How to use GENIVI IVI Layer Management APIs - hands-on session requirements

Introduction

The session will be designed to actively engage up to 20 participants equipped with their own laptop. The hands-on will be performed within a virtual machine (VM) and Renesas board. The aim is to present the Layer Management API and to train the participants how to use it. The Idea is to show a essential difference between wayland desktop application and wayland ivi application. During the session attendees would finish some prepared examples to realize typical ivi-hmi use-cases by using Layer Management API, then compile and deploy finished application to the Renesas board and verify the results.

The virtual machines files with GDP SDK will be made available ahead of time. Ideally all participants will have been able to confirm that the VM works properly prior to the start of the session.

The session is scheduled for Thursday afternoon.

Renesas board requirements

- GDP with weston 1.9 and wayland-ivi-extension 1.9
- Fix network address for every target

System requirements per participant

- Core i5 or i7 system (64-bit) or similar
- 8GB physical RAM or higher
- SD card reader and/or USB 3.0 port
- Oracle VirtualBox 4.8 or newer (Free)
- 4096MB of RAM allocatable to the VM

Room settings and configuration

- 20 x Renesas boards
- 20 x free power sockets for participants laptops
- 20 x desk and chair sitting configuration
- 20 x network cable to connect laptop to the Renesas board
- 01 x video projector for presenter
- 01 x microphone with audio amplification for presenter
- 01 x Internet access via Ethernet connection for presenter (and power)
- 01 x dedicated table for target systems (power and ethernet)

Optional room arrangements

- 20 x 1Gb Ethernet network connections (for VMs access)
- 01 x Shared Internet access with all participants
- 60 x DHCP addresses for hands-on session room Ethernet segment
- 20 x additional desk+chair for paired participation

Skills

Participants are expected to know how to:

- operate virtual machines using VirtualBox
- have general knowledge of
    - C programming language and Object Oriented software development
    - GNU/Linux environment
    - Eclipse IDE or CLI development tools
- basic understanding of Linux systems (compilation and deployment of binaries)

Presentation material will be provided on the day of the training to simplify the participants ability to follow-on.