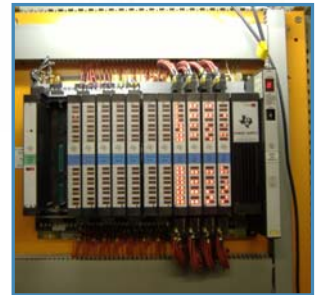


Disaster Recovery...

How much do you really know about your systems, would you benefit from a Control System Audit?

Control systems are becoming increasingly critical in the effective operations of production companies. Eliminating unscheduled downtime is one of the core objectives of organisations that own and operate process manufacturing facilities, utilities and other major assets and infrastructure. Every organisation knows the commercial value of its throughput, which makes downtime easier to quantify than ever before.



When something goes wrong, the resultant downtime can often be traced to either a safety issue, emergency maintenance or system non-compliance. Something as seemingly insignificant as the failure to take regular back-ups of PLC software could lead to the plant being shut-down while further checks are undertaken, or worst case failure to restart.

It is therefore imperative that organisations are aware of the detail of their currently installed plant control systems and how they are operated as well as looking at the opportunities that exist to maximise their reliability and efficiencies by the use of regular control system maintenance, this could involve either hardware or software upgrades, **regular system upgrades are far more cost effective than total system replacements.**



Engineering Solutions - Delivering Efficiencies



Implementing a Systems Audit

Within agreed areas FMA would list the existing control hardware and software currently installed. For each system FMA would attempt to obtain the latest software and documentation to be collated in to a site/area repository. For the following systems FMA would extract latest software from the systems on-line:

PLC Systems:

Siemens S5-S7 (200/300/400 series)
 Rockwell SLC, PLC3, PLC5, PLC5/250 and ControlLogix
 Mitsubishi A and Q series

Reports on PLC systems would include:

- Model numbers and quantity of hardware installed.- Network node addresses (older equipment where addresses not held in offline back-up)
- Visible hardware errors.
- Accessible software error data.
- Memory data usage and scan time.
- Version of site support application software

Survey Outputs

Stage 1 Survey would be a visual inspection of the agreed areas and would report the following:

- Lists of equipment/software as above
- System Architecture for agreed systems
- CD(s) compiling current site held offline application programs and documentation
- Summary of hardware errors/faults observed
- Recommended actions for above
- Comments on obsolescence of the systems observed
- Notification of areas that need immediate or medium term action

A Stage 2 Survey would involve on-line connection to agreed systems, including examination of SCADA/MES PC hard discs and would report the following:

- System Architecture with node addresses
- Comparison of off-line and on-line software with reports of conflicts
- Rectification of straight-forward errors (eg. Battery faults)
- Summary of software errors/faults observed
- Summary of error logs



The reports would be discussed with a post-survey meeting. Further actions could include::

- Retaining copies of system software off site which would be available in emergencies.
- FMA renewing the system software back-ups at relevant intervals.
- FMA providing 24/7 support.
- Planning system evolution and obsolescence evasion.



For more information

FMA Process Engineering Limited, Three Spires House, Station Road, Lichfield, WS13 6HX
 Tel: +44 (0)1543 255 152 email: info@fma.uk.com web: www.fma.uk.com