SIEMENS
Ingenuity for life

Modernization made easy: Flow Chart

Future focused technologies for today's Digital Enterprise

Start

Physically review the system to be migrated

↓

Determine the panel space and locale space for mounting an additional panel if required

↓

Get drawings of the physical application and a copy of the application program

↓

Analyze the current I/O and determine if special hardware is being used

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Cross reference the I/O to appropriate SIMATIC I/O

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Locate an appropriate Siemens solution for any special hardware being used such as that supplied by AB Encompass partners

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Choose and configure an appropriate SIMATIC PLC and configure it in TIA Portal

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If required to connect to a specific network, determine an appropriate gateway or SIMATIC solution

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Migrate the existing AB programs using the TIA Migration Tool

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In the event that a SIMATIC library function is not available for a specific AB function, create a SIMATIC library function and add it to the SIMATIC AB library

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Create SIMATIC functions for any new hardware or gateways that will be used

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Create the Main calling routine(s)

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Add PROGRAM_ALARM for diagnostic messages to the S7-1500 display and HMI

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Configure the HMI(s) in TIA Portal

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Verify the HMI Connection(s)

↓

Configure the HMI Tags

↓

Configure the HMI Graphics

Configure the HMI Alarms

↓

Configure the HMI Trending

↓

Configure the PLC/HMI security

↓

Test the new configuration using simulation

↓

Correct any issues found during simulation

↓

Develop preliminary drawings for the application using the new SIMATIC hardware

↓

Develop an operator/ maintenance manual for the plant

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Take the new system to site and install it

↓

Wire the IO using the fastest method possible (TBD)

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Adapt the network configuration to the plant network infrastructure

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Startup and test the new application

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Modify and document the updates to the application hardware and software

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Modify and release the final drawings for the application

↓

Archive the application code

↓

Get acceptance sign-off from customer

↓

Deliver all documentation and drawings to the customer

↓

End

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