

Best way to set/report multiple parameters?

There are important times when it is necessary to set or to read multiple parameters at the same time. Notably during initialization, when each device driver needs to set up the zero-level safe parameters values, or when TM configures the initial state of the system, or again at the start of a new set of observations, when it is required a large change of state of the instrument. We propose two commands `getFullStatus` and `setFullStatus`. The first command instructs the device server to build a json object containing all its parameters and send the resulting blob to the device driver issuing the command via a Tango Pipe. The `setFullStatus` accepts, as argument, a json object containing many parameters and then executes a “Set Parameter” for each of them. Optionally this command can be followed by the execution of a `getFullStatus` for confirmation.

For more complex situation, we can also devise a recursive `setFullStatus`, inserting the name of device class to witch a group of parameters applies.

Comments on this proposal?

Summary

We propose two commands `getFullStatus` and `setFullStatus` to get/set multiple parameters to a device driver at init time or at system reconfiguration.

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