

LMC-TM Interface

The Telescope Manager monitors and controls SKA Elements through the interface with their LMCs. Within LMC we made these assumptions:

1) Interface realization: The interface is realized by a unique instance of a TANGO device running in the LMC control domain. The interface device contains all the Dish monitoring attributes for TM subscription and commands callable by TM (following the TM-DSH.LMC ICD), plus pipes for defining events/alarms. TM directly communicates only with the interface device not with internal LMC TANGO components. Is this assumption correct?

2) Static vs Dynamic Interface: Is the interface supposed to dynamically change at real-time with respect to the ICD specification (stored in the Self Description Data)? In other words, is LMC requested to support creation/removal of monitoring points and/or commands at run-time by TM? This seems the case from the TANGO LIG, but the exact mechanism and physical use cases justifying this for the Dish are unclear at the moment. For instance, for internal interface definition, Dish sub-elements (SPF, Rx) suggested a static interface.

As an exercise, we were able to dynamically generate monitoring points at run-time (and also subscribing and actually monitoring them) on the basis of a parsed SSD config (i.e. an XML modified config file with respect to the provided SSD template) but how to generate commands and their actual behavior (=code to execute actions)?

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