

TACTICSTM smartGuard



TACTICS smartGuard is a smart and cost effective solution to manage multiple traffic intersections in a city. Built as a web-based hosted solution, TACTICS smartGuard enables performance of the most commonly used functions of a Traffic Management Center (TMC). Accessible via any web-enabled device, TACTICS smartGuard eliminates the need for expensive and complicated IT infrastructure at the TMC. The city or agency benefits by having a highly secure TMC that is always maintained with the latest software reducing the need for ongoing capital investments.

- Web-based Centrals Software
- Simple and Easy to Use
- Quick and Easy Deployment
- Monitor and Control Capabilities
- Flexible Procurement Models
- Multiple Deployment Modes
- Flexible Packaging

Web-based Centrals Software

Anytime, Anywhere Availability

 TACTICS smartGuard is a web-based Centrals software that allows secure access from anywhere in the world on a variety of HTML5.0 based browsers using an internet enabled PC, tablet or Smartphone device. TACTICS smartGuard is an intelligent and innovative system for monitoring and optionally managing connected Siemens controllers and associated detectors. You've never been more in control.

Secure Connectivity

TACTICS smartGuard is hosted by Siemens in a highly secure
datacenter environment designed for hosting specialized
applications for high availability critical infrastructure. In
addition, the security of all critical changes by the user on
TACTICS smartGuard is enforced using a dual authentication
concept. Certified by TÜV, the world renowned safety and
certification agency, the dual authentication concept
requires the user to enter a secret numeric code in addition
to the standard login and password credentials when making
any changes to the controller configuration. The secret code
is sent as an SMS text message to a predefined cell phone
included in the user's profile.



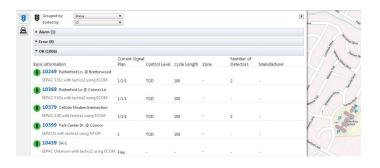
Simple and Easy to Use

Intuitive User Interface

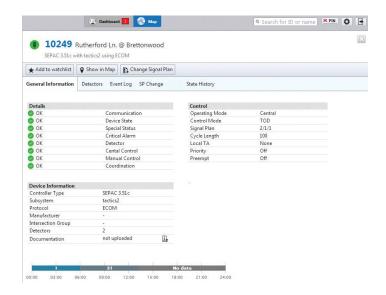
Map Display – Based on OpenStreetMap, the Map view presents a one-click overview of your entire traffic system.
 Swiping your finger or cursor across a rollover opens a window that displays key information about controllers and detectors. You can zoom in and out with a pinch gesture and swipe your way through map sections. From the map, you can directly access other functions to modify a signal plan.



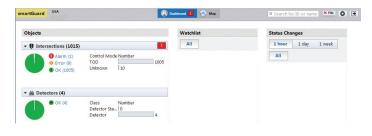
 List Display – If you prefer to work with lists instead of maps, choose the list format to review key data on the objects in your system. Flexibly sort and group objects by device type, control level, or name and number to make your tasks even easier.



 Detailed Display – Simply tap or click on an object in the Map or List Display to open a window that provides a more detailed look at intersection details.



 Dashboard Display – Check system status at a glance. Red for alarms and yellow for warnings call instant attention to important messages. Take it a step further by querying causes and place critical objects on a watch list. The dashboard also displays time-stamped status changes individually by object or in historical summaries.



 Archive Display – The signal plan archive provides easy-toread operational data history, while another archive shows historical detector data.

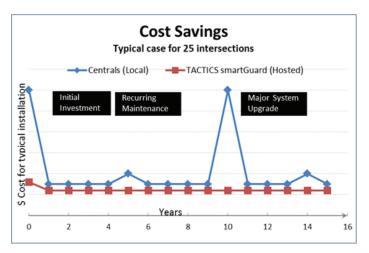


Flexible Procurement Models

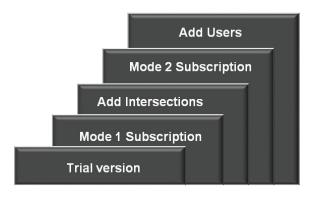
Unlike conventional Centrals software, TACTICS smartGuard is not installed on a server at the TMC. Cities and agencies therefore are able to procure TACTICS smartGuard as a software service from Siemens. A key characteristic of this service is the subscription-based pricing model.

Subscription-based Pricing

 Subscription-based pricing consists of a minimal onetime setup fee and a nominal recurring payment. The primary benefit of such a pricing model is the ability to scale the investment to suit a wide array of financial and technical constraints.



 Cities could choose to connect a subset of intersections, such as problem intersections or those located in remote locations to TACTICS smartGuard as a first step under Mode 1. As the need increases, additional intersections can be easily added to scale the system. As the number of intersections increase, it could become economically feasible to convert the system to a Mode 2 deployment while enjoying the benefits of TACTICS smartGuard.



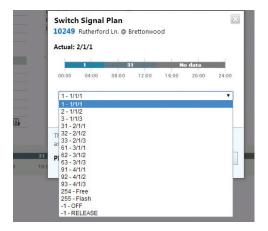
Plug and Play Trial Version

- One important benefit of web based Centrals software is the ability to quickly and easily experience the software. Siemens offers a convenient TACTICS smartGuard trial version whereby cities and agencies can quickly and easily experience the superior benefits.
- The convenient trial version consists of the following features
 - 60 days free access to a fully configured TACTICS smartGuard for 5 intersections
 - Includes 5 sets of cell modems and data plan

Monitor and Control Capabilities

Change Signal Plans

 TACTICS smartGuard allows the user to change signal plans on configured intersections. When making a change, a unique PIN code is sent to the user's cell phone to ensure secure operations.

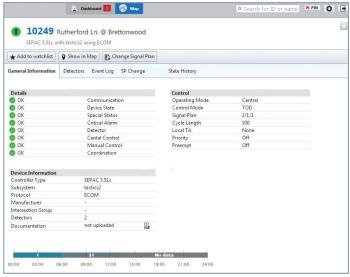


Online Documentation Storage

 TACTICS smartGuard supports the storage of documentation in a number of standard formats. This makes it easy for personnel in the field to access critical information when they need it.

Intersection Detailed Status

• TACTICS smartGuard gives the user a detailed view of the status of an intersection making it easy to see what is happening at the intersection.



Multiple Deployment Modes

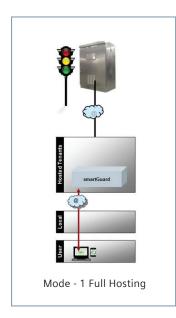
TACTICS smartGuard supports multiple deployment modes:

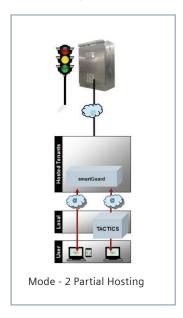
Deployment Mode 1, Full Hosting

 For the Application Service Provider (ASP) the required software and hardware are not purchased, but rented.
 Customers without urban traffic centers can thus rent base functionality of an urban traffic center as a service at a reasonable price.

Deployment Mode 2, Partial Hosting

 Customers continue to have access to the full functionality of TACTICS using their hardware and software. TACTICS smartGuard provides remote access to core functionality outside of the TMC via an Internet browser on a Smartphone or PC.





Multiple Communication Modes

Just like any conventional Centrals software, TACTICS smartGuard is capable of communicating with field equipment over NTCIP or the proprietary ECOM protocol. This feature ensures that TACTICS smartGuard can communicate with your field equipment irrespective of the protocol used.

- ECOM protocol works seamlessly with the Siemens SEPAC controller software. Proven over decades of successful implementations across the country, ECOM communication is critical when integrating legacy controllers.
- NTCIP is an open protocol widely used in the industry. Since
 the protocol is shared by multiple controller manufacturers,
 inter-operability is a key tenant of NTCIP. The ability of
 TACTICS smartGuard to communicate using the NTCIP
 protocol opens up the ability to widen the scope of controller
 brands including most 3rd party controllers.

System Compatibility

The system compatibility for TACTICS smartGuard is carefully designed to work with previous versions of hardware and software. Backwards compatibility is a key tenant. Although previous version of controller software may be technically compatible, we strongly recommend using the latest version of controller software with TACTICS smartGuard.

Controller Hardware and Software

- TACTICS smartGuard is compatible with Siemens models m50, m60, and 2070 series of controller hardware. In fact, TACTICS smartGuard is compatible with all versions of controller hardware that are compatible with TACTICS version 2.2.4 and later.
- TACTICS smartGuard is also compatible with the popular Siemens SEPAC controller software by default. Any version of SEPAC software that is compatible with TACTICS version 2.2.4 and later is already compatible with TACTICS smartGuard.



Features

The customer has access to the following basic functions:

- Two-stage security concept certified by TÜV
 - User name and password
 - For security relevant modifications Mobile PIN via SMS
- Controller compatibility
 - Compatible with all SEPAC and EPIC controllers
 - All communication media supported
- Monitoring of traffic objects
 - Controller
 - Detectors
- GIS-Map (OpenStreetMaps)
- Dashboard & List functions
- · Visualization of historical operating data
 - Display of signal plan change
 - Display of detector time series
 - Display of device status changes
- Managing (switching) of controller plans
- User administration
- Positioning of traffic objects
- Service notification
- Operation notification
- Time-of-Day (configuration by Siemens)
- Controller database backup and recovery (configuration by Siemens)
- Up- and download of documentation (PDF, JPG, etc.) for each intersection
- Support of: Android, iOS, Windows, OS X, and Linux

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