



Jaaji Technologies
Sophistication with Simplicity

Data Historian using



Why inSis Data Historian..?



- Data Aggregation through multiple protocols made easy
- Real-time data monitoring and Historical data analytics on mobile devices
- Compliant to latest IT standards for Superior User experience and IT security
- Integration with other digital solutions like Logbooks, EMS, LIMS etc.. for comprehensive analysis
- Process, Energy, Lab, Environment, Asset, Safety – all Plant related parameters on same platform
- Integration with other AI / ML applications for extended use

Solution Architecture (Indicative)

Applications & Presentation

 Visualization Role based Dashboards, Graphics, Trends & Charts, Visual Reports	 Data Analytics Actionable Insights, Troubleshoot Operational Issues, Decision Support Tools, Calculation Engine	 KPI Management KPI Management, Alerts & Notifications, Asset Framework, Discussions	 Online Reports Flexible & Configurable Layouts, Comments & Manual Entries, Web based, Scheduler	 Digital Logbooks Configurable Logbooks, Instructions, Comments, Shift Manpower Log, Web based, Workflow based	 Mobile Apps Realtime & Remote Monitoring, Native Apps & Mobile Views, Secure	 Collaboration Collaboration, Share & Discuss, Manage Team Tasks
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Data Processing

Data Processing	Calculations & Analytics Engine	Events Processing & Notifications	Data Archiving & Retrieval	Users & Security	Schedulers
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Business Logic

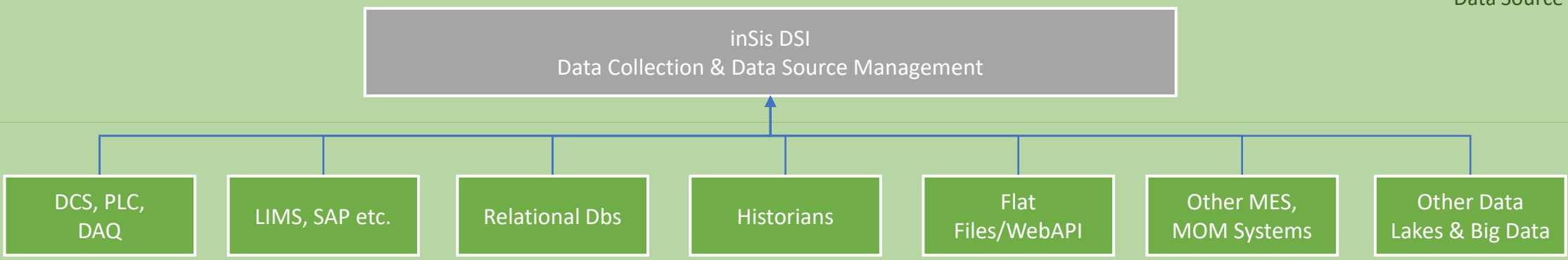
Data Historian

Configuration Db	Assets Db	Images, Videos & Documents	Events & Logs Db	Time-series Data Archives	Comments & Other Db
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Process Data Historian

Data Integration

Data Source Integrator



Data Historian– Trending Features

Data Integration

- DCS/ PLC/ SCADA
- SQL, Oracle, SAP
- L0/L1 Sensors
- Supports XLSX, Flat files, CSV etc...

Data Validation

Bad data check
Outlier check
Includes Exponential filters
Calculation Engine

Unlimited Data Storage & Security

No-SQL Timeseries DB with Unlimited Storage
Data Encryption & Compression
Discrete & Continuous data
Compliant to VAPT

Multiple Protocol support

OPC DA/UA/HDA, ODBC, SQL
Modbus, Ethernet/IP, ProfiNet, Serial
IOT Edge devices, RESTful APIs

Data Handling

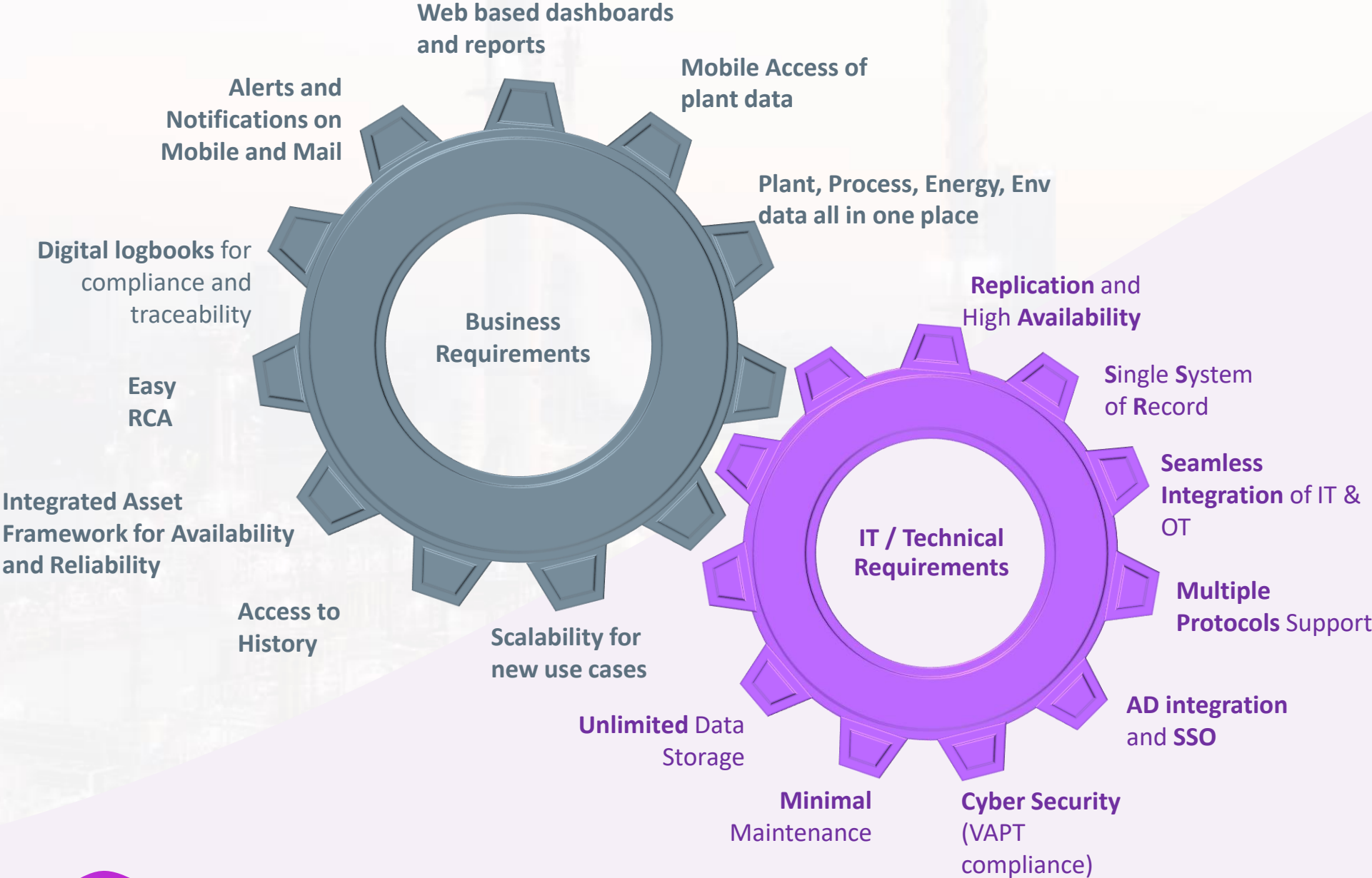
Tag list import / export
Bulk Tag upload
Tag browser & edit option
Device Portability

Data Analytics & Mobility

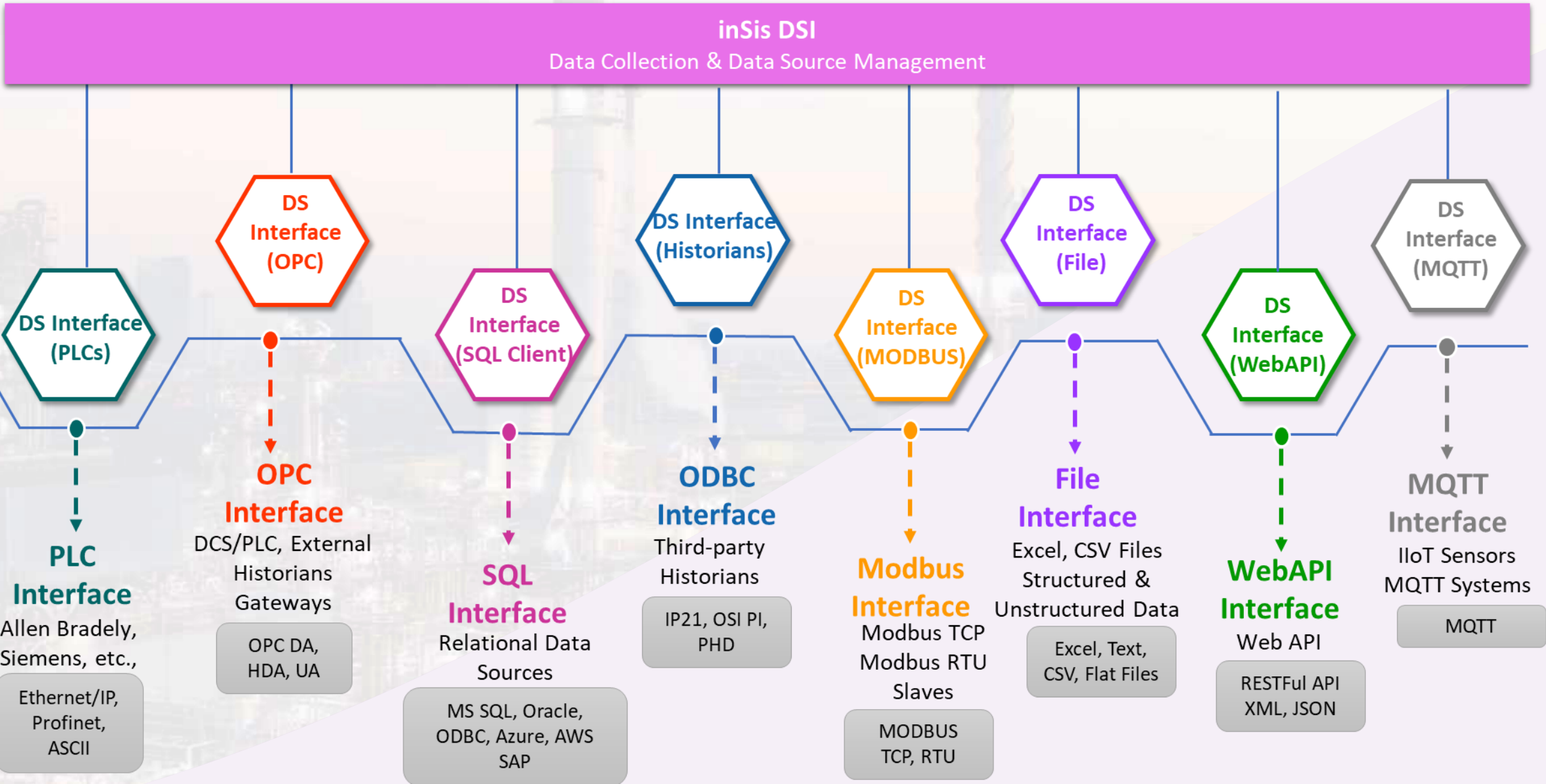
30 + Visualizations (Role-based)
Drag & Drop functionalities
Web based Automated Reports
SmartTrend, Excel Add-In, Mobile Apps, Scheduler,
Calculation Engine etc...



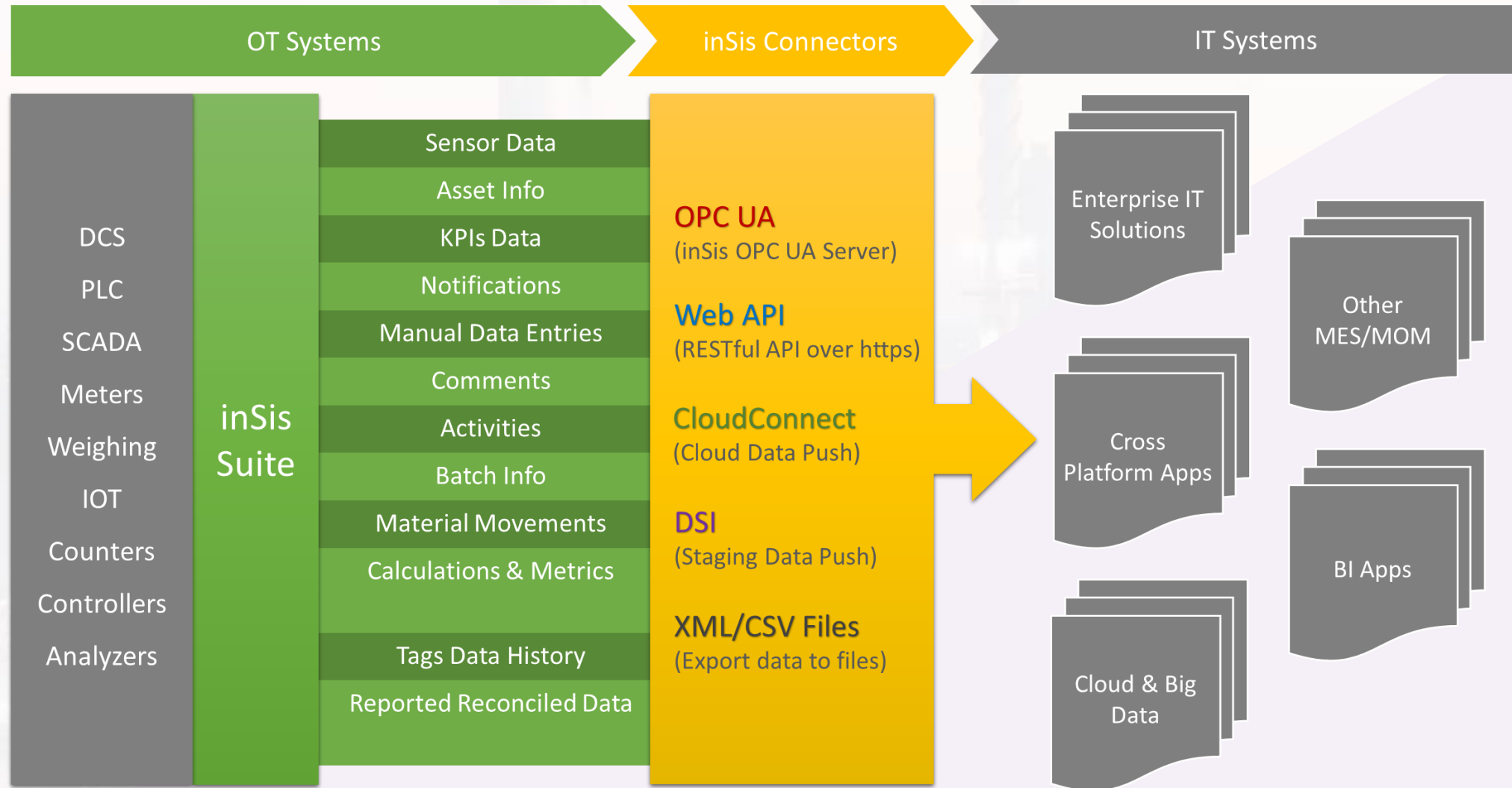
inSis Data Historian – Data Integration



Data Integration Capabilities

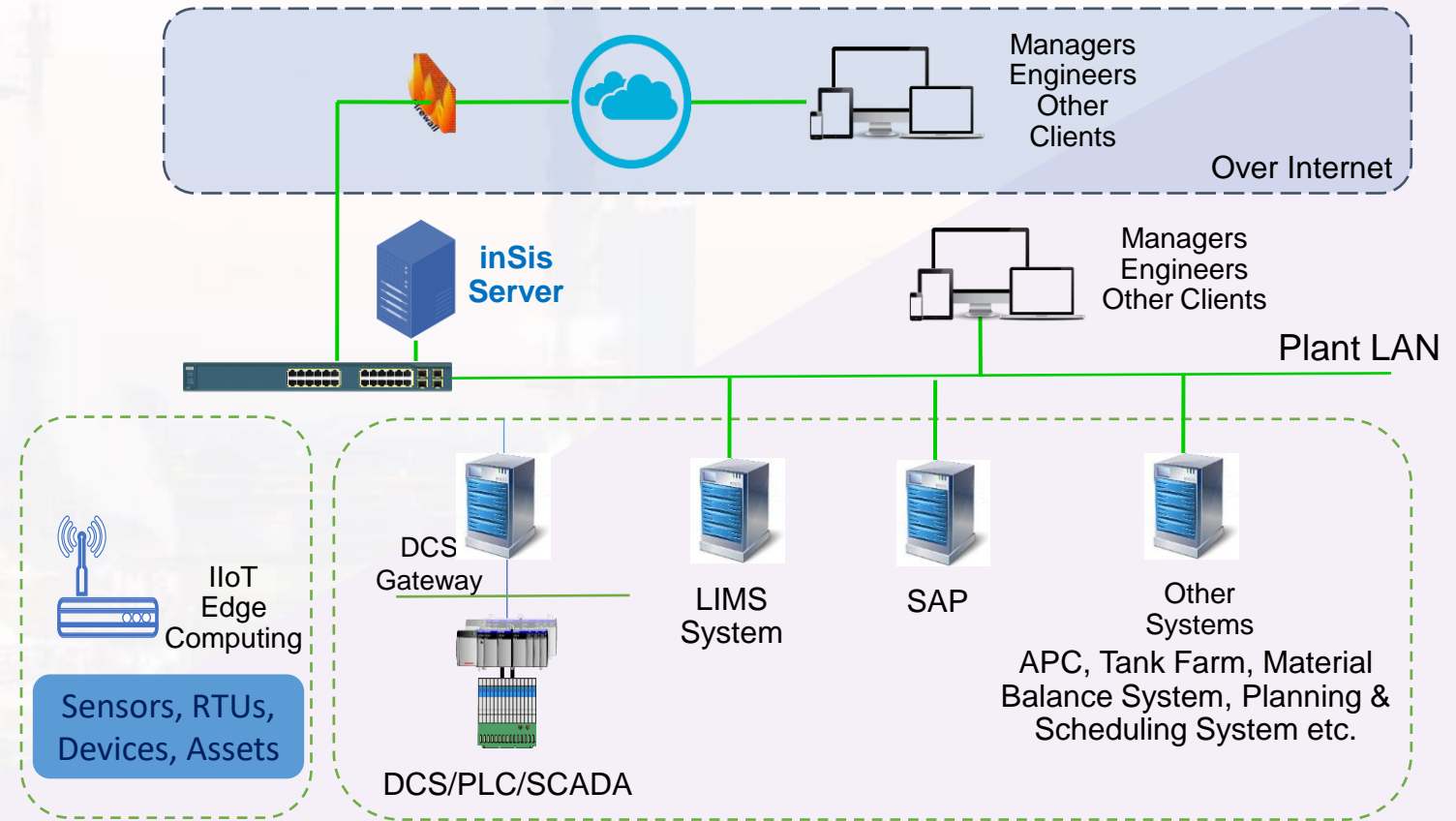


IT-OT Data Integration Framework



IT-OT Data Integration Framework

- Pulls process data to make timely decisions
- Historizes data from your sensors at a frequency as high as 1 Sec
- Is built on No SQL proprietary DB for real time data capture
- Interfaces with ERP systems, LIMS, planning and other data systems
- Includes both on-premise and cloud options
- Has Built-in calculation and analytics engine
- Uses 30+ visualizations to decipher your process
- Monitors your process and asset performance
- At lowest TCO against similar systems
- Provides Assured and on-going quantifiable benefits



Unlimited
Data Storage



Sharing &
Collaboration



30+
Visualizations



Inbuilt
Calculation
Engine



On-Premise /
Cloud based
Solution

Benefits of inSis Data Historian

Layered Architecture



Single platform supporting end to end functionalities from **Data Collection** to **Visualization, Calculations and Analytics**

Self-configurability



Low code platform catering to varieties of Use cases depending on end user roles and requirements

Scalability



The platform is scalable to cater to new digital applications in future and **seamlessly integrates with other IT / ERP systems**

Low TCO



Simple Architecture, **Easy maintenance** and **lower License costs** ensure low TCO against similar solutions

Sample Screens for inSis Analytics and Dashboards

inSis Suite Administrator Dashboard | ABC Oil Company

System Explorer | System View | Security | Manage | Services | License | Events Messages | Admin Tools | Troubleshooting

Home | Editor | Loader | Bulk Load | Data Sources | Devices | View Share Lists | Global Settings

Tag Summary Chart

Total Tags	DSI Tags	CalcTags	Manual Tags
3084	2356	392	337

Tags Summary

No. of Templates	No. of Objects	No. of Healthy Tags
30	1058	1023

Data Source Summary (Active/Registered in DSI)

Data Sources	Count	Healthy Count	Total Tags
OPC Interfaces	2	0	0
SQL Interfaces	7	1	14
ODBC Interfaces	1	0	5
File Interfaces	1	1	2
Modbus Interfaces	2	0	14
Web Interfaces	0	0	0
PLC Interfaces	1	0	1
Total	14	2	36

Historian Summary

Historians	Status	Files
Local	Active	Local_HistoryFile24
LocalAgg	Active	LocalAgg_HistoryFile31
SipchemHis	Active	
IP21External	Active	
OracleHis	Active	
SQLFormatsHis	Active	
SQLFormatsExt	Active	
DataAnalysis1His	Active	

Security Summary

Security	Active	Inactive	Total
Users	8	0	8
Users Groups	7	0	7
Roles	8	0	8

System Services Summary

System	Status	Last StartTime
inSisCore	Running	25-01-2023 08:13:09
inSisDSI	Running	25-01-2023 08:13:11
inSisHistory	Running	25-01-2023 08:13:09
inSisInformation	Running	25-01-2023 08:13:09
inSisProSense	Running	
inSisReports	Running	

Configurations Summary

Configurations	Quantity
Infoview	1359
Dashboards	144
SmartTrends	51
PDFs	44
Scheduler Items	17
Portals	7
KPIs	85
Notifications	32
Assets	123
Web Reports	7
Logbooks	17

Oneview | Chennai Plant Overview | CPP Summary | ABC Power Overview

SAP: 4090.19 Ton/Hr | PAP: 4082.59 Ton/Hr | HP Steam: 5678.73 Ton/Hr | LP Steam: 5678.73 Ton/Hr

SAP Throughput: 86.71% | PAP Throughput: 80.00%

06-Aug-18 06:00:00 | 06-Aug-18 06:00:00 | 06-Aug-18 03:15 AM | 06-Aug-18 06:45 AM

Feed Flow SAP | Feed Flow PAP | Total Generation | Total Export | Auxiliary Power Consumption

Well Monitor | ABC Oil Company

Overview | Map View | Daily Production | Trend | Events | Performance Summary | System Architecture

DGH Overview

State	Gas (KNM3)	Oil Production (M3)	Water (M3)
ASSAM	1042.95	678.85	345.14
GUJARAT	974.68	999.61	226.07
TAMIL NADU	738.80	607.01	1254.44
RAJASTHAN	551.01	382.60	108.47
KUTCH Offshore	932.79	873.61	721.41
MUMBAI Offshore	1754.47	1799.14	406.86
M.P.	384.40	78.18	230.72
ANDHRA PRADESH	635.35	442.12	125.23

Case Study

Historian & Analytics

Leading Chemicals & Fertilizers
Manufacturer

Objectives: Comprehensive Manufacturing Information & performance analytics portal of three large manufacturing sites

Solutions implemented: inSis Data Historian, Dashboards, KPI Management, Reports, EMS, Bagging Monitoring, Enterprise Portal for operations information



Automated data collection from about 20 DCS systems



Realtime Dashboards, Analytical Views, Trends, Graphics & Reports, Mobile Apps



Lab Data Management Module, Energy Management System Module



Web-client, Excel Add-In, Scheduler, Personal Home, Tag Explorer



Plan Data, Stock Data, Other plants operations data, etc... is consolidated



Replication Server at Corporate Office



Set up ground for implementing specific AI/ML use cases



20
Units



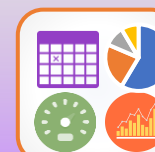
15000
Tags



100/50/30
Trends/Graphics/Reports



300+
KPIs



100
Dashboards

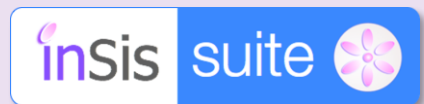
Jaaji Technologies
Innovation with Simplicity



Thank You



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Sophistication with Simplicity



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