



NAPCON INFORMER TECHNICAL BROCHURE

As the cornerstone of the NAPCON information platform solutions, NAPCON Informer enables you to dig deeper into the vast ocean of data generated by your plant.





NAPCON INFORMER

KNOWS IT ALL.

NAPCON Informer makes it easy to collect all process data from your DCS systems, IoT devices and plants by Industry 4.0 compatible way. Take over Operational Intelligence and gear up digital transformation with OPC UA certified, future-proof vendor-independent solutions.

NAPCON INFORMER MAIN BENEFITS

FLEXIBLE

NAPCON Informer allows configurable process data collection and sharing it from any single automation system, all the way to global, multiple plant-wide information systems.

PERFORMANCE

Our major design principle for this modern and fast information platform is the capability to handle large scale data.

SAFETY

OPC UA with attention to specific industry related requirements, latest technologies and architectures guarantees built-in cyber security.

STANDARDIZED

NAPCON Informer accomplishes a standardized, modern and secure OPC UA interface, making it compatible with any existing modern information system.

VERIFIED

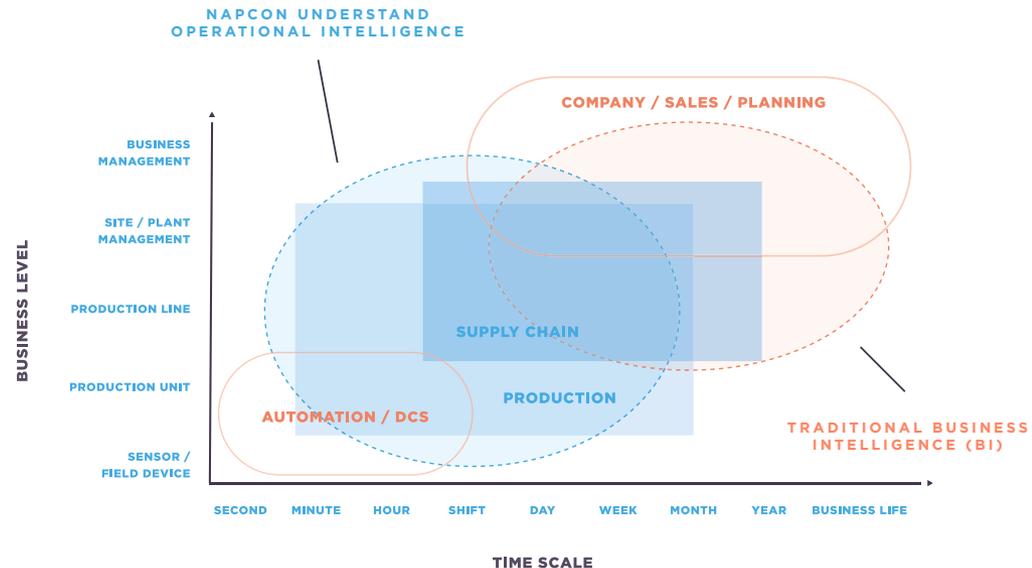
NAPCON Informer is certified by an OPC Foundation accredited Certification Lab and is ready to guide your plant towards the Industry 4.0 era.

TRANSPARENCY OF INFORMATION

NAPCON Informer is a reliable and scalable solution for effective access and analysis of your process information.

EXPERTISE

Your business is in good hands: with our 30 years experience we truly understand the process industry platform.



NAPCON INFORMER KEY FEATURES

STANDARDIZED

Standardized interfaces through OPC UA for historian and real-time information built on top of time series database with premium performance.

EXTENDABLE

Easily extendable to different on-premises, cloud or hybrid cloud needs for data management purposes to power up new and existing investments.

AUTOMATION

Built-in information models that allow true system-to-system communication, improving performance and scalability.

ADAPTABILITY

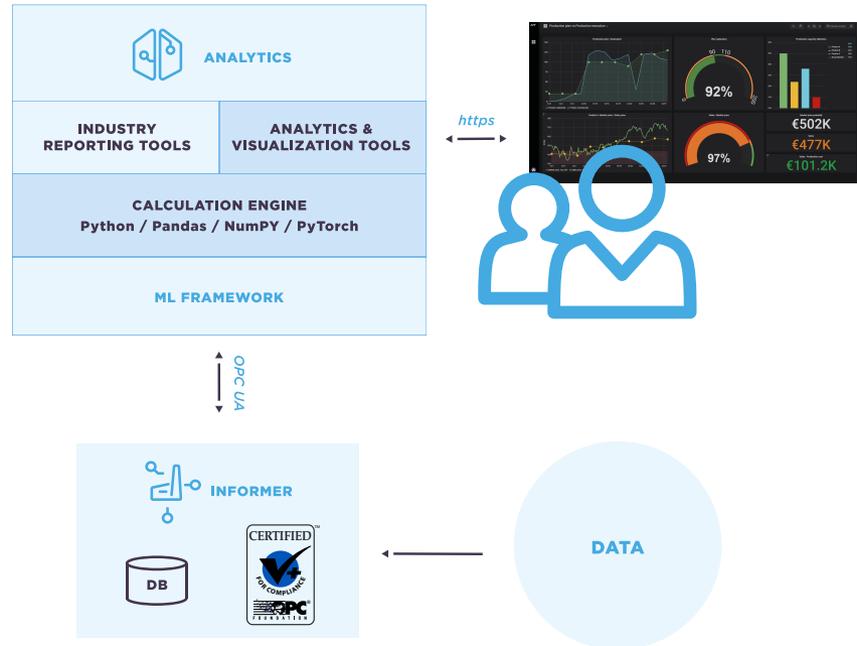
NAPCON Informer can automatically detect changes on instrumentation, leading powerful reporting and visualizations with NAPCON Analytics.

SAFETY

OPC UA technology that enables cyber secure communication and provides reliable user authentication.

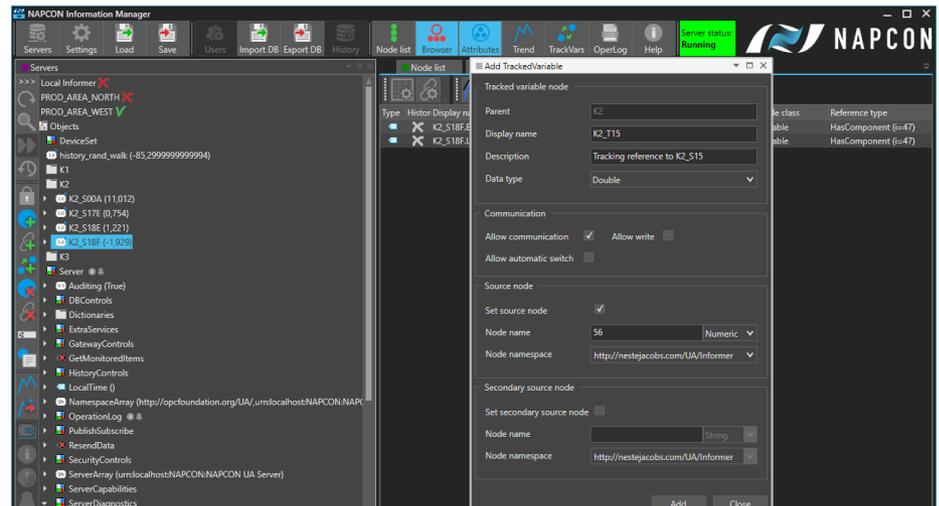
EFFICIENCY

Historian database with time series capabilities enabling efficient data handling that truly matches the needs.



MAIN PROPERTIES

- DCS/OPCUA data accessibility to fast, reliable and secure and universal integration services
- OPC UA Certified, certified profiles: Standard Server / Data Access Server / Method Server
- Integration of accurate and up-to-date data from different time intervals and sources for different levels of production like ERP, DCS and instrumentation
- Advanced data manipulation and export in multiple formats e.g. csv, xls, xlsx
- Common interface for accessing data stored in separate existing databases
- User management and authentication for OPC UA Server
- Excellent scalability with high data throughput capability
- Wide support for security features: Encrypted OPC UA communication, Antivirus softwares, Whitelisting, User identification, Encrypted data transport, Certificates
- Application monitoring & logging for efficient maintenance
- Easy configuration and set up with installer utilizing configuration templates and generation of certificates

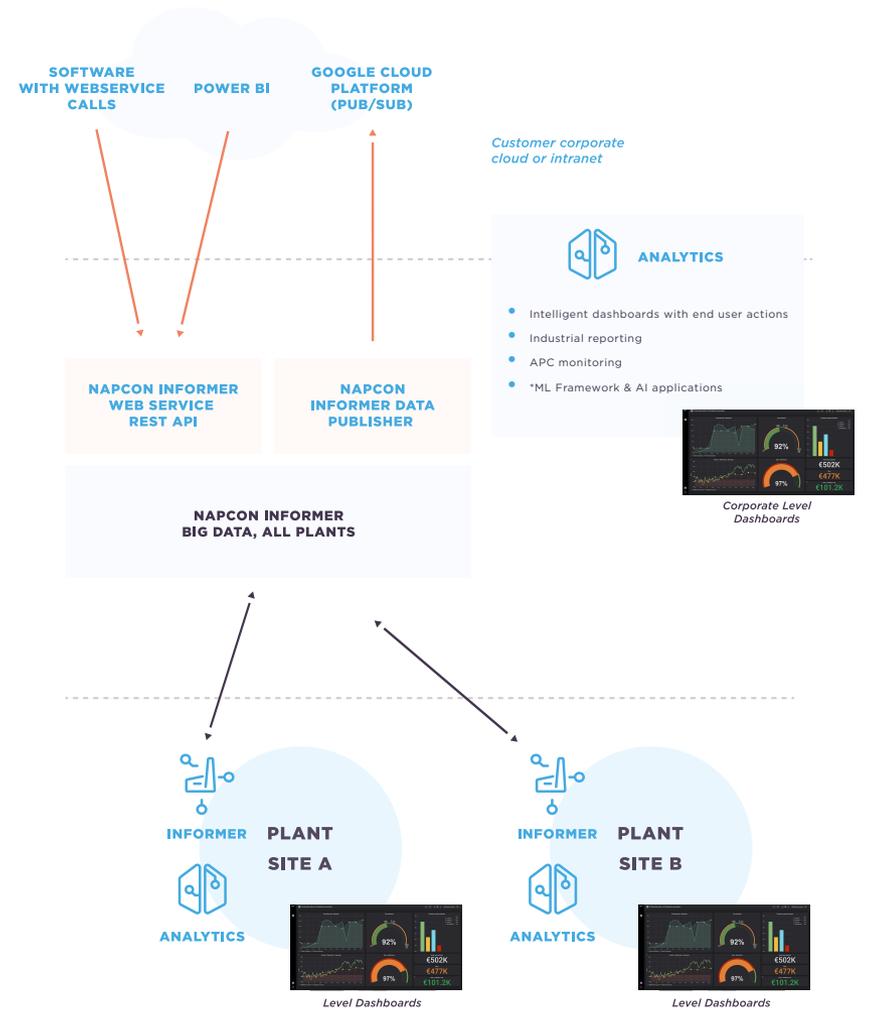


PROCESS HISTORY

CASE EXAMPLE

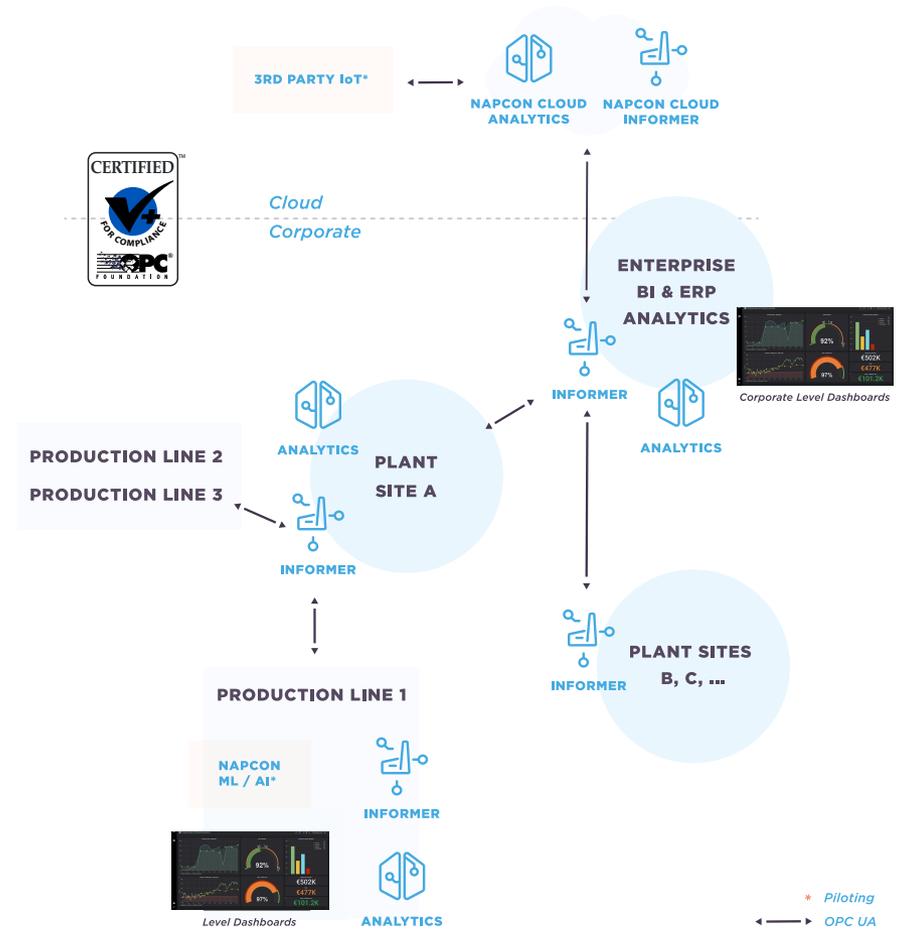
Base for all modern machine learning and artificial intelligence solutions is vast amount of data that is collected and stored properly. NAPCON UA Server is a process historian database with extensive support for the OPC Unified Architecture (OPC UA) protocol. Compliance with the standard gives NAPCON UA Server excellent interoperability, scalability and extendability with other automation software products and makes it applicable to various system configurations and operations. For example, history repository Export and import of database structures between different Informer servers is possible. Also, cloud connectivity is made easy and secure with OPC UA. Informer cloud connectivity consists of:

- NAPCON Informer Web Service REST API
- NAPCON Informer Data Publisher (Pub/Sub GCP)
- DCS/OPCUA data accessibility to fast, reliable and secure and universal integration services
- OPC UA Certified, certified profiles: Standard Server / Data Access Server / Method Server
- OPC UA Gateway functionality (e.g. connectivity to DCS systems)
- OPC UA standard compatible data aggregation for Improved history services
- OPC UA standard diagnostics



PROCESS INFORMATION PLATFORM CASE EXAMPLE

- To enable operational intelligence and real time visibility to production on different locations and assets, coherent, secure and easily modifiable information platform is needed. NAPCON UA Server can be configured to operate as a member of database network, enabling interaction and data aggregation from other OPC UA servers. Easily configurable network topology makes it possible to build any information platform with secure OPC UA connection method depending on customer needs.
- Informer offers customer flexible solutions for data gathering and transport between different sites or use cases. Fully integrated OPC UA features makes it future proof and vendor independent solution whether use case is related to gaining existing plant or process or building new. By altering setup configurations, NAPCON Informer can act on different roles at different levels inside enterprise and serving for many user groups and use cases.
- Previous investments on data historians are secured as Informer can be used as data transport link between applications for various needs on on-premise, cloud and hybrid environments.

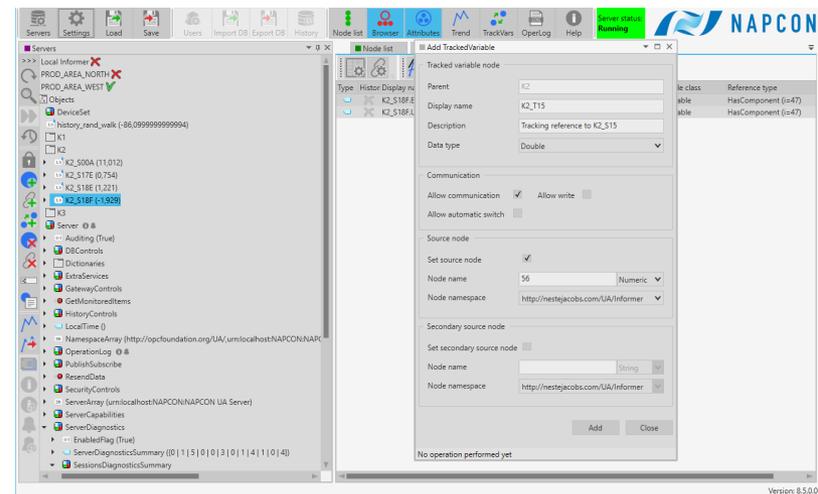


DATA ACCESS AND CONFIGURATION TOOL

- Informer IM (Information Manager) is used for configuring, managing, maintaining and monitoring Informer server instances, as well as the data stored in them.
- IM has generic tools for managing the nodes, as well as information about the connected server, folders, variables, calculations, and objects.
- IM is used to versatile user management operations and supports username/password-based authentication on OPC UA session establishment. UA Server is widely configurable; for example security policy, communication encryption, backups, different logging options, reconnecting intervals and timeouts.

USER INTERFACE

- Informer IM UI is built on Microsoft's .NET technology, ensuring performance, stability, and interoperability. The trend page can show the long-term history of a variable, plotted trend can be zoomed into, scaled or browsed backward or forward in time. The trend view supports drag-and-dropping variables from other views and autoscaling.

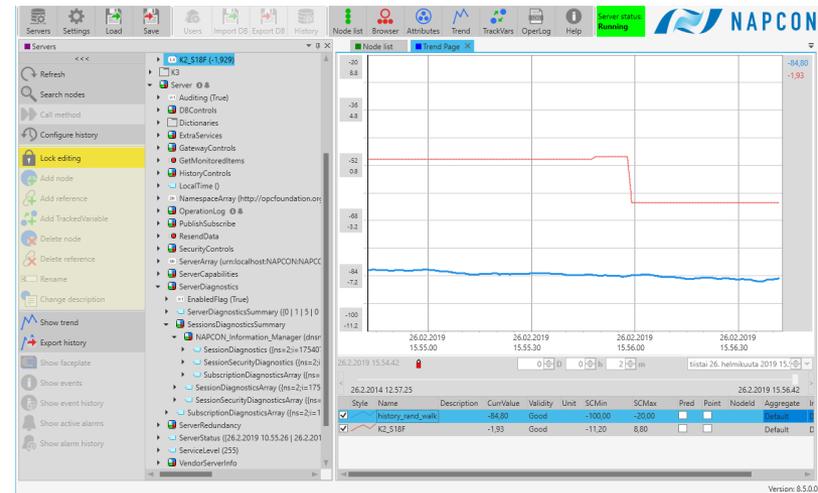


REALTIME DATABASE: Informer supports real time database usage for example for NAPCON Controller (APC) and NAPCON Simulator use cases.

- Full support for OPC UA information modelling e.g. for controllers, alarms, and events, including OPC UA standard information models
- Dynamic address space enables addition of new nodes on run time
- Industry 4.0 ready connectivity to systems from shop floor to office level using OPC UA and OPC DA

PROCESS HISTORIAN: Informer uses powerful PostgreSQL database for large scale history data storage. NAPCON History Writer acts as an intermediary buffer between the NAPCON UA Server and NAPCON History Database.

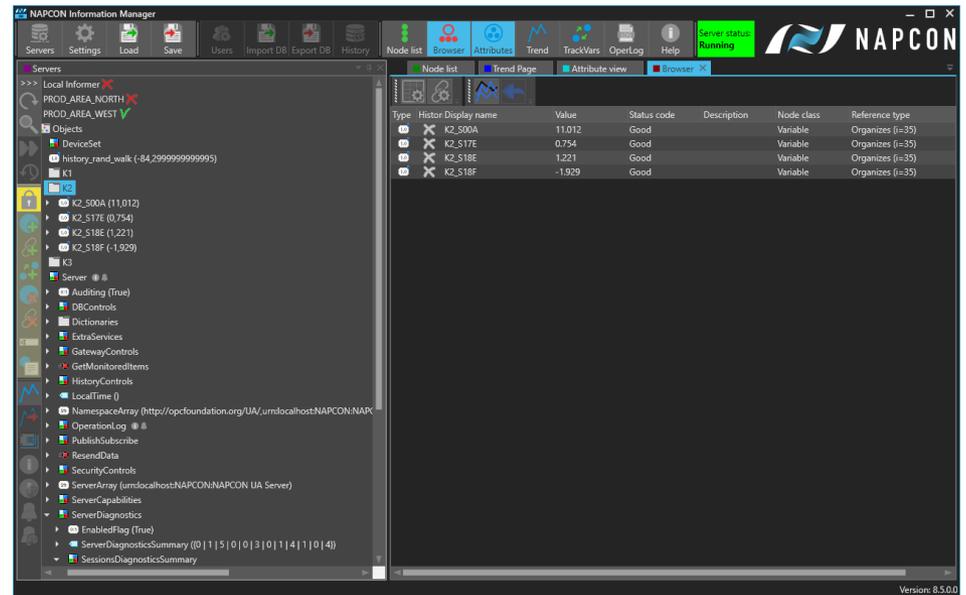
- PostgreSQL database technology, object-relational database
- Storage for process data, alarms and events.
- Partitioning of history to optimize data access speed and storage capacity
- Several schemes for data compression
- Buffered input to even out momentary high loads of data transmissions.



- Automated scheduled backup on remote PCs.
- Independent user operations via Windows Services based components
- Built on Microsoft .NET and OPC UA standard
- Windows 32/64 bit platforms

COMMUNICATION

- Informer enables future-proof data communications with other applications through its OPC UA -compliant interface. In addition to the certified OPC UA data communication interface, Informer can use other external data sources with various data communication protocols and formats.
- Informer can be used as data gateway or as an edge device (with NAPCON Analytics calculations) for solutions where data needs to be preprocessed for some particular needs and only relevant information is needed for other purposes. Or it can act as a full-blown process historian with mirroring and data buffering for situations where existing capabilities are missing.
- Integration of accurate and up-to-date data from different time intervals and sources for different levels of production like ERP, DCS and instrumentation
- Advanced data manipulation and export in multiple formats e.g. csv, xls, xlsx
- Common interface for accessing data stored in separate existing databases
- User management and authentication for OPC UA Server



EASY START WITH NAPCON INFORMER PLATFORM SOLUTIONS

Do you want to benefit your production data with machine learning enabled intelligence but sending the valuable data to cloud seems questionable by cost or reliability point of view? Don't worry, because NAPCON has developed practical solutions to put machine learning in operation with On-Premise way.

- NAPCON Informer enables turn-key delivery for streaming data solutions without production interruptions and resilient process data access with certified OPC UA tools from IoT, process DCS and many other systems.
- Flexible and scalable OPC UA certified data acquisition technologies (Informer & ADC) for Industry 4.0 era requires at on premise, cloud and hybrid installation globally with NAPCON Informer.



NAPCON PRODUCTS



UNDERSTAND

NAPCON Understand solutions will turn the data provided by your plant into relevant information that help optimize your company's production.

NAPCON Informer

NAPCON Analytics



IMPROVE

NAPCON Improve solutions will bring out the maximum potential of your operations and help you ensure that your investments meet your strategic goals.

NAPCON Controller

NAPCON Optimizer

NAPCON Business Optimizer



TRAIN

NAPCON Train solutions will bring the real life plant into the virtual world, making training operators and testing the limits of your plant safe and exciting.

NAPCON Simulator

NAPCON Games

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