



TANGO Control System Management Tools

P. Verdier, F. Poncet, J.L.Pons, ESRF, Grenoble, France
N. Leclercq, Soleil, Gif sur Yvette , France

A light
for science



- 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 as running on specified host.

At start-up, 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 :

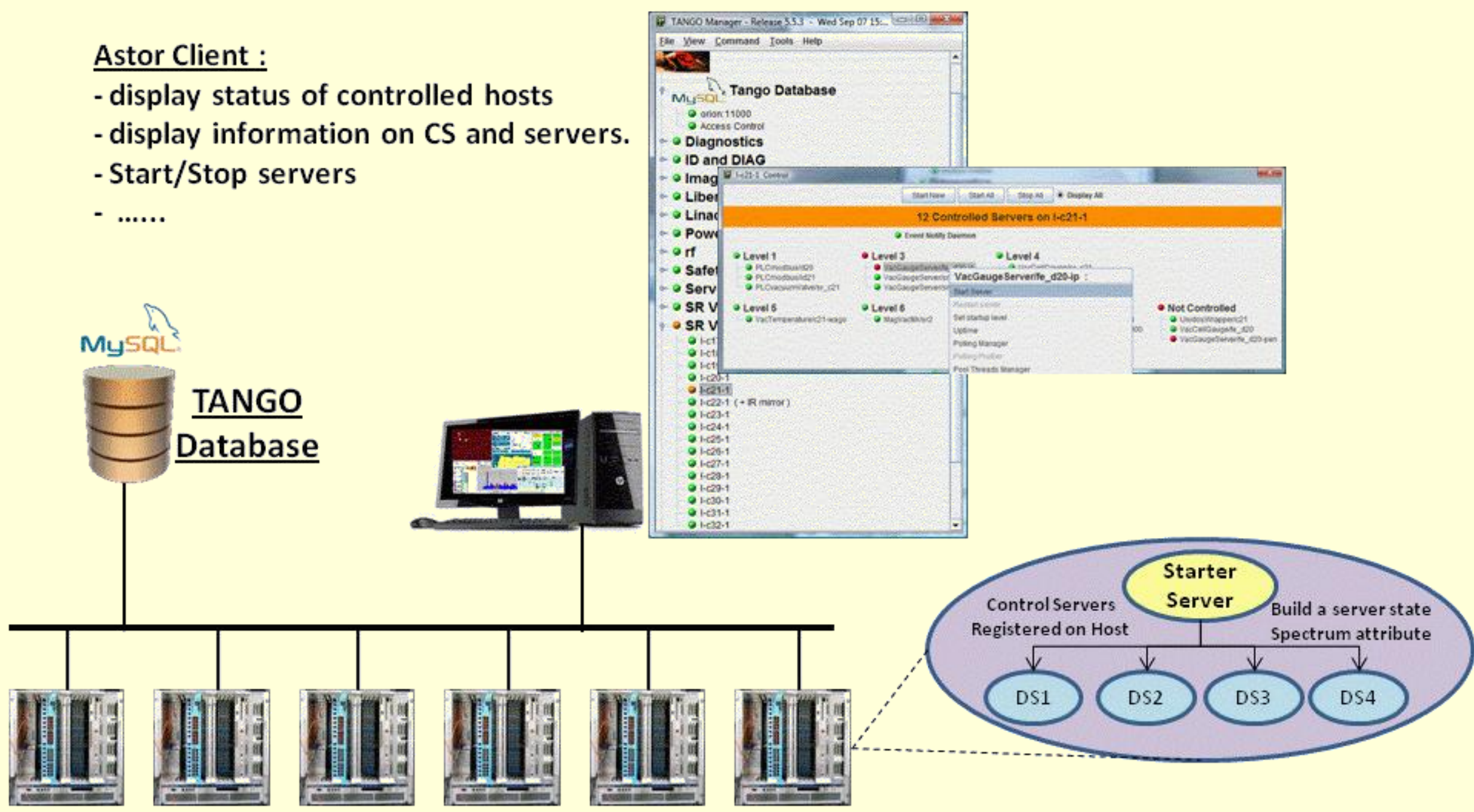
- At Starter start up.
- On request through a command.
- Automatically in case of server failure.

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

