

# Command and Control, Dexion Integrated Systems

As the role of integrated systems continues to grow within the logistics environment and the complexities of systems increase, customers are demanding higher levels of performance and transparency in terms of monitoring its well being and trouble shooting problems when they occur. To address these issues, Dexion Integrated System has designed the Integrated Command and Control (ICC) system.

Michael Ward and Mark Faigen discuss the background to this development and the benefits it provides customers.

“For some time we have recognised that our users require different views of information from our RDS system. To cater for this we had developed our Graphical User Interface (GUI), which provides enquiries, generates reports, and monitors productivity and workload etc.,” said Ward.

“For the complexities of a project such as Linfox-Kellogg’s, there is a definite need for information that is focused on keeping the system running at optimum levels. The state of the materials handling equipment – the conveyors, the cranes and the robotics etc. – are continuously monitored to provide operators with a real time status of all elements, and, if something goes wrong, assist in identifying and rectifying in the quickest and most efficient way,” he said.

“Like the GUI, the ICC is web based. Therefore, any operator with a web browser can access the ICC,” he said.

Command and Control provides a bird’s eye of the entire system. It enables the user to pan around and zoom into particular areas. The user can see individual motor numbers, lift table numbers, photo cell numbers etc. providing information and feedback on the system in real-time. It shows the operator exactly what is happening.

“If a fault is detected, an alert is displayed. Operators are able to instantly zoom into the exact location where the fault occurred and are provided with a detailed description,” said Ward.

“At Linfox-Kellogg’s, supervisors are equipped with tablet PCs. This rugged laptop allows the web based ICC to be carried by the operator throughout the DC.”

“So, the system is telling the operator what is wrong, and, in a lot of cases, what he needs to do in order to fix it,” said Ward.

If there is a pallet jam on the conveyor, for example, the operator



is able to toggle individual motors from automatic to manual. In most instances, manually jogging motors will clear the jam. Once the jam is cleared the operator returns the system to automatic mode.

*“So, really, the Command and Control is a tool for operators, supervisors, and maintenance people to be able to keep the facility running, quickly identify when there are faults, be able to rectify quickly and efficiently and basically get the system back up and running as quickly as possible,” said Ward.*

“The performance of the system is critical with a distribution centre like Linfox-Kellogg’s. Pallets are being delivered to the DC 7 days a week, 24 hours a day, and we have to ensure the system is always available. If it does stop for any reason, it’s critical that it is fixed very, very quickly,” said Faigen.

“One might think that the ICC is only applicable for a pallet handling facility, but we have recently installed it for a large cross-dock system sorting over 9,000 cases per hour. A single operator manages the entire system and although he can’t physically see all areas, he is able to monitor everything via the ICC,” said Faigen. “So, if there is a lane full or a jam, it’s flagged and dealt with quickly”.

The ICC system is designed to be easily used by non-technical operators, allowing them to attend to common faults and removing the need to call out trained engineers.

Another benefit of being web-based is that it enables Dexion Help Desk staff to remotely access the on-site ICC. If a customer calls the Help Desk, support staff can actually see what’s happening on the same screen as the customer, and can therefore make recommendations as to how to fix the problem.

“We’ve actually had an incident where we had two service engineers, each on line in different locations, assisting a third engineer who was onsite. As they were all looking at the same screen in real time they were able to diagnose the problem and have the system up and running quickly,” said Faigen.

“With ICC we have further demonstrated our software development capability and we have had excellent feedback from our customers. We will continue to develop, with further enhancements and greater functionality for more applications,” he said.

“Command and Control is a very powerful tool, and reflects our continued investment in smarter methodology and our commitment to innovation and the ongoing development of our systems offering,” he said.