



Enterprise Solution for Mining Industry

Introduction

This project is a web-based Integrated Mines Management System developed for administration and regulation of mineral reserves across various states. The project streamlined the core processes of mining administration through automation and contributed significantly to e-governance in the state. After successful completion of this phase, emerging business needs paved the way for phase 2 of Integrated Mines Management System. The project is an interactive platform between the lease holders/buyers and the government. It is an integrated system with Vehicle Tracking System & Command Control Centre to provide real time and uninterrupted information about the mineral carrying process. The system consists of development of a single window for all the mining stakeholders like mining department, lessees, licensees, traders and transporters. The project is intended to improve the efficiency of the existing system through mobility, increase the control on minor mineral through desktop application in the areas where last mile connectivity is a challenge and vehicle tracking will enable the monitoring the mineral movement within the state through real time analytics on dashboard.

Purpose

- Enhancing the existing version of Integrated Mines Management System streamlining the automated process of mining catering to the emerging business needs and maintaining the e-governance status of the state.

Objective

- Ensuring Continuity of existing project and carrying out the Application and Design, Development, Implementation and Maintenance of phase 2 which in a nutshell includes Design & Development of Integrated Mines Management system, Vehicle Tracking System, Establishment of ICCC and hosting the desired application on cloud followed by its operation & maintenance.

Solution

- It consists of a mobile and a web-based interface for the stakeholders to monitor and locate the GPS devices registered with the system. The overall architecture is a cloud -based system which hosts the application and all the data thus minimizing the dependencies and loop holes of the on-premise data centres.
- The entire IT Infrastructure is being managed by establishing an Integrated Command & Control Centre which is connected with the district/zonal offices for monitoring the geo-location specific incidents and geo-spatial display.
- ICCC consists of user specifications dashboards for easy visualization and monitoring of data. This is done by supplying all the hardware and infrastructure related to the project for the entire project duration.
- Supplement with Operation and Maintenance of entire system with training and capacity building to support the application and operational mechanism

Challenges

- Increased revenue generation and curb down the illegal mining activities.
- Ease of doing business.
- Real-time data analytics to monitor key performance parameters of lessee and lesser.
- State-wide mineral movement tracking using the integrated Vehicle Tracking System.
- Interactive & user specific dashboards for easy visualization of data showing Key Performance Indicators

Benefits

- 2400 watershed data integrated onto one single portal
- DSS enabled real -time monitoring of crop growth & health
- Optimized used of fertilizer, water utilization for any crop at any stage
- Common operational platform providing actionable intelligence and situational awareness to all its stakeholders like Farmers, Hydrologists and Environmentalists.

Key Project Highlights

- Equipped with world class OEM technologies like Cisco, Microsoft, this project represents core enterprise solutioning capabilities of Ceinsys.
- Amalgamation of mining, Vehicle tracking system and IT in the form of ICCC onto one single portal.
- Cloud based solution development minimizing the dependencies of on-prem systems.
- Automated real-time view for all the stakeholders
- Transparency in the form of revenue transactions

