



OPEN COMPONENTS FOR EMBEDDED REAL-TIME APPLICATIONS

WP8 & WP12: OCERA in BusyBox Author: Pierre Morel (MNIS)

Goals:

This demo checks the integration of the components into a complete working Real-Time System with a Linux application interface: a http server.

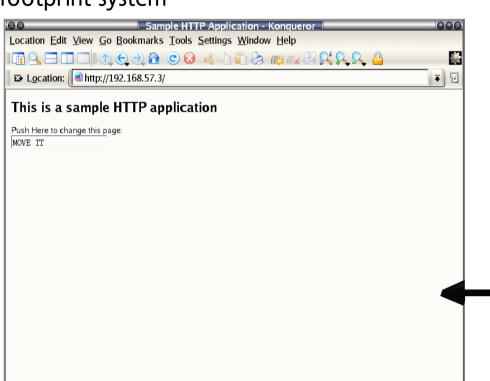
Tested components:

- Integration
- ORTE

Description:

The application is a command interface to start and stop realtime applications from a remote computer.

This tests the possibility to use a standard application interface like HTTP on a simple low footprint system



The system has 4 command entries:

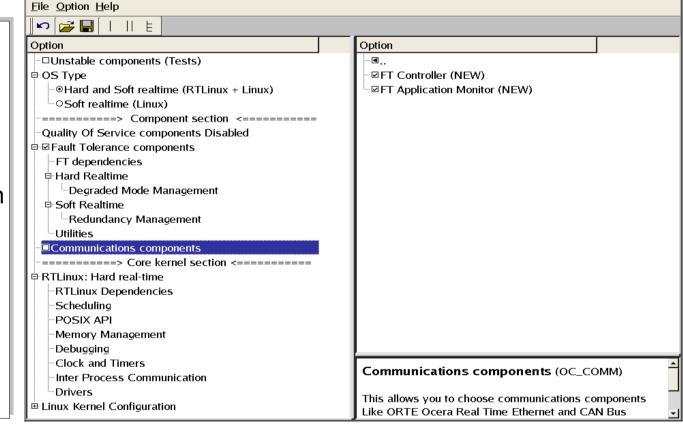
- Start RTLinux and load the base modules.
- Start the demo application
- Visualisation of the results.
- Stop the application
- Stop RTLinux
- Stop the system.



Demo phases

Phase 1

- Creation of a Test CDROM
 (This validate the OCERA generation tree)
- From the sources, build the Ocera kernel, modules and tools
- Build ORTE exemples
- Build the generation tools and generate the target root filesystem
- Create a CD-ROM for the target
- Boot the target from the CDROM disk
- Verify the connection with the network



Phase 2

- Start a remote computer
- Use the HTTP server to start some RTLinux demo

Phase 3

- Start a remote computer with ORTE manager
- Verify the ORTE publisher and the ORTE subscriber of the embedded system

Conclusions and results:

The usage of the WEB interface shows how it is easy to configure an embedded system from any network interface.

This solution can be used in any embedded system with OCERA to control and supervise any hard-realtime robotic or control command application.