

MAPS SCADA INTELLIGENCE

HMI - SCADA - LIFE CYCLE MANAGEMENT

The Product

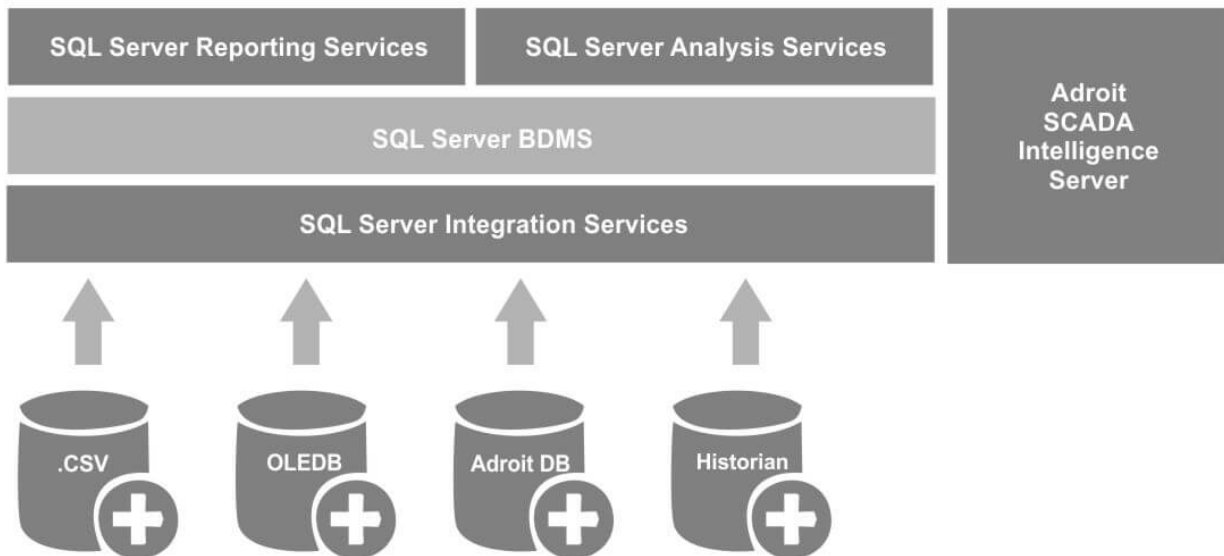
MAPS SCADA Intelligence is an out-of-the-box data warehousing and business intelligence solution that collects, processes and organises historical data from disparate data sources into a structured industry standard data model (ISA-95 Expanded Equipment Hierarchy). The resulting information is then made available on a common platform to enable informed decision making.

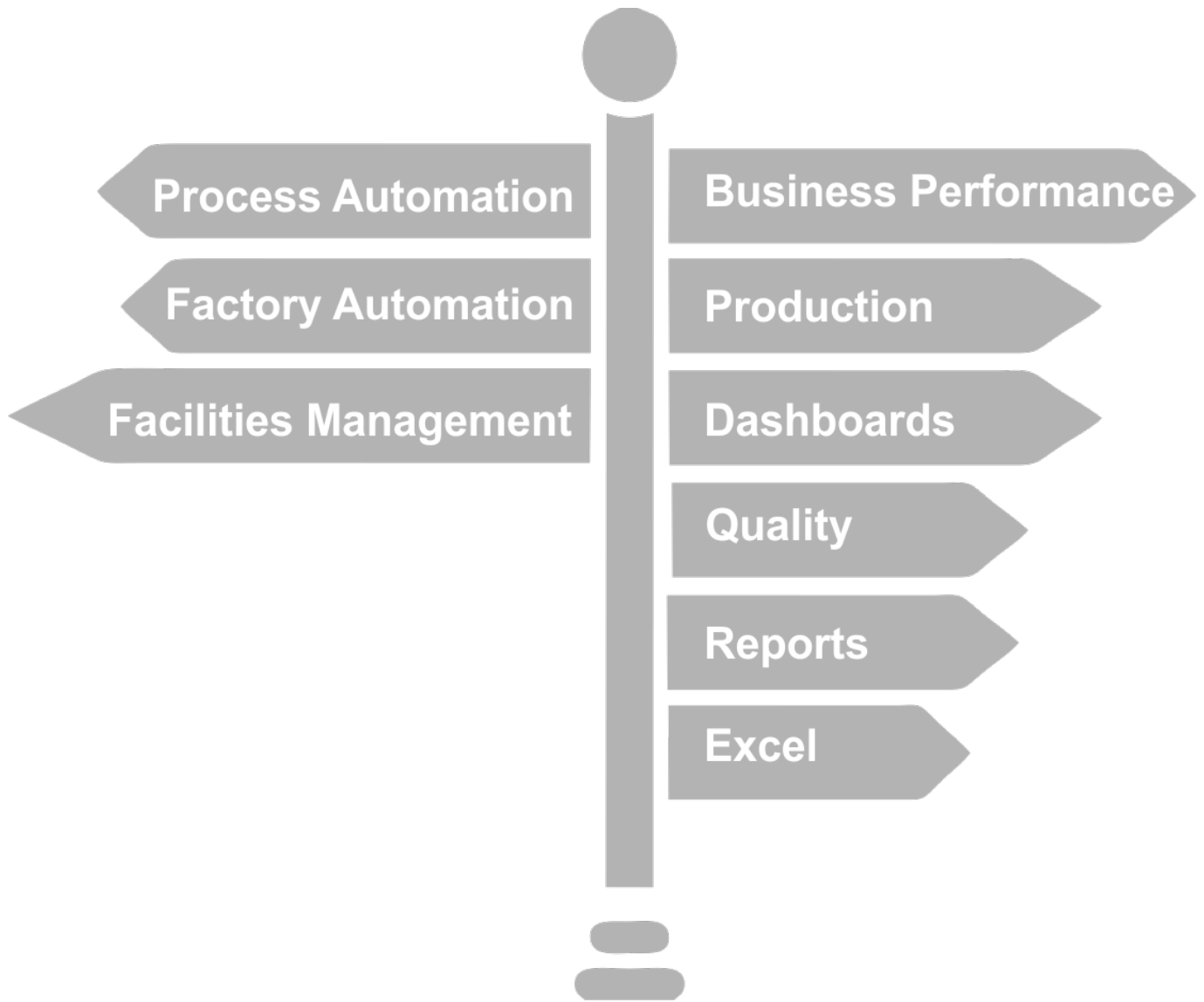


End User Tools



BI Platform





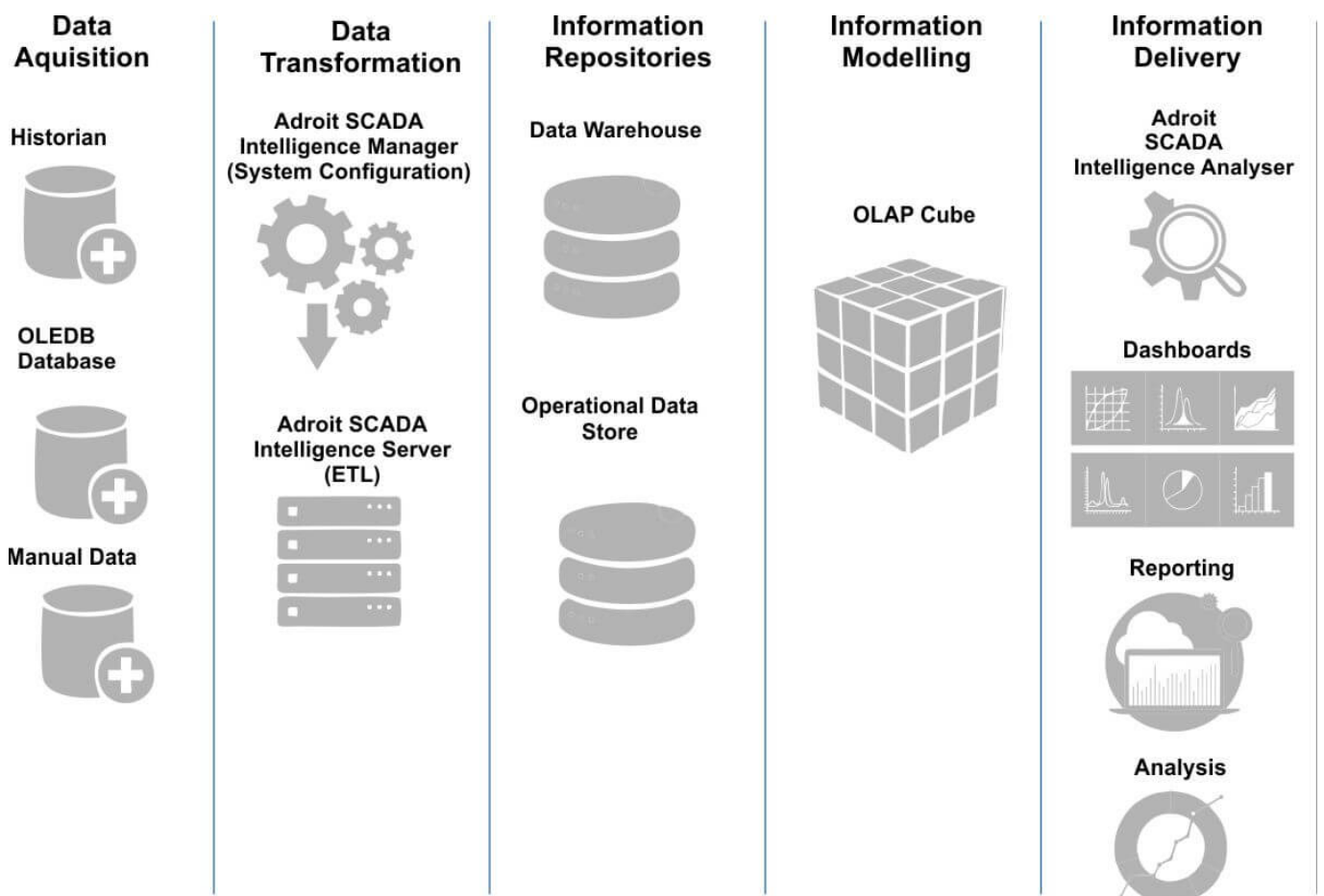
The Technology

MAPS SCADA Intelligence is developed on Microsoft SQL 2008 R2 Enterprise. Microsoft Business Intelligence solutions scale to the growing needs of your organization and provide the agility to respond quickly to changes.

The MAPS SCADA Intelligence Application

- The MAPS SCADA Intelligence Manager is used to configure data connectors, define how and when data is to be processed, database archiving, system backups, monitor system performance, processing durations and system error logs.
- The MAPS SCADA Intelligence Analyser allows users to do ad hoc analysis on both the Data Warehouse and the Operational Data Store using drag and drop functionality.

MAPS SCADA Intelligence Product Architecture



Data Acquisition

MAPS SCADA Intelligence can retrieve time based historical data from multiple data sources.

Data Transformation

The Extract Transform Load (ETL) process adds predefined context and other attributes to the summarised data and stores this in the data warehouse. Thus the captured data is transformed into information.

Information Repositories

The summarised information is stored in a multidimensional Data Warehouse. This is an optimised data store with specific focus around data management and retrieval. The contextualised raw data, for higher resolution analysis, is stored in an Operational Data Store (ODS).

Information Modelling

The information is modelled into an On-Line Analytical Processing (OLAP) cube which enables information to be queried and analysed efficiently using any OLAP compliant Business Intelligence (BI) or reporting.

Presentation Layer

The presentation layer is how information or key performance indicators (KPIs) are presented or visualised by end users. These can take the form of dashboards, scorecards, reports, or interactively through software such as Excel and/or the MAPS SCADA Intelligence Analyser.

Application of MAPS SCADA Intelligence

- Production Reporting
- Equipment Performance
- Overall Equipment Efficiency
- Network Performance
- Operator Performance
- Environmental Management
- Carbon Footprint Reporting
- Water Balance Reporting
- Distribution Management
- Quality Management
- Telemetry Network Management

Industries using MAPS SCADA Intelligence

- Water
- Mining, Metals and Minerals
- Telecommunication
- Power
- Facilities Management
- Food and Beverage
- Oil and Gas
- Cement



Reduced Configuration Time

The MAPS SCADA Intelligence software is quick and easy to install. The items and context model can be easily configured through the MAPS SCADA Intelligence Manager or the Microsoft Excel import I export functionality. This reduces implementation time, effort and therefore cost of your MAPS SCADA Intelligence solution.



Reporting Templates

MAPS SCADA Intelligence comes standard with report templates, sample reports and report parts that can be used to create custom reports. This allows for rapid development and customisation of your MAPS SCADA Intelligence solution.



Seamless Excel Analysis

Standard OLAP functionality in Excel enables users to connect to the MAPS SCADA Intelligence data cube directly. This familiar and intuitive environment allows users to easily do ad hoc analysis and reporting off their data with little or no training.



Sharepoint Capabilities

MAPS SCADA Intelligence is built on the Microsoft BI platform that allows for the seamless integration into SharePoint technologies.



The MAPS SCADA Intelligence Analyser User Interface

Without any other software it is possible to use the standard MAPS SCADA Intelligence Analyser to extract information in trends and other standard views. User defined reports can be created, stored and shared with other interested parties.



Multiple Data Sources

Data can be collected from Microsoft SQL databases, manual data input and 3rd party applications such as SCADA Historians (Citect Historian and Wonderware's InSOL).



Transform Raw Data Into information

Time based historical data is one dimensional, however the real world is not. MAPS SCADA Intelligence allows users to add context which transforms the data into information adding enormous value in the process.



ISA-95 Structured Equipment Hierarchy

MAPS SCADA Intelligence allows data to be contextualised into the S95 extended physical model. This model is an industry accepted standard used to organise enterprise data.



Microsoft SQL Reporting Services

MAPS SCADA Intelligence is built on the Microsoft BI platform and as such allows users to take full advantage of the applications that leverage the technology. Features include:

- Web based reporting can be made available on the web via SQL Server Reporting Services (SSRS).
- Reports available in different formats: (email, Excel, PDF and HTML).
- Scheduling reports: Reports can be scheduled or created on demand.
- Drill down functionality from reports: Users can drill down from reports in data for further detailed analysis.

