



IBM Practices for Software Capability Improvement

Bruce MacIsaac
Manager RMC Content, Rational
bmacisaa@us.ibm.com

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IBM Software

Innovate2011

The Premier Event for Software and Systems Innovation



Software. Everywhere.

June 5–9 Orlando, Florida



Agenda

- What is Software Capability Improvement?
- Why is Software Capability Improvement important?
- IBM's Solution for Software Capability Improvement
 - ▶ IBM Rational Method Composer Tooling
 - ▶ IBM Rational Method Composer Content
- Practices for Software Capability Improvement
- What's New in RMC 7.5.1
- Process & Practice Vision, Strategy and Roadmap
- Related Assets

What is Software Capability Improvement?

- An approach for improving the capability of an organization to develop and deliver quality systems and software.
- Often referred to as “Process Improvement” or “Process Management”, but we emphasize:
 - ▶ our focus is **software development and delivery**
 - ▶ with the goal to **improve organizational capability.**

What are the Software Capability Improvement Practices?

- **Software Capability Program Management**
 - ▶ provides a standard approach for managing software capability improvement that is aligned with the organization's strategic goals
- **Method Development**
 - ▶ how to develop, implement, and deploy enterprise methods and tools
- **Adoption Through Execution**
 - ▶ helps an organization develop a mentoring program in order to drive successful adoption of capability improvements

Related practices:

- Setting Up a Performance Measurement System
- Managing Performance Through Measurements
- Project Process Tailoring

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The Goal

- A Software and / or Systems Engineering Organization that is:

- ▶ **Predictable**

- *Perform on target and do not confront stakeholders with surprises*

- ▶ **Competitive**

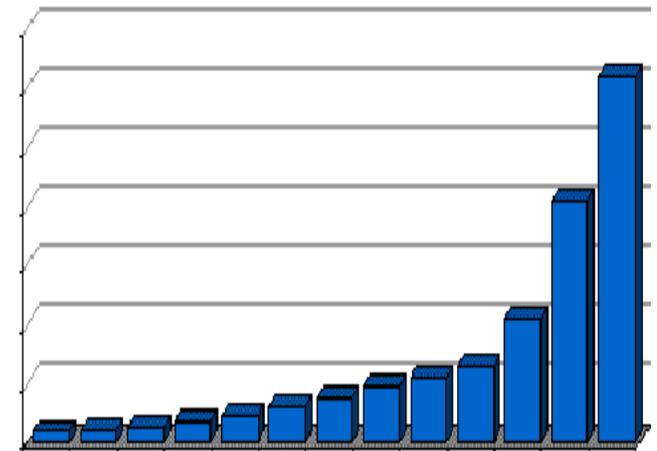
- *Make the right choices and deliver on time*

- ▶ **Profitable**

- *Work cost efficiently and deliver for the right price*

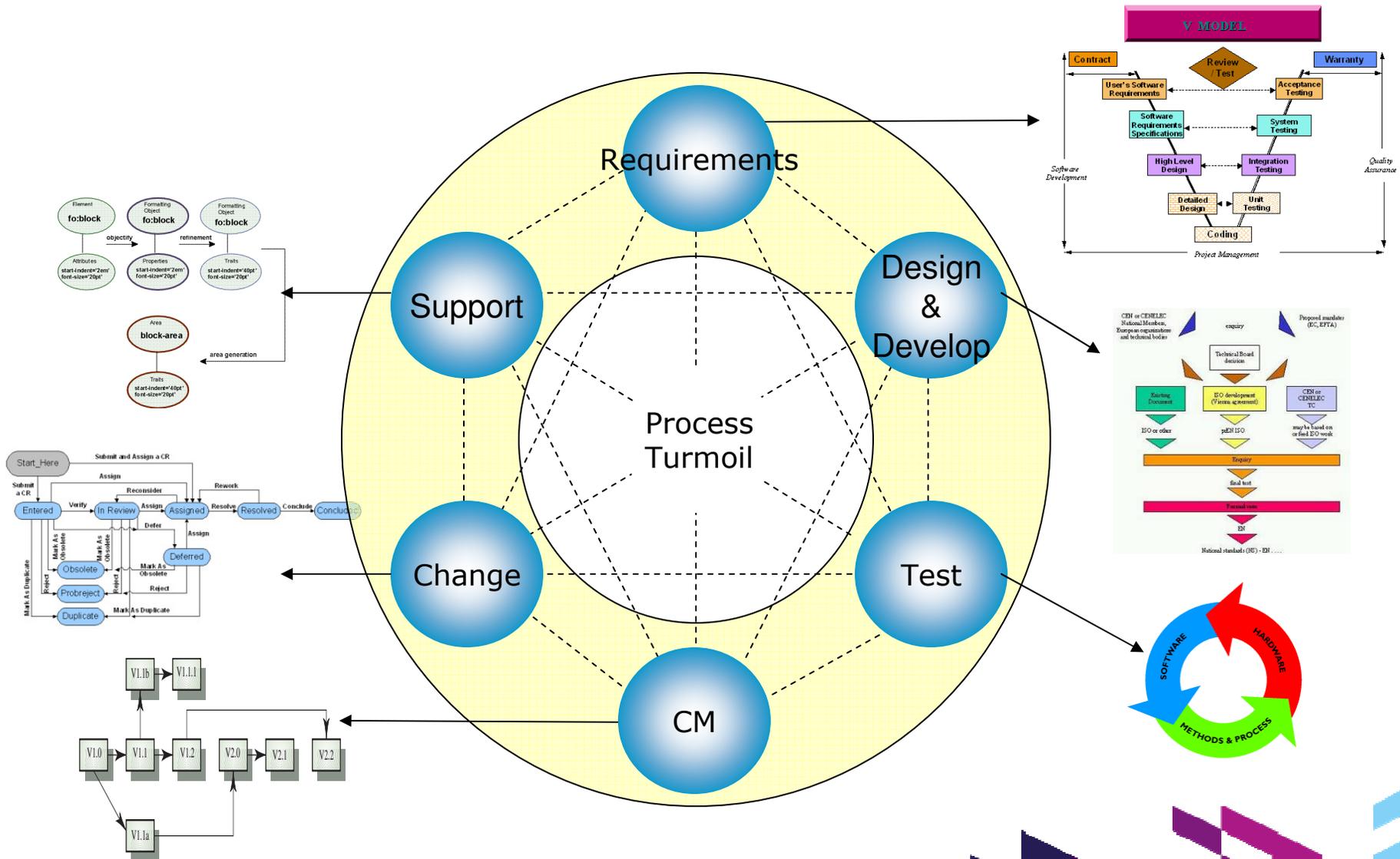
- ▶ **Compliant**

- *Comply with relevant industry or government regulations*

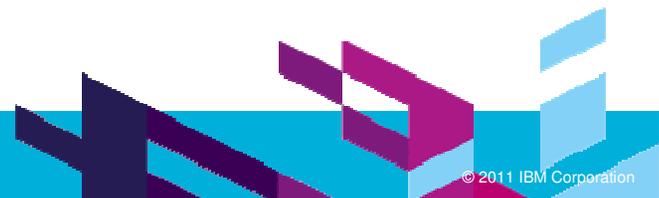
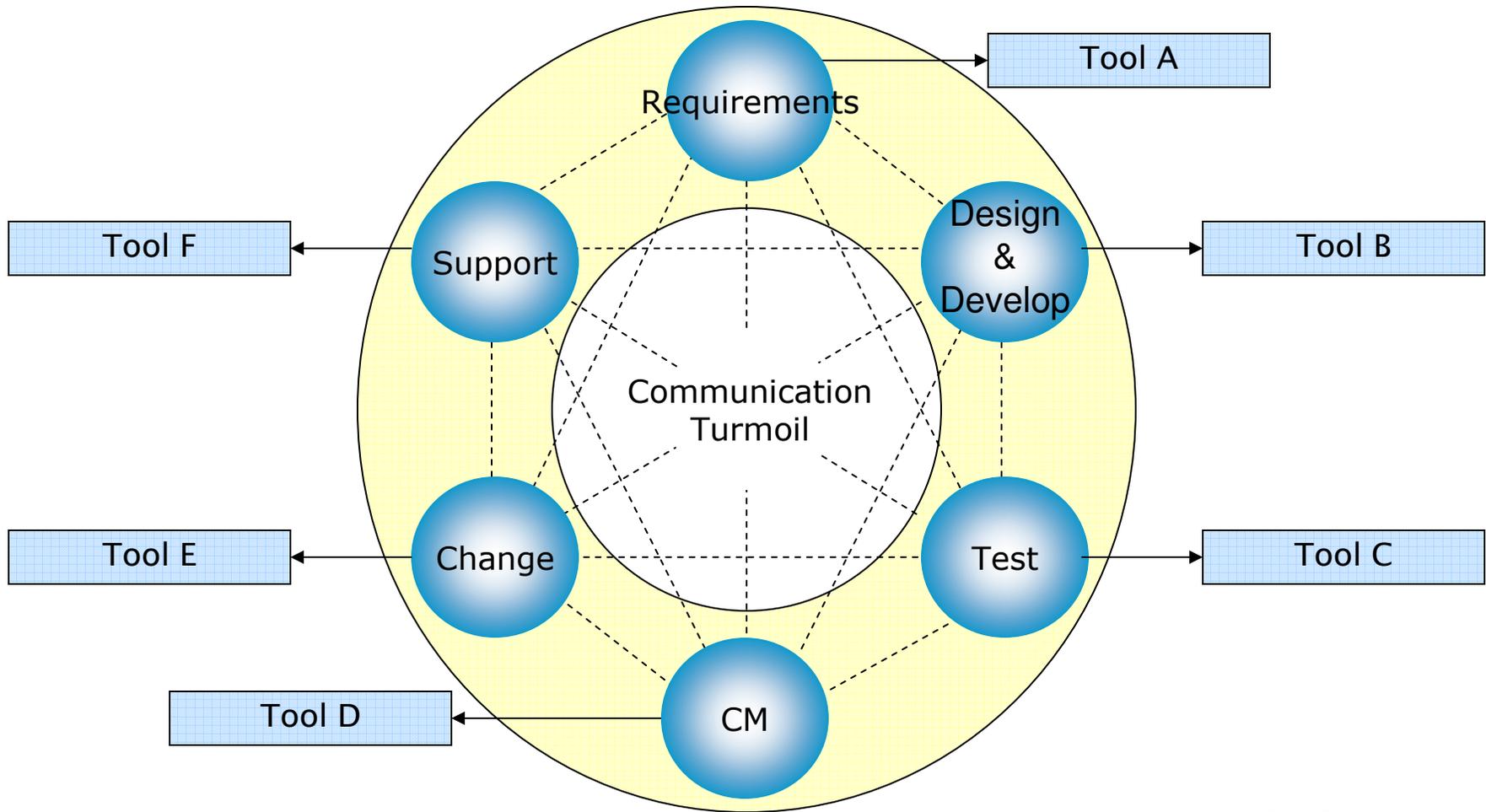


- *But there are challenges...*

The Process Challenge – Process Silos



The Technology Challenge – Tool Silos



Common Business Challenges

■ Project Execution

- ▶ *“We have problems delivering projects on time, on budget, and meeting all high priority requirements. There is no consistency or predictability.”*

■ Compliance Audits

- ▶ *“It’s a nightmare every time we’re audited. Demonstrating our process to the auditor is laborious, time-consuming and painful.”*

■ Process Improvement

- ▶ *“We know our process isn’t working. We know we need to change it. We’re just not sure what is the right process, how to effect that change and get everyone to follow it.”*

■ Process Management

- ▶ *“We have great processes. Too many of them! It is difficult for people to move between teams and a nightmare to manage.”*

■ Outsourcing / Distributed Development

- ▶ *“Budget was just cut 40% and we need to outsource. How do we communicate our process to the outsource vendor? If we don’t, they’re going to charge a premium.”*

■ Process Deployment / Execution

- ▶ *“We have a great process, but it is too expensive to maintain, and we are not effectively deploying it.”*

Common Technical Challenges

- **Formal Architecture**

- ▶ *“We would never permit development projects using our development process to have poor architecture... but how process is authored and maintained typically violates this by muddying its ‘data’, ‘logic’, and ‘presentation’ tiers!”*

- **Using Automated Tooling; Leveraging Proven Technologies to Reduce Risk**

- ▶ *“DBAs use tools that perform ‘referential integrity’. Developers use tools that generate/compile the language they code in. Why do methodologists & method engineers typically capture process in manually maintained HTML pages, documents, etc.?”*

- **Exploring “Buy” vs. “Build”; Not Reinventing the Wheel**

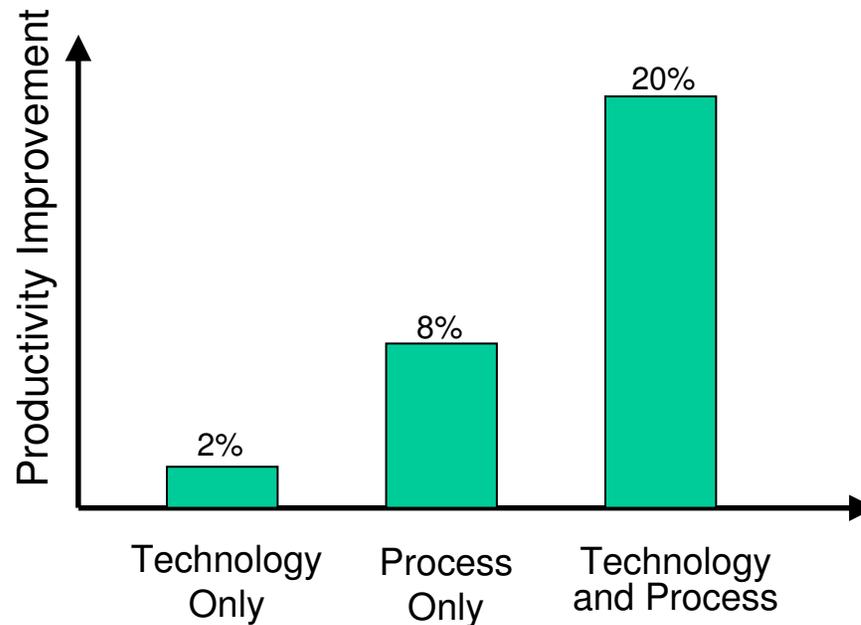
- ▶ *“Most organizations consider commercial packages as an alternative to building (and testing) them in-house. Almost all development projects build atop J2EE or some other proven architecture and leverage code libraries. Why do most process initiatives ‘build a process from scratch’?”*

- **Considering Deployment and Maintenance**

- ▶ *“The value of a process is not in the building of one, it is in the successful deployment and adoption of it... and being able to respond to feedback and maintain it gracefully.”*

Overcoming Process and Technology Challenges Pays off

A Combination of Technology and Process Improvement delivers best Business Value



Source: London School of Economics – McKinsey survey and analysis of 100 companies in France, Germany, United Kingdom, and United States

“When IT lifts productivity”, Stephen J. Dorgan and John J. Dowdy, ©2004 McKinsey & Company

Why Is Software Capability Improvement important?

- Without general concurrence in the organization about what your processes are how can anyone in the organization...
 - ▶ Agree that ‘what is supposed to be done, isn’t being done’?
 - ▶ Qualitatively or quantitatively measure project performance?
 - ▶ Improve how are things are done?

- Globally distributed development, outsourcing, and so forth implies that the team working together now likely hasn’t worked together before
 - ▶ A common process provides all team members a reference point from which to anchor their responsibilities to the team
 - ▶ It also provides the project manager and all other team leads a reference from which to have a conversation about the big picture and the immediate tasks at hand

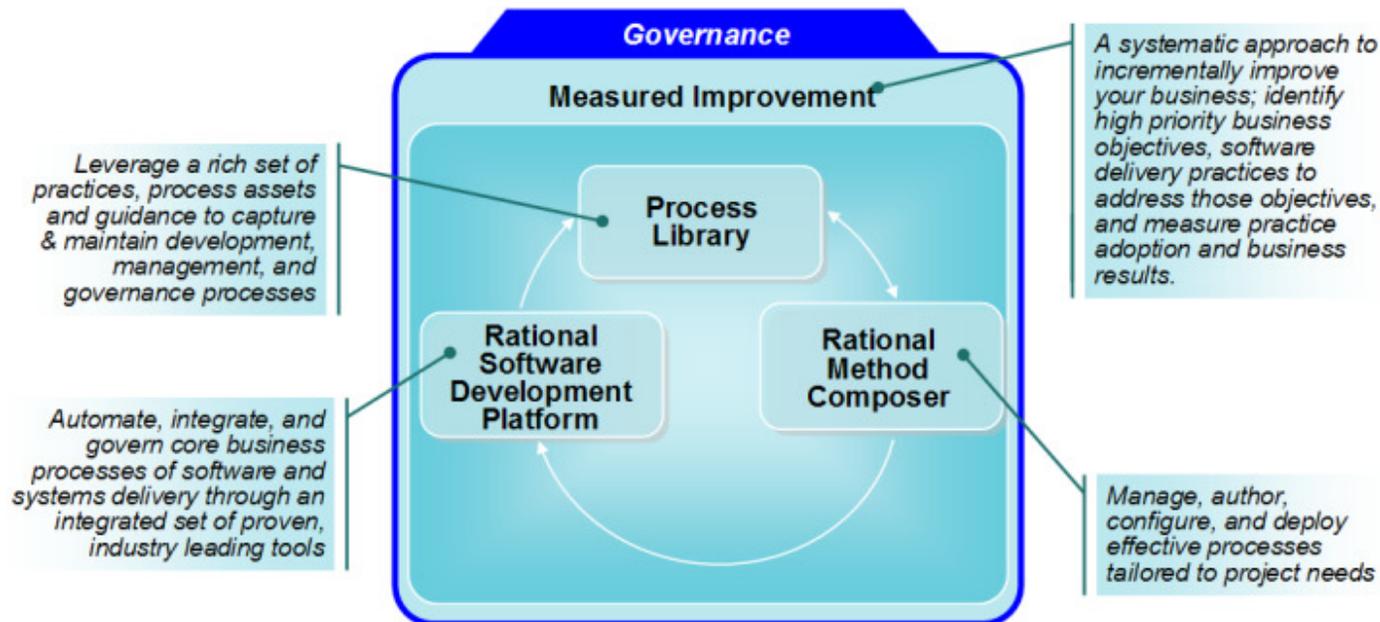
- Without a defined process and its associated governance project teams can make locally optimized decisions that are not optimal for the organization
 - ▶ e.g. “We can do it quicker without requirements, version control, quality gates, ...”

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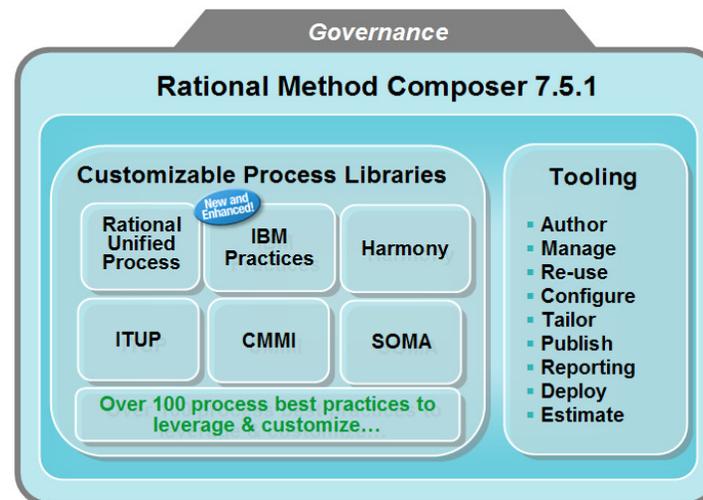
IBM's Solution for Software Capability Improvement

Create, customize, publish, enact and measure software & systems delivery, practices and processes according to project needs



IBM Rational Method Composer

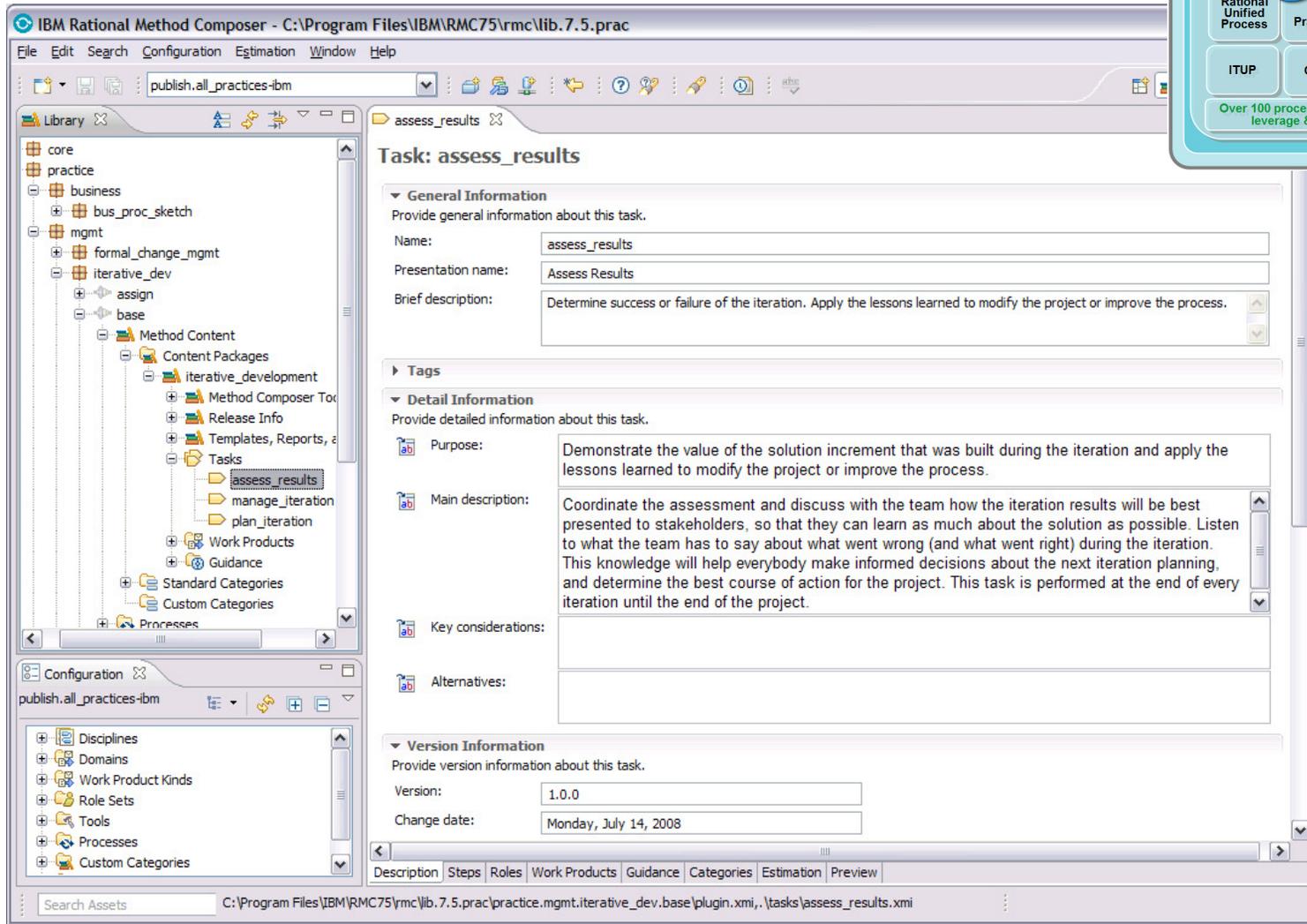
- IBM Rational Method Composer (RMC) is comprised of:
 - ▶ **Tooling** that provides capabilities to:
 - create and maintain well-architected libraries of structured process assets,
 - create organizational standard and project specific process descriptions, and
 - to publish these processes in easy to consume formats to help practitioners execute.
 - ▶ **Methods** in a “customizable process library” that includes IBM Practices, the Rational Unified Process (RUP), and plug-ins like MDSD
 - Can be used as-is, customized, or leveraged to augment your own processes



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Rational Method Composer - Tooling



Governance

Rational Method Composer 7.5.1

Customizable Process Libraries

- Rational Unified Process
- IBM Practices
- Harmony
- ITUP
- CMMI
- SOMA

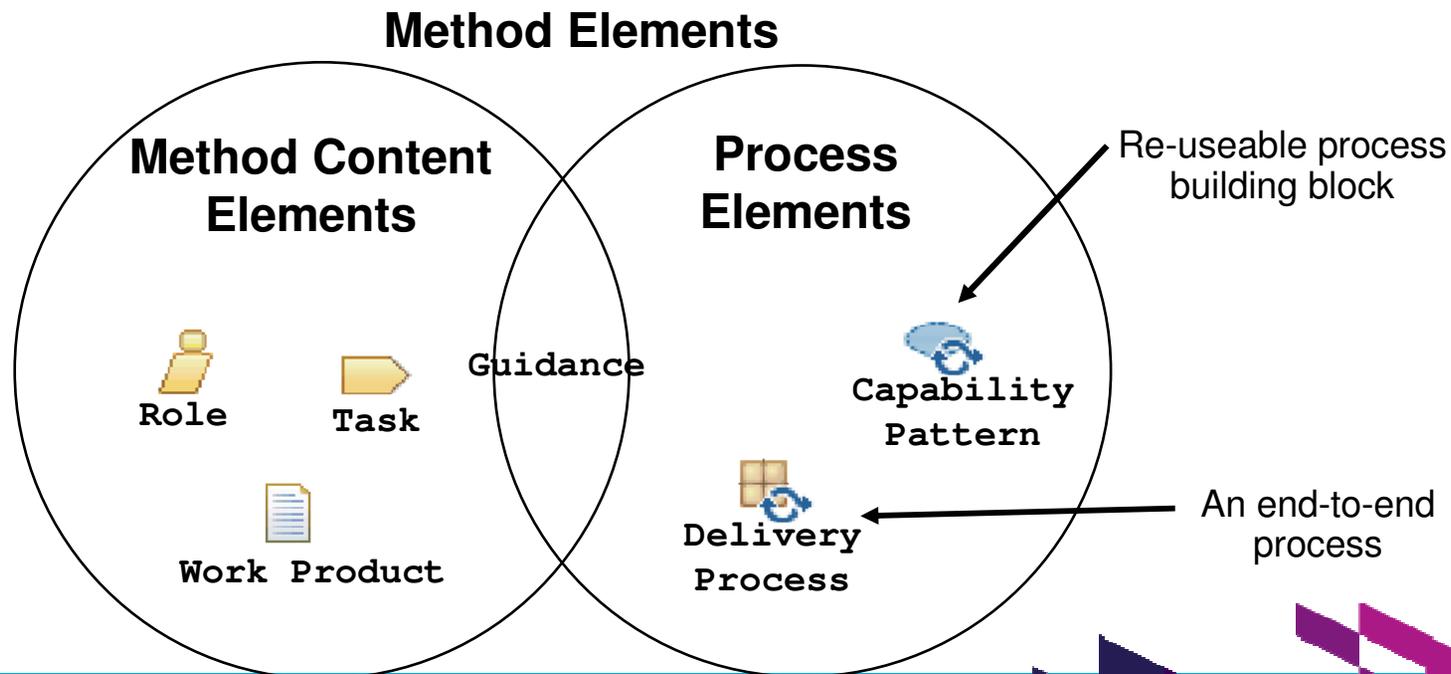
Over 100 process best practices to leverage & customize...

Tooling

- Author
- Manage
- Re-use
- Configure
- Tailor
- Publish
- Reporting
- Deploy
- Estimate

Basic Concepts – Method Content, Process

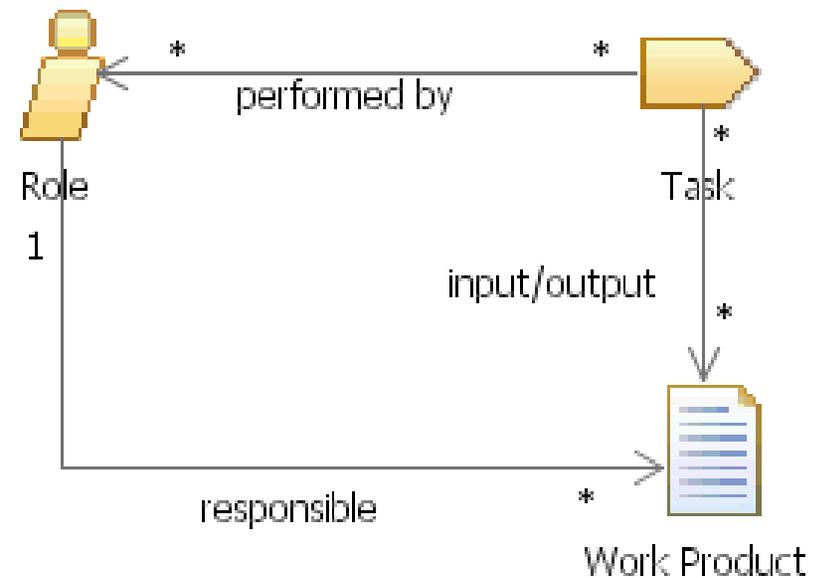
- Method Content (Who, What, Why, How)
 - ▶ Highly re-useable information
 - ▶ Definition of Roles, Tasks, Work Products and associated relationships
 - ▶ Includes Guidance and Categories
 - ▶ No timing information
- Process (When)
 - ▶ End-End sequence of Phases, Iterations, Activities and Milestones that define the development lifecycle.
 - ▶ Defines When tasks are performed via Activity Diagrams and/or Work Breakdown Structures



The Basics – Method Content Relationships

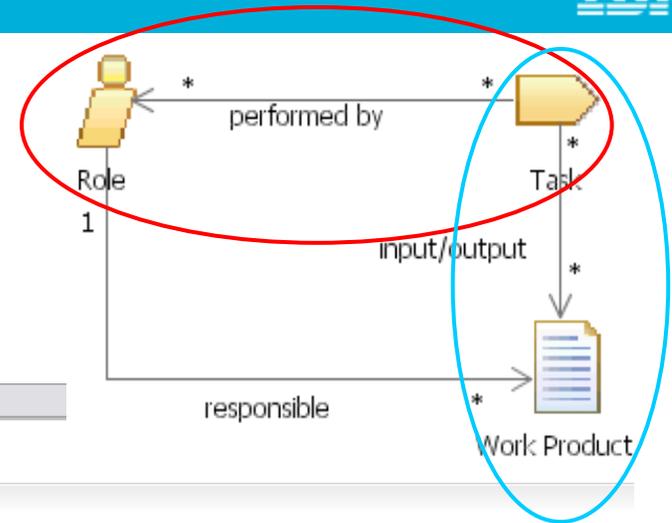
A Standard Model Ensure Process Integrity

- The benefits of a model
 - ▶ Support analysis
 - Complete
 - Consistent
 - Impact of changes
 - ▶ Support reporting
 - What tasks do I perform?
 - What inputs do I need to perform this task?



Template Approachability

- Simplicity in data entry through use of form based editors



Task editor

Attributes

Template tabs

architectural_analysis

Task: architectural_analysis

▼ General Information
Provide general information about this task.

Name: architectural_analysis

Presentation name: Architectural Analysis

Brief description: This task focuses on defining a candidate architecture and constraining the architectural techniques to be used in the system.

▼ Detail Information
Provide detailed information about this task.

Purpose:

- To define a candidate architecture for the system based on experience gained from similar systems or in similar problem domains
- To define the architectural patterns, key mechanisms, and modeling conventions for the system.

Main description: Architectural analysis focuses on defining a candidate architecture and constraining the architectural techniques to be used in the syst systems or problem domains to constrain and focus the architecture so that effort is not wasted in architectural rediscovery. In systems architectural analysis might be omitted; architectural analysis is primarily beneficial when developing new and unprecedented systems.

Key considerations:

Alternatives:

► Version Information

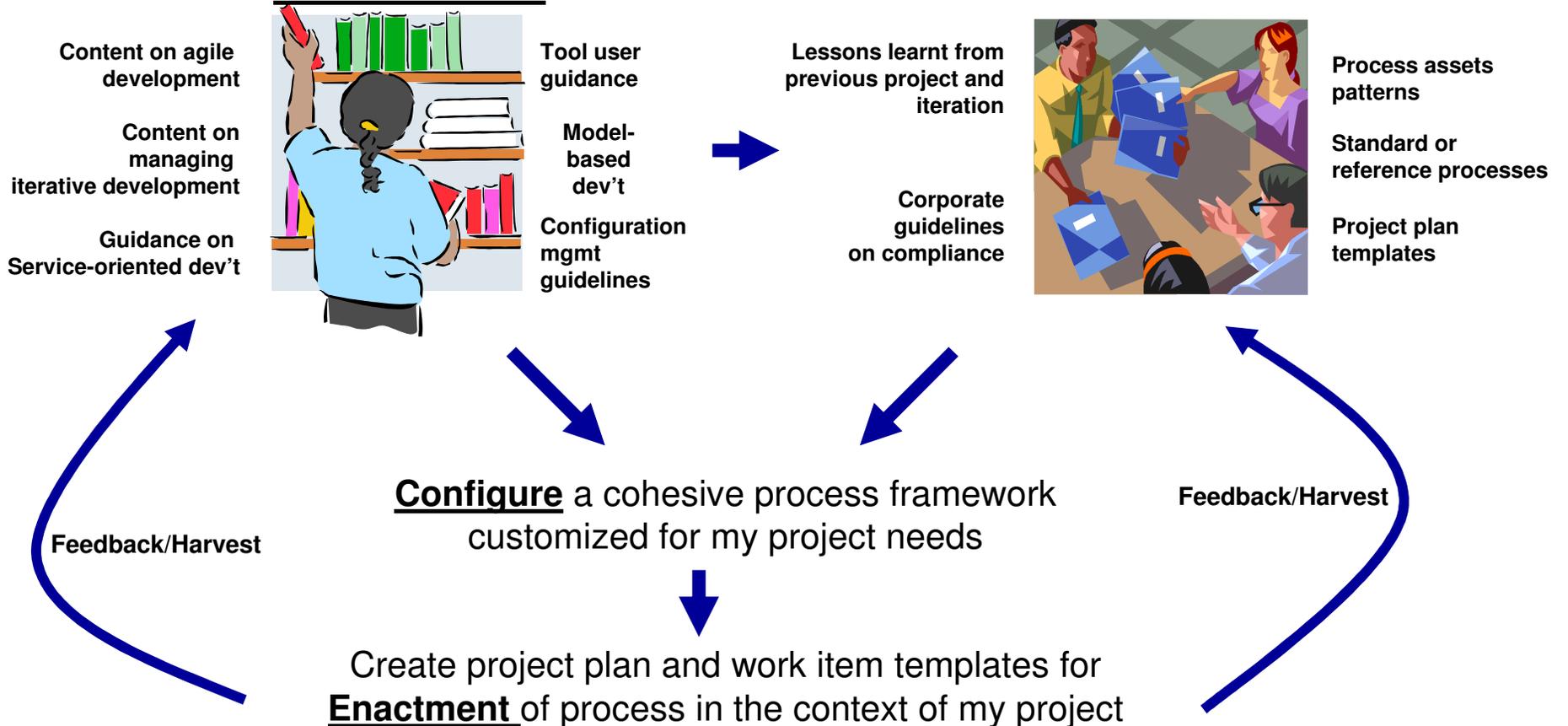
► Content Variability

Description | Steps | Roles | Work Products | Guidance | Categories | Preview | Estimation

Method Authoring: RMC

Standardize representation and manage libraries of reusable **Method Content**

Develop and manage **Processes** for performing projects



Adoption Made Easy

Role-based guidance available as a Web site

Rational. Method Composer

Search this Site:

Team (IBM)

- Welcome to the Practices for Agility@Scale Website
- Getting Started
- Delivery Processes
- Practices
- Roles Sets
 - Enterprise
 - Software Development
 - Architecture
 - Configuration and Change Management
 - Development
 - Project Management
 - Team Lead**
 - Requirements
 - Testing
 - Environment
 - Tasks
 - Work Products
 - Guidance
 - Tools
 - Release Info

Roles Sets > Software Development > Project Management > Team Lead

Role: Team Lead

This role leads the planning of the project, coordinates interactions with the stakeholders, and keeps the project team focused on meeting the project objectives.

Role Sets: [Basic Roles](#), [Project Management](#)

Relationships

```

    graph LR
      TL[Team Lead] -- performs --> AR[Assess Results]
      TL -- performs --> ACR[Assign Change Request]
      TL -- performs --> IAR[Identify and Assess Risks]
      TL -- performs --> MI[Manage Iteration]
      TL -- performs --> PI[Plan Iteration]
      TL -- performs --> PPR[Plan Project]
      TL -- responsible for --> IP[Iteration Plan]
      TL -- responsible for --> PP[Project Plan]
      TL -- responsible for --> RL[Risk List]
      TL -- responsible for --> WIL[Work Items List]
    
```

Additionally Performs	<ul style="list-style-type: none"> Develop Technical Vision Envision the Architecture Refine the Architecture
Modifies	<ul style="list-style-type: none"> Risk List

[Back to top](#)

Main Description

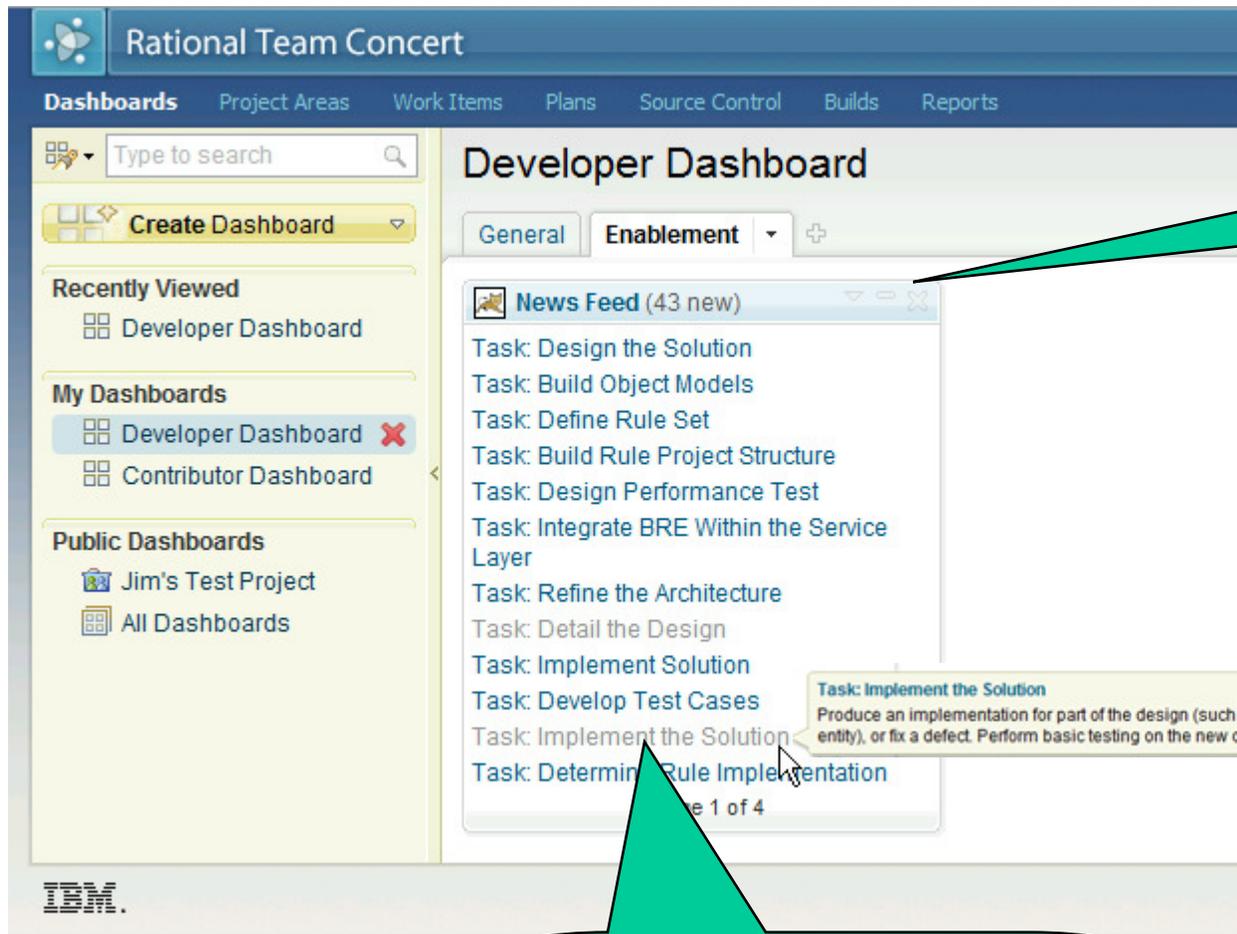
The person in this role:

- Coaches the team to drive a successful outcome of the project and the acceptance of the product by the customer
- Is accountable for the outcome of the project and the acceptance of the product by the customer
- Is responsible for the evaluation of project's risks and for controlling those risks through mitigation strategies
- Applies management knowledge, skills, tools, and techniques to a broad range of tasks to deliver the desired result for a particular project in a timely manner

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Integrated Process and Tools

Process Guidance When You Need It, Where You Need It



RSS feed of Relevant process guidance in RTC.

Name and brief description on tool tip.

Click link to navigate to Details

Integrated Process and Tools

Execute the process and track progress

- Create RTC Work Item Templates based on WBS in RMC
- Instantiate Templates in RMC as a Project Plan, Iteration Plan or ad-hoc set of tasks
- Process Guidance linked to each work item
- Track and report on project status with RTC Dashboards and reports

The image displays a workflow from Rational Method Composer (RMC) to Rational Team Concert (RTC). On the left, the RMC interface shows a 'Delivery Process: Process for Agile Delivery' with a 'Work Breakdown Structure' tree. A blue arrow points from this structure to the RTC interface. The RTC interface shows a 'Task: Plan Iteration' work item, which is a template instantiated from the RMC process. The work item details include a description: 'Plan the scope and responsibilities for a single iteration.' and a 'Purpose' section: 'To identify the next increment of system capability, and create a fine-grained plan for achieving that capability within a single iteration.' The 'Relationships' section lists roles like Team Lead, Analyst, Architect, Developer, Stakeholder, and Tester.

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Rational Method Composer – Method Content

Rational. Method Composer
Search this Site:

IBM Practices

- Welcome
- Getting Started
- Practices
 - Enterprise
 - Adoption Through Execution
 - Asset-Based Development
 - Asset-Based Development Governance
 - Determine the Application Modernization Strategy
 - Managing Performance through Measurements
 - Method Development
 - Product Portfolio Management
 - Setting up a Performance Measurement System
 - Software Capability Program Management
 - Use Case Driven Business Modeling
 - Systems Development
 - Architectural Analysis - Key System Functions
 - Architectural Analysis - Operation Based
 - Architectural Design - Operation Based
 - Architectural Design - Use-Case Based
 - Build and Validate Use Cases
 - Detailed Use-Case Requirements Analysis
 - Elaborate Draft System Requirements Specification
 - Joint Realization
 - Trade Study - Weighted Objectives Method
 - Software Development
 - Architecture
 - Configuration & Change Management
 - Deployment
 - Development
 - Environment
 - Project Management
 - Requirements
 - Testing
 - Business Rules Development

Welcome

Welcome

This configuration is intended for browsing the complete set of practices available from IBM.

Main Description

Learning

- Basic Process Concepts
- Practice

Resources

- Practice-based enablement
- Additional Practice Plug-ins
- IBM Rational Method Composer
- General IBM resources
 - The Rational Edge
 - IBM Rational training

About this configuration

Welcome to the All IBM Practices Configuration!

Practices

Enterprise Practices

Systems Engineering Practices

Software Development Practices

Governance

Rational Method Composer 7.5.1

Customizable Process Libraries

Rational Unified Process	IBM Practices	Harmony
ITUP	CMMI	SOMA

Over 100 process best practices to leverage & customize.

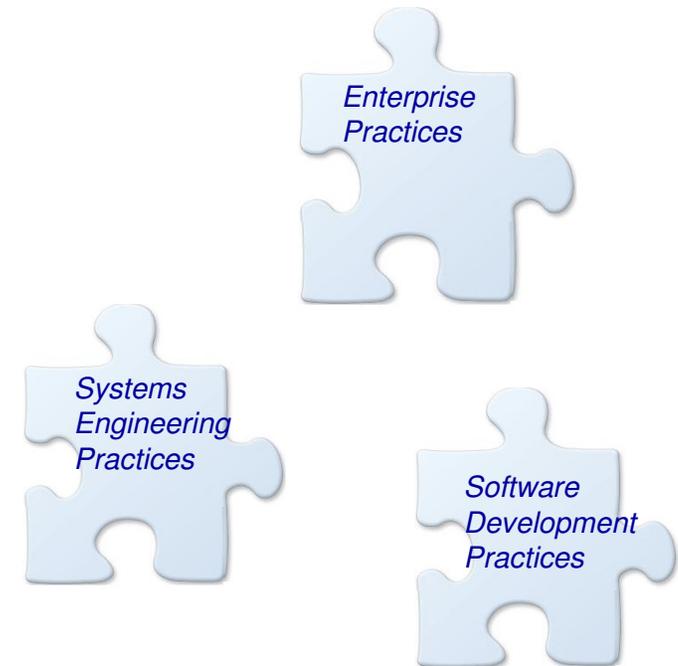
Tooling

- Author
- Manage
- Re-use
- Configure
- Tailor
- Publish
- Reporting
- Deploy
- Estimate

What is a Practice?

Guidance for software and systems development, management, governance, and more

- A practice is an approach to solving one or several commonly occurring problems
 - ▶ Practices are intended as "chunks" of process for adoption, enablement, and configuration
 - ▶ Address one aspect of the development process that can span disciplines/domains.
- Practices apply the concepts of “components” or “services” to process management
 - ▶ Include associated tool guidance
 - ▶ Include recommended metrics to assess practice adoption (process metrics) and project status (product/project metrics)
- Practices enable a compositional approach to building methods with the following benefits:
 - ▶ Adaptability and scalability
 - ▶ Mapped to operational objectives
 - ▶ Incremental adoption
 - ▶ Easy to configure and use
 - ▶ Enable community development



Results:

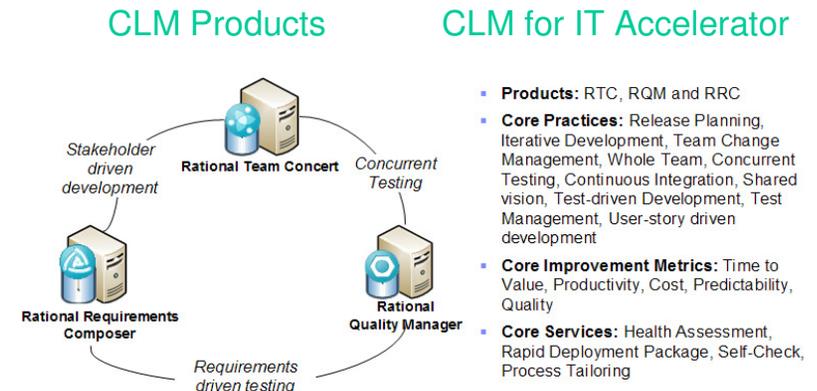
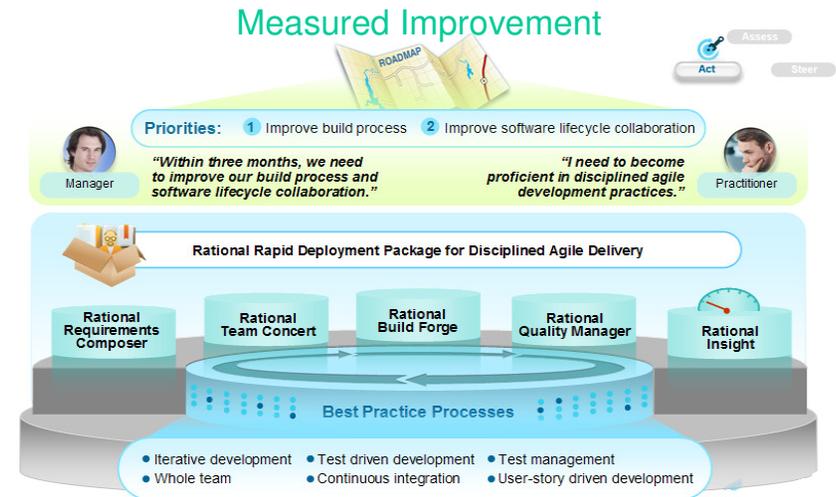
- ✓ Avoids self-inflicting too much process
- ✓ Faster and more predictable results
- ✓ Measured Improvement

Why are Practices Important?

- Practices are a key component of measured improvement
 - ▶ They represent the “unit of adoption” for incremental improvement
 - ▶ They embody the guidance for team members to adopt proven methods
 - ▶ Include recommended metrics to assess process adoption (process metrics) and project status (project/product metrics)

- Practices are a key component of Solutions
 - ▶ Practices provide “the glue” for full-lifecycle, cross-product, cross-role project execution
 - ▶ Along with scenarios, practices are a driver for product integration requirements

- Practices can make our clients more successful with our tools
 - ▶ They include recommended measurements/metrics
 - ▶ They provide guidance on how to use our tools together to enact practices





Architecture

- Component Based Software Architecture
- Evolutionary Architecture
- Service Identification
- Service Realization
- Service Specification

Configuration & Change Mgmt

- Formal Change Management
- Team Change Management

Deployment

- Deployment Management
- Developing User Support and Training

Development

- Continuous Integration
- Data Design
- Design Driven Implementation
- Evolutionary Design
- Staged Integration
- Test Driven Development

Environment

- Project Process Tailoring
- Reviews

Project Management

- Iterative Development
- Release Planning
- Risk Management
- Risk-Value Lifecycle
- Whole Team

Requirements

- Business Process Sketching
- Requirements Management
- Shared Vision
- Use Case Driven Development
- User Story-Driven Development

Testing

- Application Vulnerability Assessment
- Concurrent Testing
- Independent Testing
- Performance Testing
- Test Management

Business Rules Development

- Agile Business Rule Development



Systems Architecture

- Architectural Analysis - Key System Functions
- Architectural Analysis - Operation Based
- Architectural Design - Operation Based
- Architectural Design - Use-Case Based

Systems Requirements

- Build and Validate Use Cases
- Detailed Use-Case Requirements Analysis
- Elaborate Draft System Requirements Specification
- Joint Realization
- Trade Study - Weighted Objectives Method



Software Capability Improvement

- Method Development
- Software Capability Program Management
- Adoption Through Execution
- Setting up a Performance Measurement System
- Managing Performance through Measurements

Asset-Based Development/

Asset-Based Development Governance

Application Modernization Strategy

Product Portfolio Management

Use Case Driven Business Modeling

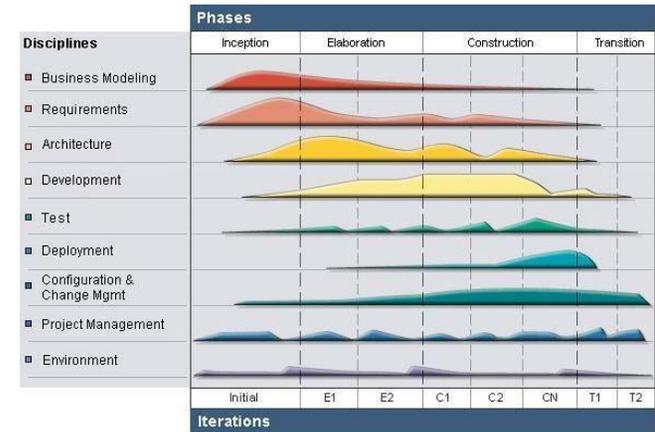
Software Development Configurations



Disciplined Agile Delivery



Agility@Scale



Rational Unified Process

Plus other configurations for Software Development, Systems Engineering, and Enterprise process areas.

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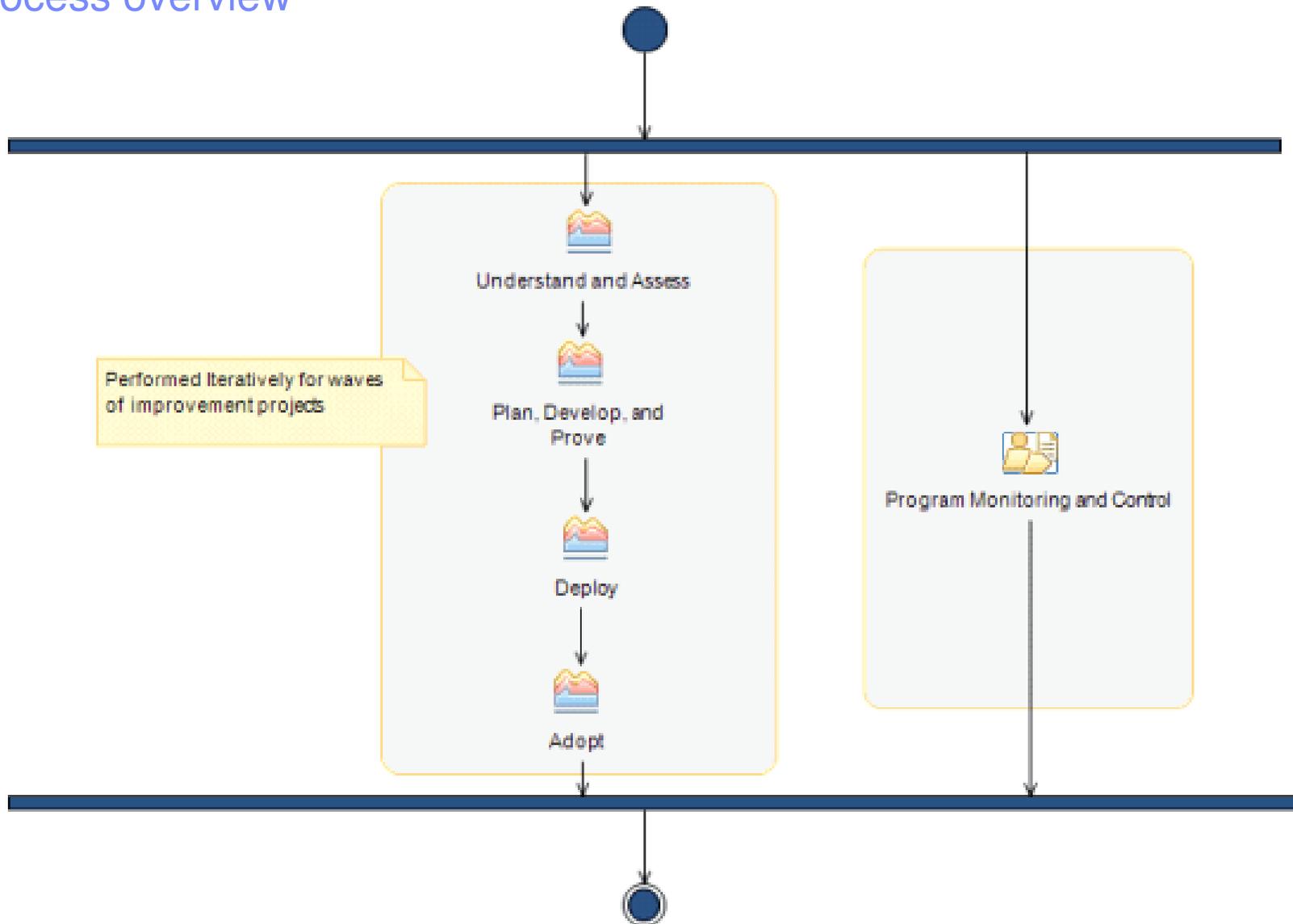
Practices for Software Capability Improvement

- Software Capability Program Management
 - ▶ provides a standard approach for managing software capability improvement that is aligned with the organization's strategic goals
- Method Development
 - ▶ how to develop, implement, and deploy enterprise methods and tools
- Adoption Through Execution
 - ▶ helps an organization develop a mentoring program in order to drive successful adoption of capability improvements

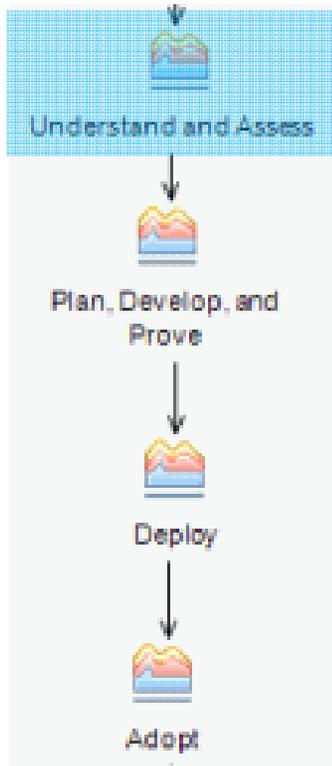
Related practices:

- Setting Up a Performance Measurement System
- Managing Performance Through Measurements
- Project Process Tailoring

Process overview



Understand and Assess



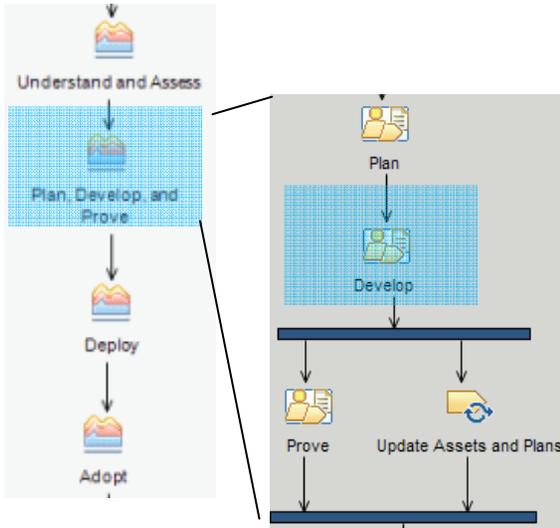
Overview:

- Understand your current state and drivers for improvements
 - ▶ Define measures of success
- Identify improvements and prioritize
- Get buy-in from stakeholders
- Create a roadmap for reaching objectives.

Main elements:

- Role: Process manager
- Work product: Organization assessment:
- Task: Assess the organization

Method Authoring

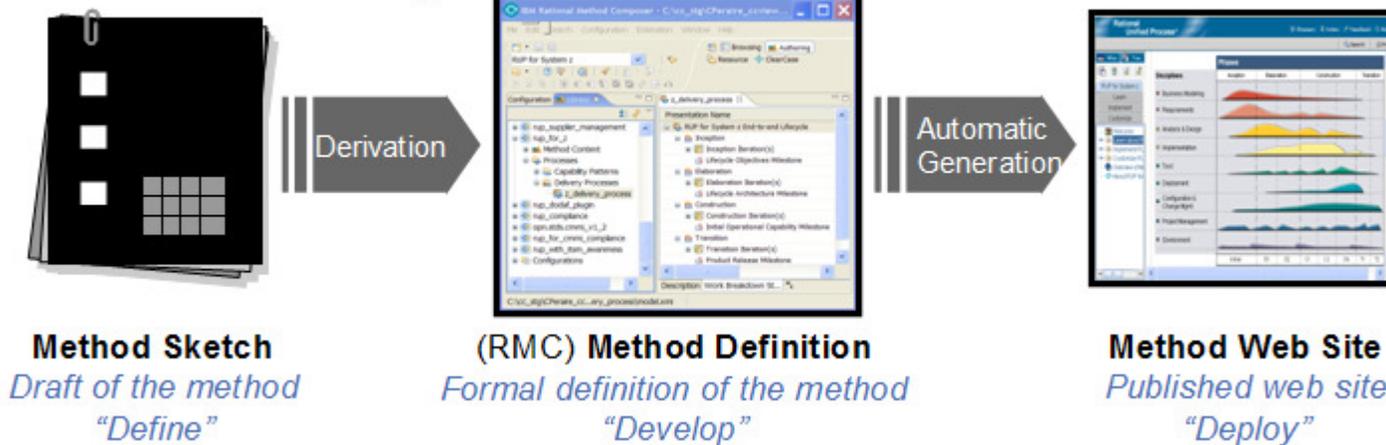


- ▶ Develop method assets and user guidelines

- ▶ Select, acquire, and configure tools

- ▶ Develop mentors

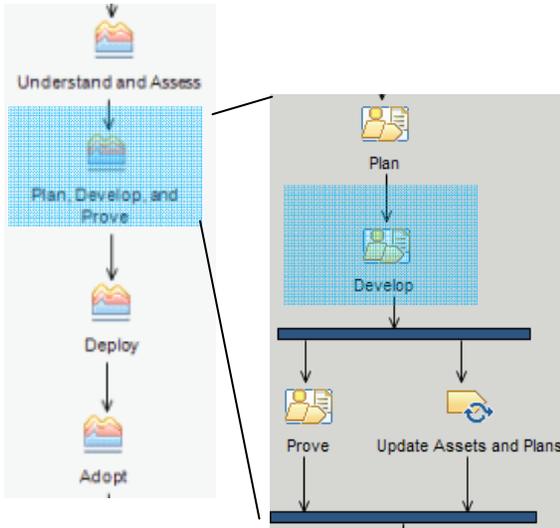
Method authoring



Methods: Build vs. Buy Decision

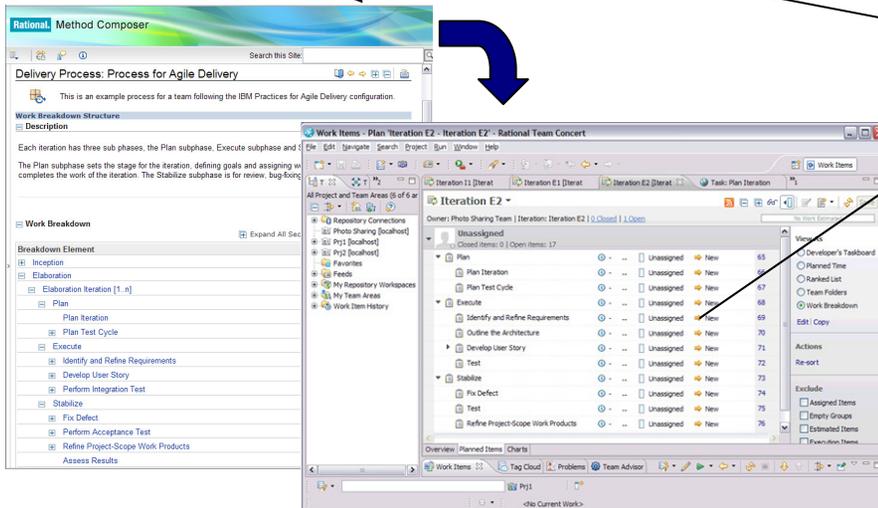
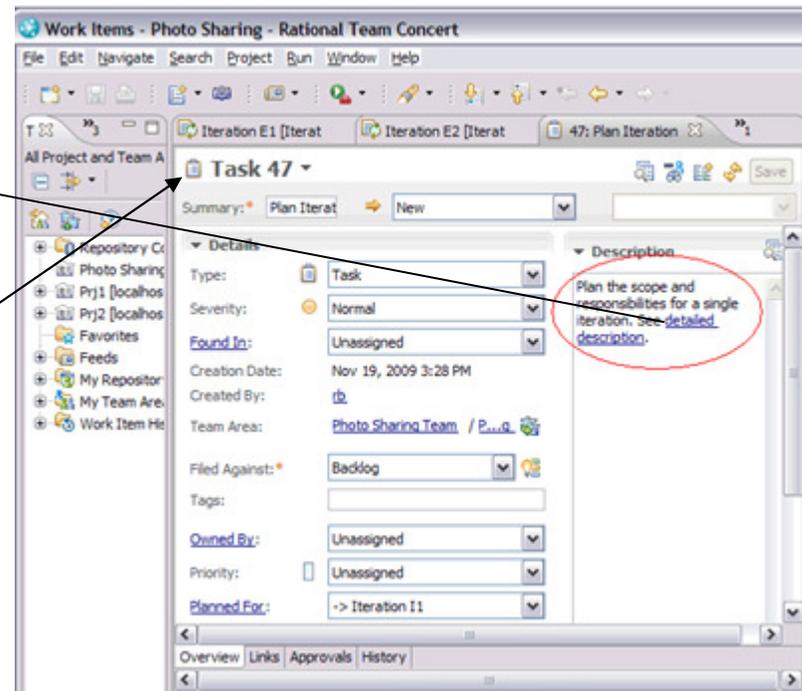
- When a company decides to build its own process it is:
 - ▶ an extended period between when the decision is made and the process is ready
 - the longer a project goes without demonstratable results, the more likely it is to be stopped
 - ▶ an uphill battle to get stakeholders to accept every aspect of the process
 - ▶ lacking additional documentation, training materials, and experts already knowledgeable about the process
 - ▶ difficult to be unbiased about how well the process is understood and adopted and what the root cause of those associated issues are
- When a company uses existing methods:
 - ▶ the process can receive some initial customization very quickly... and be piloted on projects to enable further customization through real field use and demonstrate success and value... which gives credibility to the project and helps ensure funding isn't cut
 - the value of process is in the successful implementation of it, not in having created it
 - those who would have defined the homegrown process can now instead help others execute
 - ▶ it provides an established and proven process that reduces “will it work” discussions
 - ▶ mitigates defensive postures caused by feeling of ownership and pride found in a homegrown process; as a result the adoption team often partners better with projects
 - ▶ it benefits from the scores of books and whitepapers, evolved and proven training materials, and an existing community of established and credentialed practitioners

Method Authoring

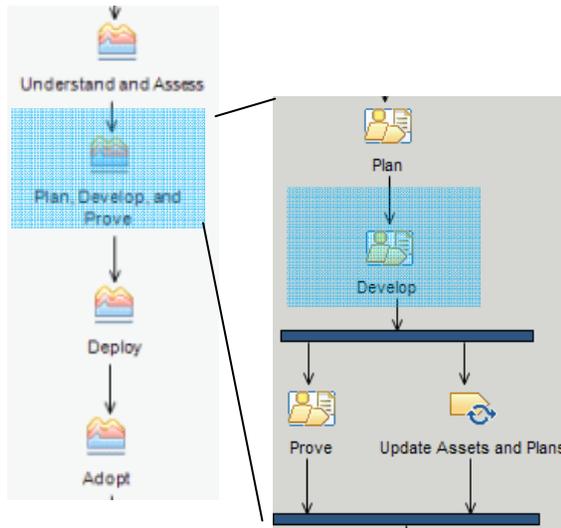


- ▶ Develop method assets and user guidelines
- ▶ Select, acquire, and configure tools
- ▶ Develop mentors

- Configure tools and process to fit
- Process/tool integration increases productivity
- IBM accelerators are complete process/tool solutions



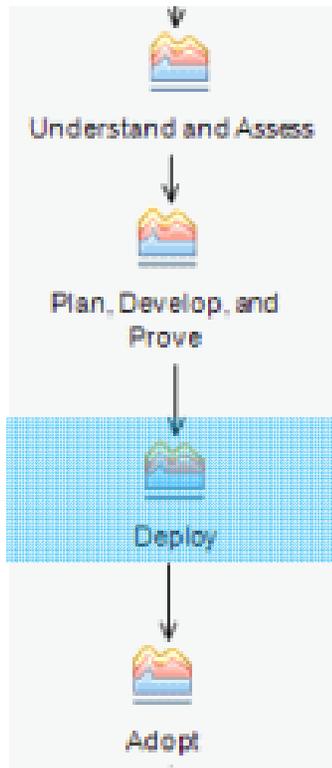
Method Authoring



- ▶ Develop method assets and user guidelines
- ▶ Select, acquire, and configure tools
- ▶ Develop mentors

- Mentor by *centers of capability*
- Identify candidates
- Train /additionally mentor as needed

Deploy



Overview:

- Includes both process and tools
- Validate readiness to deploy
- Roll out process and tools
- Communicate and train.

Adopt



Overview:

- Pilot projects
- Train and mentor
- Assess results
- Identify new mentors

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Work Product States

- Ability to define possible states for each work product.
- Ability to assign states to input and output work products for each task descriptor.
- Ability to view input and output states on Activity Detail Diagrams and Task Descriptor Pages

The screenshot displays two main windows from the IBM Rational software interface:

- Work Product (Artifact): artifact1**: This window allows defining states for a specific work product. It features a list of states (Approved, Draft, Peer_Reviewed) and a 'States available from all method plug-ins in the library' section. A 'States' dialog box is open, showing a list of states with 'Assign State' and 'Unassign' buttons.
- Task Descriptor : review_artifact_1**: This window shows the configuration for a task descriptor. It includes sections for 'Work Products', 'Mandatory Input', and 'Optional Input'. The 'Work Products' section shows 'Artifact_1 [Draft]' as an input. The 'Assign State' button is highlighted with a red box.

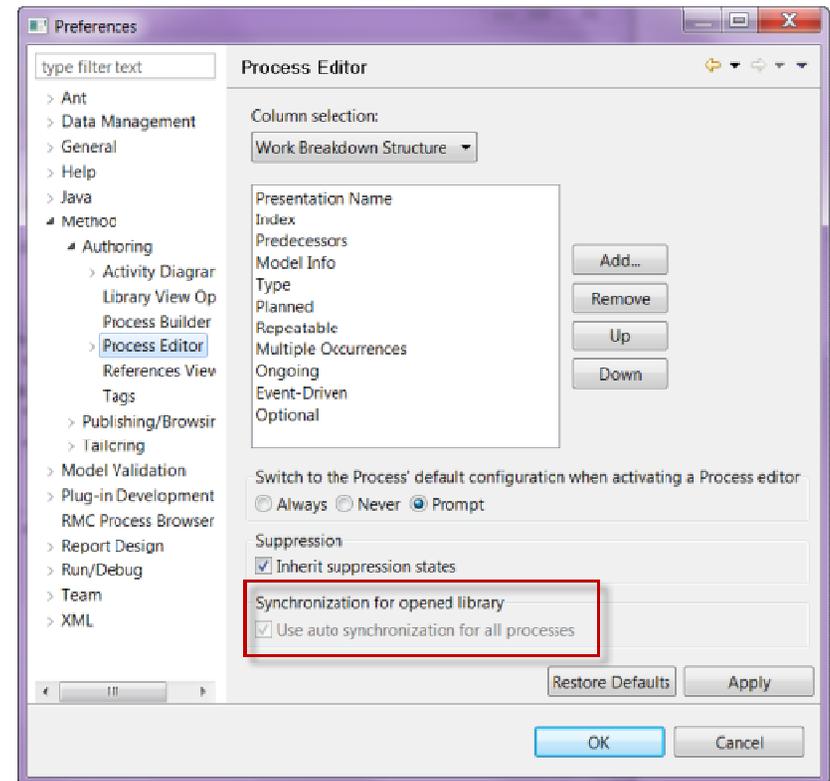
Below these windows, a workflow diagram is visible, showing a sequence of activities: 'Artifact_1 Creator' leads to 'Create Artifact_1', which produces 'Artifact_1 [Draft]'. This artifact is then used as input for 'Artifact_1 Reviewer', which leads to 'Review Artifact_1', producing 'Artifact_1 [Peer_Reviewed]'.

This screenshot shows the 'Task: Review Artifact 2' page, detailing its relationships and properties:

- Relationships**:
 - Roles**: Primary: Artifact_2 Reviewer, Additional: (empty), Assisting: (empty)
 - Inputs**: Mandatory: Artifact_2 [Draft], Optional: None, External: None
 - Outputs**: Artifact_2 [Peer_Reviewed]
- Properties**:
 - Predecessor**: Create Artifact_2

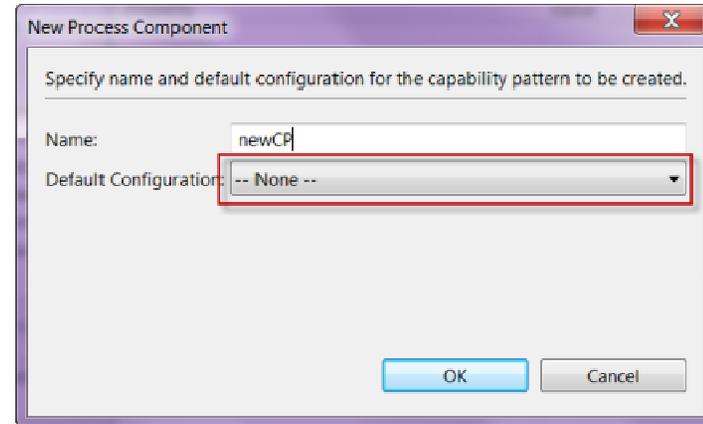
Improved Synchronization of Method Content and Process

- Previously, for CPs/Activities that had task descriptors as children, one needed to do a manual synch if the task was updated.
- New preference added to use “Auto-Synchronized Process”.
- When enabled, descriptors use links to method content vs. copies that need to be synchronized.
- Local tailoring of descriptors still supported.
- If this option is selected, the current library will be backed-up and converted to the required format to support this feature.
- There is no way to convert the library back to the old format. (and you probably will not ever want to go back!)



Configuration Free Process

- When creating capability patterns there is a new option to select `-none-` for the default configuration.
- Removes the need to define a default configuration for each CP
- Removes constraint that CPs can only be used in the default configuration or a configuration that is a superset of the default configuration
- Contents of the CP are computed and displayed at realization time (Browsing or Publishing) based on the selected configuration



Presentation Name	In...	Predecessors	Model Info	Type	Plann...	Repe...	Multi...	Ongo...	Event
newCP	0			Capabilit...	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Create Artifact_1	1			Task Des...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Review Artifact_1	2			Task Des...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Create Artifact_2	3			Task Des...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Review Artifact_2	4			Task Des...	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Capability Pattern: newCP

Description Work Breakdown Structure Team Allocation Work Product Usage

Work Breakdown

Breakdown Element	Steps	Index	Predecessors	Model Info	Type	Planned	Repeatable	Multiple Occurrence
Create Artifact_1		1			Task			
Review Artifact_1		2			Task			
Create Artifact_2		3			Task			
Review Artifact_2		4			Task			

Capability Pattern: newCP

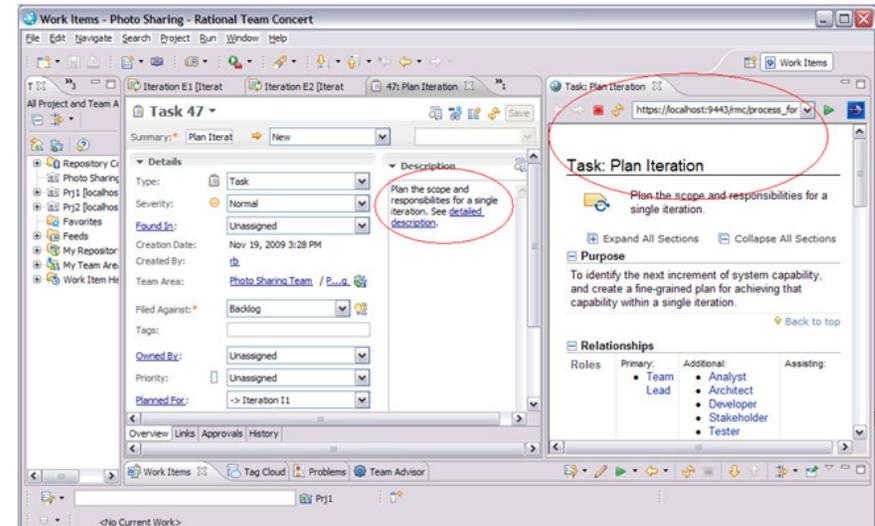
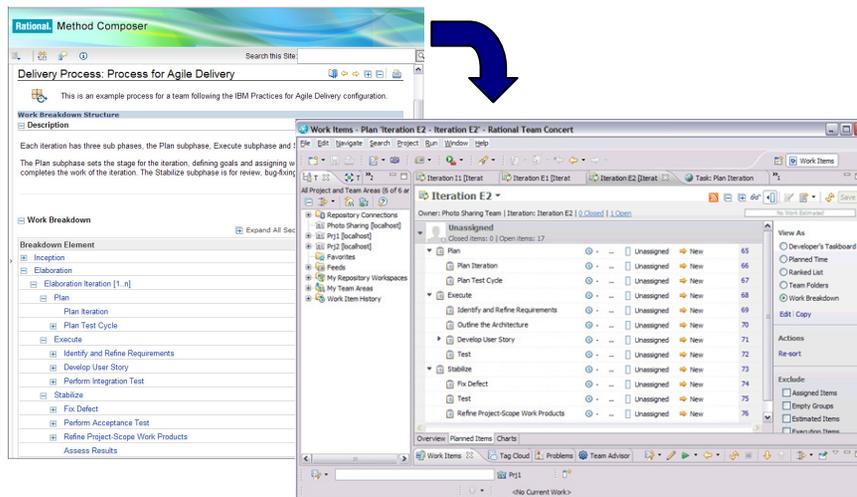
Description Work Breakdown Structure Team Allocation Work Product Usage

Work Breakdown

Breakdown Element	Steps	Index	Predecessors	Model Info	Type	Planned	Repeatable	Multiple Occurrence
Create Artifact_2		1			Task			
Review Artifact_2		2			Task			

Integration, Export and Import

- Support Synergy/Change integration
 - ▶ One issue identified. Plan to release note this issue and provide fix in RMC 7.5.1 ifix1
- Export RMC practices to Jazz process authoring
- Import Jazz Process authoring practices into RMC library
- Export RMC WBS to Jazz RTC work item templates
- Upgrade RAM Eclipse client integration to RAM 7.5.0.0 (bundled with RMC)
- Support CCRC 7.1.2
- Support CC SCM 7.5.0
- Shell sharing with RTC 3.0

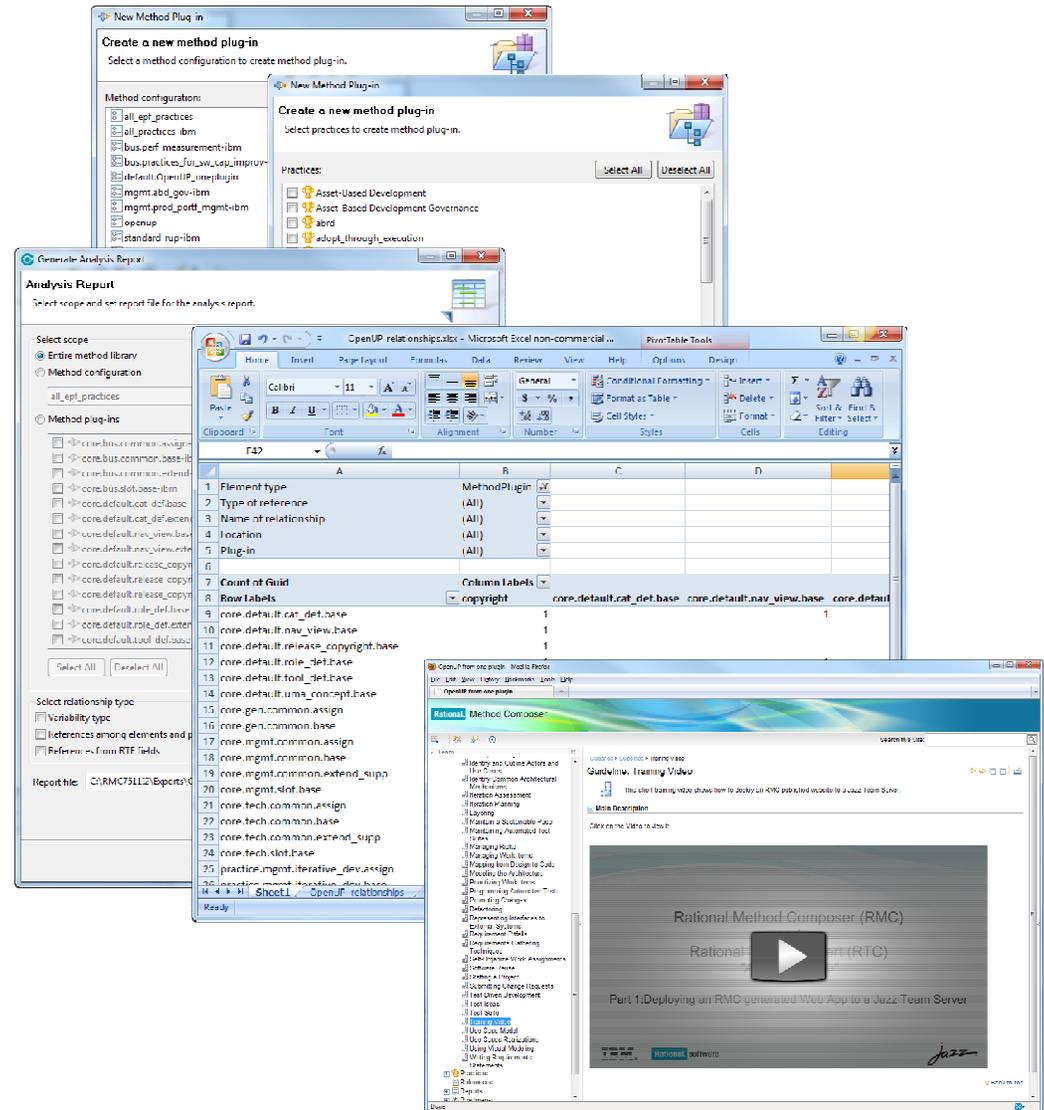




Rational Method Composer 7.5.1.1

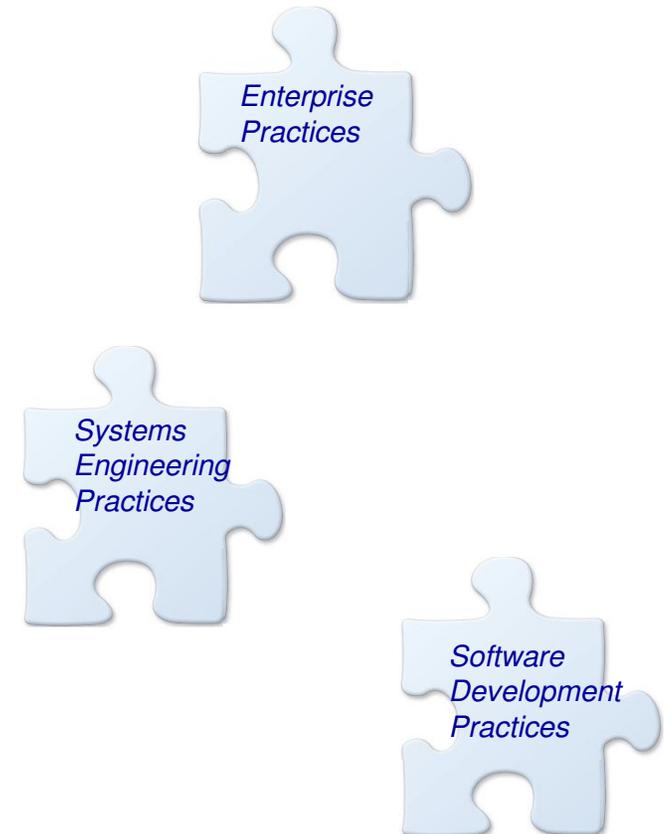
Simplified tailoring, relationship reports, rich content and work item export

- Create a single plug-in based on a method configuration and/or selection of practices to simplify tailoring by non-experts.
- New CSV report that supports impact analysis and analysis of changes
- Improved element move across plugins that simplifies library management
- Enhanced work item template export that bridges the gap for enactment with RTC
- Ability to incorporate multi-media content and javascript in published pages



New and updated RMC content

- Major content themes:
 - Support for CLM for IT, CLM for Systems, and Disciplined Agile Delivery
 - New RUP configuration based on practices
 - Additional support for measured improvement
 - Support for CMMI planning and implementation
- New Enterprise Practices
 - Adoption through Execution; Asset-Based Development & Governance; Software Capability Program Management & Method Development
- New Software Delivery Practices
 - Data Design; Deployment Management; Developing User Support and Training; Project Process Tailoring; Reviews; Risk Management; Staged Integration
- Incorporation and updates to content previously released as separate downloads
 - Systems Engineering Practices; Service Oriented Modeling and Architecture; User Story Driven Development; Performance Measurement; Product Portfolio Management
- New and updated RTC process templates
- Updated Tool Mentors for IBM Rational Tools.



Agenda

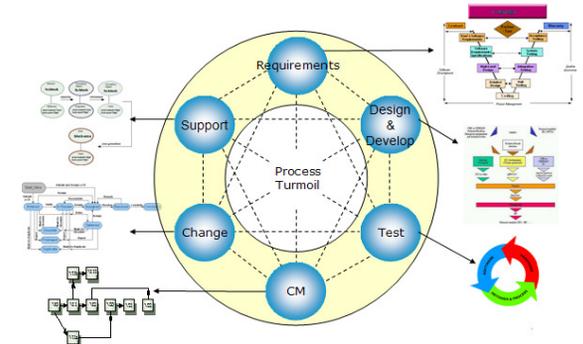
- What is Software Capability Improvement?
- Why is Software Capability Improvement important?
- IBM's Solution for Software Capability Improvement
 - ▶ IBM Rational Method Composer Tooling
 - ▶ IBM Rational Method Composer Content
- Practices for Software Capability Improvement
- What's New in RMC 7.5.1
- Process & Practice Vision, Strategy and Roadmap
- Related Assets

Process & Practice Vision

Cross-tool, Cross-role, full-lifecycle, right-sized, executable process

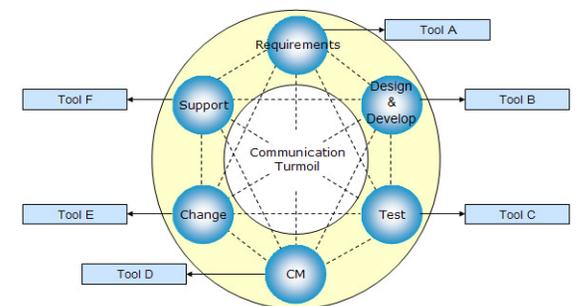
■ Eliminate process silos

- ▶ A common notion of process and practices that span the entire lifecycle
- ▶ Process management capabilities that make it easy to compose, tailor and deploy right-sized, executable processes based on operational needs.
- ▶ Rich library of proven practices that can be independently and incrementally adopted to deliver measured improvement.
- ▶ Unified process and project management



■ Eliminate tool silos

- ▶ Tools that are process aware and whose behavior is configurable via practice/process selection
- ▶ Cross-product process capabilities/orchestration driven by the selected process and practices
- ▶ Integrated (sets of) products that are developed and tested together based on specific client scenarios and processes/practices



■ Integrate Process & Tools

- ▶ Achieve the “20% Productivity Increase”

Process & Practice Vision

Cross-tool, Cross-role, full-lifecycle, right-sized, executable process

- Assess
 - ▶ Select practices based on operational objectives and project characteristics
- Act (Products/Accelerators)
 - ▶ Instantiate Lifecycle Projects based on selected practices
 - Automated tool configuration and project initialization based on selected process & practices
 - Plan and work item templates created based selected process & practices
 - ▶ Execute Project
 - Instantiate plans and work items based on process templates
 - Provide in-context Guidance, safety nets, workflow orchestration, and process & practice advisors for consistent, simplified project execution
 - Empower teams to make process & practice improvements based on lessons learned
- Steer
 - ▶ Pre-defined reports and dashboards to assess project, product and process status
 - ▶ Harvest process/practice improvements from the Teams that are executing the process

Process Strategy

Enhanced Jazz Team Server Process Capabilities

- Incrementally deliver new/enhanced Jazz Foundation process management capabilities that unify *process documentation* and *process specifications*
 - ▶ Leverage Rational Method Composer *process documentation* capabilities and concepts
 - RMC provides powerful capabilities for capturing, communicating and maintaining **human readable** *process documentation* to simplify knowledge transfer, on-boarding new team members and ensuring consistency across teams.
 - ▶ Leverage Rational Team Concert *process specification* capabilities and concepts
 - RTC provides powerful capabilities for process enactment and process automation via **machine readable** *process specifications*
- Incrementally adopt new/enhanced JTS process management capabilities in new and/or existing Rational products
- Leverage existing RMC content and incrementally incorporate executable process aspects to provide a higher value process asset library
- Ensure interoperability between RMC and new/enhanced JTS capabilities to preserve investments in RMC content
- Evolve Jazz-based process capabilities over time to subsume RMC capabilities.
- Provide a migration path to new enterprise process management and team process capabilities for current RMC/RUP/EPF users

Agenda

- What is Software Capability Improvement?
- Why is Software Capability Improvement important?
- IBM's Solution for Software Capability Improvement
 - ▶ IBM Rational Method Composer Tooling
 - ▶ IBM Rational Method Composer Content
- Practices for Software Capability Improvement
- What's New in RMC 7.5.1
- Process & Practice Vision, Strategy and Roadmap
- Related Assets

RMC Integrations

- Perform version control on RMC libraries
 - ▶ Integrates with **ClearCase, Synergy, Subversion, or CVS**
- Model your business then jump start your process definition or Analyze your process definition via business modeling
 - ▶ Integrates with **WebSphere Business Modeler**
- Jump start project plans using a project template generated from your process
 - ▶ Integrates with **Rational Team Concert** and **MS Project**
- Estimate project effort using your process
 - ▶ Integrates via MS Project to: **SEER** by Galorath, **SLIM** by QSM
- Easily find what new / updated methods are available and manage your process assets like other IT assets
 - ▶ Integrates with **Rational Asset Manager**
- Enact your process
 - ▶ Instantiate **project templates** based on WBS/Processes from RMC

Additional IBM offerings

- Courses and Workshops:
 - ▶ RMC and RUP Courses
 - ▶ Disciplined Agile Delivery (DAD) Workshop
 - ▶ DAD Self-paced Online Course

- Measured Improvement assets and services
 - ▶ Executive Business Value Workshop
 - ▶ Health Assessment
 - ▶ Quick Diagnostics
 - ▶ Self-Check

- Solutions for
 - ▶ Application Lifecycle Management
 - ▶ Strategic Planning
 - ▶ Systems and Embedded Software Development
 - ▶ CMMI compliance

Where to go for more information: RMC DeveloperWorks Group

Go to:

- <https://www.ibm.com/developerworks/mydeveloperworks/groups/service/html/allcommunities> and search keyword “RMC” under public groups

For:

- ▶ Getting started guidance
- ▶ Forums/blogs
- ▶ FAQs / Advanced feature guidance
- ▶ Events
- ▶ Links to:
 - RMC Trial download
 - Additional plug-in downloads
 - Accelerators/solutions
 - Training

developerWorks > Community >

developerWorks: Groups

Public Groups My Groups

Rational Method Composer and Practices

Overview

The mission of the Rational Method Composer and Practices is to provide the tools, methods and best practices for method authoring with Rational Method Composer and Rational Software Development Platform.

- Adopting and deploying methods and practices
- Customizing and reusing content
- Creating new practices and lifecycles by leveraging capabilities

For getting started and advanced guidance on using Rational Method Composer and Rational Software Development Platform, see the following links:

Tags: [method](#), [methodology](#), [practices](#), [process](#), [rmc](#), [rup](#)

Upcoming Events

We have initiated a webinar series in collaboration with SEMAT.

Topic: SEMAT
When: Feb 10, 2011 - 8:00AM PST

[More information here.](#)

QUESTIONS



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Daily iPod Touch giveaway

- Complete your session surveys online each day at a conference kiosk or on your Innovate 2011 Portal!
- Each day that you complete all of that day's session surveys, your name will be entered to win the daily IPOD touch!
- On Wednesday be sure to complete your full conference evaluation to receive your free conference t-shirt!

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