Deploying Proficy iFIX and Historian in a Secure, High Availability Architecture

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For the Operations Hub, is it a one-way push from theSCADA LAN segment to the HUB? If so, then the SCADA segment is touching the internet?

Proficy Operations Hub can be deployed within the SCADA LAN (control network) or outside and has ability to do both read and write. It does not require internet connectivity. It is at the discretion of the customer if they want to deploy with internet connectivity. For example, when they want to display information from level 4 or 5 systems. Of note, you can also deploy separate Operations Hub servers for control vs higher level dashboards where OT data is accessed via Historian.



Does this include enterprise-level web frontend to view the data?

Yes, that is a key use case for Proficy Operations Hub. This is a key area of focus for future development as well as to provide out-of-the-box, industry-specific dashboards as "starters." We have a customer who stated to us that Proficy Operations Hub will be the most used product in their enterprise, even more than SAP.

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Can you provide information on reporting software PI, Dream, XLReporter? Can you integrate them?

With standards-based communication (OPC UA, REST, MQTT, SQL), Proficy Operations Hub can connect to third-party systems such as using a REST connector to visualize data from PI. There is also a frame widget that allows embedding HTML reports such as Dream Report directly into the custom apps built in Operations Hub.



Does the web configuration present a web API so that configuration can be scripted?

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Yes, it does. Enabling scripting and "silent configuration" are key requirements for the development team.



Modeling is your term for Template?

Model and Template terms can be used synonymously but have some differences to note. For example, the modeling capabilities are based on OPC UA standards of having components such as Object Types, Objects and data variables. The Object Type is similar to a class in programming terms and would be considered a template of, for example, equipment such as a pump. This Object Type can have expressions and substitutions to allow for equipment variability of variables and enable ease of creating instances.



Are there any moves to have applications operate in containers?



There are things we are doing in that direction. One specific area of focus first is GE's Proficy Historian, which supports containers. For the HMI/SCADAs, GE is still in the investigation and consideration phase, and thus it would be something that would be further out for timelines. Moving iFIX configuration to be web based (configuration hub) is a key enabler for containerization of the SCADAs. F A Q

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Can we schedule a one-on-one session with the CB or AutomaTech team if we want to go deeper with our engineers?



Yes, please reach out to CB Pacific on the west coast or AutomaTech on the east coast and we will assign the appropriate Solution Architect to help you.



How difficult is it to upgrade from version iFIX 5.5 to 2022 version?

For the most part, the upgrade is easy. However, there are differences in every implementation of iFIX, and those nuances need to be considered prior to upgrading any project. The Solutions Architects at CB Pacific and AutomaTech are prepared to review current projects and advise customers on the proper steps to upgrade from any version of iFIX and/or Proficy Historian.



Are there any login customization for users to have unique workspaces?

GE is looking to customize the experience for both configuration and IoT applications. In Configuration Hub, GE is designing an IDE-type experience that allows users to customize panels for development and deployment. Persistence and saving of those workspaces per user are planned for next year's development. For IoT applications in Proficy Operations Hub, you are able to create purpose-built apps that can be assigned to specific users. There is also the ability to save things such as a user's favorites of historical analysis. GE plans to do even more in this area next year and we would love to hear more about your use cases.

Can I upgrade SCADA Servers without upgrading Clients?

In some cases it is possible, but there are nuances to every implementation that need to be considered. The Solutions Architects at CB Pacific and AutomaTech are prepared to review current projects and advise customers on the proper steps to take on upgrades.



Are there any plans to handle loss of data with Last Known Good Value holding if not implemented already?



iFIX presents ampersands in the place of the data to indicate that there is a communication issue with the data source (SCADA server) and that functionality is designed to prevent an operator from acting on "bad" data.



How does the latest version of iFIX / Historian embrace Cloud technologies?



Across the Proficy suite as part of the 2022 releases, GE will be supporting Azure and AWS VMs for deployment. Moreover, GE has built Historian Collector capabilities that enable the ability to pump data from either iFIX or Proficy Historian into cloud infrastructures. Lastly, as mentioned earlier, with Proficy Historian having the ability to be containerized, it can optimally leverage cloud infrastructures.