



IoT Solutions^{(Pty) Ltd}

— — — Enterprise Optimization Through IoT

COMPANY PROFILE

BIS Solutions for any manufacturing environment

IoT Solutions offers our customers specialized set of tools to help them manage their manufacturing environment. We understand the integration and automation on most platforms and environments.

Our software solutions ensure Reliability, Accuracy, Transparency, Quality Assurance and Visual Management of any manufacturing environment.



All information are made easily accessible
across various device platforms

Cloud based management allows our customers to access, manage and monitor data from anywhere in the world, at any time. From integration, mobility to even user personalization, giving management access to cloud solutions making things effortless.

Our software solutions have no user limits, everyone is able to access the system and use it, at any time. This feature ensures access to all of our customers employees at no additional cost. The free usage feature in our software solutions places us ahead of any of our competitors.

Enterprise Optimization Through IoT

www.iotsolutions.co.za

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About

About IoT Solutions

IoT Solutions was created to help companies integrate and automate their manufacturing and maintenance functions.

In our experience, implementing **practical and effective** systems is also used for long-term manufacturing planning.

By integrating and automating manufacturing systems, you have full access, transparency and **control** over your manufacturing environment. Moreover; accurate and real-time data-from-source is always available to improve efficiency, effectiveness, quality and speed of production processes.

By creating a **visual management** environment in the workplace ensures full visibility and control on the work floor with rapid and accurate responses.

We offer a system that improves manufacturing throughput, quality, consistency and cost.

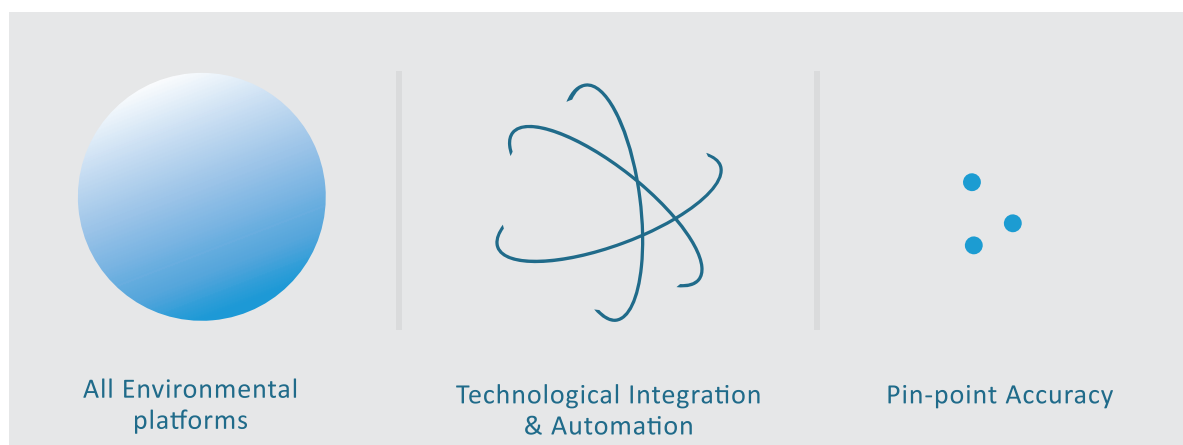


Figure 1. Our Company DNA

Our Approach to Challenges within Manufacturing Environments

The **IoT Solutions** team knew that the market required a software solution that offers more than just a maintenance management system. Using our knowledge of the manufacturing environments, Our Solution evolved into an **integrated Business Intelligent System** (BIS).

Our Solution **integrates** into **any** manufacturing environment, making use of existing hardware and software. If not available, cost effective hardware and software is installed to bridge the data transmission gap.

Our Solution offers a **visual management** system to instantly highlight problems detected, either by means of Visual Interfaces in the workplace, or via mobile applications. By using the ANDON industry standard, SCADA interfaces and Microsoft Power BI, Our Solution effectively offers a cost-effective visual management system to you. Our Solution are robust enough for any environment, as well as support all the functions within the workplace.

Our solution is **flexible** enough to be tailored to any manufacturing environment and to meet unique customer demands.

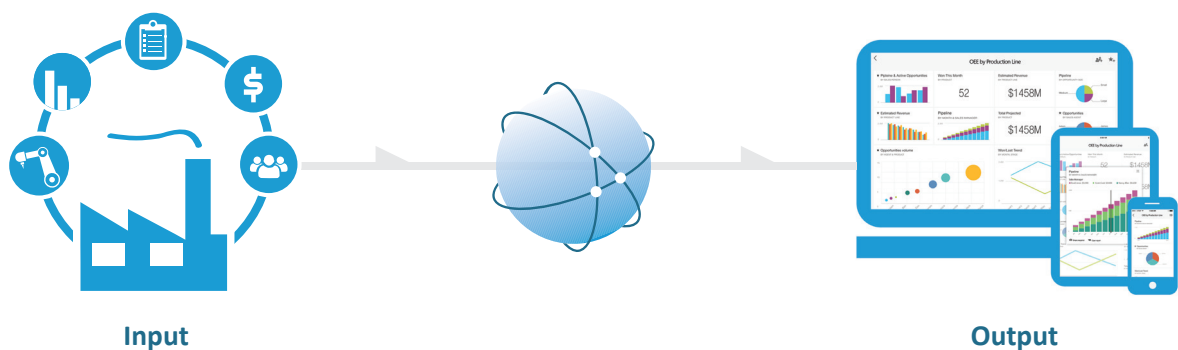


Figure 2. Our Solution

Our Core Focus

IoT's core focus are
the following aspects:

1. Reliability
2. Robustness
3. Accuracy
4. Flexibility
5. Performance
6. Visual Management
7. Access to Information

Enterprise Optimization

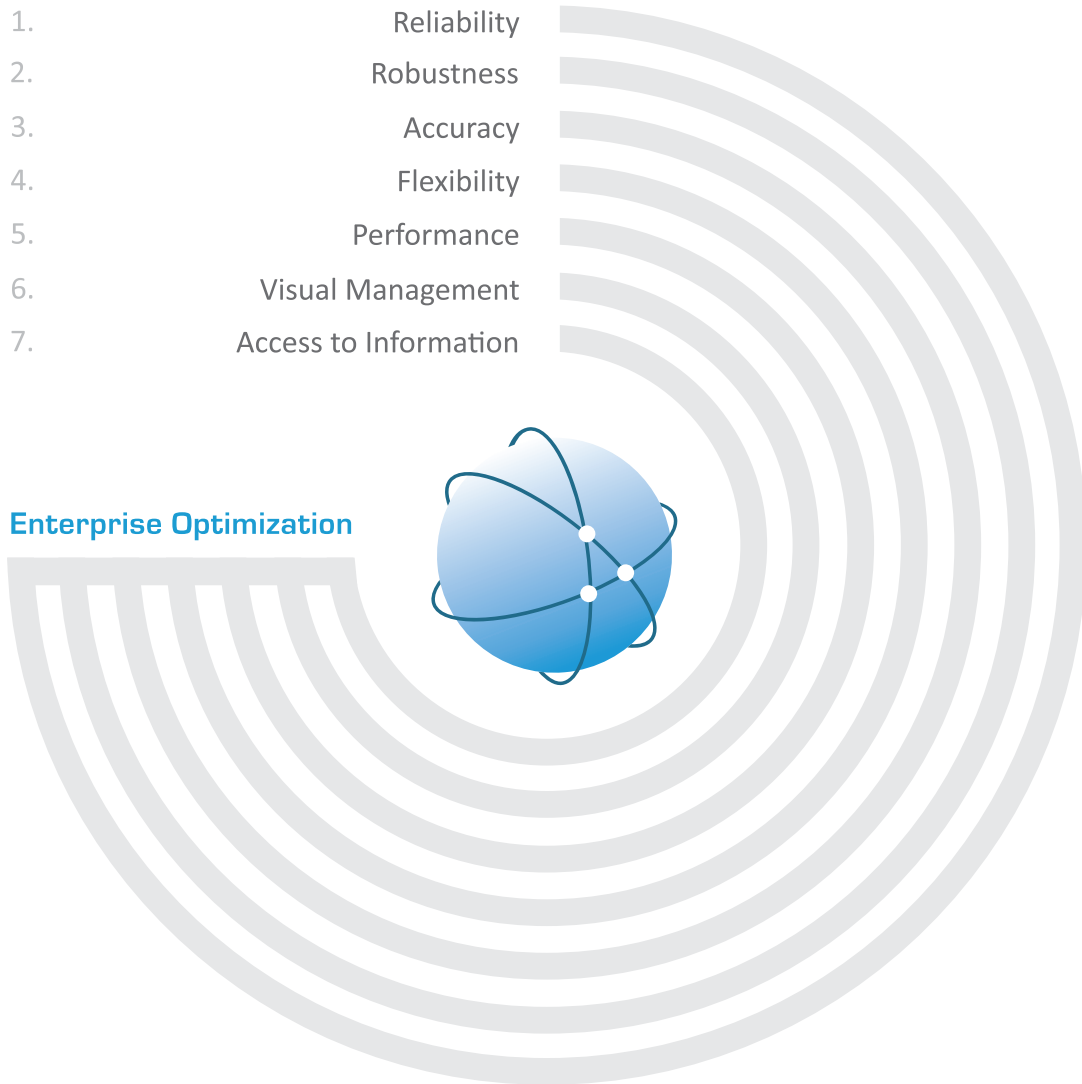


Figure 3. Our Core Focus

Our Solution

Our Solution has evolved into a fully integrated system that the team initially envisioned. It **integrates** all the aspects of the maintenance and manufacturing environment **effortlessly**. Our Solution offers more than the traditional BIS system, which is dependent on manual document inputs. The key is: **We obtain our data at source!**

Our quality control and dynamic Statistical Process Control (SPC) module ensures that our customers have full control over their products, thus, the 'software birth' of **IoT Solutions**. Due to a big demand the team decided to focus on a single industry; **Manufacturing**.

With the integration of our software on **Microsoft products and Data Centre services**, our IoT Solution facilitates any manufacturing platform. We make use of multiple hardware loggers to integrate into the manufacturing environment where the use of OPC software packages are not available. This ensures the ability to integrate into nearly any manufacturing environment effortlessly.

The **IoT Solutions** team implement and maintain to meet our customers' **standards**. Our Solution has a fully integrated visual management system to SCADA, thereby putting our Solution ahead of the competition, as most other system requires the support of third party applications. This system is used to display data on the production lines, on any mobile smart device and Azure Power BI.

The system is **built** around the ANDON standard, but can be tailored to any customer standard or requirement.



Our Promise

Our Solution offers our customers a robust management tool that enables them to effectively and successfully manage their manufacturing maintenance and quality environments. The system improves daily with the main focus of offering our customers a system that is:



Reliable in-all Aspects



Robust Adaptability



100% Accurate



Industry Flexible



Performance Guaranteed



Visually Measurable



All information are made easily accessible
across various device platforms

Services

Our Full Service Offer



Live
Manufacturing



Downtime
Management



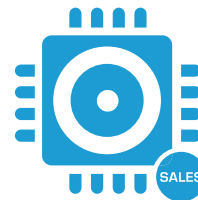
Asset
Management



Work Order
Tracking



Preventative
Maintenance Scheduling



Hardware & Software
Sales



Quality
Assurance



Manufacturing
Visualization



Cloud Computing
& BI



Training and
Support



Service Level
Agreement

Services explained



Live
Manufacturing

[IoT Solutions](#) offers seamless integration into any manufacturing environment, using either existing hardware or installing cost-effective hardware solutions to display the output. We specialize in OPC software that ensures transparency. Our manufacturing module displays real-time output live for the end user. Using predefined cycle times, the module is able to calculate downtime with an accuracy of 99%.



Downtime
Management

[IoT Solutions](#) helps users to monitor and act on plant downtime trends and events, and gain valuable insight into production cycles. It is equipped with tools to drill down to root causes and identify true capabilities, automated data collection, downtime categorization and custom reporting. It includes Mean Time to Repair (MTTR), Mean Time Between Failure (MTBF) functions and key performance indicator (KPI) dashboards, and reports.



Asset
Management

Our Solution ensures that users can track breakdown history on all their manufacturing equipment by capturing the assets details and setup on the Asset Care module. It allows for the creation of assets on the system as per the customer's standards or requirements, management of the loggers link to the assets, or links directly to the PLC or Raspberry modules.



Work Order
Tracking

Our work order module organizes maintenance records and data of an organization in a way that reduces failures and unscheduled downtime, while lowering maintenance costs and improving productivity. In the digital era a comprehensive Work Order tracking software package is essential for any organization that wishes to remain profitable, competitive and efficient.



Preventative
Maintenance Scheduling

Preventative maintenance (or preventive maintenance) is maintenance that is regularly performed on equipment to decrease the likelihood of failure. Preventative maintenance is performed while the equipment is still working, in order to prevent unexpected breakdowns. Preventative maintenance is planned in order to ensure the correct resources are available at the time.



Hardware & Software
Sales

Tired of chasing sales and figuring out what technology to buy on your own? [IoT Solutions](#) is an authorized partner with virtually every major brand of business hardware and software. We offer solution services to help you choose the optimal high-quality, high-reliability systems, equipment, and software your business needs. We offer competitive pricing on products from world-leading technology partners.

Services explained



Quality Assurance

Our Solution's quality module is targeted at quality departments to manage and improve aspects of product quality control, process optimization, traceability and compliance by offering real time scrap and rework recordings. Our SPC Measurement module ensures product quality through SPC analytics, testing and measurement recording with a powerful and visual SPC report. Automated cycle time recording enables customers to improve on processes and product quality.



Manufacturing Visualization

Our visual/SCADA module helps our customers to improve operational effectiveness in every step of the process, through real-time visibility into manufacturing processes, support functions and downtime management. Make gains in productivity by integrating and visualizing data from a variety of sources and processes, to improve capacity planning, identify available workforce resources, and staying current through real-time data visualization.



Cloud Computing & BI

Cloud computing allows you to access documents anywhere, with an Internet connection on smart devices, standard or industrial. Cloud offers Online storage which is more reliable and cost effective. Cloud links different devices, making it possible to access the information no matter where you are. It is the most cost-effective storage solution because you don't have to buy any additional hardware and you only pay for what you need for a specific time period.



Training and Support

We offer a wide variety of training to our customers, working closely with your team to ensure an outcomes-based result. Training needs analyses, is done prior to training to ensure it is relevant and personalized. Our highly skilled facilitators are hand-picked for their experience and ability to relate to participants. Constructive feedback is provided to learners and management. We work closely with people's goals to enhance job performance and improve motivation.



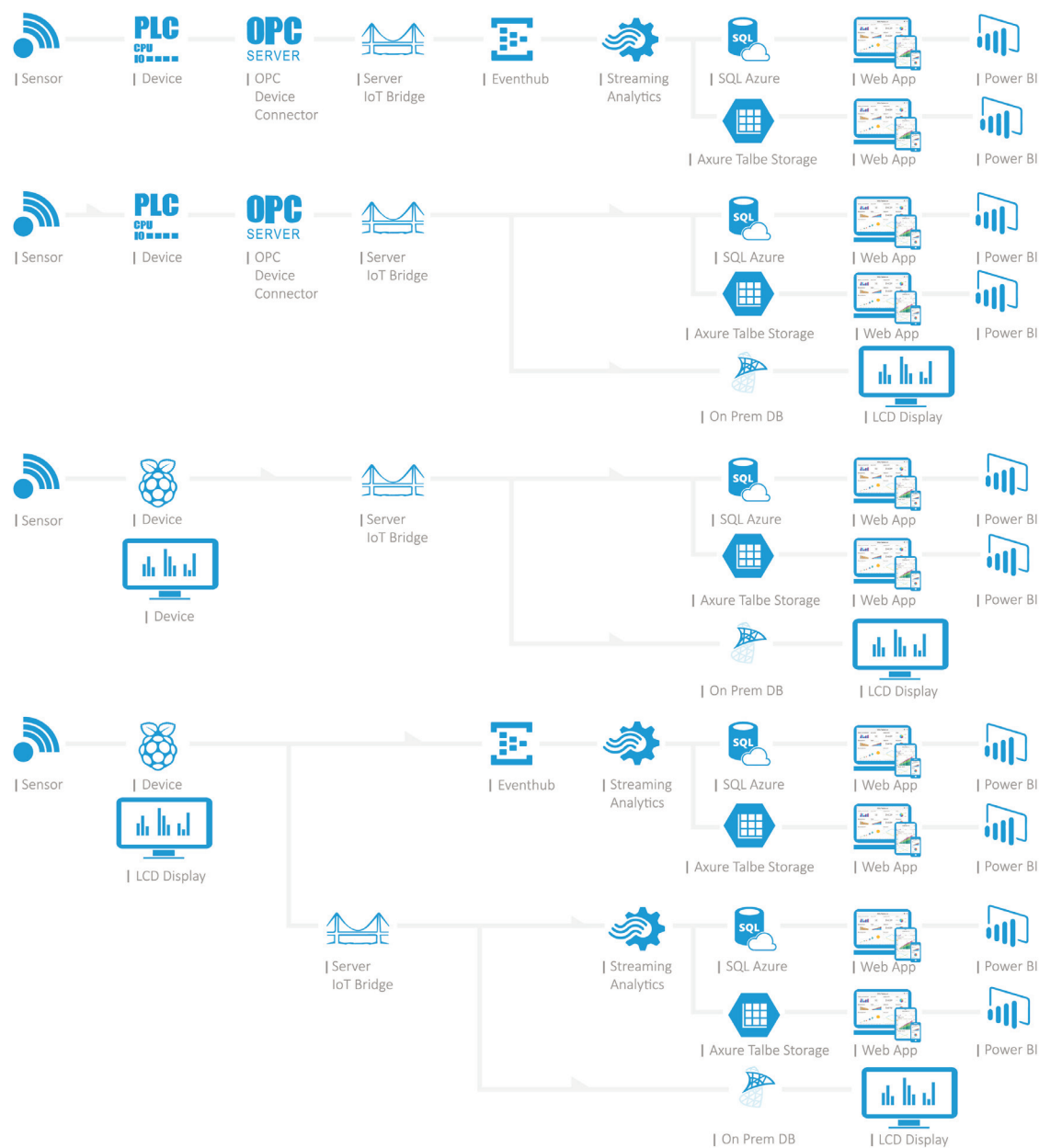
Service Level Agreement

Flexible and client specific SLA's - Gold/Silver/Platinum

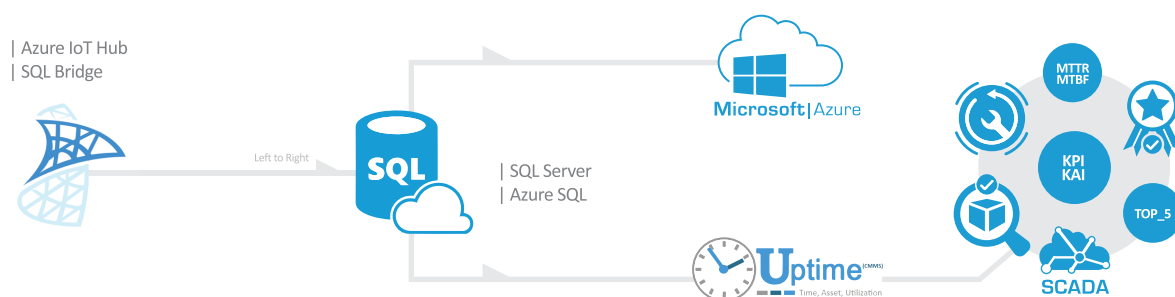
Our SLA's brings together information on all of the contracted services and their agreed-upon expected reliability into a single document covering key elements. These Service elements include specifics of the services provided, conditions of service availability, standards (time window for each level of service), responsibilities of each party, escalation procedures, and cost/service trade offs.

Services explained

Capturing the Data



Converting Data into Information



Core Infrastructure

Design and Consulting

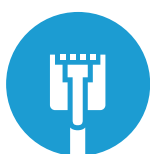
Business today depends on the best IT and Communications Systems. With over 20 years' experience within the IT industry **IoT Solutions** has the knowledge and skills to take your business forward.

IoT Solutions aim to achieve the planned design objectives efficiently within the agreed time scales and budget. We can provide a quote and site assessment for free and guarantee that we will save you time and money with an economical and cost effective network installation.

Network cabling is amongst the more difficult elements of IT infrastructure. We provide both wired and wireless networking solutions for your business in order to ensure that you have the right networking solution regardless of your company size.

Whether you're relocating into new or already existing offices, growing your company through physical expansion, or just rearranging your current layout, we are here to assist. We will give you a solution that will deliver the flexibility that you require and guarantee your satisfaction!

Primary Products and Services



Data and
Telephone
Cabling



Fibre Optic
Cabling
Solutions



Wireless
Connectivity



Access Control
and Time &
Attendance

Secondary Products and Services



Auditing of IT
connectivity
infrastructure



Design of Wireless,
Cable and Fibre
Optic Architecture

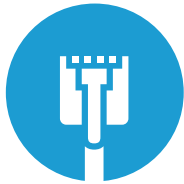


Design of Server
Rooms, Switching
Centres and Data
Centres



Microsoft
Machine
Learning

Products and Services



Data and
Telephone Cabling

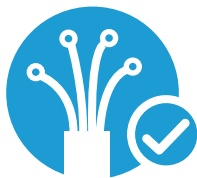
Network Cabling – Category's 5e, 6, 6a and 7

Voice Cabling – Internal and external grade multi core installations

Cabinet installations - All types and sizes of Cabinets and frames installed

Computer Rooms -Professional Design, Implementation and access control

- Connectivity Testing and Cable Relocations
- Replacing old infrastructure and clean-up thereof
- Structured Cabling Solutions for all buildings sizes
- Fibre Optic Installation & Testing



Fibre Optic
Cabling Solutions

Whether the requirement is to match legacy multimode 62.5/125 links or implement new 10 Gigabit backbones, we have the fibre solution for you.

Multimode and Single mode offerings in flexible 19" panel mount enclosures allow a mixture of fibre and connector types in a single tray. We guide you through the decision making process, helping you to make the most informed decision by looking at the characteristics, losses and bandwidth of your fibre network

- Fibre Optic Cabling - All grades with all required termination methods and testing.



Wireless
Connectivity

Wireless provides not only a secure data transfer equal to copper cable but is also a great tool for asset tracking and lowering media cost for many applications. We supply the same reliable service and support offered in our structured cabling services. Our expertise in structured cabling, combined with the convenience of an operational wireless network based on your needs means you get a high-quality, more economical installation. We provide design, planning and installation of all types of wireless LANs and WAN communications.

- Wireless Access Points for LAN or WAN communications
- Point-to-Point Connectivity between area's or buildings
- Radio Links



Access Control and
Time & Attendance

We install CCTV surveillance and access control systems for government, commercial offices, retail, healthcare, manufacturing, educational and industrial customers. We have the technical expertise to properly install cameras and access control devices and the entire supporting infrastructure, whether interior, exterior, aerial or underground. These access control systems allow you to control who can enter your server rooms. Our access controls systems bring you full-featured physical security solutions serving any size facility.

- Card, Tag, RFID and Biometric Access Control
- CCTV, Turnstiles, Booms and Server rooms

Our Promise

After an installation program has been agreed upon, every stage of implementation will be closely monitored and tested to ensure a high quality of work. On completion, full test results, Computer Aided Design and warranties are provided. We always comply with the latest Health and Safety procedures and work closely with our customers to keep disruption to a minimum.

We are proud to offer Network Cabling services throughout Africa. We provide the most competitive pricing no matter the size of the project. Our track record is impeccable, because we do quality work with a worry free process.

Other Professional Products



Auditing of IT connectivity infrastructure



Design of Wireless, Cable and Fiber Optic Architecture



Design of Server Rooms, Switching Centers and Data Centers



Microsoft Machine learning (coming soon)

Clients worked with

Client List



Product Vendors

Vendors List



Microsoft
SQL Server



Raspberry Pi



SIEMENS



HIRSCHMANN

ADVANTECH

KUKA



NETGEAR®

MikroTik

ORing



BECKHOFF
New Automation Technology

Rexroth
Bosch Group



RUBYTECH
Networking & Communications



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