OVERVIEW

Which INS Software Specifications are provided by ESO?

– VLT Instrumentation Software Specification

- Standard and modular structure of INS software (OS,MS,DCS,ICS)
- General requirements (setup files, FITS header, simulation, logging)
- Standard interfaces to on-line Midas, TCS, on-line Archive
- *Note*: this document does not yet take into account the ESO Data Flow and other recent changes. This concerns:
  - OSS which functionality is mainly covered by the Phase II Preparation Software (P2PP) to prepare an observation (incl. the exposure time calculator ETC)... Other instrument specific Observer Support Software will have to be developed e.g. to support the preparation of a slit mask.
  - MOBS: a standard Multiple Observation Software which is a feature of BOB.
  - Data Reduction Software DRS which is to be implemented within the scope of the Pipeline Data Reduction
  - Templates which are to be developed for each instrument

– INS Common Software Specification

- Contains the most recent and detailed specifications of the “VLT Instrumentation Software Specification”.
- Standard commands for INS modules
- Format and handling of setup files
- Instrument configuration files
- Mode switching
- Common subroutines and utilities (data transmission, PCO, Disk space monitor)
- Observation Block and templates

OVERVIEW

Which INS common software is provided by ESO?

- **oslx: File handling library**
  - Features for handling: FITS files, setup files, generic parameter files (PAF), configuration files, dictionaries, alias tables.
- **dxf: Detector data transfer library**
  - Send/receive detector data.
- **pco: Protocol converter**
  - Converts CCS messages to raw socket messages and vice versa
  - Used for communication with Midas.
- **Disk space monitor**
  - Monitors the available disk space
  - Available as a subroutine and as a panel editor class
- **Real-Time Display software**
  - Contains: Fast image display, panning, scaling, zooming; Overlaying line graphics; pixel query; color operations; read/write FITS files;...
- **FHT: File Handling Tool**
  - Handling of setup files, FITS files, templates...
  - Implements the OSS functionality to search, rename, delete, copy, etc.
  - Support for INS directory tree structure (create, delete)
- **Interface routines**
  - Interface to Archive (VOLAC / VCSOLAC)
  - Communication with Midas via PCO
  - Communication with TCS via the TCS interface (TIF)