- Additional server for incoming data: Linux server, 500GB fast disk storage, 16-32GB RAM. Software: ftp server, JDK 1.6, UMLCAR Incoming



Installation experience

- About 2 years ago we installed DIDB in Prague
- These days we are in process of installation of DIDB, DRIFT, Incoming and Backup servers in Beijing
- Next: South Africa



Future

- Even the present approach gives advantage in faster access, it still not fills "mirror" sites with recent ionogram data automatically from UMLCAR.
- To do this we either have to buy Firebird replicators and adapt them for our environment, or create our own replicator, which might be more efficient as it will take in account our specifics.
- To improve efficiency and speed of data access, including data replication, the DIDB could be split into SAO data and lonogram data. That would significantly increase access to SAO data, and also improve maintainability of DIDB.



