

Data Relay Workflow

DICOM relay

1. The relay has a local XNAT server with DICOM receiver listening for sessions from the Prisma or other DICOM sender
2. An hourly job on the local XNAT system will push any new sessions to WU via Xsync
 - a. The UUID is extracted from the dicom and added to a list to pull the matching RAW data from the MARS computer
 - b. The DICOM is deleted from the relay after 1 month of successfully being imported into IntraDB.

RAW k-space data relay

1. A daily cron job is scheduled to launch at the beginning of known idle scanner times, such as third shift. It pulls RAW data from the MARS computer and deletes it from the MARS when successful.
 - a. If your site's scanner has no predictable idle schedule this job will be launched each time there new RAW data to be relayed. The rsync jobs will have data throughput throttle of 250mb/s, about 1/4 the unthrottled speed.
2. RAW data that has been moved from the MARS computer to the relay will be pushed to Wash U via the Aspera client via TCP and UDP on port 33001
3. Any RAW data not associated with DICOM received will NOT be copied.
4. The raw data is deleted from the MARS on successful rsync to the remote relay, and it is deleted from the remote relay on successful transfer to Wash U storage.

Note that rsync always verifies that each transferred file was correctly reconstructed on the receiving side by checking its whole-file checksum
So if the rsync returns zero, we know we have the files, uncorrupted and in their entirety
5. If you are collecting RAW data for any other project or plan to keep a local copy please let us know.