

INDUSTRIAL NETWORKS & IIOT



Routeco



Cisco IoT Partner

Routeco are very proud to be recently appointed as Cisco's first Advanced Internet of Things Industry Expert Specialised Partner in the United Kingdom.

The Cisco IoT Industry Expert Specialisation enables partners to combine their Operations Technology (OT) experience with Cisco IT networking knowledge. IoT Industry Expert Specialised Partners have experience working in industries such as manufacturing, energy and utilities, travel and transport, and/or connected safety and security. They have an understanding of Cisco products and concepts to be able to provide their customers the IoT solution they need.

The designation recognises Routeco as having fulfilled the training requirements and program prerequisites to sell, deploy and support Cisco IoT Industry Expert products and solutions.

Damian Spall Product Marketing Manager said: "Working with Cisco will ensure that we are fully equipped to support our customers converging their IT and OT networks and will allow us to widen the scope of Industrial IoT projects that Routeco can assist with."

To earn the IoT Industry Expert Specialisation, Routeco fulfilled Cisco training and exam requirements. Routeco also met the personnel and post-sales support requirements set forth by Cisco.

The IoT Industry Expert is part of the Cisco® Channel Partner Program. The program provides partners with the training and technical expertise they need to sell Cisco products and solutions.

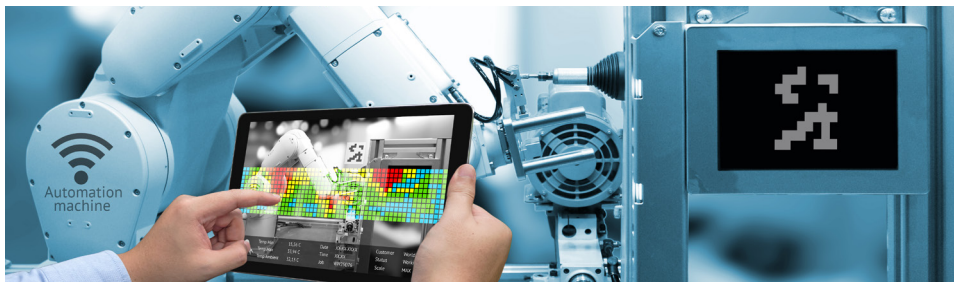


Our IoT Vision



What is Routeco's vision for the future of Industrial Automation and IoT?

With the growing momentum of what we know as IT/OT convergence, Industry 4.0 (Fourth Revolution) and Connected Enterprise, working out what being SMART really means for your business can be a challenge. One of the key challenges being how to gain visibility and transparency across your total business. When full visibility is achieved then improved processes, assets, locations, real-time accurate data, sustainable improvements in productivity and profitability become automatic and inevitable.



The danger in this goal is that the desire to get quick data very often means that not enough commitment is given to building a solid and robust network infrastructure; the consequences of which can be seen across many businesses today. In order to have real-time accurate data, businesses need to invest their time, money and effort into their industrial network infrastructure including the convergence of IT/OT.

Routeco are able to provide expertise as a consultative SMART facilitator to our customers; to help you achieve the visionary improvements in the business performance you are striving for.

The process is not simple, but committing professionally to implementing it correctly will return the level of dividends that progressive businesses are looking for; our knowledge allows us to highlight products, services and partnerships that enable us to deliver your SMART vision in a totally scalable and bespoke way.



What is IIoT and what does it look like?

The IT/OT space is extremely dynamic, impacting on many different areas within our customers' businesses. Recently, IIoT has started paving its way into the manufacturing industry, with the increase in devices, equipment and machinery available for connection to the network. Many companies are taking risks with existing poorly designed infrastructure, some are still sceptical about the rewards that IIoT brings and some are vaguely aware of what it even means.



So, what does it mean?

In simple terms, it is the digitisation of technology and offering transparency of data across the business in real time. Here at Routeco, we know that people are still trying to understand what IT/OT and IIoT means for their business.

Our customers operate in a wide range of industries and approach Industrial Networks from differing perspectives. There is a growing interest emerging in engineering; the need to learn and explore network solutions and services is becoming more prominent.

More manufacturers are now providing solutions that rely on having sound and secure networks available within a typical manufacturing factory 24/7. This is driving the need for engineers to up-skill in order to maintain and service plants with minimal down time.

The convergence of IT and OT within our customers also present us with cultural differences that exist between engineering and IT and this has led us to follow a more consultative path involving both. We have been working more closely with our franchise partners and IT VARs to broaden and understand their insight of the industrial automation space.

What does this mean in an industrial automation environment?

We can look at this in three key areas:

- > Presentation and storage of data - Information Technology
- > Network infrastructure - Common platform allows for convergence
- > Real time production data - Operational Technology

Largely, IT is known as the centre of data analysis and OT as the shop floor or where all the activity happens in terms of production. This means multiple systems, managing high risk areas and no coalition of what happens in IT or OT. Now with convergence, the two can be seen working hand in hand to drive results and efficiencies for businesses.

Your network infrastructure is the critical middle ground and here data has to transfer securely and reliably. Operational Technology is the source of fundamental data from the production area or manufacturing process, which is not necessarily being harvested to make critical business decisions.



HOW SMART IS YOUR BUSINESS?

What production issues and business challenges are you currently facing?

In a world that is digital more than ever today and reliant on technology, we know from experience the issues businesses are facing now, especially when it comes to IIoT and IT/OT convergence. In the case of IT/OT, the two have historically had separate business objectives, though now with IT Managers starting to converse more freely with the production staff and engineers, the business can be seen from a much larger scale and the intricacies of issues and flow are more visible.

Here at Routeco, we have the expertise to help you think about where your business currently is and to get you thinking about your SMART objectives for the future.

Below are a few areas for you to think about:
Is your business:

- > Suffering network issues?
- > Secure from cyber-attacks?
- > Thinking about optimising profitability?
- > Perceiving your issues as software/hardware issues but it's your failing infrastructure?
- > Have you thought about network failure and the impact that could have on production (think about real-time down time and financial loss)?

How SMART are you?

A good starting point is to understand where you are today. Which of the factories below best describe your current situation?



Factory A

- > Unexplained downtime
- > No network infrastructure; so isolated M/Cs and production
- > Production bottlenecks
- > Inefficient legacy manufacturing processes
- > Sporadic production
- > Limited or zero visualisation / analytics

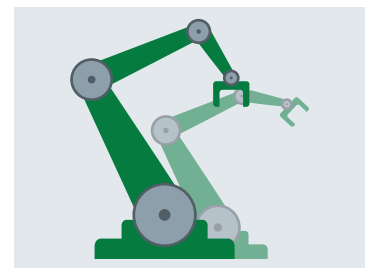
Result - uncompetitive business at RISK



Factory B

- > Network enabled machines
- > Evolved plant floor network infrastructure
- > Local visualisation and SCADA
- > Some diagnostic capability
- > Reduced downtime
- > Improved manufacturing processes

Result - improved but mediocre business performance



Factory C

- > Plantwide / business wide secure network
- > Identified and resolvable downtime
- > Total manufacturing process visibility
- > Real time metrics and analytics
- > Maximised productivity
- > Future proof and sustainable business

Result - Market leader profitable growth and expansion

TAKE ACTION NOW, UNLOCK THE VALUE OF IIoT

Our recommended next steps to becoming SMART and enabling the IIoT in your business.

If you are thinking about what you could change in your manufacturing facility to increase productivity, reduce downtime and gain value from the valuable data stored in your machines then here are some recommended next steps to help you on your journey to becoming SMART.



To help you realise your vision, Routeco will work with you in a consultative manner to understand your business needs, address your issues and help you to implement IIoT into your manufacturing processes.

To help get you started, here are a few pointers and topics to consider:

AUDIT YOUR EXISTING NETWORKS



Successful technology deployment depends on an accurate assessment of your organisation's current network, security state, overall readiness to support the proposed solution and compliance with policies and best practices. As you plan to deploy and support a new technology, application, architecture or solution to address evolving requirements you need to be sure your existing infrastructure can support it.

DESIGN OR UPGRADE YOUR NETWORK INFRASTRUCTURE



Industrial automation excellence starts with an optimised physical infrastructure. As networks converge, the physical infrastructure becomes even more critical to support the demands of real-time control, data collection and device configuration. Each element of the physical infrastructure must be designed and deployed to ensure industrial networks and control systems provide sufficient performance margin within the specified environmental conditions.



REVIEW YOUR CYBER SECURITY POLICIES



As the reliance on our critical networks grows, so too does the frequency and complexity of cyber-attacks against them. This increasing complexity of threats means that traditional methods of securing infrastructure and sensitive assets are no longer adequate and a more robust, future-proof line of defence is required to combat the evolving nature of cyber-attacks.

ENABLE THE DATA WITHIN YOUR MACHINES



To enable companies to derive value from their data more quickly, easily and incrementally, installing new control and automation components that allow for remote monitoring, machine performance, device health and diagnostics will all help with a 'predictive maintenance' strategy. At the enterprise level, these solutions offer more powerful ways to integrate plant-floor data into business intelligence strategies.

PROTECT YOUR CRITICAL SOFTWARE APPLICATIONS



In today's manufacturing landscape seconds matter and downtime is critical. Your bottom line depends on your ability to keep your plant infrastructure up and running at all times. Downtime in your SCADA, HMIs, Historians and other critical industrial automation systems can mean lower yields, lost revenue, regulatory fines, compromised quality or a damaged reputation. To maximize your productivity and quality you need continuous availability and continuous visibility.

MAXIMISE PRODUCTION WITH REAL-TIME DATA ANALYTICS



With the right tools you can consolidate data from many sources, turning it into the kind of reporting and analysis that can help you make informed business decisions. Capturing data is fundamental but data without context is not an asset. Converting data into working information capital and putting it into context is the ultimate goal to increasing your profitability.

Routeco has successfully established itself as one of Europe's leading distributors of industrial automation and control products. Over an impressive period of sustained and continuous growth, Routeco have secured a network of sales locations employing over 300 personnel.

> GROUP HEADQUARTERS

Davy Avenue, Knowlhill, Milton Keynes, MK5 8HJ. United Kingdom.
T. 01908 666777 F. 01908 666738

> UK OFFICES

SOUTH WEST

T. 01454 625444
F. 01454 625789
E. southwest@routeco.co.uk

DARTFORD

T. 01322 228588
F. 01322 228850
E. dartford@routeco.co.uk

GLASGOW

T. 01355 264629
F. 01355 264630
E. glasgow@routeco.co.uk

MILTON KEYNES

T. 01908 666777
F. 01908 666738
E. sales@routeco.co.uk

SOUTHAMPTON

T. 023 8027 4407
F. 023 8027 4406
E. southampton@routeco.co.uk

DERBY

T. 01332 202008
F. 01332 202009
E. derby@routeco.co.uk

LEEDS

T. 01924 439900
F. 01924 439901
E. leeds@routeco.co.uk

PETERBOROUGH

T. 01733 361000
F. 01733 238092
E. peterborough@routeco.co.uk

COVENTRY

T. 024 7667 6513
F. 024 7667 8490
E. coventry@routeco.co.uk

DUDLEY

T. 01384 294888
F. 01384 293777
E. dudley@routeco.co.uk

MANCHESTER

T. 0161 737 4448
F. 0161 737 4449
E. manchester@routeco.co.uk

PETERLEE

T. 0191 518 2888
F. 0191 518 2899
E. peterlee@routeco.co.uk

> AUSTRIA OFFICE

Routeco GesmbH, Egger-Lienz-Str. 10, 4050 Traun. Austria.
T. 07229 64266-0 F. 07229 64266-51 E. linz@routeco.com

> THE NETHERLANDS OFFICE

Routeco B.V. De Maas 22b, 5684 PL Best. Netherlands.
T. 0499-801 801 F. 0499-327 128 E. sales@routeco.nl

