

RTAP

Powerful, Secure SCADA for Mission-Critical Industries

Industrial Defender RTAP

- Proven reliability and availability for mission-critical applications
- Flexibility and openness to adapt to changing system and application requirements
- Multiple operating system choices including Linux, Unix and Windows
- Integrated security solution designed specifically for the unique security challenges of today's control environment

Facing Today's Challenges for Mission-Critical Industries

Mission-critical industries such as power, oil & gas, water and transportation have many challenges in today's environment. The vulnerability from cyber attack of systems that control the critical infrastructure of our communities has become a critical issue at the federal, industry and corporate level. Ensuring the physical safety and security of this infrastructure and its users has increased the need for more effective monitoring and control. In addition to security challenges, deregulation of many traditional utilities has resulted in a competitive imperative to better understand and control use of resources such as energy. Whether your industry is power, water or transportation, deregulation has meant maximizing operational efficiency and improving service responsiveness. Finally, increased acquisitions along with the emergence of multi-service utilities call for the automation and integration of large scale diverse assets. All these challenges require SCADA systems to provide the utmost in flexibility, scalability, openness and reliability.

Industrial Defender's RTAP SCADA platform, coupled with our highly experienced service capabilities, produce a truly powerful and secure SCADA solution – one that can manage the automation challenges seen in today's critical infrastructure such as: power generation and transmission, oil & gas production and pipelines, water distribution and treatment and rail and metro transportation. RTAP specializes in monitoring and controlling large mission-critical operations that are complex, diverse and evolving. The RTAP real-time object database offers you an unprecedented ability to reuse or clone system components, saving considerable time and investment in system development, expansion and maintenance. Management and organization of large systems is made very easy, as tasks or modifications can be performed once on a parent component and apply to any clones of that component used throughout the entire system. RTAP has unmatched openness and flexibility both for configuration by engineering staff or at the programming level for custom modifications by developers or system integrators. The full functionality of RTAP runs on Windows, Unix and Linux platforms allowing you flexibility to deal with the evolving operating system landscape. You can even mix and match RTAP Windows or Linux clients with RTAP Unix or Linux database servers for ultimate adaptability.

Finally, in order to secure your SCADA solution RTAP is integrated with Industrial Defender's security solution. Industrial Defender is the first security solution specifically designed for the unique security challenges of the control environment.



RTAP – A Proven Track Record in Mission-Critical Industries



Industrial Defender's RTAP has a stellar track record in addressing power industry challenges. For example, it has enabled increased flexibility and responsiveness in over 30 generating units and 14,500 MW of thermal power generation in the UK. RTAP allows these generation plants to perform in a fully deregulated UK marketplace by providing a supervisory platform with powerful integration features, flexibility and scalability to extend the life cycle of existing legacy control systems while increasing the responsiveness of the facility itself.

RTAP is also used in other power industry applications such as transmission and distribution network management and in providing training and simulation for 17 nuclear power stations in Europe.

"Industrial Defender's RTAP SCADA platform has provided superior reliability, flexibility and scalability. It is the foundation of our PROCYS control system which is a contributor to our position as a world leader in the transportation of oil & gas."

Scott Clarke
Enbridge Pipelines Inc.

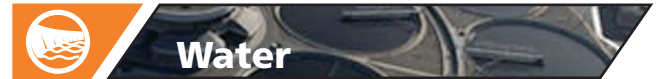


RTAP manages pipelines for the largest gas producers in Russia and the largest pipeline operation in North America. For one customer, RTAP is responsible for monitoring the transportation of 1.9 million barrels of refined oil products through over 9,700 miles of pipeline. In addition, RTAP provides real-time automation and optimization of production facilities in some of the harshest onshore and offshore environments in the world.



RTAP is deployed in a broad range of transportation applications. It currently manages millions of passengers everyday who use subway stations in France, Spain, Hong Kong, Singapore and Chile, to name a few. It is used to manage and control railway and automobile traffic across various European countries, as well as cities in North America.

Finally, it provides transportation facilities management at major European airports, monitoring everything from airplanes fueling and moving walkways to HVAC systems and security cameras. RTAP also makes certain that airports can handle high volumes of passengers associated with frequent plane arrivals and departures.



Industrial Defender's products are at the heart of several water distribution and purification networks, providing drinking water to millions of customers from California to Europe. In the city of London an RTAP-based system is one of the largest water SCADA systems in the world and controls water services to over 6 million customers. In Spain RTAP is used for environmental monitoring and supply management of water distribution systems.

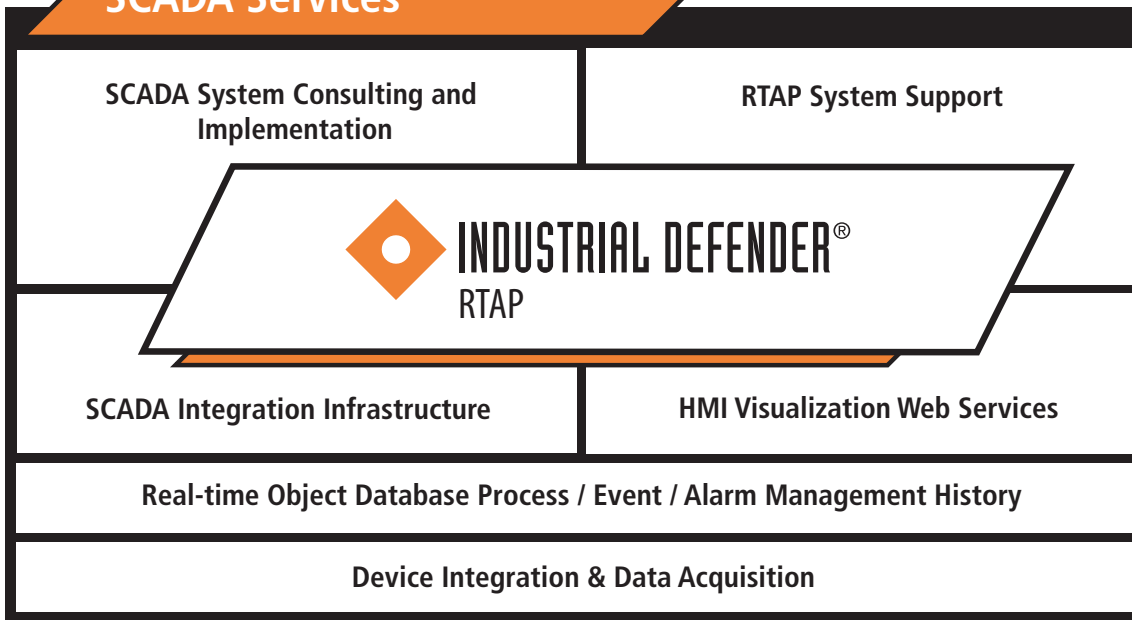


Key Features and Benefits

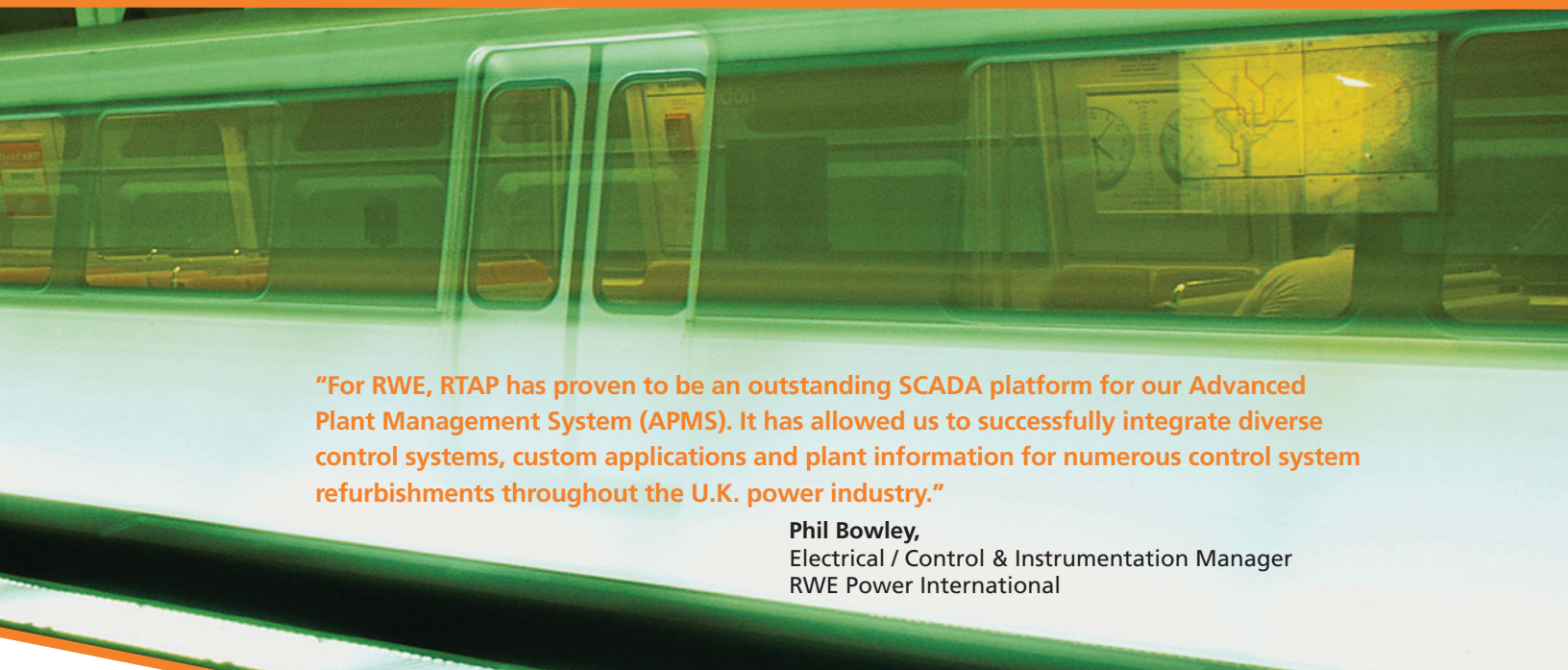
RTAP General Features:

- Powerful object oriented, real-time database including
 - Long term archiving of process data
 - Real-time alarm and event management
- Comprehensive development and integration infrastructure for customization and integration
- Platform flexibility with clients and database servers available on Windows, Linux and Unix platforms including:
 - Windows 2003 and Windows XP (client only for XP)
 - HP-UX (for PA RISC and Itanium), HP Tru64
 - Sun OS
 - Red Hat Enterprise Linux
- Choice of Windows, Linux or Unix HMI visualization
- Web services to securely deliver plant information to knowledge workers via web browsers or wireless devices
- Reliability with a complete hot standby solution that can handle multiple redundant servers
- Complete set of device drivers and flexibility to develop new drivers

SCADA Services



SCADA Platform Components



“For RWE, RTAP has proven to be an outstanding SCADA platform for our Advanced Plant Management System (APMS). It has allowed us to successfully integrate diverse control systems, custom applications and plant information for numerous control system refurbishments throughout the U.K. power industry.”

Phil Bowley,
Electrical / Control & Instrumentation Manager
RWE Power International

The Real-Time Object Oriented Database - Manage assets easily by intuitive models of any physical layout through hierarchical real-time objects.

- Eliminate repetition in building and maintaining the system through reuse of database objects and their related graphical components.
- Improve scalability by performing an operation on an object class and have it take effect on all instances of that class.
- Have visibility and responsiveness through real-time event and alarm management.
- Conduct long term analysis and record keeping through long term historical archiving.
- Perform any type of real-time data manipulation or analysis through an extensible calculation engine.

Customization and Integration Infrastructure

- Protect your investment from dead ends by taking advantage of RTAP's openness and flexibility.
- Easily develop and integrate new industry specific applications or functionality around RTAP using:
 - Scripting language access via Javascript, VBA and TCL
 - An object oriented Java interface for applications using EJB, J2EE or JSP
 - Access to all RTAP core functions through an extensive and documented set of C API's.

Visualization

- Choice of Windows, Unix or Linux HMI's
- Take advantage of user-friendly Windows clients working with Windows servers or highly reliable Linux/Unix servers.
- Drastically reduce the number of graphic screens developed through use of relative addressing. Multiple database objects can dynamically address the same graphic.
- Improve scalability with smart graphical objects for multiple reuse and group level graphic modifications.
- Take advantage of scripting flexibility through use of a simplified scripting language or a more powerful scripting language like VBA or Javascript.
- Provide summary or management information to wireless devices or any browser through RTAP Web Services.

Device Connectivity

- Comprehensive list of device drivers available including: OPC, Siemens, Rockwell and Modbus.
- Satisfy requirements for any device driver, old or new, by taking advantage of a fully documented driver development toolkit.



Industrial Defender, Your Trusted Partner in Cyber Risk Protection™

With over 18 years of industrial control system and SCADA industry cyber security experience in the Power, Oil & Gas, Transportation, Water, and Chemical vertical markets, Industrial Defender is the trusted leader in the Cyber Risk Protection™ lifecycle. Please contact us for more information at:

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About Industrial Defender, Inc.

Industrial Defender, Inc., the global leader in Cyber Risk Protection™, is the first company to offer a completely integrated Defense-in-Depth™ cyber security solution designed to protect the industrial control system and SCADA environment in a flexible and cost effective platform. This comprehensive Cyber Risk Protection™ lifecycle solution enables the efficient assessment, mitigation and management of cyber security risk within the critical infrastructure network domain. Industrial Defender is a privately held company with over 18 years of industrial control system and SCADA industry experience, and more than 7 years of industrial cyber security experience – recognized by Frost and Sullivan's for the 2008 Company of the Year Award. Industrial Defender has completed more than 100 process control / SCADA cyber security assessments, more than 9,000 global technology deployments in securing critical infrastructure systems, more than 3,000 mission critical SCADA deployments and provides managed security services for 160 process control plants in 21 countries.