



Common SMart iot Connectiv (CoSMiC) is a middleware software that is intended for deployment between an IOT field device and Application server to provide standard based deployment of IOT/M2M ecosystem to ensure interoperability, security, data sharing and multi-vendor deployments of different applications in Intelligent Transportation System. It facilitates users and application service providers in various vertical domains to use application agnostic open standards and open interfaces for end to end communication with well-defined common service functionalities. CoSMiC software is compliant to oneM2M global standards and include Common Service Layer framework to support multi-vertical/ multi-vendor applications and a User Management interface to configure and manage IOT devices. The capability of CoSMiC to expose open data sets and provide open APIs to application developer community can encourage innovation in Smart Cities across all verticals. OneM2M global standard has been selected as the National Standard for the IOT/M2M ecosystem in India and is being adopted in most Smart Cities.

SALIENT FEATURES

- ❖ A single horizontal platform for all IOT/M2M ecosystem
- ❖ Open standards to avoid vendor lock-in
- ❖ Dataset exploitation using open APIs for advanced analytics
- ❖ Access to real time and non-real time data across verticals for data fusion and smarter decisions
- ❖ Enhanced security and data privacy
- ❖ Integration support for legacy IOT devices using hardware/software adapters
- ❖ SDKs / APIs for complying IOT devices to oneM2M standards
- ❖ Microservice design for scalable and distributed architecture
- ❖ Management Console & Dashboard
- ❖ Configuration utility
- ❖ Docker based Deployment
- ❖ Reports

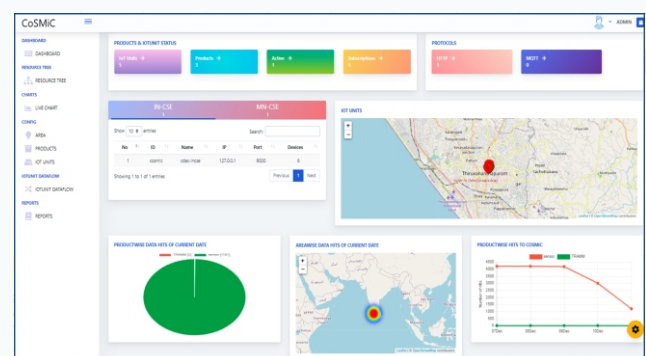
INSTALLATION PREREQUISITE

Hardware Platform

- ❖ Server PC with 32 core/256 GB RAM
- ❖ Linux

Database

- ❖ MongoDB



Dashboard

FUNCTIONAL SPECIFICATIONS

Common Service Functions

- ❖ Application and Service level Management
- ❖ Communication Management and Delivery handling
- ❖ Data Management and Repository
- ❖ Device Management
- ❖ Group Management
- ❖ Location Services
- ❖ Registration
- ❖ Security
- ❖ Subscription and Notification

User Management

- ❖ Management Console for configuration and management
- ❖ Smart Dashboard to view/control
- ❖ Alarms and Notifications
- ❖ Reports – Real time/Historic
- ❖ Scalable database

