

# An Introduction to IBM Rational Asset Manager

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IBM Rational Software Development Conference 2008

WHERE TEAMS ARE **R-HEROES**



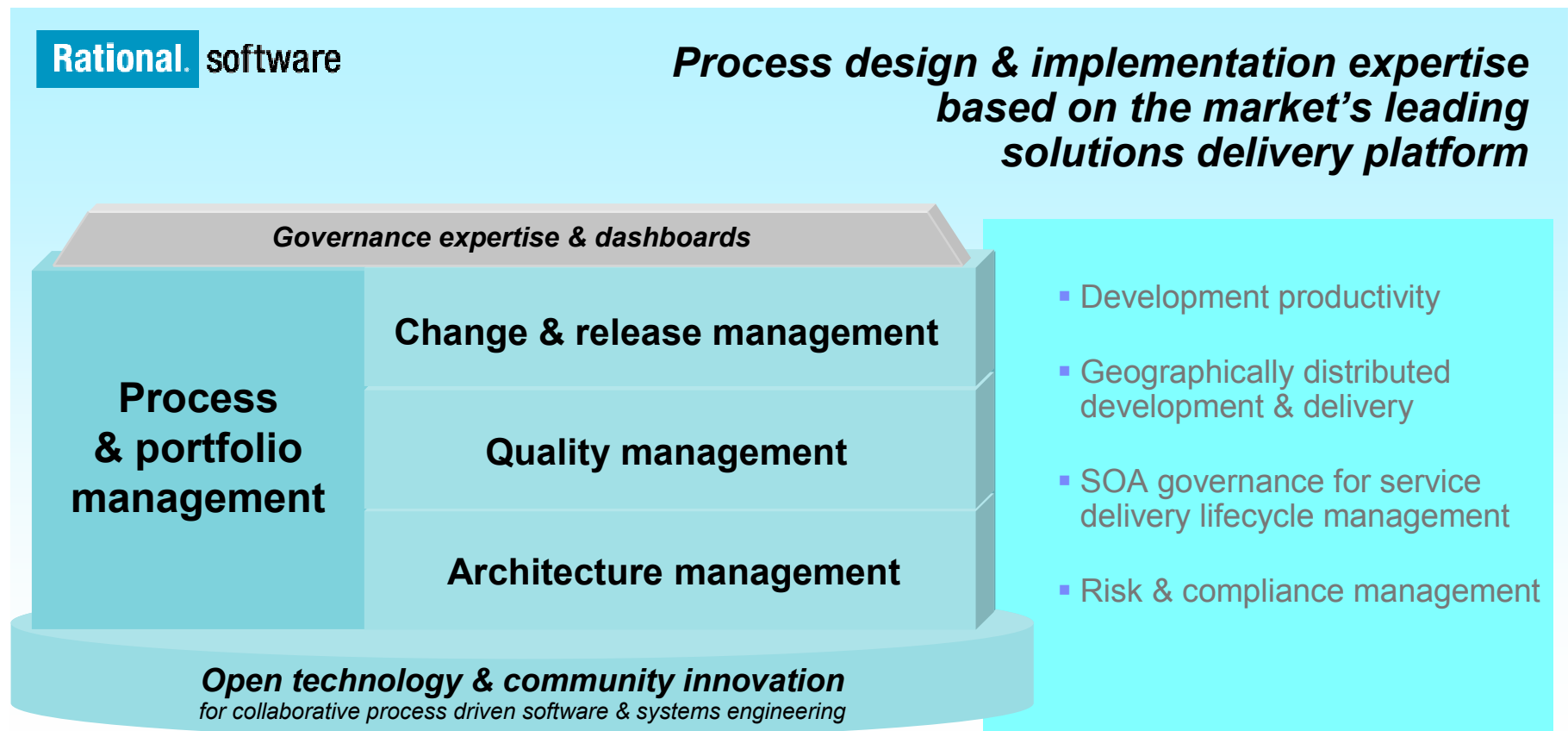
## Agenda

- **IBM Rational Software**
  - ▶ Software Delivery Platform
  
- **Asset Management**
  - ▶ Definition
  - ▶ Challenges
  
- **Introducing IBM Rational Asset Manager**
  
- **Summary**



# IBM Rational Software Delivery Platform

*What we offer*



# Collaborative, Process-Driven Lifecycle Management

## GOVERNANCE DASHBOARD

Process and portfolio management

Architecture management

**Business driven software delivery processes**

Change & release management

Quality management

### Manage value

- Real-time analytics linking financial and software information
- Real-time resource management
- Comprehensive, flexible dashboards monitoring health of projects

### Development flexibility

- Proven best practices
- Integrated requirements & architectural mgmt
- SOA design and construction capabilities
- Open, collaborative role-based team environment

### Control risk and change

- Lifecycle change and asset management
- Built-in audit and status information on projects and assets
- Functional & compliance quality management
- Service-level monitoring

## Agenda

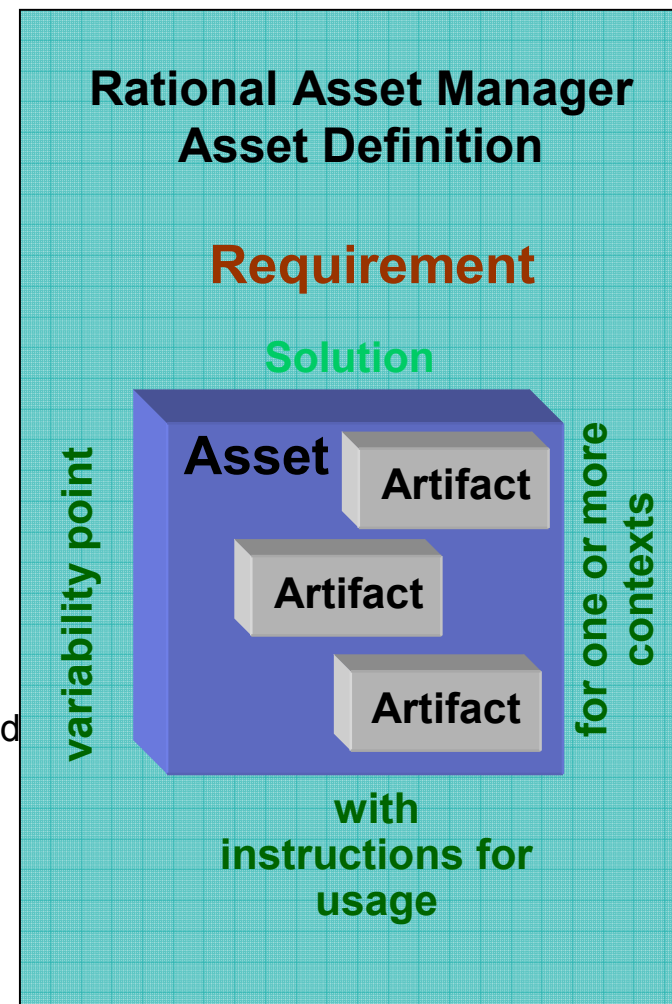
- IBM Rational Software
  - ▶ Software Delivery Platform
  
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- Summary





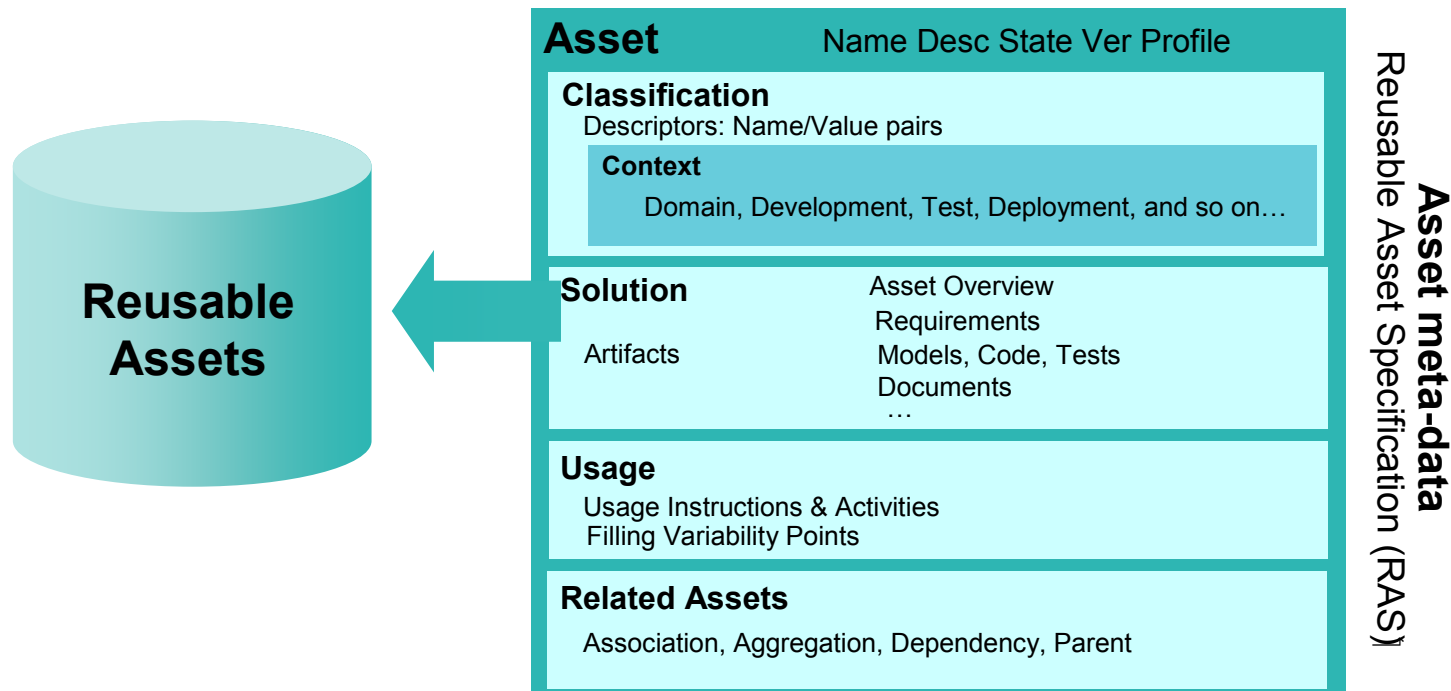
# What is a Software Asset?

- **A Software Asset is**
  - ▶ a collection of Artifacts
  - ▶ which provides a solution to a requirement or business/mission need
    - for one or more contexts
    - with instructions for usage
    - and variability points
- **What are Artifacts?**
  - ▶ Workproducts from the software process
    - Requirements, Designs & Models (including enterprise and systems architecture), Source code, Data, Tests, User Interfaces, Documentation, Service Interfaces, Estimates and so on...
- **Kinds of assets**
  - ▶ Applications, components, patterns, software that runs systems or products, services, frameworks, templates, ...



# What is software asset management?

*Asset warehousing is critical to successful reuse*



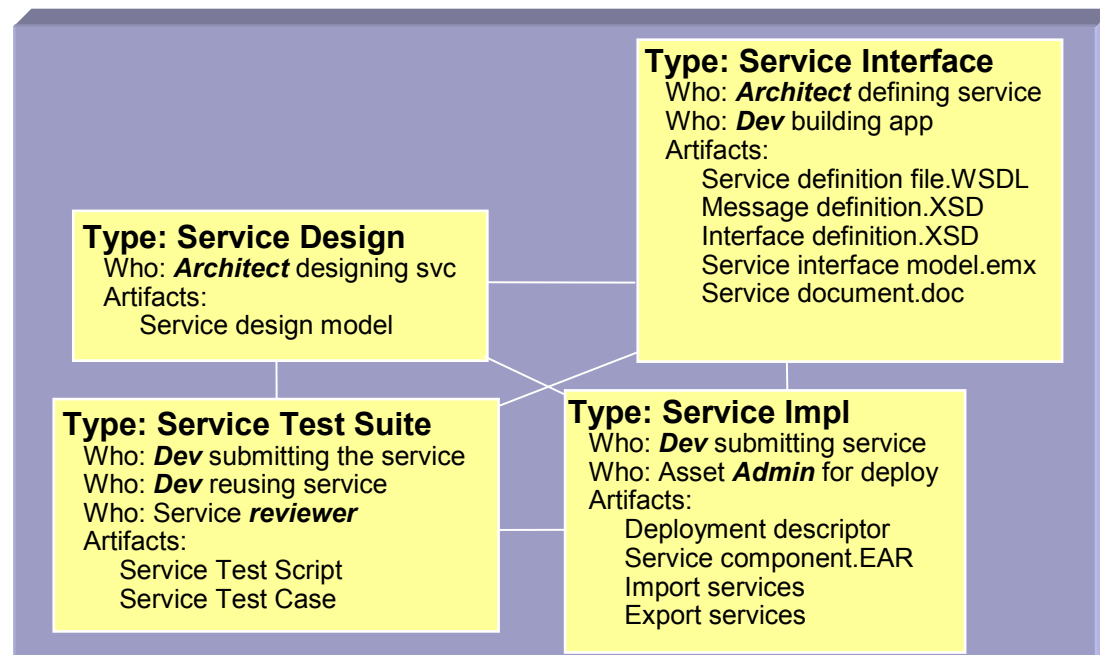
*Software asset management is all of the infrastructure and processes necessary for the effective management, control and protection of the software assets within an organization, throughout all stages of their lifecycle*

Asset Type Example: Services are assets consisting of numerous components; all need to be maintained, traced, and easily located

- ✓ **Asset types can be created to handle any asset**

- ✓ **An asset type specifies:**

- ▶ Type name, description
- ▶ Required artifacts
- ▶ Required relationships
- ▶ Attributes (optional or required)
- ▶ Which categories are allowed



**Example asset types representing a service**

- ✓ **Validation of asset type constraints will be run on asset submission**



# Software Asset Management Challenges

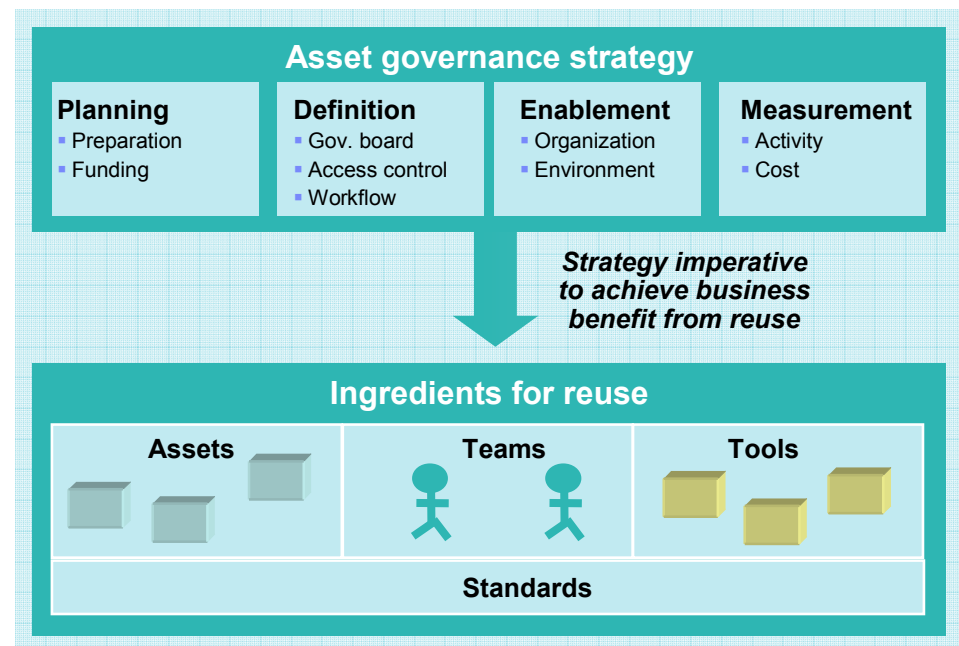
## Business challenges

- ▶ Am I getting the return on my asset investments that I expected?
- ▶ What assets are needed to support the business?
- ▶ Are my development costs decreasing with the reuse initiatives?
- ▶ Am I preventing duplicate efforts?
- ▶ How do we know which assets are benefiting the business?



## IT management challenges

- ▶ How can reusable assets be easily located, and by whom?
- ▶ How do we roll assets into the teams, what enablement is needed?
- ▶ Once assets are constructed, how are they verified?
- ▶ How can assets reuse be enforced?

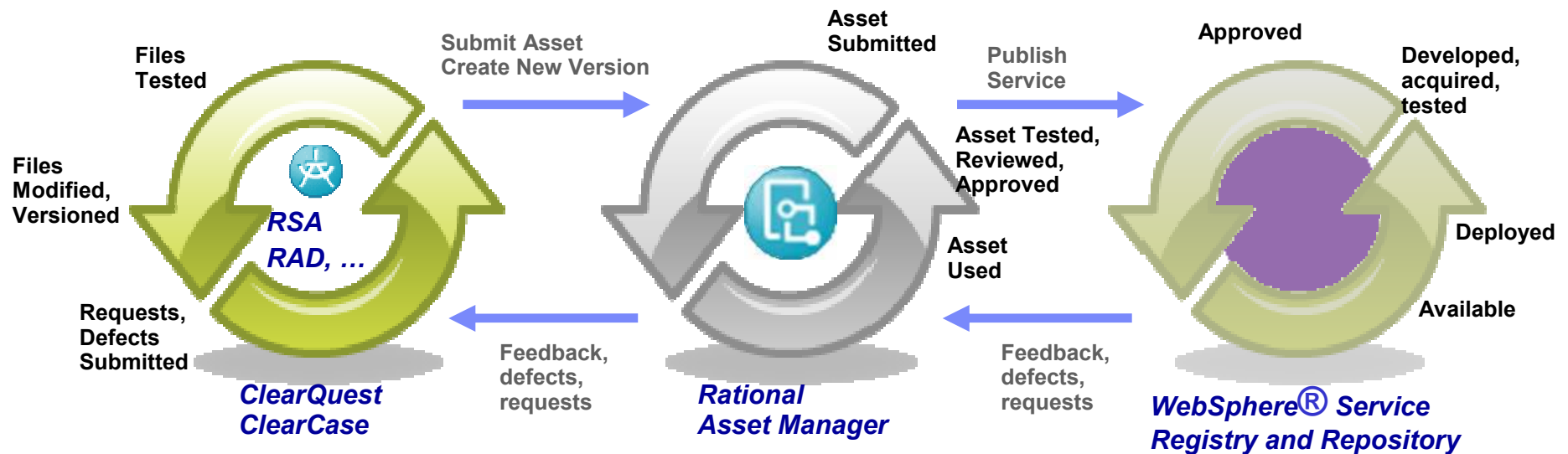


# Development, Asset, & Service Lifecycles

## Development Lifecycle

## Asset Lifecycle

## Service Lifecycle



Use development tools, the Rational Software Delivery Platform, Rational ClearQuest MultiSite®, Rational ClearCase® to iteratively refine files which ultimately can be in a state to be shared, communicated, governed, and traced in Rational Asset Manager

Use Rational Asset Manager to share, communicate, govern, and trace assets and their usage

Use IBM WebSphere Service Registry and Repository to communicate, govern, and trace services and their usage

## Agenda

- IBM Rational Software
  - ▶ Software Delivery Platform
  
- Asset Management
  - ▶ Definition
  - ▶ Challenges
  
- **Introducing IBM Rational Asset Manager**
  
  
- Summary



# Introducing IBM Rational Asset Manager

- **Collaborative asset management** to identify and manage assets & ROI best practices
- **Manages assets** across their lifecycle from design/creation to consumption/change
- **Manages software and service** creation & reuse across projects
- Leverages an extensive library of process **best practices** for asset creation & reuse in Rational Method Composer (ABS, SOA, GDD, etc.)



**Asset Administrator**

**Define**

**Analyst, Developer, Architect Tester**

**Search & Retrieve Assets**

**Analyst, Developer, Architect Tester**

**Create & Modify Assets**

**Project Manager Reviewer Approver**

**Measure**

**Project Manager CIO/CTO**

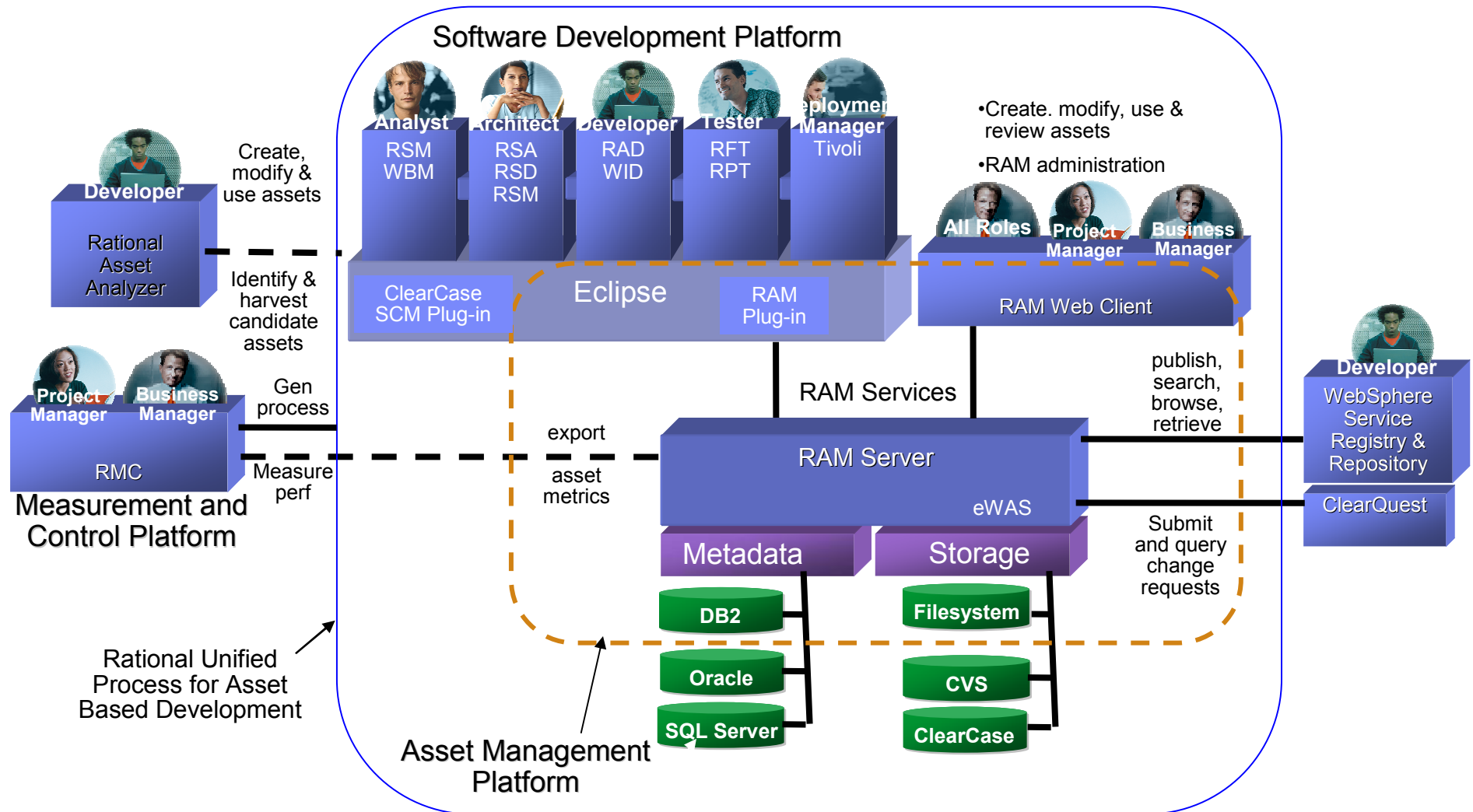
**Govern**



# Rational Asset Manager Overview

- ✓ **RAM is a development time software asset management repository**
  - Uses the Reusable Asset Specification to define, create and modify assets
  - Provides asset type specific search & governance
  - Measures asset reuse in development
- ✓ **Handles any kind of asset**
  - Applications, components, patterns, services, frameworks, templates, ...
- ✓ **Benefits:**
  - Reduce software development and operational costs
  - Improve quality by facilitating the reuse of approved & proven assets
  - Integrated with other Rational and SWG tools

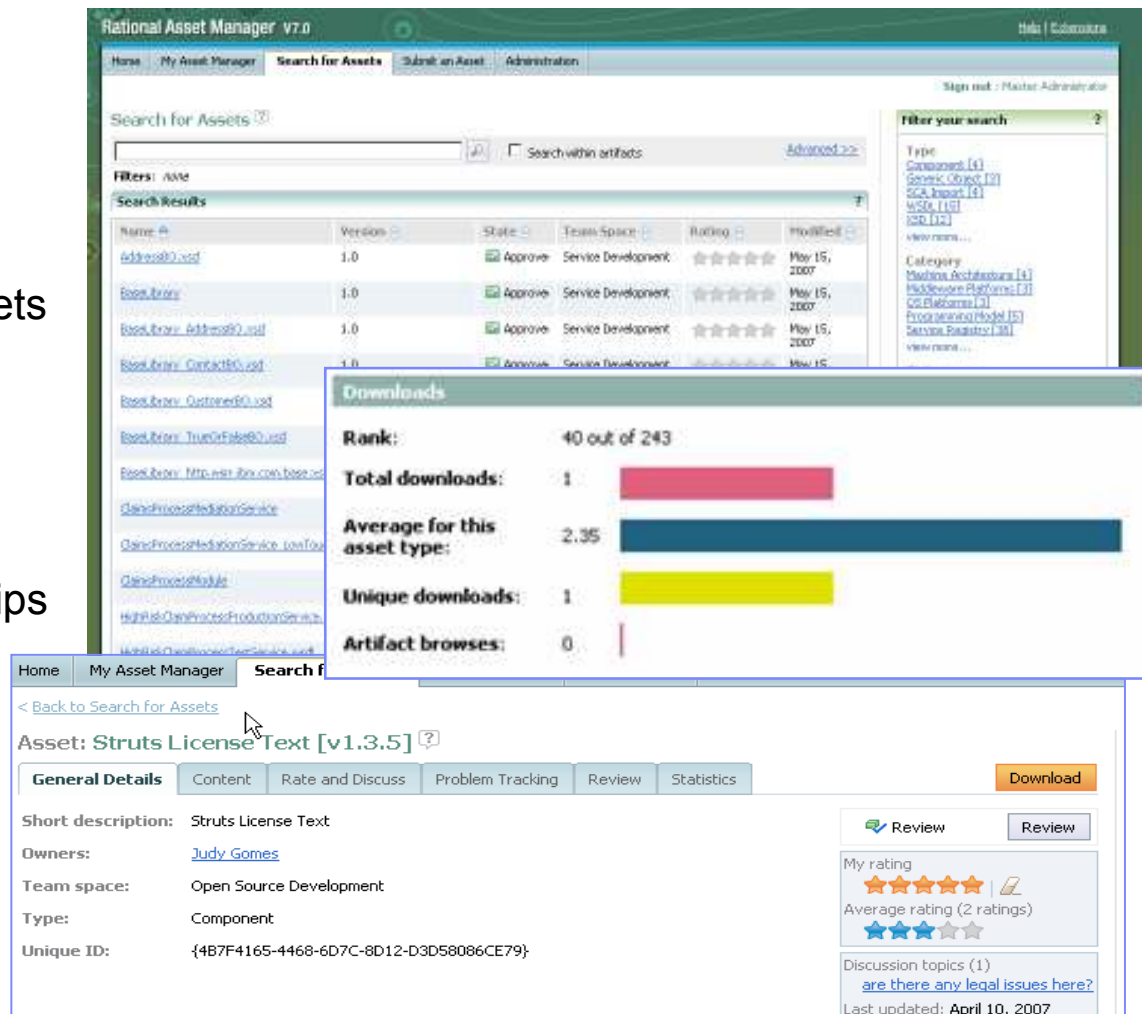
# Rational Asset Manager Architecture





# Increase productivity and enforce architectural integrity

- **Easily locate existing reusable assets**
  - ▶ Search using categories, facets, keywords
  - ▶ Indexed for fast retrieval
  - ▶ Rich client integration inserts assets directly in Eclipse based IDE
- **Create and package assets**
  - ▶ Support reuse of Lifecycle assets which include models, patterns, code, tests and artifact relationships
- **Highlight reusable assets important to the business**
  - ▶ Browse the asset to the artifact level
  - ▶ Ratings, feedback, and statistics help in asset evaluation



# Search and retrieve assets

## Search

- ▶ Search by categories, facets, tags, keywords
- ▶ Indexed for fast retrieval
- ▶ Web-based and Eclipse-based clients

## Retrieve

- ▶ Can browse the asset to the artifact level
- ▶ Ratings, forums, feedback, and statistics help in asset evaluation
- ▶ Download in one click- Web or Rich Client
- ▶ Rich Client integration inserts the asset directly into an Eclipse-based IDE

Home My Asset Manager **Search for Assets** Submit an Asset

Search for Assets ?

Filters: (clear all) Category: Rational Unified Process

Search Results - 6 assets found ?

Name	Version	State	Community	Rating	Modified
Account Management DB	1.0	Approve	Service Development	★★★★☆	Nov 10, 2007
Account Management Service Design	1.0	Approve	Service Development	★★★★☆	Nov 10, 2007
Credit Management Architecture	1.0	Approve	Service Development	★★★★☆	Nov 10, 2007

**Filter your search** ?

**Type**

- Architecture [1]
- Asset Case Study [1]
- Dev Time Policy [7]
- Service Design [2]
- Service Implementation [2]

[View more](#)

**Category**

- Business Domain [8]
- Geography [1]
- Rational Unified Process [10]
- SOA [9]
- Technology\_Software [6]

**State**

- Approved [18]

**Community**

- Repository Con
- Service Analysis
- Service Develop
- Service Testing

**Rating**

- 3 or higher [1]
- 2 or higher [1]
- 1 or higher [1]

**Downloads**

Asset: **Credit Management Architecture [1.0]** ?

General Details Content Ratings Forums Statistics [Download](#)

Short description: Architecture for credit management solutions

Rank: 96 out of 1960

Total downloads: 9

Average for this asset type: 0.77

Unique downloads: 3

Artifact browses: 0

Approved

My rating: ★★★★★

Average rating (2 ratings): ★★★★★

Discussion topics (0)

Last updated: November 10, 2007

**Analyst, Developer, Architect Tester**

**Search & Retrieve Assets**

# Easily Locate existing reusable assets – RAM Web UI

The screenshot shows the RAM Web UI search interface. At the top, there is a search bar with a search icon and a 'Submit an Asset' button. Below the search bar, there are filters and a 'Search Results' table. The table has columns for Name, Version, State, Team Space, Rating, and Modified. The results list various assets like AddressBO.xsd, BaseLibrary, and ClaimsProcessMediationService. On the right side, there is a 'Filter by' section with expandable categories like Type, Category, State, Team space, Rating, and Tags. Callouts point to the search bar, the filters, and the search results table.

**Search by keywords**

**Search on specific meta data elements**

**Search using customizable facets such as asset types, state, teamspaces, categorization**

**Search using custom tags you associate with assets**

Name	Version	State	Team Space	Rating	Modified
<a href="#">AddressBO.xsd</a>	1.0	Approved	Service Development	★★★★★	May 15, 2007
<a href="#">BaseLibrary</a>	1.0	Approved	Service Development	★★★★★	May 15, 2007
<a href="#">BaseLibrary_AddressBO.xsd</a>	1.0	Approved	Service Development	★★★★★	May 15, 2007
<a href="#">BaseLibrary_ContactBO.xsd</a>	1.0	Approved	Service Development	★★★★★	May 15, 2007
<a href="#">BaseLibrary_CustomerBO.xsd</a>	1.0	Approved	Service Development	★★★★★	May 15, 2007
<a href="#">BaseLibrary_TrueOrFalseBO.xsd</a>	1.0	Approved	Service Development	★★★★★	May 15, 2007
<a href="#">BaseLibrary_http.wsrr.ibm.com.base.xsd</a>	1.0	Approved	Service Development	★★★★★	May 15, 2007
<a href="#">ClaimsProcessMediationService</a>	WPSClaimsProcessMediat	Approved	Service Development	★★★★★	May 15, 2007
<a href="#">ClaimsProcessMediationService_LowTouch</a>	WPSClaimsProcessMediat	Approved	Service Development	★★★★★	May 15, 2007
<a href="#">ClaimsProcessModule</a>	WPSClaimsProcessModule	Approved	Service Development	★★★★★	May 15, 2007
<a href="#">HighRiskClaimProcessProductionService.i</a>	1.0	Approved	Service Development	★★★★★	May 15, 2007
<a href="#">HighRiskClaimProcessTestService.wsdl</a>	1.0	Approved	Service Development	★★★★★	May 15, 2007

# Easily Locate existing reusable assets RAM Web UI

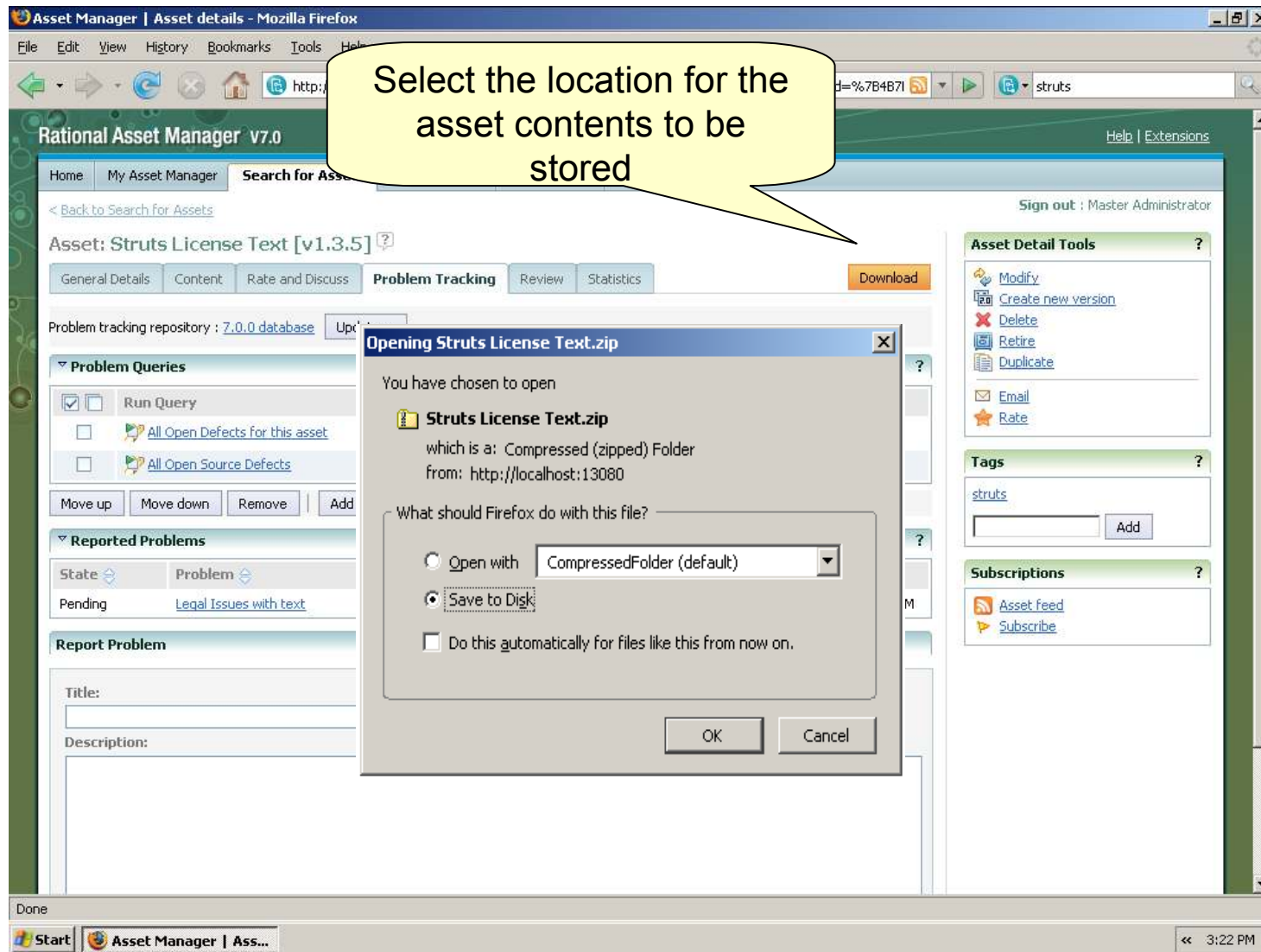
Search criteria can be combined and are (de)selectable

The screenshot displays the Rational Asset Manager v7.0 search interface. At the top, there are navigation tabs: Home, My Asset Manager, Search for Assets (selected), and Submit an Ass... A search bar is present with a search icon and a checkbox for 'Search within artifacts'. Below the search bar, filters are shown: 'Category: Programming Model' and 'Team space: Open Source Development'. The search results are displayed in a table with columns: Name, Version, State, Team Space, Rating, and Modified. A 'Filter your search' sidebar on the right shows various filter options like Java J2EE, Type Component, Related Category, State, and Rating.

Name	Version	State	Team Space	Rating	Modified
<a href="#">Logging Log4j License Text</a>	1.2.14	Plan review	Open Source Development	☆☆☆☆☆	Apr 11, 2007
<a href="#">Struts License Text</a>	1.3.5	Review	Open Source Development	☆☆☆☆☆	Apr 10, 2007
<a href="#">Struts binaries</a>	1.3.5	Plan review	Open Source Development	☆☆☆☆☆	Apr 10, 2007
<a href="#">logging-log4j</a>	1.2.14	Review	Open Source Development	☆☆☆☆☆	Apr 11, 2007

4 assets found

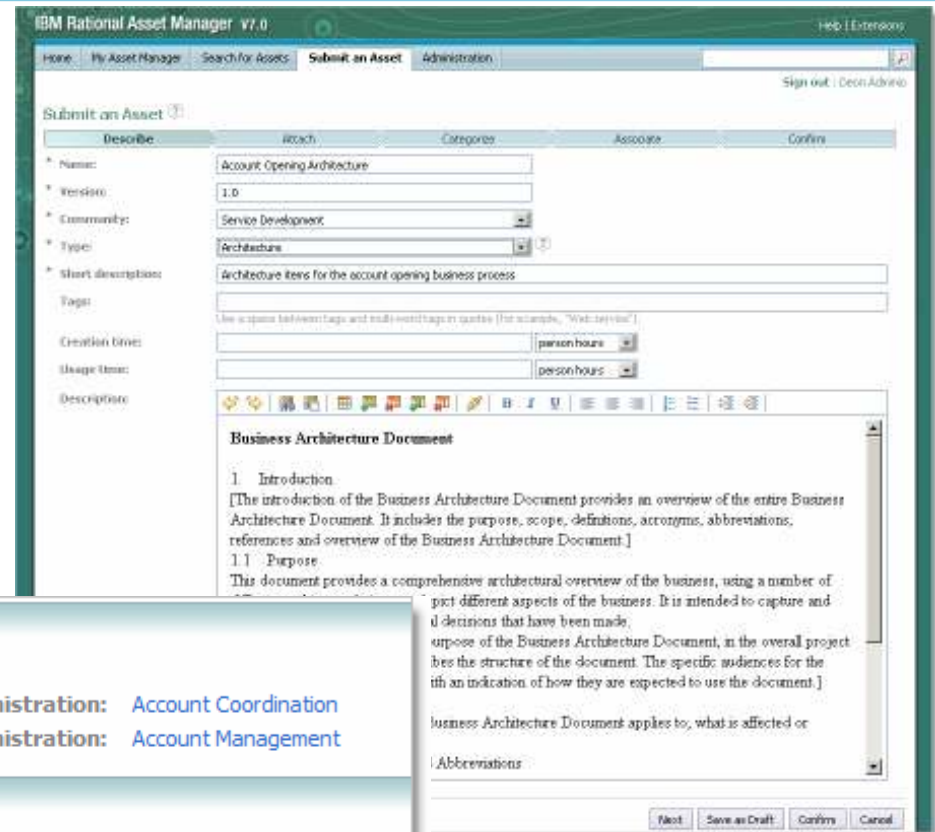
# Retrieve and use an asset – RAM Web UI





# Create and modify assets

- **Support reuse** of Lifecycle assets which include models, patterns, code, tests and artifact relationships
- **Chose** type, categories, relationships and files to upload
- Can specify additional **tags** for searching
- **Wizard** guides the user based on how the asset type is defined
- Industry-standard **RAS** packaging



**Categories**

**Business Domain**

- Business Administration: Account Coordination
- Business Administration: Account Management

**Related Assets**

- Dependent
  - Verify Account to-be Business Process [ V1-0]
  - Account Management Business Process [ V1-0]
- Next version
  - Credit Solutions [version of V1-1]

Submit an Asset ?

Describe    Attach    Categorize    Associate    Confirm

\* Name:

**Analyst,  
Developer,  
Architect Tester**

**Create &  
Modify Assets**



## Create and package assets – RAM Web UI

- Chose type, categories, relationships and files to upload
- Can specify additional tags for searching
- Wizard guides the user based on how the Asset type is defined

Rational Asset Manager v7.0

Home My Asset Manager Search for Assets **Submit an Asset** Administration

Sign out : Master Administrator

Submit "Tax Calc Service Client"

Describe Attach Categorize Associate Confirm

\* Name: Tax Calc Service Client

\* Version: 1.0

\* Team space: Commercial Insurance

\* Type: Service Implementation

\* Short description: Calculates Tax implications for claims

Tags: Use a space between tags and multi-word tags in quotes (e.g. "Web service").

Creation time: + person hours

Usage time: 3 person hours

Description:

Example of Tax implications:

Mentor - Taxation Education  
 Industry & Education  
 Taxation of insurance compensation  
 November 2006 CA (PE-II) paper on I-T and CST

ing on business. His stock and machinery were damaged and  
 k lost (totally damaged) was Rs 6,50,000. A certain portion  
 written-down value (WDV) of the block as on April 1, 2005, was Rs 10,80,000.  
 guarding machinery and in the fire-fighting operations, Mr A lost his gold chain and a  
 and purchased in April 2002 for Rs 1,20,000. The market value of these two items as  
 on the date of the fire accident was Rs 1,80,000.

Mr A received the following amounts from the insurance company: i) towards loss of stock, Rs 4,80,000; ii) towards damage of machinery, Rs 6,00,000; iii) towards gold chain and diamond ring, Rs 1,80,000. You are

Next Save as Draft Confirm Cancel

Fill out asset meta data, select artifacts and "Save as draft"

Description can include rich text, formatting and links

# Submit New assets – RAM Web UI

Rational Asset Manager v7.0 Help | Extensions

Home My Asset Manager Search for Assets **Submit an Asset** Administration

Sign out : Master Administrator

Submit an Asset ?

Describe **Attach** Categorize Associate Confirm

Asset file:   [Preview content](#)

File name:

File size:

**Content Preview** ?

Artifact search    Search within artifacts

Name  Path  Size  Format

0 artifacts found

**Identify Artifacts for asset, categorize asset and identify associated assets**

**Once completed, click Confirm**

IBM © Copyright IBM Corporation 2007. All Rights Reserved. | [Help](#) | [Extensions](#) | [About](#) | [Feeds](#)

# Modify and create new asset versions – RAM Web UI

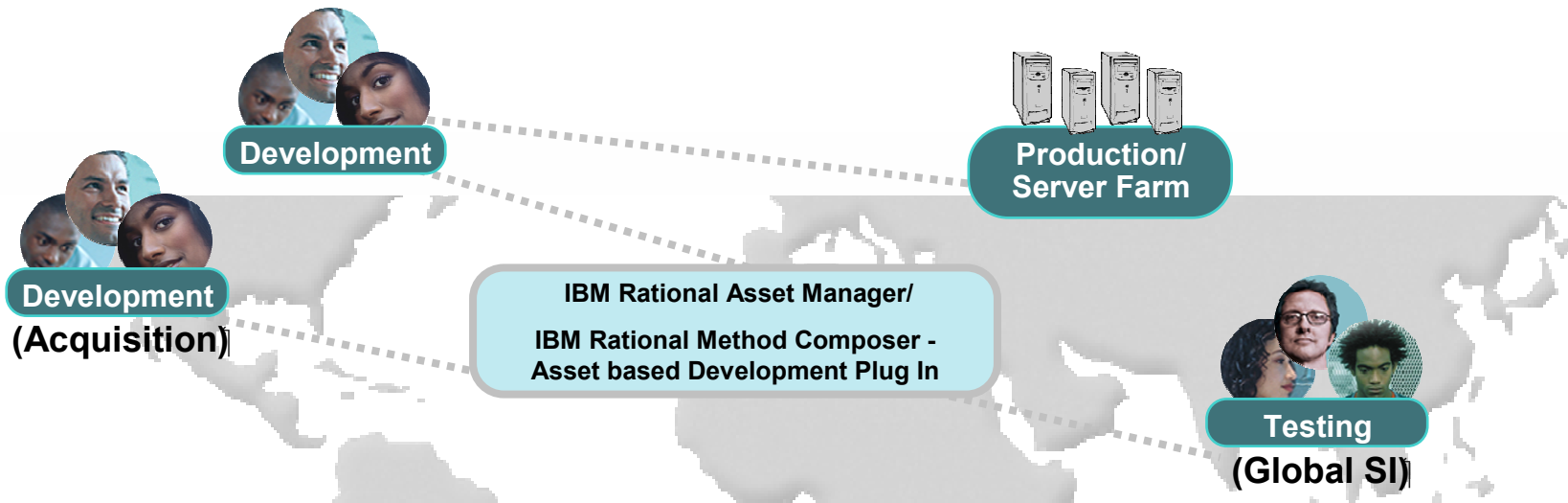
The screenshot displays the Rational Asset Manager v7.0 web interface. The main view shows the details for an asset named "Struts License Text" (version v1.3.5). A yellow callout bubble points to the "Modify" option in the "Asset Detail Tools" panel on the right, with the text "Select the 'Modify' option".

Below the main view, a smaller window titled "Rational Asset Manager v7.0" shows the "Modify 'Struts License Text'" form. A second yellow callout bubble points to the "Version" field in this form, with the text "Enter the new asset version #, update the asset content and other meta data and confirm".

The "Modify" form includes the following fields:

- Name: Struts License Text
- Version: 1.3.5
- Team space: Open Source Development
- Component: Component
- Short description: Struts License Text
- Tags: (empty)
- Creation time: 1

Quickly propagate reusable assets and best practices to prevent release of old versions with improved communication



**Increase development productivity with IBM Rational Asset Manager**

- Extend and share existing application components
- Ensure only approved assets are running
- Ensure that all reusable assets have passed tests in target environments



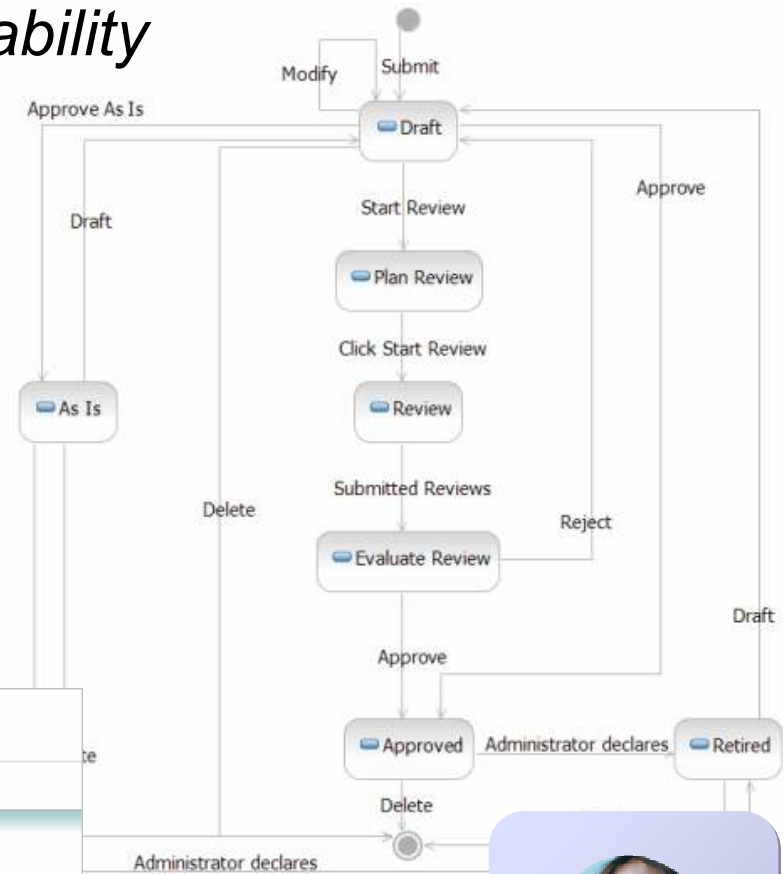
**Business benefits**

- Securely facilitate sharing of information to gain competitive advantage quickly

*Promoting reuse view of RAM*

# Govern – Manage access with traceability to protect intellectual property & enforce compliance mandates

- **Manage roles and access control securely**
  - ▶ Reporting on access patterns, ratings and value
  - ▶ Both internal and external (e.g., outsourced vendors)
- **Manage change to reusable assets implementing a review process**
  - ▶ Review processes can be customized (Built in Process or via ClearQuest)
  - ▶ Manage change by board or individual reviewers
  - ▶ Reviewers receive notifications automatically



Community: Service Development

Users | User Groups | Roles | **Review Processes** | Forum Mapping | Connections

Manage the processes that this community uses to review and approve assets.

**Review Processes**

Order review processes in decreasing priority, where the first review process to match the minimum set of conditions will be selected for an asset.

<input type="checkbox"/>	Review Process	Conditions
<input type="checkbox"/>	Service Implementation ReviewProcess - ClearQuest	Asset type = Service Implementation
<input type="checkbox"/>	Service Implementation Review - Built-in	Asset type = Service Implementation
<input type="checkbox"/>	Service Interface Review	Asset type = Service Interface
<input type="checkbox"/>	Service Design Review	Asset type = Service Design

Move Up | Move Down | Delete | New Review Process...

**Choose Review Type**

Select a review process type.

- Default review process
- Default review process
- Rational ClearQuest driven review process**

**"As is" Configuration**

Administrator must approve assets submitted "as is"

Download

Review history

Plan review Start Review

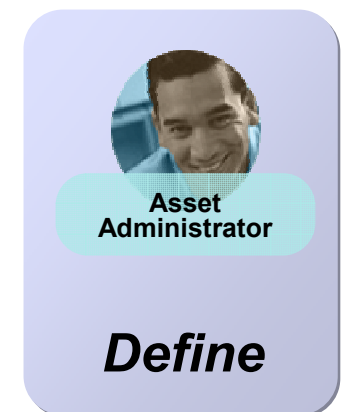


**Project Manager CIO/CTO**

**Govern**

## Configuring the repository for projects

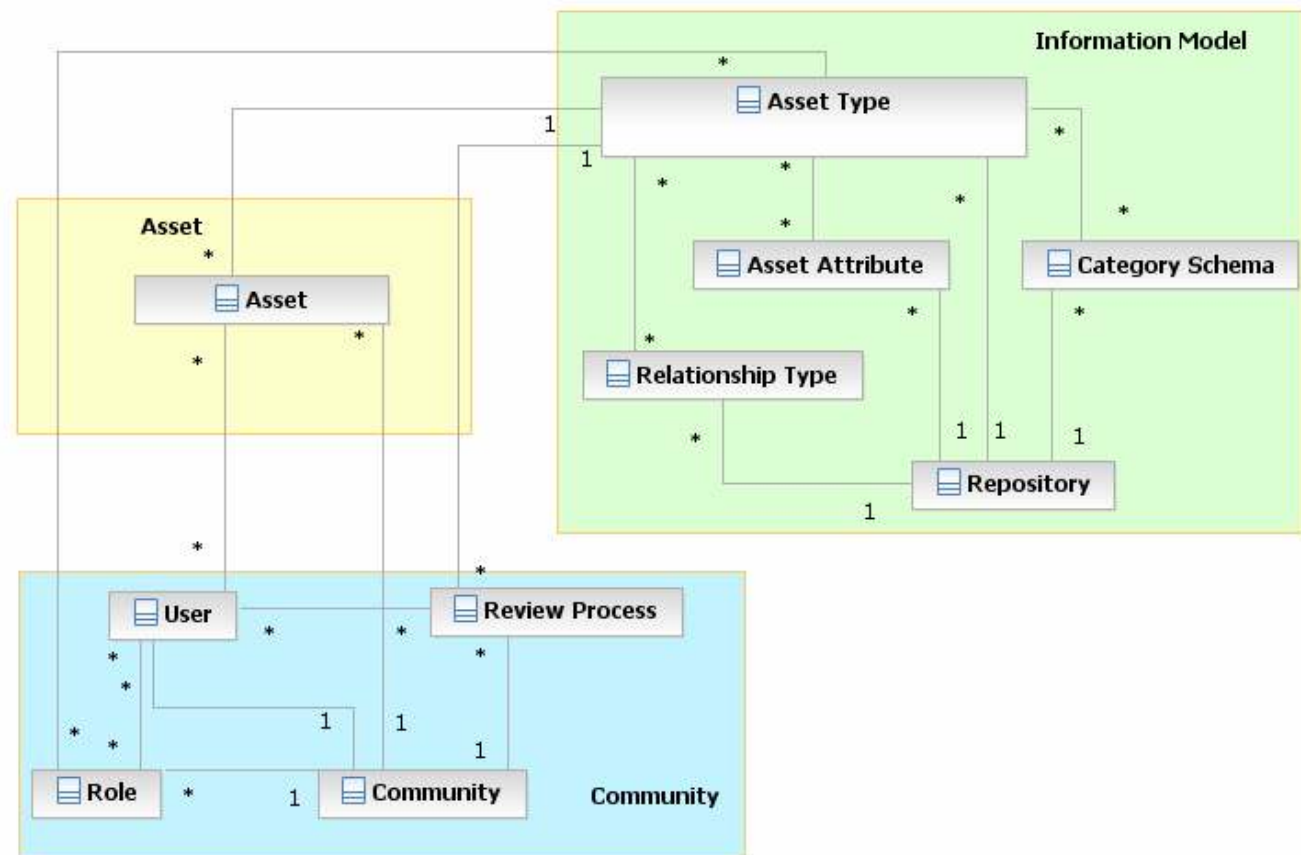
- **Before getting started the Administrator configures the repository**
  - ▶ Create Communities, Roles and Access Control
  - ▶ Create Categories
  - ▶ Create Asset Types
  - ▶ Create Review Processes
  - ▶ Define Your Asset Mgmt Processes
  - ▶ Connect Asset Mgmt Processes To Assets





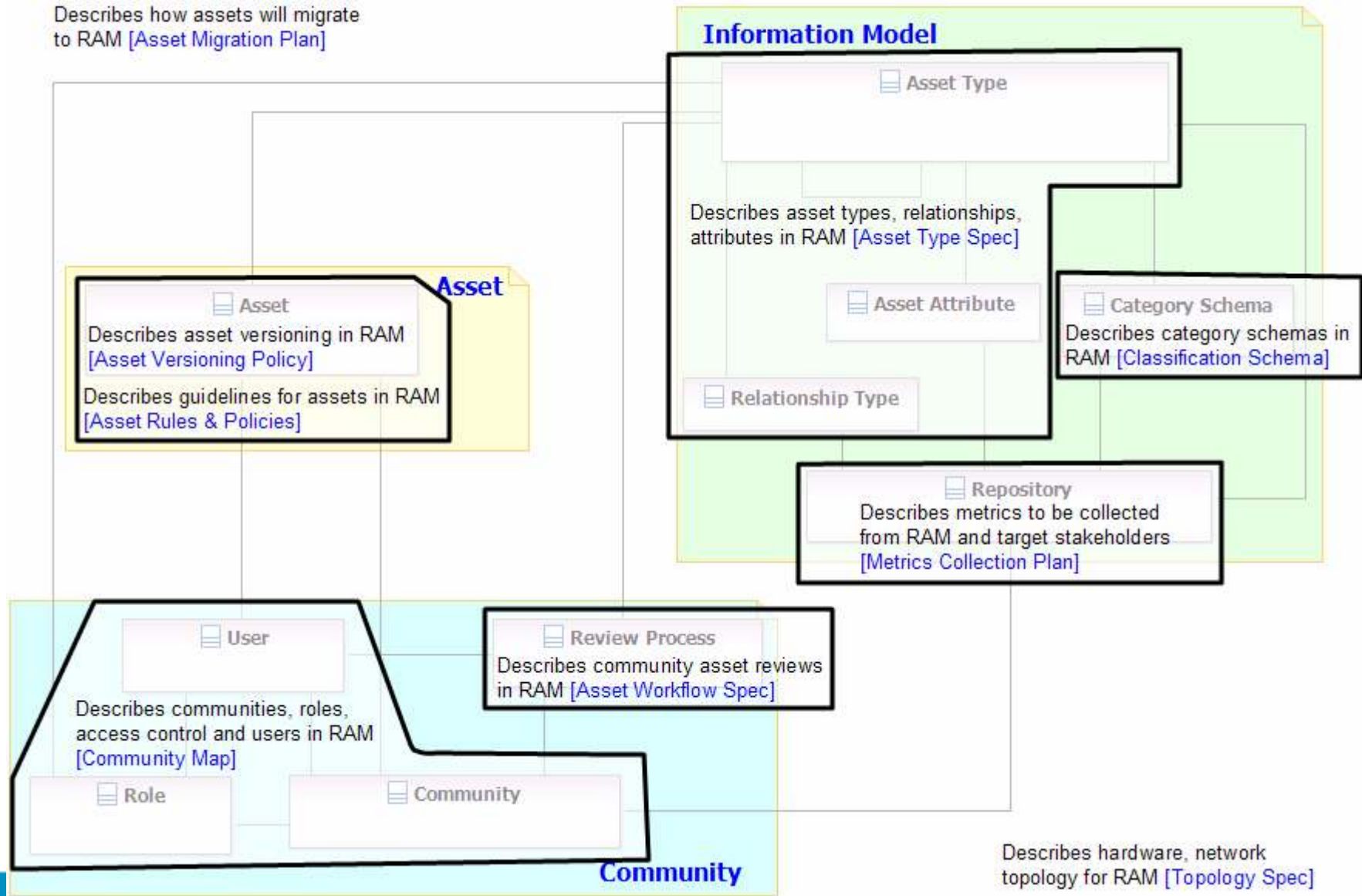
# RAM Logical Model

- In the **Information Model** section is the **Repository** configuration. The **Asset Type**, **Relationship Type**, **Asset Attribute**, and **Category Schema** are defined at the **Repository** level.
- For each **Asset Type** specify the asset attributes, relationships, category schemas, and artifacts.
- In the **Asset** section each **Asset** is of only one **Asset Type**. An **Asset** is contained in only one **Community**. The asset owner (a **User**) is the person who submitted the asset to the repository.
- In the **Community** section the **Community** owns the definition of the **Review Process** to which the asset is subject. Other **Users** can access the **Assets** based on the permissions of the **Role(s)** they are assigned.



# Asset Governance Workproducts - RAM Logical Model

Describes how assets will migrate to RAM [Asset Migration Plan]

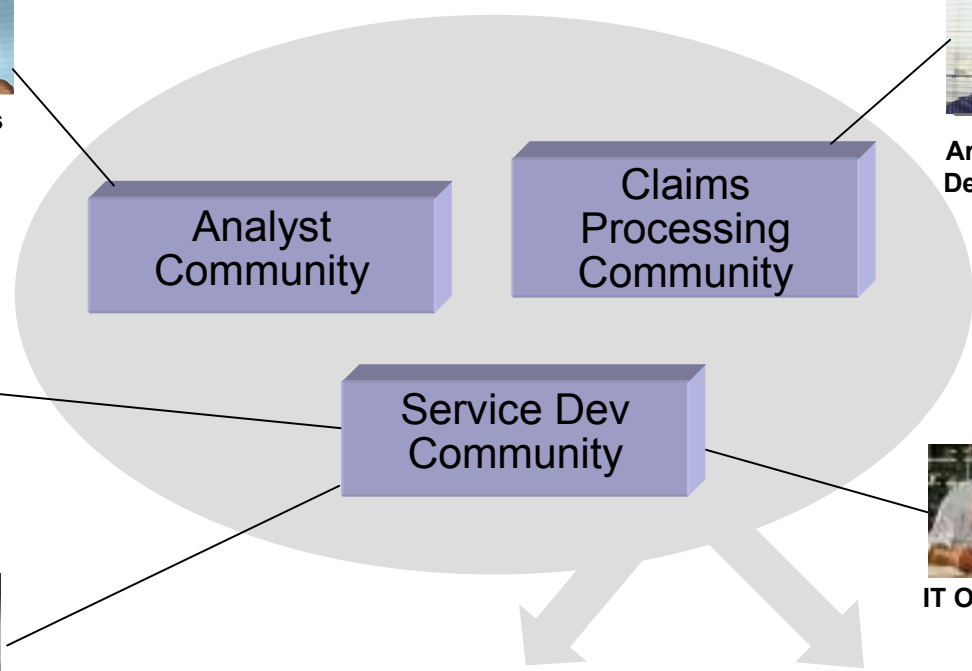


# Create Communities, Roles & Access Control

**Access Control:**  
search, read,  
browse, download,  
update all assets in  
Analyst Community



**Access Control:**  
search, read,  
browse, download,  
update all assets in  
Claims Processing  
and Analyst  
Community



**Access Control:**  
search, read,  
browse, download,  
update all assets in  
Service Dev  
Community

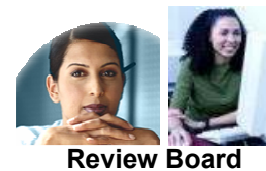


**Access Control:**  
search, read,  
browse, download,  
update all assets in  
Service Dev  
Community



**A Community is a collection  
of users, their roles and  
entitlements, and their assets  
and review processes**

**Community Admin**  
**Access Control:**  
full entitlement  
across all assets in  
all Communities



**Access Control:**  
search, read,  
browse, review all  
assets across all  
Communities

## Create Asset Categories

- Categories for Asset classification are configured via the RAM Web UI or an XML file
- Assets can belong to any number of categories
- Categories can be used for faceted search, browsing, and access control
- Example taxonomy for Insurance:
  - ▶ Financial Reporting
    - Stockholders Equity
    - Financial Position
    - Income Statement
  - ▶ Health Insurance
    - Public
      - Claims Processing
      - Tax
      - Social Security
    - Private
      - Mandatory
      - Employment Group
      - Community Rated
      - Risk Rated

Rational Asset Manager v7.0

Home My Asset Manager Search for Assets Submit an Asset Administration

< Back to Administration | Back to Categories Sign out : Master Administrator

Asset Category [?](#)

Name: Service Registry

Description: Service Registry Category

Reorder				
⊖	DefaultLifecycle	Edit	Insert child	Remove
⊖	State	Edit	Insert child	Remove
⊖	Assemble	Edit	Insert child	Remove
⊖	Created	Edit	Insert child	Remove
⊖	Deploy	Edit	Insert child	Remove
⊖	Manage	Edit	Insert child	Remove
⊖	Model	Edit	Insert child	Remove
⊖	Retired	Edit	Insert child	Remove
⊖	Transition	Edit	Insert child	Remove
⊖	Approve	Edit	Insert child	Remove
⊖	AuthorizeDevelopment	Edit	Insert child	Remove
⊖	Certify	Edit	Insert child	Remove
⊖	Deprecate	Edit	Insert child	Remove
⊖	Plan	Edit	Insert child	Remove
⊖	Repair	Edit	Insert child	Remove
⊖	Revoke	Edit	Insert child	Remove
⊖	Sample Governance Lifecycle Definition	Edit	Insert child	Remove
⊖	State	Edit	Insert child	Remove
⊖	Archived	Edit	Insert child	Remove
⊖	BeingProvisioned	Edit	Insert child	Remove

# Creating an Asset Type in RAM

Rational Asset Manager v7.0 Help | Extensions

Home | My Asset Manager | Search for Assets | Submit an Asset | **Administration**

[< Back to Administration](#) | [Back to Asset Types](#) Sign out : Master Administrator

## Asset Type ?

Name:

Description:

**Artifact Constraints** ?

**New Artifact Constraint** ✖

Exactly  artifacts with format of

**Category Constraints** ?

Use all categories  Use only the following categories:

**Relationship Constraints**

**New Relationship Constraint** ✖

Exactly  assets of type  with the relationship:

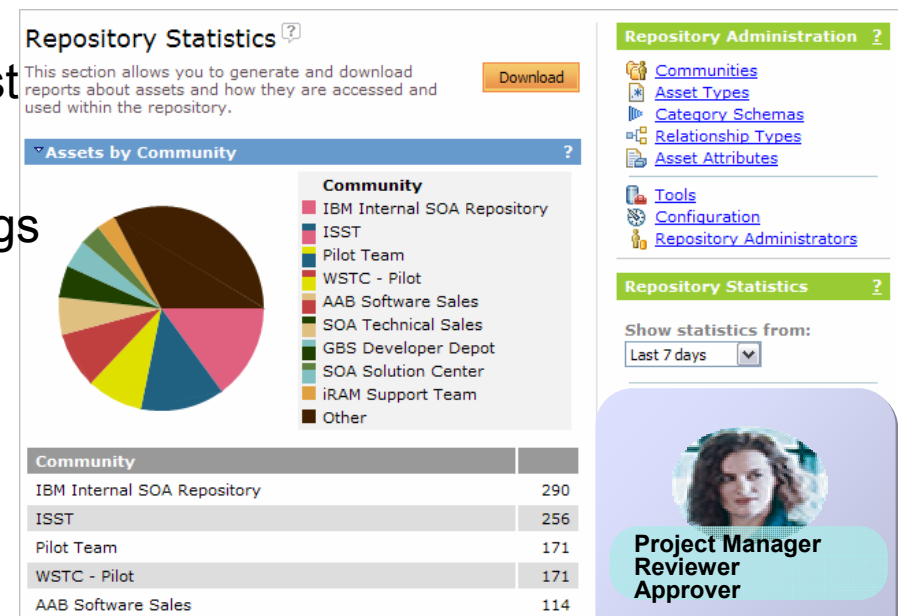
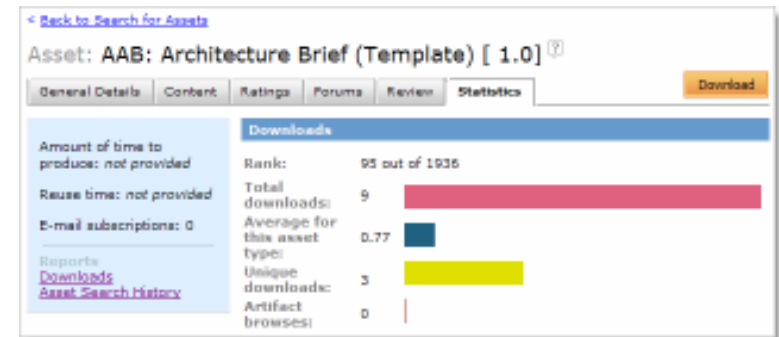
**Attribute Constraints**


**New Attribute Constraint** ✖

Required

# Measures and reporting

- Provides the ability to ...
  - Capture asset production effort
  - Capture expected & actual reuse effort
  - Capture downloads, submissions and approvals.
  - Generate derived metrics (ROI, productivity, cost savings...)
  - Report and chart metrics
  - Report asset defects stored in ClearQuest
- Asset level reports
  - Downloads, browses, feedback and ratings
- Repository level reports
  - Assets by community, type, and state
  - Search history and downloads
- Activity audit
  - Generate audit for up to 35 activities across date range
  - Who did what, when, on what asset





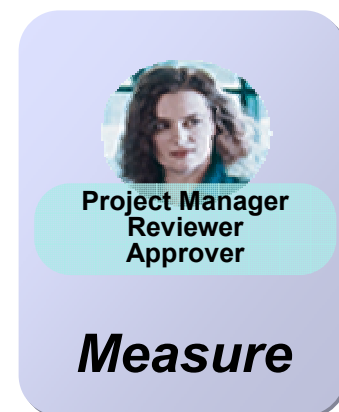
**Project Manager  
Reviewer  
Approver**

Measure



# Measure asset activity

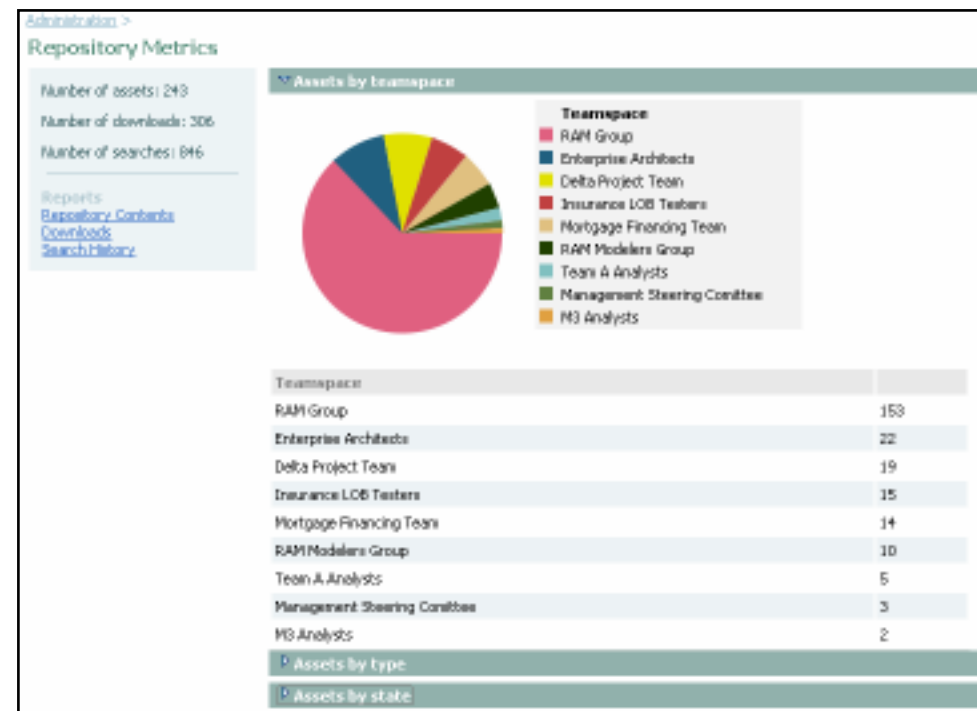
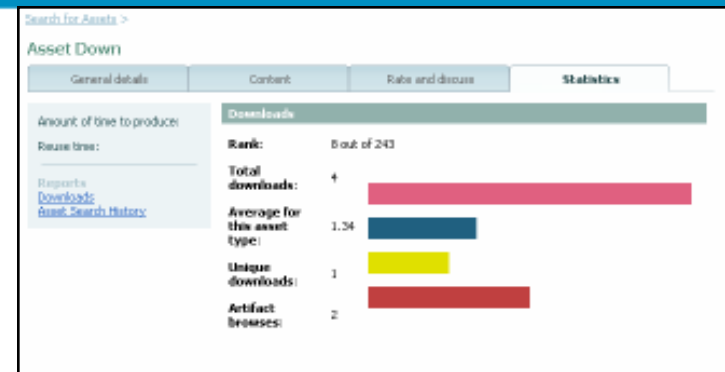
- **Scenario Description**
  - ▶ Identify if submitted Asset is being used in projects
  - ▶ Administrator does the following:
    - Generate metrics reports
- **Pain points**
  - ▶ Management needs to quantify activity level, benefits realized, return on investment & quality
- **Rational Asset Manager provides the ability to ...**
  - ▶ Capture asset production effort
  - ▶ Capture expected reuse & actual consumption effort)
  - ▶ Capture downloads, submissions, approvals,
  - ▶ Generate derived metrics ( ROI, productivity, cost savings...)
  - ▶ Reporting and charting metrics
  - ▶ To report on asset defects stored in ClearQuest





# Measure Asset Activity

- **Metrics and reporting are supported in RAM**
  - ▶ Asset Level Reports
    - Downloads, browses, feedback and ratings
  - ▶ Repository Level Reports
    - Assets by teamspace, type, and state
    - Search History
    - Downloads



# Subscriptions, Ratings and Discussion Groups

- **Email** and **RSS** notifications are supported
- **Notifications** can optionally occur when:
  - An asset is submitted or updated
  - Review state of an asset is changed
- **Subscriptions**
  - Per asset or search criteria
  - Notifications sent on periodic basis
- **RSS Feeds**
  - Per asset or search criteria
  - Notifications sent via event to RSS reader
- **Ratings**
  - Per user, rate each asset
- **Discussion Groups** built into Rational Asset Manager
  - Based upon an asset

The screenshot displays the Rational Asset Manager interface for an asset titled "Credit Management Service Implementation [1.0]".

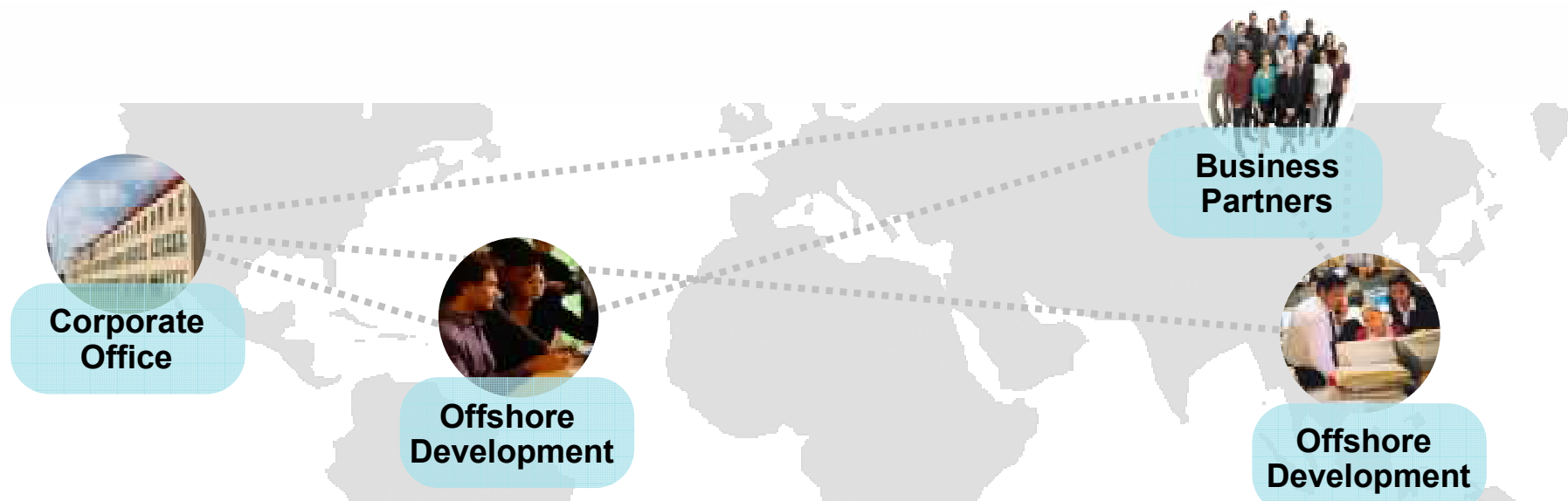
**Subscriptions:** A dropdown menu shows options for "Asset feed" and "Subscribe to this asset", as well as "Topic feed" and "Subscribe to this topic".

**Ratings:** The "Ratings" tab is active, showing a "My rating" of 4 stars (out of 5) and a comment: "Good implementation. In the next iteration, review the architecture framework for more specifics." The "Average rating" is also 4 stars, based on 2 ratings.

**Comments:** A table of comments is shown with columns for "User", "Rating", and "Date". One comment by "Al Aarkashan" is visible, dated "Dec 18, 2007 6:02".

**Discussion Post:** The "Forums" tab is active, showing a topic titled "Archive appears to be corrupt". A post by "Deon Adminio" (deon@jke.com) dated "Dec 18, 2007 5:55 PM" contains the text: "Please recompile the archive and resubmit". Below the post is a "Discussion Post" form with a "Reply to:" field and a "Message:" field containing the text: "Sorry, I got that wrong. It works...".

# Lower costs and complexity of meeting compliance with rigorous yet flexible review processes



## IT benefits

- Control IP with a change management approval workflow
- Ensure only approved and compliant components are used in implementation
- Clear line-of-sight over software deliveries in distributed environments
- Enhanced control over open source elements



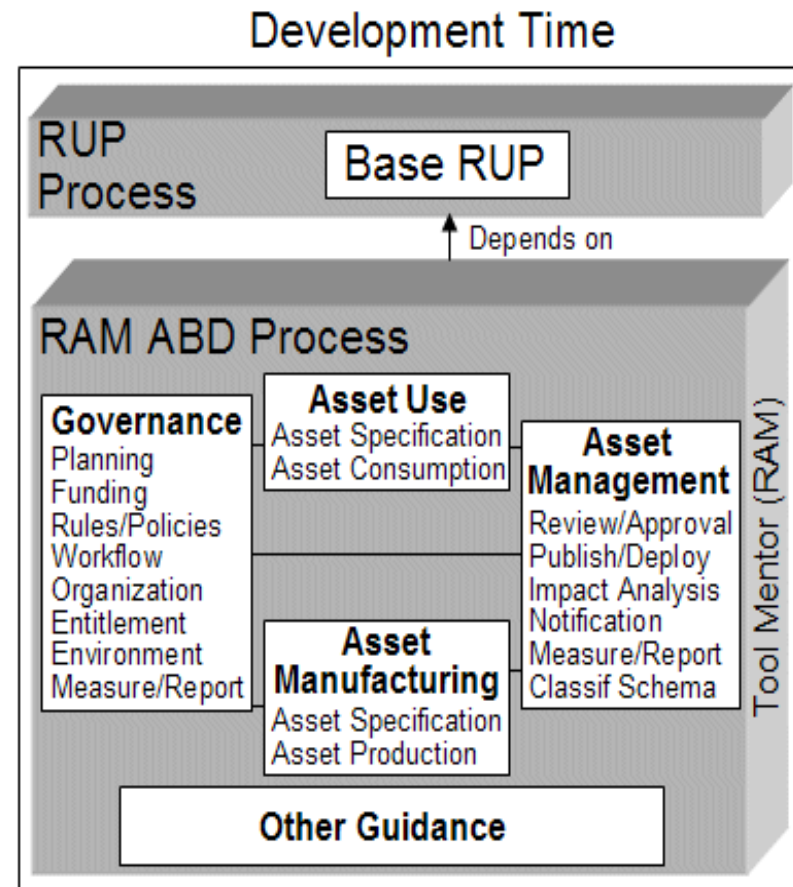
## Business benefits

- Decrease compliance cost
- Increase enterprise productivity
- Protect competitive IP
- Manage role access governance across geographies
- Increased security

*Compliance view of RAM*

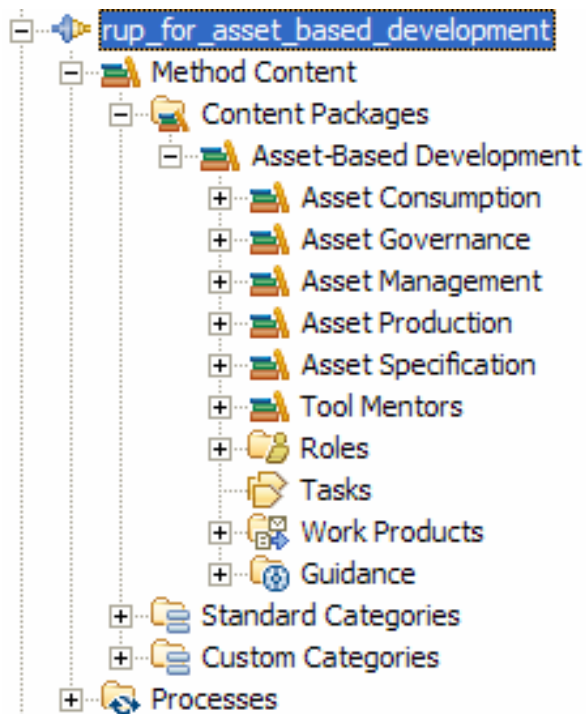
# Asset Development Process

- **Scenario Description**
  - ▶ Software type assets require established software architecture & process, versioning & configuration management skills
- **Pain points**
  - ▶ Wasted effort in reuse initiative
    - lack of process
    - don't know how to get started
    - Unable to find assets for specific process step
    - To much time spent on review
- **RAM provides the ability to ...**
  - ▶ In corporate Asset Based Development & management process guidance
  - ▶ Integrates with Rational Method Composer – Rational Unified Process
    - RMC RUP website
    - RMC project
    - Sample process templates & tutorial movies
  - ▶ Provide URL to applicable assets from the process step
  - ▶ Submit assets “as-is” for specified users

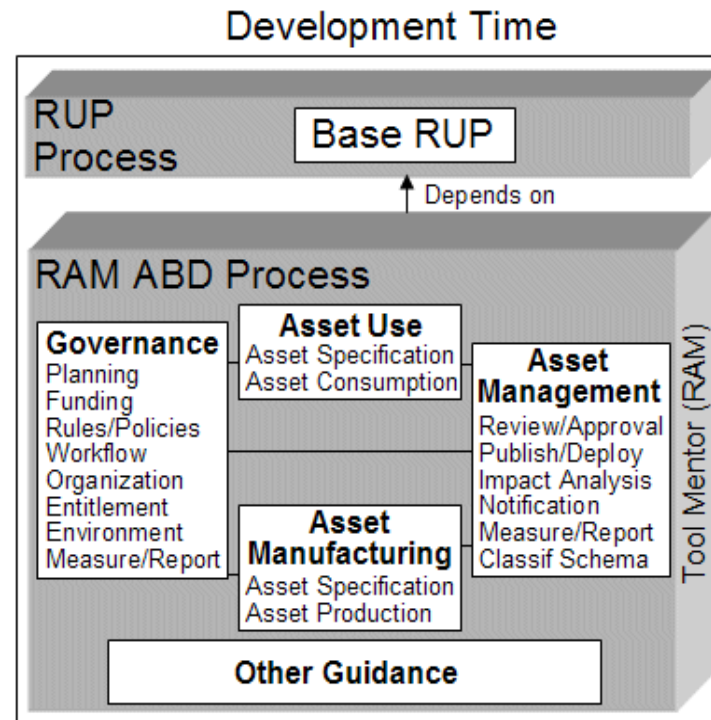


# Process is captured in Rational Method Composer for RAM

## Structure In RMC



## Content Scope



Updated Asset based development plug-in includes tool mentors for RAM

# Connect Asset Management Processes To Assets

Using RMC-published process, click asset link

**Services Layer**

Browse and use the following assets for the Services layer.

Claims Service Client - <http://127.0.0.1:8080/com.ibm.ram.repository.web/assetDetail/general>

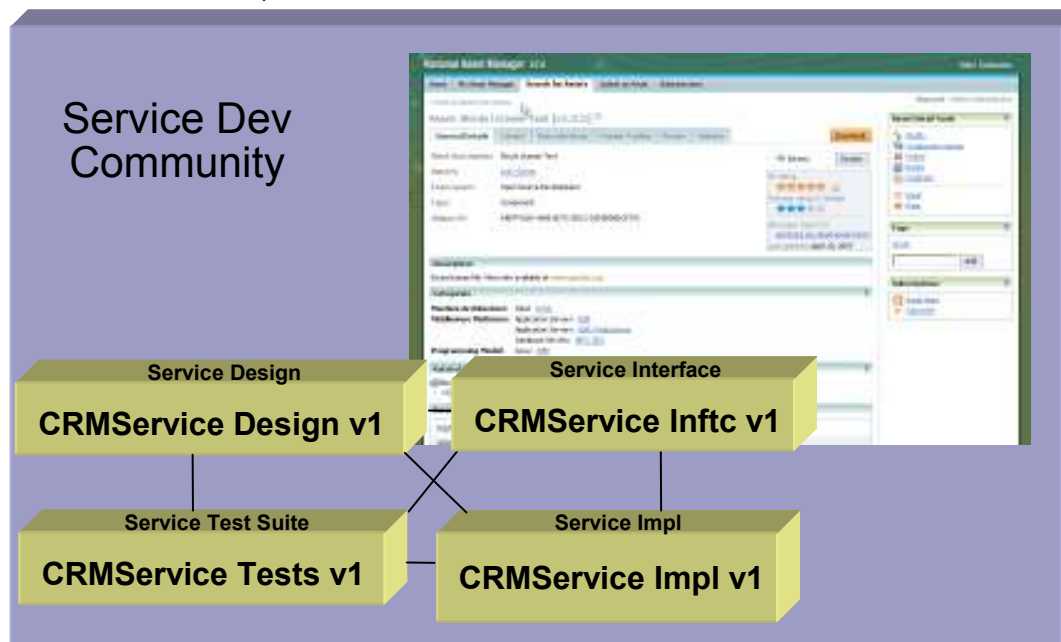
Authenticate

**Sign in**

**Username**

**Password**

Browse, download asset from RAM Web UI





# Review & approve assets

## ▪ Scenario Description

- ▶ Analyst/Architect/Developer... has submitted an asset
- ▶ Review
  - Asset Manager or review board does the following:
    - determines and notifies asset reviewers
  - Asset Reviewer does the following:
    - reviews the asset
    - submit asset review
  - Asset Manager or review board approves
    - evaluates the submitted reviews
    - approves or rejects the asset for publishing
  - System notifies the submitter/author/producer/owner/reviewers

## ▪ Pain points

- ▶ Needs assets which have been validated and verified for a specified context and scope of reuse
- ▶ Needs assets which have met enterprise rules, policies and governance
- ▶ Lack of awareness of where the asset is in the workflow

## ▪ This offering provides the ability to ...

- ▶ Perform out of the box default workflow
- ▶ Capture review process information
- ▶ Send workflow email notification



Project Manager  
Reviewer  
Approver

**Measure**

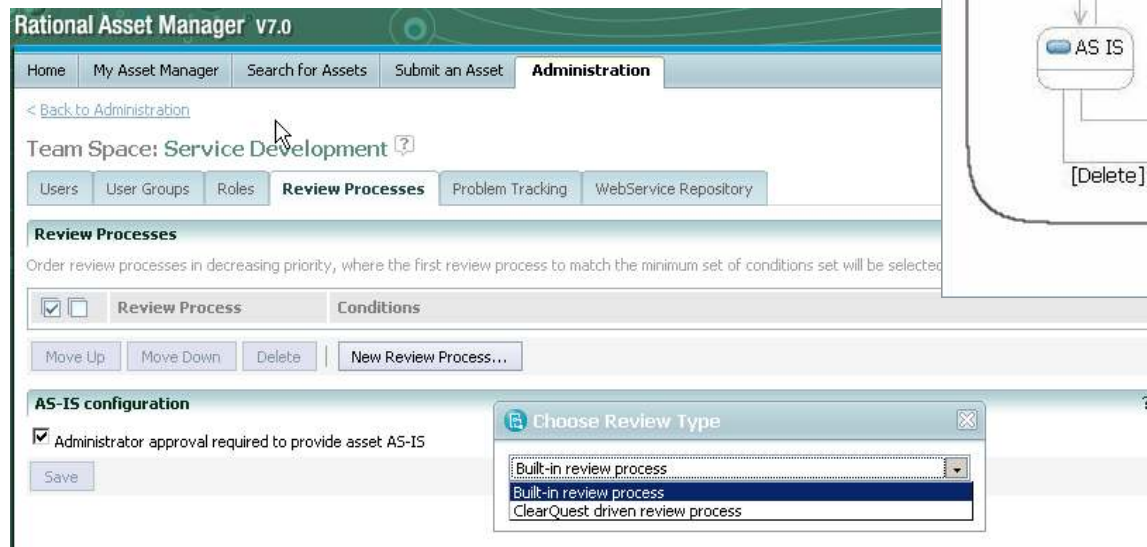
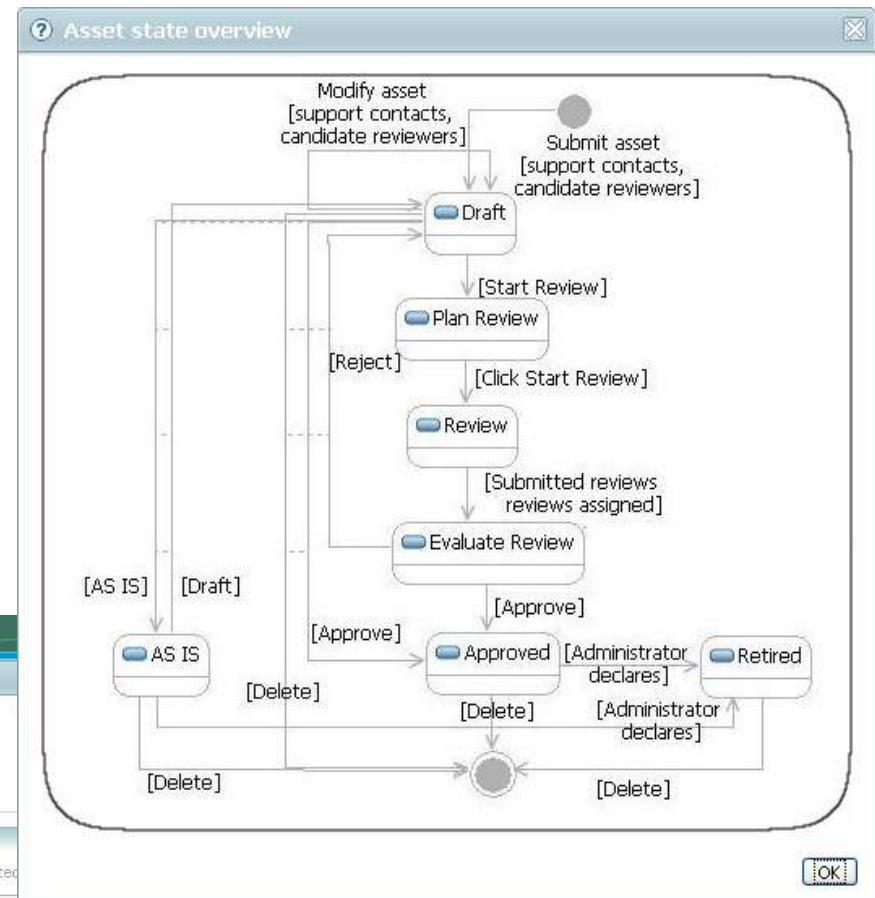


Project Manager  
CIO/CTO

**Govern**

# Asset Review Process

- Community administrator can set up review processes per asset type and category
- Review processes can be customized
- Review boards and individual reviewers supported
- AS-IS state supported
- Notifications are sent automatically to reviewers
- Use Built-in process or ClearQuest



# Review & approve asset – RAM Web UI

**Asset: example [v 1.0]**

General Details | Content | Rate and Discuss | Problem Tracking | **Review** | Statistics

Component Review Process 5/15/07

Configure the review process and click Start review to begin.

Plan review | **Start Review**

Reviewers			
Individual Reviewers			
User	Req. reviews	Finished reviews	
1	1	0	Tom Walsh

**Review**

Tom Walsh's Review

Attachment:  Browse

Save as Draft | Accept | Reject

**Asset Detail Tools**

- Modify
- Create new version
- Delete
- Retire
- Duplicate
- Email
- Rate

**Tags**

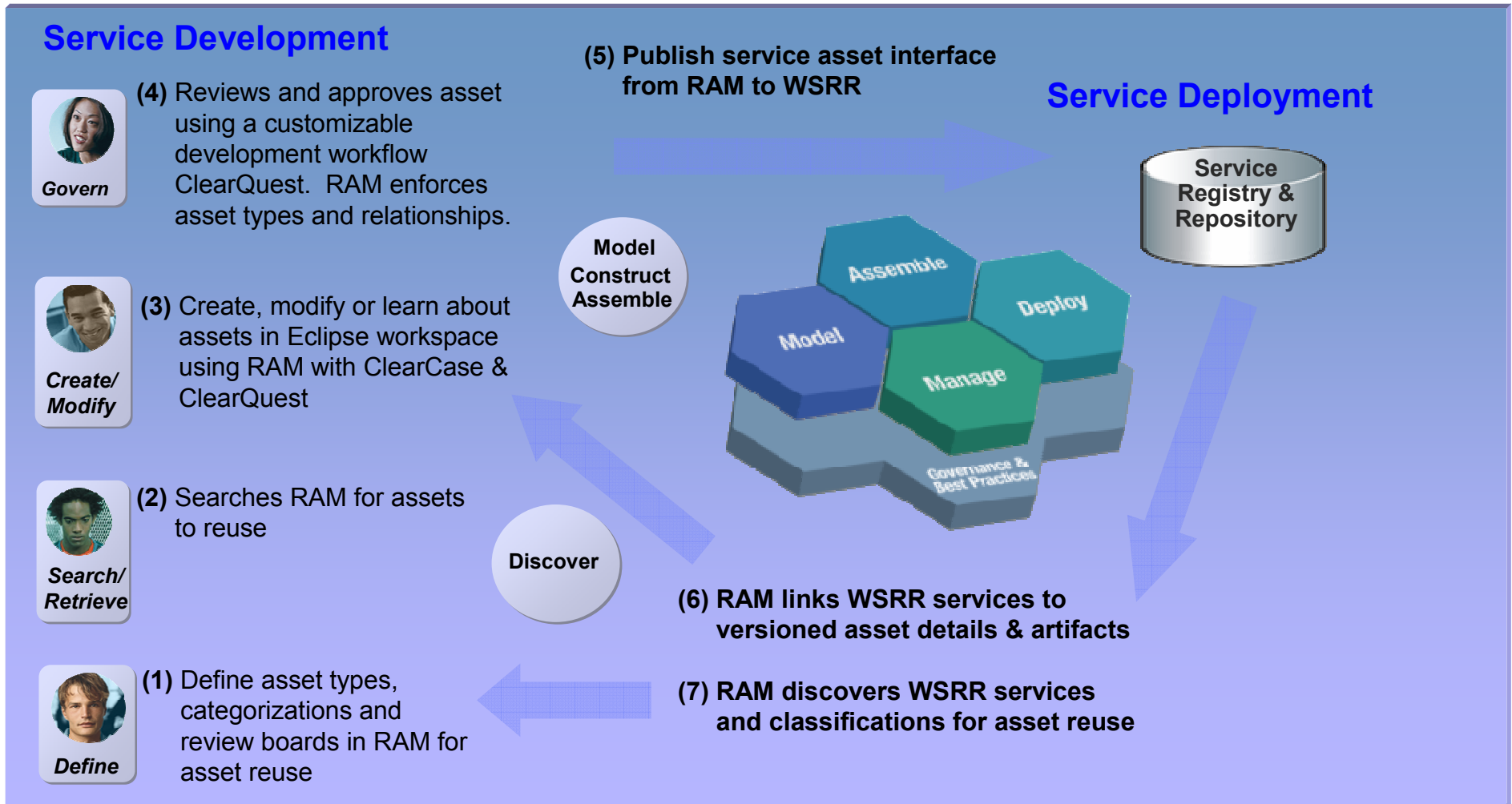
Add

**Subscriptions**

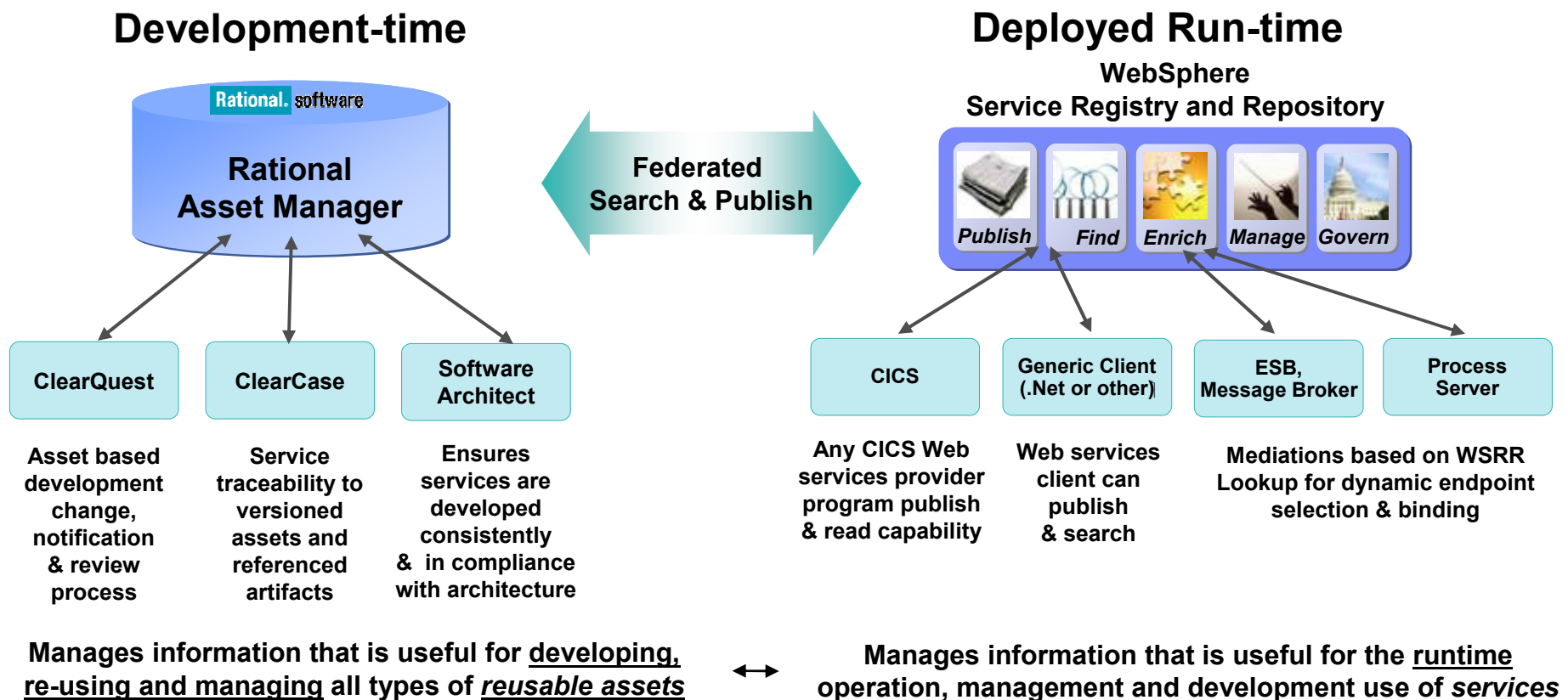
- Asset feed
- Subscribe

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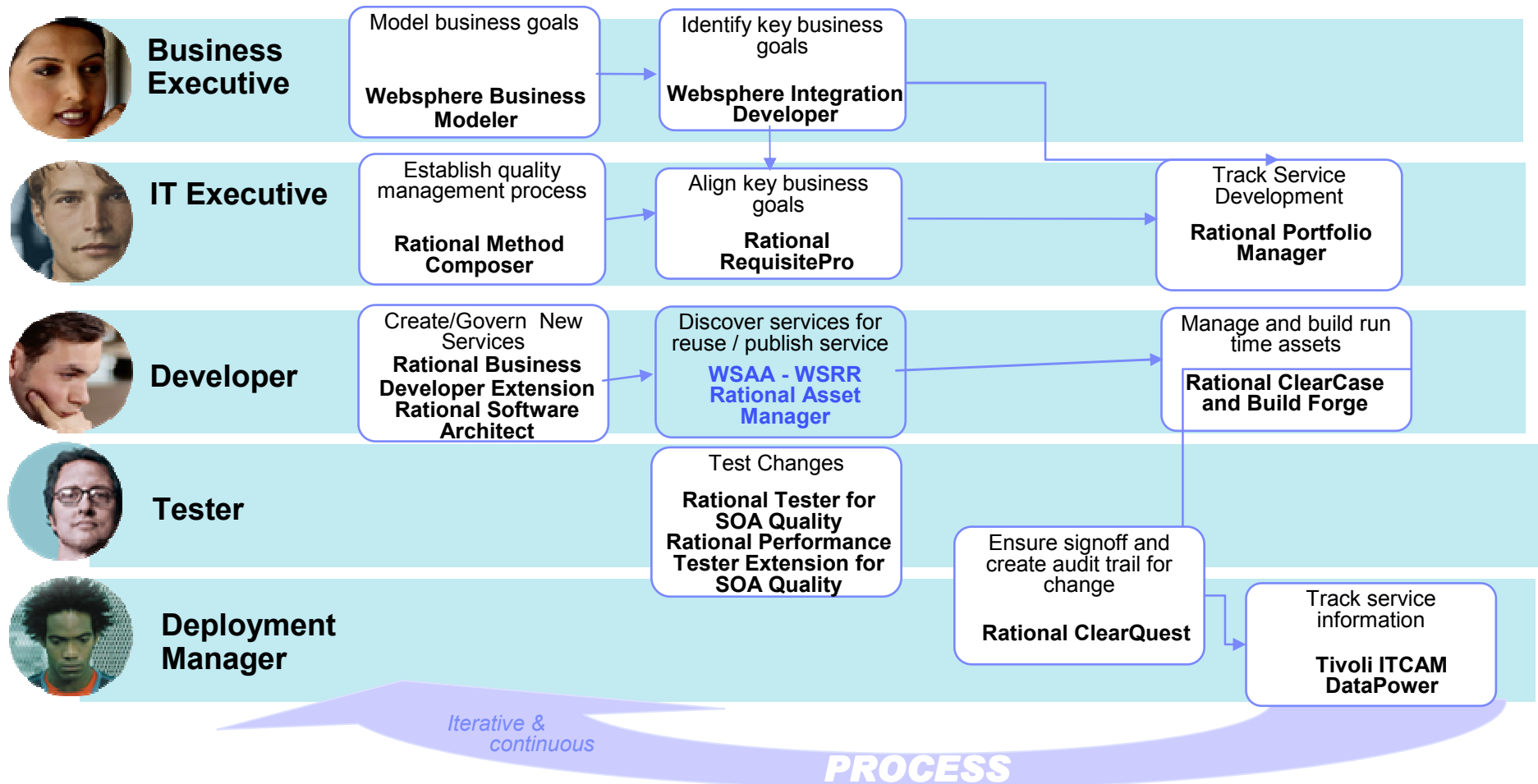
# Service lifecycle management with federation across IBM Rational Asset Manager and WebSphere Service Registry and Repository



# Bridge the gap between development and deployment run time services with RAM and WSSR



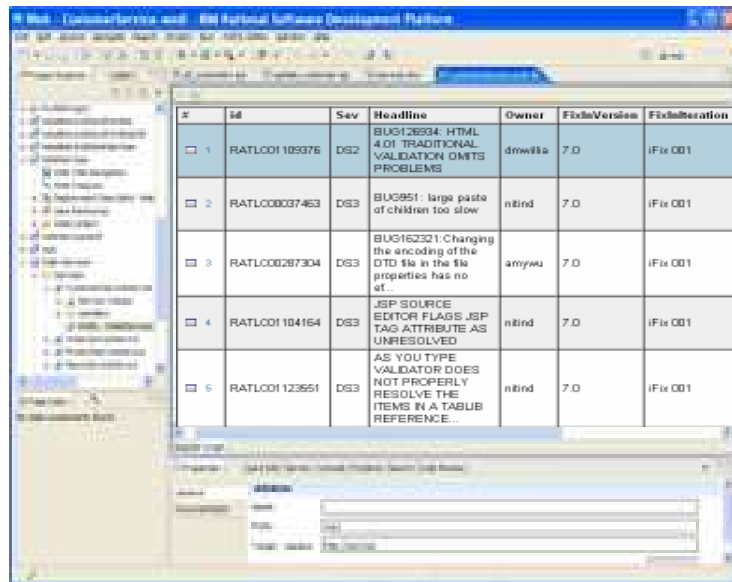
# Service Lifecycle Management enabling tools enhance each team member's ability to be successful



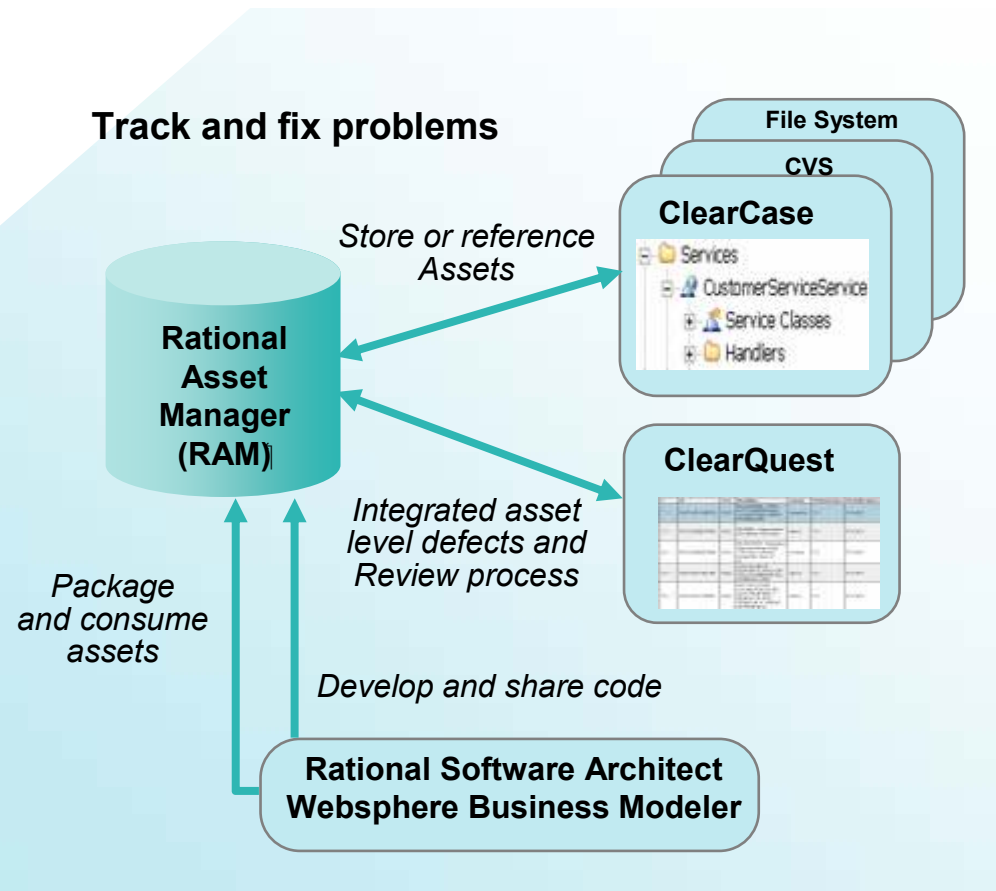


# Rational Asset Manager works seamlessly with the IBM Software Delivery Platform

- Develop code in a team environment
- Create and package assets
- Search for and reuse assets
- Track and fix problems  
Seamlessly! All in the same IDE!



Eclipse based Rational Software Delivery Platform



# Agenda

- IBM Rational Software
  - ▶ Brand Overview
  
- Asset Management
  - ▶ Definition
  - ▶ Challenges
  
- Introducing IBM Rational Asset Manager
  
  
- Summary



## Summary: IBM Rational Asset Manager

- **SOA benefits – Access to proven high quality services**
  - ▶ Ability to assign and search on basis fine-grained quality parameters
  - ▶ Easy discovery throughout SOA lifecycle with runtime and deployment repository federation e.g., synchronization with WSSR and Tivoli CCMDB
- **Delivery efficiency**
  - ▶ Integration with Rational Software Delivery platform
  - ▶ Custom workflows with Rational ClearCase and Rational ClearQuest
- **Enhanced usability**
  - ▶ Simple intuitive interface tailored for business users
  - ▶ Zero upfront configuration necessary
- **Collaboration – offers human dimension to use of IT assets**
  - ▶ Wikipedia style user ratings for quality
  - ▶ Discussion forums, review boards, RSS and Email notifications
- **Lower Total Cost of Ownership and Time to value**
  - ▶ Free WebSphere Application Server and DB2 included



# Rational Asset Manager – a critical piece of driving visibility and collaboration in software delivery

## Increase global project efficiency & insight

- Enhanced process modeling, analytics & lifecycle automation
- Easier global team access in an intuitive, Web experience
- New high-availability & security features enabling global teams



**Result: Greater global project agility & productivity for x-organizational teams**

## Business Intelligence for your software assets

- Create asset inventories and ROI best practices
- Govern asset utilization with meaningful instrumentation
- Enable asset traceability & architectural governance



**Result: Improve return on software assets**

## Improve team agility & collaboration

- Enable real-time collaboration & project health information
- Flexible lifecycle management for agile development
- Automated processes & lifecycle service integration



**Result: Greater team agility, innovation & alignment with dynamic business priorities**

A new project to drive innovation in collaborative software engineering technology leveraging an open community-driven development model



## For More Information...

The screenshot shows the IBM Rational Asset Manager product page. The main heading is 'Rational Asset Manager' with a sub-heading 'Overview'. The overview text states: 'Helps create, modify, govern, find and reuse any type of development assets, including SOA and systems development assets. It reduces software development costs and improves quality by facilitating the reuse of all types of software development related assets.' Below this, there are several bullet points detailing benefits such as reducing development time, unifying teams, and improving governance. The page also includes a 'Learn more' section with links to features, system requirements, and a data sheet. On the right, there are contact options like 'Call me now' and 'E-mail us', along with a 'Special offer' for the Rational Software Conference in June 2008.

- Rational Asset Manager on ibm.com:
  - ▶ <http://www-306.ibm.com/software/awdtools/ram/>
- Contacting your IBM representative
  - ▶ <http://www.ibm.com/contact/us>

Technical Resources on IBM developerWorks

- ▶ [www.ibm.com/developerworks/rational](http://www.ibm.com/developerworks/rational)
- ▶ Technical library of whitepapers, utilities, betas
- ▶ Downloadable demos
- ▶ Discussion forums

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IBM Rational Software Development Conference 2008

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