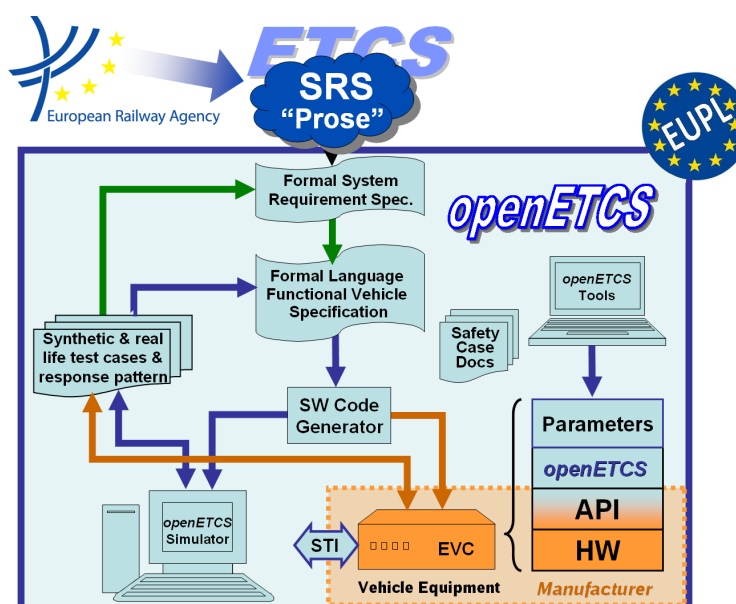


Work-Package 5: “Demonstrator”

Installation guide for WP5 Demonstrator

Nicolas Van Landeghem, Didier Weckmann, Alexis Julin

June 2014



Funded by:


 Federal Ministry
 of Education
 and Research

 Université de la République
 Française
 MINISTÈRE
 DE L'ENSEIGNEMENT SUPÉRIEUR
 ET DE LA RECHERCHE

 Région de
 Bruxelles-
 Capitale

 GOBIERNO DE ESPAÑA
 MINISTERIO
 DE INDUSTRIA, ENERGÍA
 Y TURISMO

This page is intentionally left blank

Work-Package 5: “Demonstrator”**OETCS/WP5/M5.1
June 2014**

Installation guide for WP5 Demonstrator

Document approbation

Lead author:	Technical assessor:	Quality assessor:	Project lead:
location / date	location / date	location / date	location / date
signature	signature	signature	signature
Alexis Julin (ERSA)	Alexis Julin (ERSA)	Ainhua Gracia (SQS)	Klaus-Rüdiger Hase (DB Netz)

Nicolas Van Landeghem, Didier Weckmann, Alexis Julin

ERSA
5 Rue Maurice Blin
67500 Haguenau, France

Description of work

Prepared for openETCS@ITEA2 Project

Disclaimer: This work is licensed under the "openETCS Open License Terms" (oOLT) dual Licensing: European Union Public Licence (EURL v.1.1+) AND Creative Commons Attribution-ShareAlike 3.0 – (cc by-sa 3.0)

THE WORK IS PROVIDED UNDER openETCS OPEN LICENSE TERMS (oOLT) WHICH IS A DUAL LICENSE AGREEMENT INCLUDING THE TERMS OF THE EUROPEAN UNION PUBLIC LICENSE (VERSION 1.1 OR ANY LATER VERSION) AND THE TERMS OF THE CREATIVE COMMONS PUBLIC LICENSE ("CCPL"). THE WORK IS PROTECTED BY COPYRIGHT AND/OR OTHER APPLICABLE LAW. ANY USE OF THE WORK OTHER THAN AS AUTHORIZED UNDER THIS OLT LICENSE OR COPYRIGHT LAW IS PROHIBITED.

BY EXERCISING ANY RIGHTS TO THE WORK PROVIDED HERE, YOU ACCEPT AND AGREE TO BE BOUND BY THE TERMS OF THIS LICENSE. TO THE EXTENT THIS LICENSE MAY BE CONSIDERED TO BE A CONTRACT, THE LICENSOR GRANTS YOU THE RIGHTS CONTAINED HERE IN CONSIDERATION OF YOUR ACCEPTANCE OF SUCH TERMS AND CONDITIONS.

<http://creativecommons.org/licenses/by-sa/3.0/>

<http://joinup.ec.europa.eu/software/page/eupl/licence-eupl>

Modification History

Version	Section	Modification / Description	Author
1.0.0	All Parts	New Document	Alexis Julin
1.0.1	New Part	Add license management	Alexis Julin
1.0.2	New Part	Add GE comments (issue nr.12)	Nicolas Van Landeghem

Table of Contents

Modification History.....	3
1 Introduction.....	5
2 Installation	6
2.1 Hardware and Software requirements	6
2.2 Installation	6
2.3 Uninstallation.....	7
2.4 Upgrade	7
2.5 Downgrade.....	7
3 Content of the package	8
3.1 OpenETCS archive	8
3.2 Installation directory	8
4 Getting a license (First installation only)	9
4.1 Getting computer fingerprint.....	9
4.2 Installing license	9
5 Running the Automatic Test Runner	10

1 Introduction

This document is a guide for the installation and execution of the EVC simulator software libraries used by the Automatic Test Runner (ATR) aka Preliminary Test Environment.

EVC simulator software libraries is T5.2 deliverable (M5.1)

Automatic Test Runner (ATR) is T5.3 deliverable (M5.3)

2 Installation

2.1 Hardware and Software requirements

OpenETCS step 1 deliverable has been installed and tested on a computer running CentOS 6.5 operating system with the following mandatory conditions :

- internet connection
- root access

Due to compatibility between Red Hat Enterprise versions and CentOS, installation works as well on Red Hat Enterprise Linux 6. Step 1 deliverable is composed of M5.1 EVC kernel library which can be used through M5.3 Test environment executable. In a first step, the EVC kernel is not ready to host any external code, whereas the Test environment is provided for local use with some scenarios given as example.

2.2 Installation

2.2.1 First steps

- Create a folder
- Copy OpenETCS archive in this folder
- Open a terminal
- Unpack OpenETCS archive
`>tar xvfj OpenETCS_WP5_X_X_X.tar.bz2`
- Move to WP5_Demonstrator_Installer folder
`>cd WP5_Demonstrator_Installer`
- Connect as root

NB: an archive is a compressed set of files provided by the project and/or the provider and that an end-user can uncompress or unpack onto its own computer.

2.2.2 Mysql dependencies

- Install mysql-server package and its dependencies
`>yum install mysql-server`
- Start mysql service
`>service mysqld start`

2.2.3 SRS databases

- Install SRS baseline 230d database
`>rpm -Uvh srs230d_db-1.0.3-220.i386.rpm`

- Install SRS baseline 330 v11 database
`>rpm -Uvh srs330_class1_v11_db-1.0.0-282.i386.rpm`
- Install SRS baseline 330 v20 database
`>rpm -Uvh srs330_class1_v20_db-1.0.0-282.i386.rpm`

2.2.4 Qt driver

- Install driver mysql for Qt
`>yum install qt-mysql`

2.2.5 OpenETCS

- Install OpenETCS step1 package
`>yum localinstall openETCS-X.X.X-X.X.X.i386.rpm`

2.3 Uninstallation

- Uninstall OpenETCS step1 package
`>rpm -e openETCS`

2.4 Upgrade

- Upgrade OpenETCS step1 package
`>yum localinstall openETCS-X.X.X-X.X.X.i386.rpm`

2.5 Downgrade

- Uninstall old OpenETCS step1 package
`>rpm -e openETCS`
- Install new OpenETCS step1 package
`>yum localinstall openETCS-X.X.X-X.X.X.i386.rpm`

3 Content of the package

3.1 OpenETCS archive

A rpm (Redhat Packet Manager) is a OS-dedicated packet manager, used to create automation when automatic deployment is required. It avoid end-users to have knowledge of which files have to be installed where on the Operating System. OpenETCS archive contains :

- OpenETCS rpm
- SRS 230d database rpm
- SRS 330 v11 database rpm
- SRS 330 v20 database rpm

3.2 Installation directory

After installation procedure has been completed, following files and folders can be found in **/usr/local/openETCS** folder.

3.2.1 Licensing folder

Licensing folder contains all tools to manage license.

3.2.2 lib folder

Lib folder contains EVC simulator software libraries.

3.2.3 test_runner folder

test_runner folder contains :

- scenarios folder which contains all (templates and user specific) Automatic Test Runner scenarios
- data folder which contains mainly simulation logs
- test_runner, the Automatic Test Runner executable

4 Getting a license (First installation only)

4.1 Getting computer fingerprint

- open a *non-root* terminal
- move to OpenETCS folder
`>cd /usr/local/openETCS`
- move to Licensing folder
`>cd Licensing`
- launch script for getting fingerprint
`> ./echoid >> echoid_output.txt`
- send an email with file echoid_output.txt to licenseactivation@ersa-france.com

4.2 Installing license

You will receive an email with a licensing file

- open licensing file with a text editor
- open a root terminal
- move to OpenETCS folder
`>cd /usr/local/openETCS`
- move to Licensing folder
`>cd Licensing`
- launch license installer script
`>./licenseinstaller -i -l 'xxxx' /opt/ERSA/license/license.rc` where `xxxx` must be replaced by the key in licensing file (you can find it from first character to # character *include*)

5 Running the Automatic Test Runner

To execute Automatic Test Runner :

- Open a terminal
- move to OpenETCS folder
>cd /usr/local/openETCS
- launch test_runner
>./test_runner oETCS_scenarios/scenario_name.sce