

## IBM Rational Asset Manager Governing the Assets of your Enterprise

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- Concepts
- Configuring Rational Asset Manager for Governance
- Rational Asset Manager Modular Service Offering



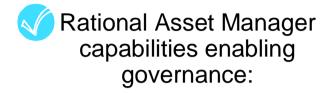


- Concepts
  - Governance
  - Community
  - Process
- Configuring Rational Asset Manager for Governance
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#### **Asset Governance**

- The establishment of
  - Chains of responsibility to empower people
  - Measurement to gauge effectiveness
  - Policies to guide the organization to meet their goals
  - Control mechanisms to ensure compliance
  - Communication to keep all required parties informed



Communities, Review and Approval

Impact Analysis, Metrics, Reporting

Policies, Communities, Information Model, Asset Versioning, ANT

Access Control, Libraries

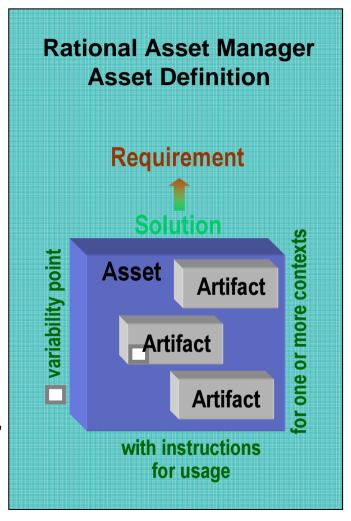
Notifications, Subscriptions, Discussion Forums, Integrations





#### What is an Asset?

- An Asset is
  - a collection of Artifacts
  - which provides a solution to a requirement or business need
    - for one or more contexts
    - with instructions for usage
    - and variability points
- What are Artifacts?
  - Workproducts from the software process
    - Requirements, Designs, Models, XML, XSD, Source code, Data, Tests, User Interfaces, Documentation, Service Interfaces, Estimates and so on...
- Kinds of assets
  - Applications, components, business process, information model, patterns, services, frameworks, templates, ...

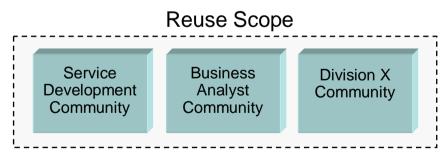






#### What is a Community?

- A community
  - is a target audience for assets.
  - may produce, consume, and manage assets.
- A community may be aligned on organizational boundaries, or for a role, or a project, and so forth.
- Assets may be shared amongst communities



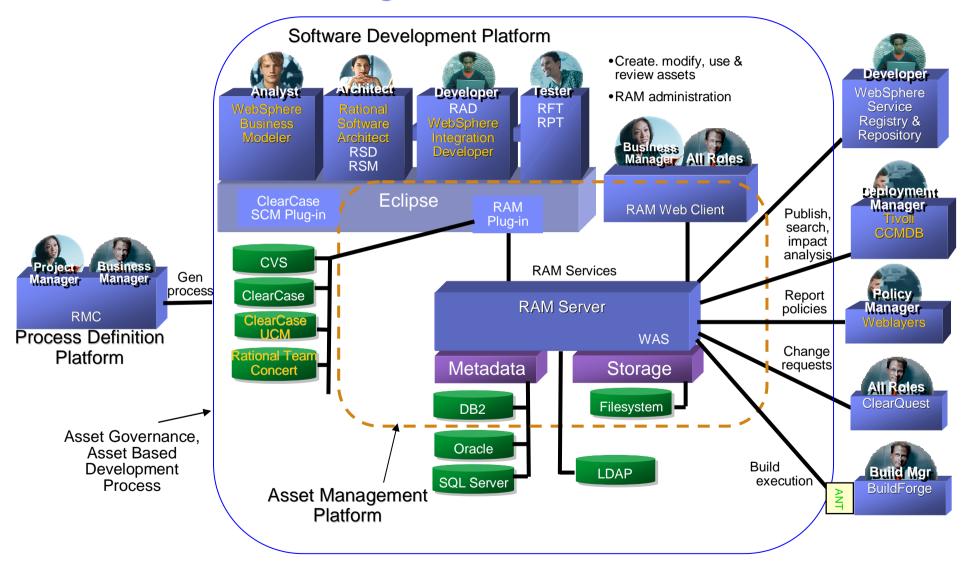
The repository is typically created for a reuse scope.





#### Rational Asset Manager Architecture

#### Targeted for RAM V7.1

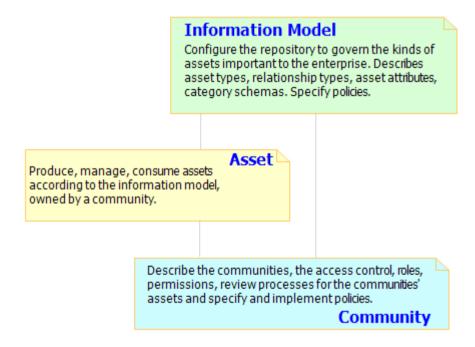






#### Major RAM Concepts

- The major RAM concepts include
  - Information Model
  - Assets
  - Communities
- Understanding these concepts and how they relate to each other, enables our ability to configure the repository







#### RAM Usage Templates

#### The RAM usage templates influence the RAM configuration

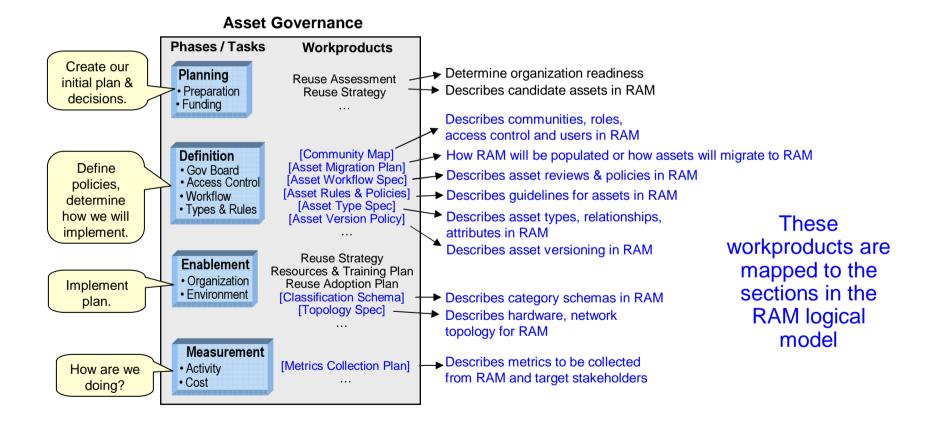
- Reuse
  - Harvest existing artifacts, build and share assets to mitigate costs and productivity concerns for analysis, development, testing
- Governance
  - Coordinate and control assets, intellectual property, determining what is shared, versioned, and visible for others to use
- Impact Analysis & Traceability
  - Understand the relationships and impact of assets, such as the relationship amongst development time assets and the relationship to infrastructure assets
  - Creating a map of the key assets of the enterprise
- Broker
  - Govern assets within and across communities, a community describing needs, another community realizing needs and submitting solutions to repository
- SOA / Services
  - Govern service development and publishing into service registry
- Catalog
  - Track assets with largely remote references to artifacts; often leaving them in their original place but using the repository as an entry point for discovery and navigation of references
- Business Intelligence
  - Custom reporting on asset activity, trends, financial impact
- Asset Planning & Roadmap
  - > Align assets with requirements and features, defining asset development, rollout, and retirement





#### Asset Governance Process & Workproducts

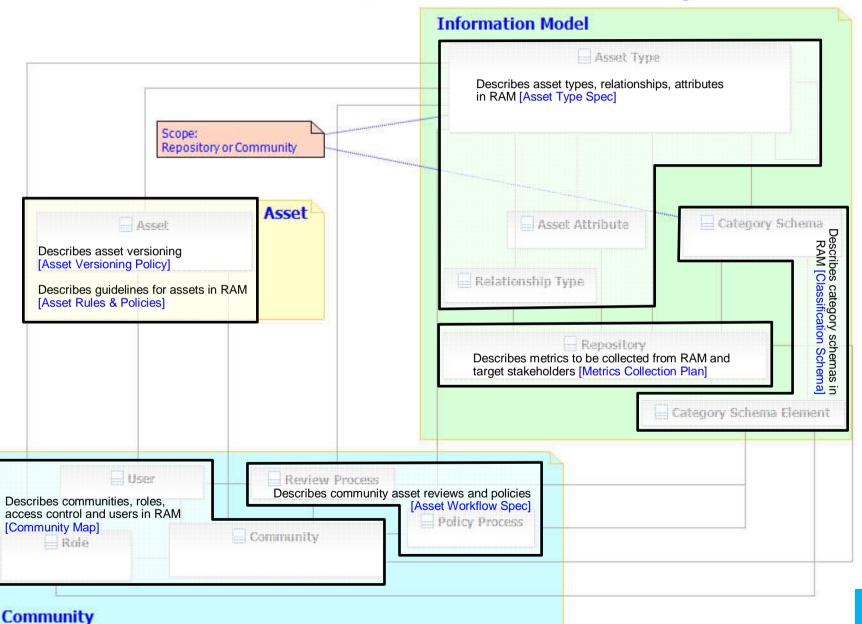
- A process should be followed to configure RAM most asset management needs
- The Asset Governance workproducts capture the policies which are configured and enforced in RAM







#### Asset Governance Workproducts - RAM Logical Model





- Concepts
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  - Information Model



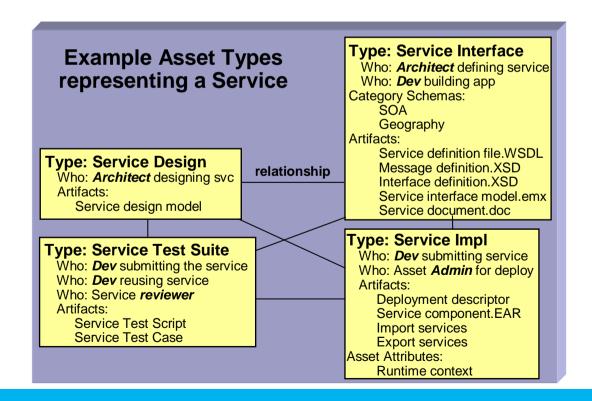
- Asset Types
- Category Schemas
- Relationship Types
- Asset Attributes
- Import / Export
- Asset Versioning
- Communities
- Policies
- Impact Analysis, Metrics, Reporting
- Notifications, Subscriptions, Discussion Forums
- Integrations
- Libraries
- Rational Asset Manager Modular Service Offering





#### Information Model: Asset Types

- An asset type describes the structure of assets
- An asset is of one asset type
- When defining asset types, do so from the perspective of the target asset consumer







Rhode Island

New York

Northeast

鲁 開 East

Category Configuration

USA

☐ Transition

☐ Construction

黑 Inception

Iteration Assessment

Reference Architecture

Software Architecture Document

**Category Configuration** 

Work Products

Phases

#### Information Model: Category Schemas

- Category schemas are a form of communication
- A perspective or the business or technical domain or ...
- Used by asset consumers to discover assets



- Asset Types
- **Review Processes**
- Roles





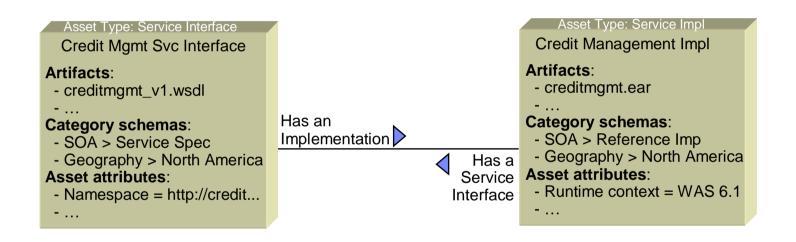






#### Information Model: Relationship Types

Asset relationships are bi-directional



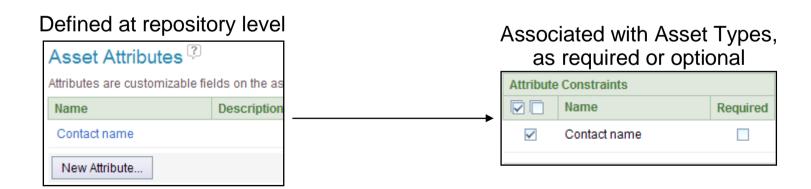
- When defining the relationship type in the repository, define both ends
- Relationship Types can be used as constraints on Asset Types





#### Information Model: Asset Attributes

- The core metadata elements for assets in the repository are defined by RAS (Reusable Asset Specification)
- Asset Attributes are associated with Asset Types
- Asset Attributes are metadata elements which contain either strings or pre-defined lists







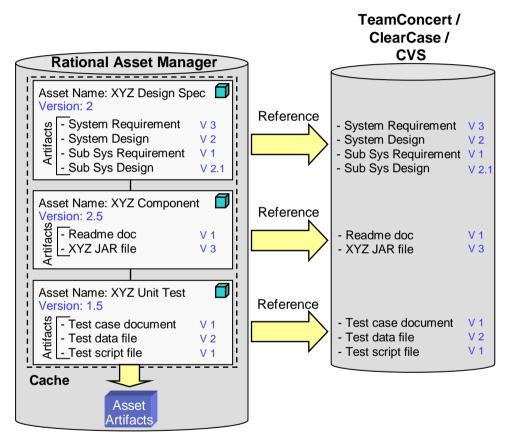
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#### **Asset Versioning**

- Every asset's artifacts are cached in the repository
- Versioning is handled at two levels
  - Asset
  - Artifact
- Asset
  - Each asset can be versioned in the repository
  - Asset versioning is dictated by the policies of the organization
- Artifact
  - Artifacts can be located and versioned in Rational Team Concert, ClearCase, CVS







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  - Communities



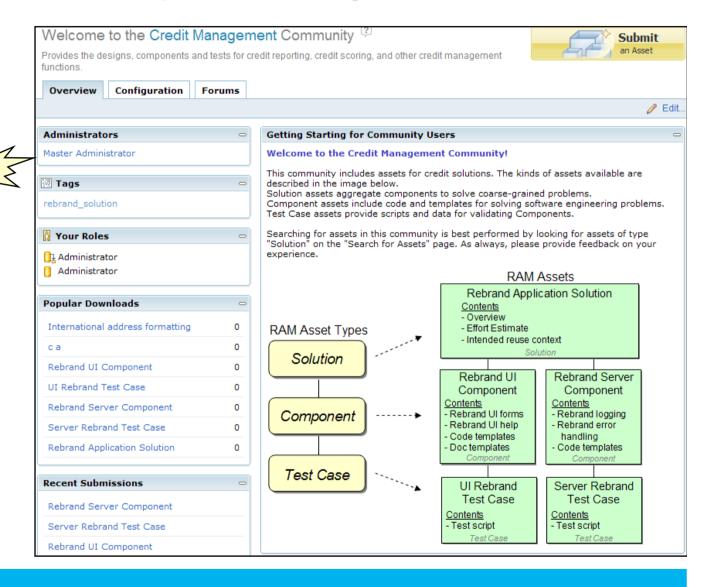
- Customizable community home page
- Access control and roles
- Review and approval
- Repository Configuration Community
- Policy Adapters
- Impact Analysis, Metrics, Reporting
- Notifications, Subscriptions, Discussion Forums
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#### Customizable Community Home Pages

- When users come to the repository they often don't understand many things about the repository
- Guide community users attention to
  - Key assets to use
  - Discussion forums
  - Community overviews
  - Tags
  - Configuration
    - Asset types
    - Category schemas
  - Asset version policy
  - Workflows and review processes





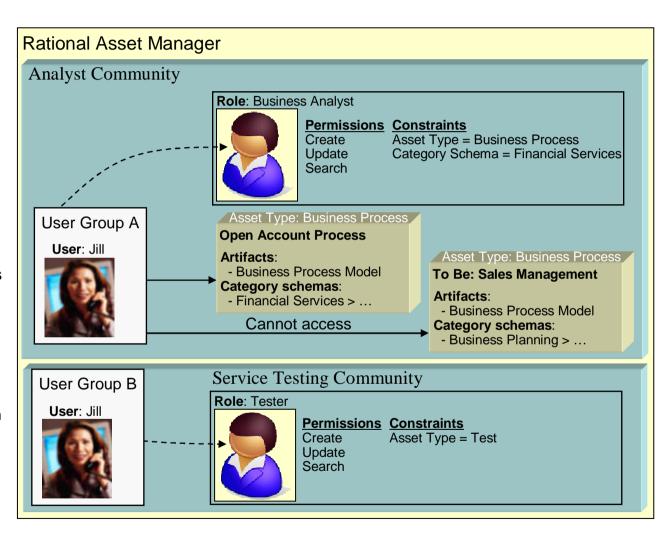


#### **Access Control**

Access control defines what you can do in the repository and with what assets you can work.

Jill in the Role of Business Analyst in the Analyst Community

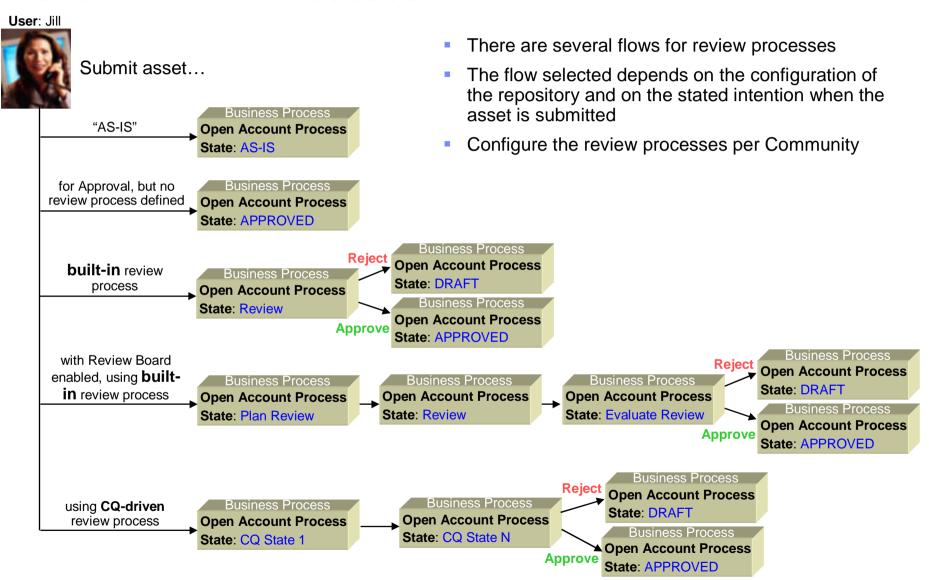
Jill in the Role of Tester in the Service Testing Community can access assets of type Test







#### **Asset Review Processes**

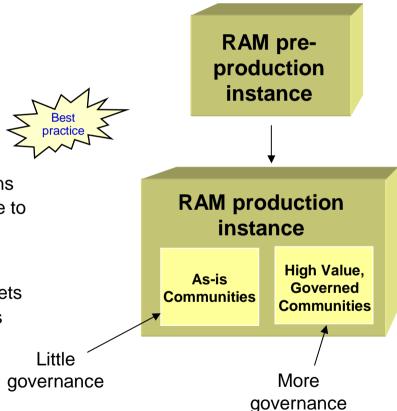






### Communities - Low Governance and High Governance

- Start with RAM instance for practice, learning
  - Test out repository policies and governance assumptions
  - Give a place for people to learn
  - Watch where they "walk"
    - What asset types they create
    - What communities they create
    - What category schemas they create
    - ...
- Create a production RAM instance
  - Refine repository policies and governance assumptions
  - Migrate "good" assets from on-boarding RAM instance to production RAM instance
  - Create communities which support as-is, open marketplace asset
    - Let the rating systems bubble up high-value assets
  - Transition high-value assets to governed communities
    - Provide support for assets
    - Track asset consumers
    - Conduct impact analysis







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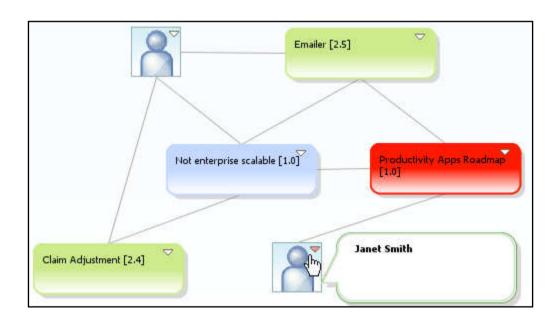
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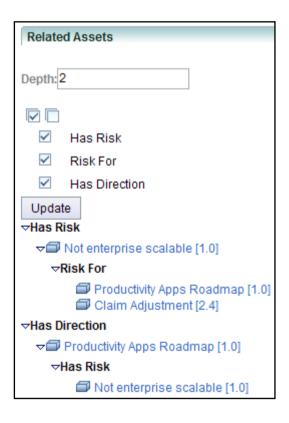




#### Visual Browse and Impact Analysis

- A critical part of governance is to understand the impact of a change
- RAM illustrates what assets are impacted and what people are impacted









#### Metrics and Reporting

- Rational Asset Manager manages usage metrics at two levels
  - Asset
  - Repository
- Asset metrics are viewed in Eclipse and Web clients by administrators and other users
  - Amount of time to produce an asset
  - Expected time to reuse and asset
  - Total downloads
  - Average downloads for assets of given type
  - Unique downloads
  - Artifact browses



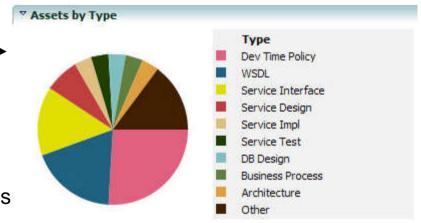


#### Metrics and Reporting

- Repository statistics
  - Reports are viewed in Web client by administrators
  - Reports can be downloaded into .csv file formats



- Repository Contents
- Asset Activity
- User Activity
- Search History
- Activity Audit
  - Generate audit for up to 22 activities
  - Who did what, when, on what asset

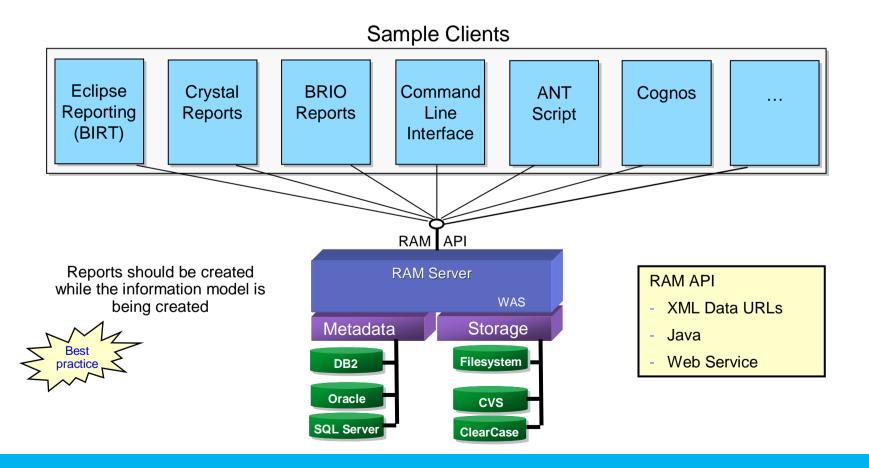






#### RAM v7.1 Reporting

 It is anticipated that the majority of reports produced with RAM will be created using report writing tools accessing the RAM API







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  - ▶ Impact Analysis, Metrics, Reporting



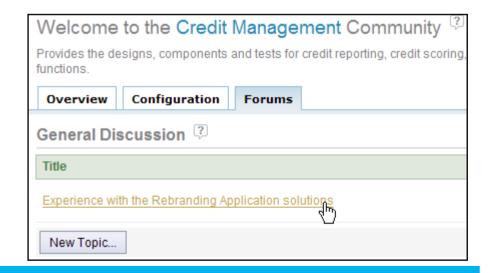
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#### Notifications, Subscriptions, Discussion Forums

- Rational Asset Manager generates notifications for review processes
- Subscriptions
  - Per asset
  - Per search criteria
  - Notifications sent on periodic basis
- RSS Feeds
  - Per asset
  - Per search criteria
  - Notifications sent per event to RSS reader
- Discussion Forums
  - Per asset
  - Per community







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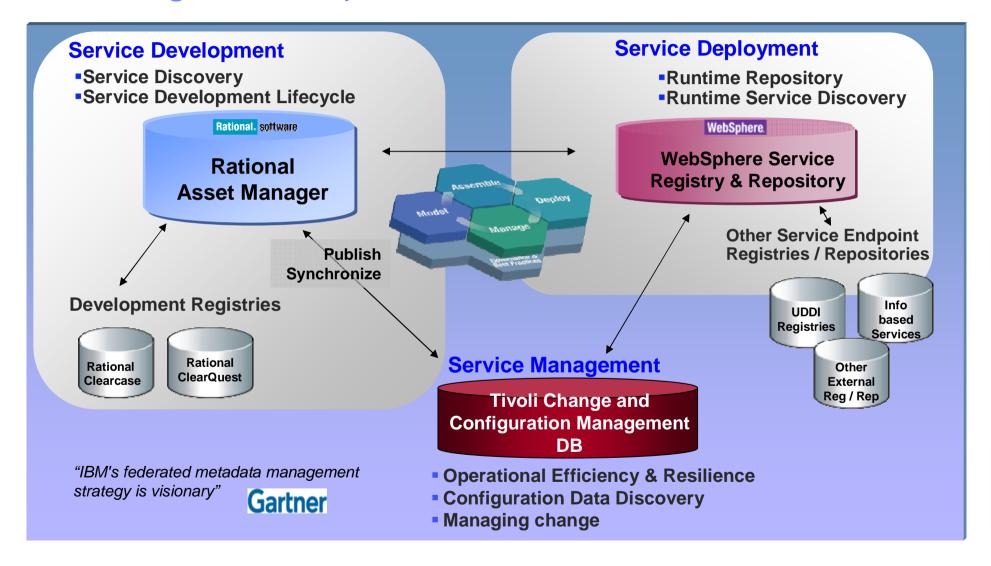


- Integrations
  - Tivoli CCMDB
  - WebSphere Service Registry & Repository
  - ClearCase, CVS
  - ClearQuest
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#### IBM Registries/Repositories







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Rational Asset Manager Modular Service Offering





#### IBM Rational Asset Manager Modular Service Offering

- ▶ IBM Rational Software Services engagement to quickly deploy RAM in a customer's environment
- Serves as a first iteration of an enterprise rollout of RAM
- Includes 10 days of consulting to do:
  - Asset-based readiness assessment
  - Mentoring and training
  - Deployment planning
  - Product installation
  - Define and implement a customer's specific RAM information model for a pilot team
    - Asset types, communities, roles, review processes & categorizations



























# THANK YOU

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