

FSC TO SAFETY MANAGER MIGRATION



Protect Intellectual Property
While Extending Asset Life

Migrating the FSC system to Safety Manager modernizes the Safety Instrumented System to improve plant safety and extend support of automation investments.

The process industries have employed a long and successful practice of applying process safety systems to safeguard their profitable critical processes. Honeywell's Fail Safe Controller

(FSC) was one of the first and most successful Safety Instrumented Systems on the market.

With Safety Manager, Honeywell introduced the next generation safeguarding solution for the process industries. This evolution complies with all the latest safety standards and matches all the elevated requirements of the industries.

A COMMITMENT TO CONTINUOUS EVOLUTION

For nearly four decades, Honeywell has stood behind our customers to help them reduce the total cost of ownership of automation investments. This commitment to continuous technology evolution enables facilities to modernize legacy systems incrementally, with less disruption while enabling the preservation of valuable intellectual property (IP).

Honeywell's modernization roadmap incorporates full flexibility in lifecycle planning, including long-term support of existing equipment for life expectancy extensions and upgrades for plant performance improvements.

INNOVATION FOCUSED ON LONG TERM IP AND ROI

The migration solution is the next step in the

evolution path of the FSC system. By migrating from FSC to Safety Manager, intellectual property will be protected and 21st Century safeguarding technology will be enabled.

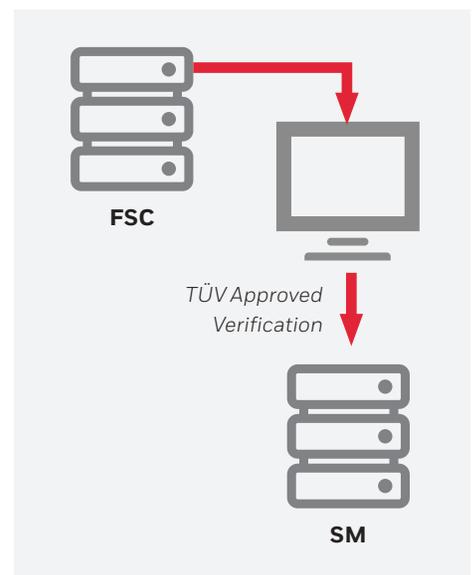
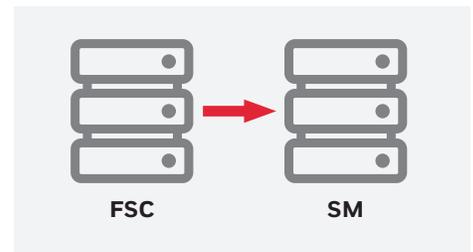
With this solution, it is possible to exchange the FSC controller with the Safety Manager controller and maintain the FSC I/O and all related field devices and wiring. Hardware migration kits will make the transition an easy operation.

In addition to a smooth hardware migration, the solution also contains the option to convert the FSC application in an automatic way to a Safety Manager application. A TÜV certified software migration tool enables a one-to-one conversion of the FSC application.

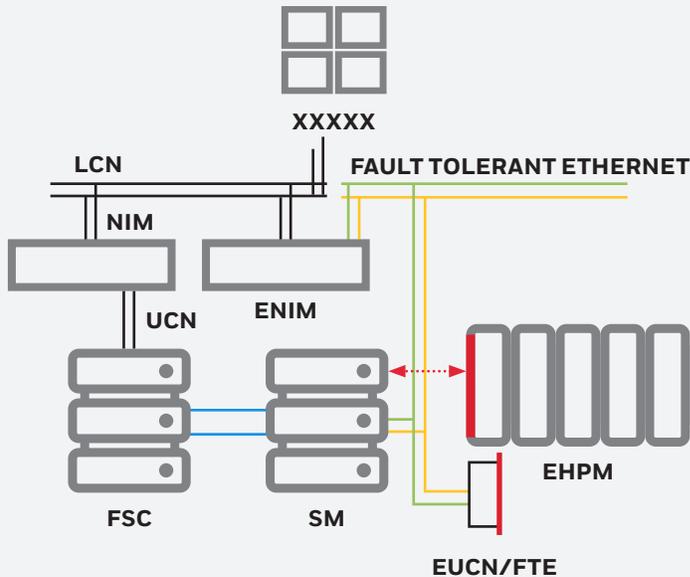
The migration of an installed base of FSC systems can be planned in a phased way, aligning it with the turnover schedule of the plant. A SIL3 Fail Safe communication link between the FSC system and the Safety Manager enables the phased migration.

SEAMLESS PATH TO FUTURE CONTROL ENVIRONMENT

This migration solution also includes modernization of the Universal Control Network (UCN) to Ethernet technology by introducing Honeywell's Fault Tolerant Ethernet (FTE)-based Enhanced Universal Control Network (EUCN) and related Ethernet based control devices like the EHPM. Safety Manager will be



Honeywell



able to connect to the EUCN, which will allow peer to peer communication to the EHPM.

This unified control environment provides a logical path for migration of coax-based devices to Experion PKS at minimal investment cost, process disruption and changes to intellectual property. The UCN to EUCN upgrade does not require any changes in controller configuration, application software or process displays.

LEVERAGE EXPERT GLOBAL SUPPORT

Honeywell is committed to lifecycle support and helping customers meet their business needs for automation planning. Our high-value service and support capabilities have more global reach and presence than any other supplier.

With Honeywell's approach, linearity of capital investments, together with efficiency improvements is fully supportable using an incremental modernization and upgrade approach.

Honeywell local service technicians, trainers, consultants and Global Technical Assistance Center (GTAC) experts use collective expertise to support customers in countries across the globe. Honeywell's teams are driven to the highest standards, using consistent processes, leveraging advanced technologies and more than 2,000 years of collective domain expertise to ensure customer support requirements are met.

EXTENDING THE BENEFITS

By migrating from FSC to Safety Manager, customers can:

- Modernize their reliable Safety Instrumented System by introducing the latest safety technology:
 - Universal Safety IO
 - Universal Logic Solver
 - ISA secure – cyber security
 - Advanced Experion Integration
- Prevent a costly rip and replace by exchanging the FSC controller with the Safety Manager controller and maintain the FSC I/O and all related field wiring and devices.
- Maintain a reliable Safety Instrumented System by converting the FSC application in a TÜV certified and automated way to a Safety Manager application. This will not only save expensive redesign cost but will also limit testing to an absolute minimum.
- Reduce engineering, maintenance and training cost due to the similarity between FSC and Safety Manager. For instance, diagnostic features of both systems are closely related, and the program language of the two systems is the same.

For more information

To learn how Honeywell's Enabled Services Program provides economic benefits and flexibility, visit www.honeywellprocess.com or contact your Honeywell account manager.

Honeywell Process Solutions

2101 CityWest Blvd, Houston, TX 77042
 Honeywell House, Arlington Business Park
 Bracknell, Berkshire, England RG12 1EB
 Shanghai City Centre, 100 Junyi Road
 Shanghai, China 20051
www.honeywellprocess.com