

CitectSCADA

System of Choice for Industrial Automation

HMI/SCADA



scalable >>> flexible >>> reliable

www.citect.com

Sign up for your free monthly MyCitect News for the latest e-news on product developments and application stories in your industry. Visit www.citect.com today!

Disclaimer

Citect Corporation makes no representations or warranties with respect to the contents or use of this brochure and, to the extent permitted by law, expressly limits its liability for breach of any warranty that may be implied to the replacement of this manual with another. Citect Corporation assumes no responsibility for any errors that may be in this document and reserves the right to revise this document at any time without incurring an obligation to notify any person of the revision.

Copyright

© Copyright 2003, Citect Corporation. All rights reserved. No part of this document may be reproduced, photocopied, or transmitted in any form or by any means (electronic or mechanical), for any purpose, without the express written permission of Citect Corporation.

Trademarks

Citect, CitectHMI, CitectSCADA, Plant2Business, and Plant2NET are trademarks of Citect Corporation. All other brand or product names are trademarks or registered trademarks of their respective holders.

CITECT CORPORATION LTD

Citect is a worldwide leader in industrial automation and information management solutions. Its CitectSCADA and Citect Plant2Business software are complemented by professional services, customer support and training. These solutions are enhanced by strong partner programs and are sold in numerous industries, including water and wastewater, facilities monitoring, gas pipelines, mining, food and beverage, pharmaceutical, and power distribution. Citect is headquartered in Sydney Australia, has offices in Australia, USA, Europe, China and Africa, and its products are distributed in more than 40 countries worldwide.

“Microsoft is pleased to be working with Citect to deliver powerful and reliable control and monitoring solutions for industrial customers worldwide.”

Don Richardson, Director, Manufacturing Industry Solutions, Microsoft Corp.

“CitectSCADA was the only HMI/SCADA product that could meet the requirements of a system this size. The built-in redundancy and scalability in CitectSCADA have ensured no system downtime since it was installed in 1998.”

Patrick Cross, Senior Engineer, WMC Resources Ltd – Olympic Dam,

WMC Resources’ Olympic Dam Operation includes over 450,000 tags and over 60 operator stations.

The Choice of Global Manufacturers

Citect, a world leader in industrial automation and information management, connects your personnel to real-time information in ways that support business strategies and enhance profitability.

Tradition of meeting customer expectations

Citect has a long history as a global leader in the development and application of SCADA and HMI software for industrial automation applications. The ability to develop powerful and reliable “industrial strength” software, capable of withstanding the rigors of large-scale operations, has been one of our great strengths.

Established in 1973, Citect has grown steadily over the years; both in terms of its sales revenue and financial strength. We have a tradition of meeting our customer’s expectations, whatever their requirements.

Scalable >> Flexible >> Reliable

CitectSCADA, one of the world’s leading industrial automation software packages, is renowned for its reliability and flexibility. Used in a wide range of industries, CitectSCADA enables you to increase your return on assets by delivering highly scalable, reliable control and monitoring systems to reduce operating costs, improve productivity and product quality. Easy-to-use configuration tools and powerful features enable you to quickly develop and deploy solutions for any size application.

Citect has been working in partnership with Microsoft for over ten years to ensure that CitectSCADA remains a technology leader. We continue to invest significant R&D into CitectSCADA; as a result it is the HMI/SCADA system of choice for many successful global manufacturers. We count among our customers, Alcoa, General Motors, NASA, Urenco, Baoshan Steel, BHP Billiton, Pratt & Whitney, BP Solar, WMC Resources, BMW, Nestlé, Mars Confectionery and Shell Oil, to name but a few.

A secure and protected investment

CitectSCADA is complemented by a dedicated team of experts providing professional services, customer support and training, ensuring that your automation investment is secure and protected. Citect Professional Services, our specialized team of engineers, can offer the best integration services to meet your requirements. They work strategically with our impressive global network of over 500 sales and integration partner companies to provide leading edge automation and information management solutions. In addition, our highly experienced technical support staff can provide you with the most up-to-date, quality support and services.

Successful global manufacturers select Citect as their automation partner to extend their competitive advantage. Experience shows that selecting our scalable, flexible and reliable automation system will enable you to increase your return on assets and ensure that your automation investment is secure and protected.





Reduce Operating Costs, Improve Productivity

Many global manufacturers have reported significant benefits from deploying a CitectSCADA monitoring and control solution. These include: maximized production, lowered deployment costs, more efficient process control, improved product quality, and integration with existing business systems.

Maximize productivity

Maximize productivity and ensure continuous production by investing in the world's most reliable HMI/SCADA system. CitectSCADA's design is centered on multi-level redundancy to ensure constant communication and operation of your system.

Improve product quality

Analyze and control the quality of manufactured products using standard CitectSCADA functionality, such as Statistical Process Control (SPC). Advanced statistical alarms enable your personnel to perform predictive calibration of process parameters thus preventing out of limit deviations before they occur.

Reduce your operating and maintenance costs

Through the deployment of a centralized SCADA system you can significantly reduce operating and maintenance costs; fewer personnel are required to monitor field equipment in remote locations, resulting in increased operator effectiveness; and less maintenance trips are required, resulting in decreased maintenance and training costs.

Integrate with your business systems

CitectSCADA can be easily integrated with your existing business systems using Citect Plant2Business, an easy-to-use platform that allows you to share data. In addition, Industrial Information Management (IIM) analysis applications allow you to aggregate and present real-time information, improving decision-making processes and significantly increasing business performance.

Preserve your capital investment

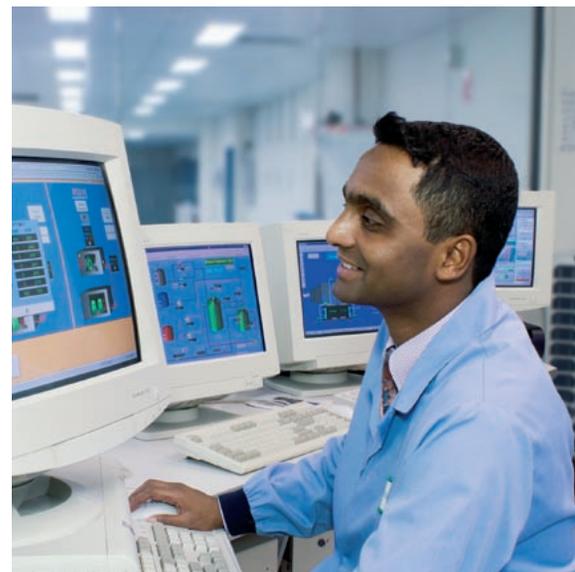
When you spend money to improve operations, you need to ensure prolonged use; CitectSCADA's open system design protects against control system obsolescence and can be easily scaled to meet growing demands on your operations. CitectSCADA has the flexibility to operate with open standards supported by hundreds of hardware and software vendors.

A secure and protected investment

CitectSCADA is complemented by a full range of specialized customer services, including professional services, an accredited integration partner program, technical support, and training, ensuring that your automation investment is secure and protected.

“By using CitectSCADA we have improved the product quality and minimized the manufacturing cycle time of our process.”

Rod Seares, Plant Manager,
BP Solar, Australia





Benefits for All

Plant Managers

Improve production processes Improve management of the production process with reliable, timely and accurate plant floor data.

Lower deployment costs Use off-the-shelf hardware and software applications rather than proprietary solutions to achieve lower deployment costs.

Reduce training costs Improve operator usability, familiarity and confidence and reduce training time with CitectSCADA's intuitive user-friendly graphics.

Compare vital data Produce daily comparisons across multiple years using CitectSCADA's long-term data archiving.

Control Engineers

A reliable, low risk system Design a highly reliable system using CitectSCADA's built-in redundancy and automatic failover.

Free development system Begin developing your system before purchasing licenses with our free development system.

Easily scalable Expand the capabilities of your system as site requirements change, without having to re-engineer your project.

IT Managers

Reduce maintenance and support Benefit from reduced maintenance and support with CitectSCADA's single platform and utilization of Microsoft technologies.

Systems Integrators

Reduce development and deployment costs Develop and deploy plant modules using CitectSCADA's project based design, and easily incorporate all of these modules into a single site-wide system.

Suit clients' needs Our flexible, open and customizable HMI/SCADA system can be fully configured to suit individual clients' particular needs.

Reduce project risk CitectSCADA's inherent handling of large scale systems, distributed systems and low bandwidth communications reduce project risk.

Operators

Gain confidence in your system Take the stress out of operations with the knowledge that your control system is reliable and robust.

Improve operator usability CitectSCADA's advanced alarm management and intuitive, user-friendly graphics improve operator effectiveness.





Scalable >> Flexible >> Reliable

CitectSCADA is a full-featured industrial automation product that can handle the requirements of any enterprise in a single integrated package. Take advantage of the following functionality included in CitectSCADA:

- Graphical process visualization
- Advanced alarm management
- Historical and real-time trending
- Built-in reporting
- Statistical Process Control
- Multithreaded CitectVBA and Cicode programming languages

CitectSCADA is the system of choice when you require a scalable, flexible and reliable system for any industrial automation monitoring and control application. Take the stress out of your operations by ensuring that vital production data will always be available. Easily expand or modify your system as your requirements change.

Whether you need an easy-to-use operator interface with networked reporting capability, or an entire client/server HMI/SCADA system spanning multiple plants on different continents, you can do it all with CitectSCADA.

Easy to configure

Advanced graphical features Fast-track the configuration of your display graphics by linking common graphical components such as pumps and faceplates to library objects. Using Genies, you need only select the loop name, and all associated tags, graphic objects and pop-up windows will be automatically configured.

Choice of programming languages If your system has specific requirements, you have a choice of two high level programming languages – Cicode, a SCADA programming language, and CitectVBA, an industry standard.

Up and running fast Minimize your learning curve using CitectSCADA's included page templates, designed to be easily modified to suit your requirements. In addition, CitectSCADA includes a fully configured, ready-to-run project that provides you with ideas for your own system.

Extensive user community Access a wide range of detailed technical articles, the accumulated experience of thousands of Citect users, via our online Knowledgebase. In addition, you can share your industry knowledge and keep in touch with other Citect users by joining the Citect Users email list.

Free development system Download your free CitectSCADA development software from our website, www.citect.com, to develop and test your application before purchasing licenses. Once this is complete, simply order your runtime license.

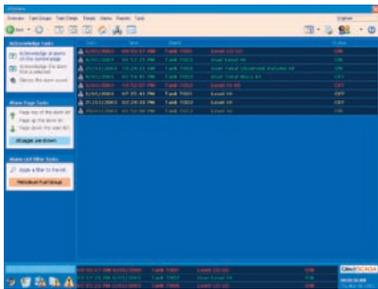
Architecture

Based on Microsoft technologies, CitectSCADA has been designed with an innovative, scalable architecture that allows your system to grow with your requirements, preserving your initial investment.

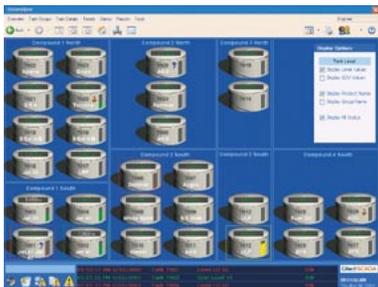
With an architecture designed for true client/server operation, the CitectSCADA server is functionally divided into separate tasks – I/O Processing, Alarming, Trending and Reporting – to ensure high performance response and integrity of data. If required, each of these tasks can run independently on different computers to distribute processor loads. Based on this unique architecture, you can scale your system without having to modify your existing configuration.

Redundancy

An open, flexible alternative to proprietary Distributed Control Systems (DCS), CitectSCADA significantly reduces your initial investment and your total cost of ownership. CitectSCADA includes DCS style redundancy, which can be incorporated at all levels to ensure continuous, reliable operation of your system.



Advanced alarming Increase operator effectiveness using Alarm Filtering, Alarm Delay and Multi-Digital Alarms. All alarms can be filtered by date and time, tag name, area, category and acknowledgement status.



Fast data display The dynamic data optimization inherent in CitectSCADA allows information to be distributed anywhere on your network in less than a second.

Easy to connect

All inclusive drivers CitectSCADA includes over 100 drivers enabling you to connect to a wide range of supported controllers. All drivers are easy to configure; simply select the express wizard to guide you through the set up. Connect to any included drivers at no extra cost.

OPC Client Expand your connectivity to a host of industrial devices via connection to third-party OPC Servers.

Third party applications Improve connectivity to your existing applications with open system interfaces, including OLEDB and OPC Server. In addition, CitectSCADA includes a comprehensive Application Programming Interface (API) for connection to custom applications.

Easy to operate

Fast Data Display The dynamic data optimization inherent in CitectSCADA allows information to be distributed anywhere on your network in less than a second.

Advanced alarming Increase operator effectiveness using Alarm Filtering, Alarm Delay and Multi-Digital Alarms. All alarms can be filtered by date and time, tag name, area, category and acknowledgement status.

Trending View your process status at a glance via an unlimited number of dynamic real-time and historical trends. Historical data can be archived indefinitely and retrieved in seconds for fast analysis.

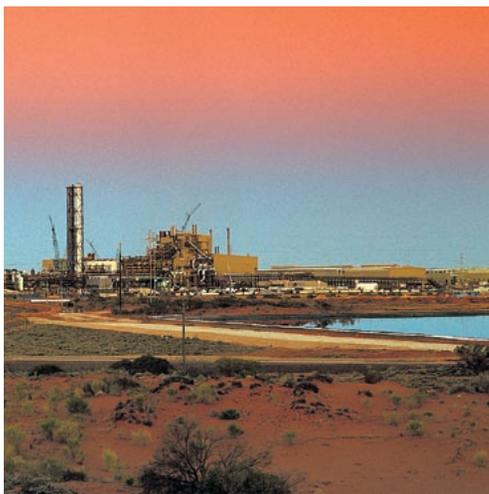
Reporting CitectSCADA's powerful reporting capabilities allow you to create custom reports that can be triggered manually by an operator, a time schedule or a process event.

Statistical Process Control Advanced statistical alarms inform your operators of process trends that may adversely affect product quality enabling them to perform predictive calibration of process parameters.

“CitectSCADA has become a market leader by providing scalable and reliable solutions that help users reduce operating costs, improve productivity and product quality across all industries.”

Craig Resnick, Research Director, ARC Advisory Group

Industrial diversity increases benefits



Oil and Gas

Perform remote monitoring of pipelines, tank farms, natural gas and liquid hydrocarbon extraction sites, and offshore platforms. Combining HMI and SCADA processes into a single system saves money and improves reliability and performance.

Power

Increase efficiency and reduce downtime for any size power generation plant and transmission network. Using open protocols such as DNP3.0 and a scalable SCADA product, your system can grow to suit your changing requirements.

Water

Seamlessly integrate PLCs, RTUs and Data Loggers over disparate communications media, with redundant paths, to ensure uninterrupted monitoring and control of remote water and wastewater facilities. In addition, operators can remotely access your control system via Pocket PCs.

Food and Beverage

Improve production capabilities and operations using CitectSCADA Batch, a fully redundant batch management solution. It is the most reliable batch solution available that enables compliance with S88 and FDA 21 CFR Part 11. CitectSCADA Batch provides a competitive advantage by enabling you to maximize system availability through field proven redundancy and improve supply chain and production management through integration with business systems.

Metals and Mining

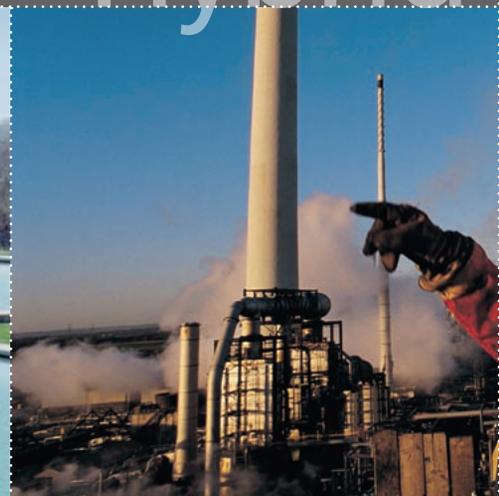
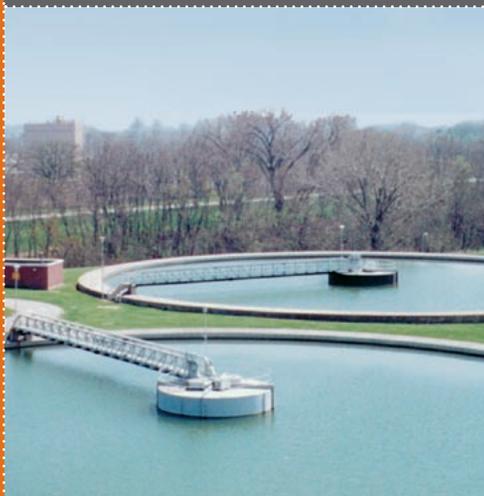
Improve mine safety, productivity and competitiveness by taking charge of all phases of production from mine face to mill. Improve mining processes by integrating your system with a range of Industrial Information Management (IIM) applications to collect productivity, downtime and quality information for analysis, planning and optimization.

Citect is the largest independent HMI/SCADA supplier to the Metals and Mining industry. We have proven our capability by supplying the world's largest PC-based SCADA system at WMC Resources' Olympic Dam operations. Argyle Diamonds, DeBeers, Alcoa, Baoshan Steel, Dofasco, BHP Billiton and WMC Resources are just a sample of our many customers.

Specialty Chemicals

Access to information is the key to safety and productivity in chemical manufacturing. Powerful data acquisition capabilities help you minimize energy consumption and monitor the plant environment all while ensuring production processes remain within safe limits. In addition, you can improve product quality and production capabilities using CitectSCADA Batch, a fully redundant batch management solution.

Hybrid



Agriculture
 Aluminum
 Automotive
 Aerospace
 Beverage
 Bio-Technology
 Facilities Management
 Building Materials
 Cement
 Chemicals
 Communications
 Cosmetics
 Defense
 Education
 Electronics
 Environment
 Food
 Glass
 Manufacturing
 Metals
 Mineral Processing
 Mining
 Oil and Gas
 Packaging
 Petrochemicals
 Pharmaceuticals
 Plastics
 Power
 Pulp and Paper
 Ship Loading
 Steel
 Textiles
 Transport
 Wastewater
 Water

Citect's wide range of industry experience and the flexibility of CitectSCADA ensures that we can meet your automation requirements.

Manufacturing

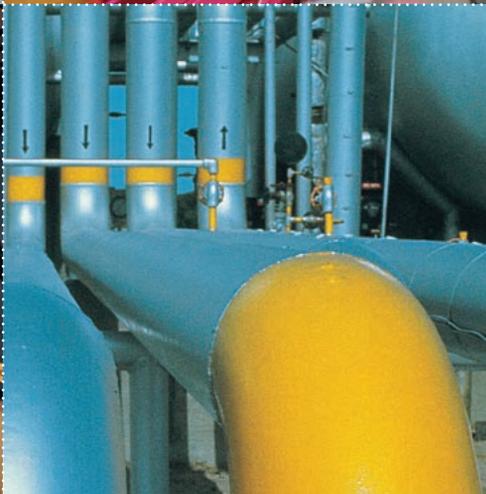
Visualize the entire plant including machine states, processes and operations in a graphical environment and gain real-time access to key performance measures from business-critical manufacturing processes.

Citect has a unique understanding of the challenges facing manufacturers. Cost, quality and scheduling are key indicators that drive the industry, and to control these successfully, all aspects of the process must be addressed. With secure access management, you can analyze information from anywhere on the network and the entire plant can be monitored and controlled from any Citect station.

Improve production processes by integrating your system with a range of Industrial Information Management (IIM) applications designed to improve decision-making processes and significantly increase business performance.

Discrete

Vertical Solutions



Facilities Monitoring

Improve tenant services and reduce operating costs with Citect's flexible system for centralized monitoring of multiple facilities.

CitectSCADA Facilities is a specialized facilities monitoring product designed to integrate climate, lighting and other controllable devices from multiple facilities, creating an enterprise-wide monitoring and control system.

CitectSCADA Facilities can be used to connect systems in any size building, complex or even a large integrated facility, such as a ship.

By aggregating your building automation systems into a single system, facilities managers can lower operating costs and benefit from centralized monitoring of their real estate assets.

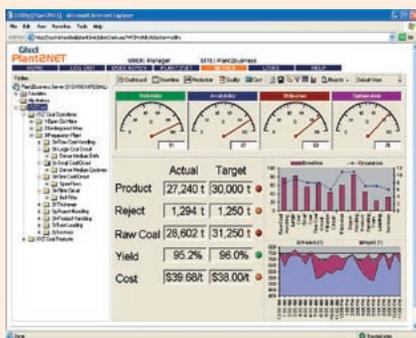
Improve facilities monitoring by integrating your system with a range of Industrial Information Management (IIM) applications to track after-hours use and generate customized reports on each building tenant.



Improve Business Performance

To gain a competitive edge in today's market, successful global manufacturers are using Industrial Information Management (IIM) solutions to reveal opportunities for improved business performance and increased profit margins.

In every industrial process, there are opportunities to refine the production process and maximize asset utilization. By drilling down into the detail of plant Key Performance Indicators (KPIs), you can increase yield, minimize inventory shelf-life, improve quality, comply with regulations and reduce manual intervention and data entry.



Aggregate information from all IIM modules, to produce Key Performance Indicators for the entire production system.

IIM solutions deliver real-time access to plant and business information, enabling you to address these issues. By connecting, transforming and presenting information in real-time, throughout the enterprise, IIM solutions reveal opportunities which allow you to increase performance, efficiency and profitability.

CitectSCADA systems are integrated with IIM solutions via Citect Plant2Business, an easy-to-use platform that allows you to share data throughout your entire business. Aggregating and presenting real-time information from multiple disparate systems throughout the enterprise allows corporate IT, plant and production managers to improve decision-making processes.

By connecting to all your production control systems and business databases using non-invasive, open technologies, Plant2Business reduces training and deployment costs. This approach complements existing IT infrastructure to typically deliver fast ROI.

Connect >> Transform >> Present

IIM solutions are designed to be deployed in a modular fashion, where each module delivers those benefits to aid in improving each business need independently. All modular solutions can be integrated with CitectSCADA and are designed to give fast, incremental and measurable benefits.

Citect has worked with real customers to build modules that address specific business needs, such as production, quality, tracking, downtime, and metrics. Each module has a targeted purpose, with a focus on returning a measurable ROI to your business in these key areas.

Optimize production process efficiencies

By drilling down into the detail of plant KPIs, you can make informed intelligent decisions. Access to real-time information, enables you to take action to correct problems before they impact on supply chain, regulation compliance and production.

Maximize Return on Assets (ROA)

ROA can be maximized by eliminating equipment downtime, unscheduled maintenance and bottlenecks and by improving operation equipment efficiency, speeding up time-to-market, response times and by streamlining schedules.

Lower Total Cost of Ownership (TCO)

Citect's IIM solutions are deployed in a modular fashion, with a long-term vision of an integrated architecture that will allow sustainable and continuous improvement. Open technologies allow your IIM solution to scale easily with your requirements, whilst upgrades are available between versions ensuring you stay up to date.

Fast and substantial Return on Investment

Citect's non-invasive, modular approach, complements existing automation and IT infrastructure, providing you with a high ROI, low risk solution.

“Trainers have an excellent mix of technical knowledge, dynamic delivery and the ability to explain complex issues in simple terms.”

Kevin Lill, Electrical Process Specialist, BHP Steel

Maximize your Automation Investment

Citect Support

We are committed to providing you with world-class service from the day you purchase our products. Our goals are to not only resolve current issues quickly, but also to leverage our day-to-day work to prevent future problems. Our support services can help your organization save money by enabling you to achieve greater returns on your automation investment.

At Citect, we believe our people are key to providing excellent support. We look for the right blend of support engineers to ensure we surpass your support needs. Our people have superior communications skills and lateral problem solving abilities. In addition, they thoroughly understand our products and the automation industry.

Citect Training

Gain comprehensive knowledge of Citect products through high quality, interactive training that you can immediately apply within your workplace.

Citect offers a variety of technical training courses to meet your specific training requirements. Our instructor-led courses provide you with hands-on experience, leaving you feeling confident to design and configure your own systems. Citect training services include configuration and programming courses, update courses, and introductory courses for both CitectSCADA and Citect Plant2Business solutions.

Citect Integration Services

We can offer the best integration services solution to meet your requirements through Citect Professional Services or Citect Integration Partners.

Citect Professional Services work strategically with Citect Integration Partners, distribution partners and corporate customers to provide leading edge automation and information management solutions. Technical knowledge and proven resources are transferred to our partners and customers to ensure fast and effective benefits are obtained from the implementation of our products.

The Citect Integration Partner (CIP), program has been specifically designed to help you choose the appropriate integrator for your control system. Choosing the right integrator is as important as choosing the right software – not all integrators have the same abilities. Training is a fundamental requirement for all levels in the program, from basic configuration courses for the Silver level to advanced training and certification for the Gold and Platinum levels.





To learn more about how you can reduce operating costs and improve productivity contact your nearest Citect representative today.

For further information visit www.citect.com or call your regional office.
AMERICAS Tel 1 770 521 7511
AUSTRALIA Tel 61 2 9496 7300
EUROPE Tel 31 71 576 1550
CHINA Tel 86 21 6886 3799
SOUTH AFRICA Tel 27 11 462 6671

Product of Australia – PR10408

Citect
Industrial Strength Solutions