



TACO TANGO



Workshop at the ESRF, Grenoble

14-15 November 2001

TACO at Lure

Lucile Roussier, LURE (CNRS) - Service Informatique Expériences, Bat 209D, BP 34 - 91898 Orsay Cedex, France

Due to Lure age and history, no common control and acquisition software exist for all experiments, except for some of the same kind. Most of user computers are PC/Windows or Macintosh, and Unix culture isn't developed. In 1996 a new diffraction + absorption beamline (H10) was built, and researchers would like to use Spec and its diffractometer geometry facilities (already implemented on very old and specific programs at Lure), and to have the same interface like ESRF. They also would like to reuse some VME cards from an old experiment. So we installed Spec and to keep device development independence, we choose to also install TACO and to develop device servers (if they didn't exist), with the ESRF help. A second beamline (DW12) with similar needs has also been equipped in 2000.

TACO on H10 beamline

SPEC and TACO are installed on a SUN/Solaris station which is connected to a VME crate.

Device servers used :

- on OS9 :
 - (LURE) Oregon motor VME8 card (à 8 motors, without encoders)
 - (ESRF) CC133 encoders
 - (ESRF / LURE) Heidenhaim encoders (RS232)
 - (LURE) THOMSON TSVME403 DAC (8 channels)
 - (LURE) XYCOM 590 ADC (8 channels)
- on the SUN station :
 - (ESRF) Canberra ND556 (AIM) MCA

TACO on DW12 beamline

SPEC and TACO are installed on a PC/Linux, and equipments are directly connected to the PC by GPIB bus (IEEE488) or RS232.

Device servers used on Linux :

- (LURE) Digiplan motors interface (à 3 motors - GPIB connection)
- (LURE) Lure motors interface (à 3 motors - GPIB connection)

The experience of installing such tools was of great interest :

- client/server architecture,
- heavy learning for only 2 beamlines, but after, it's easy to implement,
- easy and efficient TACO installation procedures, friendly ESRF help,
- for external users, a device server generator is an interesting tool.