

Siemens Accelerates its Dual DCS Strategy

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Summary

For several years Siemens has pursued a unique process automation strategy of providing long term support for two DCS product lines that share a common hardware platform. These two are the well-established SIMATIC PCS 7 and its successor, the entirely web-based SIMATIC PCS neo. This year, Siemens promised explicitly to support the SIMATIC PCS 7 software until at

In 2024, Siemens promised to provide long term support for both of its DCS solutions, leaving customers free to make long term automation plans based on their specific business needs.

least 2040. This promise effectively frees its large installed base from any concerns of impending obsolescence, enabling users to plan when they move to the new system on the basis of measured business value rather than system obsolescence. At the same time, Siemens continue to add significant new capabilities to SIMATIC PCS neo (e.g., with

AI-based engineering copilots) that makes it increasingly attractive not only for greenfield projects, but also for end users who wish to add innovative features to their automation platforms.

Support Remains “Job One” for Automation Suppliers

Despite the advancement of technology in the process automation business, long term product support by automation suppliers is perhaps the most important business value that they provide to their end user customers. One difficulty suppliers face is providing rapid innovation on an existing product line without applying too much pressure on their installed base to either upgrade or expand their automation systems. Too rapid a cadence of new software or features can force end users into more frequent updates than they prefer, or (worse) can leave them running their process on old software

versions that are obsolete and difficult to support for both the supplier and the end user alike.

Another major difficulty faced by automation system suppliers is the perception of the customer base toward major new product introductions. Regardless of any assurances, end users of existing DCS systems will be concerned about the future support and future direction of their older installed automation systems. They inevitably have concerns about whether emphasis on new products will cause support issues for their future operations. Sadly, there are several examples in the history of process automation where suppliers have deliberately told their installed base that they must migrate to a new system on a proscribed timetable or lose their support. Such stories have unhappy endings for the supplier.

The Siemens Dual DCS Strategy

When Siemens introduced its new SIMATIC PCS neo process automation system, its strategy took several steps to avoid such problems with new product introduction. First, with SIMATIC S7-410, SIMATIC ET 200SP HA and others, SIMATIC PCS neo shared a common control and IO hardware platform with the large installed base of the SIMATIC PCS 7. This provided

Providing software support for SIMATIC PCS 7 at least through the year 2040 has effectively taken the issue of obsolescence off the table and left end users free to plan a future using either automation platform.

investment protection to the installed base as much of their installed hardware would remain usable with either DCS line. Second, Siemens assured its customers that the introduction of SIMATIC PCS neo would be gradual and that the SIMATIC PCS 7 software would be supported going forward. Third, Siemens defined a set of

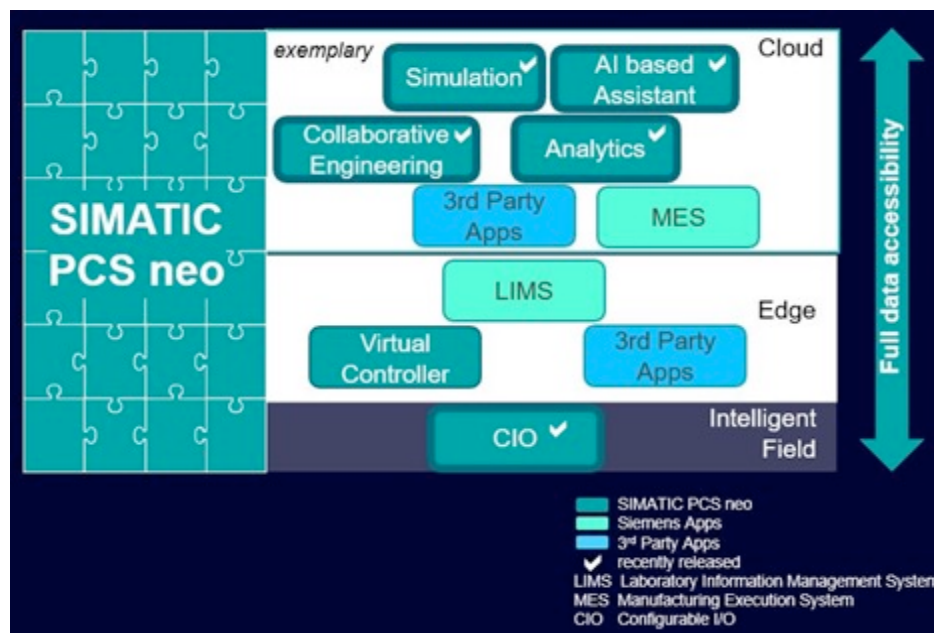
SIMATIC PCS 7 application logics that was directly portable into the next generation DCS, the new SIMATIC PCS neo. For example, by designing applications using the Advanced Process Library (APL), end users can re-use existing applications and greatly simplify the process of evolving to the newer DCS.

Despite all these steps there are inevitably still some concerns in the minds of end users about how the evolution of these two DCS products will impact their operations in the years to come. This year, Siemens clarified its guarantee of long term support for SIMATIC PCS 7 software. At the 2024 AICHEMA show, Siemens promised to release a long-term support version of SIMATIC PCS 7 software under a new business model in 2027, which will be supported

at least through the year 2040. Providing a long-term support for SIMATIC PCS 7 end users with a software maintenance contract effectively removed any concern about obsolescence and thus saved effort and cost for upgrading the SIMATIC PCS 7 version caused by obsolescence. This also left them free to match their own DCS strategy to the overall lifecycle of their plants and process units rather than to any schedule of Siemens. By this promise, Siemens took the issue of SIMATIC PCS 7 obsolescence off the table.

Key Advantages of SIMATIC PCS neo

From its first introduction, SIMATIC PCS neo has differentiated itself through software. The overall objective of Siemens in creating SIMATIC PCS neo was to deliver a full set of DCS software, including all configuration tools and human machine interfaces that would be entirely web-based, have a unified data platform, and a fully consistent look and feel for engineers and for operators. Software tooling for process automation systems tends to fragment over time as new capabilities and features are added. This situation forces end users to learn and master new and unfamiliar software tools in order to add new or more advanced DCS functionality. SIMATIC PCS neo was designed from the outset to prevent this. New features and functionalities are added to the software with each annual product release but the overall architecture of the software remains consistent.



SIMATIC PCS neo is the Innovation Platform for Siemens Process Automation

As SIMATIC PCS neo is completely web-based, it requires no installation on client side and updates and new functionalities can simply be implemented like e.g., new MS Office features. This is a milestone in keeping a DCS future-ready and secure.

The latest version of SIMATIC PCS neo is now targeted at industries such as food & beverage, water & wastewater treatment, certain chemical industry segments, and clean energy markets such as hydrogen production. As new capabilities are added to the SIMATIC PCS neo platform, the range of targeted industries will expand to encompass the full complement of process industries.

SIMATIC PCS neo is now the innovation platform for process automation within Siemens. The platform already provides many of the modern features available in today's DCS such as fully cloud-based DCS engineering, support for secure and full remote access, support for modular automation with the NAMUR Module Type Package (MTP) standard, AI tooling to assist with engineering tasks and, in the near future, fully virtualized controllers.

SIMATIC PCS neo is moving toward the vision of a fully software-defined automation platform. The addition of new technologies like AI, MTP, integrated simulation, and system virtualization will enhance its appeal to both greenfield projects and existing SIMATIC PCS 7 customers. At the same time, Siemens' promise of long term support for SIMATIC PCS 7 means that owner-operators can make decisions about switching to SIMATIC PCS neo on their own timetable rather than being constrained by any supplier support issues. If they choose to move to the new platform, they can do so for solid business reasons rather than because of supplier support timetables.

Recommendations

- Siemens' promise of long term support has mooted any questions about possible obsolescence or end-of-life issues with SIMATIC PCS 7. The company provides customers with the flexibility to determine the optimal timing for their transition to SIMATIC PCS neo, ensuring a smooth and cost-efficient process.
- End users running SIMATIC PCS 7 on their process units should evaluate possible upgrades to SIMATIC PCS neo based solely on their

business needs and their fit with the expanding capabilities of the SIMATIC PCS neo line.

- End users will benefit from moving their systems to the Siemens APL to ensure a smooth transition to SIMATIC PCS neo.

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