# About Yugandhar Open Master Data Management (MDM) Hub Project

Master Data Management came a long way in last decade or so. There are currently more than 20 MDM solutions catering to various specializations of MDM like Customer Data Integration (CDI), Product Information Management (PIM), vendor and supplier management etc. However most of these solutions come with licensing costs amounting to thousands of dollar. To offer a completely free solution which would be made available through Apache 2.0 license, A Project is started in 2017 under the name ‘Yugandhar Open MDM Project’ to build Open Source MDM solutions catering to CDI, PIM and Data Governance Capabilities. Yugandhar in Sanskrit means Ever Lasting and the strongest of its time. Our vision is to build the strongest, Open Source, Multi Domain, Cross Industry and completely free MDM Solution.

We are happy to announce that the first release of the Yugandhar MDM Hub catering to CDI solution is built with Open source technologies like Spring and Hibernate etc, inbuilt data Model, 400+ ready to use services and having incredible Out of the Box capabilities is currently being distributed. We aim to make the current CDI offering the strongest and Planning to bring Data Stewardship and PIM solutions in upcoming years.

### Silent Features

* Providing Industry standard MDM solution for harmonization of Customer Master Data.
* In built and Extendable Customer Master Data Model for maintaining Person and Organization master data along with Account, Address, Phone Number, Identifiers, Grouping, Vehicle, Preference, Property and party relationships etc.
* Built using Open Source technologies – Spring boot, Hibernate and JBoss
* Built on Service Oriented Architecture (SOA) having 450+ prebuilt ready to use services
* RESTful and MQ enabled
* Rapid Development using Hibernate Reverse Engineering Tool and Yugandhar Code generation Templates (Freemarker).

### Capabilities

1. Free and Open Data Model
2. 450+ prebuilt ready to use services, 50+ Composite and 400 Base table services
3. Embedded and extendable data validations and business rules
4. Multilingual Reference data management Capability
5. Comprehensive application and performance logging using logback.
6. User and role based Authorization
7. Inquiry level and Pagination for retrieve and search services
8. Audit Log for maintaining database row level transaction history
9. Pluggable and UUID based Primary Key generator
10. jsr107 compliant Ehcache based caching framework
11. Integrated with Maven
12. Event Manager
13. Match and Merge framework (Beta)

# Getting Started

We have provided comprehensive documentation about the project. Refer the documentation section at below github link

<https://github.com/yugandharproject/YugandharMDMHub/tree/master/resources/documentation>

You may start with the Architectural overview to understand the architectural components and capabilities of the MDM Hub. APIAndTransactionRefrenceGuide, DataModelGuide and DevelopementAndCustomizationGuide should follow the next. To take a dip dive on having hands on of running the applications refer the DevelopementEnvironmetSetup and CodeGenerationGuide.

# Prerequisites

## System Requirement

The supported configuration for hosting Yugandhar MDM Hub primarily depends on redhat jboss, Oracle and Springboot Framework configuration

Refer jboss System requirements here

<https://access.redhat.com/articles/2026253>

Refer Springboot System Requirements here

<https://docs.spring.io/spring-boot/docs/1.5.6.RELEASE/reference/htmlsingle/#getting-started-system-requirements>

### Production Environment

We are summarizing the requirements for ease of access however for any further clarification refer the Redhat JBoss and SpringBoot framework Documentation

1. JBoss EAP 7.1 full runtime or later
2. Oracle Database 11g Enterprise Edition Release 11.2.0.3.0 - 64bit Production or Later
3. JBoss Integrated Artemis Messaging broker
4. Java jdk 1.8 or later

### Development Environment

1. OS – Windows 7 enterprise addition, Service Pack 1 or later
2. 8GB RAM and 100 GB Storage
3. Eclipse Java EE IDE for Web Developers. Neon.3 Release (4.6.3) or later
4. JBoss EAP 7.1 full runtime or later
5. apache-maven-3.5.0 or later
6. Java jdk 1.8 (jdk1.8.0\_121) or later
7. Spring Boot 1.5.6.RELEASE
8. Hibernate Tools
9. Oracle Database 11g Express Edition Release 11.2.0.2.0
10. Oracle SQL Developer
11. SOAPUI or any other tool to test REST services

Note - Internet connectivity is needed to setup workspace. If internet is not available because of any reason then all the software and Maven jars needs to be manually downloaded which might be tedious task.

# Documentation links

### Project documentation

<https://github.com/yugandharproject/YugandharMDMHub/tree/master/resources/documentation>

### Javadoc

<https://yugandharproject.github.io/YugandharMDMHub/resources/javadocs/index.html>

### dbdocs

<https://yugandharproject.github.io/YugandharMDMHub/resources/dbdocs/index.html>

**github project link**

<https://github.com/yugandharproject/YugandharMDMHub>

# Contacts

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# How to Contribute

If you have adequate knowledge of Open Source technologies and you are fit to contribute to this project then please feel free to send a mail to us at below email id mentioning the area in which you can contribute. We will respond to you at the earliest

[**support@yugandharproject.com**](mailto:support@yugandharproject.com)

**support.yugandharproject @gmail.com**

The Name of the contributors will be listed in either ‘Team’ or ‘Contributors’ or in both the section based on level of contribution.

# Authors

Rakesh Vikhar : Having 12+ years of industry experience in working with various Master data Management projects across Banking, manufacturing, automotive and retail domain.

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# License

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