



Orchestra

HEALTHCARE EDITION

RELEASE NOTES

OHE / RELEASE 18.1.1

< E170006 >

Product	Orchestra - Healthcare Edition
Version	Based on Orchestra 4.7.3.1
	Release 18.1.1
Datum	23.02.2017

CONTENT

The purpose of this document is to summarize the functional scope of the Product “Orchestra Healthcare Edition” in Version R 18.1.1.

Furthermore, this document identifies new features , changes and fixes in this Release Version of the product.

TARGET GROUP

This document is intended as release information for experts in health care information technology, including solution architects, project managers, consultants as well as developers and administrators.

The release 18.1.1 enhances the functionality of the previous released Version 17.2.1.

The following document gives an overview about the new added features.

1. Release Changes

1.1 Features and Functionalities

1.1.1 IHE Client enhancements

[#OHE-1010 & # OHE-1081]

- Multi repository selection: clients can cover transactions to more than one repository.
- Value Set Consumer: Retrieve Value Set [ITI-48]
- Value Set Consumer: Retrieve Multiple Value Sets [ITI-60]
- Retrieve Value Set now also returns the MIME type of the document

1.1.2 Cross-Community Access

[#OHE-85 & #OHE-84]

Initiating Gateway

- ITI-38 Cross Gateway Query
- ITI-39 Cross Gateway Retrieve

Responding Gateway

- ITI-38 Cross Gateway Query Response
- ITI-39 Cross Gateway Retrieve Response

1.1.3 EFA enhancement

[#OHE-290]

- Enable update of a policy
- Policy rollback if XDS transaction fails

1.1.4 Base TS

[#OHE-990]

The release 18.1.1 offers a base-version of the Terminology-Server, which offers the functionalities provided by University of Applied Sciences Dortmund's CTS2 server. The documentation for the official version of CTS2 can be found [here](#).

The Terminology Server was enhanced with the following features:

- Minimization of web service parameters
- TLS Support for login
- Authentication of users through LDAP

The following limitations are given by the current version:

- Permissions to edit code systems cannot be set based on LDAP memberships of users

1.1.5 DICOM Router

[#OHE-865]

- Functionality to pipe images to one or more destination systems
- Implementation of Rules Engine to determine destination systems

- Implementation of DICOM Metadata Enrichment (for research)

1.2 Product Documentation

[#OHE-743]

- Technical documentation of the Orchestra Health Edition is available in English.
 - DICOM Channel Documentation [OHE-1087]
 - XCA documentation [OHE-84 & OHE -85]

2. Quality Assurance

The product Orchestra Healthcare Edition was tested with automatic tests and manual test cases. The software is based on an IHE-architecture under usage of different industry standards.

The verification process included relevant IHE-workflows and guarantees a solid level of functionality.

The usability and functional correctness was tested and validated by the criteria of the IHE guidelines and under usage of different toolkits (e.g. NIS testing tool, IHE XDS-Toolkit).

The list below contains some minor issues discovered during the testing and quality assurance phase of the product.

2.1 Solved Issue

The following known issues from release 17.2.1 are solved with the version 18.1.1:

OHE-696	homeCommunityId should be included in SubmissionSet (ITI TF3)
OHE-736	Remove Version of Jetty Server Banner
OHE-737	Honor TLS cipher order
OHE-968	milliseconds of birth- and death-time are only storable with 3 (instead of 4) digits
OHE-1116	HL7 V3 patient feeds are not possible if the family name has the qualifier SP (spousal)

2.2 Known Issues

ORC-536	Trusted SSL certificates must be added manually for each scenario
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The following functional (required) and quality (optional) set of issues was recommended to reach the state of a solid release between the Trunk-Version and the Release Candidate 1. The Release Candidate 1 succeeded as final Release in terms of the quality management and the recommended set of issues was successfully tested:

[OHE-1015 & OHE-995]

3. Compliancy Tests

3.1 IHE - Integrating the Healthcare Enterprise

The Orchestra Healthcare Edition has successfully participated at the European IHE Connectathon 2017 and proved the compliancy with given IHE-profiles as well as interoperability with various products from vendors in the healthcare context.

A detailed list of supported profiles is given in the [IHE Integration Statement](#);

3.2 EFAv2.0 Consumer proof of conformity

- EFAv2.0 Member System
- EFAv2.0 Context Manager

3.3 EFAv2.0 Provider – Single Peer proof of conformity

- EFAv2.0 Resource Manager – Single Peer
- EFAv2.0 Document Registry – Single Peer
- EFAv2.0 Document Repository
- EFAv2.0 Identity Provider

4. Third-Party Components

Assimilable Logging Service:

elastic:	beats	- Apache License 2.0
elastic:	elasticsearch	- Apache License 2.0
elastic:	kibana	- Apache License 2.0
elastic:	logstash	- Apache License 2.0

Assimilable Terminology Server Service:

FHDortmund:	Termserver Version 2.1	- Apache License 2.0
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Access Control Handling:

WSO2:	Balana Version 1.1.3	- Apache License 2.0
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DICOM Router Handling:

dcm4che:	dcm4che Version 3.3.8	- Mozilla Public License version 1.1
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5. Requirements

5.1.1 Server Requirements

The usage of a virtual environment (VM ware) must be given. The following system requirements can be understood as recommended requirements in the context of the Orchestra Healthcare Edition. The actual memory requirements vary in the context of the processed IHE data according to medical specialty areas, data throughput, and log depth.

OS	CentOS 6, 7 or Red Hat Enterprise Linux 6,7
CPUs	CPU with 16 cores
RAM	32 GB Ram
storage	260 GB SAN 1: OS SAN 2: 25 GB – Orchestra application SAN 3: 45 GB – DB-Orchestra (interval: 30 d) SAN 4: 90 GB DB Dumps SAN 5: 30 GB DB Logs SAN 6: 50 GB Fileshare LTA SAN 7: 20 GB Fileshare Journalfiles <i>In addition, the following calculation is recommended as the basis for IHE data persistence:</i> report: 500 KB patient: 60 KB ATNA-log: 5KB
DB	MySQL 5.6 32 GB Ram, CPU with 12 cores
3d party apps	Linux, Java 8.