

Technology Stack

Development Tools

- Java 8
- Javascript/JQuery
- NodeJS (for easily building fast, scalable network applications)
- Ajax (send data to and retrieve from a server asynchronously)
- Maven (build automation tool)
- Spring 4 (Core support for dependency injection, transaction management, web applications, data access, messaging, testing)
- IntelliJ (Development IDE)
- GitHub (web-based repository for revision control and source code management)

Database

Apache Cassandra

- Elastic scalability
- Always on architecture
- Fast linear-scale performance
- Flexible data storage
- Easy data distribution
- Operational simplicity
- Transaction support

Server Technology

- Apache Tomcat 8 (open-source web server)
- Apache Camel (rule-based routing and mediation engine that provides a Java object-based implementation of the Enterprise Integration Patterns using an API)
- Java SE 8
- Linux Ubuntu, Debian, Fedora, CentOS/RHEL, SUSE

Messaging Queuing

RabbitMQ

- Reliability
- Flexible Routing

- Clustering
- High availability queues
- Multi-protocol
- Management UI
- Tracing

APIs and Protocols

- REST
- SOAP
- SFTP
- SMTP
- IMAP

Data Standards and Transforms

- IHTSDO SMOMED CT
- FHIR 1/2
- HL7 2/3
- ITK
- XML
- JSON
- OPENHR
- EMISOPEN
- ODATA
- POJO

Testing and Support Tools

- Endeavour Administration Suite
- IntelliJ Test Runner
- Cassandra-stress
- RabbitMQAdmin
- Nagios XI