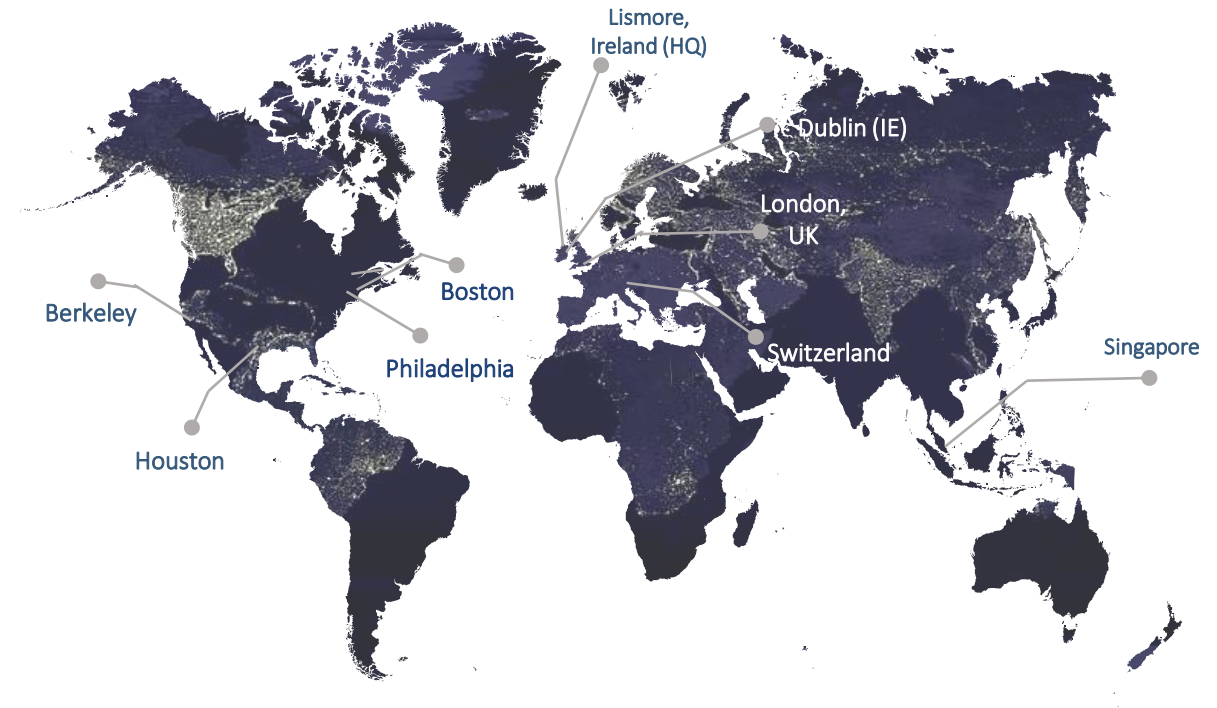


TQS Integration HP ALM Validation Library

COMPANY INFORMATION

TQS has offices located in:

- Corporate Head Office, Lismore, Co Waterford, Ireland, P51 H01X
- 3013 Lake Drive, Citywest Campus, Dublin 24, Ireland, D24 PPT3
- 90 Long Acre, Covent Garden, London, England, WC2E 9RZ
- United States: -
 - Boston – 800 Boylston Street, Suite 1600, Boston, MA 02199
 - Houston – 4604 FM 1960 West, Suite 400, Houston, TX 77069
 - Berkeley - 3015 San Pablo Ave, Apt 315, Berkeley, CA 904702
 - Philadelphia w/OSIsoft - 1700 Market St, Philadelphia, PA 19103
- Switzerland – Innere Margarethenstrasse 5, 4051 Basel, Switzerland
- Singapore – 8 Jurong Town Hall Road, Level #24-03, Singapore 609434, Singapore



***These locations cater for 85+ of TQS employees. Through these sites TQS provide project implementation, integration, testing and on-going support to our client base.**

***Our offices are strategically located which facilitates ease of access to our SME's by our clients.**

TQS INTEGRATION OVERVIEW



175+

Years worth of projects delivered.



130

Unique clients.



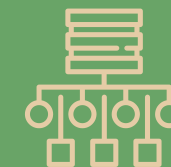
10

Out of the top 10
Pharma Companies
choose TQS.



10

Multi-lingual
staff with 10+
languages
supported.



100%

Data Intelligence
Dedicated
workforce.

WHO ARE WE?



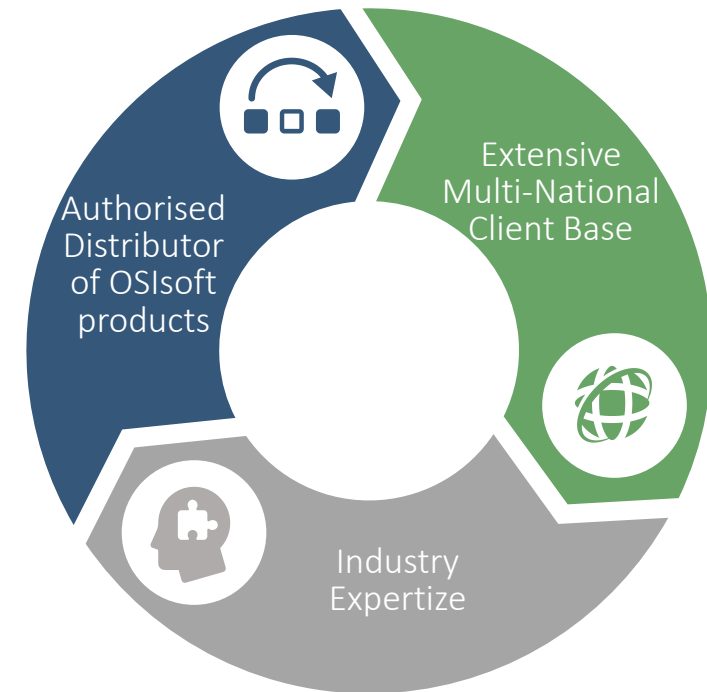
Authorised Distributor of OSIsoft products

- Founded 1998, HQ in Lismore, Co. Waterford
- Authorised Distributor for OSIsoft Ireland, UK and Europe
- Global EA Partner with OSIsoft
- Only Select Global OSIsoft partner in Life Sciences
- Worlds largest dedicated PI Consultancy Team
- Current Offices Waterford, Dublin, IE ; Boston, MA, Houston, TX, Philadelphia, PA, Berkley, CA, USA ; Basel, CH; London, UK; Singapore.



Established Multi-National client base

- TQS has an extensive customer base of leading Life-Sciences and Power Companies
- Global Implementation Partner for many customers
- Turnkey solutions – USA, EMEA, APAC



WHAT WE DO – Advanced PI Consultancy



Supply, Integration & Support of PI Systems

- PI System expertise has been our core business focus and differentiator
- Off the shelf Products to enhance data analysis and compliance
 - OSIsoft Select Partner



Product Expertize

- Expert experience and familiarity of product suite
- Development with all technologies for non standard requirements or new interface development
- KEY Driver and partner on several OSI products including RtReports and AF.



PI Integration

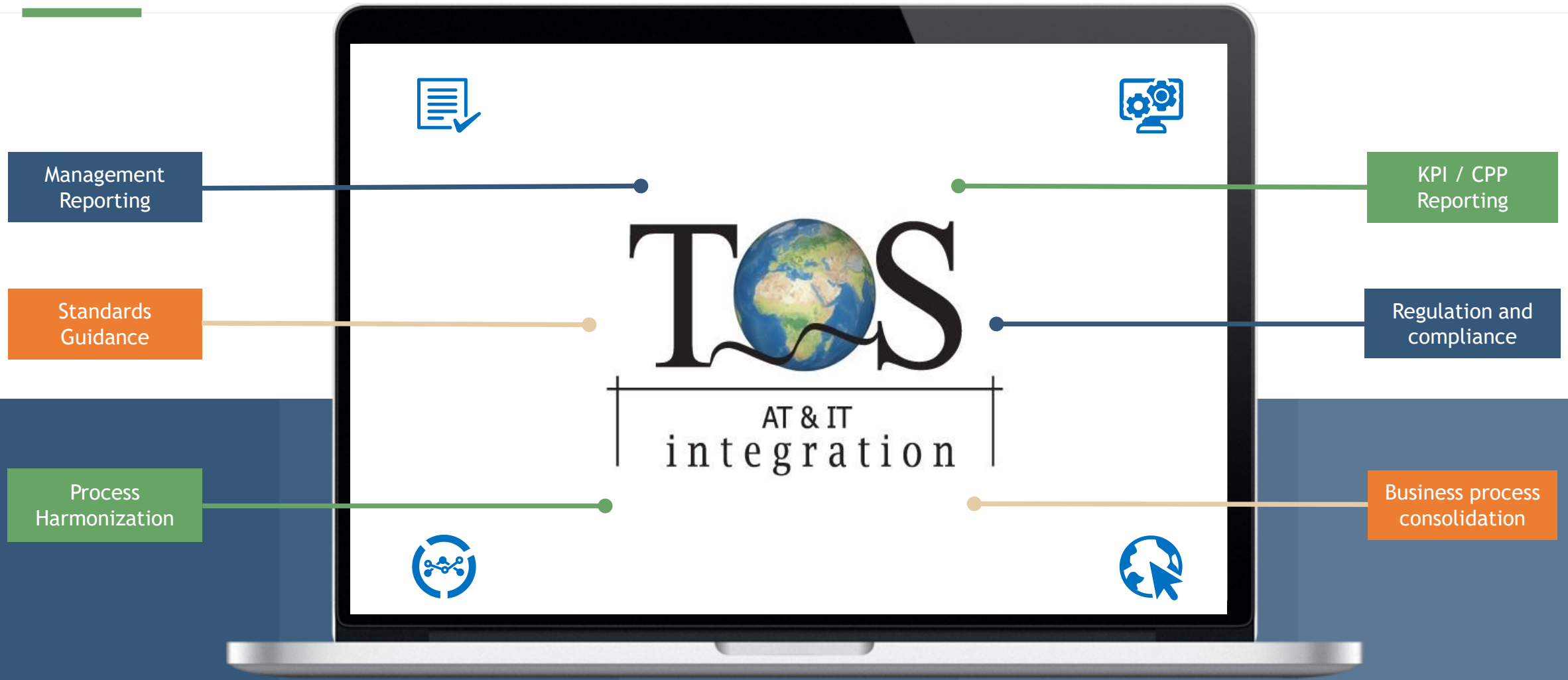
- Standardized engagement, evaluation and planning.
- Expert deployment and standardized configuration for PI interfaces.
- Standardized solutions for Validation of PI server, interfaces and client applications.
- Off the Shelf solutions for HP-ALM and Validation templates.



System Operation

- Optimization of server and interfaces
- Pro-active maintenance and support
- Service Level Agreements (24/7/365)
 - Programme Management
 - SME Access

WHAT WE DO



END-TO-END VALUE PROPOSITION



Connectivity

Collect, transmit, store data



Automation

Development & execution of logic rules that automate business activities and device configuration



Monitoring & Visualisation

Dashboards to monitor real-time data



Analytics

Complex analytics used to develop device models and insight



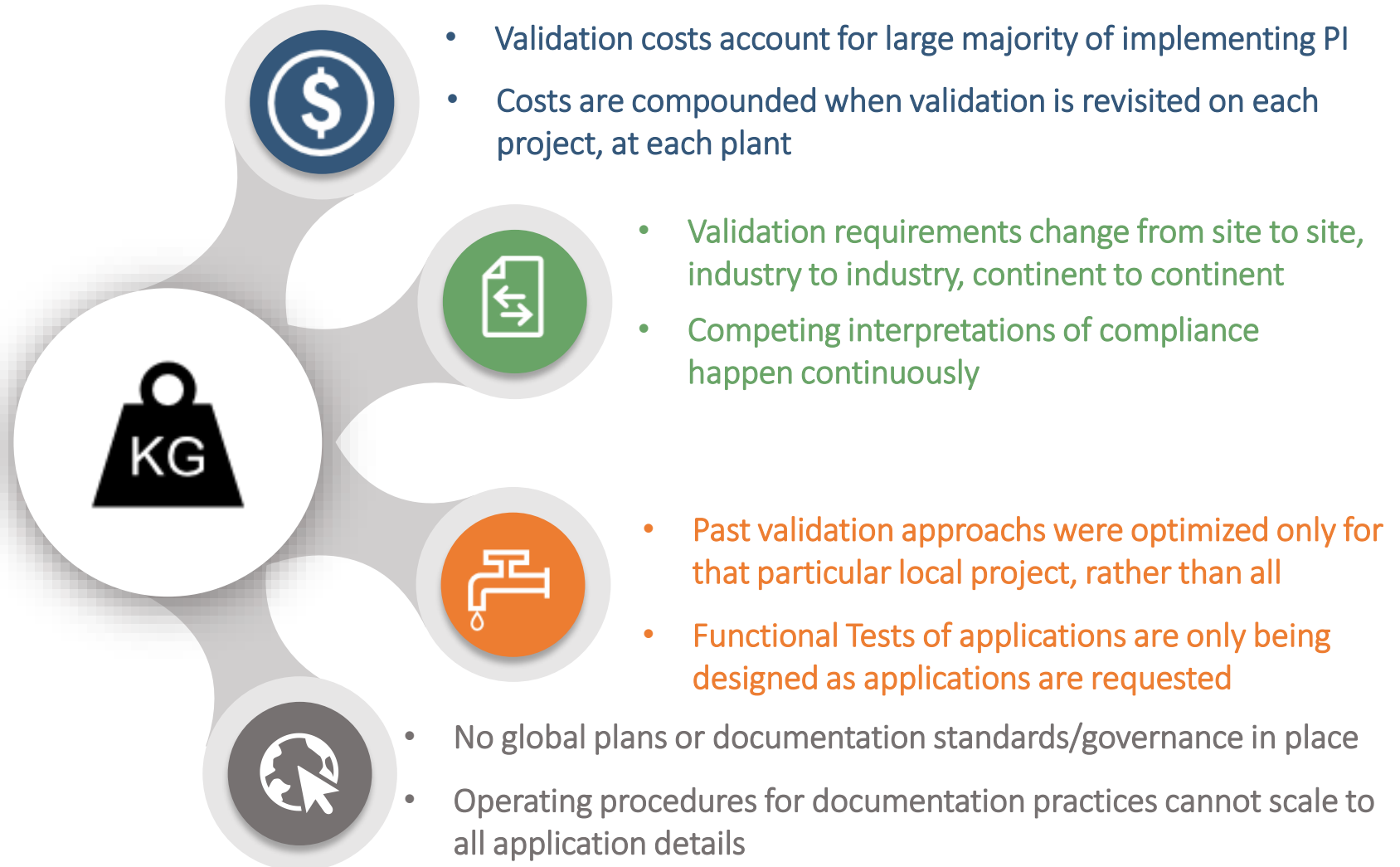
Enhancing On-board Logic

Distribution of analytics and orchestration to the device level

TQS HP ALM Validation Library

What is it, what does it do and how can it help my enterprise ?

General Problem Statements



TQS Validation Library Approach

Product Overview

The TQS HP ALM Validation Library is a Standardized, Generic Script Library capable of being employed to test and validate any OSIsoft PI System Product Deployments or PI System Application. The library of scripts are capable of being used and re-used for any PI Projects.

Combined with our best-in-class Documentation Suite, gains in project cycle-time reductions, defect occurrences and test coverage can be immediate.



Eliminate duplication of design efforts



Validation Cycle Time Reduction



Standardize how every component is documented



Full Product Suite Coverage



Testing Knowledge shared across the enterprise



Developed and maintained by Subject Matter Experts



Documentation Cycle-Time Reduction



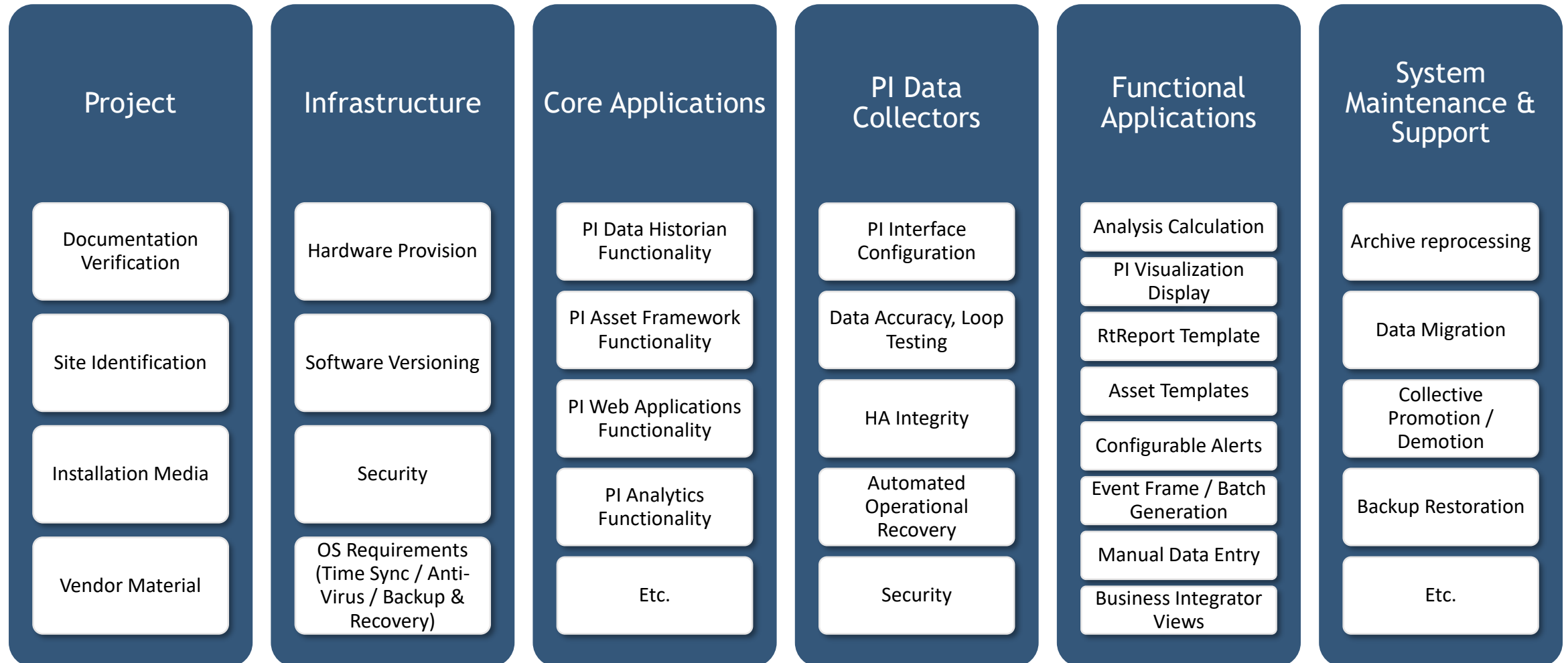
Reduce Resource Footprint for project deliveries



Full Product Suite Coverage

Testing that is ready when you are

TQS Validation Verticals





Documentation for all Components

Covering all projects and all applications

TQS Documentation Templates

Global

The Global documents will manage enterprise-wide compliance, as well as system standards and project implementation guidelines.

These documents will provide instruction and guides to all aspects of the PI System, and are available ready-made for your enterprise, from the TQS Documentation Library.



01. User Requirement Specification



02. Traceability Matrix



03. System Risk Assessment



04. Validation & Criticality Assessment



05. Master System Test Plan



06. Administration & Disaster Recovery SOP



07. Application Configuration Management



08. Client Tools SOP



09. Validation Job Aids

TQS Documentation Templates

Enterprise Core

The delivery or update of an Enterprise Core PI System will require update or creation to the following documents.

The documentation shown on the right are components available ready-made for your enterprise, from the TQS Documentation Library.



Follow



Review



Create



Execute



01. Master Test Plan



02. Application Configuration Management



03. Validation & Criticality Assessment



04. Project Impact Assessment



05. System Risk Assessment



06. Design Specification



07. Configuration Specifications



08. Test Protocol



09. Test Scripts & Test Execution

TQS Documentation Templates

Interface Deployment

The delivery or update of a PI Interface will require update or creation to the following documents.

The documentation shown on the right are components available ready-made for your enterprise, from the TQS Documentation Library.



Follow



Review



Create



Execute



01. Master Test Plan



02. Application Configuration Management



03. Validation & Criticality Assessment



04. Project Impact Assessment



05. System Risk Assessment



06. Design Specification



07. Configuration Specifications



08. Test Protocol



09. Test Scripts & Test Execution

TQS Documentation Templates

Functional Apps

The delivery of validated application use-cases will require update or creation to the following documents.

The documentation shown on the right are components available ready-made for your enterprise, from the TQS Documentation Library.



Follow



Review



Create



Execute



01. Master Test Plan



02. Application Configuration Management



03. Validation & Criticality Assessment



04. Traceability Matrix



05. System Risk Assessment



06. User Requirement Specification



07. Configuration Specifications



08. Test Protocol



09. Test Scripts & Test Execution



Knowledge Sharing

Covering all projects and all applications

Ease of Use

Finding the Right Tests

The TQS Test Protocol makes short work of identifying the right test for what you need.

A simple step-by-step guide in the TQS Test Protocol Template will allow all users to interact and select the tests they need to complete their projects

The screenshot displays a multi-step configuration interface for the TQS Test Protocol. It is organized into five main sections:

- Step 1. Define App Servers:** A list box containing 'PI_Data Hist' (highlighted) and 'PI AF Collective'. Below the list are 'Add New' and 'Remove' buttons, and an 'Exit' button at the bottom.
- Step 2. Define App Server Information Specifics:** Contains several input fields: 'ComputerName:' with the value 'PI_Data Hist'; 'Apps:' with a checked list including 'Base', 'Server Generic', and 'PI Server'; 'Member:' set to 'Primary'; 'Environment:' set to 'Production'; and 'Status:' set to 'New'. Below these is a sub-section 'Step 2.1. Update App Server Information' with an 'Update Server Info' button.
- Step 3. Get Available Scripts:** A single button labeled 'Retrieve'.
- Step 4. Select applicable Test Scripts:** Features two list boxes, 'Available' and 'Selected'. The 'Available' list contains 'New Application Server' and 'New PI Data Historian'. Between the lists are '>' and '<' navigation buttons. Below the 'Available' list is an unchecked checkbox for 'Is Load Balanced'.
- Step 5. Send to Document:** A single prominent green button labeled 'Build'.

Future Releases

What features can be expected soon



What's in the Pipeline

- Native support for System-to-Document, Document-to-System Audits
- Integration of TQS Documentation Suite with HP ALM Test Lab
- Localization of TQS Documentation Suite to support multiple languages
- Automated Change Request verification forms

Come ask me about



Deploying the TQS HP ALM
Validation Library within
your enterprise



Past, present and future
of this product



Continuous Validation; what is it,
and what will it do

CONTACT TQS



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