



HL7 CDA to FHIR mapping hands-on

16.6.2022, workshop with HL7 Italy

[Bit.ly todo](#)

Agenda

- 10.00 – 10.30 High Level Introduction CDA and FHIR Mapping (Differences between Standards, FHIR Mapping Language as independent Mapping Exchange format)
- 10.30 – 11.00 FHIR Logical Model of CDA - Exercise
- 11.15 – 12.15 FHIR Mapping Language Introduction with conversion to StructureMap - Exercise
- 14.00 – 15.00 CDA to FHIR mapping hands-on with matchbox - Exercise (based on provided Italian example)
- 15.00 – 15.30 Summary, Questions and answers - Exercise



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2015 - founder ahdis

2003 - 2014 visionary AG, docbox
2002 - 2003 Ecofin Research & Consulting AG
1994 - 2001 SPEAG

2016 - Dozent BFH Bern, ZHAW Winterthur

Medizininformatik, Interoperabilität

HL7.ch

Technical Manager, member hl7 since 2009

IHE Suisse Member since 2015

IHE International ITI Technical Committee Co-Chair

Dipl. Inf. ETH, ETH Zürich, 1996

IHE XDS Advanced Training, 2015
Certified HL7 CDA Specialist, 2015
Certified Scrum Master, 2014
NDK eHealthcare, Nottwil, 2009



Workshop

Übungen Computer Setup

- Editor: Visual Studio Code
 - REST Client Extension
 - fhir-tools Extension
- Github Desktop or git client locally
- Java Runtime for running HL7 Java Validator

Visual Studio Code

 Visual Studio Code

Docs

Updates

Blog

API

Extensions

FAQ

 Search Docs

 Download

Version 1.45 is now available! Read about the new features and fixes from April.

Overview

SETUP

Overview

Linux

macOS

Windows

Network

Additional Components

GET STARTED

USER GUIDE

LANGUAGES

NODE.JS / JAVASCRIPT

TYPESCRIPT

PYTHON

JAVA

C++

CONTAINERS

Setting up Visual Studio Code

Edit

Getting up and running with Visual Studio Code is quick and easy. It is a small download so you can install in a matter of minutes and give VS Code a try.

Cross platform

VS Code is a free code editor, which runs on the macOS, Linux, and Windows operating systems.

Follow the platform-specific guides below:

- [macOS](#)
- [Linux](#)
- [Windows](#)

VS Code is lightweight and should run on most available hardware and platform versions. You can review the [System Requirements](#) to check if your computer configuration is supported.

Update cadence

VS Code releases a new version [each month](#) with new features and important bug fixes. Most platforms support auto updating and you will be prompted to install the new release when it becomes available. You can also manually check for updates by running **Help > Check for Updates** on Linux and Windows or running **Code > Check for Updates** on macOS.

IN THIS ARTICLE

Cross platform

Update cadence

Insiders nightly build

Portable mode

Additional components

Extensions

Next steps

Common questions

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<https://code.visualstudio.com/docs/setup/setup-overview>

REST Client

Visual Code Extension

1

2

3

The image shows a Visual Studio Code window with the 'EXTENSIONS: MARKETPLACE' view open. The search results for 'REST Client' are displayed. The first result, 'REST Client 0.23.2' by Huachao Mao, is highlighted. Three blue arrows point from the numbers 1, 2, and 3 to the search bar, the extension list, and the extension details page respectively.

REST Client 0.23.2
REST Client for Visual Studio Code
Huachao Mao
918K 5 stars
Install

Simple REST Client 1.3.0
Easy to examine your API's responses directly within Visual Studio Code
Tino
9K 5 stars
Install

SP REST Client 0.1.4
SharePoint REST Client for Visual Studio Code
Sergei Sergeev
2K 5 stars
Install

MicroProfile REST Client Generator 0.1.1
Generate a MicroProfile REST Client using the OpenAPI Generator
MicroProfile Community
2K
Install

Bember REST Client 0.21.1
Fork of "REST Client" for internal use at Bember
bemberas
320
Install

Self Use REST Client 1.0.0
REST Client for Visual Studio Code
cweijan
213
Install

HTTP Client 0.34.0
Simple way to do HTTP requests.
Marcel J. Kloubert
16K 5 stars
Install

reStructuredText 128.0.0
reStructuredText language support (RST/ReST linter, preview, l...
LeXtudio Inc.
165K 3.5 stars
Install

stREST Client 0.1.3
stREST Client for Visual Studio Code
jgroom
445
Install

R LSP Client 0.1.6
R LSP Client for VS Code
REditorSupport
27K 5 stars
Install

REST API 3.0.1
Extension that provides a REST API to control your editor.
Marcel J. Kloubert
12K
Install

Azure REST for Ansible 0.0.18
Create, update or delete any Azure resource using Ansible
7K 5 stars
Install

Extension: REST Client humao.rest-client
Huachao Mao | 918,744 | 5 stars | Repository | License
REST Client for Visual Studio Code
Install

REST Client
build: passing | chat: on github | VS Marketplace: v0.23.2 | downloads: 4131680 | installs: 918949
rating: average: 4.94/5 (204 ratings)

REST Client allows you to send HTTP request and view the response in Visual Studio Code directly.

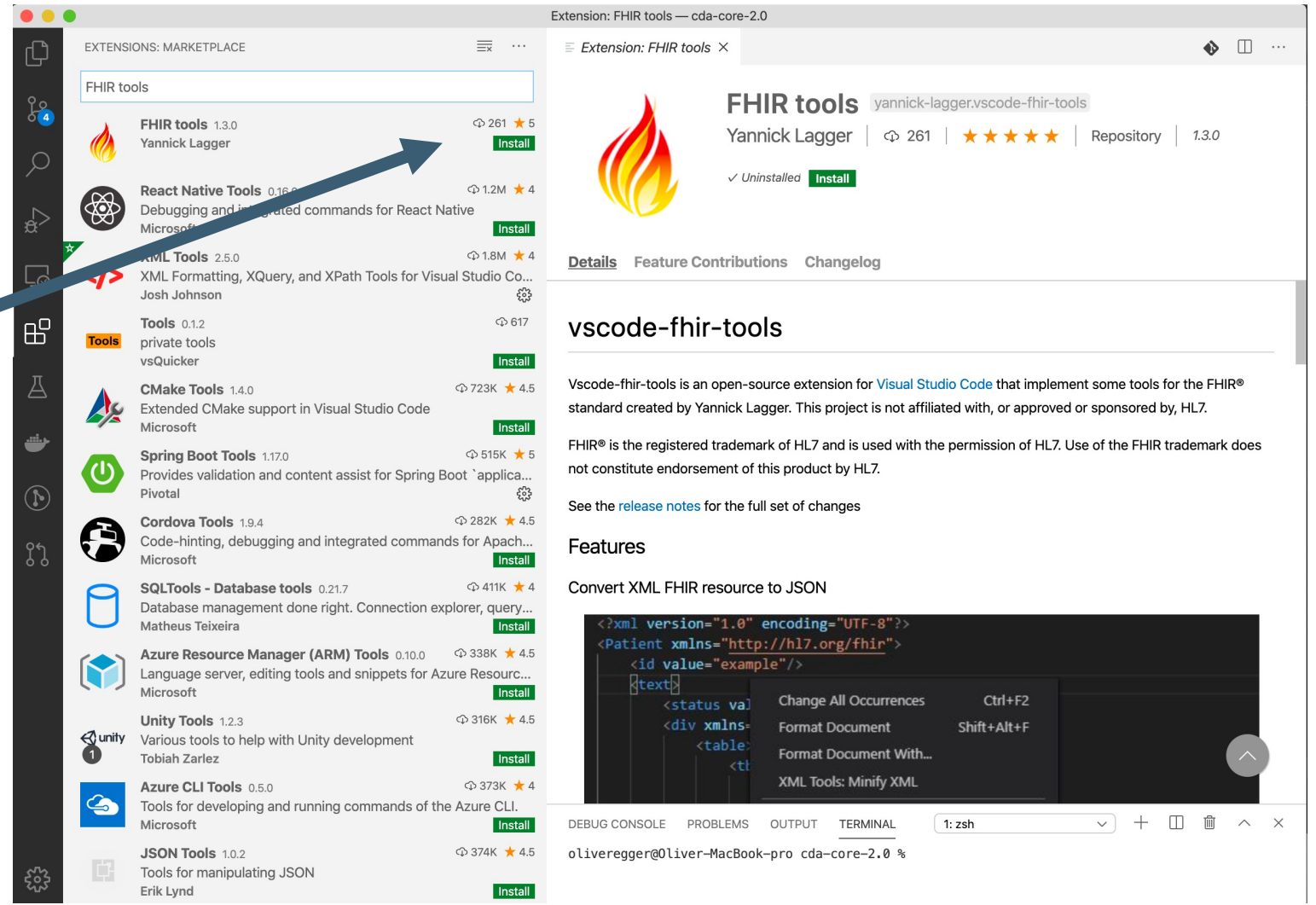
Main Features

- Send/Cancel/Rerun **HTTP request** in editor and view response in a separate pane with syntax highlight
- Send **GraphQL query** and author **GraphQL variables** in editor
- Send **cURL command** in editor and copy HTTP request as **cURL command**
- Auto save and view/clear request history
- Organize **MULTIPLE** requests in the same file (separated by **###** delimiter)
- View image response directly in pane
- Save raw response and response body only to local disk
- Fold and unfold response body
- Customize font(size/family/weight) in response preview
- Preview response with expected parts(**headers only**, **body only**, **full response** and **both request and response**)

DEBUG CONSOLE | TERMINAL | ... | 1: zsh | oliveregger@Oliver-MacBook-pro cda-core-2.0 %

FHIR tools

Visual Studio Code Extension



The image shows the Visual Studio Code interface with the FHIR tools extension marketplace listing on the left and the extension details page on the right. A blue arrow points from the 'FHIR tools' extension in the marketplace to the details page.

EXTENSIONS: MARKETPLACE

Search: FHIR tools

- FHIR tools** 1.3.0
Yannick Lager | 261 | 5 stars | [Install](#)
- React Native Tools** 0.16.0
Debugging and integrated commands for React Native | 1.2M | 4 stars | [Install](#)
- XML Tools** 2.5.0
XML Formatting, XQuery, and XPath Tools for Visual Studio Code... | 1.8M | 4 stars | [Install](#)
- Tools** 0.1.2
private tools | 617 | [Install](#)
- CMake Tools** 1.4.0
Extended CMake support in Visual Studio Code | 723K | 4.5 stars | [Install](#)
- Spring Boot Tools** 1.17.0
Provides validation and content assist for Spring Boot 'applica... | 515K | 5 stars | [Install](#)
- Cordova Tools** 1.9.4
Code-hinting, debugging and integrated commands for Apach... | 282K | 4.5 stars | [Install](#)
- SQLTools - Database tools** 0.21.7
Database management done right. Connection explorer, query... | 411K | 4 stars | [Install](#)
- Azure Resource Manager (ARM) Tools** 0.10.0
Language server, editing tools and snippets for Azure Resourc... | 338K | 4.5 stars | [Install](#)
- Unity Tools** 1.2.3
Various tools to help with Unity development | 316K | 4.5 stars | [Install](#)
- Azure CLI Tools** 0.5.0
Tools for developing and running commands of the Azure CLI. | 373K | 4 stars | [Install](#)
- JSON Tools** 1.0.2
Tools for manipulating JSON | 374K | 4.5 stars | [Install](#)

Extension: FHIR tools — cda-core-2.0

FHIR tools yannick-lagger.vscode-fhir-tools
Yannick Lager | 261 | 5 stars | Repository | 1.3.0
[Uninstalled](#) [Install](#)

[Details](#) [Feature Contributions](#) [Changelog](#)

vscode-fhir-tools

Vscode-fhir-tools is an open-source extension for [Visual Studio Code](#) that implement some tools for the FHIR® standard created by Yannick Lager. This project is not affiliated with, or approved or sponsored by, HL7.

FHIR® is the registered trademark of HL7 and is used with the permission of HL7. Use of the FHIR trademark does not constitute endorsement of this product by HL7.

See the [release notes](#) for the full set of changes

Features

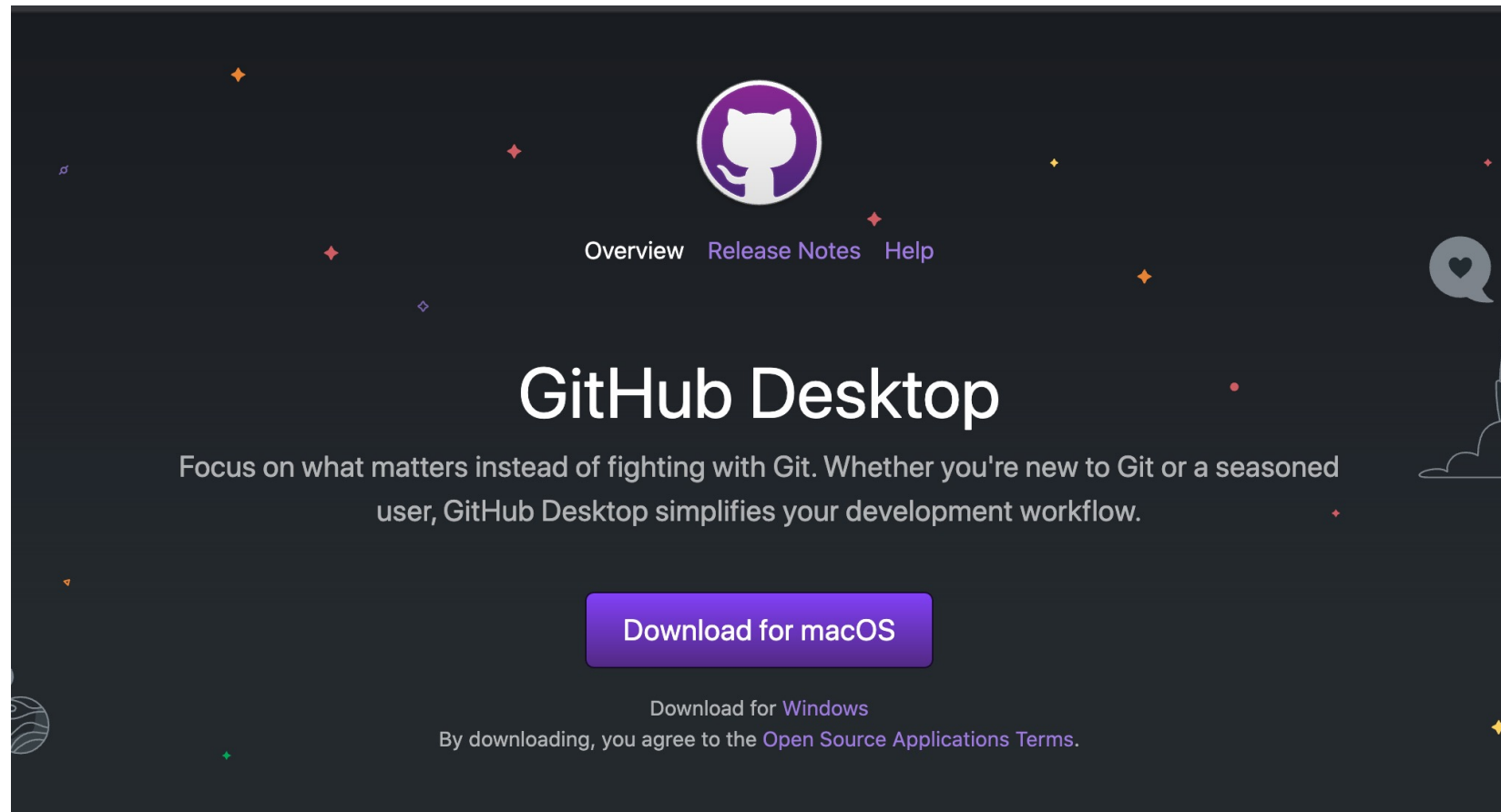
Convert XML FHIR resource to JSON

```
<?xml version="1.0" encoding="UTF-8"?>
<Patient xmlns="http://hl7.org/fhir">
  <id value="example"/>
  <text>
    <status val
  <div xmlns=
  <table>
  <tl
```

Change All Occurrences Ctrl+F2
Format Document Shift+Alt+F
Format Document With...
XML Tools: Minify XML

DEBUG CONSOLE PROBLEMS OUTPUT TERMINAL 1: zsh + - - - x
oliverregger@Oliver-MacBook-pro cda-core-2.0 %

Github Desktop



<https://desktop.github.com/>

Java



Suche 

Download Hilfe

HILFERESSOURCEN

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Wie installiere ich Java?



Wählen Sie das Betriebssystem, um Anweisungen zur Installation von Java zu erhalten:

- [Windows](#)
- [Mac OS X](#)
- [Linux](#)
- [Solaris](#)

Download und Installation unter Windows

Download und Installation von Java sind einfach und kostenfrei. Es gibt verschiedene Möglichkeiten, Java für Windows zu erhalten

- Onlinedownload
- Offlinedownload

https://www.java.com/de/download/help/download_options.xml

Preparation exercise

- <https://github.com/ahdis/cda-fhir-maps>
- Clone project with Desktop and open in Visual Studio Code

