Telescience Resource Kit (TReK) Information for POIWG Splinter



January 28, 2015

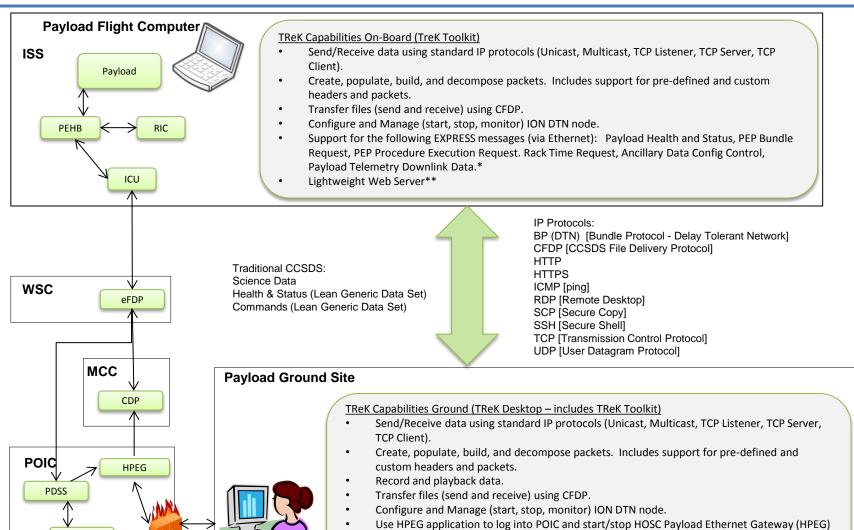
NASA

TReK Information

- TReK 4.2.0 onboard software verification has been completed.
 - Check with your Payload Integration Manager for information about leveraging off the TReK Verification.
- The TReK Demonstration Payload is scheduled to fly in early 2016 (Ready Date: January 27, 2016).
 - Payload is currently listed as reserve so we don't have an exact date the payload will be onboard.
 - Demonstrate the TReK software running on-orbit on an ISS provided T61p laptop.
 - Pathfinder Payload for NAS and DTN.
 - Current Uplink Plan
 - Uplink the TReK Software to the Payloads Network Address Storage (NAS).
 - Crew initiates image install from Payload NAS using PXE-Boot. (Crew time for the T61p Laptop set up and software transfer from NAS is currently reserve time).
 - Run performance tests for the IP protocols described in SSP 52050.
 - Provide the capability to support live demonstrations during ISS Payload Conferences.
 - Provide the TReK Demonstration Payload as a training tool in the Huntsville Operations
 Support Center (HOSC) On Demand Test Environment for payloads seeking to experience
 operating with IP protocols.



TReK Information



* The TReK EXPRESS Library will use traditional CCSDS based Telemetry and Commanding.

telemetry & commanding (CCSDS), etc.)

session with payload. (HPEG session provides support for SSH, HTTPS, RDP, CFDP). Other capabilities provided via TReK Desktop (data display, data statistics, traditional

** Preliminary version of the TReK Lightweight Web Server.



TReK Information

- TReK 4.3.0 will be delivered April 29, 2016. This release will contain the following:
 - Updates to TReK HPEG software to align with the latest HOSC PGUIDD updates for Ku IP.
 - A new TRek HPEG API to provide programmatic access to TRek HPEG information.
 - Updates to the TReK CFDP software to support filestore directives when running native CFDP.



Point of Contact

Name: Michelle Schneider

Phone: (256) 544-1535

Fax: (256) 544-9353

E-Mail: Michelle.Schneider@nasa.gov

Address: Building 4663, EO50

Huntsville, AL 35812

TReK E-Mail: trek.help@nasa.gov

TReK Web Site: http://trek.msfc.nasa.gov