

The IHE logo consists of the letters 'IHE' in a bold, dark blue, sans-serif font. A thin vertical line is positioned to the right of the letters.

**IHE**

Integrating  
the Healthcare  
Enterprise

The background features a light purple color scheme with abstract, flowing lines and a faint, stylized globe showing the Americas in the lower-left corner.

# **IHE IT Infrastructure (ITI) Domain & Connectathon Snapshot**

## Today's hosts



**Daniel Berezeanu**  
Ready Computing  
IT Planning co-chair  
Technical Committee  
member

# Agenda

## **What we'll cover:**

- IT Infrastructure Overview
  - ITI's families of profiles
  - What's new this year?
- How to participate in IHE
  - IHE International Membership
  - Planning & Technical Committees
- High-level Connectathon overview
- Q&A

## **Not covered today:**

- Details about other domains
- Details about North American Connectathon 2018 and HIMSS Interoperability Showcase Webinar
- Other webinars are coming! See <http://www.ihe.net/Webinars/>

# IT Infrastructure Domain Focus

- **IT Infrastructure concentrates on:**
  - Document Sharing
  - Security and Privacy
  - Provider and Patient Identity Services
  - REST-based exchange
  - Workflow Management
  - Other Infrastructure and whitepapers

# Document Sharing

Profiles for sharing documents within a community:

- XDS.b – Cross-Enterprise Document Sharing
- XDR – Cross-Enterprise Reliable Interchange
- XDM – Cross- Enterprise sharing Exchange Media
- XDS-SD – Scanned Documents
- MHD – Mobile access to Health Documents

Profiles for sharing documents between communities:

- XCA – Cross-Community Document Sharing
- XCF – Cross Community Fetch
- XCDR - Cross-Community Document Reliable Interchange

Enhancements for document sharing:

- MPQ – Multi-patient Query
- DSUB – Document Metadata Subscription
- Delayed Document Assembly
- Metadata Update

# Document Sharing

Enhancements for document sharing:

- MPQ – Multi-patient Query
- DSUB – Document Metadata Subscription
- Delayed Document Assembly
- Metadata Update

## **NEW for 2017**

- RMD – Remove Metadata and Document

# Provider and Patient Identity Services

**Patient:**

- PDQ, PDQ v3, PDQm – Patient Demographic Query
- PIX, PIX v3, PIXm – Patient Identifier Cross-Reference
- PAM – Patient Administration
- PLT – Patient Location Tracking
- XCPD – Cross Community Patient Discovery
- XPID – XDS Affinity Domain Patient ID Change Management

**Provider:**

- HPD – Healthcare Provider Directory, including Federation
- CSD – Care Service Discovery
- PWP – Personnel White Pages

# Security & Privacy

- ATNA – Audit Trail and Node Authentication
- BPPC – Basic Patient Privacy Consents
- XUA – Cross-Enterprise User Assertion
- EUA – Enterprise User Authentication
- DEN – Document Encryption
- SeR - Secure Retrieve
- DSG – Document Digital Signature

## **New in 2017**

APPC – Advanced Patient Privacy Consent

# REST-based Exchange

- IUA – Internet User Authorization
- RID – Retrieve Information for Display

## **HL7 FHIR® DSTU3 based:**

- PIXm - Patient Identifier Cross-Reference for Mobile
- mACM - Mobile Alert Communication Management
- RESTful query for ATNA
- MHD – Mobile Access to Health Documents
- PDQm – Patient Demographic Query for Mobile

## Workflow Management

- XDW – Cross Enterprise Document Workflow
- RFD – Retrieve Form for Data Capture

## Other Infrastructure

- CT – Consistent Time (NTP)
- PSA – Patient Synchronized Applications (CCOW)
- SVS – Sharing Value Sets
- Other handbooks & whitepapers available on [http://ihe.net/technical\\_frameworks/#IT](http://ihe.net/technical_frameworks/#IT)

For a quick tutorial on how to read and navigate IHE technical frameworks, watch the first webinar on this page: <https://gazelle.ihe.net/training>

## Summary - What's New This year

- Coming in Sep 2017:
  - Mobile Care Services Discovery (mCSD)
  - Non-Patient File Sharing (NPFSm)
  - Mobile Cross-Enterprise Document Data Element Extraction (mXDE)
  - Remove Metadata and Documents (RMD)
- Updates to HL7 FHIR® DSTU3 based profiles:
  - Appendix Z on HL7 FHIR
  - Mobile Access to Health Documents (MHD)
  - Patient Identifier Cross-reference for Mobile (PIXm)
  - Patient Demographic Query for Mobile (PDQm)



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# ITI wants YOU!

## ITI is Global

### Sponsors:

- Health Information Management Systems Society (HIMSS) [www.himss.org](http://www.himss.org)
- ASIP Santé- <http://esante.gouv.fr>

### Committee participation includes:

- Austria, Belgium, Canada, France, Germany, Italy, Japan, South Africa, United States, Netherlands



**Published  
For Public  
Comment**

**IHE Technical  
Framework  
Developed**

**Trial  
Implementation  
Posted**



months 6-13

**Test at IHE Connectathons**



months 14-18

**Publish in IHE's  
Product Registry**



**Demonstrations, eg**

**HIMSS INTEROPERABILITY  
SHOWCASE™**

**Profile Selection by  
Committees**

**IHE Call for  
Proposals Opens**  
months 1-5

***IHE Improves  
Safety, Quality and  
Efficiency in Clinical  
Settings***

**Install  
interoperable  
products in  
clinical  
settings  
worldwide**



# Annual Publication & Testing Cycle –

IHE Profile Cycle Stages	Open Date	Close Date
<b><i>Call for Proposals</i></b>	Aug 1, 2017	Sept 22, 2017
<b><i>Profile Selection</i></b>	Planning Cmte October 16-17 2017	Technical Cmte November 15-16 2017
<b><i>IHE Profiles drafted in IHE Technical Committee</i></b>	Dec 2017	May 2017
<b><i>Public Comment</i></b>	May , 2018	End June, 2018
<b><i>Public Comment Resolution; Trial Implementation Published</i></b>	July 2018	September 2018
<b><i>IHE N.A. Connectathon Registration</i></b>	Sept 6, 2017	Oct 6, 2017
<b><i>IHE N.A. Connectathon Cleveland, Ohio</i></b>	Jan 15, 2018	Jan 19, 2018
<b><i>IHE European Connectathon The Hague, the Netherlands</i></b>	April 16, 2018	April 20, 2018



## How to Participate?

- **Teleconferences:** Provide active feedback to the lead authors of each work item as they are developed. Each work item has regularly scheduled calls.
  - **Email Discussions:** Occasional email discussions on the technical committee and working group email mail lists related to technical issues.
  - **Face-to-Face Meetings:** Committees meet occasionally throughout the year(travel is optional, but highly beneficial) where the focused work on milestones is completed. Meeting schedules and dates vary by domain.
  - **Public Comment:** Provide comments on work items when they are released for public comment, and/or internal committee review.
- 
- Apply for IHE International Organizational Membership
    - Visit: <http://ihe.net/Join/>
    - [Review IHE's 400+ Organizational Members](#)

## Benefits of Participation

- **Support the development of IHE-based products** in your company. Ensure your organization's products and implementations are reflected in the development of new profiles and new changes made to the existing Technical Framework
- **Establish subject matter expertise** in IHE profiles and content and become an asset to your business and industry.
- **Build name recognition** for you and your company; active IHE members are highly visible and well-known in the Healthcare IT world.
- **Provide leadership** to develop well written IHE profiles that benefit the broader IHE and Health IT community.

# Testing & Demonstrating IHE capabilities

## *Two Related events...*

### 1. Annual IHE Connectathon

Week-long in-person testing event in NA and Europe

Focus on ***peer-to-peer interoperability testing*** & exercising IHE profiles and transactions

### 2. HIMSS Interoperability Showcase

Opportunity to demonstrate your IHE capabilities

Successful completion of Connectathon testing is a *prerequisite* to demonstrating IHE profiles in the Showcase

### 3. Ehealth Week (europe)

Opportunity to demonstrate your IHE capabilities

Successful completion of Connectathon testing is a *prerequisite* to demonstrating IHE profiles in the Showcase

**HIMSS****Showcase Rqmts:**

- Registration
- Contract
- Fee payment
- Use case planning
- Internet testing

**Connectathon Rqmts:**

- Registration
- Contract
- Fee payment
- Pre-Connectathon tests with tools
- Configuration sharing
- System preparation
- Connectathon week testing with partners



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# Getting started with IHE Connectathons: Where and when in 2018?

## **North American Connectathon 2018** January 15 - 19, 2018

- January 15 - 19, 2018
- Cleveland Convention Center
- Registration is open Sep 6 – Oct 6, 2017
- See: <http://iheusa.org/connectathon.aspx>

## **HIMSS Interoperability Showcase 2018**

- Feb 19 – 23, 2017
- Las Vegas, Nevada
- See: <http://www.interoperabilityshowcase.org/>

## **European Connectathon 2018**

- April 16-18, 2018
- The Hague, the Netherlands
- Registration opens in fall
- See: <http://ihe-europe.net/connectathon/connectathon>

# Getting started with the IHE Connectathons

Let's fast-forward to January 2018...



# General Process During Connectathon

- You are assigned a set of required tests for each IHE profile/actor you support.
- You execute each test with peer systems; you choose your partners; this is an iterative process throughout the week: the “three test” rule
- Connectathon Monitors examine individual test results (domain/clinical experts, not vendors)
- Domain Project Managers (eg Lynn) evaluates these results against the “success” criteria and assign passing grades

**Cooperative efforts to debug problems and work towards success**

**Real-world testing in an environment where it's safe to fail**

**Opportunity to find problems in products *and* in the profiles**

## Setting your Expectations

- Initial failures can be fixed and retested later in the week
- You set priorities & manage your time. We do not guarantee you will complete your tests.

## When you finish...

- IHE publishes which *actor/integration profile pairs* each company has successfully tested
- We do not publish failures
- This is not government testing or certification
- You have the benefits of an extraordinary testing opportunity
- You have a “ticket” to participate in IHE showcase demonstrations

# IHE General Connectathon Timeline

**Jun**

**Jul**

**Aug**

**Sep**

**Oct**

**Nov**

**Dec**

**Jan**

**Feb**

## What do we want to do?

- Match product capabilities to IHE profiles
- Consider demo use cases

## Can we do this?

- Goals
- People
- Budget
- Commitment

**Regis-  
ter!!!**

**Development  
Pre- C'thon tests**

**Config  
entry**

**Finish  
advanced  
prep**

**Connectathon!** ◆

**Interoperability Showcase** ◆

**Jun**

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## What do we want to do?

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**You are here**

**...to get here in January...**



## What do we want to do??

**For Connectathon, you need to register for actors in IHE profiles**

- Each profile/actor pair translates into a set of requirements for your product, and a set of tests at the connectathon

**What influences that selection?**

- Existing implementation
- Future product plans
- Showcase considerations



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*Great, but how do I map my product's capabilities to IHE profiles?*

## *Conformity assessment*

*North America cert - Consort by HIMSS*  
*Europe certification - IHE Conformity*  
*Assessment Scheme (CAS)*

## Before you register...

### **Read IHE Integration Profiles**

- Do they match your existing product or plans?

### **Consult with HIMSS Showcase managers:**

- What product capabilities do you want to highlight/demonstrate?
- What use cases will be part of the Interoperability Showcase demonstration?

### **Ask questions of the Connectathon technical managers:**

- We do not know your product
- We \*do\* know the IHE Profiles and can help map your product capabilities to IHE profiles
- June/July/August is a good time to set up a call with us

## Contact info

### **IT Infrastructure Domain activities:**

#### **Planning Committee**

- Daniel Berezeanu -- [daniel.berezeanu@readycomputing.com](mailto:daniel.berezeanu@readycomputing.com)
- Eric Heflin – [ericheflin@gmail.com](mailto:ericheflin@gmail.com)

#### **Technical Committee**

- Elliot Silver – [Elliot.Silver@mckesson.com](mailto:Elliot.Silver@mckesson.com)
- Mauro Zanardini – [mzanardini@consorzioarsenal.it](mailto:mzanardini@consorzioarsenal.it)

### **Connectathon & Showcase:**

**Connectathon Technical Support:** registration, preparation, test tools, schedule

- Steve Moore – overall Connectathon technical management– [moores@mir.wustl.edu](mailto:moores@mir.wustl.edu)
- Lynn Felhofer – ITI Domain Testing - [felhofer.lynn@gmail.com](mailto:felhofer.lynn@gmail.com)

**Connectathon Logistics support:** fees, contracts, invoices, hotel info, badges...

- IHE USA staff – [connectathon@ihe.net](mailto:connectathon@ihe.net)

#### **HIMSS Interoperability Showcase**

- Bronwen Huron- [bpitchford@himss.org](mailto:bpitchford@himss.org)

- IHE Technical Frameworks
  - [www.ihe.net/Technical\\_Framework/index.cfm#IT](http://www.ihe.net/Technical_Framework/index.cfm#IT)
- ITI profile summaries
  - [http://wiki.ihe.net/index.php?title=Profiles - IHE IT Infrastructure Profiles](http://wiki.ihe.net/index.php?title=Profiles_-_IHE_IT_Infrastructure_Profiles)
- Google Groups
  - How to join: [http://wiki.ihe.net/index.php?title=Mailing\\_Lists](http://wiki.ihe.net/index.php?title=Mailing_Lists)
  - ITI Planning Committee: <https://groups.google.com/d/forum/itiplan>
  - ITI Technical Committee: <https://groups.google.com/d/forum/ititech>
- Connectathon Info:
  - North America – <http://iheusa.org/connectathon.aspx>
  - Europe - <http://www.ihe-europe.net/connectathon/connectathon>
  - Connectathon Results Database - <http://connectathon-results.ihe.net/>
- IHE Product Registry (for providers & purchasers – to find products with IHE capabilities)
  - <http://product-registry.ihe.net/PR/home.seam>
- Learn More
  - IHE Int'l 2016 Webinar Series - <http://ihe.net/Webinars/>



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*Questions?*

**Thank you for attending!**