

# Introduction to LibreClinica

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# OpenClinica/LibreClinica

- ❖ OpenClinica/LibreClinica is a web-based CDM and EDC system, typically used for clinical trials, but also for registers and other kinds of studies.
- ❖ provides the features required to be compliant with Good Clinical Practice (GCP)

# From OpenClinica to LibreClinica

- ❖ OpenClinica® (OC) released by Akaza/OpenClinica in 2005
- ❖ with OC4 no community version (OC3 still supported, but the forum disappeared...)
- ❖ OC3 offers good range of functions and has many users worldwide
- ❖ to keep alive the work contributed by OpenClinica & community, the LibreClinica project aims to...

## LibreClinica - Aims

- ❖ clean up the build process offering a version that can be built independently of OpenClinica-servers
  - ❖ provide a version that can be built compatible for recent versions of JDK, Tomcat, and PostgreSQL
  - ❖ provide minor releases / subversions for bug fixes
  - ❖ provide a free to use version
  - ❖ improve code quality
  - ❖ improve and extend functionality
  - ❖ generate ideas for next generation EDC system
- [[libreclinica.org/goals.html](https://libreclinica.org/goals.html)]

## LibreClinica - Aims

- ❖ The project is to be open source valueing input from contributors, and at the same time providing a reasonably tested production version.

[[libreclinica.org/goals.html](https://libreclinica.org/goals.html)]

# LibreClinica - Community

- ❖ The project started with volunteers from different background, i. e. academia, clinical research service, IT industry.
- ❖ DKFZ Partner Site Dresden
- ❖ Trial Data Solutions
- ❖ GCP-Service International
- ❖ ReliaTec GmbH
  
- ❖ Tom Hickerson (former Akaza/OC, now clinCapture)
- ❖ UK Aachen, Institute for Medical Informatics

LibreClinica ≠ ReliaTec

libreclinica.org    reliatec.de

COI: Die ReliaTec GmbH bietet Beratung, Support, Betrieb und Validierung von LibreClinica-Systemen sowie Entwicklungsleistungen an.

COI: ReliaTec offers consultation, support, hosting, and validation of LibreClinica systems as well as software development.

# First release

- ❖ LibreClinica founded early 2019
  - lots of phone conferences – before COVID19 ;-)
- ❖ LibreClinica Version 1.0.0, 27.2.2020
- ❖ update and removal of unused libraries, some bug fixes, all except one (JMesa) build dependencies without OpenClinica servers
- ❖ small graphical adjustment (LC has its own flavour but looks like OC)
- ❖ see complete list on [libreclinica.org/download.html](https://libreclinica.org/download.html) Release Notes
- ❖ Current version 1.2.0 just released 20-Sep-2022



# First release

## ❖ Tests

To make the quality of LibreClinica transparent, [test specifications](#) can be used to validate the software. We also offer [test results](#) provided by the LibreClinica community. The validation of a computerized system is an extensive task requiring experience particularly if you operate in a regulated environment (such as GCP, 21 CFR Part 11). You can find assistance on the [support](#) page.

## ❖ [[libreclinica.org/documentation/](https://libreclinica.org/documentation/)]

## Further development

- ❖ LC is conservative – remember our mission statement  
So why bother about a remake?
- ❖ technology is evolving, especially web frameworks
- ❖ monolithic → modular architecture
- ❖ weaknesses in source code
- ❖ interfaces mixture of REST, SOAP, and ???
- ❖ mobile devices, attract new developers

## Further development, LC2

- ❖ When doing a remake, how to enable a painless transition?

for administrators

- ❖ compatibility on database-level?

- ❖ provide import of ODM1.3 with OpenClinica extensions

for end users (study assistants, monitors, datamanagers etc.)

- ❖ keep core elements (like subject matrix, events, CRF-definitions) on GUI level

## Further development, LC2

- ❖ When doing a remake, how to enable a painless transition?

general policy

- ❖ LC will stay open source and use open source components

## Further development, LC2

LC-renew-survey

among active community members, n = 6 out of 7 replied

key result regarding architecture

- ❖ in general importance of separation of front- and backend highly rated
- ❖ heterogeneous opinions on which languages/frameworks should be used
- ❖ high interest to plan a LC backend (REST endpoints)
  
- ❖ no crashes & improved logging in common configuration errors