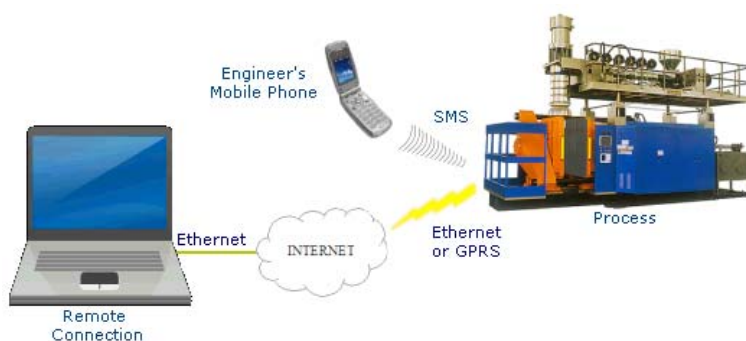


Remote System Access

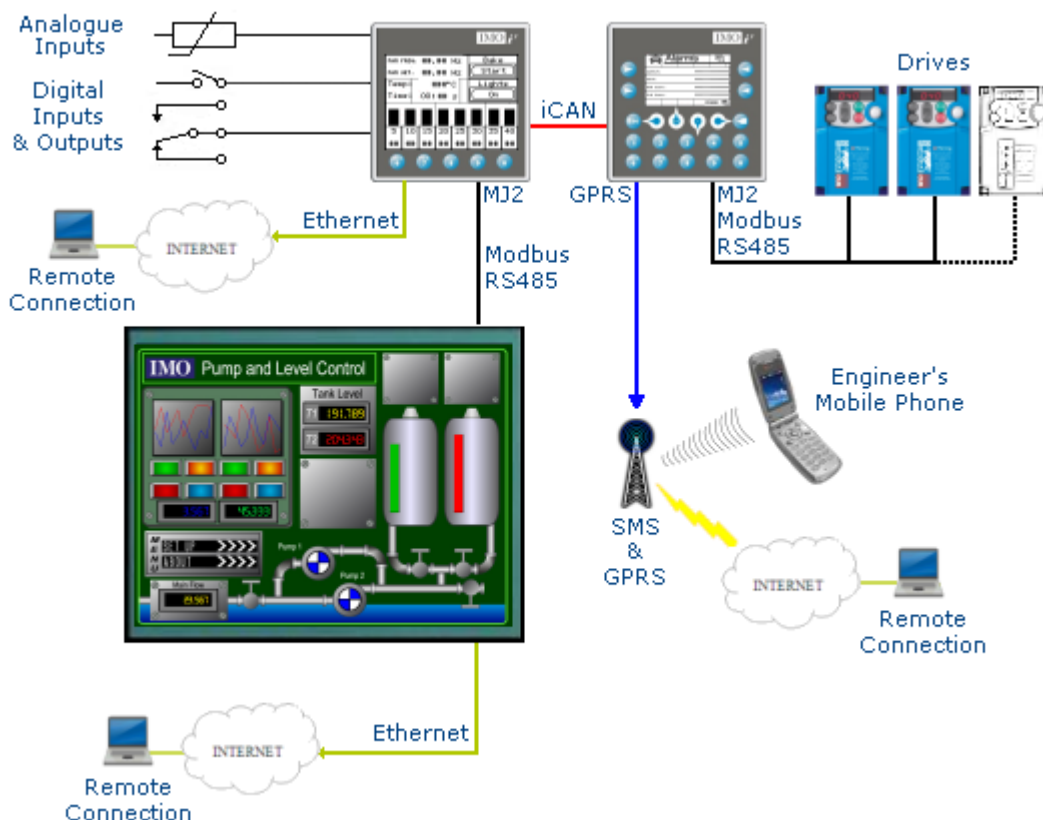
Remote monitoring, control and programming of devices can reduce service visits required and allow first class customer service to be provided to end customers. It minimizes downtime, maximises productivity and reduces servicing costs by allowing the possibility of fault diagnosis without visiting site.

However the problem is knowing how to set up a complicated remote access system. Imagine being able to see what's happening on the factory floor from your office, hotel room or home, miles from site! Also imagine being alerted to a problem with the system as soon as it is detected. The devices being monitored could be anywhere in the world.

IMO's powerful **i³** controller can make that possible. Remote access to a control system is available in two ways, using Ethernet and the Internet or by GPRS modem, your process suddenly becomes connected to the outside world.



i³ Machine Control



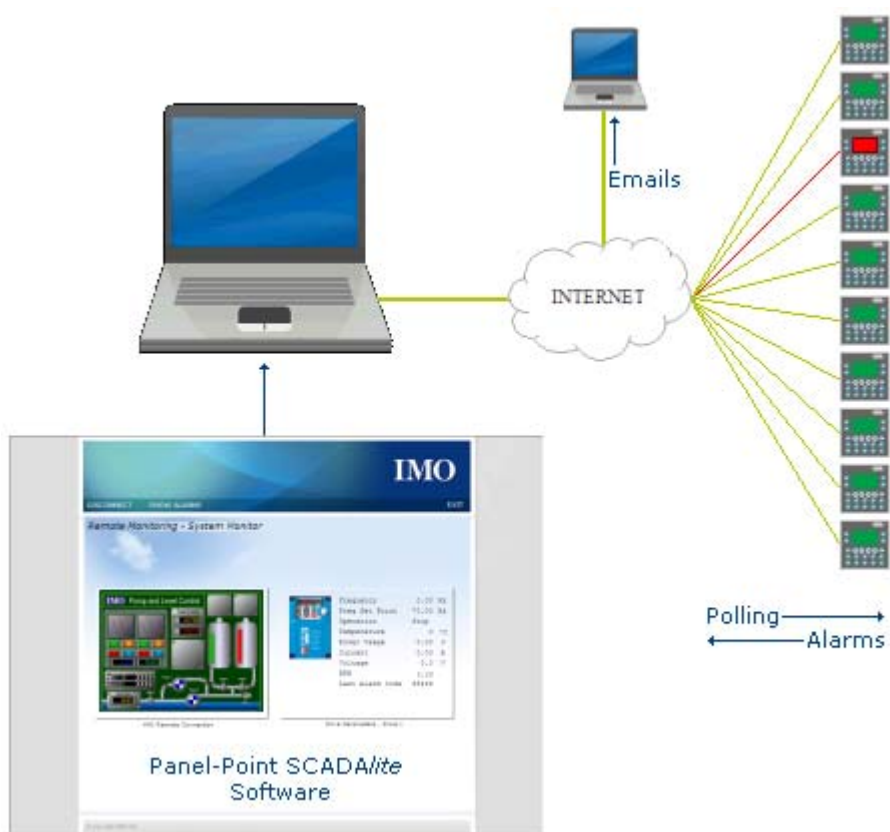
i³ Controller #1

- Digital I/O controls the process
- Thermocouple analogue inputs
- Ladder program logic for monitoring and controlling the process
- Ethernet card for connection to the internet via an external static IP address
- Connection of a colour HMI for operator input

i³ Controller #2

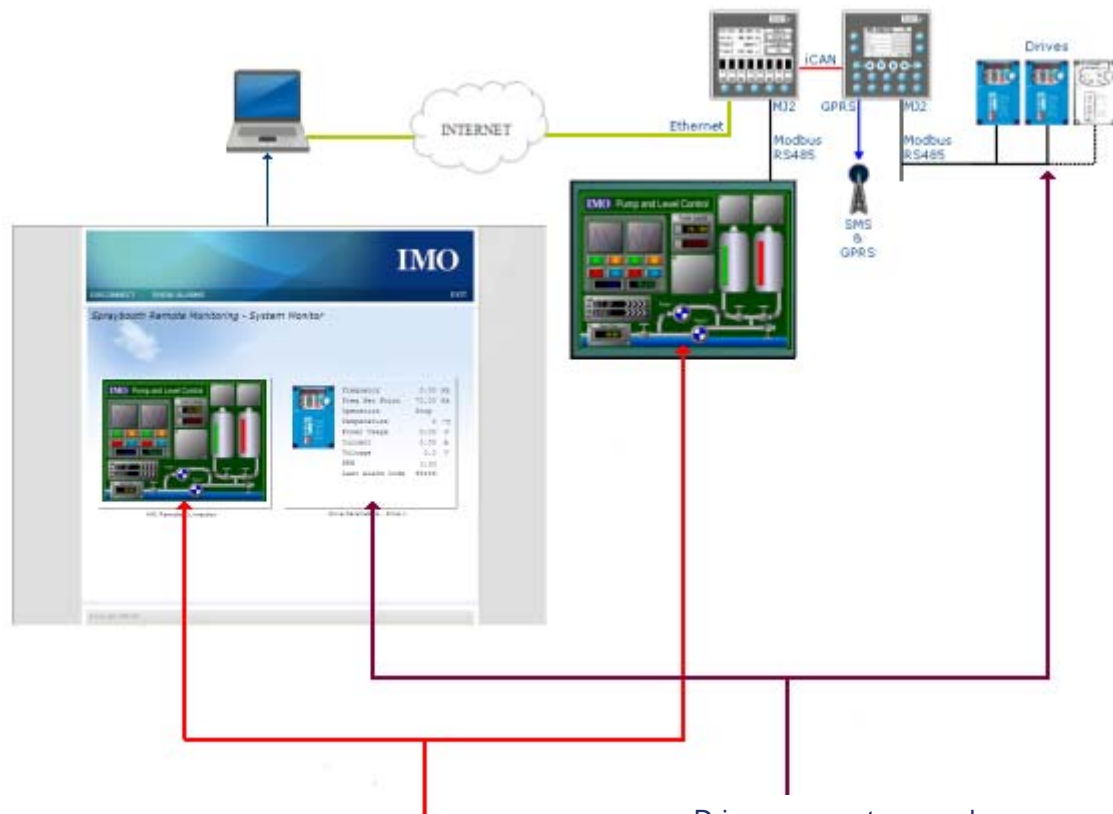
- Connection to **i³** #1 via iCan, allowing sharing of data and connections
- Drives are connected via RS485 Modbus comms
- Ladder program logic for monitoring and controlling the connected drives
- GPRS modem allows text message alarms to be sent to engineers mobile phones
- Modem also provides a second connection option to the outside world via GPRS

Remote Monitoring



- Panel-Point SCADA/ite used to monitor remote stations
- Multiple sites constantly polled
- Detected alarm conditions are immediately logged
- Alert emails generated automatically by software
- Following an email alert an engineer can respond to a problem remotely
- Service intervals of installed equipment can be monitored
- Automatic emails can be generated at service intervals
- Productivity data can be collected from remote sites
- Performance can be compared between sites

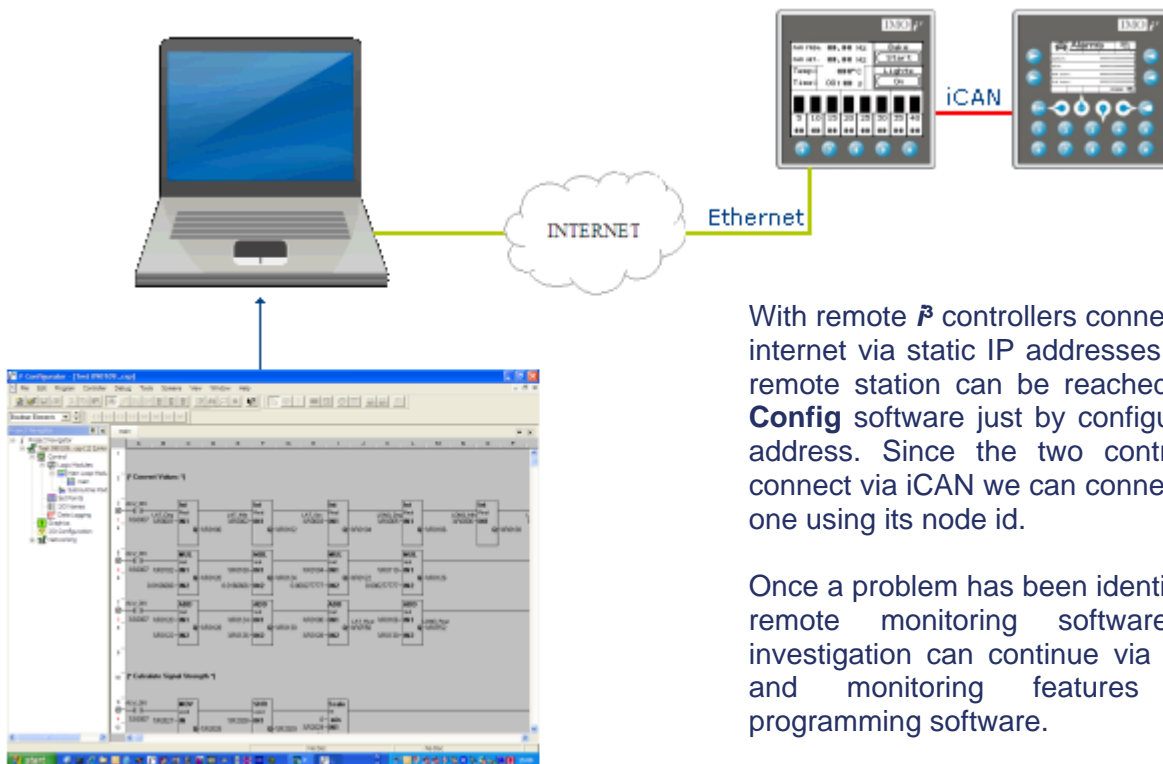
Remote Control



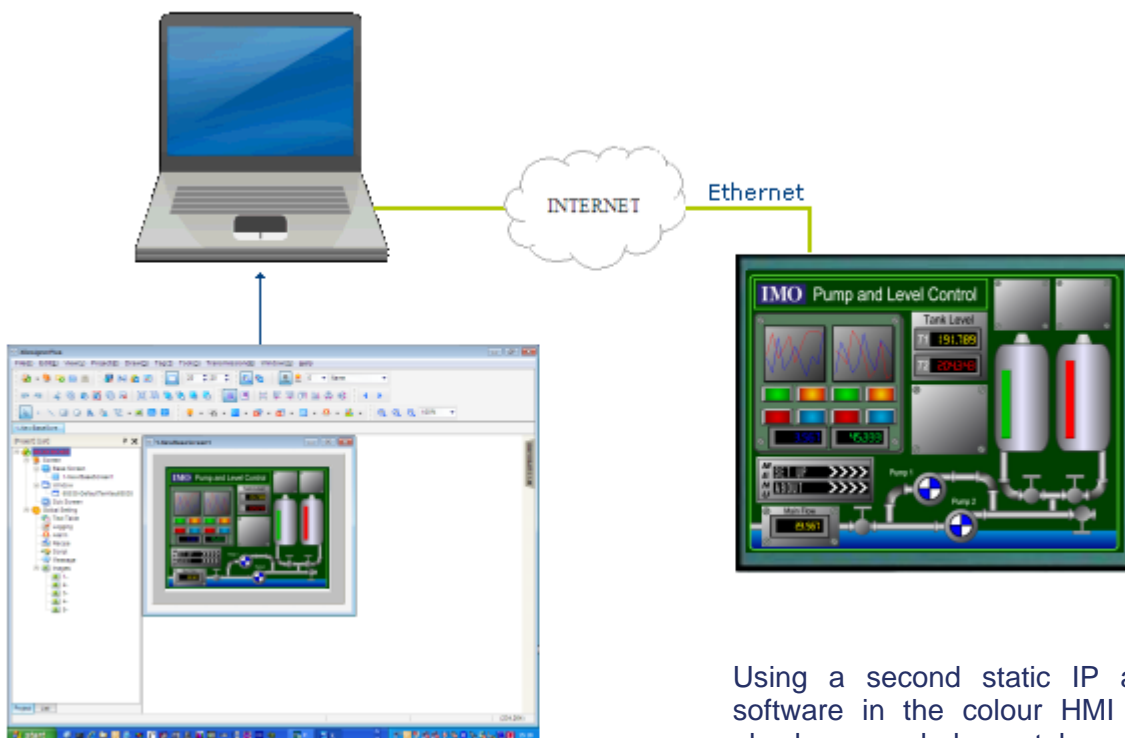
Panel-Point SCADA/ite shows the engineer a mimic of the HMI screen via the internet allowing remote operation of the system

Drives parameters can be both monitored and set remotely allowing performance to be monitored and minor changes to be made.

Remote Programming



The program can even be upgraded if necessary via this remote connection.



Please note that great care should be taken when designing a system with remote connection capability. Under no circumstances should the remote connection be able to control safety critical aspects of the system. Safe guards should be built into the internal logic of the control systems to prevent remote operation causing danger to operators. The remote operator should never assume things are safe at the other end, and should confirm with an engineer on site that the system is in a secure state before remote diagnosis is attempted.

