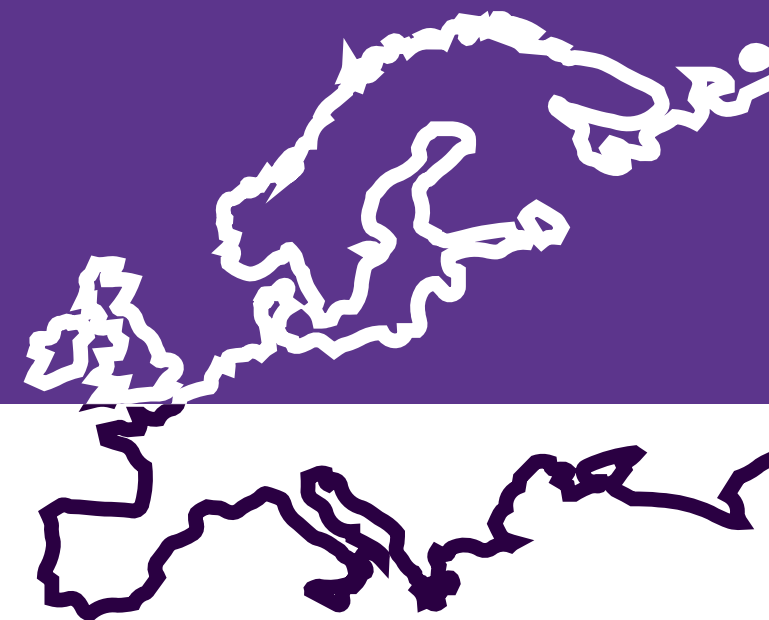




Integrating  
the Healthcare  
Enterprise

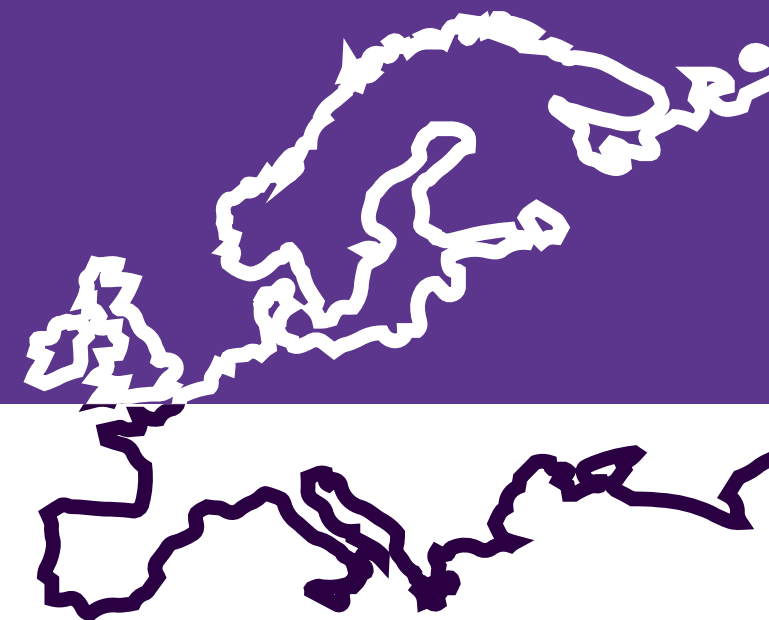


# 2023 IHE-Europe Connectathon What's new in IT-Infrastructure?

Wei Jing TEY  
Deputy Test Session manager



Integrating  
the Healthcare  
Enterprise



## Speakers:



### **John Moehrke**

Architect: Healthcare Informatics Standards -  
Interoperability, Privacy, and Security  
IHE Co-Chair IT Infrastructure Planning and Technical  
HL7 Co-Chair Security WG, FHIR FMG, FHIR facilitator,  
and FHIR Foundation founding member



### **Oliver Egger**

eHealth Architect  
Founder of ahdis.ag  
IHE International ITI Technical Committee Co-Chair  
IHE Suisse member  
HL7.ch member

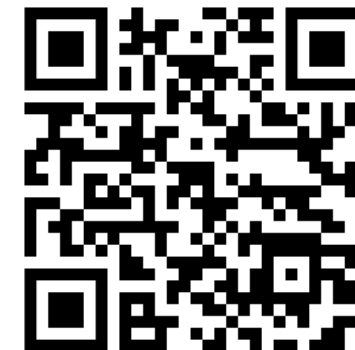


SEPTEMBER 25-29

RENNES  2023

**IHE**<sup>®</sup>  
EUROPE | **CONNECTATHON**<sup>®</sup>

# How to register to the event?



01

## Log into Gazelle Test Management

Create your account if it is your first time with Gazelle: [how-to](#)



02

## What do you want to test?

Register your systems under test: [how-to](#)



03

## Who will attend in Rennes ?

Register the people who will attend the event in Rennes.  
In case you are still unsure of the names of the attendees, you still have until end of June to perform changes



04

## Generate Contract

Check the relevant boxes in the first section of the document  
Add your name where asked  
Send the form to [office@ihe-europe.net](mailto:office@ihe-europe.net) and [technical.manager@ihe-europe.net](mailto:technical.manager@ihe-europe.net)



05

## Invoicing

An invoice will be sent to your billing contact



06

## You are ready to start testing

Upon receipt of the payment on IHE-Europe's bank account, the Connectathon technical manager will accept your system in the tool  
**ONLY ACCEPTED SUT CAN SEE THEIR TEST PLAN**

## It's Rennes Revisited!

### 2023 IHE Connectathon - 25-29 September, Rennes, France

Welcome in the instance of Gazelle Test Management used to support the 2023 IHE Connectathon in Europe. **Registration is open until 26 May.**

You need to have an account to register to the event.

If you have already attended a Connectathon in Europe in the past, [log in](#). If not, [sign-up here](#).

For further information about the IHE Connectathon events in Europe, refers to [IHE-Europe Connectathon website](#).

An **early bird price** is granted if we receive your contract on or before 30 March. Do not miss this opportunity. Read more on [IHE-Europe Connectathon website](#).

**Contract generation:** Before you push the "Download contract" button, make sure at least one of the SUTs is with status "Completed", otherwise you will download a blank page. You can send us several versions of your contract in case not all the SUTs are "Completed" at the same time. It can allow you to benefit of the early bird price without waiting for the other teams from your organisation.



## Registration to the event

The full registration process is held in Gazelle Test Management (this tool). Once your systems are marked as completed, download the contract and send it to IHE-Europe secretariat and Connectathon technical manager.

Contract generation: Before you push the "Download contract" button, make sure at least one of the SUTs is with status "Completed"

[Have a look to our tutorial](#)

## Training material

Replay of the webinars will be available within a week after they take place.

In the meantime, browse our learning base.

All the IHE Connectathon related courses are available using the **Log in as a guest** feature.

[Access the trainings](#)

## Next webinars

What's new in IHE IT-Infrastructure? : 27 March - 4-5PM CEST

What's new in IHE Radiology? : 29 March - 3:30-4:30PM CEST

What's new in IHE PaLM? : 30 March - 2:30-4PM CEST

Call for monitors: 3 April - 2:30-4PM CEST




[I Register !](#)

## Communication and support

Through out the IHE Connectathon process, get in touch with the technical support team:

 [IHE Connectathon technical manager](#)

 [IHE Community in Zoho | Join](#)

Follow us:   

## Agenda

All the milestones, scheduled webinars, and expected activities are gathered in the event agenda.

Make sure to keep an eye on it not to miss an important milestone.

[Access the calendar](#)

## Feedback on IHE Profiles

IHE invites implementers and other interested parties to review and provide input on IHE Technical Framework documents.

[Contribute](#)

  
[Back to top](#)

## Be an Early Bird



20% off on your  
registered  
system

End on 30th March

## How ?

- Register your system
- Update the registration status of your system to "Completed".
- Generate the contract.
- Send contract to [office@ihe-europe.net](mailto:office@ihe-europe.net) and [technical.manager@ihe-europe.net](mailto:technical.manager@ihe-europe.net) by **30th March 2023**

- Introduction of the IT-Infrastructure domain: what does it cover in terms of business cases
- What is new since September?
- What will happen until the Summer (and in scope for the Connectathon in September)
- Focus on hot profiles
- Q&A session



- The IT Infrastructure Domain defines interoperable infrastructure for the secure sharing of healthcare information independent of clinical domain. Interoperable infrastructure is necessary to support common IT functions for a variety of use cases but is rarely visible to the end user.
- Components supporting interoperable infrastructure may be embedded in applications but are often deployed as a shared resource within an organization or a regional or national health information exchange.
- IHE ITI was established by HIMSS & RSNA in 2002 in order to address use cases that cross multiple clinical domains and rely on a common IT Infrastructure.

## IT Infrastructure (ITI) Domain

### Topics

This section contains guidance on IHE offerings given a knowledge domain:

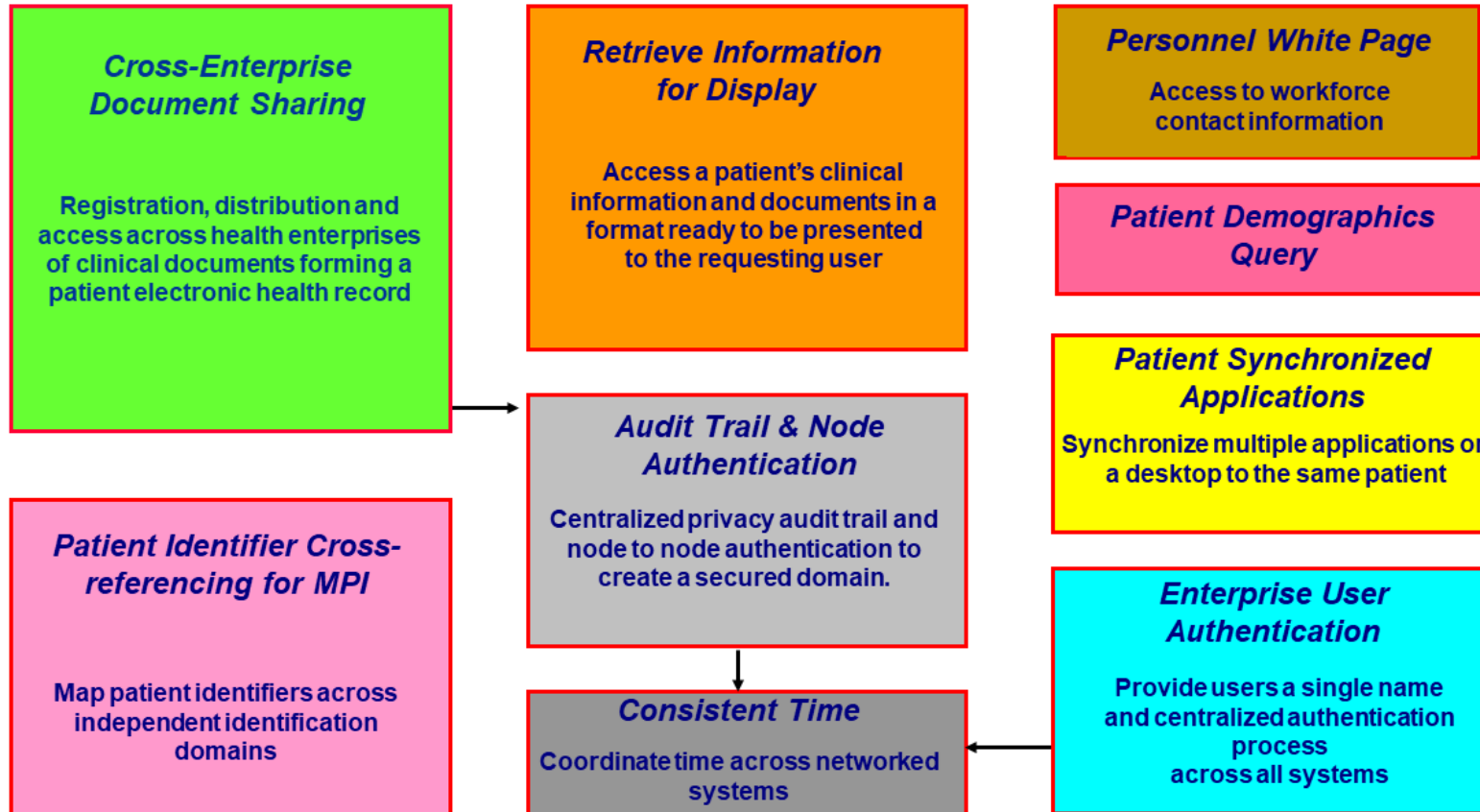
- [Document Sharing Health Information Exchange](#) Whitepaper
- [Document Sharing: Profiles](#)
- [Consuming data as FHIR Resources: Profiles, and Content](#)
- [Patient identity Management: Whitepaper, and Profiles](#)
- [Provider Directory Solutions: Profiles, and Content](#)
- [Security and Privacy Solutions: Handbooks, Profiles, and Content](#)

### Technical Framework

All Normative Final Text Profiles:

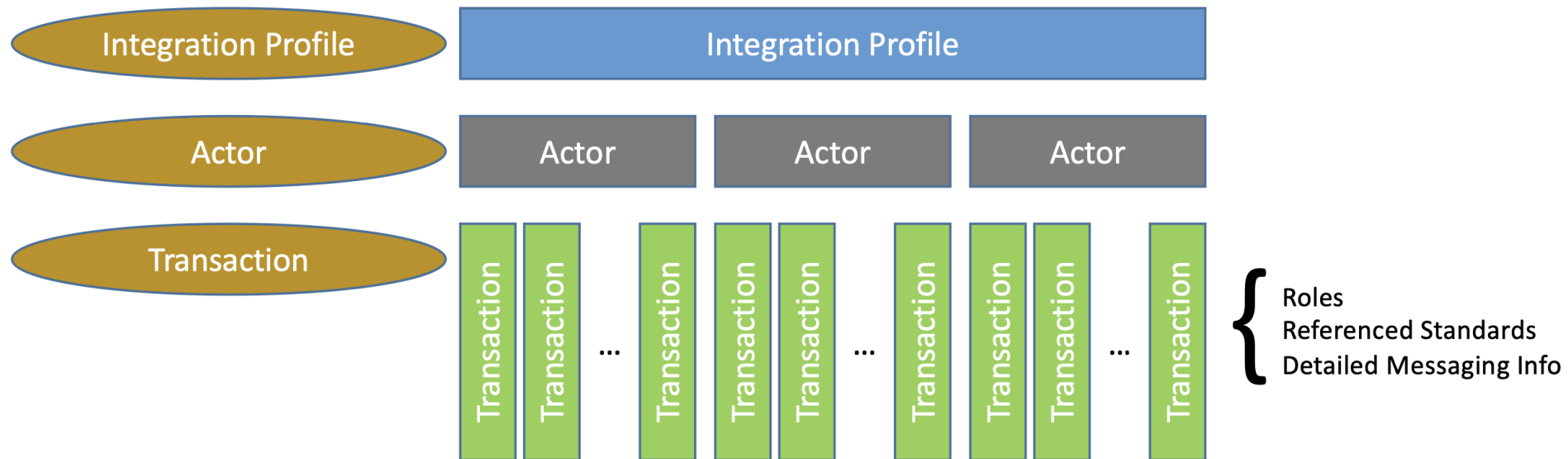
- [Volume 1: Profile definition, use-case analysis, actor definition, and use of transactions and content](#) ●
- [Volume 2: Transaction definitions and constraints](#) ●
- [Volume 3: Document Sharing Metadata, and Content Profiles](#) ●
- [Volume 4: National Extensions](#) ●
- [Comprehensive FormatCode Vocabulary: For use with Document Sharing \(XDS, XCA, MHD, etc\)](#) ●★

<https://profiles.ihe.net/ITI/>




<https://profiles.ihe.net/ITI/TF/Volume1/ch-2.html>

- Consistent Time (CT)
- Audit Trail and Node Authentication (ATNA)
- Cross-Enterprise Clinical Documents Share (XDS.b)
- Mobile access to Health Documents (MHD)



[https://www.ihe.net/about\\_ihe/faq/#What\\_is\\_the\\_IHE\\_Technical\\_Framework?](https://www.ihe.net/about_ihe/faq/#What_is_the_IHE_Technical_Framework?)



Integrating  
the Healthcare  
Enterprise

SeR

Search

Sections

- Introduction to This Supplement
- Open Issues and Questions
- Closed Issues
- IHE Technical Frameworks General Introduction
- IHE Technical Frameworks General Introduction Appendices
- Volume 1 - Profiles
- 39 Secure Retrieve (SeR) Profile
- Volume 2 - Transactions
- Volume 2 Appendices
- Volume 3 - Content Modules
- Volume 4 - National Extensions

**IHE IT-Infrastructure publications**

**Technical Framework Supplement**

**Secure Retrieve (SeR)**

**Revision 2.1 - Trial Implementation**

Date: October 24, 2022

[SeR publications history](#)

Author: ITI Technical Committee

Email: [iti@ihe.net](mailto:iti@ihe.net)

**Please verify you have the most recent version of this document.** See [here](#) for Trial Implementation and Final Text versions and [here](#) for Public Comment versions.

**Foreword**

This is a supplement to the IHE IT Infrastructure Technical Framework. Each supplement undergoes a process of public comment and trial implementation before being incorporated into the volumes of the Technical Frameworks.

This supplement is published on October 24, 2022 for trial implementation and may be available for testing at subsequent IHE Connectathons. The supplement may be amended based on the results of testing. Following successful testing it will be incorporated into the IT Infrastructure Technical Framework. Comments are invited and can be submitted using the [ITI Public Comment form](#) or by creating a [GitHub Issue](#).

This supplement describes changes to the existing technical framework documents.

"Boxed" instructions like the sample below indicate to the Volume Editor how to integrate the relevant section(s) into the relevant Technical Framework volume.

<https://profiles.ihe.net/ITI/SeR/index.html>

**IHE** INTERNATIONAL Integrating the Healthcare Enterprise **ITI**

**Mobile access to Health Documents (MHD)**  
4.2.0 - Trial-Implementation

MHD Home Volume 1 Volume 2 Volume 3 Test Plan Artifact Index

Table of Contents > MHD Home <prev | bottom | next>

This page is part of the IHE Mobile Access to Health Documents (v4.2.0: Publication) based on FHIR R4. This is the current published version. For a full list of available versions, see the Directory of published versions.

## MHD Home

Official URL: <a href="https://profiles.ihe.net/ITI/MHD/ImplementationGuide/ihe.itihmd">https://profiles.ihe.net/ITI/MHD/ImplementationGuide/ihe.itihmd</a>	Version: 4.2.0
Active as of 2022-12-07	Computable Name: IHE_ITI_MHD

Applications specific to resource-constrained and mobile devices are an emerging platform for healthcare-enhancing software. The MHD Profile is not limited to mobile devices, using the term "mobile" only as a grouping for mobile applications, mobile devices or any other systems that are resource and platform-constrained. These constraints may drive the implementer to use simpler network interface technology. There are numerous deployed implementations of [Document Sharing Health Information Exchange](#) that need a simpler network interface technology, for example those hosted by a Health Information Exchange (HIE), large health provider electronic health record (EHR), or personal health record (PHR).

The Mobile access to Health Documents (MHD) Profile defines one standardized interface to [health document sharing](#) (a.k.a. an Application Programming Interface (API)) for use by mobile devices so that deployment of mobile applications is more consistent and reusable. In this context, mobile devices include tablets, smart-phones, and embedded devices including home-health devices. This profile is also applicable to more capable systems where needs are simple, such as pulling the latest summary for display. The critical aspects of the "mobile device" are that it is resource-constrained, has a simple programming environment (e.g., JSON, JavaScript), simple protocol stack (e.g., HTTP), and simple display functionality (e.g., HTML browser). The goal is, in part, to avoid burdening the client with additional libraries such as those that are necessary to process SOAP, WSSE, MIME-Multipart, MTOM/XOP, eBRIM, and multi-depth XML.

The Mobile access to Health Documents (MHD) Profile defines one pair of actors and a transaction to submit or push new "document entries" from the mobile device to a receiving system. Another set of actors and transactions is used to query a list of "document entries" having specific metadata, and to retrieve a document.

The transactions defined here leverage the [document content- and format-agnostic metadata concepts](#) that were initially developed for [XDS](#) but simplify them for access in constrained environments including mobile devices.

The MHD Profile can be used as an [API to a Document Sharing exchange using XDS or XCA](#). The MHD Profile is used by the [MHDS Document Sharing](#) solution. The MHD Profile can be used in [push solutions](#) alone or as an API to solutions like XDR or XDM. These are further elaborated in [Cross Profile Considerations](#).

The [Mobile Cross-Enterprise Document Data Element Extraction \(mXDE\)](#) Profile combines MHD with the PCC Query for Existing Data for Mobile (QEDm) Profile to provide element level access to the medical information available in a Document Sharing exchange. More details can be found in the white paper on [Document Sharing Health Information Exchange](#).

MHD is part of [IHE - IT-Infrastructure](#) Domain and part of the [IHE Document Sharing Health Information Exchange](#) solution.

<https://profiles.ihe.net/ITI/MHD/index.html>

- Almost all IHE «mobile» Profiles are now published as FHIR Implementation Guides with
  - Actors, Transactions defined
  - Conformance Resources (StructureDefinitions, ValueSets, CodeSystems, ConceptMaps, Extensions etc)
  - and with examples!
- Facilitates also testing because Implementation Guides can be used for validation during development.



- IHE ITI Planning Committee and Technical Committee
- Work Item Proposal
- Monthly Planning Meeting
- Bi-weekly Telcos for Work Items
- 3 yearly F2F or virtual weekly meeting for work item development
- Public Comment Phase
- Trial Implementation

<https://github.com/IHE/IT-Infrastructure/projects/2>

- Mobile Access to Health Documents (MHD)
- Secure Retrieve (SeR)
- Basic Audit Log Patterns (BALP)
- Sharing Valuesets, Codes, and Maps (SVCM)

<https://profiles.ihe.net/ITI/>

## Public Comment

The following documents are currently open for Public Comment:

- [Cross-Community Patient Discovery \(XCPD\) Health Data Locator and Revoke Option](#) – Revised 2023-03-03

Comments on this document should be submitted by April 3, 2023. Submit your comments [here](#).

- [Document Sharing Across Network Topologies](#) – Revised 2023-03-03 🌐

Comments on this document should be submitted by April 3, 2023. Submit your comments via traditional methods [here](#) or by creating a [GitHub Issue](#).

<https://profiles.ihe.net/ITI/>

The screenshot shows the GitHub repository page for IHE/IT-Infrastructure. The repository is public and has 40 issues, 1 project, and 27 unwatched items. The main content area displays a Kanban board for 'IT Project Planning' with four columns:

- 4 Under assessment by planning**:
  - IT1 sex and gender profiling (#187)
  - Convert mACM to an IG published (#155)
  - Re-Document XDS Metadata Update (#124)
  - Federated Directory Grouping (#192)
- 12 Planning Assessed Work Items**:
  - approved CPs integration (#194)
  - IG for Accessibility to IPS (#197) with Dev-M, Review-M, and Testing-S labels.
  - Use \$match in PDQM (#163) with Dev-M, Review-M, and Testing-M labels.
  - DSG handling of JSON signature (#195) with Dev-M, Review-S, and Testing-L labels.
  - Finance and Insurance Services (#190) with Dev-XL, Review-XL, and Testing-XL labels.
  - Whitepaper: multiple choices of Patient id/identifier to use with server metadata
- 5 In development by Tech**:
  - CP-Maintenance (#171) with Dev-S and Review-S labels.
  - Scheduling for Mobile (#139) with Dev-M, Review-L, and Testing-L labels.
  - Privacy Consent on FHIR (PCF) (#183) with Dev-L, Review-M, and Testing-M labels.
  - RESTful document subscription (DSUBm) (#123) with Dev-L, Review-L, and Testing-L labels.
  - Convert NPFS to an IG published (#154) with Dev-S, Review-S, and Testing-S labels.
- 2 Public Comment**:
  - Move XCPD Revoke Into Its Own Transaction (#188) with Dev-S, Review-S, and Testing-S labels.
  - Document Sharing Across Network Topologies - Whitepaper (#142) with Dev-M and Review-M labels.

A search bar labeled 'Filter cards' is located at the top right of the board.

<https://github.com/IHE/IT-Infrastructure/projects/2>



This page is part of the IHE Mobile Access to Health Documents (v4.2.0: Publication) based on [FHIR R4](#). This is the current published version. For a full list of available versions, see the [Directory of published versions](#).

## Issues

### Note


### Significant changes since MHD Version 4.1.0

Version 4.2.0


- changed to AuditEvent profiling leveraging [Basic Audit Log Patterns \(BALP\) Release 1.1.0](#)
  - changes to RESTful type, and query subtype
- Added new features
  - Add an [Generate Metadata](#) that adds the [ITI-106](#) operation that allows for one structured/coded document to be published.
    - Is the use of Operation preferable to the Simplified Publish?
  - Add an [Simplified Publish](#) option that allows for one DocumentReference with the document in the .data element to be published, expecting the Document Recipient to create the SubmissionSet derived off of the DocumentReference and Community mapping policy.
  - Add an [ITI-65 FHIR Documents Publish](#) option with support in ITI-65 to include a FHIR Document Bundle as an alternative to Binary. This makes less the burden on the Document Source to serialize the content into an appropriate Binary format, as that requirement is moved to the Document Recipient. There are use-cases where the Document Recipient will use the FHIR Document Bundle directly, and there are requirements on the Document Recipient to serialize the FHIR Document Bundle when grouped with non-FHIR Actors like XDS/XDR/XDM.
    - This is added as an option at this time to keep base compatibility with existing MHD. This may become normal functionality of ITI-65 eventually
  - Each of these new options may survive or may be removed. Please voice your interest, and sign up for IHE-Connectathon to test these options. Based on interest these Options may survive or be removed.


- [Significant changes since MHD Version 4.1.0](#)
- [Significant changes since MHD Version 3.2](#)
- [Issues](#)
  - [Open Issues](#)
  - [Closed Issues](#)

[https://profiles.ihe.net/ITI/MHD/a\\_issues.html](https://profiles.ihe.net/ITI/MHD/a_issues.html)



Integrating  
the Healthcare  
Enterprise



**Basic Audit Log Patterns (BALP)**  
1.1.1 - Trial-Implementation 

BasicAudit Home | 
 Volume 1 ▾ | 
 Volume 3 ▾ | 
 Test Plan | 
 Artifacts | 
 Other ▾

Table of Contents > | 
 Basic Audit Log Patterns (BALP) | 
 <prev | bottom | next>

This page is part of the IHE Basic Audit Log Patterns (BALP) (v1.1.1: Trial Implementation) based on [FHIR R4](#). This is the current published version. For a full list of available versions, see the [Directory of published versions](#).

## Basic Audit Log Patterns (BALP)

Official URL: <a href="https://profiles.ihe.net/ITI/BALP/ImplementationGuide/ihe.itl.balp">https://profiles.ihe.net/ITI/BALP/ImplementationGuide/ihe.itl.balp</a>	Version: 1.1.1
Active as of 2022-10-21	Computable Name: IHE_ITI_BALP

The **Basic Audit Log Patterns (BALP) Implementation Guide** is a **Content Profile** that defines some basic and reusable AuditEvent patterns. This includes basic audit log profiles for FHIR RESTful operations to be used when there is not a more specific audit event defined. A focus is on enabling Privacy centric AuditEvent logs that hold well-formed indication of the Patient when they are the subject of the activity being recorded in the log. Where a more specific audit event can be defined, it should be derived off of these basic patterns.

**Note**

Significant Changes, Open, and Closed Issues

[Search this IG](#)

- [Organization of This Guide](#)
- [Conformance Expectations](#)
- [Download](#)

### Organization of This Guide

This guide is organized into four main sections:

1. Volume 1: Profiles
  1. 52 BasicAudit Introduction
  2. 52.1 BasicAudit Actors and Content
  3. 52.2 BasicAudit Actor Options
  4. 52.3 BasicAudit Required Groupings
  5. 52.4 BasicAudit Overview
  6. 52.5 BasicAudit Security Considerations
  7. 52.6 BasicAudit Cross-Profile Considerations
2. Volume 3: Content Section
  1. 5.7 Basic Audit Log Patterns
3. Test Plan
4. Changes to other documents

See also the [table of contents](#) and the index of [artifacts](#) defined as part of this implementation guide.

<https://profiles.ihe.net/ITI/BALP/index.html>



This page is part of the IHE ITI Mobile Care Services Discovery (v3.8.0: Public-Comment) based on [FHIR R4](#). This is the current published version. For a full list of available versions, see the [Directory of published versions](#).

## mCSD Open and Closed issues

### Note

### Significant changes from mCSD, Rev 3.5:

- Removed Additional Hierarchy extension due to addition of OrganizationAffiliation which can fulfill that use case.
- Changed Organization.type and Location.type for Facilities and Jurisdictions to use a defined CodeSystem instead of URNs.
  - Changed the cardinality and slicing of type to fix QA errors. Additional slices can be made if needed by implementors.
- Added in AuditEvent structure definitions with examples based on [Basic Audit](#).
- Added [Purpose Of Use](#) extension for Endpoint and Organization with [Search Parameter](#).

- [Significant changes from mCSD, Rev 3.5:](#)
- [Significant changes from mCSD, Rev 3.4:](#)
- [Issues](#)
  - [Open Issues and Questions](#)
  - [Closed Issues](#)
- [Significant changes from mCSD, Rev 3.3:](#)

<https://profiles.ihe.net/ITI/mCSD/issues.html>

# Hot profiles in development

The screenshot displays two IHE ITI profile pages and a GitHub repository. The top left shows the 'IHE ITI Scheduling' profile (0.1.0-current - ci-build) with a fire icon. The top right shows the 'Privacy Consent on FHIR' profile (0.0.1-current - ci-build) also with a fire icon. Below these are navigation menus and 'Table of Contents' links. A yellow highlight on the left page reads: 'IHE ITI Scheduling, published by IHE IT Infrastructure is based on the current content of https://github.com/IHE/ITI.DSUBm'. The right page has a yellow highlight: 'Privacy Consent on FHIR, published by IHE IT Infrastructure Technical Committee. This is not an authorized publication; it is the continuous build for version 0.0.1-current). This version is based on the current content of https://github.com/IHE/ITI.DSUBm'. The bottom right shows the GitHub repository 'IHE/ITI.DSUBm' with a commit history table:

Commit	Author	Message	Time
3a09f16	gpavan19	Initial commit	last month
		draft	3 weeks ago
		Initial commit	last month
		Initial commit	last month
		Initial commit	last month
		Initial commit	last month

<https://build.fhir.org/ig/IHE/ITI.Scheduling/volume-1.html>

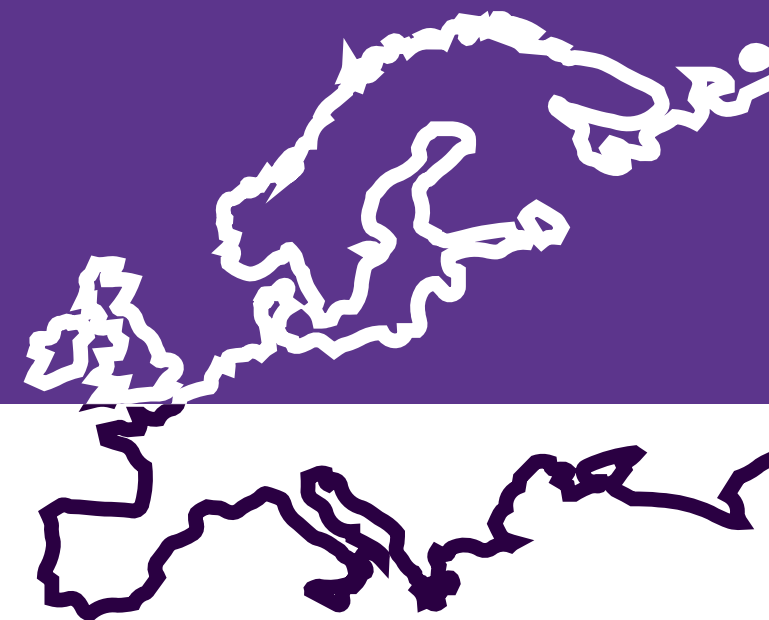
<http://build.fhir.org/ig/IHE/ITI.PCF/branches/master/index.html>

<https://github.com/IHE/ITI.DSUBm>





Integrating  
the Healthcare  
Enterprise



Q&A