



**bersi**

a Considered Desicion.

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Barsi company is the first and only Iranian private company and a member of the International Society for Photogrammetry and Remote Sensing (ISPRS), which has been operating since 1999 with the aim of new scientific developments in fields such as remote sensing, GIS, production and development of spatial software, mapping, environment and geophysics.

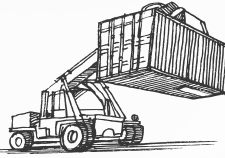
Our company provides wide access to all kinds of satellite images and faces no restrictions on supplying images and providing a collection of updated and archived commercial images.

The company's products are divided into two categories: **Data and Software.**

### ABILITIES AND FIELDS OF ACTIVITY

- GIS
- Surveying
- Remote sensing
- Mapping Services
- Photogrammetry and UAVs
- Smart Transport and Logistics Solutions
- Intra-Organizational Messaging Systems
- Geospatial Information Systems Solutions
- Programming and Software development

# TRACKSi



## Heavy Transportation Tracking System

Providing transport for employees, products, and different materials, by various mechanisms, is one of the main aspects of a factory's life cycle. Therefore, the existence of a centralized system in transportation management is highly necessary. Our purpose for implementing this system is to monitor the condition of transportation, ensure system integrity control, improve capacity management, direct transportation requests, and make appropriate decisions to increase the efficiency of the transport mechanism as well. The system is the primary core of the in-fence transportation ecosystem, offering a variety of uses that create opportunities to interact with different stakeholders. This system receives basic information related to drivers, cars, missions, and activities, as well as receiving processed information from the intelligent sensor management system. It will carry out the operations of managing, planning, and monitoring the in-fence transportation.

In addition to the mentioned goals, the following operational goals will be fulfilled:

The system manages and monitors the instantaneous state of the mechanism by monitoring fuel tank capacity, position, engine status, traffic routes, distance, etc.

Instantly speed and display relevant driver, vehicle and mechanism, and contractor information.

managing route types with their details

Management and monitoring of the momentary status of the mechanism by monitoring the fuel tank volume, position, engine condition, traffic route, distance, etc.

Instantaneous speed and display of relevant driver, vehicle, and contractor information.

Management of route types and their details for all service and energy dispatches

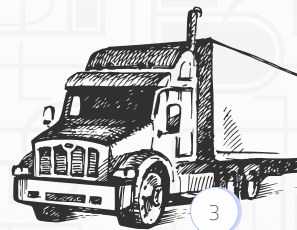
providing dashboard management for planning and decision making.

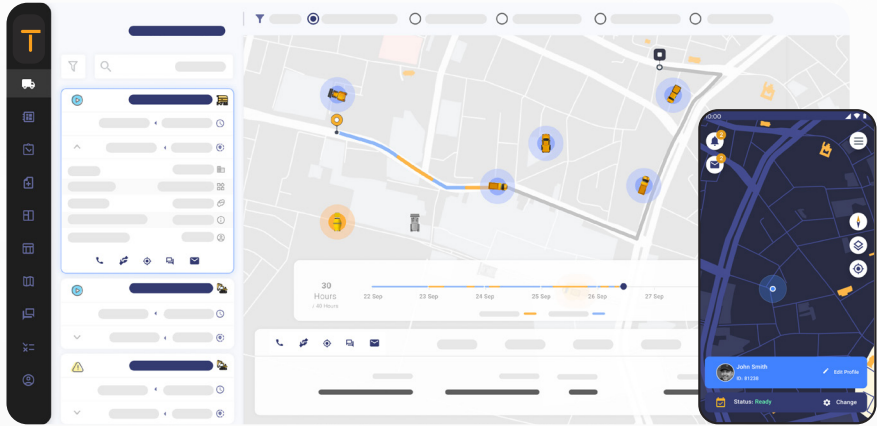




## Features of the Management Panel:

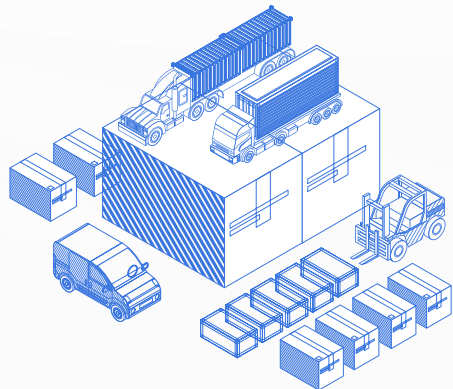
- Assigning the sensor to the mechanism.
- Recording the status of the vehicle.
- Recording the status of drivers.
- Recording or updating basic information such as vehicle information (capacity, model, etc.), driver, related documents, portable materials, Contractor, contracts, and types of mechanism (property and rental), places, and...
- Mission registration sub-system as tonnage based, service based, hourly based, smelting volume based...
- Fuel managing sub-system with the ability to monitor the volume of the vehicle fuel tank, analyze the amount of fuel consumed by each mechanism, manage the allocation of fuel to each mechanism, and the ability to record the time and places of fuel loading.
- Connecting to existing systems for information exchange with transport mechanisms and basic information delivery systems.
- Two-way connection of the intelligent sensor processing system to the vehicle management system to receive and process the latest status of the reported sensors and send status commands.
- Notifying drivers, staff, security guards, etc. of safety alerts via message or push notification system.
- B. Driver Violations.
- Subsystem for managing route types in order to define routes along with permissible speeds to separate types of mechanisms.
- Sub-system for calculating the cost and work of drivers based on the type of mechanism, type of activity, type of contract and scope of work.
- Centralized authentication through the central security management system and a log of all user actions sent to the central security control system.
- Analytical reports on transport performance including fuel consumption, tonnage carried by each mechanism in service and smelting missions based on mechanism type.





### Features of the Driver Panel:

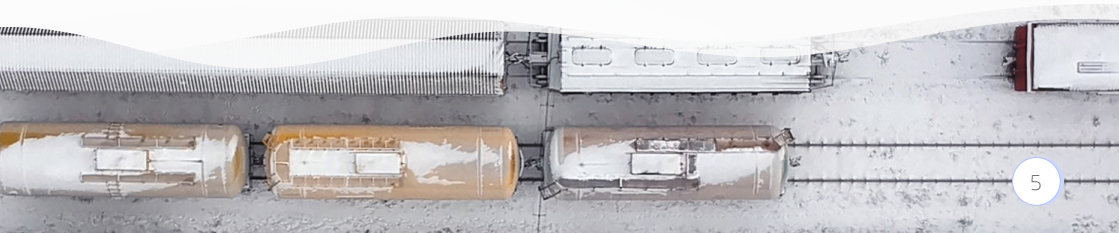
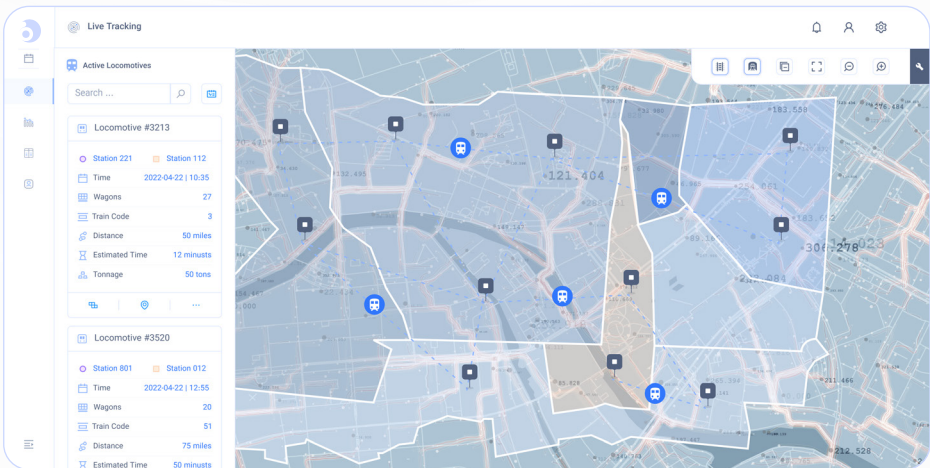
- Authentication by mobile number
- Completing profiles and upload documents
- Turning on and off the GPS of the phone and routing the mission location
- Recording off duty/ on call status along with instant status such as accidents, etc.
- Receiving daily missions as well as confirming or rejecting the mission with the mentioned reason by the driver.
- Ability to view live location on map and location of the vehicle in app
- Ability to view performance reports and view reports of the missions with status
- Ability to view upcoming missions
- Submitting complaints and tickets, rating the performance of the driver at the end of the mission
- Available on all platforms





## Railway Transportation Tracking System

Many development projects and corresponding management decisions rely heavily on transport networks. Particularly in rail transport networks, timely monitoring of each locations of fleet components and transportation units facilitates the planning process for transporting raw materials to factories and manufactured products to various destinations. This procedure which reduces transportation costs and increases the efficiency of logistics circuits within an organization is the main premise for many decisions in this field. The lack of integrated monitoring and management software to control rail transportation in and out of the fence, is one of the weaknesses in managing transportation demand in the production cycle. Therefore, having a centralized system to manage this transport would be crucial. The goal of implementing a system for managing and monitoring the transportation of materials and products by rail, in addition to integrating the control of rail transportation in and out of fence, will increase the ability to manage and control and plan and optimize the transportation of materials and products.





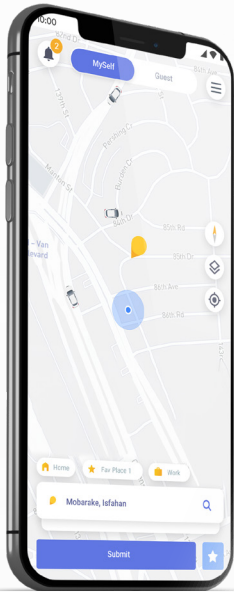
## Lightweight Transportation Management System

The goal of improving the operational status of the light transport fleet of employees through smart system and assessing the performance of subordinate units and fleets is to modify processes, plan and maintain services under various circumstances and during crises, in order to streamline costs through system control. The system can be deployed on web platforms, Android and IOS, along with being implemented locally and securely on an organization's servers. In addition to performing the functionalities of an Internet taxi platform, it supports the particular demands of organizations.

### Features of the Management Panel:

- Recording all kinds of basic information such as driver, passenger, vehicle information...
- Booking a trip, having multiple origins and destinations, and trips with multiple passengers
- Monitoring instantly the driver's/passenger's location on the map
- Exchanging messages with drivers and passengers via messenger
- Defining organizational charts and roles that should confirm trips and ...
- Presenting different types of financial, functional and survey reports
- Regulating the types of cost estimation methods
- Defining the types of payment gateways or individual and corporate credit limits
- Recording the current working status of drivers for planning purposes
- Assigning drivers dynamically and manually according to defined rules,
- Notifying different roles pf safety warnings
- Managing tickets for passengers and drivers
- Determining the approval procedure for drivers



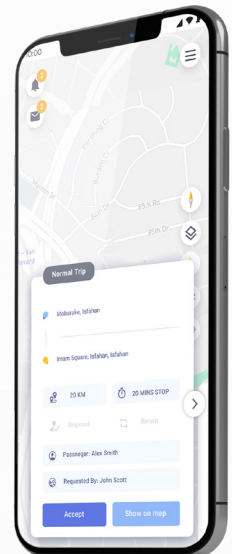


### Features of the Passenger Panel:

- Submitting a trip request of different types of cars along with selecting origin and destination on the map or favorite locations
- Viewing the momentary status of a trip request
- Rating trips and drivers
- Viewing the history of trips and requests
- Finding alternate routes, having multiple destinations, multiple stops, waiting time and requesting a ride for a guest.
- Exchanging text and voice messages with the driver
- Booking a trip
- Confirming the trips of employees
- Viewing driver's location live on the map
- Authenticating via mobile phone or username/password
- Paying the trip via bank portal or wallet
- Registering complaints as tickets

### Features of the Drivers Panel:

- Viewing the type of requested trip in the form of multiple trips, bookings, etc
- Declining/ confirming trips
- Trip routing
- Sending text/ voice messages to passengers and admin panel
- Rating trips
- Viewing earnings by day, week and...
- Registering complaints as tickets
- Viewing assigned trips in calendar format
- Registering birth certificate and identity card information
- Approving/ rejecting changes during the trip
- Managing multi-destination or multi-origin trips





Secure Organizational Messenger

ChatSi is a secure enterprise messenger with the ability to send text messages, make voice and video calls, and create video conferences on web, Android, IOS, and desktop platforms based on asymmetric encryption. You can start a server locally with unlimited service options in a very short amount of time.

## Messaging

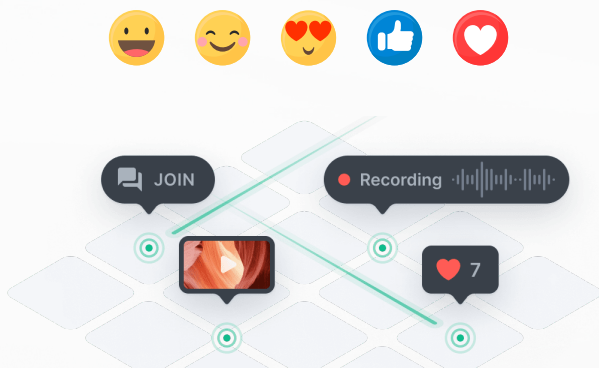
Creating two-way chats, rooms and forums with the ability to transfer all kinds of media along with displaying of emojis.

## Secure connection

Supporting end-to-end encryption on all exchanges and the ability to verify people's identities using a series of emojis.

## Two-person secure audio and video calls

using improved algorithms, and the development of high-speed internet lines have changed the position of RAICA. By integrating these technologies, you can now have face-to-face conversations with friends around the world with just a few clicks.







Fully encrypted all video and audio calls



Available on all platforms



Ability to send group calls, photos, stickers, etc.



Reduced data consumption for video and audio calls



## Organizational authentication

The main purpose of Organizational Authentication is to provide a centralized service for authentication and authorization. Providing the ability to use Active Directory or LDP, set policies, install software, and apply critical updates is one of the benefits of using organizational authentication.

- ▶ Possibility of independent authentication by username and password
- ▶ Possibility of authentication by mobile phone number and OTP code
- ▶ Possibility of connection to various central authentication systems of the organization such as Active Directory



## Using of various bots

bots are services designed with the help of a set of specific rules and artificial intelligence, with which users communicate through a user interface.

Poll collection

Chat bots

Photo and video sharing

Advertising

And many more!





## Flexible and smooth user interface

Providing a variety of attractive and customizable user interfaces on web, mobile and desktop platforms.



## A communication bridge with other messengers

Ability to centrally exchange messages with other popular messengers such as WhatsApp, Telegram, Grid, Slack, etc.

### Communication bridge with organizational systems:

Possibility of secure communication with organizational systems and presentations in the form of widgets and frames, such as dashboard widgets...



## Video Conferences

Establishing unlimited secure communication in the form of a conference with sharing pages and video along with managing meeting resources and members.



Secured, Orgnized, Fast

For futher info please visit:

[ChatSi.Barsi-co.com](https://ChatSi.Barsi-co.com)



Cetia is a location data management system that has the ability to load and display a huge amount of location information including vector data (digital maps) and raster data (aerial images, satellite images, 3D Earth models) in different formats and modes.

As one of the display features, we can mention OSM layers, Google Labels and Virtual Labels, which can be displayed online on the software.

The Terrain layer is also used to display the topography effect.

Displaying georeferenced images, displaying the largest images in the shortest time using the resources of the host computer, scrolling on the image with the least delay, and also instant change of image magnification using mouse keys are the features of Cetia.

There are default vector and raster layers in Cetia, in addition to which you can add new layers to the software or remove layers from it.

Adding an image layer in timed manner is another feature to mention. So that if there are images at different times

from a specific place and a type of image, the images can be stored and displayed in chronological order.

Other features of this software include the ability to add user images (as a new raster layer) and compare them with existing satellite images

from other servers, add tiled images, add mbtiles images from image mosaicking,

mbtiles stored in the software cache and Google Earth mbtiles products.



# GIS

GEOSPATIAL  
INFORMATION  
SYSTEMS  
SOLUTIONS

## SITA

### Lands Changes Reportage Integrated System

The Change Detection System (SITA) software detects the changes in satellite imagery. In this software, these images can be examined by using two or more images from an area and preprocessing them. The system, besides, manages to identify the phenomena and observe the differences through Satellite Image Time Series. SITA has been developed with the intention of simplifying the process of tracking changes in such a way that the user would see the results after providing necessary factors to the system.

## FireGuard

### Control Fire Hazards

FireGuard is a geospatial web-based system and mobile application that generates and displays active fire maps, burnt areas and potential fire hazards using automated processing system of various satellite images on a daily or selected timeframe. This system also provides the possibility of receiving statistical reports of products based on the city, province and over the selected time periods.

## SAMAN

### Fire Location Route Finder System

SAMAN is a web-based system that is used to locate the best route to reach the area where a fire has taken place. The system takes advantage of various firefighting information layers, passages, satellite imagery of online services as a background, as well as traffic data for different hours and days in order to determine the optimal route and fire stations.



## UAV Image Processing System

The UAV image processing system or PARDAZ can perform photogrammetric processing as well as generate specific information and 3D data from digital photos taken by the UAV. The system carefully examines the levels of the images and displays them in high resolution.

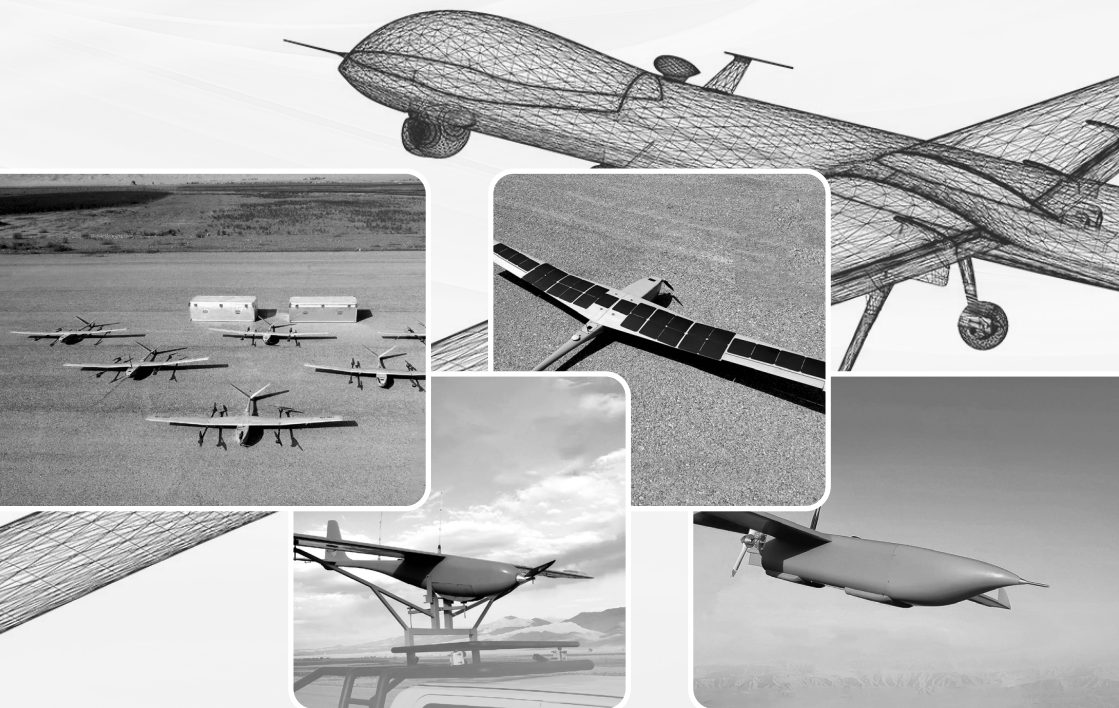
### UAVs Model List:

**BARPAD4** Multi Purpose, Batt Proven

**BARPAD3<sup>VTOL</sup>** Best For Operational Requireme

**BARPAD5** Long Endurance,Batt Proven

**BARPAD3S** Edge of Technology





DashSi is a multi-platform open source data analysis and interactive visualization web application that publishes charts, graphs and alerts to the web when connected to supported data sources. End users can create complex dashboards using an interactive query builder.

It is extensible through a plugin system and is divided into a front-end and a back-end, written in TypeScript and Golang respectively.

**Dynamic dashboards:** Defining all types of dashboards with dynamic widgets, MasterDetail and drilldown connections.

**Widget writing:** Ability to customize and define unlimited types of display widgets.

**Presentation:** Presenting widgets and dashboards as API and IFrame.

**Warning:** Ability to define various alert rules at the widget level using the communication channel to send notifications to ChatSi Messenger.

**Monitoring:** Viewing and analyzing various types of logs and metrics of system resources.

**Data sources:** Ability to connect to all types of relational, non-relational and online databases.

**Authentication:** Connecting to central authentication systems and support for OAuth2, SAML.







Secure location information system for managing, analyzing geographic layers and providing geographic services based on the OGC standard on the web platform.

**Basic map service:** Providing various OGC–based services such as satellite, urban and 3D maps.

**Spatial analysis:** Analyzing all types of raster layers such as visibility analysis, slope zoning, buffer, etc.

**Connecting to other location servers:** Connecting to other location servers such as ArcGIS, QuantumGIS, GeoServer, MapServer.

**Support for all types of data formats:** Converting more than 90 types of data formats based on vector and raster.

The ability to connect to all kinds of reliable domestic and international location databases as a web service (demographic layers, water, gas and electricity lines, etc.)

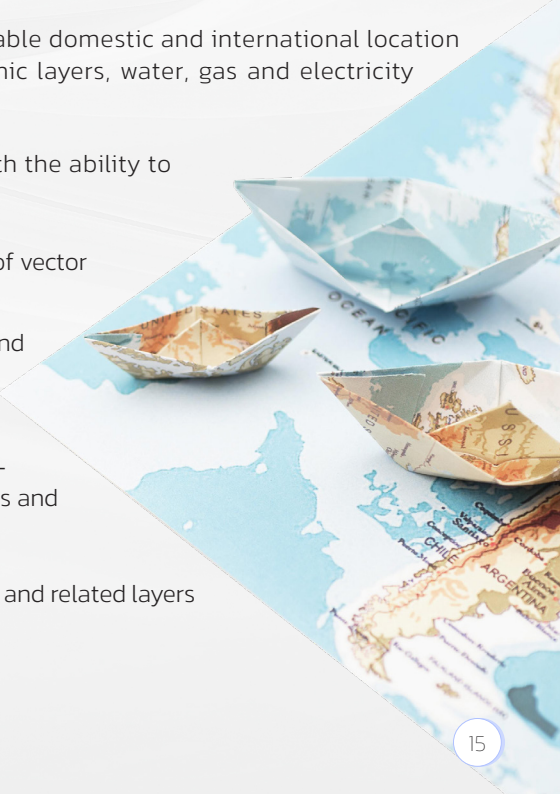
**Drawings:** Drawing all kinds of shapes with the ability to change, copy, cut and rotate, etc.

**General calculations:** Spatial calculations of vector layers.

**Search and filtering:** Searching on vector and urban layers added benefit of being able to filter and save.

**Routing:** Routing based on the types of vehicles with the ability to draw height profiles and dynamically create traffic barriers.

**Printing and extracting:** Extracting the map and related layers as GEOPDF.



**Dynamic data model:** Defining dynamically all types of information fields with support for various types of data formats.

**General features:** Pinning, creating and customizing all kinds of labels and styles on layers and features, categorizing and classifying, displaying and converting coordinates, various types of map scales, going to the position, etc.

**Dashboard view:** Displaying various dashboards on geographical layers.

**Layers management:** Defining and managing all types of vector layers with the ability to create a workspace for classification, management and specialized analysis.

**Security and access:** Authentication based on OAuth2, as well as the application of access types on the layer, field and data range in a centralized manner.

A blue paper boat is placed on top of a globe. The globe shows a map of the Pacific Ocean with the word 'OCEANO' visible. The word 'MapSi' is overlaid in large white letters, with a yellow dot above the 'i' and a yellow underline under the 'p'.

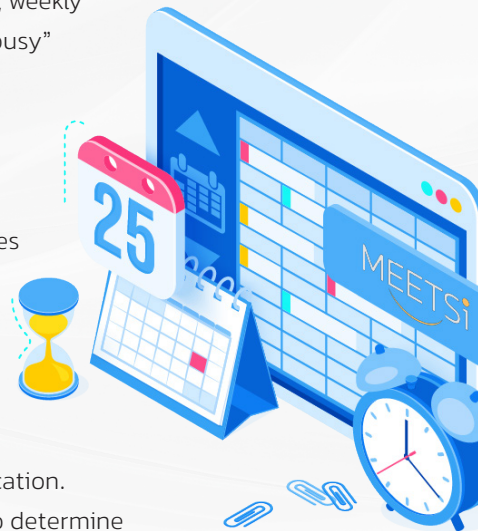
# MapSi



Designing and creating a stable, secure, open–source, distributable, agile and service–oriented infrastructure using the world’s latest knowledge for video conference communication with meeting management in a completely secure manner.

## Meetings management:

- Defining public calendar along with determination of working days and holidays
- Viewing appointments and meetings on a daily, weekly and monthly basis to view the user’s “free” and “busy” times.
- Planning appointments personally and organizationally.
- Arranging periodic meetings.
- Notifying meeting attendees of meeting changes or cancellations via ChatSi.
- Defining categories to create different types of meetings in organizational units.
- Setting up a meeting place.
- Creating a calendar for each meeting to show the availability of the meeting and its meeting location.
- Defining one or more meeting administrators to determine and manage meeting types.
- Sending invitations to meeting participants and guests via SMS.
- Creating one or more agents to follow–up on action deadlines for each resolution.
- Checking the attendance status of meeting invitees, through the meeting attendees and absentees section.
- Reporting based on all meeting information, meeting agenda and resolution.
- Connecting to the central authentication service based on LDAP, Active Directory.



### Video conference service:

- Creating various types of templates to schedule meetings based on position and resources
- Making audio and video calls in the form of video conference with minimum bandwidth on the web platform
- Sending public and private text messages
- Online sharing
- Screen sharing
- Sharing any open apps on the screen
- Adjusting the sound and image quality
- Viewing several images side by side in a tabular form
- Selecting one of the pictures as the main picture
- Recording conference calls
- Managing conference members
- Authentication integration with central authentication systems such as LDAP and OAuth2
- Supporting various codecs for voice such as Opus, SILK, Speex, G.722, PCMU/PCMA (G.711), iLBC, GSM, G.729 Annex
- Supporting various codecs for images such as H.264, H.263–1998 / H.263+
- Ability to expand the infrastructure and distribute the load between different servers
- IPV6 support
- Ability to play VOD video content
- Supporting Android OS devices
- end-to-end encryption

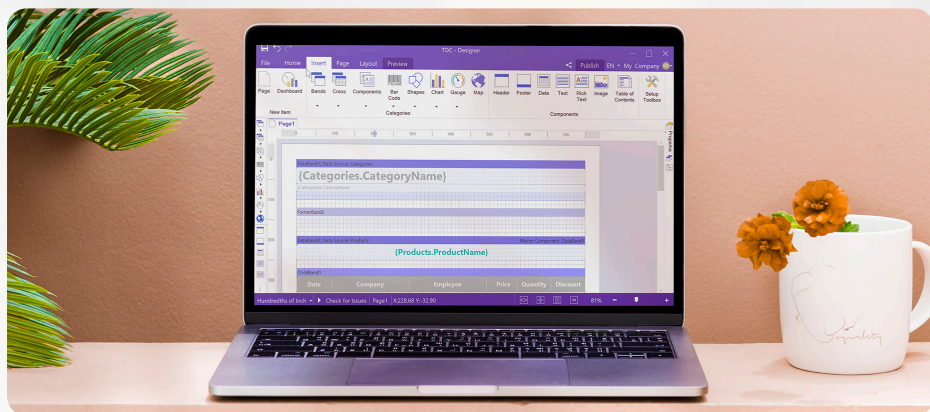
The logo for MeetSi features the text "MeetSi" in a black, sans-serif font. A yellow dot is positioned above the "i". Below the text is a stylized orange smile-like arc.





Providing a centralized and secure system in order to define all types of reports with different interfaces.

- Separated design and display environment in order to increase data security
- Ability to define, manage and categorize reports
- Ability to apply access to defined reports
- Possibility of dynamic filtering
- Ability to encrypt the rendered data to be displayed on the user side
- Providing service as REST to all existing systems
- Providing services in the form of REST in order to receive reports in different formats
- Connecting and supporting relational and non-relational database types
- Ability to export in various data formats such as word, excel, csv, pdf
- Designing 2D and 3D tables by applying various styles and formats
- Designing many kinds of components, including text, photos, bill of lading, charts, color spectrum, etc.
- Support right-to-left layout
- Fully open source and web based
- Support authentication based on SAML, OAuth2





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