



EUCARIS - Start Up Document

EUCARIS release : 7.x
Date : 20-04-2020
Author(s) : Eucaris2Help team
E-Mail : eucaris2help@rdw.nl



Table of contents

1. INTRODUCTION 3

1.1 PURPOSE..... 3

1.2 SUMMARY 3

2. OVERVIEW 4

2.1 HARDWARE AND SYSTEM SOFTWARE REQUIREMENTS 4

2.2 TEST AND PRODUCTION ENVIRONMENTS..... 5

2.3 NETWORK CONFIGURATION 5

2.4 INSTALL HARDWARE AND SYSTEM SOFTWARE..... 6

2.5 CERTIFICATES 6

2.6 INSTALL EUCARIS 7

2.7 SYSTEM UPDATES 7

2.8 CONFIGURE EUCARIS 8

2.9 CONNECT LEGACY 8

2.10 ACCEPTANCE PROCEDURE 8

2.11 OPERATIONAL MAINTENANCE OF EUCARIS 8

2.12 EUCARIS KNOWLEDGE BASE 9

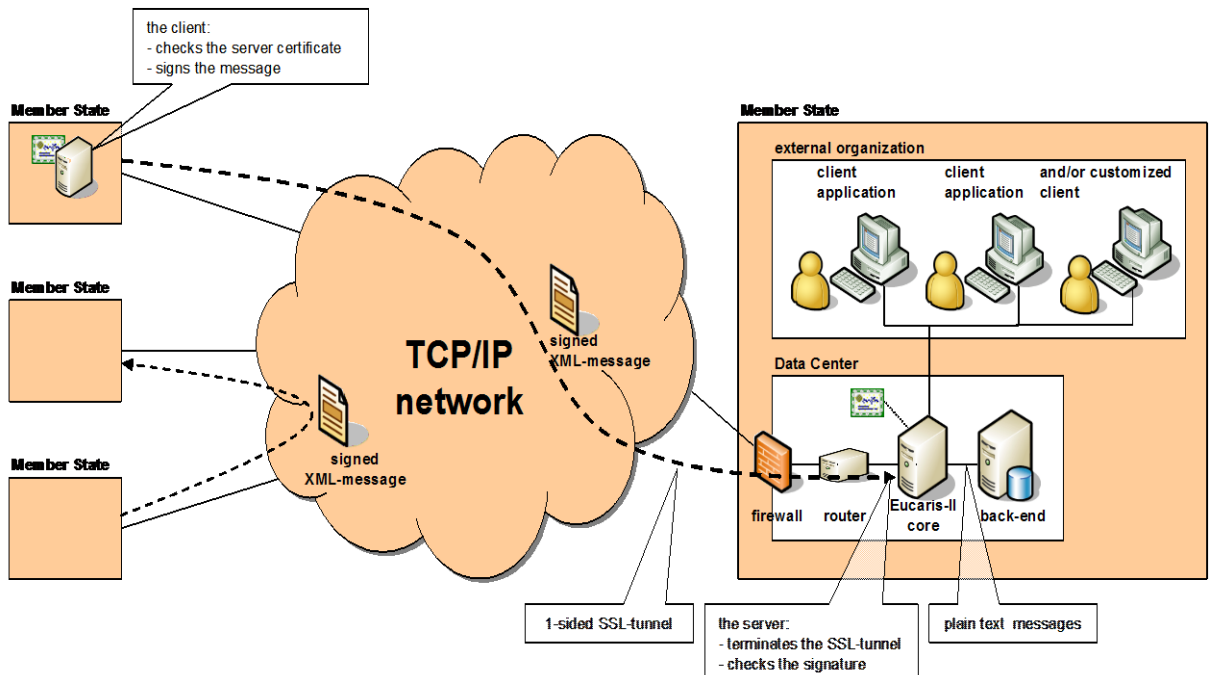
1. Introduction

1.1 Purpose

This document is the overall guide for the technical implementation of the EUCARIS system in each member state. Where applicable, a reference is made to the underlying documentation provided on the installation CD and/or installation package. For questions and support during installation of EUCARIS, during development of the interface to the back-end legacy implementation and during the acceptance test phase please contact eucaris2help@rdw.nl

1.2 Summary

EUCARIS connects all participating member states in a mesh network where each member state communicates directly to another member state. There is no central component needed for the communication. EUCARIS handles secure communication to the other participating member states and communicates to the back-end legacy systems of member states using XML. The following picture visualizes this architecture.



Member states exchange messages by directly sending them to the recipient. The data center of a member state is connected to the network used for the message exchange (TESTA, Trans European Services for Telematics). The XML messages sent are signed by using a certificate and encrypted by using SSL. The messages sent to the back-end are plain text XML messages since the connection between EUCARIS and the back-end is assumed to be located in a protected environment. A client application is provided which can be used within a member state to query the national register or other member states. Alternatively, a customized client application may be developed and connected to EUCARIS. The client applications or end-users will be identified by means of a user-id/password or a client certificate. The connection to a user in an external organization (e.g. police) may be encrypted. However, this is the responsibility of each individual member state.

2. Overview

2.1 Hardware and system software requirements

The minimum hardware requirements consist of a server with at least the following specifications:

- > 2GHz multi core processor
- 4 GB memory or more
- 80 GB disk (RAID technology)

The above hardware is sufficient as a starting point for EUCARIS, but it is important to keep in mind that the configuration depends on the number of active users ,the expected message volume and the location of the Database. Scaling might be needed if the number of users or message volume increases.

The following software is required to run EUCARIS 7.0 and higher. Please install these before starting the EUCARIS installation.

Microsoft Windows Server 2012R2 to 2019

EUCARIS is tested to work correctly on these operating systems.

Microsoft .NET Framework 4.7.x

EUCARIS has been developed using this framework and therefore it is required that this version is installed on the server. An administrator can verify if the framework is installed on the server.

Microsoft Internet Information Services (IIS) 7.0 or higher

EUCARIS consists of a number of ASP.Net web applications, which are hosted using IIS. IIS is an integral part of the Windows operating system, but has to be enabled as a server role.

Currently EUCARIS supports the following databases and database versions:

Microsoft SQL Server 2012, 2014 or 2016

For each of these SQL Server editions also free Express editions are available, but keep in mind that there are technical restrictions for these editions. The most important restriction to mention here is the maximum size of the database, which differs for each Express version. Furthermore it is advised to install using a default instance, mixed authentication and of course to install the most recent service pack available for the chosen edition.

Oracle 12.1, 18.1

For some editions XE editions are available, which can be used also, but also here some restrictions apply regarding the number of supported databases. Also for Oracle it is advised to install the latest service packs available.

It is advised to make sure that proper backup procedures are in place for the following:

Server

The server running EUCARIS must be backed up to limit downtime in case of hardware failure.

Database

The database used by EUCARIS must be backed up to prevent loss of data in case of failure.

EUCARIS is shipped with a default web client. This web client is compatible (and tested) with the latest versions of the following browsers:

- **Internet Explorer,**
- **Firefox,**
- **Google Chrome.**

Please contact EUCARIS Operations to request minimum required browser versions. If the File transfer functionality is going to be used, then the Silverlight plugin from Microsoft is required for all browsers.

Please check the document 'Installation and Operation Manual' for more information about the installation of EUCARIS.

2.2 Test and production environments

We strongly advise to create a permanent and separate environment for testing. This test environment should be used to test the client functionality of the Eucaris application in combination with the permanent test environment of EUCARIS Operations and to test the integration with the local register. Due to security both the test and production environments must be on separate (virtual or physical) servers. EUCARIS runs without problems on virtualized environments, and there are multiple products that enable the creation of the virtual EUCARIS server:

VMware Server

See: <http://www.vmware.com/products/server>

Microsoft Hyper-V

See: <https://technet.microsoft.com/en-gb/library/hh831531.aspx>

NOTE: For the acceptance/test and production environment separate sTESTA IP addresses are needed.

Acceptance tests should be carried out after the following occasions:

- after first installation of the EUCARIS application,
- after modifications are made to the legacy systems providing the information
- after integrating a new (customized) client application

Test tools, test data and other support can be requested by contacting eucaris2help@rdw.nl

2.3 Network configuration

Network configuration is not part of this documentation but is essential for using EUCARIS with other countries. The following things should be kept in mind when configuring the network:

TESTA

EUCARIS uses the TESTA closed user group network so the user should arrange a connection to this network. Please send the sTESTA IP addresses to eucaris2help@rdw.nl as soon as possible.

Firewall

To allow communication with other member states the firewall should allow outgoing and incoming connections. A list of IP addresses is available on <http://www.eucaris.net> in the files section (restricted) under 04_System_Management -> EUCARIS_IP_Addresses.pdf

URLs and IP addresses

The URLs and IP addresses of other member states are distributed via the configuration update mechanism. The IP addresses will be stored in the hosts file of the server.

2.4 Install hardware and system software

To create the base platform for running the EUCARIS software you have to perform the following steps:

1. Order, unpack and install your server hardware as specified by your hardware supplier,
2. Install the supported operating system ,
3. Install required service packs that are available for the OS of choice,
4. Configure and test your network connections.

After these steps you start installing EUCARIS specific system software. The detailed steps are described in the 'Installation and Operation Manual', which is part of the EUCARIS installation files. Install the software specified in the 'Hardware and system software requirements' chapter.

2.5 Certificates**2.5.1 Request Acceptation Certificate**

EUCARIS Operations is hosting a Certification Authority named 'EucarisTest' for issuing test certificates. A test certificate can be requested using the following procedure:

1. The member state requests a certificate by emailing eucaris2help@rdw.nl and specifying:
 - a. Technical and administrative contact details as name, address, phone and email;
 - b. Optionally a Certificate Signing Request (CSR).
2. EUCARIS Operations contacts the member state to verify the request and specify the password;
3. The member state receives the certificate by email.

2.5.2 Install Certificate

The certificate has to be installed on the EUCARIS server. If more servers are used, the same certificate can be installed on all servers. The EUCARIS Configuration Tool supports the installation of certificates. Details are described in the 'Installation and Operation Manual'.

If using a network component or other server to offload the SSL encryption and decryption then it is required to install the certificate on this platform too. Follow the procedure as specified by supplier.

2.5.3 Request Production Certificate

The certificates for the production environment are issued by Verisign. After the acceptance procedure as described in paragraph 2.10, send a request to eucaris2help@rdw.nl and the 'Certificate Request Procedure' will be send to the member state, describing how to obtain the production certificate.

2.6 Install EUCARIS

The installation procedure for the EUCARIS software can be found in the 'Preparation' and 'Installation' chapters in the 'Installation and Operation Manual'. Following these chapters will perform the following steps in case a clean server is used:

1. Create an EUCARIS service account
2. Create the EUCARIS application pool
3. Create the EUCARIS web sites
4. Create the EUCARIS database
5. Install the EUCARIS application
6. Install the EUCARIS configuration tool
7. Download and install applicable System Updates

2.7 System Updates

The EUCARIS application is based on a 'pluggable framework architecture'. This means that the functionality of EUCARIS can be easily extended or adapted by so called "System Updates". System Updates are downloaded and installed using the latest version of the Configuration Tool. The procedure to download and install System Updates is described in the "EUCARIS – Installation and Operation Manual.pdf" document. The software components are received via the secure TESTA channel and all software is checked for viruses and signed by EUCARIS Operations. The Configuration Tool checks the integrity of the received software components to ensure a safe distribution of these components onto secure environments.

Please refer to <https://www.eucaris.net/kb/system-updates> for more information about System Updates and the frequently asked questions with answers.

2.8 Configure EUCARIS

After installing EUCARIS it has to be configured. These configuration steps can be found in both the 'Configuration' and 'Operation' chapters of the 'Installation and Operation Manual'. Following these steps configures the following parts:

1. The configuration of the country code to be used;
2. The configuration of the connection to the EUCARIS database;
3. The configuration of the certificate used within EUCARIS;
4. The configuration of the authorized users of EUCARIS;
5. The configuration of the EUCARIS web applications;
6. The configuration of the EUCARIS web services;
7. The configuration of the EUCARIS windows services;
8. The configuration of the URLs to the local register;
9. The configuration of the URLs to the other member states;
10. The configuration of the rights given to other member states;
11. The configuration of the rights given by other member states;
12. The configuration of the logging requirements

All steps above are supported by the new EUCARIS Configuration Tool and the EUCARIS Management Client. Running the Configuration Update functionality the configuration is automatically updated.

2.9 Connect Legacy

EUCARIS has a web service interface to the local legacy system. As described in the 'Custom Development Manual' it is required to build the legacy interface conforming to the web service interface of EUCARIS. The EUCARIS installation CD contains the WSDL's, the XML message specifications and the XSD's to help developing this required software. The latest available development-pack is also available on the restricted area of www.eucaris.net, 03 System Documentation.

2.10 Acceptance procedure

The moment the test certificate from the 'EucarisTest' Certificate Authority is received, the member state is authorised to use the permanent acceptance environment of EUCARIS Operations. Special test cases are available on the installation CD or by request to eucaris2help@rdw.nl. By using the acceptance environment it is possible to check the standard client functionality and/or, when applicable, any customised client.

Each agreement and/or treaty follows its own procedure for acceptance testing. Please check the EUCARIS knowledge base for more information regarding these procedures.

2.11 Operational maintenance of EUCARIS

The global configuration of EUCARIS is maintained by EUCARIS Operations. This configuration contains URLs, IP addresses, authorisations and specific configuration for other member states. Changes in these configuration are supplied to the member state by so called 'Configuration Updates'.

EUCARIS Operations releases an average of 12 'Configuration Updates' each year for the production environment. Installing this is relatively easy and is normally performed by your local system

administrator and well documented in the technical documentation of Eucaris. Please take this recurring task into account when defining your Operational Service Management.

2.12 EUCARIS Knowledge base

A lot of technical information is available on the EUCARIS Knowledge base at <https://www.eucaris.net/kb>.

For more information regarding the specific treaties/agreements:

eCall: <https://www.eucaris.net/kb/ecall>

EUCARIS Treaty: <https://www.eucaris.net/kb/eucaris-treaty>

ERRU: <https://www.eucaris.net/kb/erru>

RESPER: <https://www.eucaris.net/kb/resper>

CBE: <https://www.eucaris.net/kb/cbe>

VHOH: <https://www.eucaris.net/kb/vhoh>