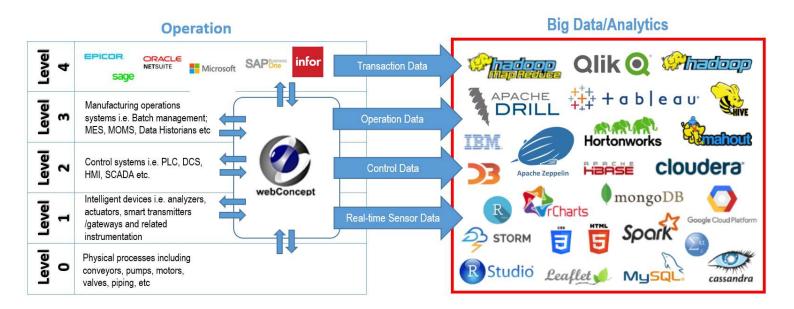




Gemia webConcept tm is an Information Management and Visualization Software Engine that offers solutions at automation levels 1,2 and 3 on the ISA 95 Architecture (Purdue Enterprise Reference Architecture). With its powerful customization features, it is also an ideal bridge between existing devices and system at all levels and by extension to the Big Data ecosystem. It is the ideal step to realize your industrial 4.0 revolution with little to no operational downtime and naturally offers significant cost and time savings.



Improving Operational Efficiency and Business Data Visualization for a Global Oil & Gas Company



Customer Pain Points

- Personnel deployed daily from regional offices throughout the country to several gas metering stations to collect data printouts.
- Sometimes no printout to collect due to printer failure and personnel will then have to stay longer to manually execute a print.
- When failure happens to important equipment i.e. analyzers or sensors, data is lost.
- When data loss occurs, manual correction is performed to produce the corrected billing report. This is time-consuming and subject to human error. This effort continue until the initial cause of data loss is rectified, adding to the total cost and time expenditure.
- Management have no visual on type, regularity and location of equipment failures.

Challenges Faced

- Different types of equipment at each station, thus requiring different communication protocols and data sources.
- Determining lost data that require backfilling and selection of data to backfill the lost data.
- Different stations and devices having different data maps/addresses.

Our Solution

Custody Transfer Billing Information Management

- We installed webConcept IOT Server at each region (total of 7 regions). System was customized to remotely retrieve billing information from each station's data concentrator (i.e. PLC, Flow Computers, Gas Analyzers data)
- The system performs data backfilling whenever there is missing data due to device failure (by polling archive data).
- The system performs automatic billing correction for incorrect data based on user specified criteria.
- We performed address standardization at local data concentrator for all stations (100+ stations).

Result

- Sources of human error (i.e. manual correction) removed. Uncontested billing ensures timely payment.
- Cost and time savings to customer from reduced travel and manual correction.
- Paperless transaction for the entire process.
- Business information (i.e. regional data & statistics, asset maintenance, every station data nationwide like analyzer data, billing data, etc) now available to an executive's fingertips.
- A gateway to deliver important data to customer's centralized Gas Management System.

Enabling Integration Between Business Information Systems for a Global Flour Producer



Customer Pain Points

- Legacy MES systems used at various plants unable to interface to new ERP system.
- Legacy MES system lack some data necessary for business logic of new ERP system.
- High cost to upgrade existing MES system just to interface to new ERP system.
- Disruptions to daily operation and business if needed to upgrade existing MES.

Challenges Faced

- Old database system used by legacy system.
- Legacy MES system did not have some data required for integration. There was also insufficient documentation for the system. Challenge is to identify and extract data directly from level 1 devices.

Our Solution

Smart IOT Gateway

- We studied existing legacy database (over 30 tables) and level 1 device data addresses to map all required data for further engineering.
- We installed webConcept smart IOT Gateway, and customized webConcept to deliver data in a customized SAP format.
- We provided an interface for customer to create new reports related to production.

Result

- Cost savings in maintaining the existing system (no need to upgrade or change the system) whilst giving the ERP the data required.
- Desired Business information now readily available at real time.
- Customer gets the customized production report needed for their operation.

Use any browser as a webConcept client!

Reduce Cost and Time:

- Unlimited free web clients (for browser version)
- Offers Excel reporting using openXML, without the need to purchase an Excel license.
- Ready made templates available for commonly used mimics i.e. trending, reporting, alarm viewer, etc.



Supported Operating Systems
(.NET CORE version)

*Seamless migration between OS
and even to cloud servers.

Easy server configuration using XML compatible syntax. Requires no configuration software!

Leverages on Microsoft .NET framework to ensure stability.

Multiple Industry Standard Protocols supported.



Low latency: a small and clean server kernel ensures maximum data through-put and fast startup/shutdown time. We once clocked in at below 1 sec data update time in a system containing over 400+ IEDs!

Strong Customization Capabilities. We can provide customization services, or an SDK for third parties to add plug-ins easily. We can also develop customized drivers, for example adding an ASCII plug-in to communicate to legacy devices or communicate with gateways to other industrial protocols.



An industrial webConcept Gateway/PC is also available for harsher environments!



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