External Forecasts and Predictions (EFPs)  
Data Transfer Mechanisms

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External Forecasts and Predictions (EFP) Data Transfers

• Best data transfer mechanisms will depend on computing infrastructure available for both sides and may depend on needed security.
• Linux is standard at CSEP, but computing environment at forecast providers is unknown and likely to vary.
• Selected mechanism must work with providers computing environment.
• Solutions can be characterized as push, pull, publish, subscribe, poll. Both forecaster and testing center will define how they collect inputs and perform their processing.
• There are few enough contributors it may be possible to develop custom solutions for each case.
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Scripting Transfer:

Available on most Linux computers:

• Remote copy – rcp
• Secure copy - scp:
• Secure ftp - sftp:
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Data transfer packages:

Available on hpcc systems. May have stronger security capabilities than more common tools.

• gridftp
• Bbcp
• Globus online
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Reliable transfer tools including message oriented middleware.
Commercial and open-source alternatives. Typically same software runs on both systems, senders and receivers.

- TIBCO message oriented middleware
- Antelope ORB
- Rabbit MQ
- Data turbine
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USGS Data Tools

Open-source. Integrate into USGS systems more easily.

• USGS Product Distribution Layer (PDL)
• Quake Data Distribution Systems (QDDS)
• Earthquake Information Distribution System (EIDS)
End