Controlling complexity.

The Integration Story:
Rational Quality Manager / Team Foundation Server / Quality Center

Agenda

- **The DOORS Integration Landscape**
- DOORS and Rational Quality Manager
- DOORS for Microsoft Team Foundation Server Add On
- Other Key Interfaces Including HP QC

Controlling complexity.

DOORS Integration Landscape

Requirement visibility and collaboration across the entire lifecycle

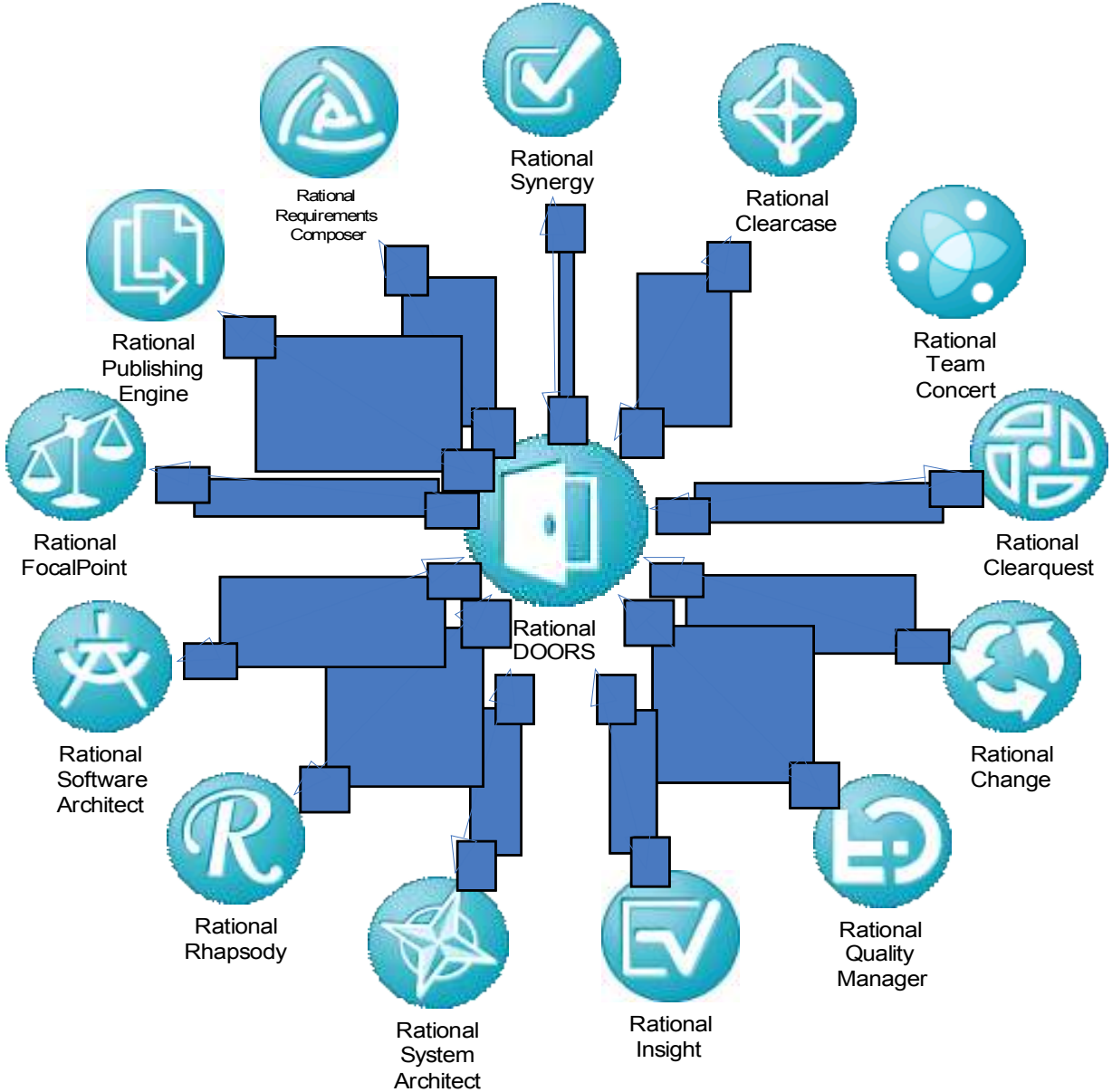Integrates with other Rational tools to give complete lifecycle coverage

An extensive range of 3rd party integrations to non IBM products

Open API allows for custom integrations to unsupported products

Integration of people & processes across tools and disciplines

Rational DOORS Integration Landscape

Rational Synergy

Rational Requirements Composer

Rational Clearcase

Rational Publishing Engine

Rational Team Concert

Rational FocalPoint

Rational Clearquest

Rational Software Architect

Rational DOORS

Rational Change

Rational Rhapsody

Rational System Architect

Rational Insight

Rational Quality Manager
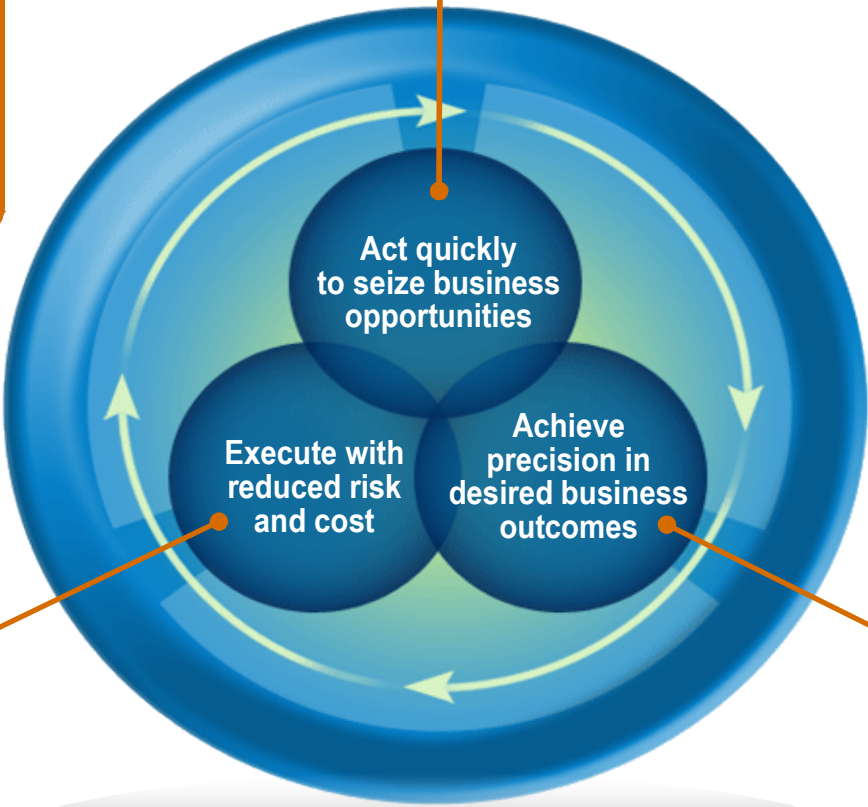
Controlling complexity.

Agenda

- The DOORS Integration Landscape
- DOORS and Rational Quality Manager
- DOORS for Microsoft Team Foundation Server Add On
- Other Key Interfaces Including HP QC

Controlling
complexity.

Driving Business Differentiation in
Challenging Economic Times with Agility and Confidence

Analyse business opportunity and the impact of change and effectively manage organisational transformation by better aligning business and development priorities
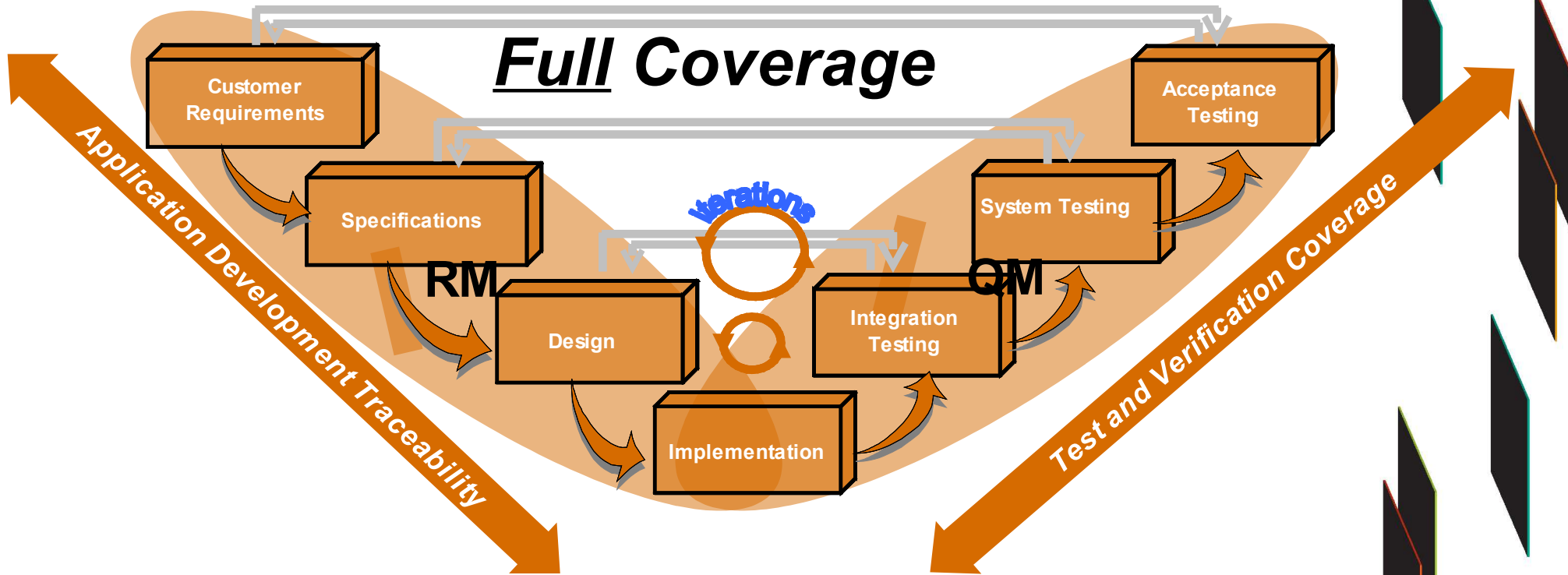
Act quickly to seize business opportunities

Execute with reduced risk and cost

Achieve precision in desired business outcomes

Deliver quality solutions and improve efficiency through real-time team collaboration, automation and reporting and leveraging proven best practices

Build consensus through business and development collaboration making good decisions based on real-time and accurate information across all stakeholders

Controlling
complexity.

IBM Offers A Unique Solution
That Ensures Entire Lifecycle Collaboration and Traceability

***Full* Coverage**

Customer Requirements

Specifications

Design

Implementation

Integration Testing

System Testing

Acceptance Testing

RM

QM

Iterations

Application Development Traceability

Test and Verification Coverage

IBM's full life cycle coverage and traceability solution
- ✓ Common set of clear requirements shared by team
- ✓ Don't miss out critical requirements
- ✓ Assess requirements change impact
- ✓ Identify most critical requirements to test
- ✓ Prove compliance (audit-ability)

Controlling complexity.

Rational Quality Manager

Central hub for business-driven software quality delivery

Mitigate business risk with *collaboration*

✓ **Team coordination of test planning**

✓ **Enforceable process workflow**

✓ **Upstream and downstream quality**

Improve operational efficiency with *automation*

✓ **Lab efficiency and asset utilisation**

✓ **Test coverage optimisation**
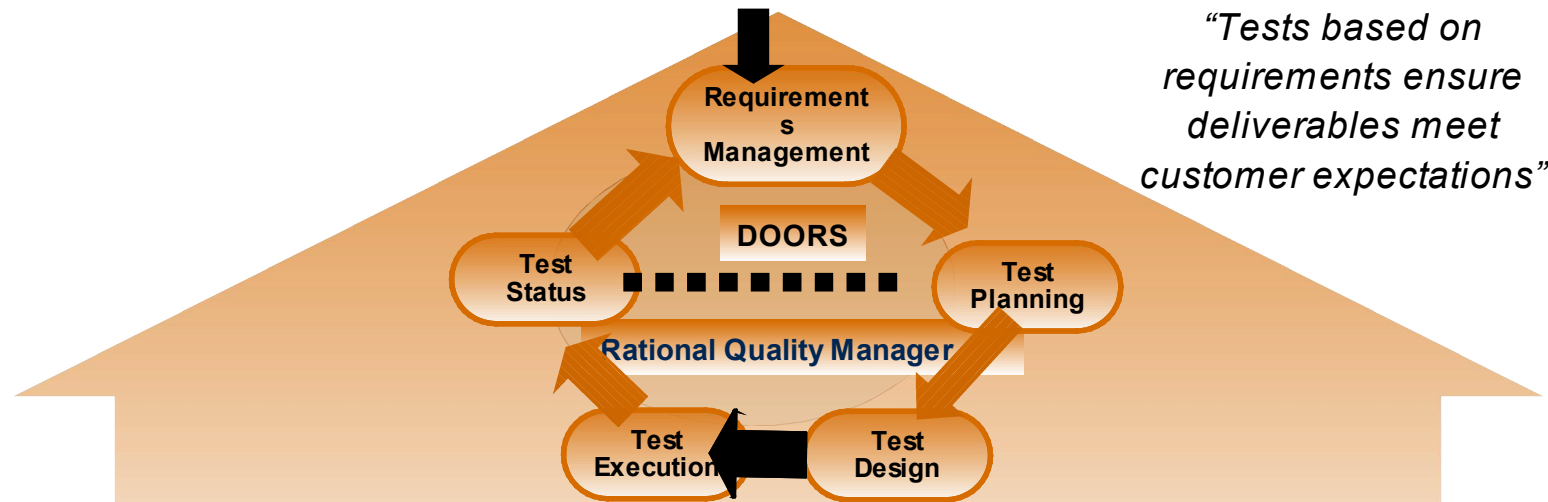
✓ **Environment and lifecycle coverage**

Make confident decisions with effortless *reporting*

✓ **Ongoing analysis & process improvement**

✓ **Proactive risk management**

✓ **Greater predictability**
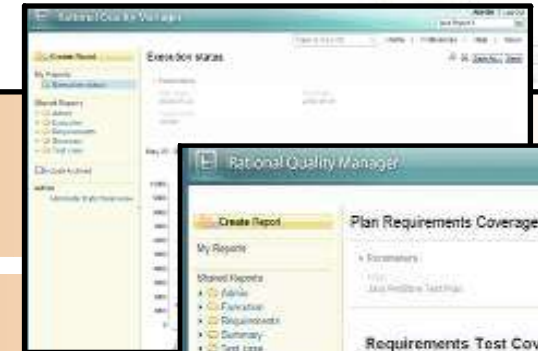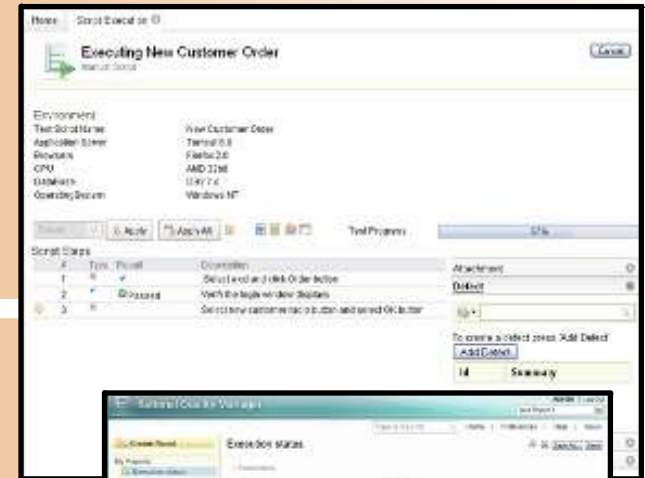
Principles of an Integrated Approach

"Tests based on requirements ensure deliverables meet customer expectations"

Requirements Management

DOORS

Test Status

Test Planning

Rational Quality Manager

Test Execution

Test Design

1. Plan Tests Early
- Plan tests for each requirement as the requirement is written.

2. Conduct Tests Early
- Perform tests as early as possible in the development process.

3. Relate Tests to Requirements
- Trace tests back to the requirements they are designed to check.

4. Relate Defects to Requirements
- Trace defects back to the requirements that they show are not satisfied.

5. Measure Progress against Requirements
- Set targets and measure the progress of testing in terms of those requirements that are shown to be satisfied or are not satisfied.

Controlling complexity.

The QA Manager/Tester Sees Requirements in RQM

The Analyst Checks QA Status in DOORS

Benefits

- Providing a requirements based integration between Requirements Management and Test Management enables:
  - The Requirements Analyst to focus on delivering testable requirements with fully defined qualification criteria
  - The QA/Tester to focus on developing tests against a known set of requirements
  - Release Management can be performed based on requirement quality measures rather than on statistics of test pass/failure

Controlling
complexity.

Agenda

- The DOORS Integration Landscape
- DOORS and Rational Quality Manager
- DOORS for Microsoft Team Foundation Server Add On
- Other Key Interfaces Including HP QC

Controlling
complexity.

Can Users in Microsoft Team Foundation server work with DOORS data?

- The DOORS for Microsoft TFS Add On allows users to drive their Visual Studio development from requirements managed in DOORS
  - Uses active/dynamic external links which allow work items to be traced from VS Work Items to DOORS objects and visa versa.

- The integration between DOORS and Microsoft Team Foundation Server (TFS) allow users to work/develop in their preferred tool environments
  - DOORS for Requirements Management
  - Visual Studio for development

Controlling complexity.

Introducing the DOORS for Microsoft Team Foundation Server Add On

Features	Functional Benefits	Business Benefits
Drag and drop linking between DOORS and Visual Studio	Traceability can be quickly created between requirements and Work Items	Greater confidence in meeting the original business goals
DOORS users can report on traceability to TFS Work Items	Traceability can be easily maintained	Avoid rework and improve operational efficiency
Visual Studio users can see traceability from TFS Work Items to their originating requirements in DOORS	Any requirements that have been overlooked can be detected	Reduce project risk by ensuring that critical requirements are not missed
Synchronisation keeps the link information up-to-date. Workitem/requirement changes identified through suspect link notification	The impact of requirements changes on development items can be viewed and analysed	Prioritise change activities based on business impact

Controlling complexity.

Track Work items Linked to DOORS Requirements

TFS DOORS Interface

- VS work items can be linked to DOORS requirements
- Data can be displayed and synchronised from VS/DOORS
- Modified DOORS requirements in will show as suspect (red flagged)
- Use custom link types

controlling
complexity.

Link and Display TFS Work item Information in DOORS

- Create bi-directional links to TFS work items
- Data from Linked TFS work items can be displayed in DOORS columns
- Display TFS suspect change indicators and other TFS attributes

Controlling complexity.

Agenda

- The DOORS Integration Landscape
- DOORS and Rational Quality Manager
- DOORS for Microsoft Team Foundation Server Add On
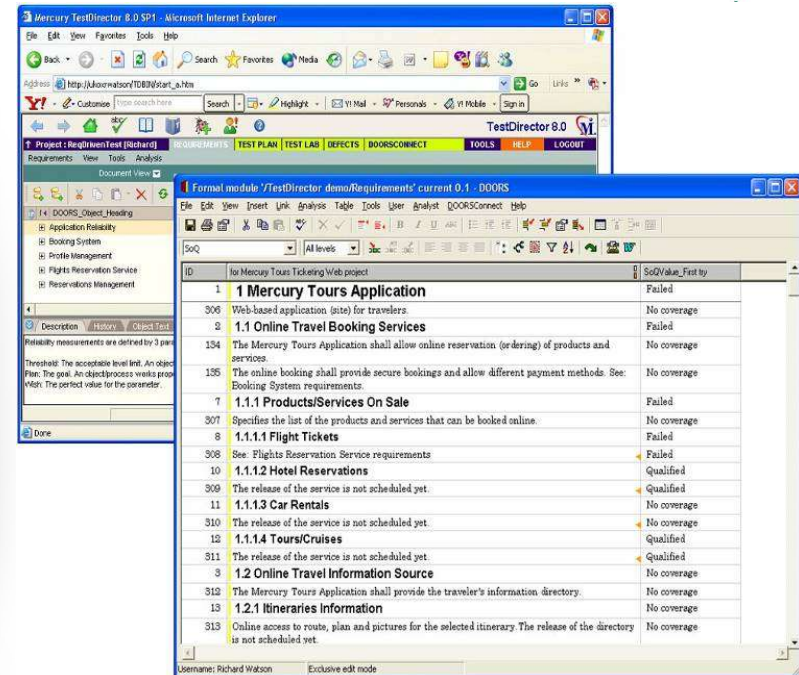- Other Key Interfaces Including HP QC

Controlling
complexity.

Other key interfaces

Rational DOORS and HP Quality Center
•The IBM Rational DOORS and HP Quality Center bridge provides synchronisation and linking between requirements in Rational DOORS and test cases in HP Quality Center.

Rational DOORS and Serena
•With this interface users can synchronise configuration management regimes and establish traceability between information managed in Rational DOORS and versions managed by Serena VM.

Controlling complexity.

Questions