



## HL7 Finland ry.

C/ o Juha Mykkänen, University of Eastern Finland  
School of Computing, HIS R&D Unit, Bioteknia 2  
PO Box 1627, FI-70211 Kuopio, Finland  
tel: +358-40-355 2824

### Board 2015:

Terhi Kajaste, FiHTA  
Juha Mykkänen, THL (chair)  
Jaakko Lähteenmäki; VTT  
Jani Kariniemi, Medi-IT

Jyrki Soikkeli, HUS  
Jarkko Uusitalo, CGI  
Marina Lindgren, Kela  
Mikko Huovila, STM  
Tajja Leppäkoski, Mylab

### Members 2014

Accenture Oy  
Acute FDS Oy  
Appelsiini Finland Oy  
Avain Technologies Oy  
BCB Medical Oy  
Carestream Health Finland Oy  
CGI  
Commit Oy  
Corame Oy  
Datawell Oy  
DT-Link Oy  
Edimaster Oy  
Elbit Oy  
Enersoft Oy  
Entteri Oy  
Etelä-Pohjanmaan shp  
FastROI Oy  
FiHTA-Terveysteknologian Liitto ry  
Fujitsu Finland Oy  
GE Healthcare Finland Oy  
Gofore Oy  
Helsingin ja Uudenmaan shp  
InterSystems B.V. Finland  
Istekki Oy  
Itä-Suomen yliopisto  
KELA  
Keski-Suomen shp  
Kibi Oy  
Kustannus Oy Duodecim  
L-Force Oy  
Lingsoft Oy  
Mawell Oy  
Medbit Oy  
Mediconsult Oy  
Medictes Oy  
Medi-IT Oy  
MediWare Oy  
Mylab Oy  
Pirkanmaan shp  
Planmed Oy  
PlusTerveys Oy  
Pohjois-Pohjanmaan shp  
Prime Solutions Oy  
PTTK Oy  
Receptum Oy  
RemoteA Oy  
Salivirta Oy  
Satakunnan shp  
Silmäasema Fennica  
Suomen Kuntaliitto  
Suomen Punainen Risti  
Taltioni osuuskunta  
TeliaSonera Finland Oyj  
Terveystieteiden ja Hyvinvoinnin Laitos  
Tieto Healthcare & Welfare Oy  
Tietotarha Oy  
Vaasan shp  
Valuecode Oy  
VITA-terveyspalvelut Oy  
VTT  
Whitelake Software Point Oy  
Yhtyneet Medix Laboratoriot Oy  
Ylioppilaiden terv.hoitosäätiö



## HL7 Finland: FHIR Hands-on Training and Connectathon

Helsinki, 5.-6.2.2015

HL7 Finland Association and Furore arrange a FHIR (Fast Health Interoperability Resources) training and Connectathon in Helsinki, 5-6 February, 2015.

### Summary of course content:

This training course offers a hands-on overview of the content of the HL7 FHIR standard. It also offers guidance on how to design, develop and test software that uses the HL7 FHIR interoperability standard, all the way from the wire-format up to validation and storage. The development process of new HL7 FHIR resources will not be touched upon.

### Who Should Attend:

This training course is aimed at those involved with the design, development, implementation, deployment and support of systems that use (or will use) the HL7 FHIR standard. Personal laptop with a development environment is recommended.

### Speakers (to be confirmed):

- Martijn Harthoorn and Mirjam Baltus, Furore, the Netherlands

### Initial agenda: see next page

- Day 1: FHIR Hands-on training: 5 February 9:00-17:00
- Day 2: FHIR Connectathon: 6 February 9:00-17:00

### Registration:

- send registration details (name, organization, possible dietary requirements) to: [mirja.turunen@kuopionsihteeripalvelu.fi](mailto:mirja.turunen@kuopionsihteeripalvelu.fi), by January 30<sup>th</sup>.
- the number of participants is **limited to 2 participants per organization**, (total 30 participants), additional registrations will be queued and notified, if space is available.

### Price:

- FREE for participants from HL7 Finland member organizations (including IHE members) (get the member rate by [joining the association](#))
- 1000 eur + VAT / participant for non-members

### The attendees are assumed to be familiar with:

- XML, Json and web-infrastructure protocols,
- Although not a requirement, knowledge of HL7 version 2 and/or HL7 version 3 will be helpful in understanding the material,
- Knowledge of .NET or Java platform is helpful, because some of the exercises will be done in either C# or Java. Should you not have knowledge of either platform, then you will be asked to partner with another attendee.
- General principles of data modeling,
- General software development principles like object orientation, databases, layered software design.

Video intro: <http://vimeo.com/70111320>

**Bank account:** NORDEA, IBAN FI31 2262 1800 0395 44, BIC NDEAFIHH  
**Trade-ID:** 1078357-1  
**Email:** [Juha.Mykkanen@uef.fi](mailto:Juha.Mykkanen@uef.fi)  
**Techn.Comm.:** [Timo.Kaskinen@salivirta.fi](mailto:Timo.Kaskinen@salivirta.fi) (+358 40 721 9123)

**OID-coder:** 1.2.246.777  
**Finnish WWW-server:** <http://www.hl7.fi>  
**International WWW** <http://www.hl7.org>  
**Date & time** 9 January 2015



## AGENDA (changes possible)

### Day 1: FHIR Hands-on training course

- Introduction
  - Overview of FHIR
  - Resources, extensions and the 80/20 rule
  - Resources and RESTful design philosophy
  - Using REST to exchange resources in XML and Json.
- Exercise: Requesting a patient Resource
- Deconstructing FHIR data
  - Resources
  - Datatypes and primitives
- Exercise: Person demographics, with extensions
- Contents of the FHIR distribution
- More on REST
  - Atom: adding identity, metadata and versioning
  - How FHIR uses verbs
  - Conformance profile
- Exercise: Requesting a patient resource using C#/Java support libraries
- Implementation aspects
  - How to handle multiple wire formats
  - Searching
  - Tour of Xml, Json and persistence alternatives
  - Implementation Examples
- Summary and recommendations
  - V2 messages, v3 CDA, IHE XDS and FHIR
  - Migration

### Day 2: FHIR Connectathon

- Connectathon with several themes such as Basic patient management, using and implementing different resources and functionalities using FHIR, profiles and conformance
- Participants will test and develop software in an informal way. Test servers will be available.
- The connectathon will be based on FHIR DSTU1 material: <http://hl7.org/implement/standards/fhir/>
- See example of Connectathon content: [http://wiki.hl7.org/index.php?title=FHIR\\_Connectathon\\_8](http://wiki.hl7.org/index.php?title=FHIR_Connectathon_8)
- More details will be provided for the registered participants.

**Tervetuloa / Welkom!**

**Goals of the training course:** Upon completion of this training course, attendees will be able to:

- Explain the key principles underlying FHIR.
- Explain the relationship between FHIR and other HL7 standards.
- Describe the characteristics and contents of the core FHIR information models.
- Help their organization to determine if, when, where and how they might implement FHIR
- Understand how FHIR aligns with REST, object-oriented and other common software-engineering principles.
- Compare strategies for using relational or document-oriented storage, validation and use of Xml and Json.
- Getting hands-on experience with the software implementation of FHIR and with the available reference implementations.

#### ***What is a Connectathon?***

A Connectathon is an opportunity to see how a specification behaves when the rubber hits the road. Many implementers come together in a single room and make use of the HL7 FHIR specification to share clinical data in ways that reflect real-world usage. It's a chance to experiment, to test, to discuss implementation strategies and to influence the development of the FHIR standard. After participating in a Connectathon, you'll have an excellent sense of if, when and where and how your organization will want to make use of FHIR.

A Connectathon is *\*not\** a demo (though there will be opportunities to demonstrate). A Connectathon is also not a certification process. You will receive no certificate of accomplishment.

Participation means developing software that makes use of the FHIR standard, in any language and implementing any scenario from any identified track. Participation does *\*not\** mean your software has to work perfectly (or at all), nor must it complete all scenarios in a given track. It is safe to fail: participants commit to discussing the activities of other participants only with their permission outside the event.