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An Update on Free/Libre and Open Source Software (FLOSS) in Healthcare

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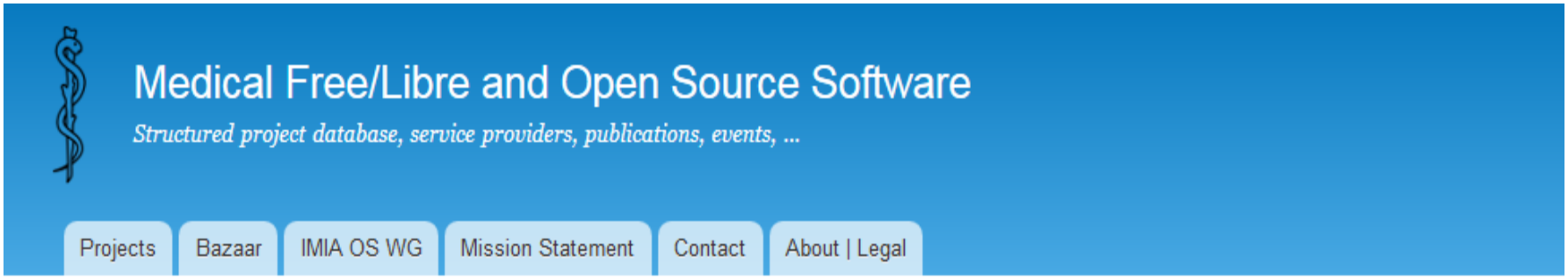
Mecklenburg Vorpommern MV tut gut.

in Mecklenburg-Vorpommern.

MedFLOSS.org



323 projects
106 companies
341 publications

European projects: epSOS

- Time period 1st July 2008 - 31st June 2014
- Duration: 72 months (6 years)
- Volume: € 36,5 Million: co-funded by the European Commission Competitiveness and Innovation Programme (CIP) within the ICT Policy Support Programme
- Number of Beneficiaries: 45
- Consisting of national ministries of health, national/regional competence centers, a consortium of industry and the project management team.
- Number of countries: 25
- different European countries: 22 EU member states and 3 non-EU member states.

OpenNCP: epSOS eHealth pilot

As of January 2016, the OpenNCP governance model changes. The OpenNCP project shifts under the direct responsibility of the European Commission, Directorate General for Health and Food Safety, DG SANTE. The goal is to move the epSOS e-health pilot OpenNCP into the global European "Connecting Europe Facility" (CEF) framework project under the umbrella of the "eHealth Digital Service Infrastructure"(eHealth DSI).

Source: https://openncp.atlassian.net/wiki/display/ncp/OpenNCP+Introduction

Open Source for the Nationwide Health Information Network (NwHIN)

Apples‘ ResearchKit

Introducing ResearchKit

ResearchKit is an open source framework introduced by Apple that allows researchers and developers to create powerful apps for medical research. Easily create visual consent flows, real-time dynamic active tasks, and surveys using a variety of customizable modules that you can build upon and share with the community. And since ResearchKit works seamlessly with HealthKit, researchers can access even more relevant data for their studies — like daily step counts, calorie use, and heart rate.

Apple Health Kit

HealthKit | Healthkit Compatible Devices | Healthkit Compatible Apps | Google Fit | Blog

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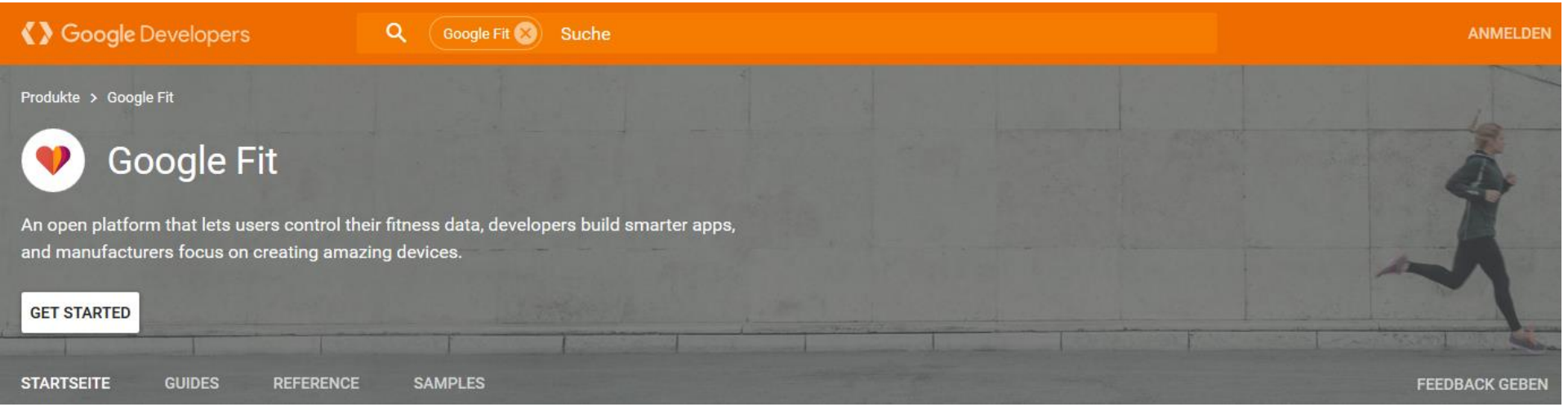
HealthKit

Welcome to Apple Healthkit. This website aims to give you the latest information about Apple's newest service for iOS which helps you keep tracking your health on your iDevice.

HealthKit is an important part of iOS 8 and Apple Watch. The app for iPhone and iPad is not called HealthBook as previously believed, but simply 'Health'.

See also: List of Health app compatible devices.

Featured Health app Device



The Google Fit SDK

New APIs to make building fitness apps and devices easier.

Discover sensors

Easily view available sensor data sources from connected apps and devices with the Sensors API.

Collect activity data

Connect your app and devices to Google Fit with the Recording API.

Help users keep track

Access and edit the user's fitness history with the History API.

The Google Fit ecosystem

fatsecret

STRAVA

intel

mapmyrun

MIO

LYNXFIT

motorola

Xiaomi

LG
Life's Good

POLAR

htc

noom

RunKeeper

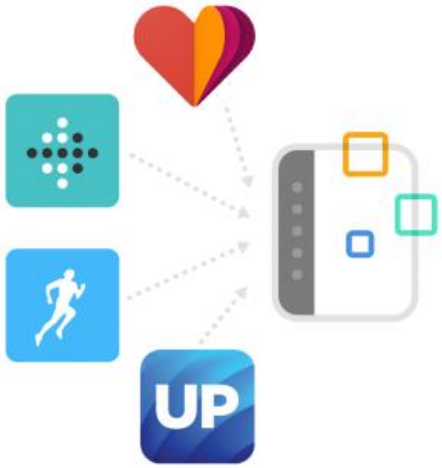
runtastic
makes sports funtastic

Open mHealth

Open mHealth Shimmer: The First Open-Source Health Data Integration Tool

Install Shimmer

The first and only open-source health data aggregator



We currently support the following APIs

- Fitbit
- Google Fit
- Jawbone UP
- Misfit
- RunKeeper
- Withings
- iHealth

NHS Hack day

NHS HACK DAY
GEEKS WHO LOVE THE NHS

Rationale FAQs Events, Teams and Projects Tools Accounts and Sponsorship Blogs Media Contact Us

Recent Tweets by @NHSHackDay

"...My main take-home message from the Hack Day was how the human drive to create and collaborate can be so strong given the right conditions..."

-- NHS Hack Day attendee, 2014

The **NHS Hack Day** team run weekend events that bring together healthcare and technology professionals and other "geeks who love the NHS" to promote health, good practice and good science.

Our events are free to attend, and have great support from across the healthcare and tech sectors. We're a friendly bunch, so come along and get stuck in!

The next NHS Hack Day will be on 14 & 15 May 2016 in London.

Blackpool Teaching Hospitals NHS Foundation Trust selects open source electronic patient records from IMS MAXIMS

New system to cost around 60% less than proprietary software

Source: http://www.imsmaxims.com/news/blackpool-teaching-hospitals-nhs-foundation-trust-selects-open-source-electronic-patient-records-from-ims-maxims/

tranSMART

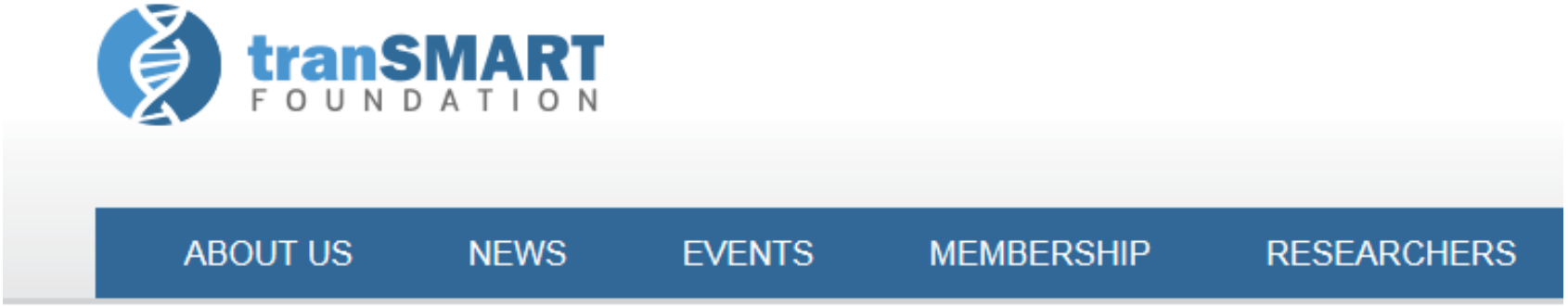
The initial version of tranSMART's data management system was developed in 2009 by scientists at Johnson & Johnson and Recombinant Data Corporation. It was used initially by pharmaceutical researchers in Johnson & Johnson's Centocor R&D division.

Since then, more than 100 other corporate, non-profit, academic, patient advocacy and government organizations have joined the tranSMART community.

Established in 2013, the tranSMART Foundation is a public-private partnership – the result of collaborations between scientists in the United States and the European Union. Founding partners include the University of Michigan, the Pistoia Alliance and Imperial College London.

The tranSMART Foundation will coordinate development of the next generation of tranSMART, which is being developed in collaboration with developers and users of eTRIKS and TraIT – two informatics/analytics knowledge management systems currently under development and supported by major European translational research initiatives. TraIT and eTRIKS are based on the tranSMART platform. The result will be one global informatics-based analysis and pre-competitive data-sharing platform for clinical and translational research.

tranSMART – Open Source Platform



Legal/Licensing

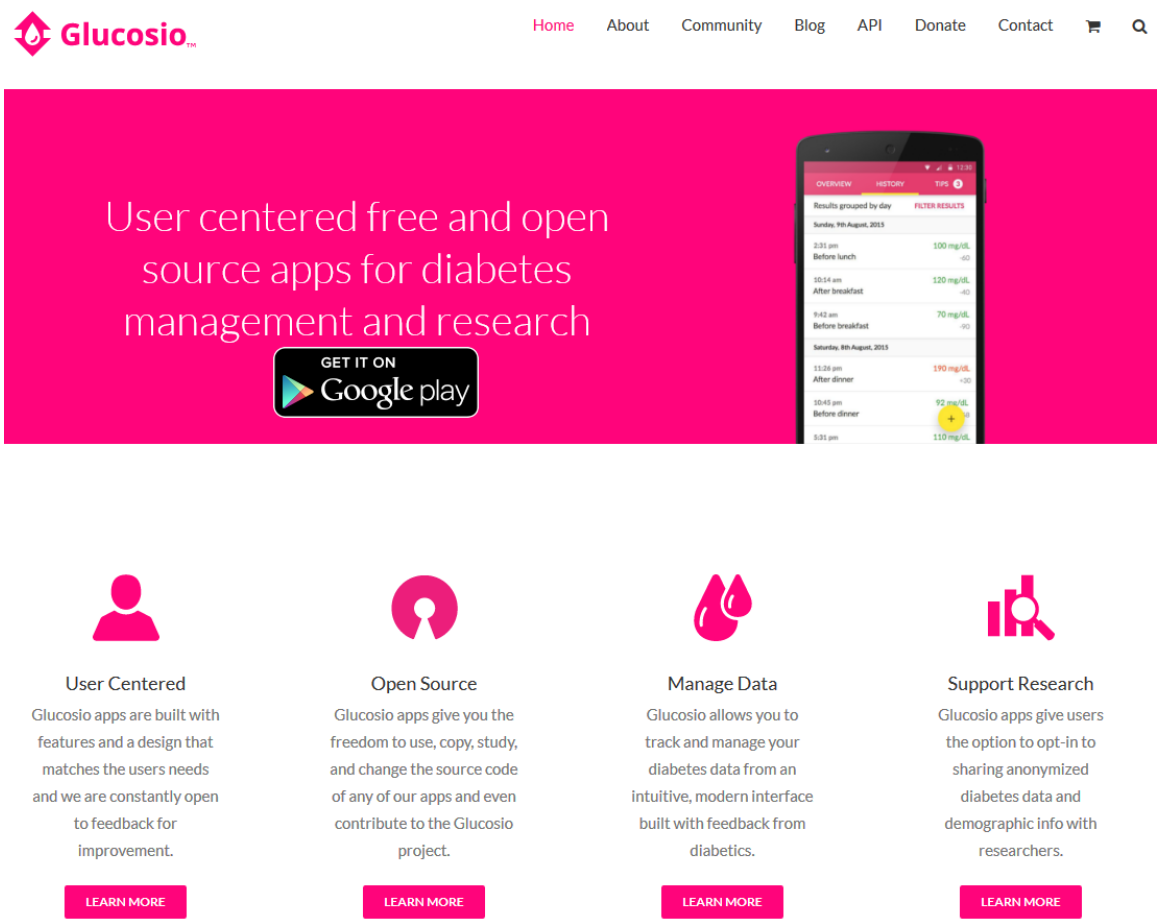
tranSMART is free software: you can redistribute it and/or modify it under the terms of the GNU General Public License as published by the Free Software Foundation, either version 3 of the License, or(at your option) any later version.

tranSMART is licensed through GPL 3. For more information on GPL 3 please see: GNU General Public License

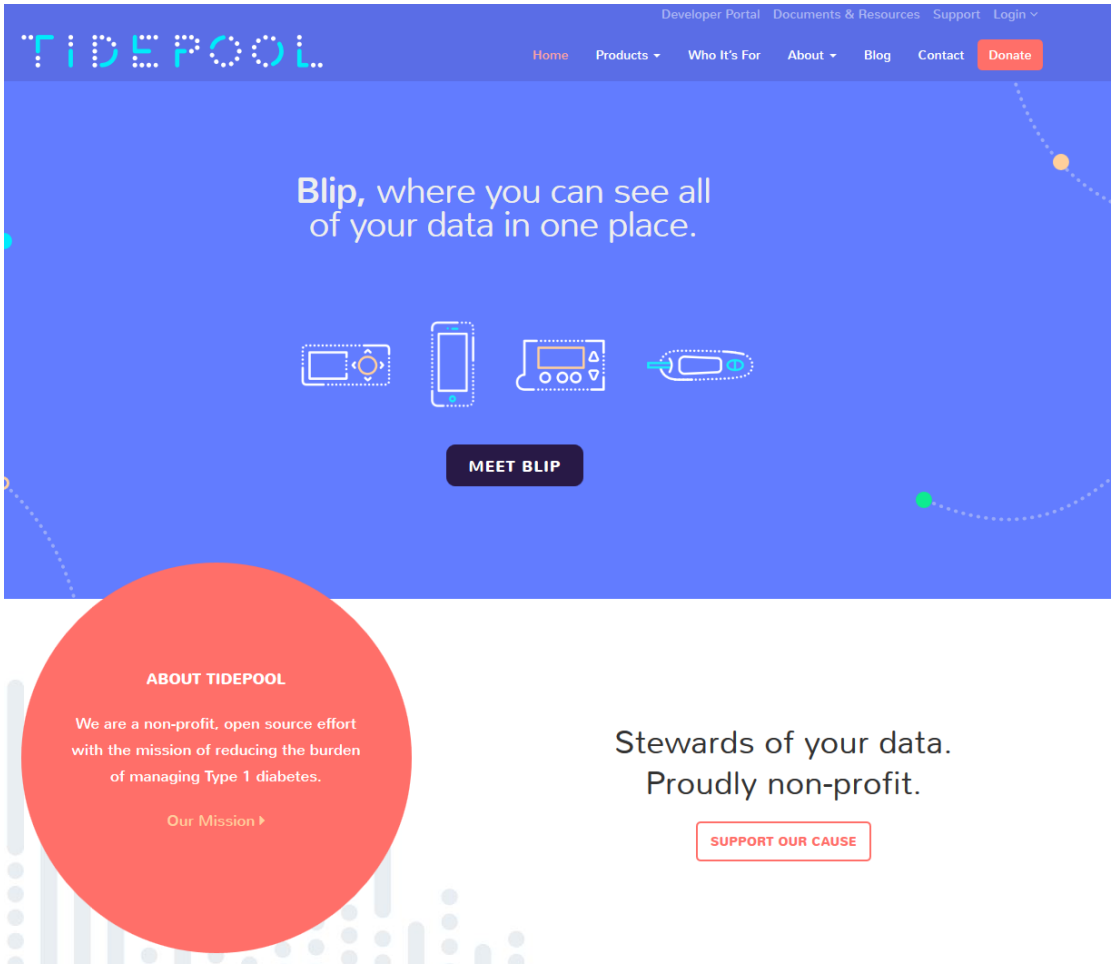
OpenClinica – open source for clinical research

Source: https://www.openclinica.com/

Glucosio – open source for diabetes management



Tidepool – open source diabetes management



OpenTele – open source telemedicine platform

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GNU Health

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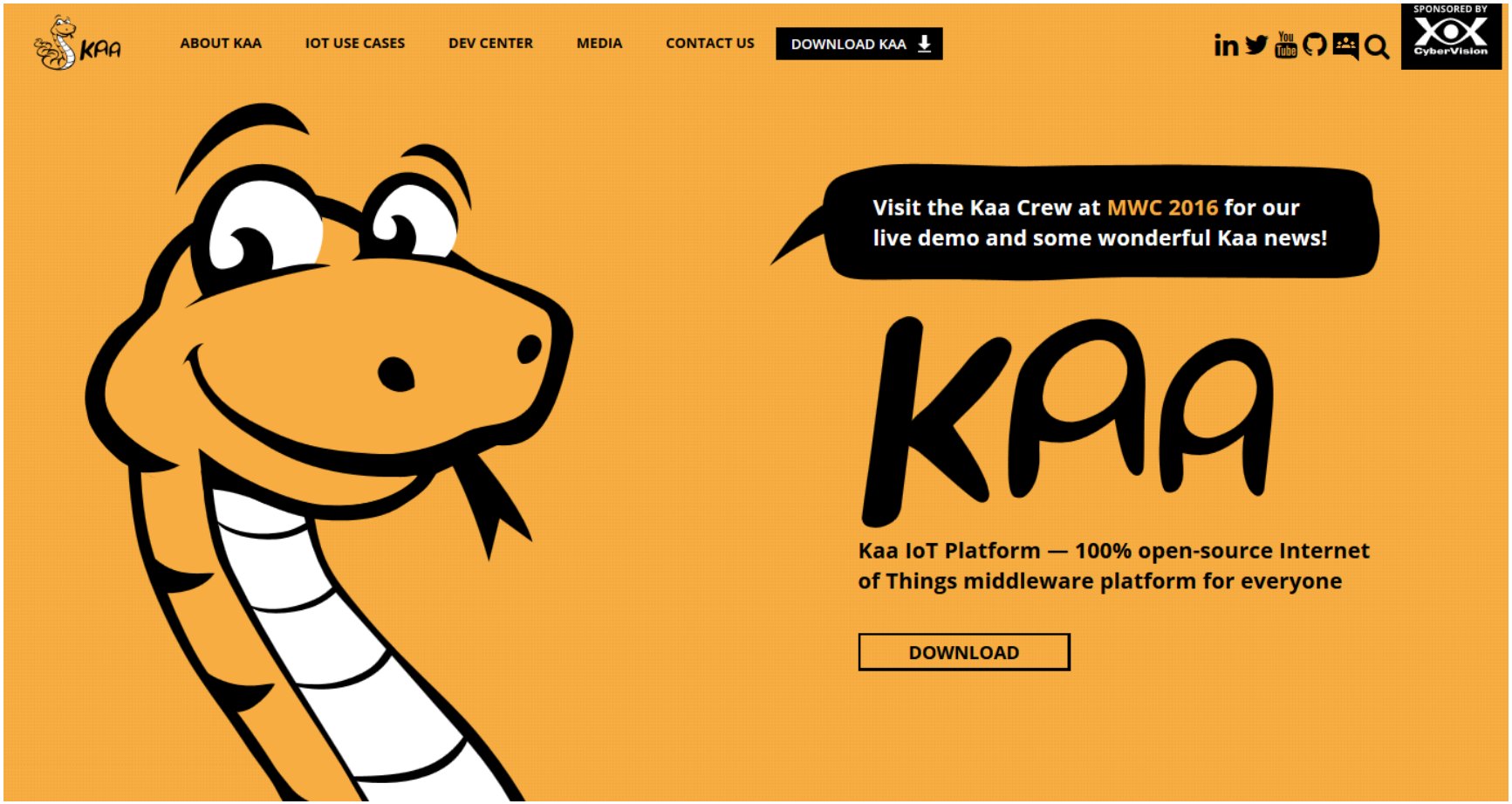
WINNER OF FSF AWARD FOR PROJECTS OF SOCIAL BENEFIT
2011
Free Software Foundation
www.fsf.org

GNU Health
GNU OFFICIAL PACKAGE

Internet of Things IoT open source middleware

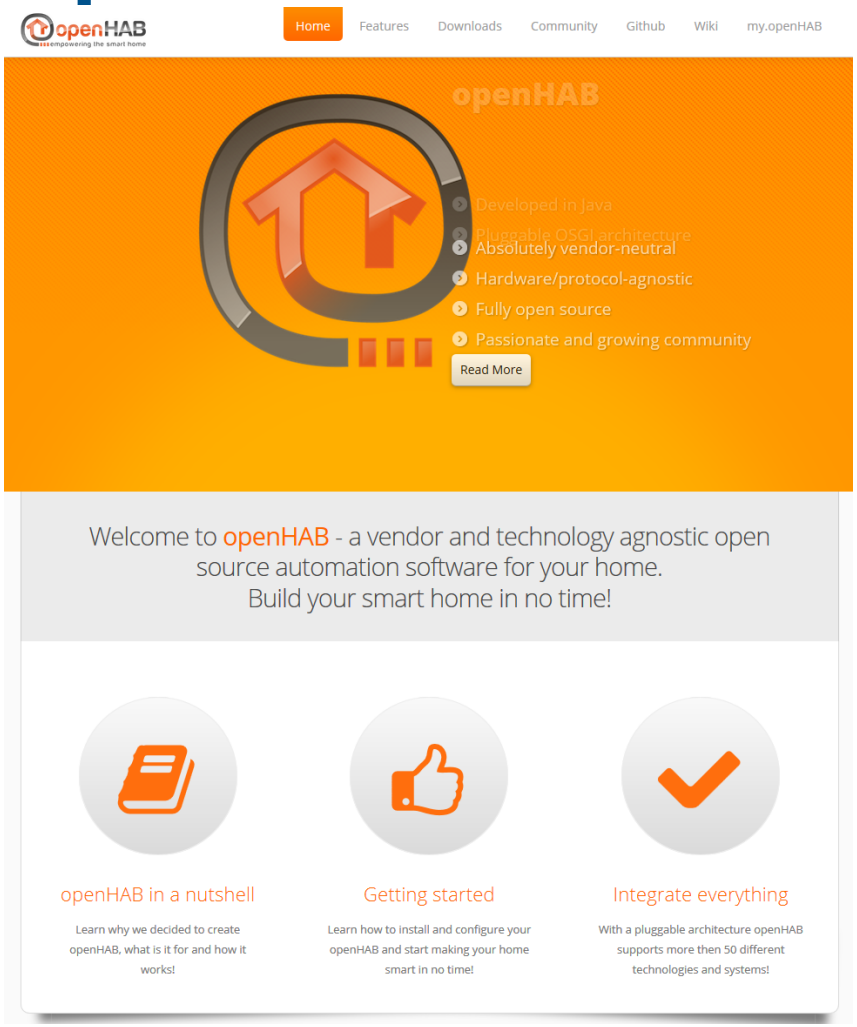


OpenRemote

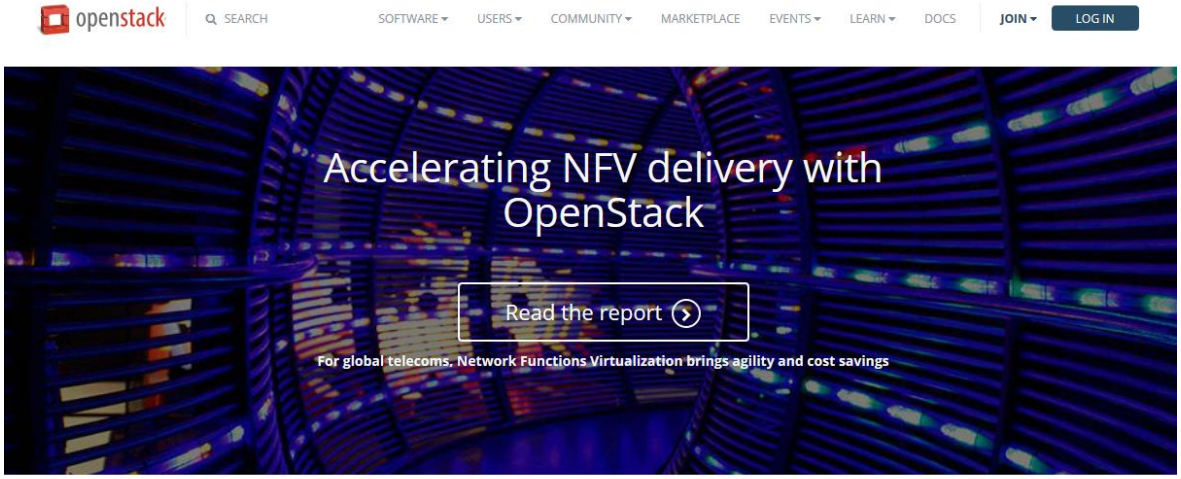
Open Source Automation Platform

Integrate:	AMX, KNX, Lutron, Z-Wave, 1-Wire, EnOcean, xPL, Insteon, X10, Infrared, Russound, GlobalCache, IRTrans, XBMC, VLC, panStamps, Denon AVR, FreeBox, MythTV, and more.
Design:	Customize control interfaces for each device, individualize user interfaces for each user
Control:	Control panels for Android and iOS devices, mobile web browsers, Desktop PCs
Automate:	Intelligent buildings with automated rules, scripts and events
Manage:	Remote updates, user interface changes, system diagnosis, import tools, device discovery
Cross-platform:	Install on Windows, Linux, Mac, Raspberry Pi, Alix, Synology, ReadyNAS, QNAP and others.

openHAB – Open Source for SMART Home



OpenStack – Open Source for the cloud



Open source software for creating private and public clouds.

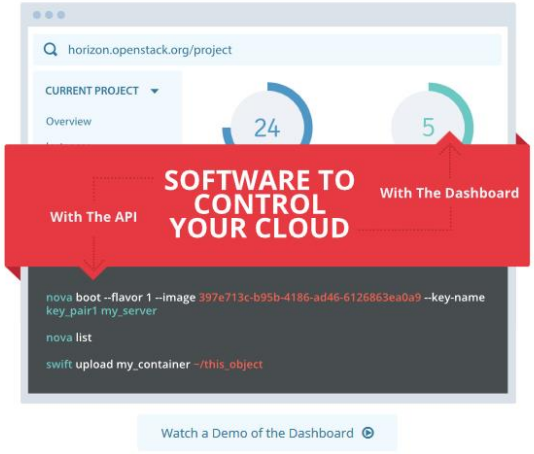
OpenStack software controls large pools of compute, storage, and networking resources throughout a datacenter, managed through a dashboard or via the OpenStack API. OpenStack works with popular enterprise and open source technologies making it ideal for heterogeneous infrastructure.

Hundreds of the world's largest brands rely on OpenStack to run their businesses every day, reducing costs and helping them move faster. OpenStack has a strong ecosystem, and users seeking commercial support can choose from different OpenStack-powered products and services in the Marketplace.

The software is built by a thriving community of developers, in collaboration with users, and is designed in the open at our Summits.

HOW IT WORKS | GET THE SOFTWARE

Latest Release: Liberty (October 2015)



Conclusions

- Over 300 FLOSS systems registered in the MedFLOSS database
- A working ecosystem is a sine qua non
- A challenge is the often missing business models

- FLOSS has a great potential to accelerate the development of high quality software in a community
- This lowers the total cost of ownership
- FLOSS prevents vendor-lock-in
- Some open questions: How open is the Apple ecosystem?
- What is the value of open source software in times of cloud software?
- „open“ has different meanings – have a look at the motivation
- Check the license ;-)

BioCon Valley®

Welcome to the „Open Source Village at Med-e-Tel 2016“

ISfTeH CCTOS Working Group Chairs, Med-e-Tel 2015

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