Mobile Module

The Mobile module adds the ability to launch Vision module projects on modern smartphones. This lets you keep track of your control system while moving around your facility. The Mobile module can be combined with remote-access networking architecture to allow global on-the-go access to your control system.

How it works

Normally, you can't launch Vision projects on mobile devices. This is because of the technical limitation of Java SE (Standard Edition) which does not run on mobile devices. The Mobile module gets around this limitation by launching the Client on the Gateway in a special headless (invisible) mode, and then using HTML5 and AJAX to show the Client's screen on the mobile device's browser.

Networking

Typically, the mobile device connects to the Ignition Gateway via the facility's wireless LAN (802.11) infrastructure. To launch a mobile client, the mobile device simply connects to the Ignition Gateway by pointing its web browser to the Gateway's LAN address. It is important to understand that normally, the traffic is not going over the device's cellular connection. This wouldn't work, because the cellular connection connects to the internet, and without explicit setup, an Ignition Gateway is not accessible from the outside internet.

Remote (as in, beyond the reach of 802.11 wireless LAN) mobile access can be enabled through the same networking strategies that enable remote access for standard Vision clients. Somehow, the mobile device must be able to access the Ignition Gateway via its cellular connection. One strategy would be to set up a VPN router and configure the mobile device as a VPN client. This way, the mobile device could directly access the LAN address of the Gateway as if it were on-site. Another technique would be to put the Ignition Gateway in a DMZ so that at least one NIC had a public IP address. Or, an edge router could be configured to port-forward the HTTP and HTTPS ports to the Gateway. Coordination with your IT is advised when attempting to set up remote access.