ULMA
Embedded Solutions

QMTIA

Quality Manager - TestStand Integration Adapter

ULMA Embedded Solutions's Quality Manager TestStand Integration Adapter provides an integration between IBM RQM, quality management tool, and National Instruments TestStand, test management software, that enhances test engineering teams efficiency by automating National Instruments TestStand sequence execution and reporting from IBM RQM.

Test case traceability

Test engineers can use the integration to link automated tests to test cases and to requirements. NI TestStand applications and parameter files on the test machine are linked to a IBM RQM test case that provides traceability to other project aspects including requirements, overall quality plan, project plan, change-defect management system, etc.

Test automation

The QMTIA provides automated test cases execution that improves testing efficiency. From the web-based interface of IBM RQM, test engineers can invoke the execution of the NI TestStand applications that are linked to the IBM RQM test case. The execution status reported by the NI TestStand sequence is displayed in the IBM RQM web interface as part of the test case execution results.

Test case results management

Upon completion of the NI TestStand sequence, various outputs from the sequence are automatically published to IBM RQM storage and an HTML report is linked to the IBM RQM test case execution result page.

Purchasing information available in
www.ulmaembedded.com
or
qmtia_sales@ulmaembedded.com

ULMA Embedded Solutions, S.Coop.
Garagaltza auzoa, 51 · 20560 Oñati (Gipuzkoa) · SPAIN · +34 943 250 300 · info@ulmaembedded.com · www.ulmaembedded.com

QMTIA services

Pre-packaged services for

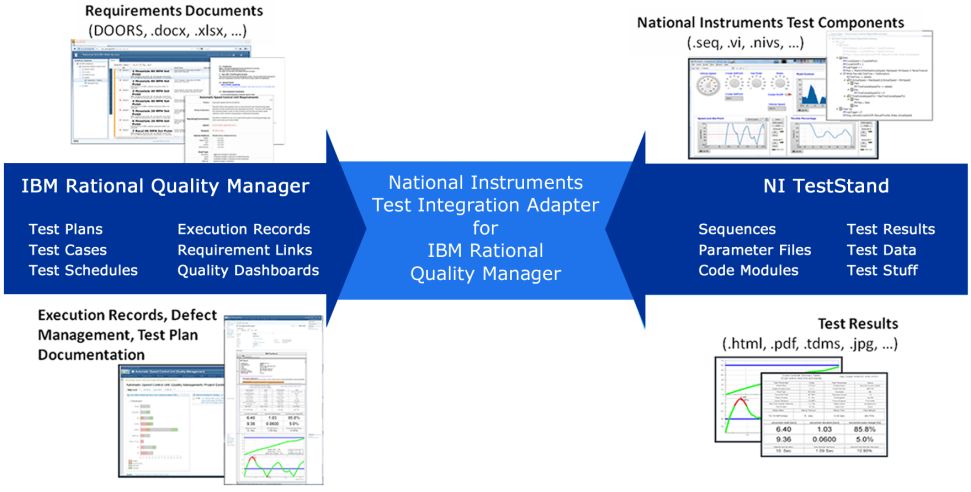
IBM RQM– NI TestStand integration

Setup | Consulting | Training | Push

- **ULMA Setup** package helps you accelerate
  - Installation
  - Configuration
  - Small deployment
- Well suited for
  - New projects with small budgets
  - Existing clients starting new projects, adding new product or require PoC
- ULMA Team
  - Junior consultant
- Delivery way
  - On-site
  - Remote
- Requires
  - Support from IT team at customer site
- Duration
  - 1 day

Please, contact us for quotation and additional information

qmtia_sales@ulmaembedded.com



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ULMA Embedded Solutions

QMTIA services

Pre-packaged services for

IBM RQM– NI TestStand integration

Setup | **Consulting** | Training | Push

- **ULMA Consulting** package helps you accelerate
  - Data migration
  - Deployments
  - Tool customization
  - Report customization and generation
  - Backup strategy
- Well suited for
  - Adding other ULMA packages
  - T&M based delivery
- ULMA Team
  - Junior consultant
  - Senior consultant
- Delivery way
  - On-site
  - Remote
- Requires
  - Project Owner and Project Manager at customer side
  - Support from IT team at customer site
- Duration
  - Variable

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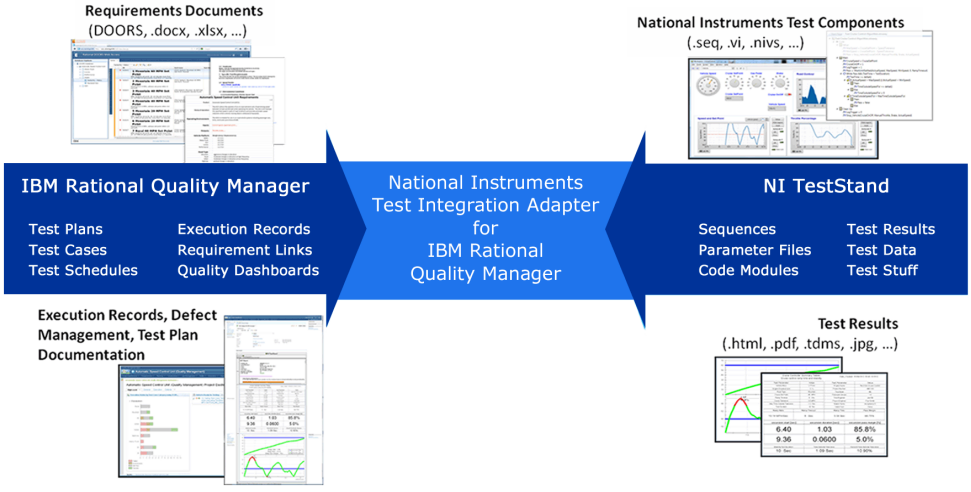
IBM Silver Business Partner

NATIONAL INSTRUMENTS Alliance Partner



ULMA Embedded Solutions

QMTIA services

Pre-packaged services for

IBM RQM– NI TestStand integration

Setup | Consulting | **Training** | Push

- **ULMA Training** package helps you accelerate
  - Team enablement
- Well suited for
  - Team tool training
  - Setting the foundations
- ULMA Team
  - Junior consultant
- Delivery way
  - On-site
- Requires
  - Support from IT team at customer site
- Duration
  - 1 day

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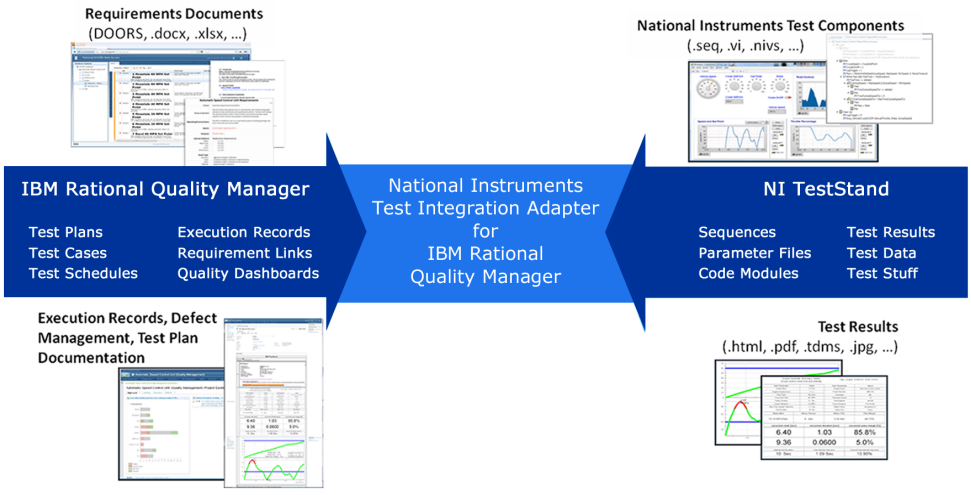
NATIONAL INSTRUMENTS Alliance Partner



ULMA Embedded Solutions

QMTIA services

Pre-packaged services for

IBM RQM– NI TestStand integration

Setup | Consulting | Training | **Push**

- **ULMA Push** package helps you accelerate
  - Setup
  - Consulting
  - Training
- Well suited for
  - Activity roadmapping
  - Fast forwarding your project
  - Tight deadlines that require quick take off
- ULMA Team
  - Junior consultant
  - Senior consultant
- Delivery way
  - On-site
  - Remote
- Requires
  - Project Owner and Project Manager at customer side
  - Support from IT team at customer site
- Duration
  - Approx 2-4 days

Please, contact us for quotation and additional information

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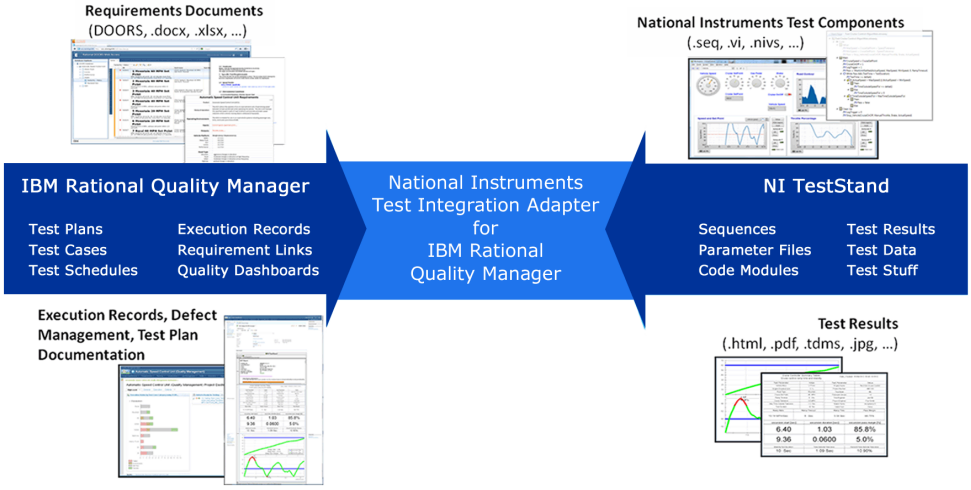
IBM Silver Business Partner

National Instruments Alliance Partner



ULMA Embedded Solutions QMTIA

A unique collaborative experience

ULMA
Embedded Solutions

ABOUT US

Safety- and Mission-Critical

Part of **ULMA Group**

Located in OÑATI & MADRID

ISO 15504 Level 2

Since 2009

ISO 9001

25 engineers

ULMA Embedded Solutions

PARTNERS

ULMA
Embedded Solutions

SERVICES

SYSTEMS ENGINEERING & TOOL INTEGRATION

AUTOMATED SYSTEMS FOR VALIDATION

INDUSTRIAL IoT APPLICATIONS

CUSTOM MECHATRONIC PRODUCT DEVELOPMENT

ULMA Embedded Solutions

TOOL INTEGRATION PRODUCTS

DAIA

IBM Rational DOORS and Altium's Altium Designer Integration Adapter

- Requirements traceability to electronic design elements
- Traceability analysis
- Change notifications

QMTIA

IBM Rational Quality Manager and National Instruments TestStand Integration Adapter

- Test case traceability
- Test automation
- Test cases results management

OSLC Adapter for LV

IBM Rational DOORS & National Instrument LabVIEW OSLC Adapter

- Requirements set
- Application development
- App deployment
- Acceptance testing
- Requirements compliance

ULMA Embedded Solutions

CERTIFICATIONS

Functional safety engineers
for HW/SW design according
IEC 61508

Professionals for
requirements engineering
Foundation Level

CTFL Professionals

IBM Rational DOORS & DNG
IBM Rational Rhapsody
IBM Rational Quality Manager

NI Certified LabVIEW Architect &
Champion
NI Certified LabVIEW Developer
NI Certified TestStand Developer

Vector CANoe

The Reuse Company
Knowledge Manager (KM)

ISO 9001
ISO 15504 · L2 (SPICE)

Innovative SME

ULMA
Embedded Solutions

STANDARDS | Critical applications

Root

- IEC 61508

Machinery

- ISO 13849
- IEC 62061
- IEC 61800-5

Railway

- EN 50155
- EN 50128

Medical devices

- IEC 60601
- ISO 14971
- IEC 62304

Household appliances

- IEC 60730

EMC

- EN 60335
- EN 61000
- EN 55025
- ISO 7637

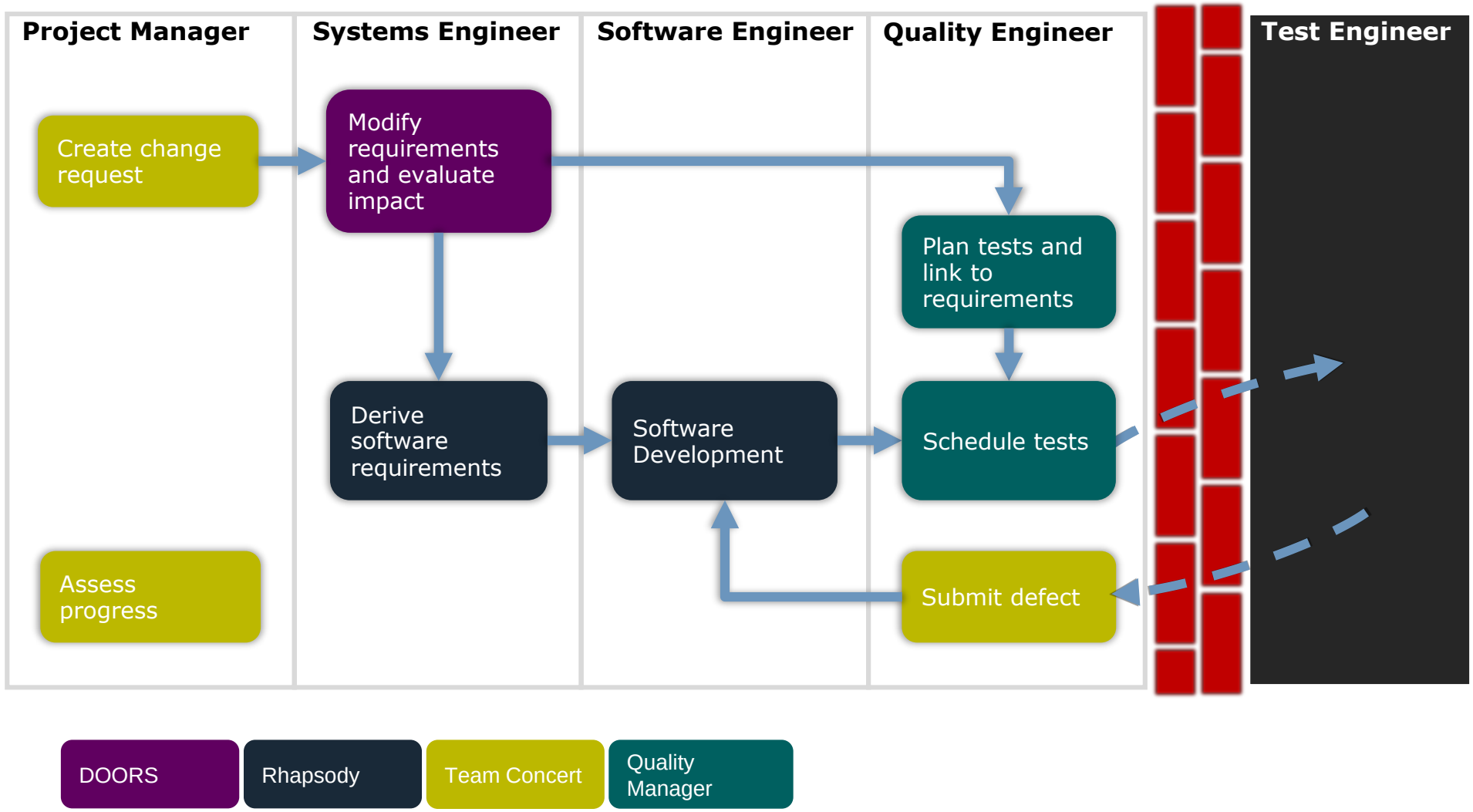
ULMA Embedded Solutions

Integrating IBM RQM and National Instruments TestStand with QMTIA

by ULMA Embedded Solutions

ULMA Embedded Solutions

TRADITIONAL DEVELOPMENT PROCESS



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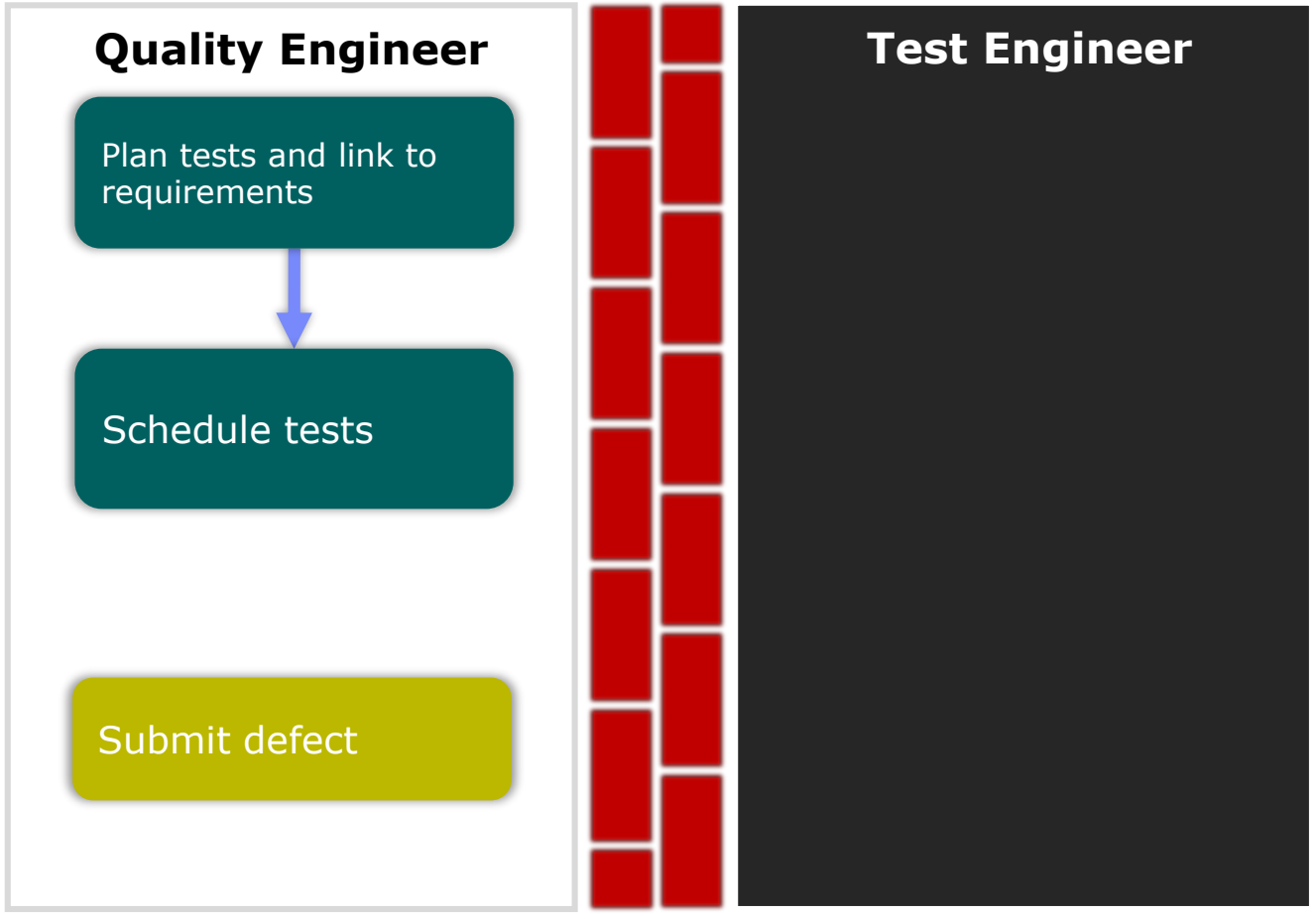
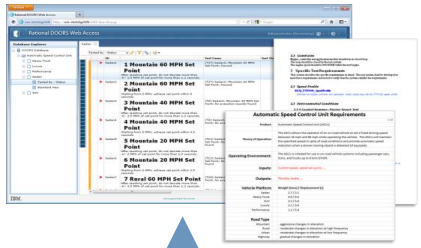
TRADITIONAL DEVELOPMENT PROCESS



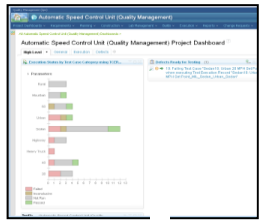
ULMA Embedded Solutions

Requirements Documents
(DOORS, .docx, .xlsx, …)



IBM Rational Quality Manager

Execution Records, Defect Management, Test Plan Documentation



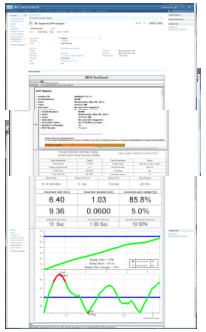
Test Engineer

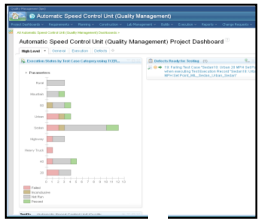
ULMA Embedded Solutions

Requirements Documents
(DOORS, .docx, .xlsx, …)

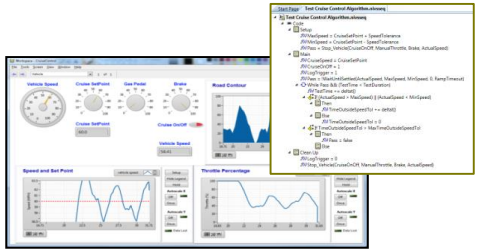
IBM Rational Quality Manager

Test Plans
Test Cases
Test Schedules
Execution Records
Requirement Links
Quality Dashboards



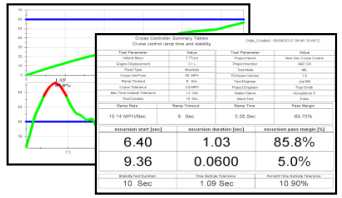


Execution Records, Defect Management, Test Plan Documentation



NI TestStand

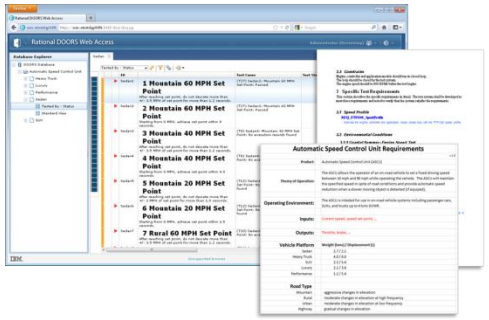
Sequences
Parameter Files
Code Modules
Execution Records
Requirement Links
Quality Dashboards



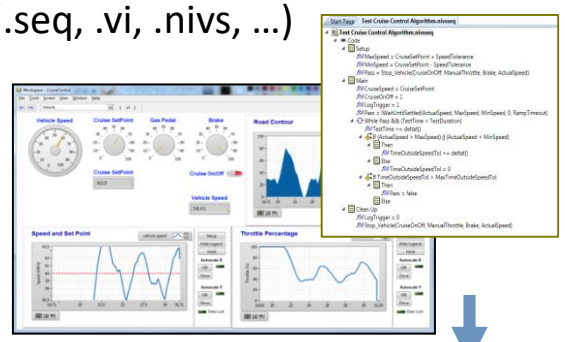
Test Results
(.html, .pdf, .tdms, .jpg, …)

ULMA Embedded Solutions

Requirements Documents
(DOORS, .docx, .xlsx, …)



National Instruments Test Components
(.seq, .vi, .nivs, …)



QMTIA

Quality Manager
TestStand Integration
Adapter

IBM Rational Quality Manager

Test Plans
Test Cases
Test Schedules
Execution Records
Requirement Links
Quality Dashboards

NI TestStand

Sequences
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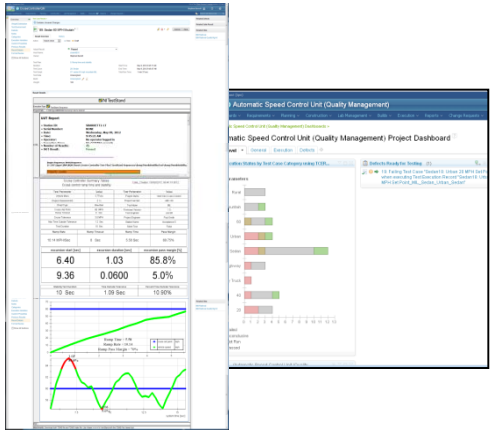

Execution Records, Defect Management, Test Plan Documentation

Test Results
(.html, .pdf, .tdms, .jpg, …)

ULMA Embedded Solutions

QMTIA BENEFITS

1. Provides a **bidirectional** connection between IBM RQM and NI TestStand

2. Enhances **test efficiency** by automating test execution and reporting from RQM

3. **Improves product quality** by ensuring lifecycle traceability from requirements down to automated tests and test results

4. **Reduces time to market** thanks to streamlined collaboration between test engineers and other roles

ULMA Embedded Solutions

OUR QMTIA PACKAGED SERVICES

Pkg 1: SET UP

| Helps you accelerate:

- Installation
- Configuration
- Small deployment

| 1 day duration

|On-site / Remote

Pkg 2: TRAINING

| Helps you accelerate:

- Team enablement

| 1 day duration

| On-site

Pkg 3: CONSULTING

| Helps you accelerate:

- Data migration
- Deployments
- Tool customization
- Report customization and generation
- Backup strategy

| Variable duration

| On-site / Remote

Contact us at qmtia_sales@ulmaembedded.com for more information about these services and pricing

ULMA Embedded Solutions

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www.ulmaembedded.com

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