The first goal is to know at a quick glance, if everything is OK in a control system, and otherwise to be able to diagnose a problem and solve it. The second goal is to configure the control system and its components. The third goal is to have long term analysis on components (logs, statistics, usage,....)

Principle:

On each host to be controlled, a device server (called Starter) takes care of all device servers running (or supposed to) on this computer. The controlled server list is read from the TANGO database. A graphical client (called Astor) is connected to all Starter servers and is able to:

- Display the control system status and component status using coloured icons.
- Execute actions on components (start, stop, test, configure, display information, ...)
- Execute diagnostics on components.
- Execute global analysis on a large number of crates or database.

Starter device server:

This Tango device server written in C++, is dedicated to control system management. When a Tango device server starts, it registers itself automatically in the TANGO database. At startup, or on change event from database server, the Starter takes this list of servers registered on the host. Periodically, a system call gets the list of running processes. For each controlled server, the Starter checks if the server is in the running processes list. If found, a second check is done by a ping on the administrative device to test if the server is alive. And finally a list containing the server names and their status is built. The Starter provides 3 ways to start servers:

- At Starter start up.
- On request through a command.
- Automatically in case of server failure.

Astor – Client Tango Manager:

The host status read from the Starter device servers is displayed on a tree using coloured icons. The hosts can be grouped under branches by usage, operating system or whatever. The status of the hosts under a branch is reported to the branch node. A panel can be opened on a crate for more details. The status of each server is also displayed by a coloured icon.

TANGO Manager Feature Overview