DFI implementation for non-event data notes

Multiple data types are returned on the SSR event stream. Note Science data telemetry apid range is 928 to 1023 (0x3A0 - 0x3ff) (Ref: LAT-TD-07664, section 13)

0x3A0 LRA data returned via the SSR (see LRA below)

0x3bb-0x3be LPA event data (already dealt with in DFIP)

0x3c0-0x3c4 SSR MSG output (see LCM below)

0x3c5-0x3c8 LCI event data (already dealt with in DFIP)

0x3cf-0x3d3 FILE dump data (see LFS below)

0x3d4-0x3d7 MEM dump data (see MEM below)

0x3d9-0x3dd ASC/Event monitoring statistics

0x3de-0x3e2 LCB stats (see LCM below???).

0x3fc M7

0x3fd LATC dumps

0x3fe PIG dumps **Note:** packet 0x3fe not documented on http://www.slac.stanford.edu/exp/glast/flight/web/a_cat/prod/WMA/hide/tlm_k_APID.shtml as of 3 Jan, 2007

Theoretically, these data formats are defined in the FSW-ISOC ICD (LAT-SS-05141). However, the design of the software interface should not rely too heavily on the particular binary data format as it can and will change. (Ex: DFI/DFIP and the QSE packages)

LFS: There exists a QLFS package (under QSD). There is a dump method but nothing ready to be coopted in callbacks.

MEM: There is a QMEM package under QSD, including QMEM_Parser, which has overrides of the _process() methods on Dfi::Datagram&, Dfi::Contribution&, and Dfi::Record& familiar from e.g. DfiLpa-Parser.

PIG: There is a QPIG package under QSD. Note that PIG datagrams have no substructure. QPIG defines updateAtDatagram and appStateGet methods analogous to methods in e.g. DfiLpa-Parser. Making a parallel structure appears to be conceptually trivial, except for deciding what to do with the context (state) info. UPDATE: This is done (modulo polishing) as of 1 Feb.

LRA: There is a QLRA package; it provides procDgm to process "a complete datagram of LRA data" and call routines "when a complete set of register values has been assembled" or for an ESR or statistics datagram.

LCM: There is a QLCM package; it provides a dump routine for LCM datagrams.

EMP: The QEMP package has QASC, which defines interfaces to the ACD software counters.

LATC: See the QCFG (src only) and maybe RIM packages.

NOTE FOR PHILIP: The following is a page in ISOC where a discussion/documentation of this topic is being done.
Completing and Extending DFI