

EXTEND7000
MONITOR | CONTROL | MAINTAIN



Boost engineering performance with mobile SCADA and maintenance



Reduce downtime

Eliminate paperwork

Cut costs

Meet KPIs



SCHAD
ENGINEERING MOBILITY

www.schad-automation.com

Introducing engineering mobility and a new era for plant maintenance

SCADA systems transformed the management of automated plants in the 1950s. Now, 60 years later, mobile technology and enterprise mobility are shaping the way we work.

Applying this innovation to process automation, SCHAD has created **EXTEND7000 Mobile SCADA and Mobile Maintenance**, a powerful set of engineering mobility tools that give plant engineers responsible for operations and maintenance activities both SCADA notifications and full visibility and control of automation systems.

Get full visibility and control of automation systems

Using **EXTEND7000**, authorised personnel are able to monitor, control and maintain automated systems remotely from anywhere within a facility or the outside world, using any mobile device.

EXTEND7000 Mobile SCADA interfaces to all leading SCADA systems, extending and enhancing existing monitoring functionality onto a mobile device. This gives both engineers and management complete visibility and full control of automated systems from the shop floor.

Traditional SCADA systems show you there might be a problem but **EXTEND7000** also reduces downtime. It alerts the right people within seconds, directly reducing the time between an alarm being raised and an available, appropriately qualified engineer starting to fix the problem.

A bridge between existing SCADA and Maintenance Systems

EXTEND7000 Mobile Maintenance further expands the software's mobile SCADA capabilities with a maintenance module that integrates to all leading plant maintenance applications, including IBM Maximo and SAP PM.

Using **EXTEND7000**, field based engineers have a single, powerful gateway to both SCADA and maintenance systems. In this way, **EXTEND7000** uniquely combines mobile SCADA notification and control with the ability to directly link to maintenance information – all in real-time, whilst on the go.

Results show downtime can be reduced by up to 60% with a 25% improvement to service levels.



Meet your KPIs through lower downtime and costs

When a tag being monitored by **EXTEND7000** meets a pre-defined notification condition, an alert message is triggered which is sent directly to engineering team members responsible for maintaining automated systems.

From any location and within seconds of an issue occurring, **EXTEND7000 Mobile SCADA and Mobile Maintenance** allows authorised personnel to:

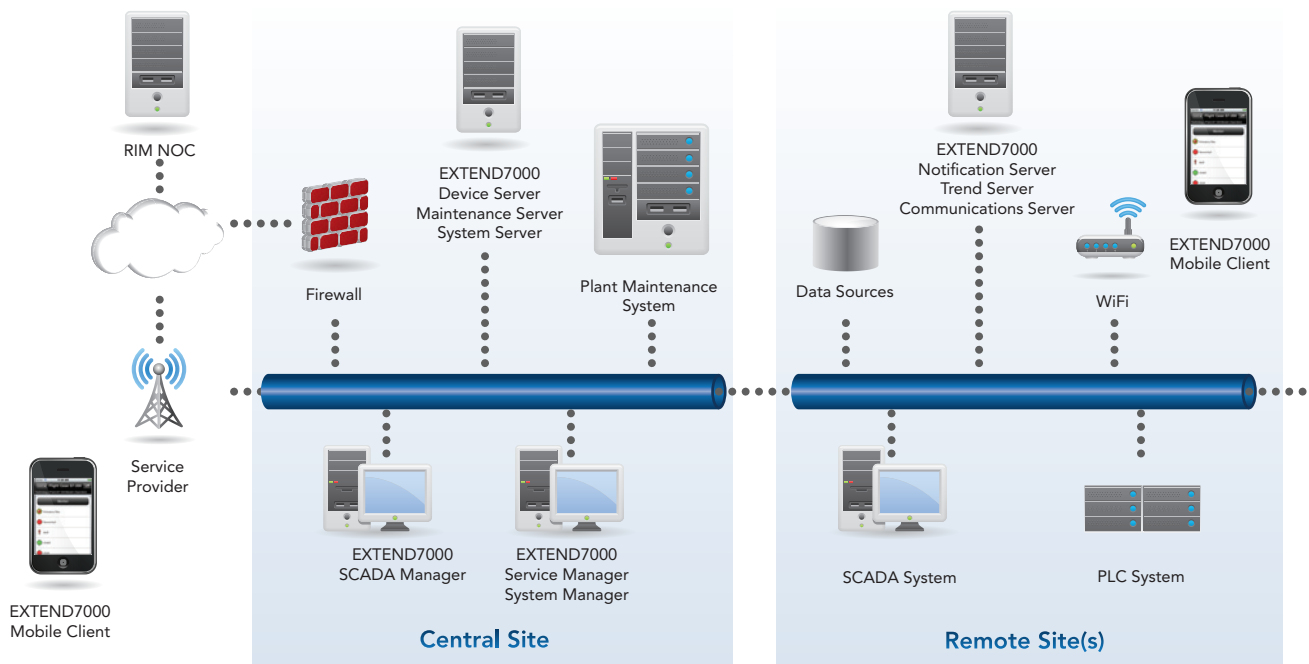
- Monitor and control multiple plants or warehouses from any location
- Co-ordinate engineering maintenance activities remotely
- Deliver SCADA notifications directly to the right engineer
- Receive and process fault notifications
- View systems remotely via CCTV on a mobile
- Directly control PLCs and change parameters
- Access historical information and create real time reports
- Link SCADA notification and control to maintenance systems
- Switch between SCADA events and maintenance activity
- Update Plant Maintenance Systems in real-time
- Review documents, work orders and historical plant information relating to a SCADA notification
- Create ad hoc work orders in response to a SCADA event
- Eliminate paperwork and manual data entry

Architecture supports scalable technology

EXTEND7000 is a mobile application that is highly functional, configurable and quick to implement.

A highly scalable solution, **EXTEND7000** can be deployed at a single site or, for large organisations, distributed across multiple sites where it is capable of monitoring many 100,000's of tags and a wide range of data sources. The system supports many 100's of remote users whether connected on a local Wi-Fi or Mobile Data Network.

- High security and system availability
- Unlimited scalability
- Fast and simple to implement for rapid ROI



Secure multi-platform support and security

EXTEND7000 has been designed to conform to the highest security standards. It is compatible with most modern smartphones, handheld terminals and tablet devices on the following operating systems:

- Android
- Blackberry RIM
- iOS iPhone and iPad
- Windows Mobile and Windows Phone

The **EXTEND7000 Mobile Client** has been designed to offer the same look and feel as the device's native functions. For harsh environments, protective cases are available as a lower cost method of converting a standard mobile into a rugged device.

Delivering extended value implementation and support services

When you choose **EXTEND7000**, SCHAD's professional services division will manage your implementation throughout its lifecycle, from system design and configuration, implementation, user acceptance testing and on-going support. Our team of system integrators are experts in mobile applications and process automation and bring invaluable insights to each customer's installation. Depending on the complexity of each project, it takes between 2 and 4 weeks to implement **EXTEND7000** including training.

PLC	SCADA	Others	Plant Maintenance Systems
Siemens Simatic S5	Siemens WinCC	OPC	IBM Maximo
Siemens Simatic S7	Wonderware Intouch	ADO	SAP PM
AB CompactLogix	Webfactory	SQL database	Oracle eAM
AB ControlLogix	Felten-PM SCADA	.txt files	Main-Tool
Mitsubishi FX	UniWare	.pdf files	Ultimo
Mitsubishi Q		Any other file type with native client viewer	

Integrate with existing SCADA and Maintenance Systems



Vanderlande uses **EXTEND7000** to monitor baggage handling at Munich Airport. The software is integrated directly with Simatic PLCs, their WinCC SCADA system and existing maintenance system, GLI MAIN-TOOL. **EXTEND7000** has significantly reduced downtime and improved their important 'LBI' KPI, which means higher operating profits.

"With EXTEND7000 we bring SCADA functionalities and maintenance into perfect symbiosis."

Thomas Gebbert
Vanderlande Industries



Construction chemicals manufacturer Lugato uses **EXTEND7000** to control production lines and materials handling systems, enabling monitoring of their automation systems to be run cost effectively as a single function. **EXTEND7000** is integrated with Simatic PLCs and an existing WinCC SCADA system, allowing Lugato to reduce downtime and labour costs.

"The cost-benefit relationship convinced us immediately."

Jan Kulling
LUGATO



Food manufacturer Frosta uses a conveyor and four ASRS process controllers designed for warehouse operations, which are now monitored by **EXTEND7000**. Alerts are sent immediately, directly to the right member of the engineering team, which means resource utilisation is optimised and unscheduled downtime is much lower.

"EXTEND7000 enables a mobile dialogue between our plant processes and our users. We can now react considerably faster to faults and fix them."

Thorsten Stern
FRoSTA



BAUR is one of Germany's oldest retailers and uses **EXTEND7000** to monitor around 70,000 designated notifications which control its fully automated warehouse operations including warehouse receiving docks, high-rack storage machinery, conveyor belts and sorting technology. **EXTEND7000** is integrated with over 60 Simatic PLCs and an existing WinCC SCADA system. Since using the software, BAUR has seen productivity increase and a reduction to service call costs.

"In two years everyone will have a smartphone so it is natural to utilise them to improve business processes."

Roland Säum
BAUR

Designed for industry

Benefits of EXTEND7000

- Cut unscheduled downtime and fix time by up to 60%
- Achieve KPIs and increase service levels
- Improve workforce productivity, reduce numbers of on-site visits
- Eliminate paperwork, real-time reporting
- Reduce labour costs
- Fast ROI (typically in 6 – 9 months)

Airports

Busy modern airports rely on process automation to ensure service operators meet important KPIs including the LBI 'leave behind index'. Unplanned downtime costs dearly, impacting revenues and customer satisfaction levels due to the inevitable travel disruption.

Who can benefit?

- International and transit airports
- Freight operators
- Ground handling contractors
- Baggage handling specialists
- Facilities management
- Airport operations
- In-flight and catering services

Utilities

Public service utilities – power stations, water treatment facilities and electricity generators – rely on automated systems and 24/7 monitoring to ensure supply levels are not disrupted. With facilities spread across a wide geographical area, they need the ability to diagnose and fix issues remotely using a mobile device.

Who can benefit?

- Water treatment facilities
- Oil and gas drilling specialists
- Mining companies
- Hydroelectric power companies
- Wind farms
- Renewable energy specialists

Manufacturing

Levels of automation within manufacturing are on the increase to help drive down costs and improve efficiency. This is central to the thinking behind the lean, six sigma and just in time approaches, with a collective goal to achieve more with less through the continuous elimination of errors and waste.

Who can benefit?

- Process driven manufacturers
- Automated production logistics
- Heavily automated facilities
- Unmanned production environments

Distribution

Modern warehouses and distribution centres typically operate a just in time service model. Downtime, mistakes or out of stocks due to automated equipment like conveyors, cranes and storage racking malfunctioning have a negative impact on sales and are unaffordable.

Who can benefit?

- Multichannel retailers, e-tailers, mail order specialists
- FMCG retailers
- Logistics providers and 3PLs
- Manufacturing – distribution operations
- Automation equipment suppliers
- Outsourcing specialists



SCHAD is a pioneer in engineering mobility solutions and was founded in 2007 to offer a global standard for the mobile operation, control and maintenance of automated systems using an ordinary mobile device.

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