Introduction to PLUTO

PLUTO is a flight control position at MCC-Houston with our primary interfaces at POIC are OC (Payload Resource manager) & DMC (High Rate Communication Systems managers). PLUTO supports ISS and Payload Operations in the following ways:

- Joint Station LAN (**JSL**): Manages the integration, operation, changes, and maintenance. Leads troubleshooting and recovery. Administrators of the system. JSL is the onboard IT networking equipment and consists of:
    - routers and firewalls
    - switches
    - wireless access points

- **SSC System** (IT operations equipment): Manages the integration, operation, changes, configuration management, and maintenance. Leads troubleshooting and recovery of servers, clients, tablets and printers. We are the system administrators. However software applications Q&A are the responsibility of the application owner. The SSC System consists of:
    - servers and clients (laptops)
    - tablets and other portable devices
    - printers
    - other devices

- USOS Plug-in Plan (**PiP**): Manages the integration, operation, and tracking of the portable powered equipment utilizing UOP/SUP 120 VDC power ports (laptops, vacuum, etc.). Leads troubleshooting power failures between UOP and end device.

The following are some payloads that have operated using the JSL, SSC System, and Plug-in Plan:
- iPad Apps: Dose Tracker, iShort, FineMotor, Food Intake Tracker (FIT)
- Surface Pro: MED2, Biomolecule Sequencer
- SSC Server/Client Apps: REM Pixelman, Ultrasonic Background Noise Test (UBNT), REALM
- JSL Devices: Robonaut, REALM
- Plug-in Plan: Portable O2 Monitor, PPFS

Below are some tips on how to make your operations a successful one:

How we can help you:
- Contact your Payload Integration Manager (PIM) if you are interested in some of these services and they will work with PLUTO for support.

- PLUTO can assist by providing information, best practices, and insight in regards to the JSL, SSC System, Tablets, and Plug-in Plan planning and operations.

- PLUTO can also provide you with experienced feedback in how to best architect your software solution / network device to ensure efficiency real time.

Best Practices:
- Request that your Payload Integration Manager (PIM) engage PLUTO for insight pre-design/pre-flight.

- Request PLUTO and OD (SSC System Developers and requirements managers) support for JSL and SSC needs throughout lifecycle, to discuss ops concepts, integration and maintenance requirements.

- Request PLUTO and OC for Plug-in Plan support throughout lifecycle, to discuss ops concepts, integration and maintenance requirements.