Measure | Understand | Control | Improve

synTQ

Enterprise Master

Centralise data management and user collaboration in a distributed PAT implementation

A key part of any data transformation programme, synTQ Enterprise Master is the overarching server that connects multiple real-time synTQ applications, collating data from anywhere in the world into one central location. synTQ EM enables users to view the performance and operating status of any PAT process in their global network in real time, using easily configurable dashboards.

synTQ EM provides harmonisation and integration of your world-wide PAT data, including models, configuration data, orchestrations (PAT methods), raw and meta data, spectral data, and univariate data. In short, all data can be stored, and this greatly simplifies data archiving.

The platform forms your PAT collaboration gateway, providing a controlled and regulatory compliant way of sharing knowledge and intellectual property (IP). It streamlines the viewing and analysis of your collected data and information, which may derive from anywhere in the world. For example, knowledge developed in an R&D laboratory or pilot plant could be shared in a controlled, compliant way with a production facility on the other side of the globe.

Typically used in a distributed PAT environment, synTQ EM would likely reside on either a user's corporate LAN or in the Cloud. Communication takes place via a firewall with the real-time synTQ applications running on the Automation LAN.

synTQ EM will interface to all real-time synTQ applications, including any mix of one or multiple synTQ FM, synTQ Lite, synTQ FM Lean and synTQ OEM applications. If your distributed PAT architecture includes both synTQ FM and Lite applications, you can traceably create orchestrations on a synTQ FM machine and load them into suitably licensed, synTQ Lite target machines.

In Summary

synTQ EM is a key attribute of any data transformation project. As well as centralising your PAT data and simplifying data archiving, it is a platform from which you can view the operating status and performance of the entire PAT process.

It forms the keystone in delivering a regulatory compliant, PAT collaboration environment, allowing you to share knowledge, orchestrations and PAT models around the world.

Optimal Industrial Technologies

Version 5 Highlights

- Modern Look and Feel
- 3D and 2D Graphics
- User Dashboard
- Instrument Store
- Model Store
- Multi-Language Switching
- Cloud-Based Data Pump System

synTQ

Enterprise Master

Technical Specification

System Operation

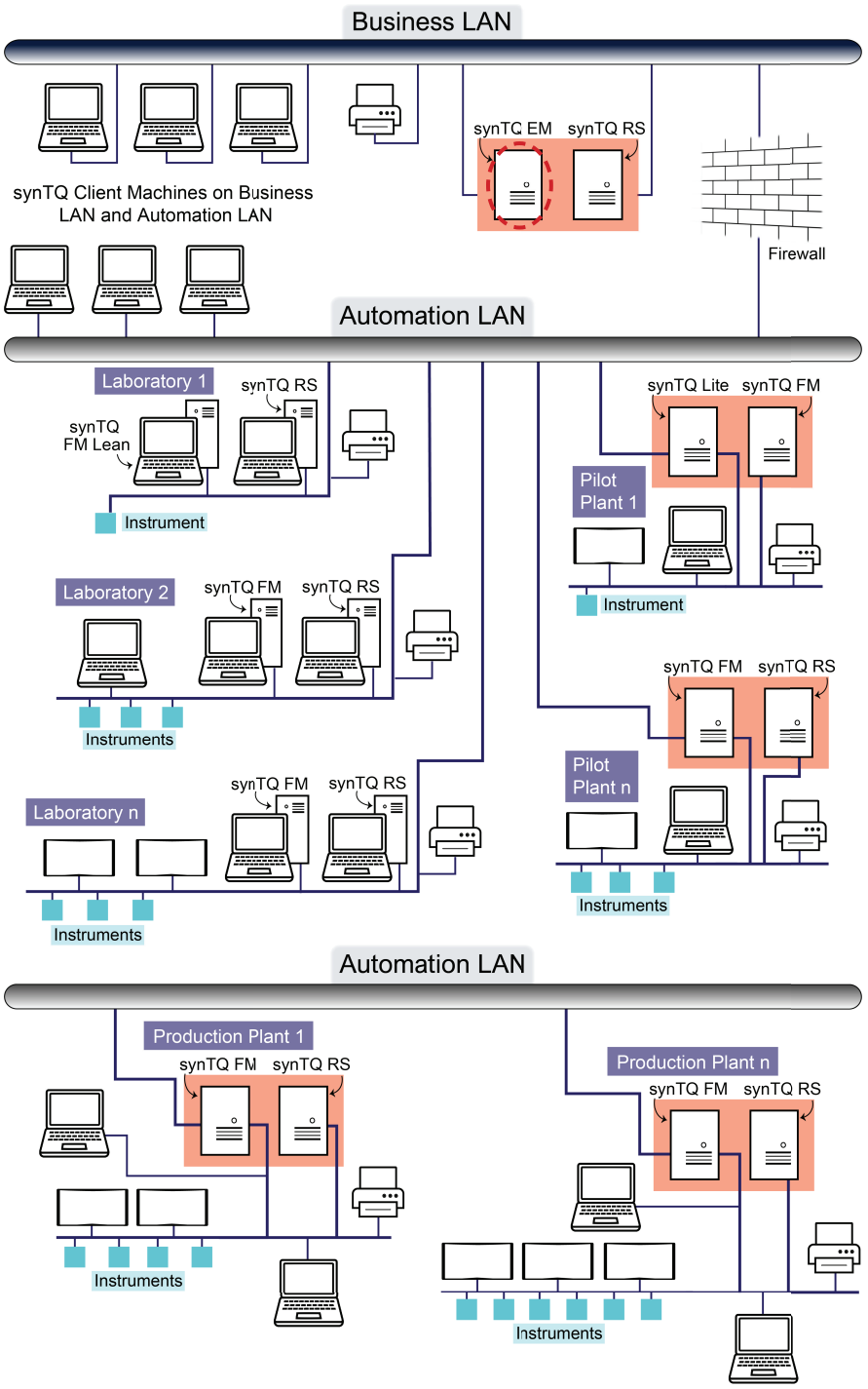
synTQ Enterprise Master is normally run from a dedicated physical or virtual server on a client's corporate LAN, or on servers in the Cloud. synTQ EM runs as a true client/server application and as such can support multiple client machines. Each client node can be used to visualise the status and performance of all orchestrations running on the connected synTQ FM, synTQ Lite, synTQ FM Lean or synTQ OEM nodes around the world, using customisable dashboards.

Real-time synTQ applications (those that are communicating with instruments) would likely reside on a 'lower level' automation LAN, and communicate with the synTQ EM application via a firewall or a specifically configured synTQ cyber DMZ gateway.

Data communication between the synTQ applications is secure, as no data is ever deleted until its safe transferral has been confirmed. This together with data encryption ensures total data integrity. If, for any reason, the network link should be unavailable, the real-time synTQ systems can continue to run your plant, storing runtime data on a local database. Data would then be transferred to synTQ EM once the link is re-established. As the real-time synTQ systems can run on locally stored, fully approved orchestrations, your plant can still manufacture even if the link to synTQ EM becomes unavailable. Within the integrated, flexible synTQ-based distributed PAT solution, productivity and quality are never compromised.

A typical distributed architecture for implementing PAT using synTQ is demonstrated by the right-hand diagram (synTQ EM is highlighted with a red dotted circle).

Multi synTQ Node Distributed Architecture Using A Range of synTQ Application Types



Please note that specifications are subject to change without notice.

SciY Optimal Industrial Technologies

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