



MOTOROLA'S WI-FI IS THE WINNING FORMULA

CATERHAM F1 TEAM ADOPTS MOTOROLA WI-FI TO DRIVE UP QUALITY AND EFFICIENCY



CATERHAM F1 TEAM

Caterham F1 Team, the Formula One racing team of the Caterham Group, moved to its current home, the Leafield Technical Centre in Oxfordshire, in August 2012. The site, which employs nearly 300 people, includes a factory making a large majority of the tens of thousands of parts that go into a modern F1 race car.

Previously the site had been through multiple occupiers, and was most recently used as a base for manufacturing car engines. It had to undergo a complete renovation to convert it into a Formula One facility, including installing 50 miles of cabling.

To enable its employees and visitors to work seamlessly throughout the site, Caterham F1 Team needed a secure, fast and reliable wireless network. Working with Motorola WLAN specialist partner Toranet, the team has installed, secured and tuned a Motorola Wi-Fi network throughout its premises. The network provides employees with anywhere access to applications across the site to help drive productivity and efficiency. This is a major step in building the foundation to allow for adoption of future applications, including automated stock control.

CUSTOMER PROFILE

Organisation

Caterham F1 Team

Location

Leafield, Oxfordshire

Industry

Manufacturing and
Warehouse Management

Partner

Toranet
www.toranet.co.uk

Motorola products

- Motorola RFS4000 wireless LAN switches
- Motorola AP6532 access points

Applications

- **Closed wireless network:** Caterham F1 Team employees have secure access to network applications anywhere on site.
- **Guest network:** Authorised visitors to the site can access the internet securely from their own mobile devices.

CASE STUDY

WI-FI DEPLOYMENT AT CATERHAM F1 TEAM

“Motorola’s wireless network enables us to work seamlessly throughout the factory. Our development teams work in different areas, so the secure closed network means that wherever they go, they can take their laptop with them, access apps and collaborate with colleagues. It’s already proving a very useful business tool, and when we adopt automated stock control it will be an essential part of our manufacturing operation.”

Richard St Clair Quentin, Commercial Manager, Caterham F1 Team



THE CHALLENGE

The move to Caterham F1 Team’s new home provided an opportunity to install technology that will both serve the business now and act as a solid foundation to support advanced applications in future.

A wireless network was an essential requirement, and had to meet the needs of two main groups of users. First, teams working in the factory needed to be able to move about the site for meetings and discussions with colleagues and use their Dell laptops and tablet PCs to collaborate with colleagues. Caterham F1 has a Bring Your Own Device policy, so staff also needed to be able to connect to the network with their own mobile devices. Second, visitors would need a secure guest network to enable them to access relevant documents or websites during meetings.

Caterham F1 Team was also keen to maximize the potential of the wireless network in future. A fixed Voice over IP (VoIP) facility is already installed on the new site, but can now be supplemented by the option to use the Wi-Fi for VoIP calls. In the longer term, the aim is to extend the use of the network for applications such as automated stock control, through the use of wireless scanners that keep track of components throughout the manufacturing process.

THE SOLUTION

On Motorola’s recommendation, Caterham F1 Team selected Toranet to install a highly secure, robust Motorola wireless network based on the latest 802.11n Wi-Fi standard. The network is built around an RFS4000 switch with an integrated network controller and AP6532 access points, supporting both voice and data. Critically for the team, involved in a hi-tech industry where corporate information is highly sensitive, it integrates a high level of security. Features include an industry leading wireless intrusion protection system that works with the access points to sense and repel attacks, with

the further protection of a robust firewall. The network also offers technology to enhance end-to-end service quality with features including:

- Prioritisation of network traffic to minimize latency
- Smart RF to provide fast and stable connections for every user by optimising power and channel selection.
- Self-healing properties to identify and automatically resolve network issues.

Caterham F1 particularly value the fact that staff without IT training can provide an authorised guest with Wi-Fi access using a customizable portal.

THE BENEFITS

With always-on network access, employees can be productive wherever they are in the factory. Laptops can either be attached to docking stations on the desk, and connected to the fixed network, or carried to meetings in other parts of the factory. There is no need for employees to log back on to the network when they go to a meeting – their device, whether it’s a company laptop or their own smartphone, connects seamlessly to the network wherever they are, reducing wasted time and providing a boost to productivity. Visitors can quickly gain access to the resources and information they need.

Caterham F1 Team has big plans for the future of the wireless network. The adoption of Motorola’s Enterprise Voice over Wireless LAN solution (VoWLAN) will enable employees to make both telephone and Push-to-Talk calls to colleagues from wireless handsets anywhere in the factory as well as low-cost external calls. With the deployment of RFID tags, read by wireless handheld scanners connected to the network, the team will be able to record the movement of parts and supplies used in the manufacturing in real-time. This will greatly improve the efficiency and accuracy of the stock control process.

Benefits

- **Seamless working:** Employees can move around with their laptops and tablets and easily collaborate with colleagues.
- **Productivity:** The ability to work anywhere means that employees can be productive even when not sitting at their workstations.
- **Solid foundation for the future:** Caterham F1 Team will be able to use the network to build stock control applications that will significantly improve efficiency.
- **Secure access:** An integrated wireless intrusion protection system (WIPS) – including a firewall – ensures that the network provides robust security to protect sensitive data.

For more information on how Motorola Solutions’ Wi-Fi networks can benefit your business, please visit us on the web at www.motorolasolutions.com or access our global contact directory at www.motorolasolutions.com/contactus

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