

RTC 3.0 Upgrade

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Rational[®] software

Overview

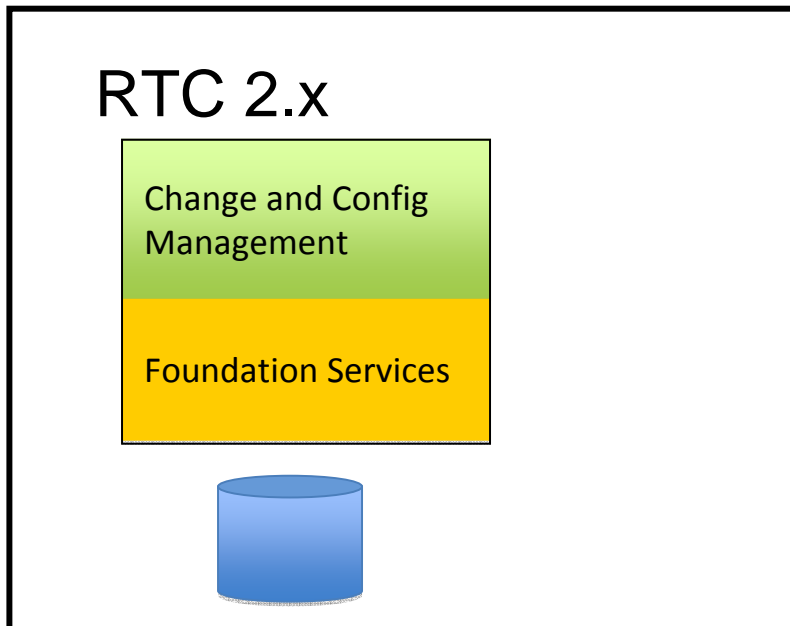
- **Discuss 3.0 deployment topology**
- **Discuss 2.x to 3.0 migration flow**

Deployment topology

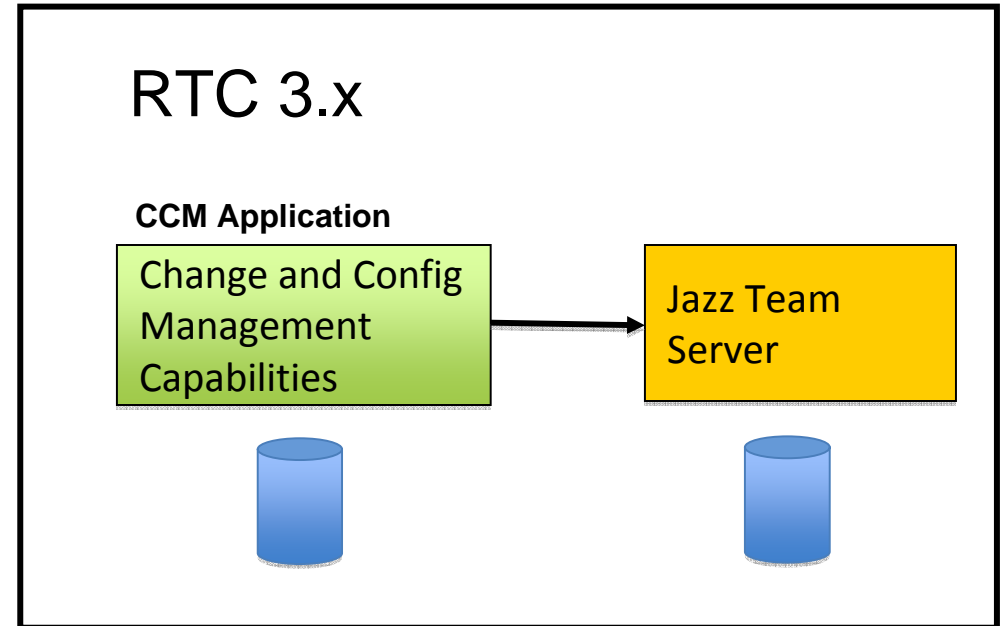
■ What's changed?

- Jazz Team Server (JTS) is decoupled from the CCM application
 - Packaged and deployed as a separate web app
- This is the first stage towards the new CLM architecture, in which multiple apps can share a common set of integration services from a single JTS
 - E.g, Users, Licenses, Dashboards
 - Shared settings for email configuration, LDAP integration, and license management
- Multiple CCM instances can share a common JTS

Deployment topology



Single WAR file, db
/jazz



Separate WAR files, dbs

New installs:
/ccm
/jts

Migrations:
/jazz
/jts

Deployment topology

- **New section added to the infocenter**

- Provides example common topologies, upfront considerations; e.g, single or multiple CCM instances, shared JTS, all on one machine or separate machines

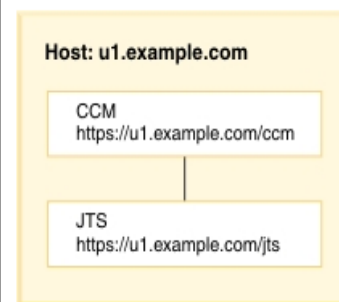
- Installing Rational Team Concert
 - 1) Planning the installation
 - Hardware and software requirements
 - Understanding licensing
 - Maximizing performance
 - Installation Manager considerations
 - 2) Planning your deployment
 - Deployment considerations
 - Deploying with single sign-on
 - Planning your URIs
 - 3) Topology overview
 - Standard Rational Team Concert 3.0 evaluation topology example
 - Standard Rational Team Concert 3.0 departmental topology example
 - Fully distributed Rational Team Concert 3.0 enterprise topology exam
 - Redeploying to a more complex topology
 - 4) Choosing a user management method
 - 5) Special server instructions
 - 6) Installing the server
 - Interactive installation guide
 - Installing by using IBM Installation Manager
 - Command-line installation

the same set of users.

Topology 1 - Single Jazz Team Server and CCM application d

In this simple topology, the Jazz Team Server and Change and Con application server. There is one Apache Derby database for the ser server.

The Derby database is limited to 10 users in an evaluation environn another supported database, and you can upgrade from Tomcat to



Topology 2 - Multiple CCM applications deployed across mul Server

databases

- Application and JTS DBs
 - DB2 and SQL Server
 - You will need to plan for 1 database for each CCM instance and the JTS
 - You must use separate databases for each app and JTS, but they can be hosted on the same database server
 - Oracle
 - You will need to plan for 1 db user for each CCM instance and the JTS
 - You must use separate Oracle users for each app and JTS, but they can be hosted on the same database

Deployment topology – other considerations

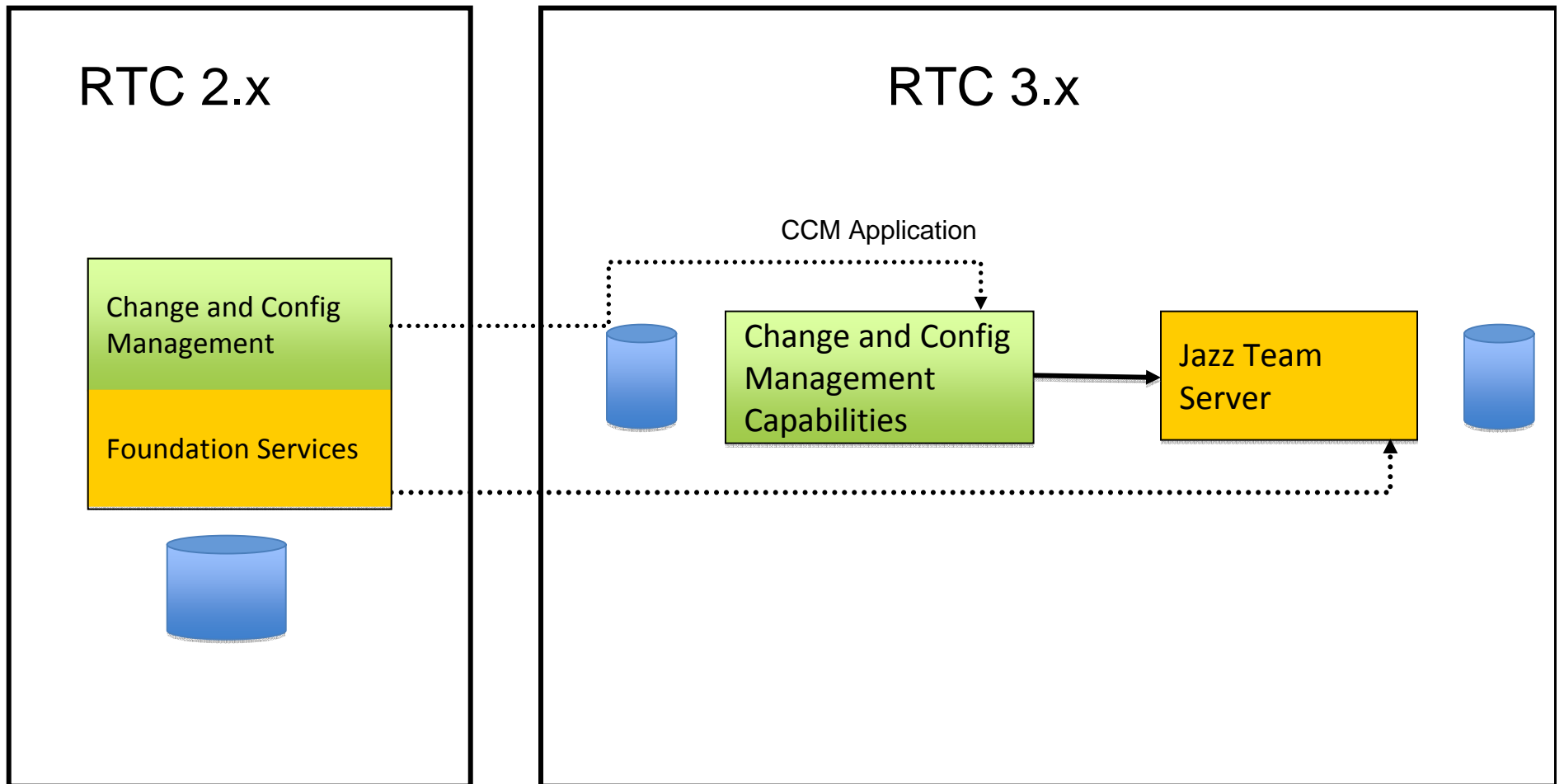
■ Shared JTS or Separate JTS instances?

- Shared JTS requires that all CCM instances are authenticated with the same authentication realm, same userids
- Consider if the user/group mappings are the same for all instances
- Do you want all users visible to all apps, or distinct groups visible to each app?
- Note: Once a CCM instance is connected to a Jazz Team Server, this cannot be changed to connect to a different Jazz Team Server.

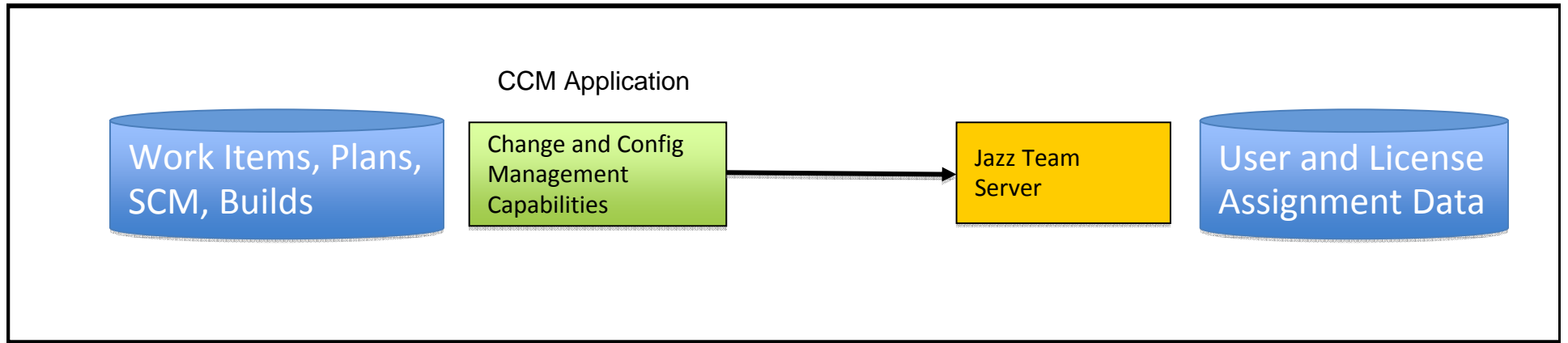
Upgrade

- **Overview of upgrade**
- **Considerations**
- **Scenarios**
- **Flow/steps**
- **Enhancements and automations**
- **FAQs**

Application Upgrade — Before and After



3.x migrated data



Upgrade Considerations

- Read the infocenter:
 - http://publib.boulder.ibm.com/infocenter/clmhelp/v3r0/index.jsp?topic=/com.ibm.jazz.install.doc/topics/c_post_install.html
 - Additional tips article at jazz.net: <http://jazz.net/library>
- Backup the db and all configuration files before starting
- Ensure the public URL was configured in 2.x prior to starting the migration. This should be true 99% of the time already. Otherwise, set it to an accurate value that reflects what users have been using to access the server.
- The CCM application must be deployed at the same host and context root (usually '/jazz') to avoid problems with existing URL references (e.g. <https://www.example.com/jazz/xyz>)
 - The IM installer provides a page for indicating this is an upgrade and will set the context root accordingly.
- Links to 2.x applications (RRC, RQM) will continue to work after migrating CCM
 - You will need the latest iFixes for these other products
- Deployment topology and application server choice will determine steps required

Installation of preserving old context root

Install Packages

Fill in the configurations for the packages.

Install Licenses Location Features Summary

Common Configurations
Upgrade Options

Common Configurations
Upgrade Options

Select one of these options:

- Not upgrading from previous product release
- Upgrading from Rational Team Concert 2.x

Application context root values

Based on your selection above, these context root values will be used:

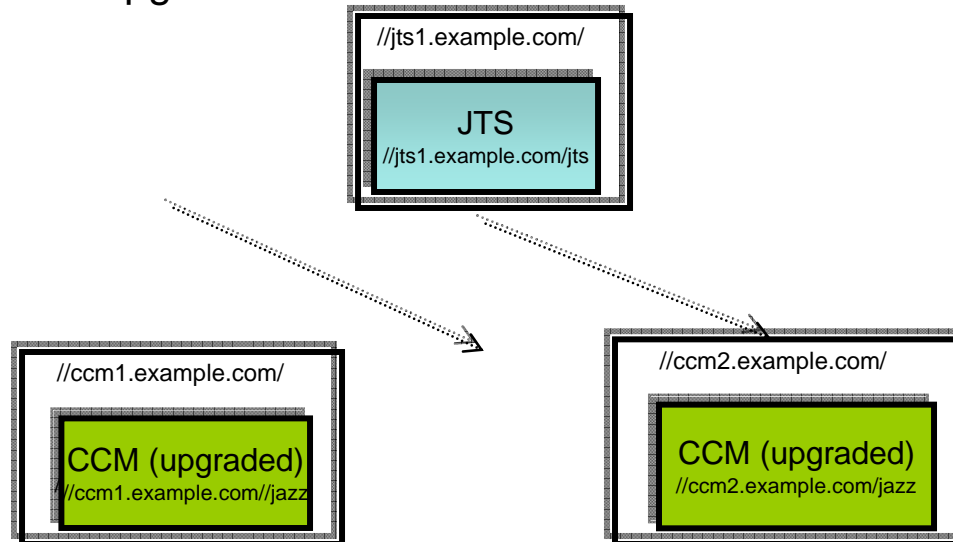
/jts	Jazz Team Server
/jazz	Change and Configuration Management

Details on upgrading from previous product release as well as additional cont

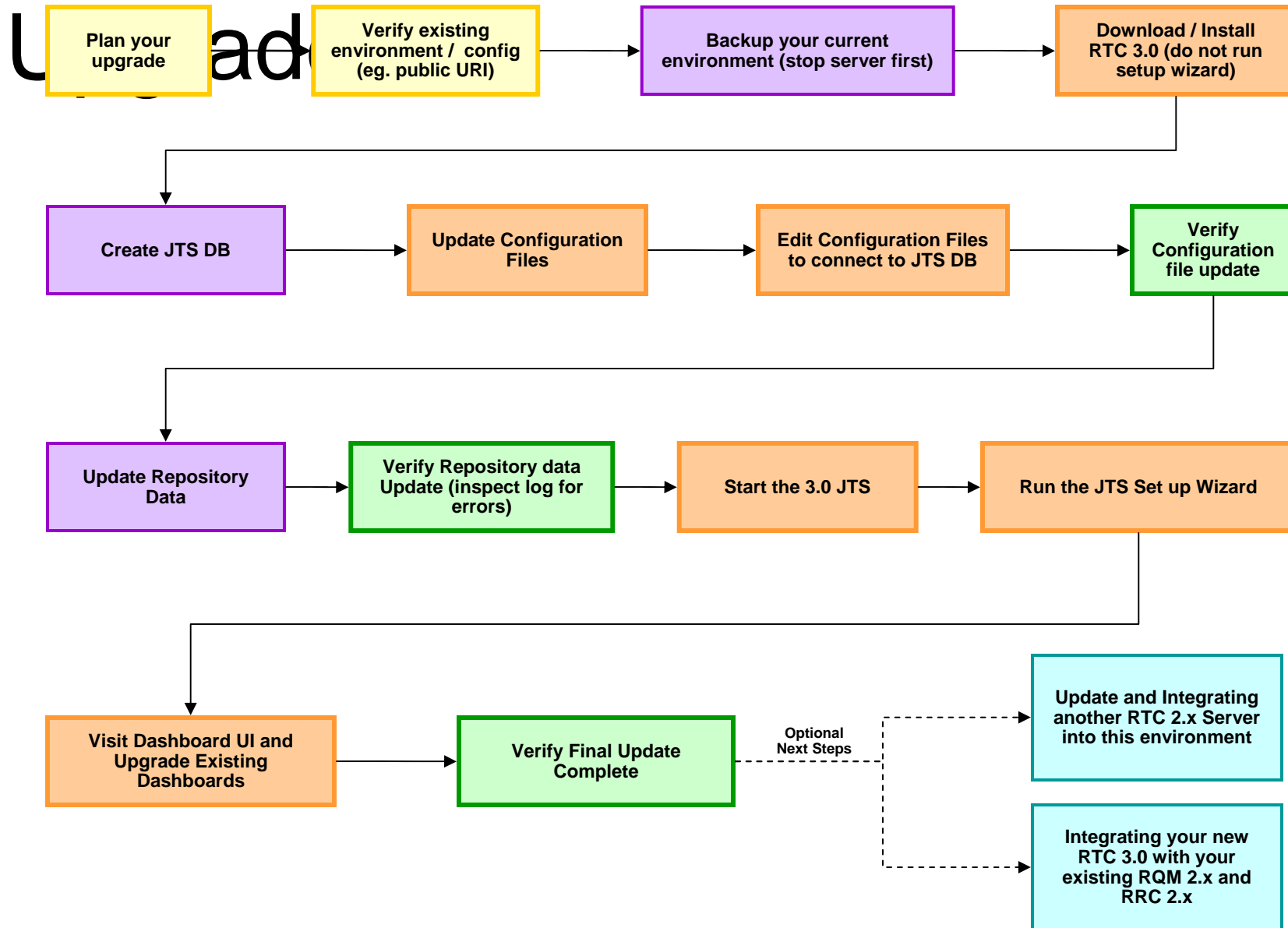
Upgrade scenarios

- Deploy CCM and JTS on the same host
- Deploy CCM and JTS on separate hosts
- Upgrade multiple CCM instances, connecting to a shared JTS
 - Multiple upgraded instances can be configured to use a shared JTS
 - The JTS can be deployed to a separate application server instance/profile or along with another application in an upgrade scenario.

Note each migrated CCM instance is on it's own host to preserve the /jazz context root and URL stability



Flow of RTC 2.x to RTC 3.0



Basic Upgrade Flow

- Plan
 - Decide on the deployment topology to be used for the new installation
 - e.g., same server or separate hosts for ccm and JTS
- Install
 - Install the server into a new location and deploy the product applications according to the deployment plan
 - If you are using the Installation Manager to install the server, you will be given the opportunity to indicate if you are planning to upgrade an existing deployment
 - License offerings should be installed into the same location as the JTS
 - Create new database for the JTS

Basic Upgrade Flow

- Migrate config and data
 - Configuration files and properties
 - New repotools command '-migration_updateConfigurationFiles', automates copying and merging of app and tomcat config files (teamserver.properties, friends.rdf, tomcat-users.xml, server.xml, web.xml)
 - Also merges properties into the JTS teamserver.properties. User must manually verify and edit the JTS public URL and the
 - CCM 'in-place' migration (repotools -addTables)
 - User and license assignment data
 - Export from CCM to a TAR file
 - Import from TAR file to JTS
 - Application data
 - Emitted as part of JTS import
 - Import application data back to CCM
 - Rebuild workitem, lucene, and RDF indices using repotools commands
 - For CCM app only; for JTS they will be created from scratch

Basic Upgrade Flow

- Setup
 - Use the setup wizard to verify the configuration and finalize the setup, registering CCM with its JTS
 - Use the admin web UI to perform any other administration
- Migrate dashboards
 - While logged in as an administrator, use the dashboards UI to migrate the dashboards online.

Upgrade — Enhancements and automations

- For CCM, in-place migration provides a significant performance gain over a full export and import
- New repotools command '-migration_updateConfigurationFiles', automates copying and merging of app and tomcat config files
 - Preserves teamserver.properties customizations, and tomcat LDAP config
- Automated scripts that aggregate commands are available via download from 'tips' article
 - Works well on same-server topology
 - Article will be refreshed as needed with additional tips or enhancements to the scripts
 - <http://jazz.net/library/article/524>

Upgrade - FAQs

- Q: Do I need to upgrade all of my 2.x servers at the same time?
 - No. There is support for interoperability between the different server versions.
 - This is true even if you are converging many app instances to a shared JTS
 - The only caveat is you must decide where your JTS is located at the time of upgrade
 - Note, however, that 2.x rich clients are not compatible with 3.x servers and 3.x rich clients are not compatible with 2.x servers
- Q: Can my data be migrated while online?
 - No. The server will need to be offline during data migration. It is strongly recommended that you take the server offline, backup the data, and then perform the upgrade and data migration.
- Q: How long will it take?
 - The time it takes will depend on the product and number of product(s) being upgraded, the size of the deployment (number of users and size of the databases) and, to a lesser degree, the deployment topology. Plan to allocate a full day for the process as a starting point (we plan to provide more specifics based on sizing at a future point).

Upgrade - FAQs

- Q: Will my integrations to other 2.x products (RTC, RQM, RRC) continue to work after I upgrade CCM?
 - Yes. The links and friend relationships are preserved and linking will continue to work.
- Q: When the other CLM products are released, will I be able to migrate them to also use a shared JTS with my 3.0.x CCM?
 - Yes. Note, however, that QM instances will still need to be deployed to distinct hosts to preserve URL stability avoid collisions on the '/jazz' context root.

Deployment topology – other considerations

■ Backing up multiple dbs

- A simple RTC installation targets two distinct repository databases (one for its CCM, and one for its JTS).
- There are links between the two repositories, and they should be backed up close in time.
- Ideally, the JTS should be backed up after its CCM. In the event of multiple RTC instances, sharing the same JTS; they should all be backed up close in time, with the common JTS being backed up last.
- Remember that backup and restore of CLM repositories is done using the database vendor tools (not repotools).
- Backup JFS indexes
 - http://publib.boulder.ibm.com/infocenter/clmhelp/v3r0/index.jsp?topic=/com.ibm.jazz.repository.web.admin.doc/topics/t_jfs_backup.html
 - JFS maintains RDF and Lucene text indexes for stored resources
 - They are derived from persisted content in the db, and can be rebuilt if needed.
 - Making a backup, however, can reduce recovery time if it is ever necessary to restore.

Questions



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