

A large industrial refinery or chemical plant at night, illuminated by numerous lights. The scene features several tall distillation columns, a complex network of pipes, and large storage tanks. The sky is a deep blue with some clouds. The foreground is dominated by a blue and yellow graphic overlay.

AMADAS

Analyzer Maintenance & Data Acquisition System

Jaaji Technologies

Sophistication with Simplicity



Challenges



Data Isolated & Scattered
Remote Shelters



Less Reliability & Availability



Manual Reports Preparation



No Real-time visibility



Lack of Data Analytics

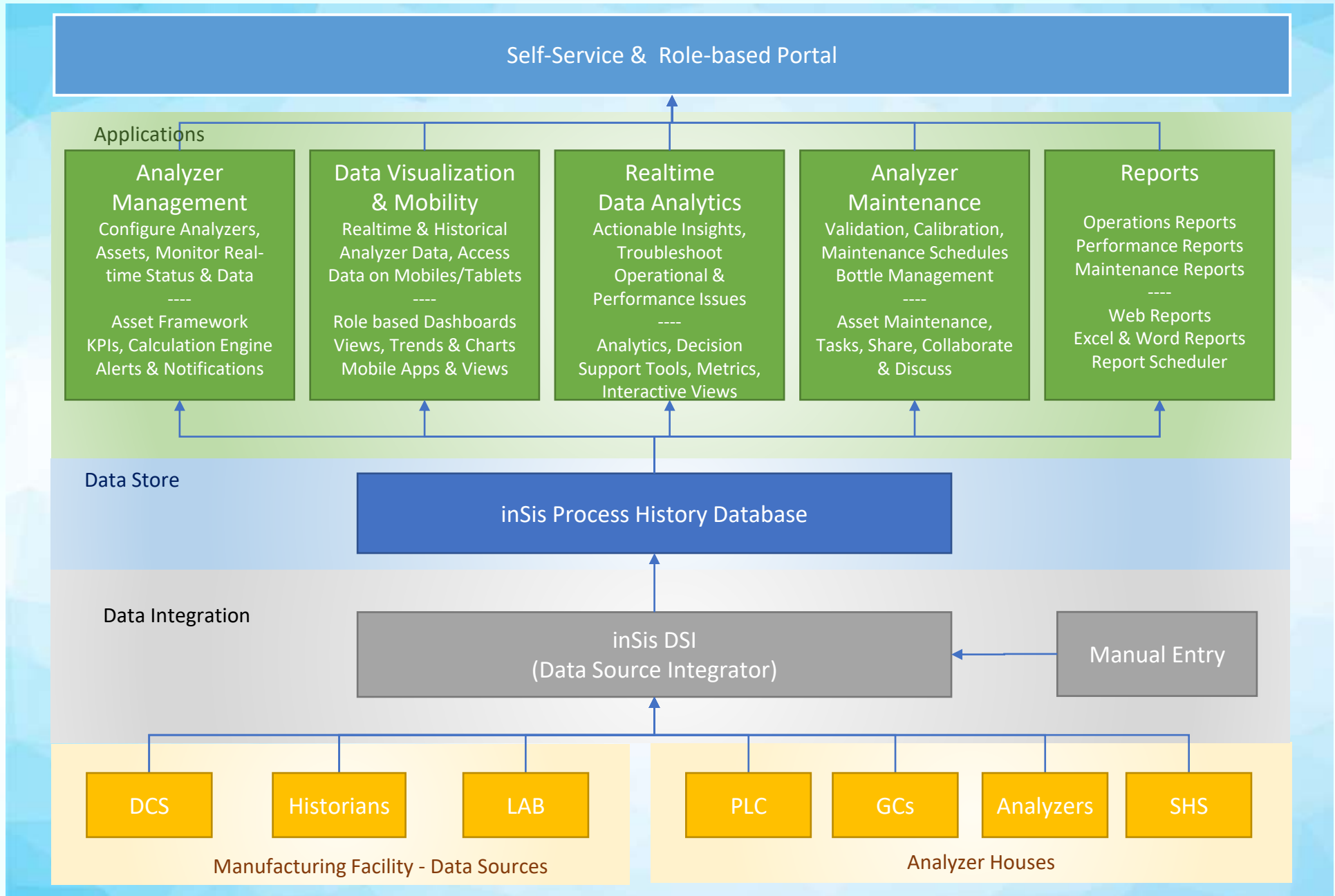


Lack of performance
monitoring & alerts

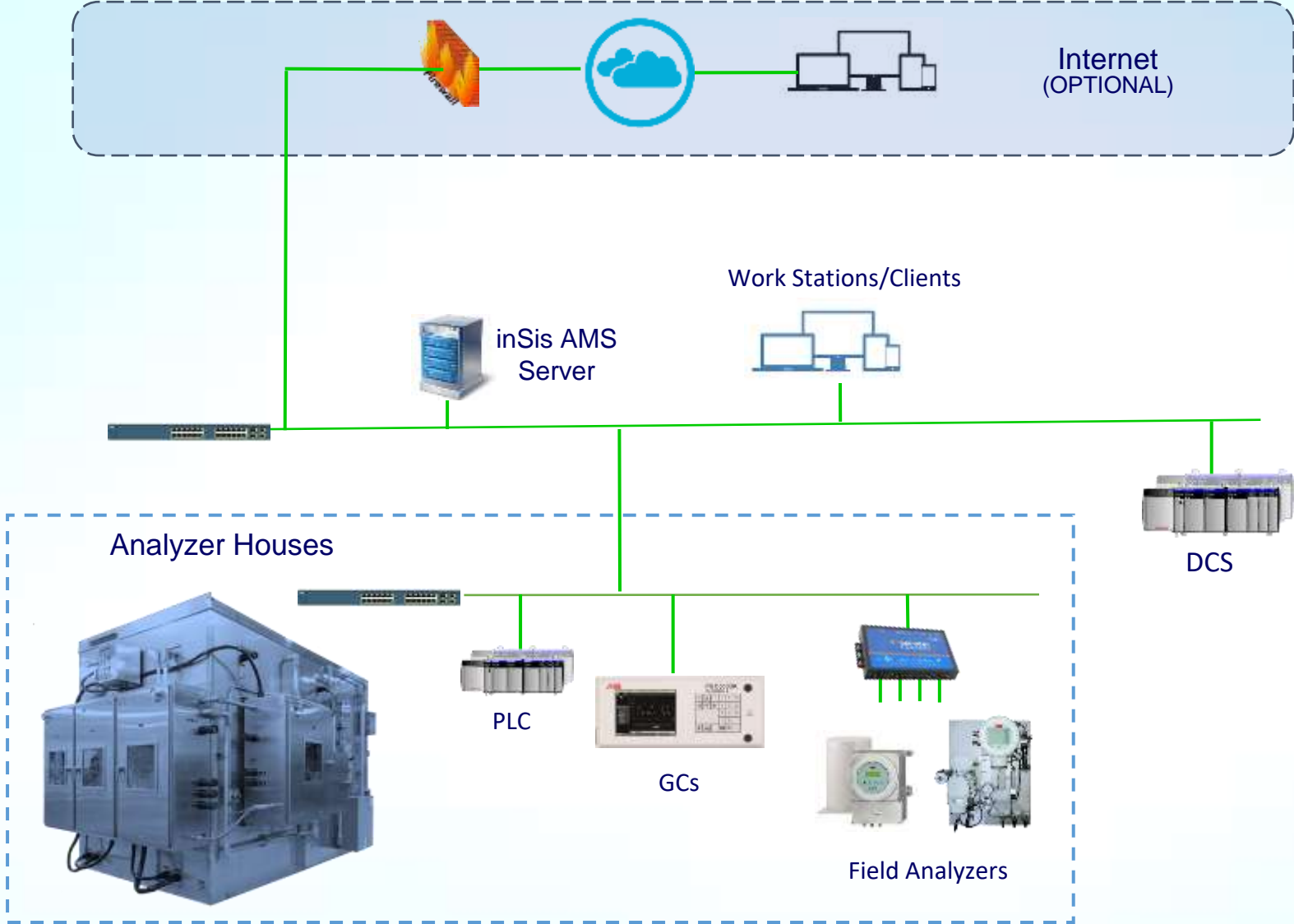
Objectives

- inSis AMS collects and stores the real-time data from,
 - GCs, Field Analysers,
 - Shelter House PLCs, HVAC Systems
 - Sample Handling Systems etc.,
- Provides Data Analytics, Trends, Dashboards, Reports, Alerts etc.
- Validation, calibration & management of maintenance schedules of analysers
- Provides the Control Charts for analysing the performance of Analyzers.
- AMS features management of assets related analyser systems
 - Analysers, Shelters, HVACs, SHS, Consumables, Documents etc.
- System calculates the Analyzers KPIs like, Availability, Reproducibility etc. and helps in monitoring and improving the performance of Analyzers

Solution Overview



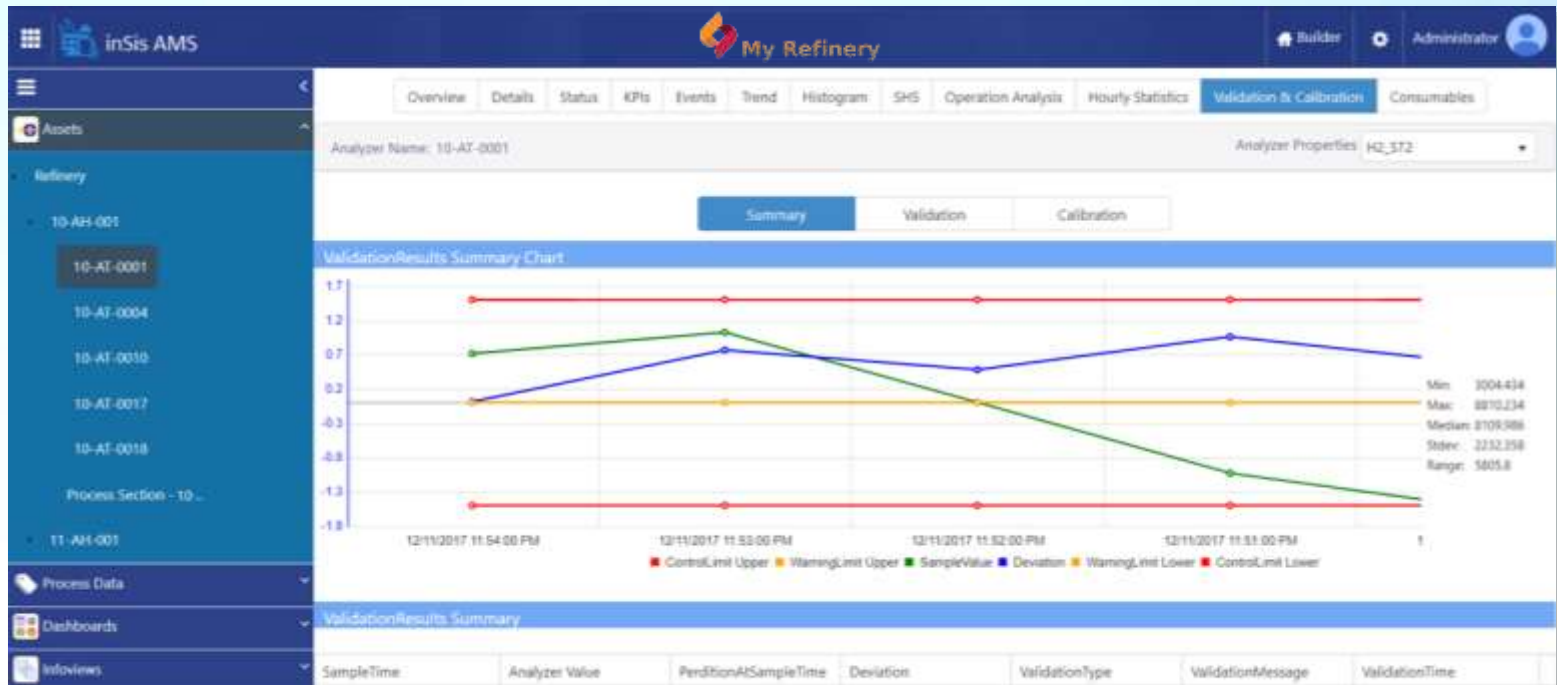
System Architecture



Benefits

- Provides single system for comprehensive Maintenance and Performance Monitoring of Analyser Systems.
- Improves the reliability and availability of expensive analyser systems.
- Increases the analytical performance of analysers
- Reduce Manpower and Resources by preventing frequent analyser maintenance
- Reduced quality giveaway which is resulting from higher confidence limits
- Centralised data collection & reporting for all the Analyser systems in the plant
- With client-server architecture and web-based solution, it is easily accessed from several locations thus improving the monitored time.
- Provides deep insights to Analyzer operation, performance and constraints with on-the-fly calculations, metrics and Self-Service Analytic capabilities.
- Quickly troubleshoot Analyzer issues there by quickly taking corrective actions.

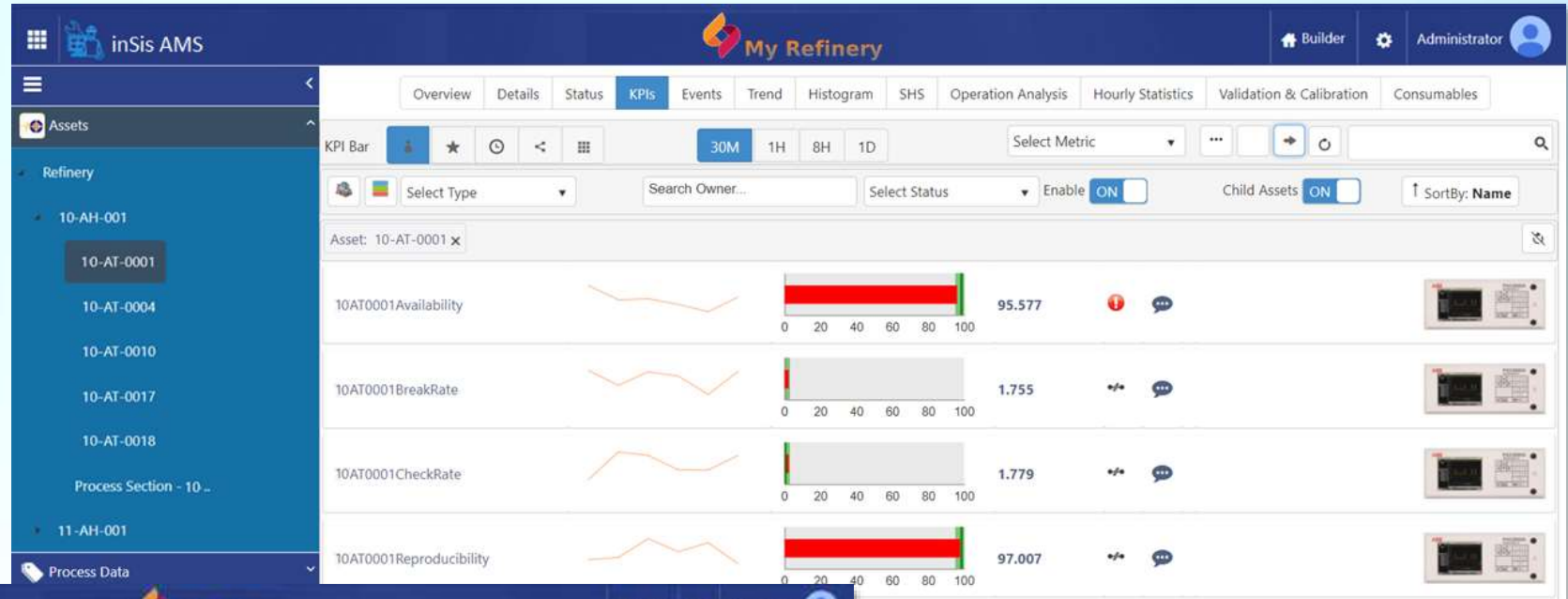
Screens



The screenshot shows the 'Asset Framework' interface for 'inSis ProSense'. The left sidebar shows a tree view of assets, including 'Best Oil Company (20)', 'Delhi Refinery (1)', 'Mumbai Refinery (1)', 'Chennai Refinery (15)', 'CDU1 (2)', 'CDU2 (2)', 'FCC (1)', 'HCU (1)', 'OM&S (8)', and 'Crude Analyser House (5)'. The main area displays 'Asset Details' for '15AI1501', an 'LPG Analyzer' under the 'Crude Analyser House' parent. The details include 'Is Structure' (checked), 'Structure' (Analyzer), 'Name' (15AI1501), 'Description' (LPG Analyzer), 'Parent' (Crude Analyser House), 'Type' (Sensor), 'Category' (Analyzers), 'Geo Location' (13,17898033038178, 80.26144410017876), and 'Tagging' (Enter the Asset Tagging Name). There are also options for 'Inherit' and 'View Template'.

SampleTime	Analyzer Value	PerditionAtSampleTime	Deviation	ValidationType	ValidationMessage	ValidationTime
12/11/2017 11:54:00 PM				Manual	Completed	12/11/2017 11:54:50 PM
12/11/2017 11:53:00 PM				Manual	Completed	12/11/2017 11:53:16 PM
12/11/2017 11:52:00 PM				Manual	Completed	12/11/2017 11:52:00 PM

Screens



Screens

