



# *Rational Quality Manager reporting*

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IBM Software

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## *Rational Quality Manager reporting with Rational Reporting Development Intelligence – QM 1693*

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# What is reporting?

- There are two broad categories of information presentation that are important for software and systems development:
  - ▶ Development Intelligence: charts and dashboards used as decision support tools
  - ▶ Document Generation: documents used as deliverable artifacts
  
- These categories have common requirements such as data access and report management
  
- Both domains produce multiple output formats, e.g. MS Office, PDF, HTML, XML, CSV
  
- But both are fundamentally different in their purpose, and the nature of the information they are representing
  
- For simplicity, we refer to both categories as *reporting*



## Development Intelligence

- The application of Business Intelligence techniques in the development space
  
- Development Intelligence reports are generally used for management purposes
  - ▶ The reports themselves are not usually the deliverables
  - ▶ The reports help to communicate status, monitor progress, diagnose problems, identify corrective actions, etc.
  - ▶ They are a key decision support tool for managing projects and programs
  
- Traditional Business Intelligence techniques can help us understand the data
  - ▶ Crosstabs/pivots – How does the data break down?
  - ▶ Drill up/down/through – How is the data interrelated?
  - ▶ Dashboards – What is the big picture?
  - ▶ Data warehouses – How are we trending over time?
  
- Examples
  - ▶ A pie chart demonstration the percentage of open work items or defects
  - ▶ A graph to show the change in the number of untested work items over time
  - ▶ A graph to show the rate of change of requirements (volatility) over time
  - ▶ A scorecard of KPI's to monitor program and project health

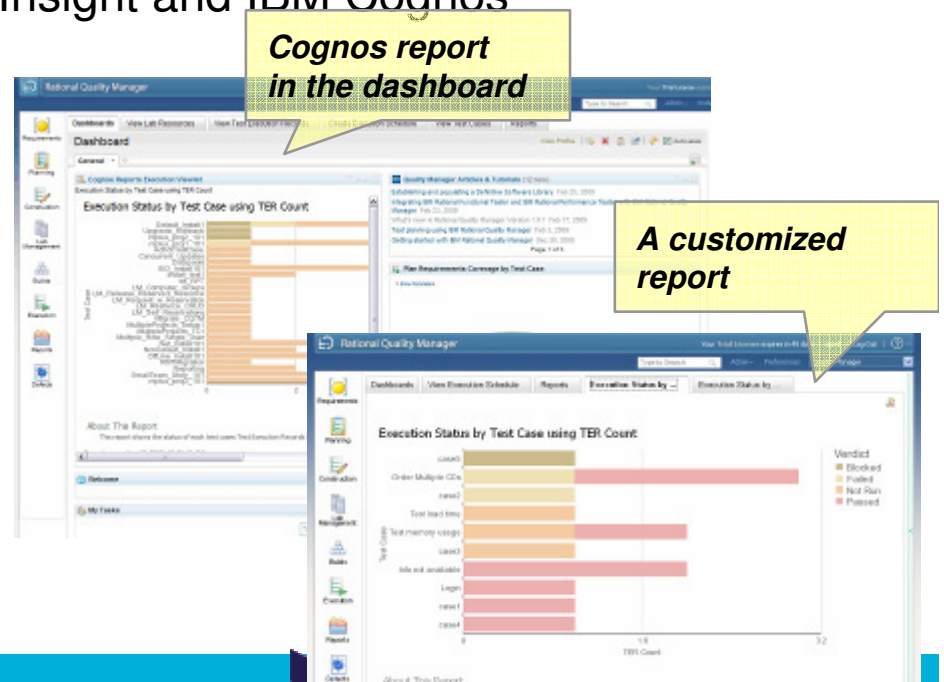
# IBM Rational's Reporting Offerings

One strategy and one consistent upgrade path:

1. Reporting solutions of Rational Quality Manager
  - a) Built-in reports (Birt technology)
  - b) Custom reports (Rational Reporting for Development Intelligence, RRDl)
2. Reporting in Collaborative Lifecycle Management (using RRDl)
  - ▶ Customers using RCR with RQM 2.x supports migration to RRDl.
3. Reporting for the Enterprise with Rational Insight and IBM Cognos

## Reporting Solution Relationships:

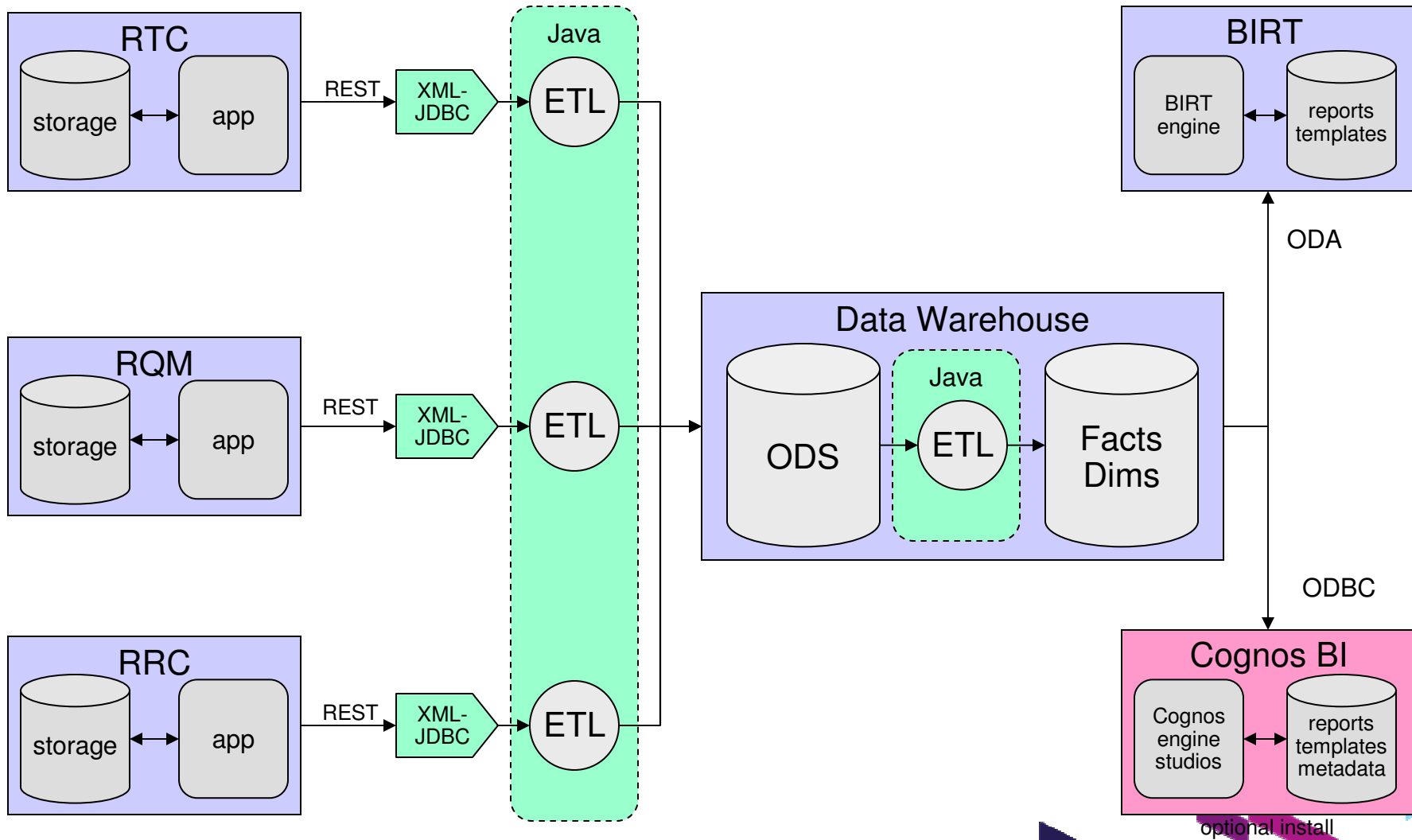
- IBM Rational Insight uses RRDl as core component
- RRDl uses core components from IBM Cognos
- IBM Cognos provides many additional business intelligence components



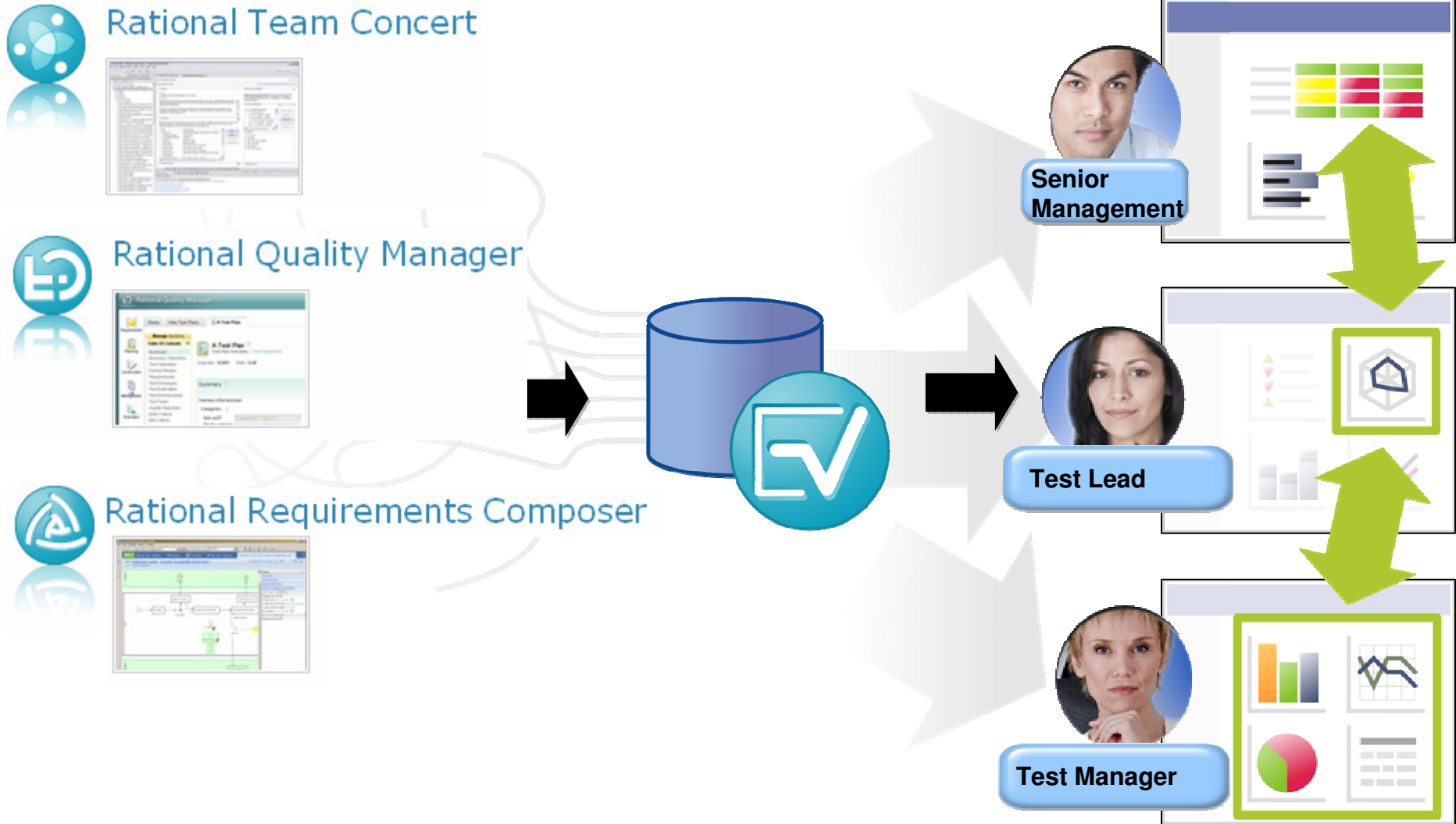
## Development Intelligence Reporting

- CLM 2011 provides users with the capability to create and view charts and dashboards that effectively support the users role and their responsibilities
- A data warehouse is provided to enable historical trend reporting. Administrators need to configure ETL (Extract, Transform, Load) jobs to load the data warehouse with data from the products.
- Reports can contain linked data from all three CLM products
- RQM and RTC utilize BIRT to provide users with a set of predefined OOTB charts and dashboards
- RRC includes no predefined OOTB charts and dashboards (without installing the optional RREDI capability)
- All three CLM products (RTC, RQM, RRC) – via an optional install - can leverage common services for development intelligence (RREDI) to provide users with the capability to create charts and dashboards from a number of predefined templates, or from custom templates.
- Installing and configuring RREDI also provides access to an extended set of predefined report templates

# CLM 2011 data warehouse reporting

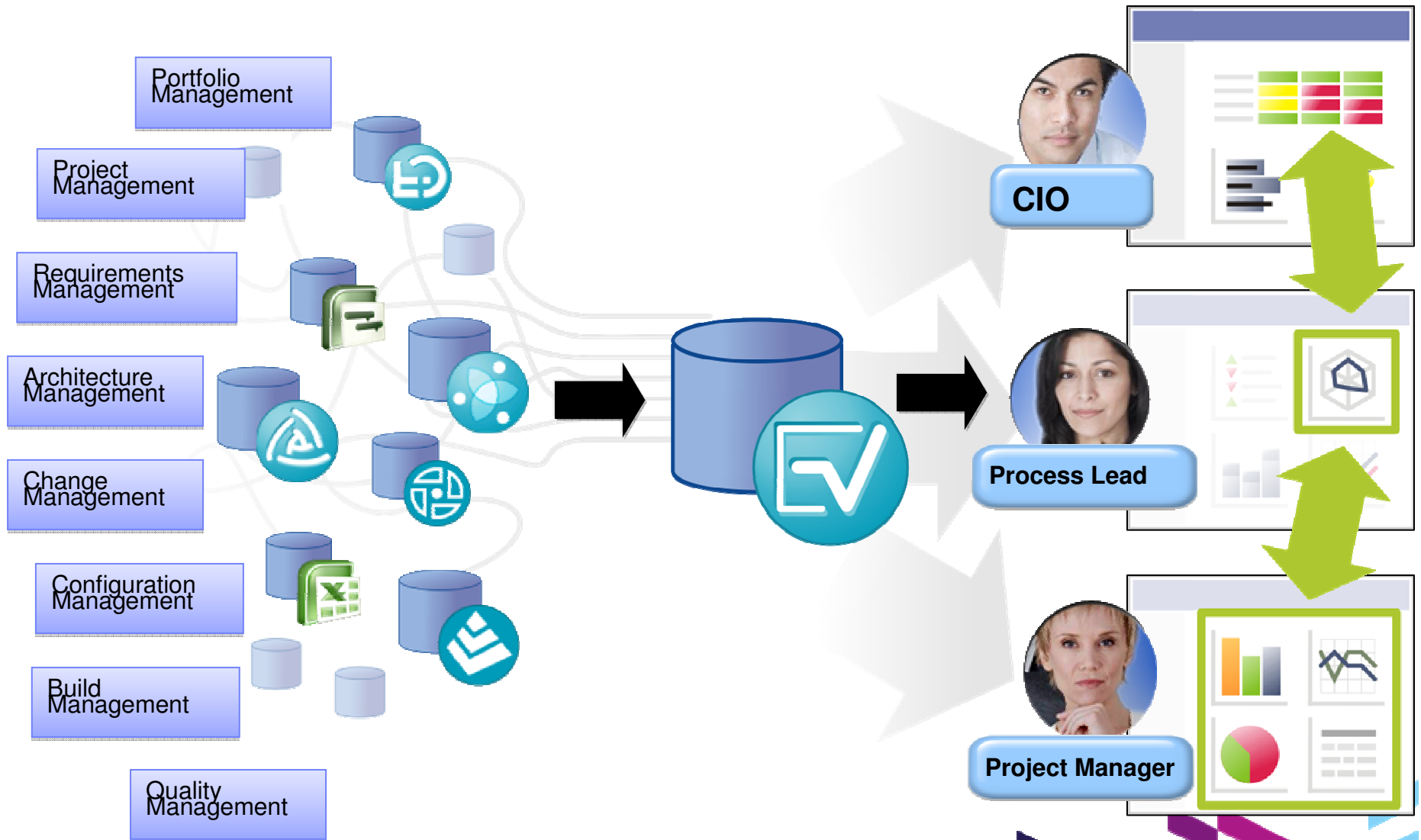


# RRDI



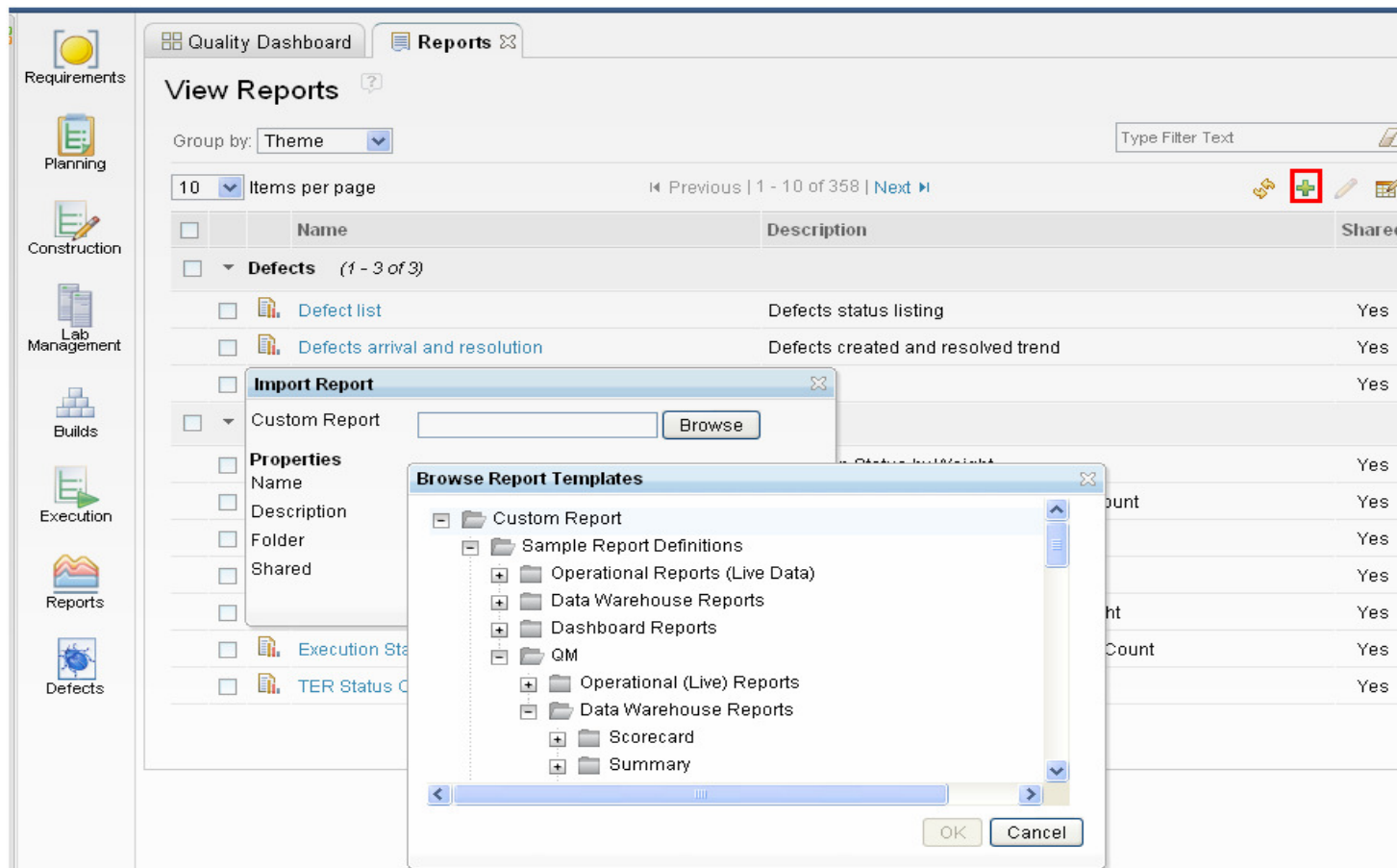


# Rational Insight



# Reporting User Interface

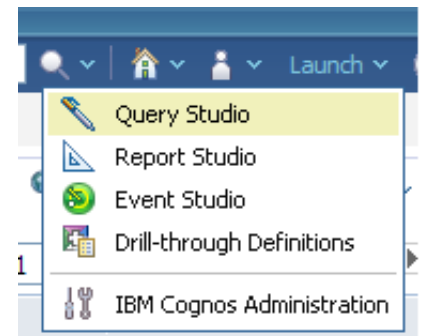
Both the out of the box reports and RRD/ Insight reports are organized and run in the same UI



# Working with RRD I for custom report authoring

- Custom Reporting

- ▶ RRD I offer two web based report authoring tools based on Cognos technology.
- ▶ Query studio- Easily create simple reports quickly.
- ▶ Report Studio- Provides more authoring capabilities to produce professional looking reports.
- ▶ Over 70 sample report templates available as starting point
- ▶ Data exposed through Frame Work(FM) manager model. No SQL required, drag and drop.
- ▶ Mapping of RQM UI concepts to exposed data for reporting available here:



<https://jazz.net:443/wiki/bin/view/Main/RqmDataDictionary>

# Query Studio

**Menu**

- Insert Data
- Edit Data
- Change Layout
- Run Report
- Manage File

Points Failed

Points Inconclusive

Points Passed

Points Perm Failed

Project ID

Project Name

Reference ID

Start Date

Test Case ID

Test Case Name

Test Script ID

Test Script Name

Test Type ID

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**Title**

Test Plan Name: Rational Quality Manager 3.0 Milestone 14 FVT Test Plan AND Verdict: Passed

Verdict: Descending order

Test Plan Name	Test Case Name	Verdict	Test Script Name
Rational Quality Manager 3.0 Milestone 14 FVT Test Plan	Artifacts_RichHover	Passed	Artifacts_RichHover
Rational Quality Manager 3.0 Milestone 14 FVT Test Plan	Associate requirement with plan	Passed	Info not available
Rational Quality Manager 3.0 Milestone 14 FVT Test Plan	Associate requirements with test case	Passed	Info not available
Rational Quality Manager 3.0 Milestone 14 FVT Test Plan	AuditRecord_DeletedArtifact	Passed	AuditRecord_DeletedArtifact
Rational Quality Manager 3.0 Milestone 14 FVT Test Plan	AuditRecord_ExecutionRecord	Passed	AuditRecord_ExecutionRecord
Rational Quality Manager 3.0 Milestone 14 FVT Test Plan	AuditRecord_TestCase	Passed	AuditRecord_TestCase_<3.x>
Rational Quality Manager 3.0 Milestone 14 FVT Test Plan	AuditRecord_TestExecutionResult	Passed	AuditRecord_TestCaseExecutionResult_<3.x>
Rational Quality Manager 3.0 Milestone 14 FVT Test Plan	AuditRecord_TestPlan	Passed	AuditRecord_TestPlan_<3.x>
Rational Quality Manager 3.0 Milestone 14 FVT Test Plan	AuditRecord_TestScript	Passed	AuditRecord_TestScript

# Report Studio

Execution Progress Pie Chart\* - Report Studio - Windows Internet Explorer

http://rvw-in102.ratl.swg.usma.ibm.com:9080/insight/pat/rsapp.htm

Your current security settings put your computer at risk. Click here to change your security settings...

File Edit View Structure Table Data Run Tools Help

Font Size 1 pt

**Insertable Objects**

- Reporting Data Model (DW)
  - Change Management
  - Configuration Management
  - Project Management
  - Quality Management
  - Requirement Management
  - Operational Data Store

**Page Explorer**

Page layers: Drop members here to create page layers

Project: < HTML Item >

Test Plan: < HTML Item >

Milestone: < HTML Item >

Context filter: Select an object with a query to see its context filter (slider).

< Div end > < Div end >

**Execution Progress Pie Chart**

Default measure: Drop item here

Series (pie Slices):

- < #Points Inconclusive# >
- < #Points Failed# >
- < #Points Unattempted# >
- < #Points Passed# >

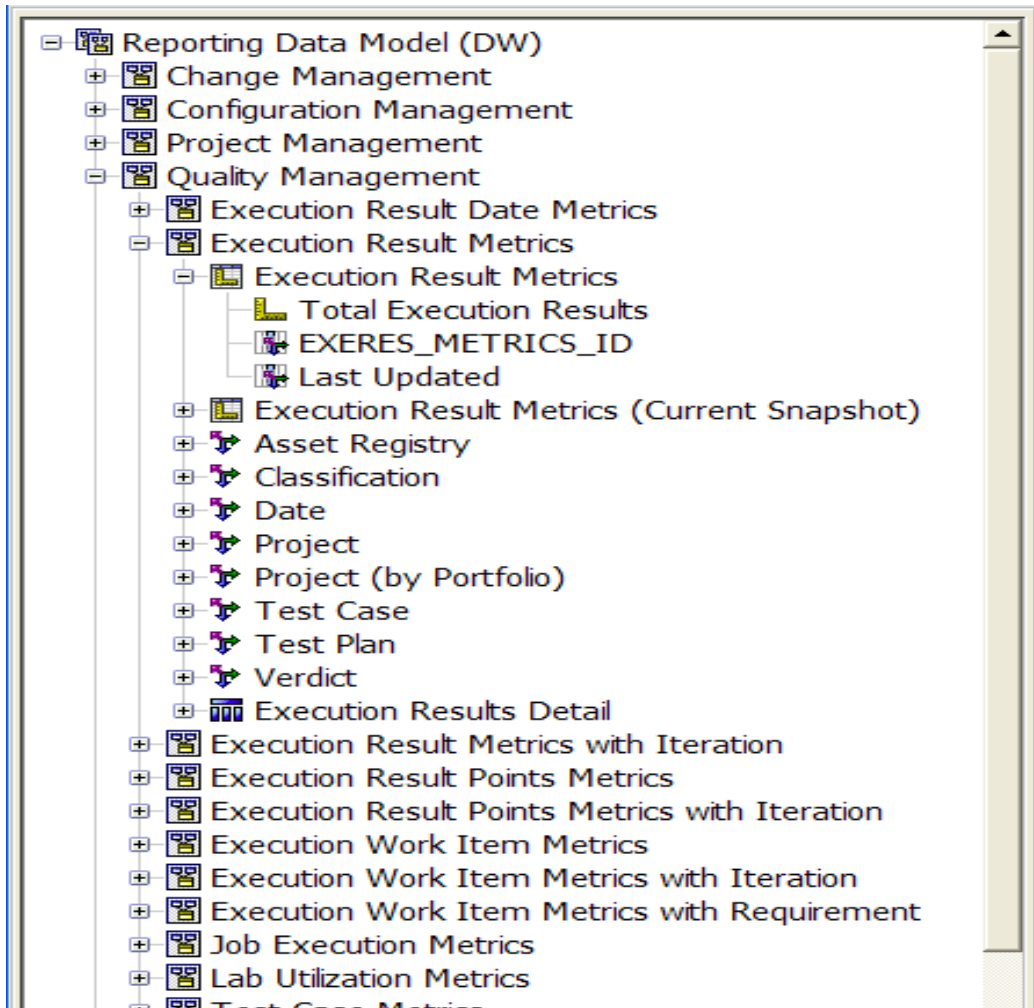
Points Category

Axis titles: abc

Categories (pies): Drop item here

Row Number	Name	Weight	Points Attempted	Points Passed	Points Failed	Points Inconclusive	Points Bloc

## RQM Metrics



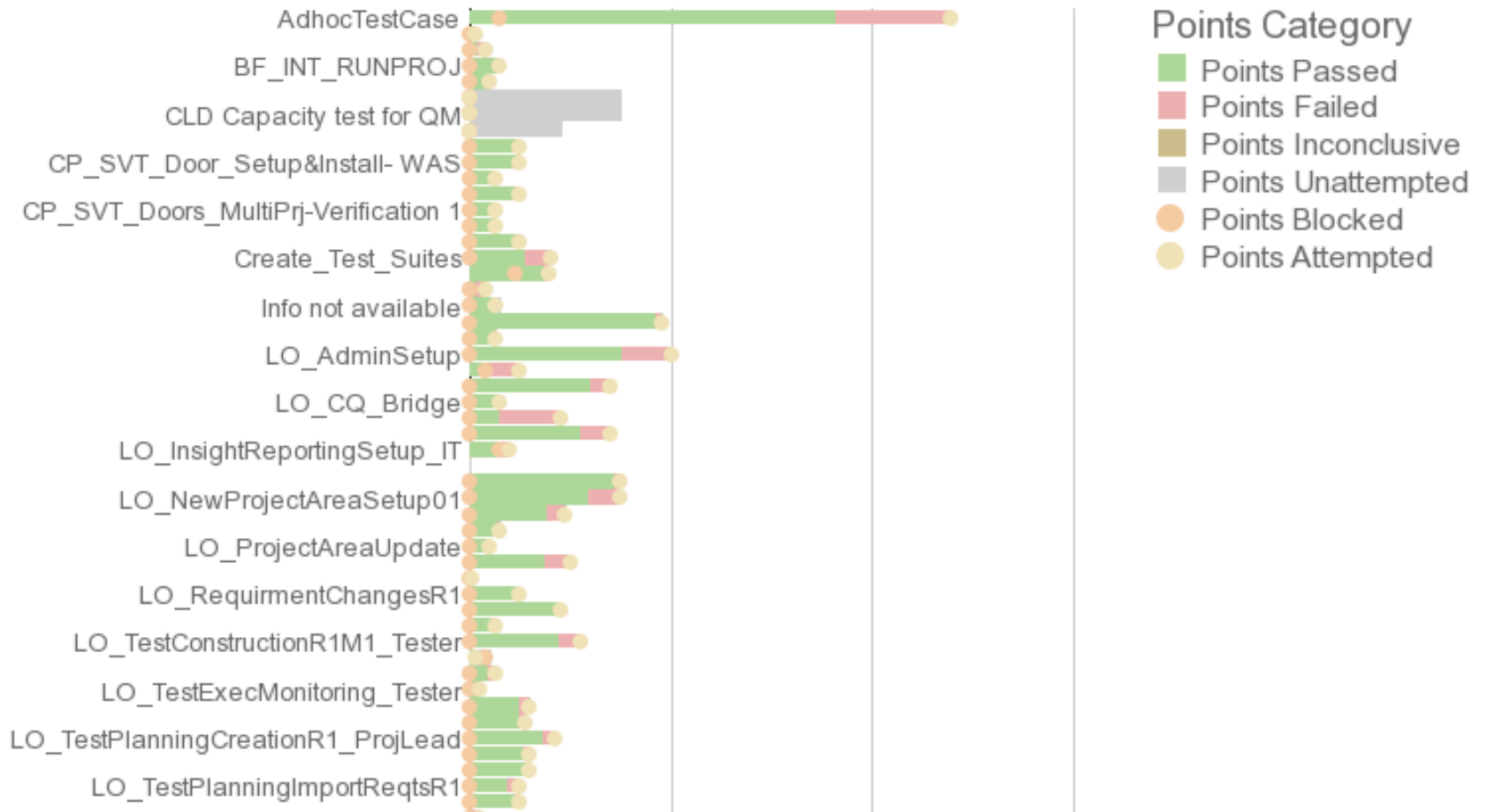
Metrics provide a way to report on data over time.

The image on the left shows some of the out of the box metrics supports in CLM 3.0.1

For example Execution Result Metrics tracks the Total Execution Results by several dimensions: date, project area, test case, test plan.

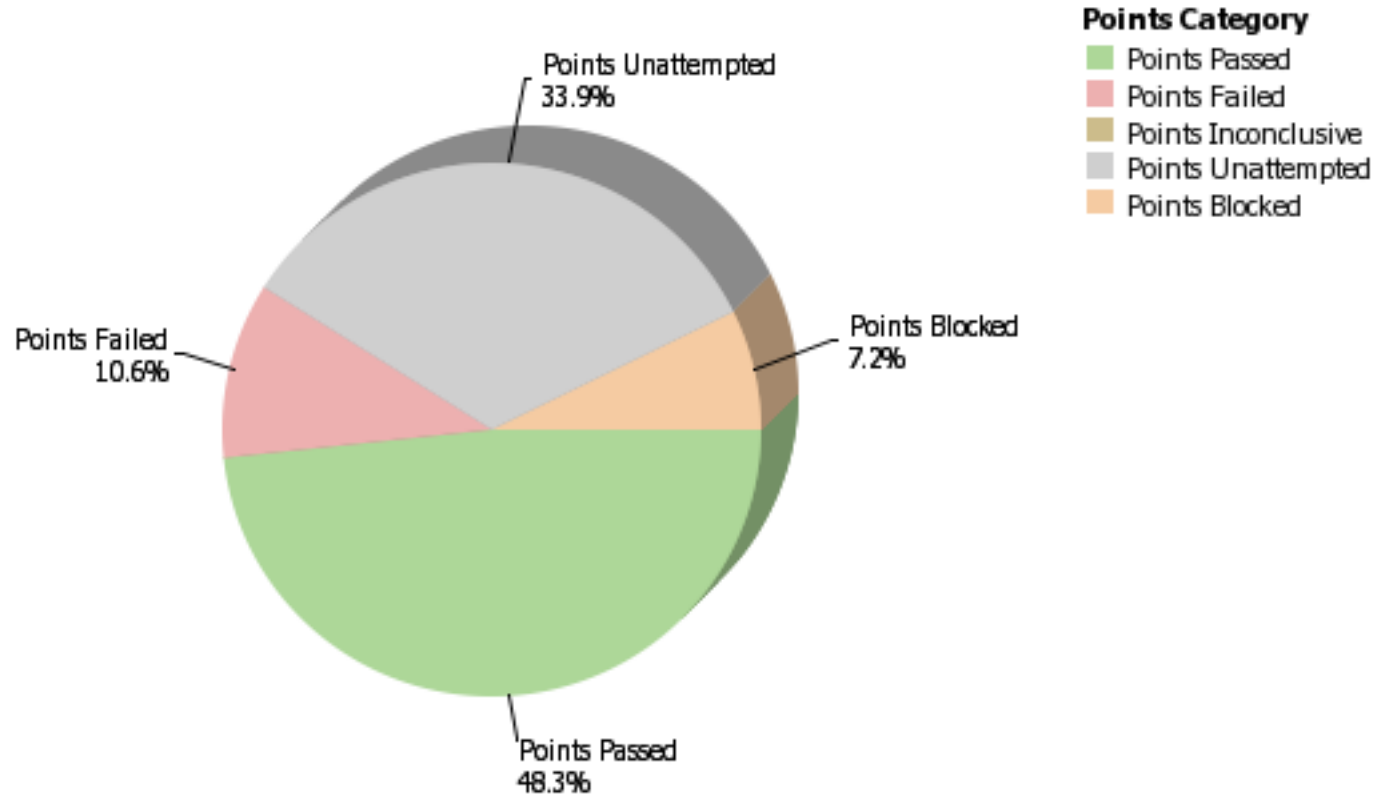
# RRDI Report

Execution Status By Test Case using Weight



# RRDI Report

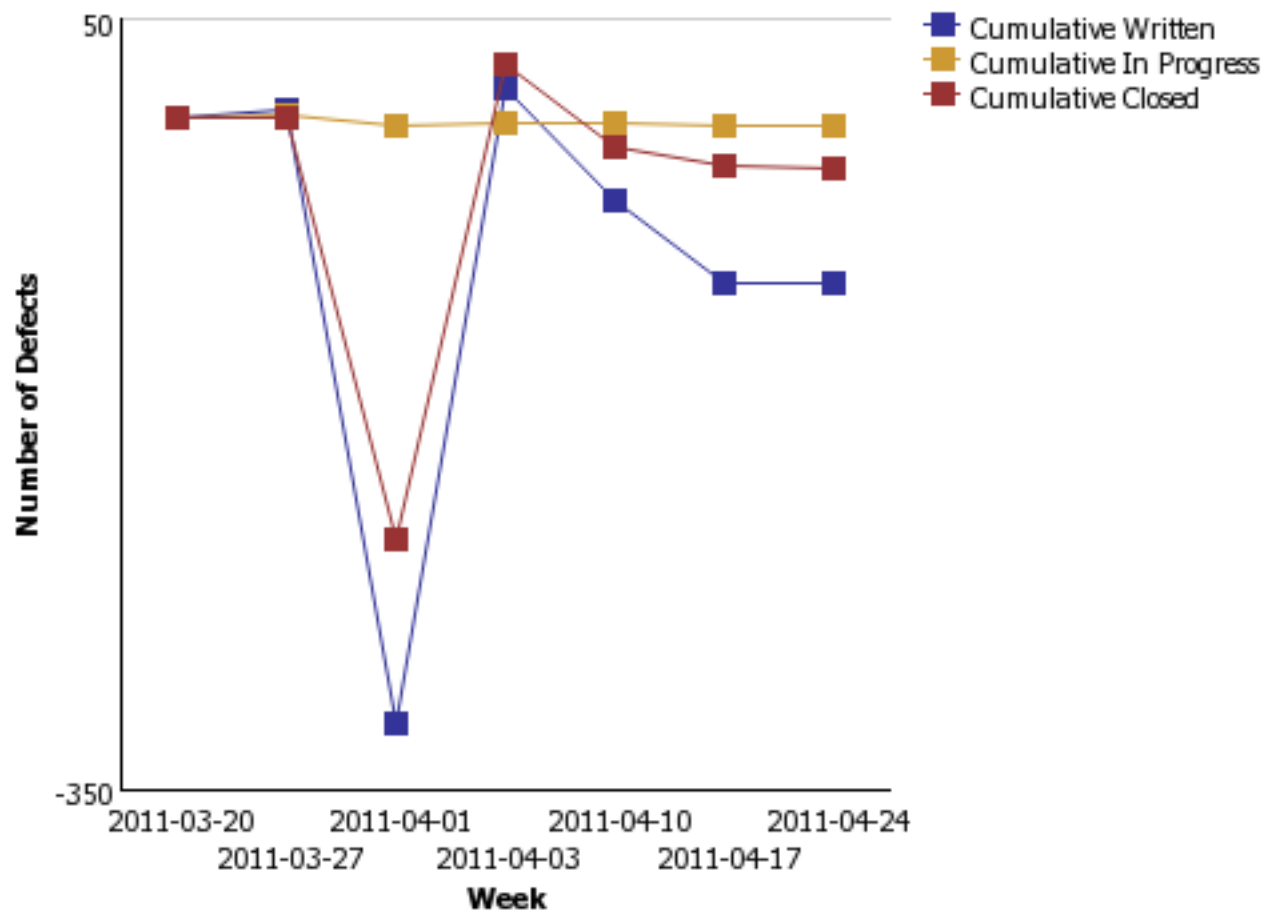
## Execution Progress Pie Chart Including Blocking Points





# RRDI Report

Defect Arrival and Resolution Over Time



# QUESTIONS



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