Mobile done right

DeltaV Mobile brings process data beyond the control room.

Riding herd on a DCS takes more than alarm notifications and static screen shots, even when you need to do it on a smart phone. So, Emerson Automation Solutions has developed a mobile platform that truly reflects users’ real-world priorities, culminating in the release of DeltaV Mobile.

“Mobility has transformed the way we consume data and operate in our everyday lives. With DeltaV Mobile, we’re securely integrating mobility into our plants. We’re introducing a new experience that changes—and improves—how plants operate and teams collaborate,” says Mariana Dionisio, DeltaV Mobile product manager, Emerson Automation Solutions.

Unlike traditional control workstations designed for operators, DeltaV Mobile connects plant managers, automation supervisors, process engineers and subject matter experts with read-only access to essential operations data. It leverages existing DeltaV configurations to provide the same richness of data shown on an operator workstation (alarms, real-time data, historical trends and more) in mobile screens that are built-for-purpose.

“With DeltaV Mobile, you can view just the alarms that are relevant to you on a customizable interface, and they will update on your mobile device in real-time, exactly as they would on the DeltaV operator workstation,” Dionisio says.

No additional DeltaV configuration is required. “Many competitors’ mobile solutions require you to configure alarms and do a lot of up-front engineering work,” Dionisio says. “Everything you’ve built in DeltaV is leveraged and pulled out on mobile.” Alarms come with context: “All the alarm information from DeltaV—priority, status, state and historical trends. It allows users to collaborate and share information, and not just a screen shot, but a deep link that a process engineer can share with an operator, via e-mail, text or SMS, and that pops up as a screen shot and sends the operator to the exact same screen on the mobile app.”

Development time was devoted to end-user concerns. “For example, you can create alarms by unit, area, piece of equipment, alarm module, and pick just the device or hardware alarms of a specific type,” Dionisio says. “You can pick who gets notifications, so no one is overwhelmed, and users aren’t buried by information they don’t need.

“Well-designed mobile apps like DeltaV Mobile enhance efficiency because they provide just the essential information to the right people, on-demand, in intuitive screens that are easy to navigate.”

Security is a top priority. “Cybersecurity is integrated into how it works. Data transfer is read-only, there’s no writing, no acknowledgement of alarms,” Dionisio says. “Most data isn’t sent over the Internet—it’s mostly on WiFi or VPN. Push notifications are the only things on the Internet, and users can disable them and use SMS or email instead.”

It’s also designed to satisfy IT. “Going mobile means involving IT early and often—that’s essential—so we have multi-layered network security,” Dionisio says. “We also have whitelisting and data encryption. Process and diagnostic data is sent to intermediate, secondary servers that are located above the DCS or automation control network, and isolated by firewalls. DeltaV Mobile accesses these servers through secure VPN or Wi-Fi. That’s very important—a built-in way to transfer plant-floor data securely.”

Users can connect to multiple DeltaV systems as well as other systems through OPC, so they can get real-time data from an increasing number of sources into consolidated views.

Dionisio adds, “We’re at the beginning of a journey to transform plant workflows with the assistance of these mobile tools, and DeltaV Mobile provides the secure platform that paves the way for an entirely new operational experience.”

For more information, visit www.emerson.com/deltavmobile