GHCon2020

V International GNU Health Conference, Nov 20-21 2020

GNUHealth

MyGNUHealth PHR: A technical introduction

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openSUSE

THYMBRA HEALTHCARE

KHADAS

Qt

Cabildo de Gran Canaria

GRAN CANARIA SOLIDARIA

Consejería de Solidaridad Internacional

Agenda

- **About GNU Health**
  - History of the project & community
- **The GH ecosystem components**
  - The GNU Health Federation and its components
- **MyGNUHealth**
  - The GH Personal Health Record
- **MyGNUHealth technical infrastructure**
  - Framework and integration w/ GH Federation
- **Q&A**
  - Questions and answers

About me

Luis Falcón

President, GNU Solidario

Author of GNU Health

falcon@gnuhealth.org

Education

- Computer Scientist
- Physician
- Genomics & Medical Genetics

Activism

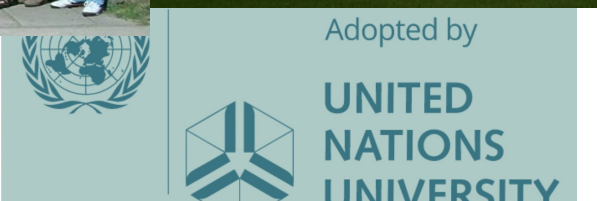
- Social Medicine
- Animal Rights
- Libre Software

History of GNUHealth and Community

- **GNU Solidario**
  - Is the NGO behind GNUHealth
  - Non-for-profit organization
  - Works globally
  - Focused on Social Medicine

- **Official GNU Project**
  - GNU Health is an official GNU project
  - Hosted at GNU Savannah
  - Many mirrors around the World
  - International community

GNUHealth around the world



GNUHealth

The Free / Libre Hospital and Health Information System

Social Medicine & Health Informatics

MyGNUHealth: A technical introduction
GHCon2020, Nov 21st, 2020

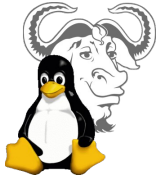
Official GNU Package

Official GNU project

Open Documentation

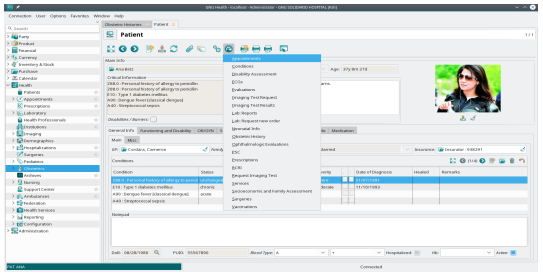
Relies on free technology

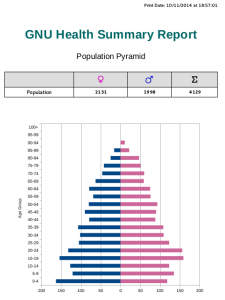
Friendly community

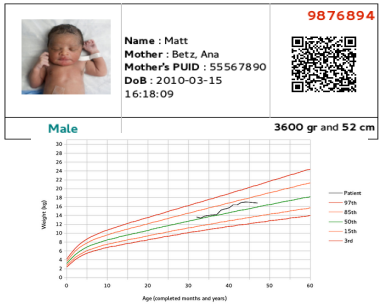


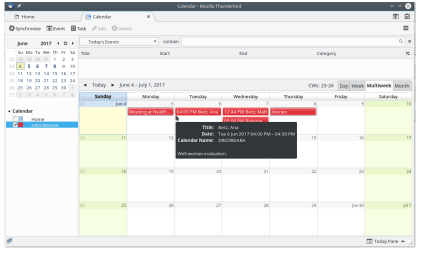
GNU Health ecosystem components

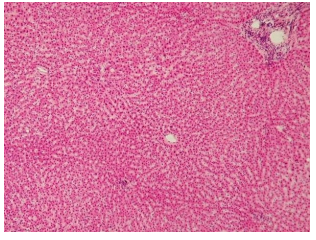
GNUHealth HMIS component

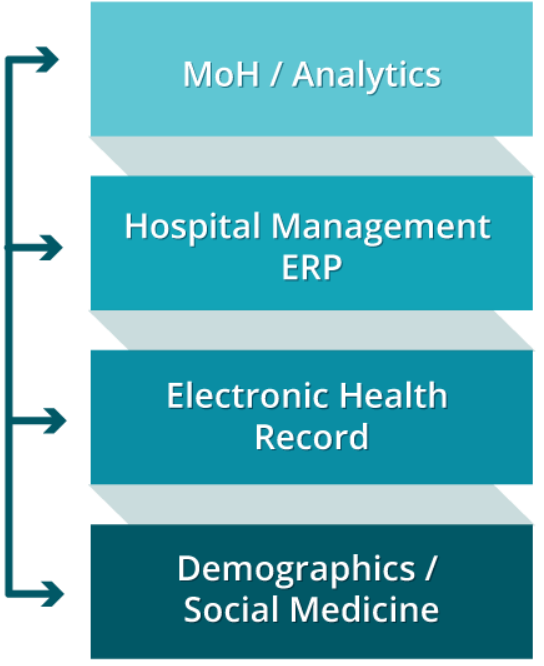












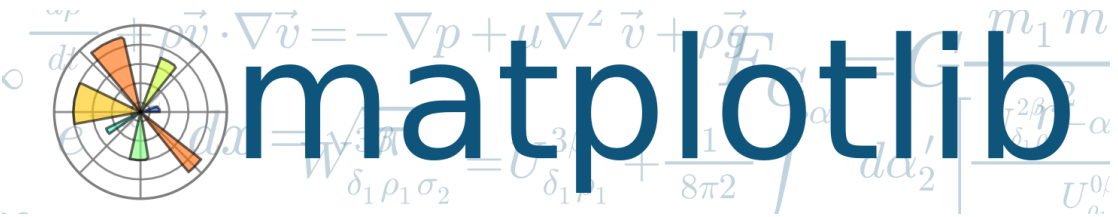
GNUHealth

MyGNUHealth: The Libre Personal Health Record

Empowering the person to be an **active member** in the **System of Health**

MyGNUHealth: Technology

Qt for Python PySide2



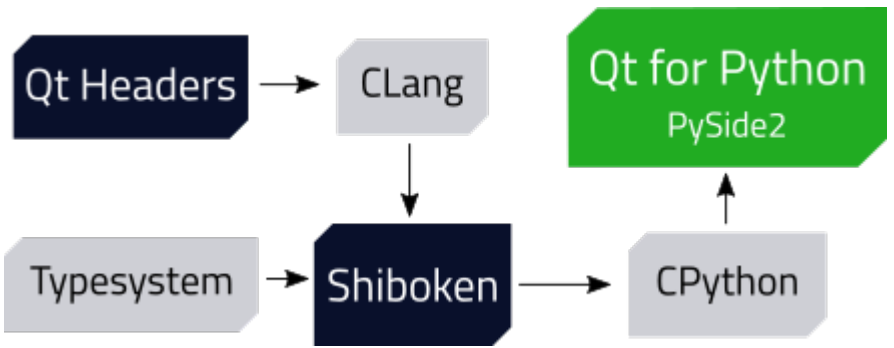
Python3 as main language

Python 3 is the main language used in most of GNU Health ecosystem components

Most packages can be found at the **Python Package Index (PyPi)**

Qt for Python (PySide2)

MyGNU Health is a Python3 application that uses the Qt framework



Source: https://doc.qt.io/qtforpython/shiboken2/shibokengenerator.html

MyGNUHealt is a convergent application

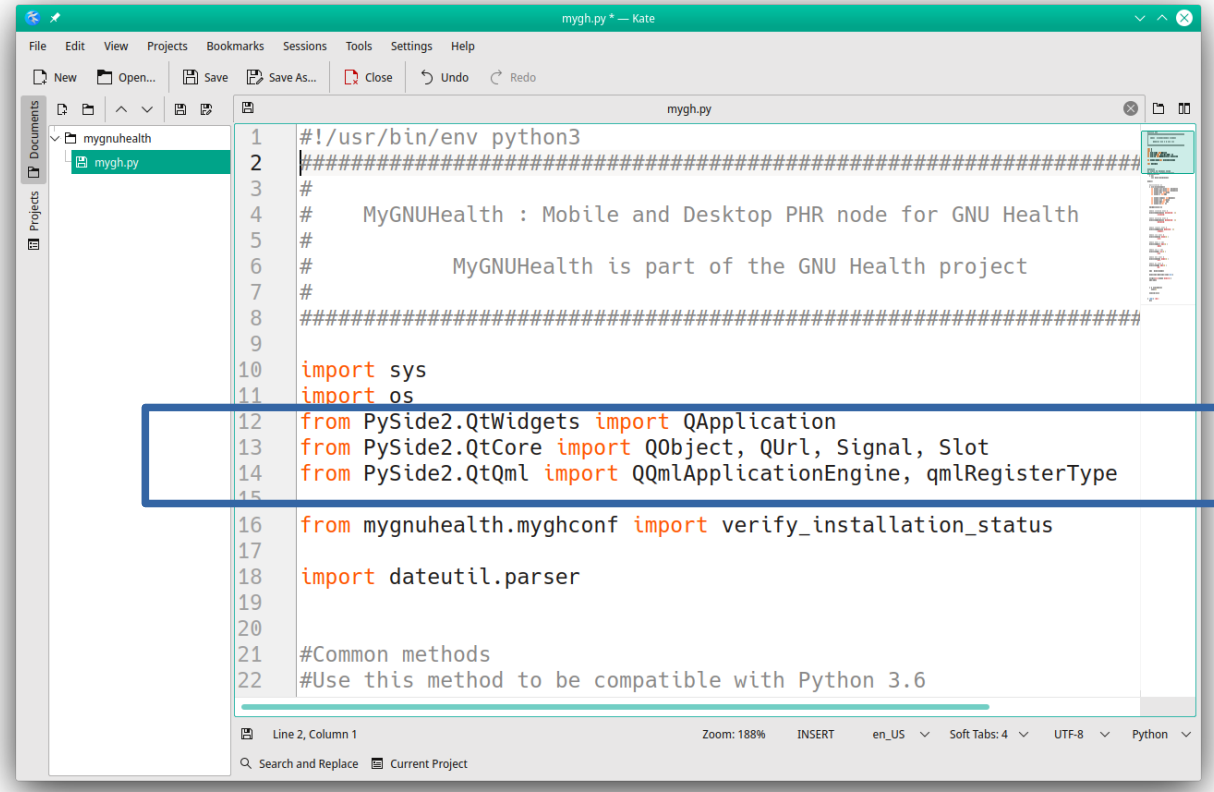
Kirigami is a KDE framework

Built on top of the QML language

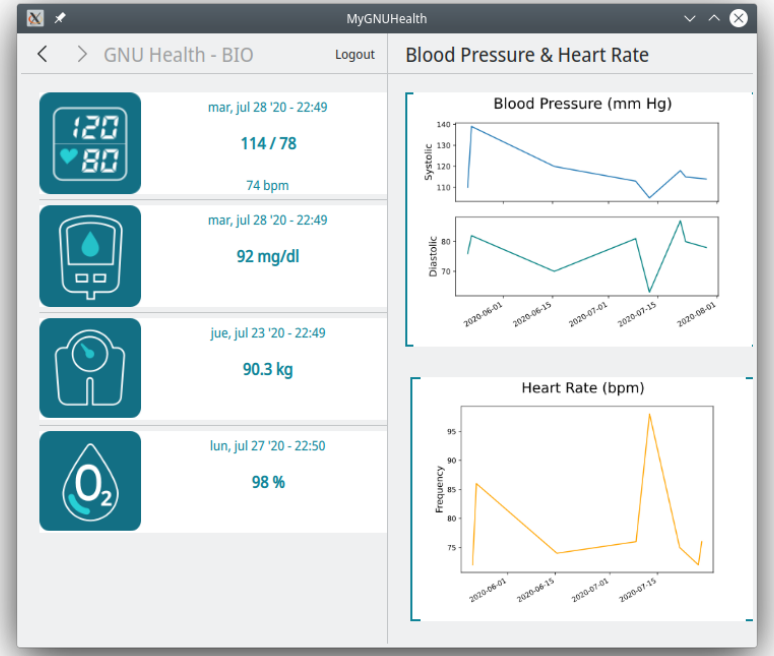
Set of QtQuick components to create convergent applications

MyGNUHealth is convergent. It adapts very well to desktops and mobile devices.

Qt for Python (PySide2)



MyGNUHealth running on Plasma Desktop



MyGNUHealth running on the PinePhone

Current development environment:

Hardware: PinePhone (“Braveheart”)

OS: KDE Neon (https://neon.kde.org/)

KDE Plasma mobile

Qt5

Kirigami (set of QtQuick components)

Local Storage

MyGNU Health uses TinyDB for storage

- Document oriented Database
- JSON encoded
- Python3 compatible
- Platform independent
- Easy to port from one device to another

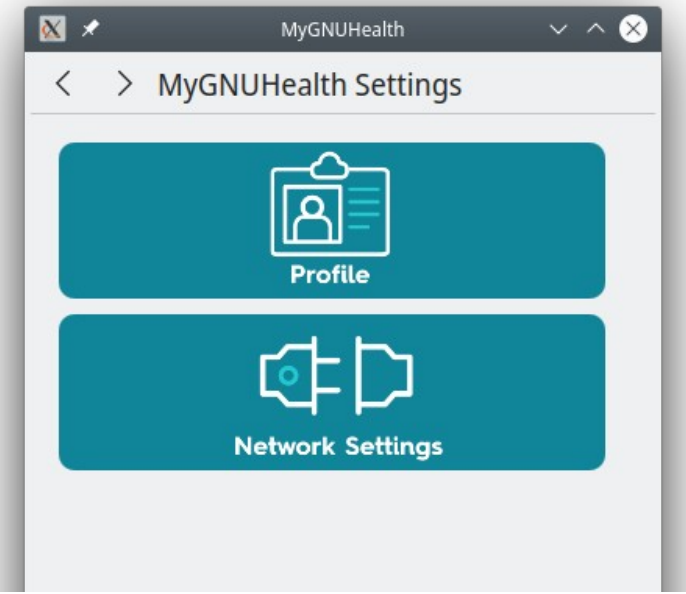
GH Federation and MyGNUHealth

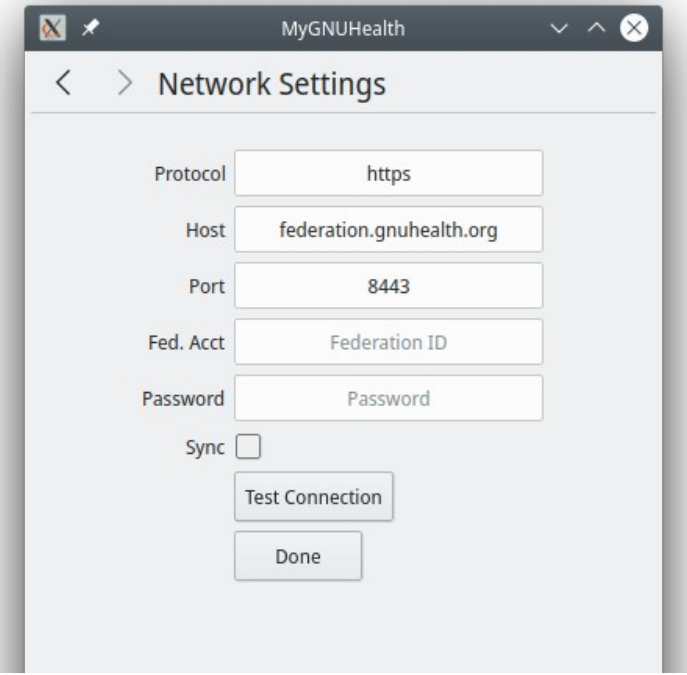
Nodes

Message Server

Information System

Coupling with GH Federation





MyGNUHealth nodes in the GH Federation

Highlights

Every person is a node

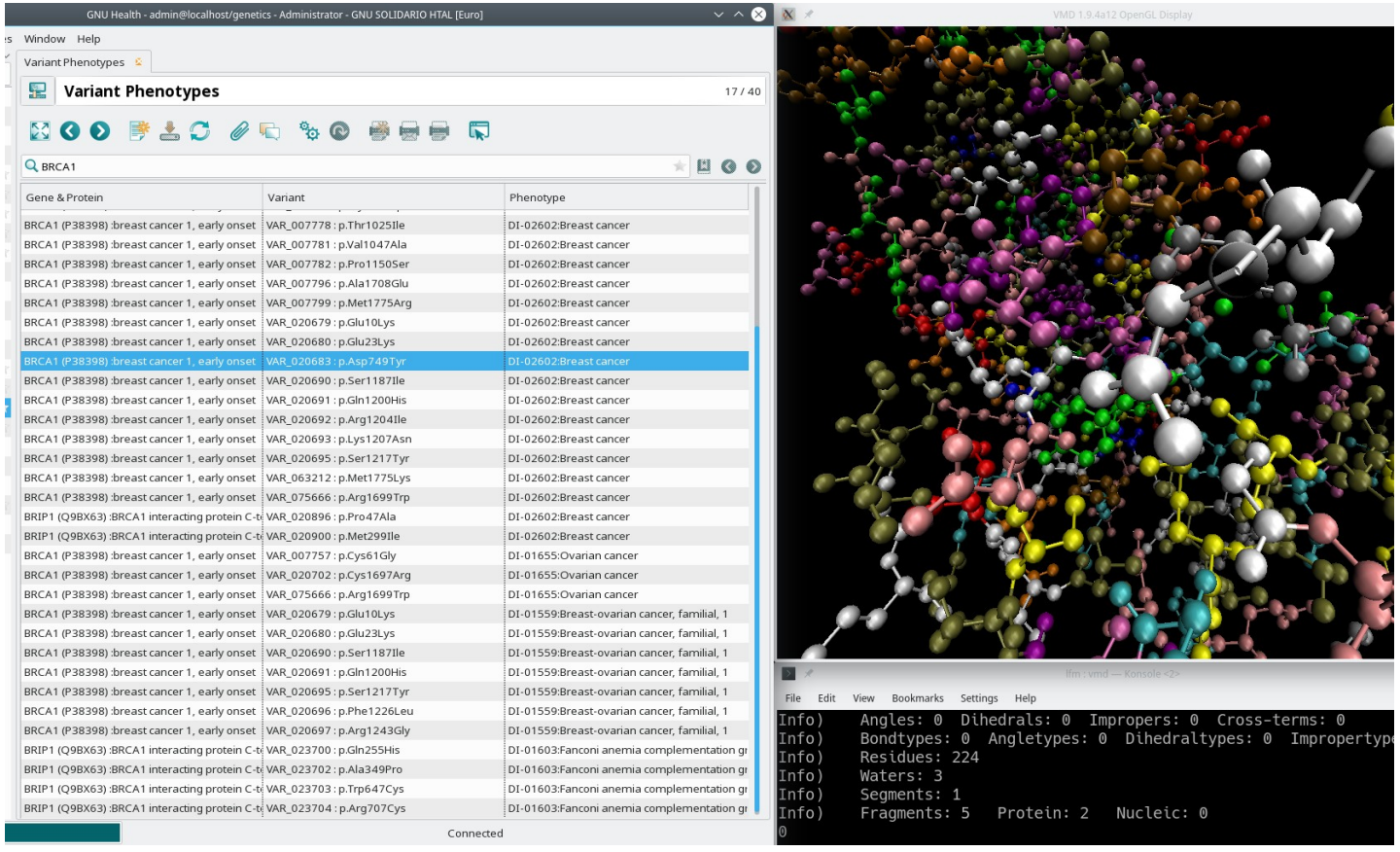
Realtime update with her health professional

Person is in control of what to share

Decrease the burden in the public health system

The person is now an active member in the public health system

GNUHealth in Medical Genetics and Cancer Research



Real-time observatory and reporting

MyGNUHealth

Misc

Development hosted at GNU.org

Mercurial (hg)

Savannah for tracking

Release 0.9 Beta in December 2020

Development docs at Wikibooks

GPL v3+

Questions : info@gnuhealth.org

TODO

Packaging

i18n

Testing

Security / Block device encryption / others

Connectivity with Open Hardware devices

Documentation

GNU Health Federation Community Hub

Community public server in Munich
Demo and test environment
Main Federation components:

* HMIS node and PgSQL
* Thalamus message server
* Person / Patient Master Index HIS
* openSUSE Leap OS

The GNU Health Federation Community Hub allows developers, health practioners and research institutions from all over the world to learn, test and develop their nodes & integrate them in the Federated network.

Join us at GNUHealthCon 2020

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