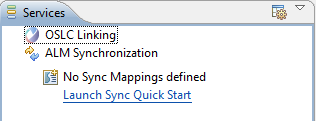
**Task Synchronization Configuration**

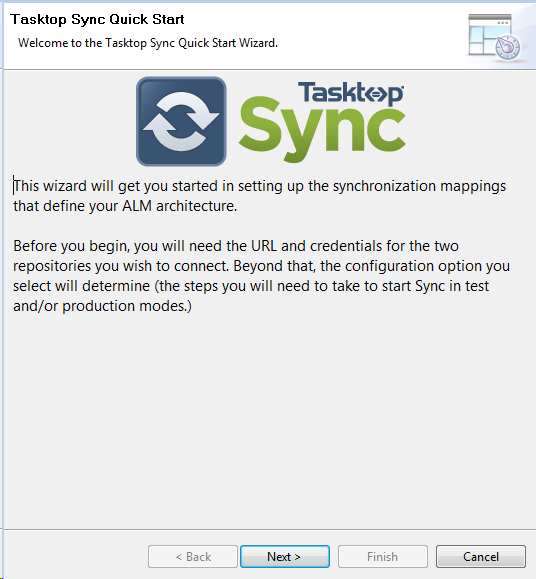
## Creating a Task Mapping

Creating a task mapping in Tasktop Sync requires three primary items be configured: a connection to each participating repository, a set of queries defining the scope of the synchronization, and a mapping that defines how synchronization between two repositories should be handled.



Click on that link to start the Quick Start Wizard, otherwise you can right click the ALM Synchronization node in the Services view and select "New Task Mapping."

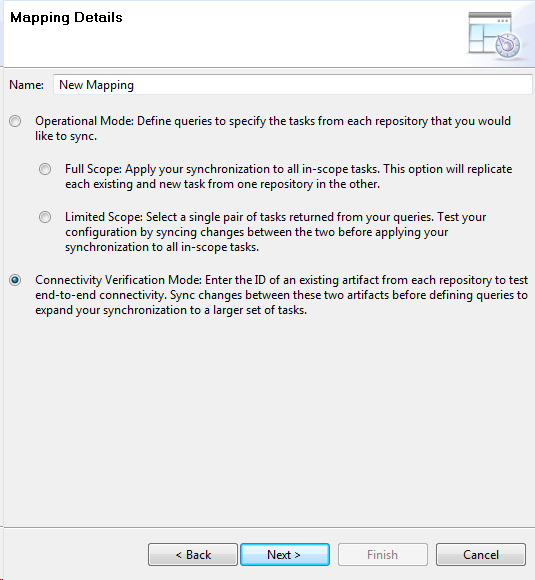
You will be presented with a welcome page which reminds you that you need credentials for the two repositories to sync and to create one task in each repository to synchronize.



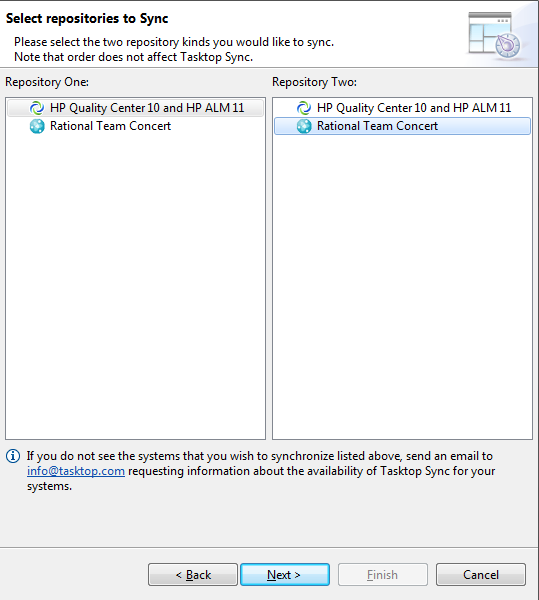
“Operational Mode” contains two different options, described below. Select this mode only if you can access or create queries to each repository. See [Create Queries](http://www.ibm.com/support/knowledgecenter/api/content/nl/en-us/SSWMXJ_1.1.0/com.tasktop.sync.help/userguide/Manual-Task-Synchronization-Configuration-Advanced-.html#CreateQueries) for more information.

A “Full Scope” mapping, under “Operational Mode”, will apply your synchronization to all existing tasks returned by your queries, replicating each existing task from one repository in the other and creating any new tasks added to one in the other.

A “Limited Scope” mapping, under “Operational Mode”, asks you to select only a single pair of existing tasks returned from your queries to test your configuration between the two before applying your synchronization to all in-scope tasks.

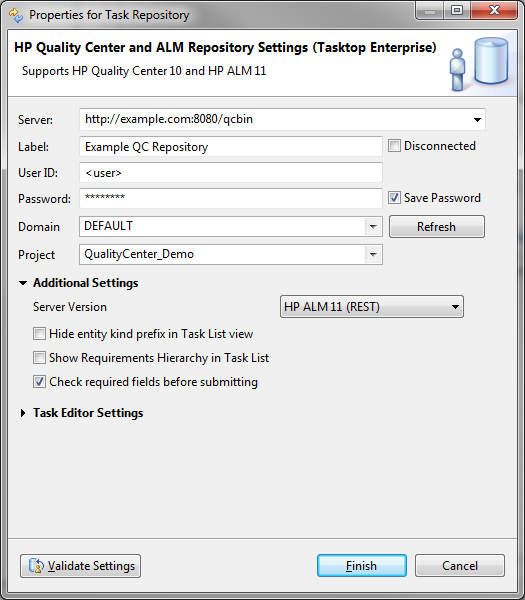


Next, you will see a page which allows you to specify which kind of repositories you would like to sync. The order in which you specify the two repositories doesn’t affect the synchronization at all.



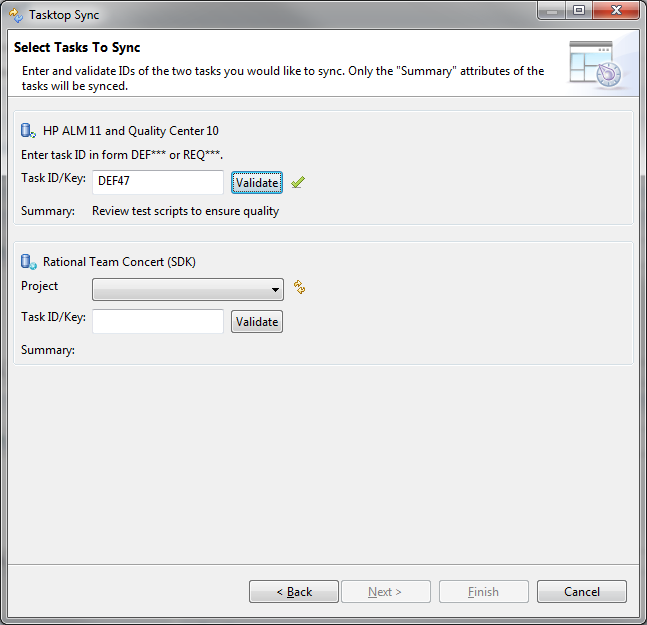
ou will see two pages where you will enter your credentials for the two different repositories. These will be different depending upon which repository type you select. Here is a screen shot of the credentials page for an HP ALM and Quality Center connector:

After you select which type of repository to use for Repository One and Repository Two, you will see two pages where you will enter your credentials for the two different repositories. These will be different depending upon which repository type you select. Here is a screen shot of the credentials page for an HP ALM and Quality Center connector:



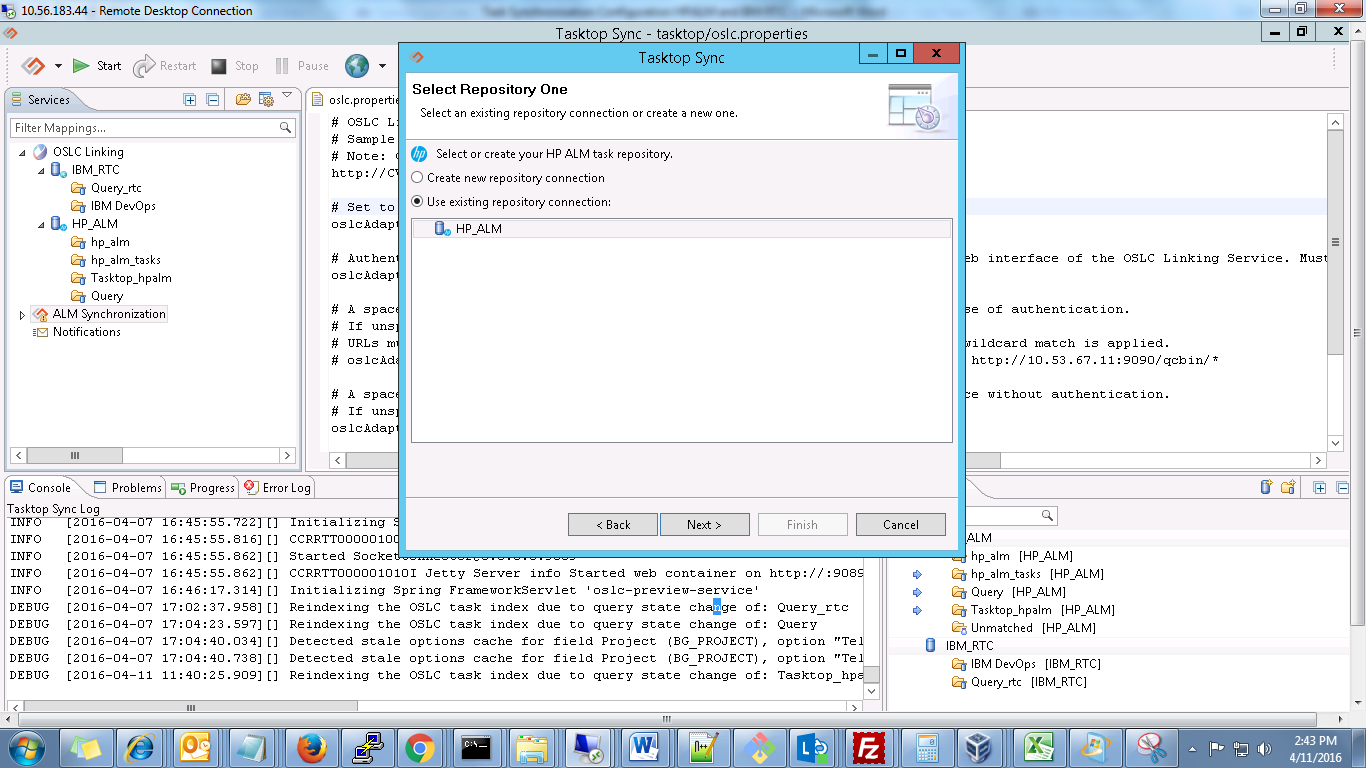
### Connectivity Verification Mode

If you chose “Connectivity Verification Mode”, the next page will ask you for the task IDs of the two tasks to synchronize; it might also ask for additional information needed for a particular type of repository. For example, for IBM’s Rational Team Concert repository, you need to specify the project area, as shown in this screenshot:

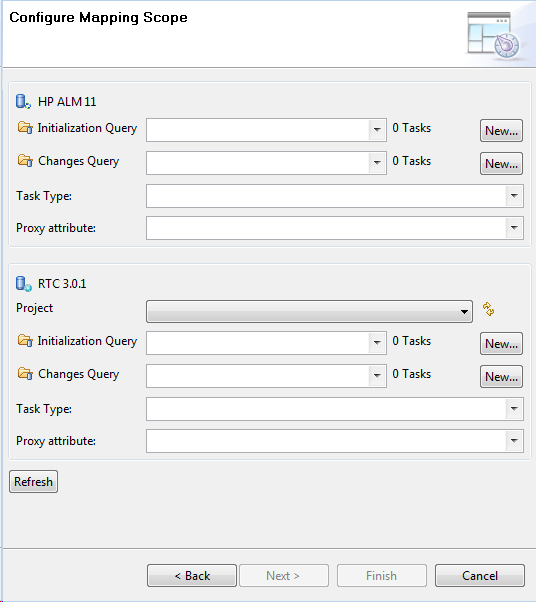


After you press Finish, Tasktop Sync will open the task mapping editor for your new mapping. The mapping will be configured to synchronize the summary attribute (and only the summary attribute) between the two test tasks that you created.

**Operational Mode: Full Scope**



If you chose “Full Scope” under “Operational Mode”, the next page will ask you some details about the scope. This includes the two queries that define the mapping scope, the types of the tasks, and the proxy attribute field.



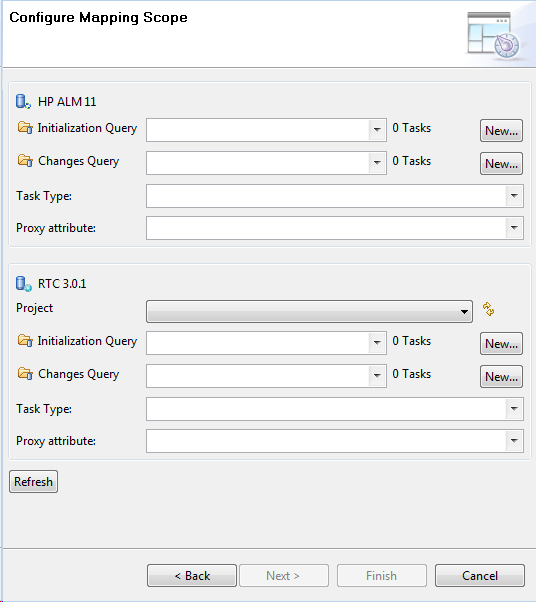
For each repository, you need to configure queries. See [Create Queries](http://www.ibm.com/support/knowledgecenter/api/content/nl/en-us/SSWMXJ_1.1.0/com.tasktop.sync.help/userguide/Manual-Task-Synchronization-Configuration-Advanced-.html#CreateQueries) for more information about query scope. You may choose existing queries, or create new queries.

Task type will be populated from the tasks that match the queries. In the case there are multiple types, you can select which type you want to synchronize.

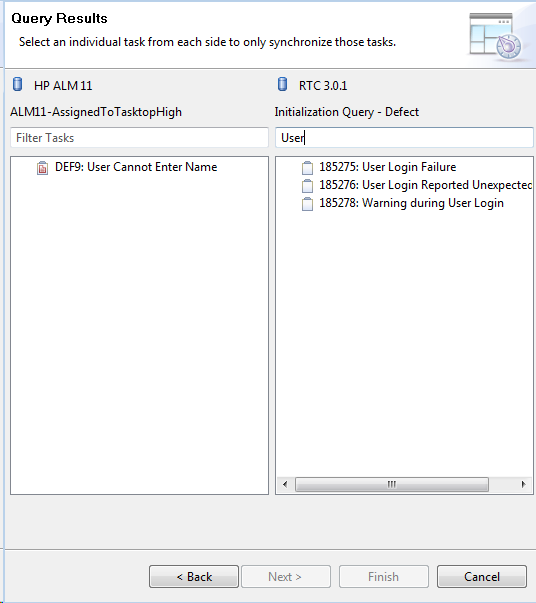
The proxy attribute may be left blank to be configured later. See [Proxy Association Storage](http://www.ibm.com/support/knowledgecenter/api/content/nl/en-us/SSWMXJ_1.1.0/com.tasktop.sync.help/userguide/Manual-Task-Synchronization-Configuration-Advanced-.html#ProxyAssociationStorage) for more information.

After you press Finish, Tasktop Sync will open the task mapping editor for your new mapping. The mapping will be configured to synchronize the summary attribute (and only the summary attribute) between the sets of tasks you defined.

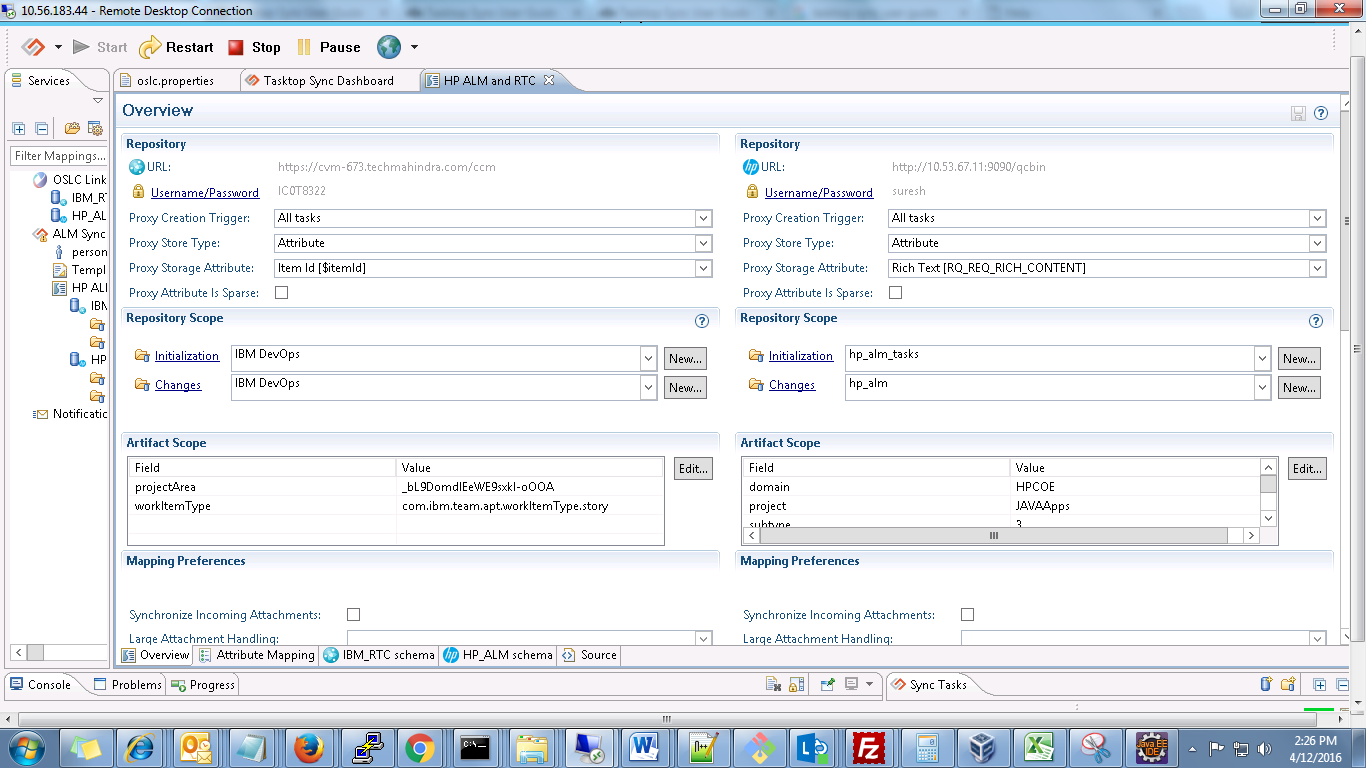
If you chose “Limited Scope” under “Operational Mode”, the next page will ask you to choose queries from each repository. You only need to fill in the initialization queries for each repository; the changes queries, task type and proxy attribute are all optional.



After you press Next, you must choose a task from each repository. The results of each initialization query are shown on the page; click on a single task in each list. To help you locate the desired task, you can enter some filter criteria to narrow down the list.

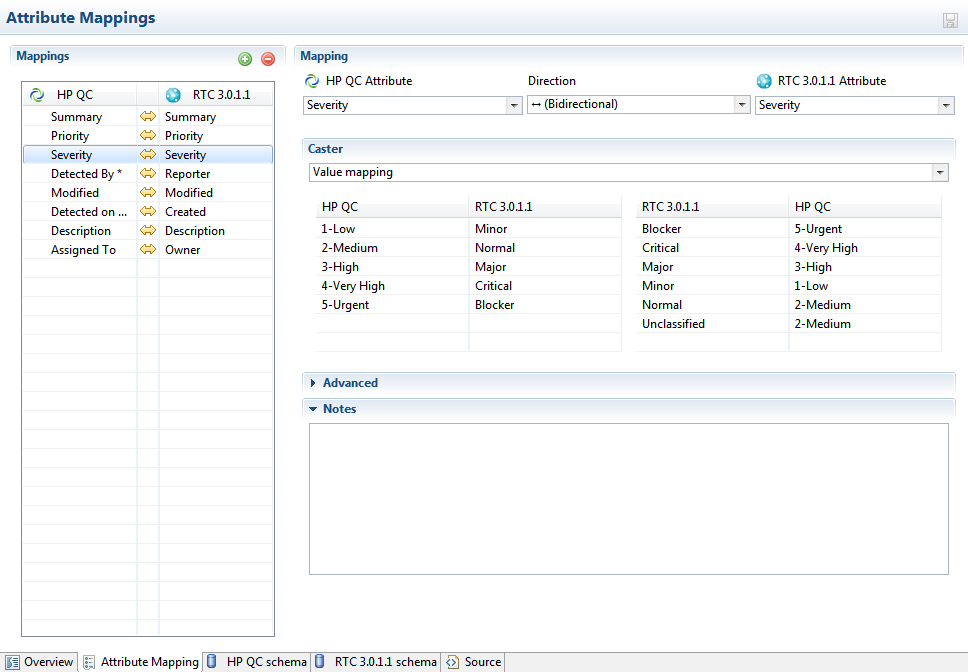


After you press Finish, Tasktop Sync will open the task mapping editor for your new mapping. The mapping will be configured to synchronize the summary attribute (and only the summary attribute) between the two test tasks that you created.

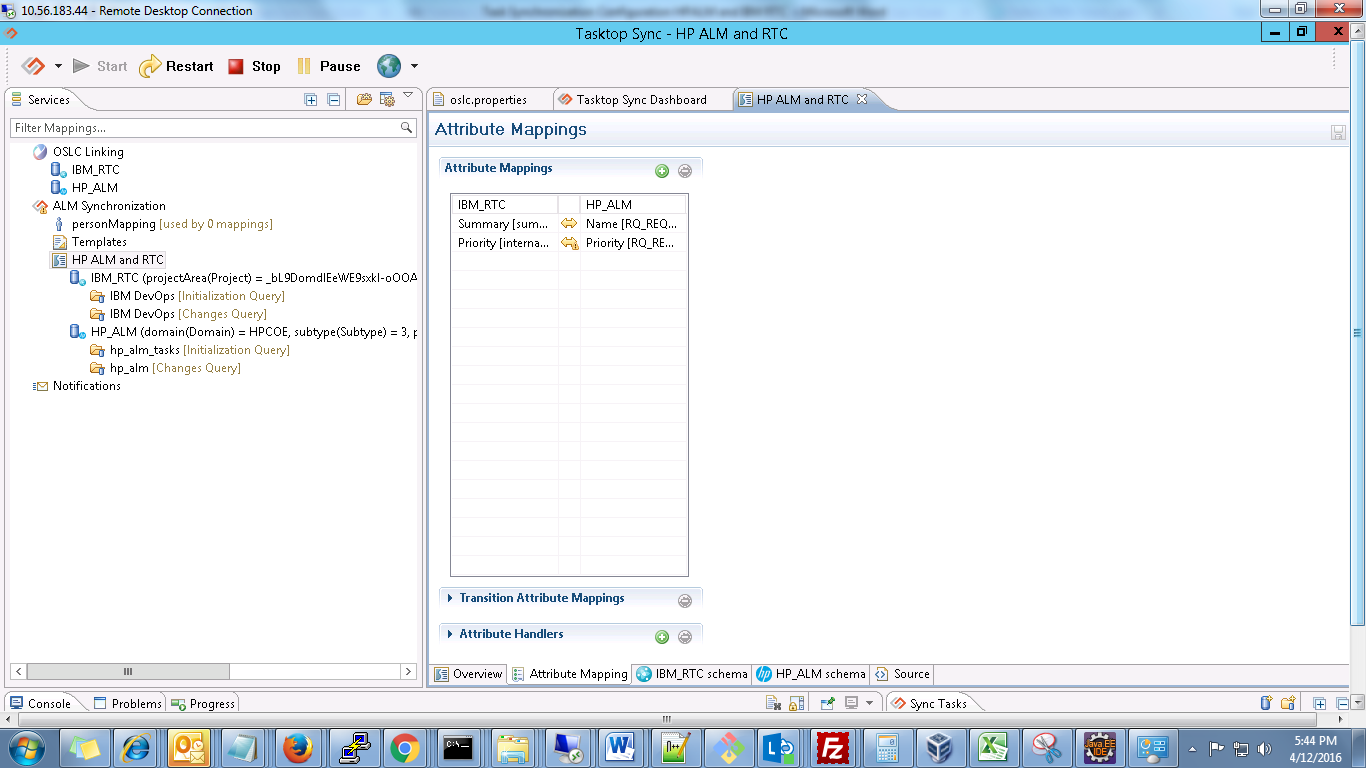


### Attribute Mappings Editor

The attribute mappings editor is used to configure the specific attribute-level mappings that are used when synchronizing tasks between the repositories. Before you can configure attribute mappings, you must have a refreshed schema for each repository



#### Mappings Table



# Web Container Configuration

1. Start Tasktop Sync.
2. Edit the web.properties file within Tasktop Sync (you can open this file by clicking on the web menu in the tool bar and selecting Configure).
3. Several of the properties combine to form a URL that web browsers and other repositories will use to find the computer which Tasktop Sync is on.
   * For protocol, use the URL protocol (probably http) users will connect to your computer with.
   * For hostname, you should pick a hostname that is resolvable by DNS. If configuring OSLC linking then the hostname set here must not change once task relationships begin getting persisted. Users will need to be able to reach it when they link tasks.
   * For port, you can choose any port which does not conflict with another port and which will not be blocked by security software.
   * For bindIP, you need to choose which IP address (of several that your server might have) that the web container should bind to. If you set bindIP to 0.0.0.0 it will bind to all configured IP addresses on the computer.
   * For debug, set to true to enable the low level Jetty debugging output. Note that setting this option will redirect all Tasktop Sync’s error output (stderr) to the Jetty debug log file in the logs directory.

# Configure web properties menu option

# 

# 

* For protocol, use the URL protocol (probably http) users will connect to your computer with.
* For hostname, you should pick a hostname that is resolvable by DNS. If configuring OSLC linking then the hostname set here must not change once task relationships begin getting persisted. Users will need to be able to reach it when they link tasks.
* For port, you can choose any port which does not conflict with another port and which will not be blocked by security software.
* For bindIP, you need to choose which IP address (of several that your server might have) that the web container should bind to. If you set bindIP to 0.0.0.0 it will bind to all configured IP addresses on the computer.
* For debug, set to true to enable the low level Jetty debugging output. Note that setting this option will redirect all Tasktop Sync’s error output (stderr) to the Jetty debug log file in the logs directory.

Oslc.properties file

# OSLC Linking Configuration

# Sample URL: <protocol>://<hostname>:<port>/oslc/...

# Note: Context path is setup in the OSLC Linking container configuration.

http://CVM-1006:9089/oslc/rootservices

# Set to true to enable the OSLC adapter

oslcAdapter.enabled=true

# Authentication Mode. Indicates if authentication should be disabled for the web interface of the OSLC Linking Service. Must be one of true/false, defaults to false if not specified.

oslcAdapter.disableAuthentication=true

# A space-separated list of task repository URLs that can be used for the purpose of authentication.

# If unspecified, all configured task repositories are used.

# URLs must be space-separated. URLs may have a trailing '\*', in which case a wildcard match is applied.

# oslcAdapter.authenticationRepositories=https://cvm-673.techmahindra.com/ccm/\* http://10.53.67.11:9090/qcbin/\*

# A space-separated list of IP addresses that can access the OSLC Linking Service without authentication.

# If unspecified, none are available. Values must be space-separated.

oslcAdapter.allowedRemoteHosts=192.168.0.21 10.53.67.11 10.56.183.181

# OAuth Consumer Secret. This should be changed to new values in production. This is used to allow consumers to create an OAuth connection with the OSLC Linking Service.

oslcAdapter.oAuth.consumerSecret=1ad1b943783c4430bdc7c51899f99881

# Query Synchronization Interval in seconds. Controls how often the OSLC queries are run to update the task search index. If not provided, defaults to 60sec (1min).

# oslcAdapter.querySyncInterval=60

# Task Linking Configuration

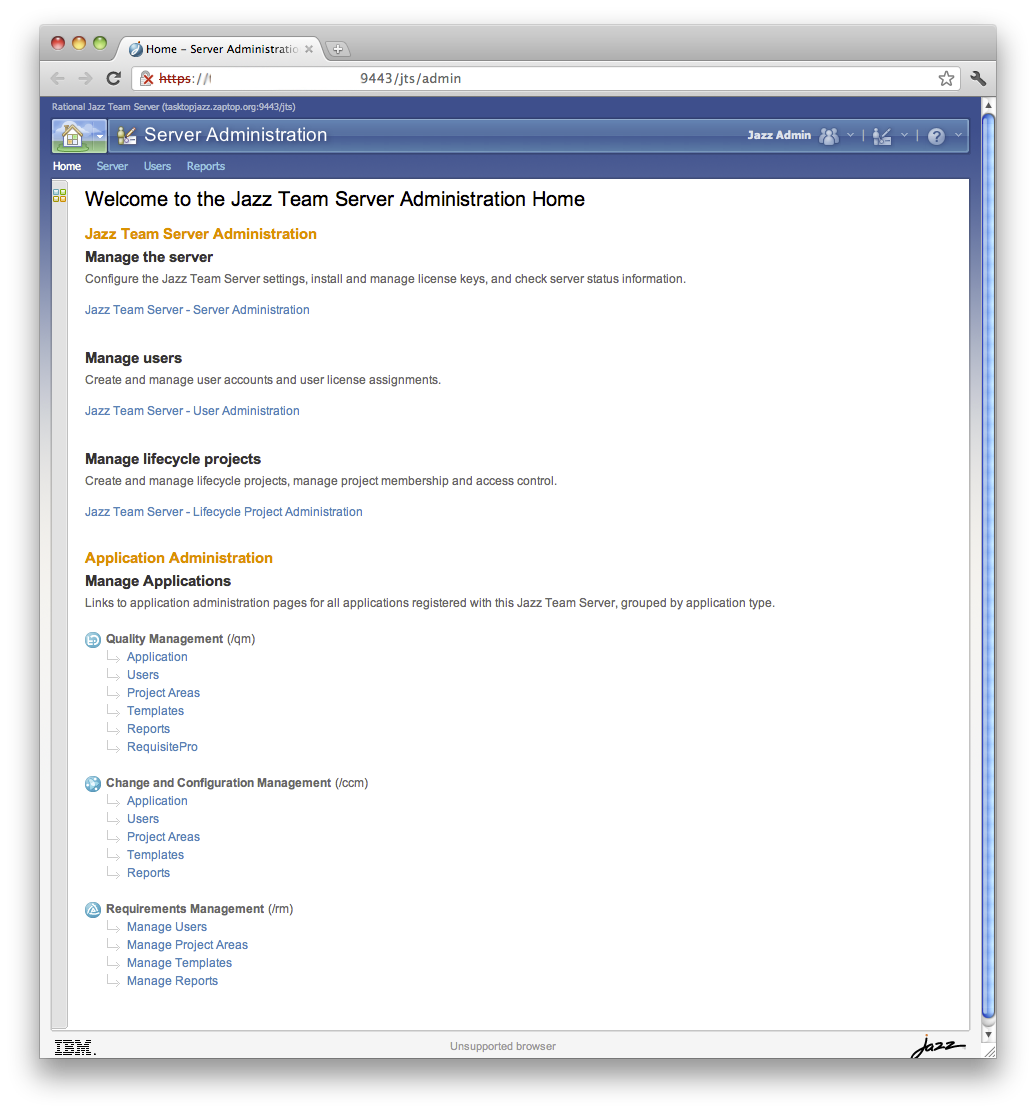
1. Start Tasktop Sync.
2. Edit the OSLC properties file within Tasktop Sync (you can open this file by right clicking on OSLC Linking in the Services view and selecting "Properties"
   * For enabled, you should leave it “false” (or unspecified) until you are satisfied that your configuration is correct. Afterwards, setting enabled to “true” will cause Tasktop Linking to start as soon as Tasktop Sync is launched.
   * For disableAuthentication should be false if you want authentication and true if you want to disable authentication. (See authentication note below.)
   * For authenticationRepositories, give a space-separated list of URLs of configured task repositories that can be used to authenticate the user’s name/password. (See authentication note below.) URLs may have a trailing ‘\*’, in which case a wildcard match is applied.
   * For allowedRemoteHosts, give a space-separated list of IP addresses that can access the OSLC Adapter without authentication. If unspecified, all IP addresses must authenticate.
   * OAuth Consumer Secret must be a randomized 40 character hex string, used to allow OSLC consumers to create an OAuth connection via Task Linking.

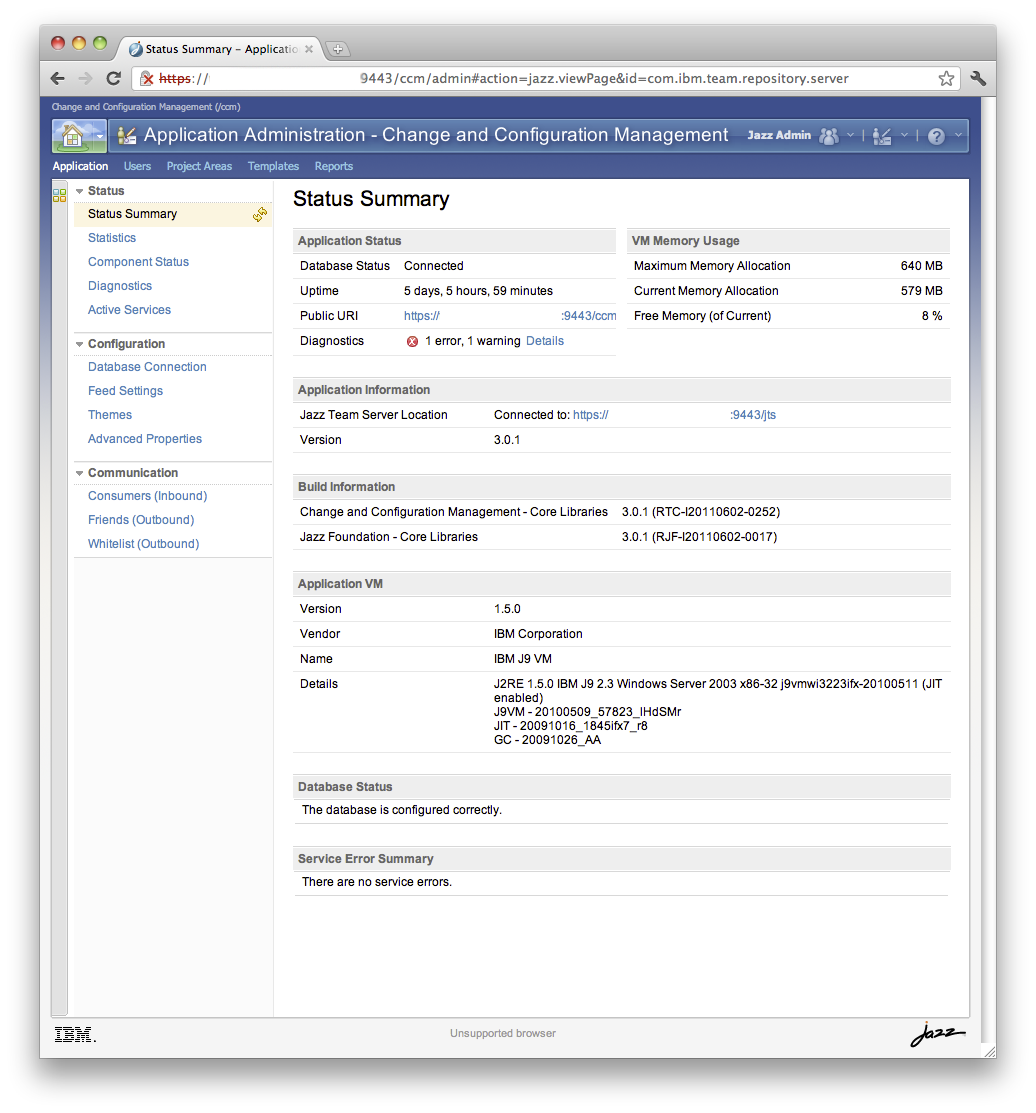
## IBM Rational Team Concert Change Configuration Management (Change and Configuration Management) Configuration

### Configure the Task Linking Server Relationship

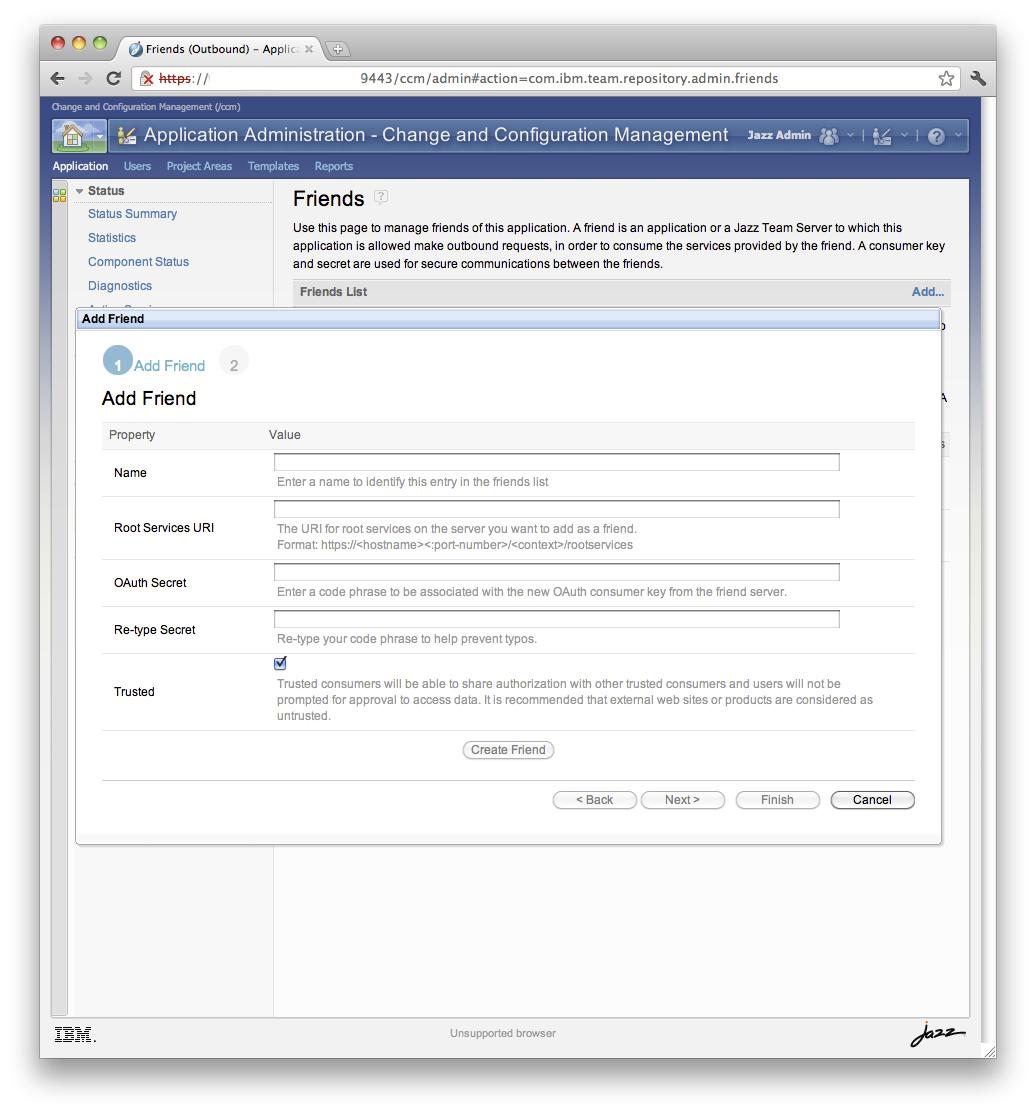
To add Task Linking as a service that provides links to related tasks, complete the following steps:

Navigate to the Jazz Team Server Administration Home:

Click on Application under Change and Configuration Management, and you will get to the Change and Configuration Management page

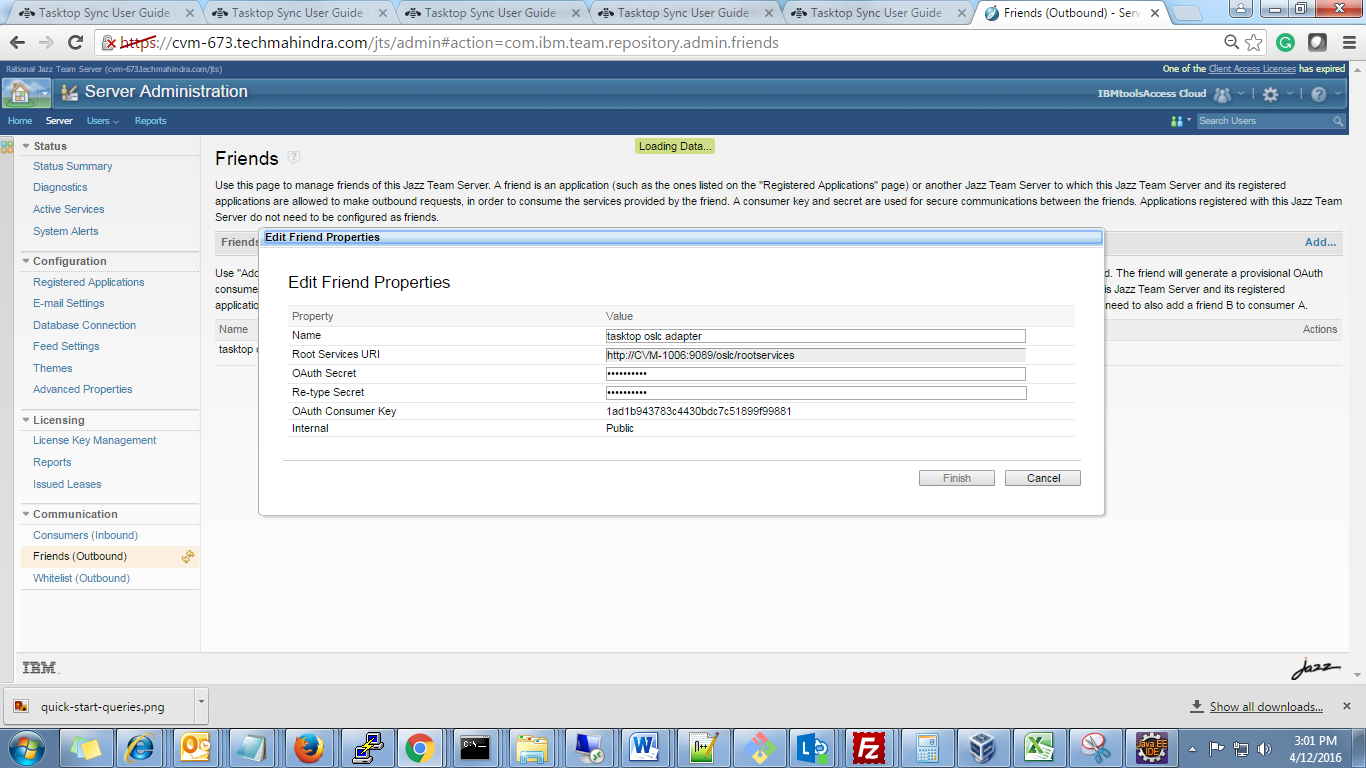


Click on Friends (Outbound) section in the left sidebar. When the Friends page appears, click Add and complete the form using values from your oslc.properties file. These values must match the values in the oslc.properties file exactly.

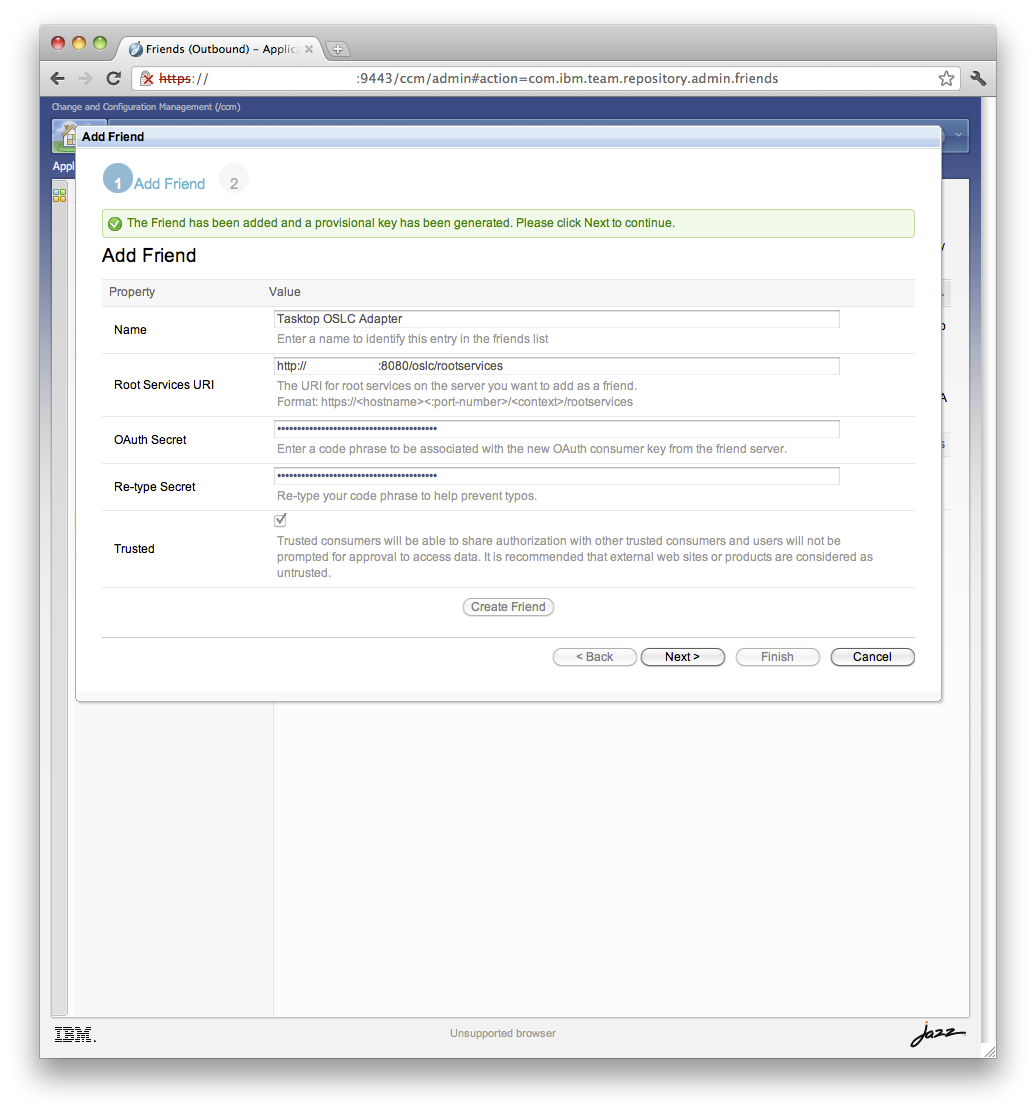


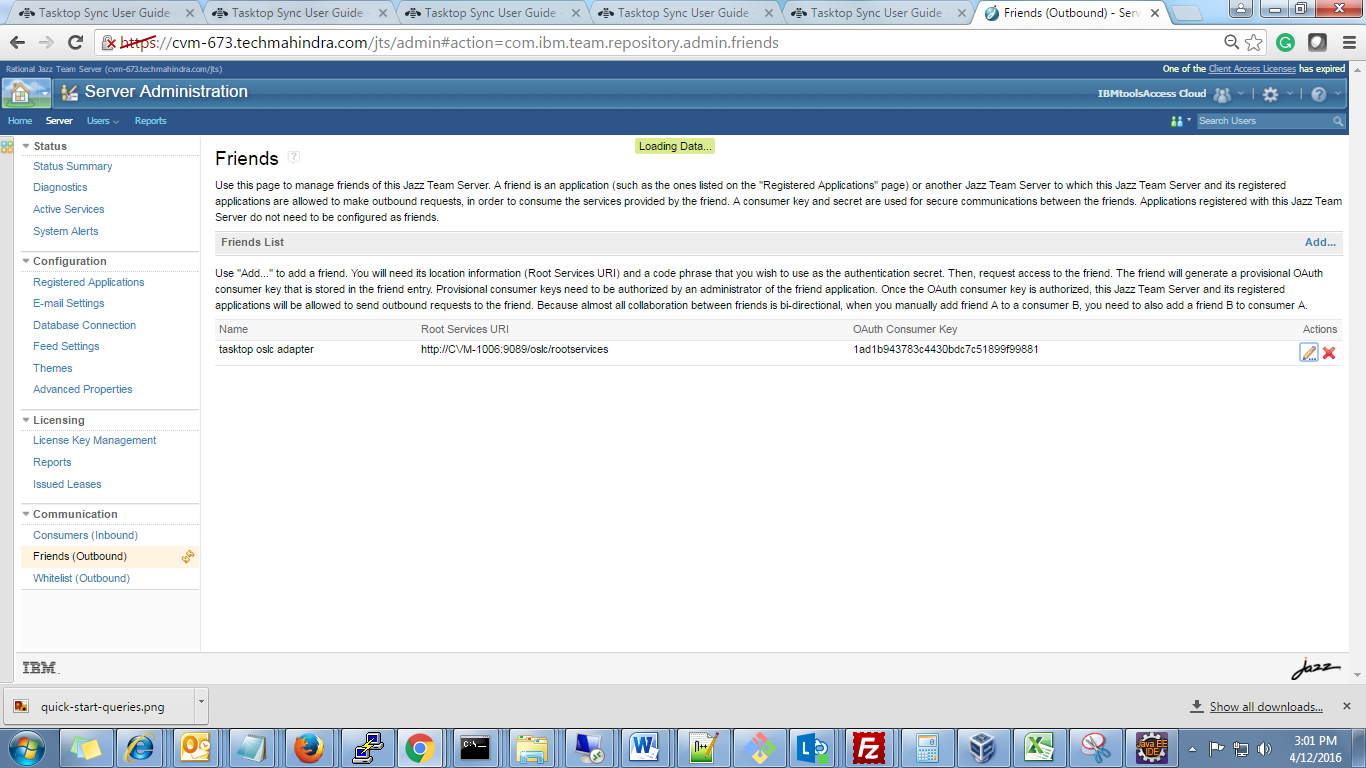
* Name: We recommend Tasktop OSLC Adapter.
* Root Services URI: protocol:// hostname: port/oslc/rootservices
* Consumer Secret: consumerSecret

The filled-in form will look something like this:



Click on the Create Friend button, and you will get confirmation that the service has been registered as a Friend:

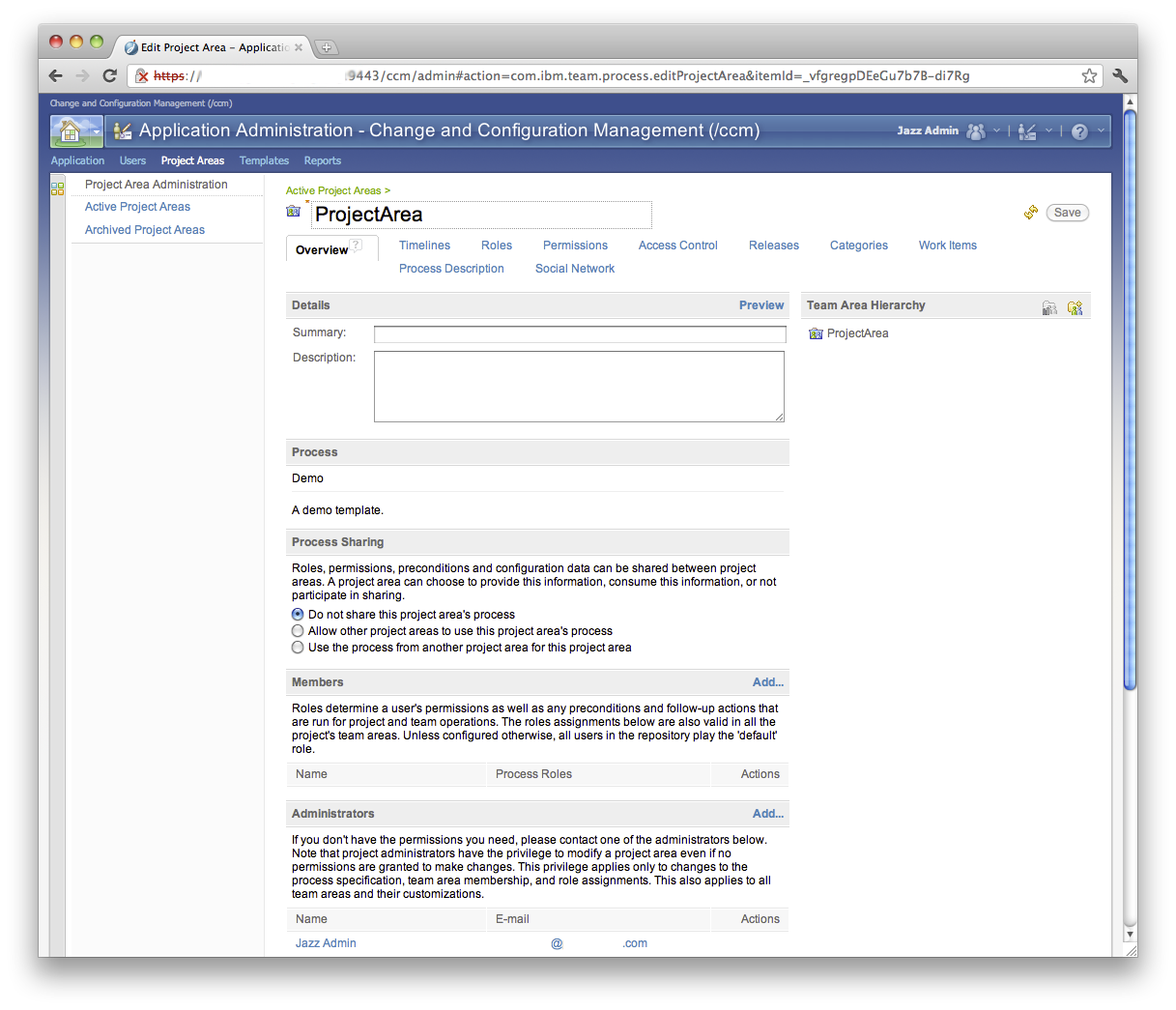




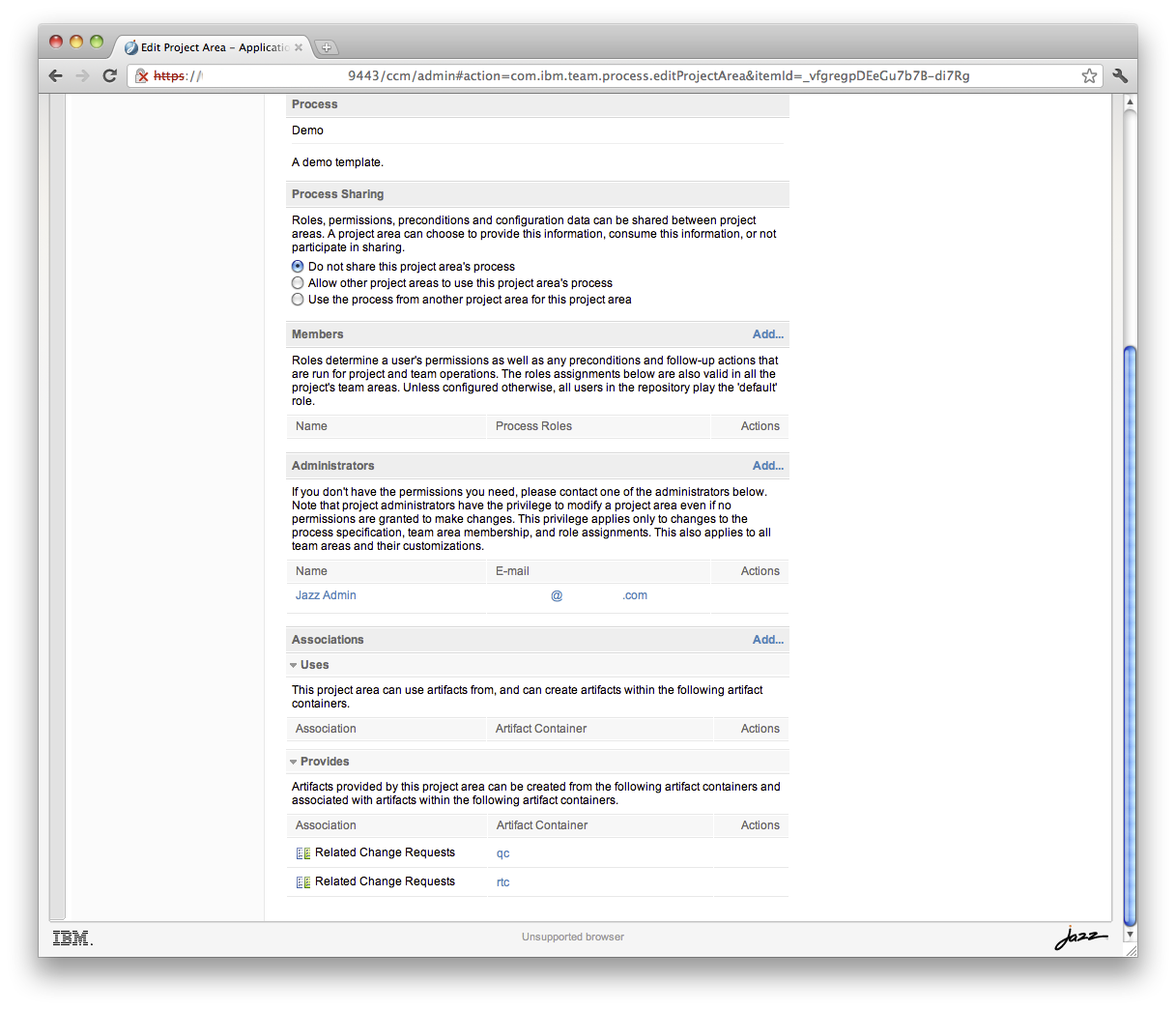
### Configure the IBM Rational Team Concert Change and Configuration Management Project Area

For each Project Area that you wish to enable the consumption of remote tasks using Task Linking, complete the following steps:

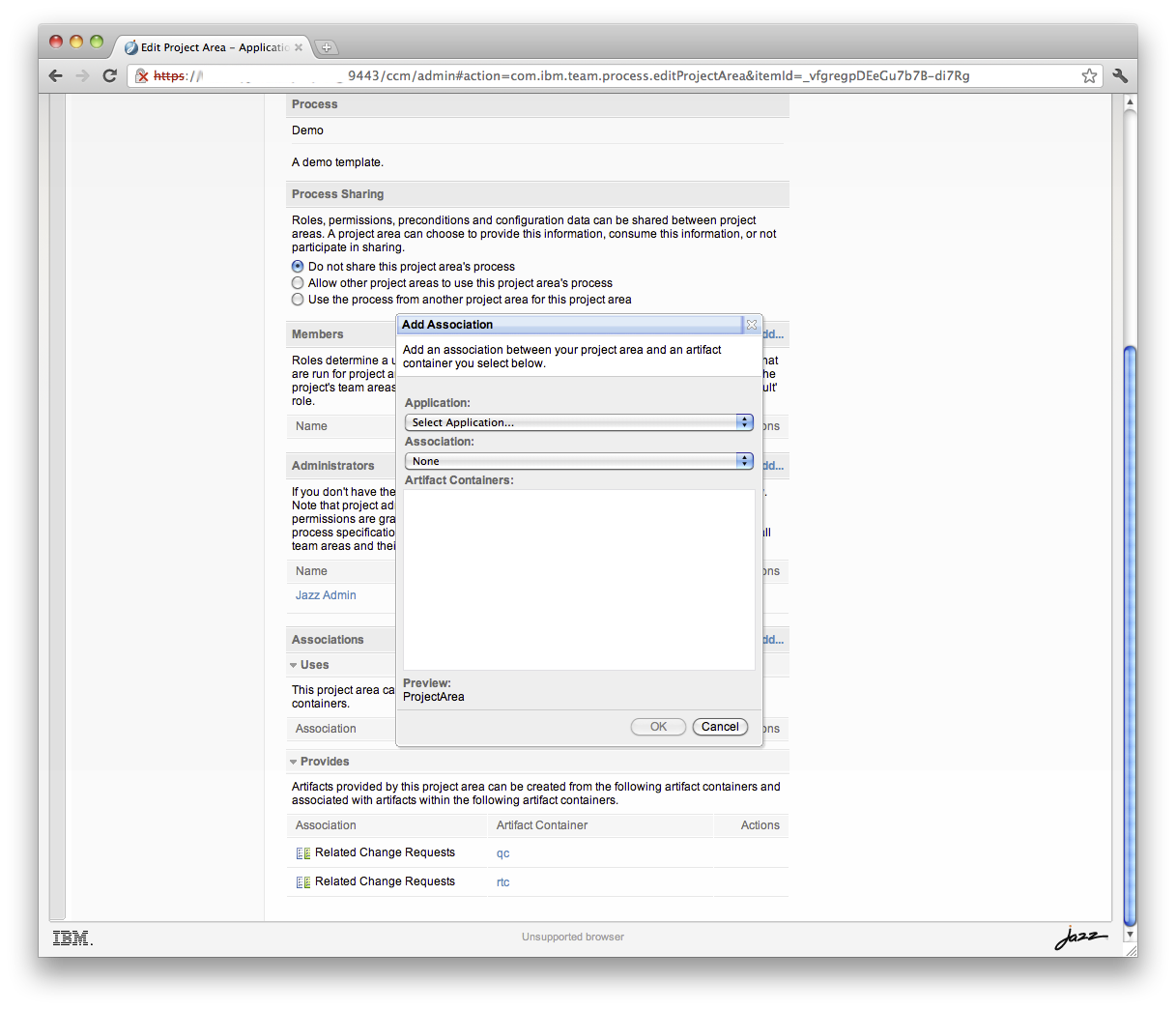
Navigate to the Project Area Administration Page on the top tab bar, then navigate to a project area:



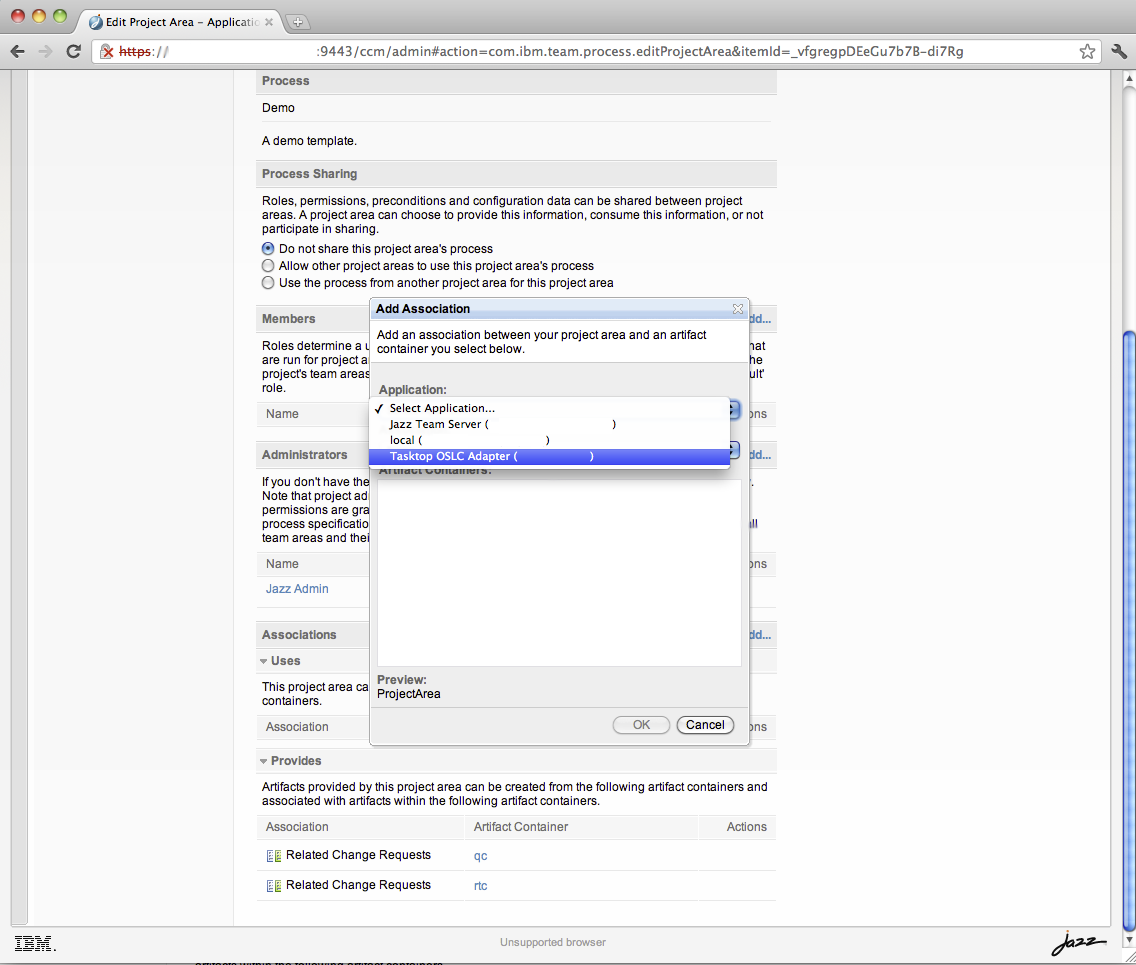
Navigate to the bottom section, Associations:

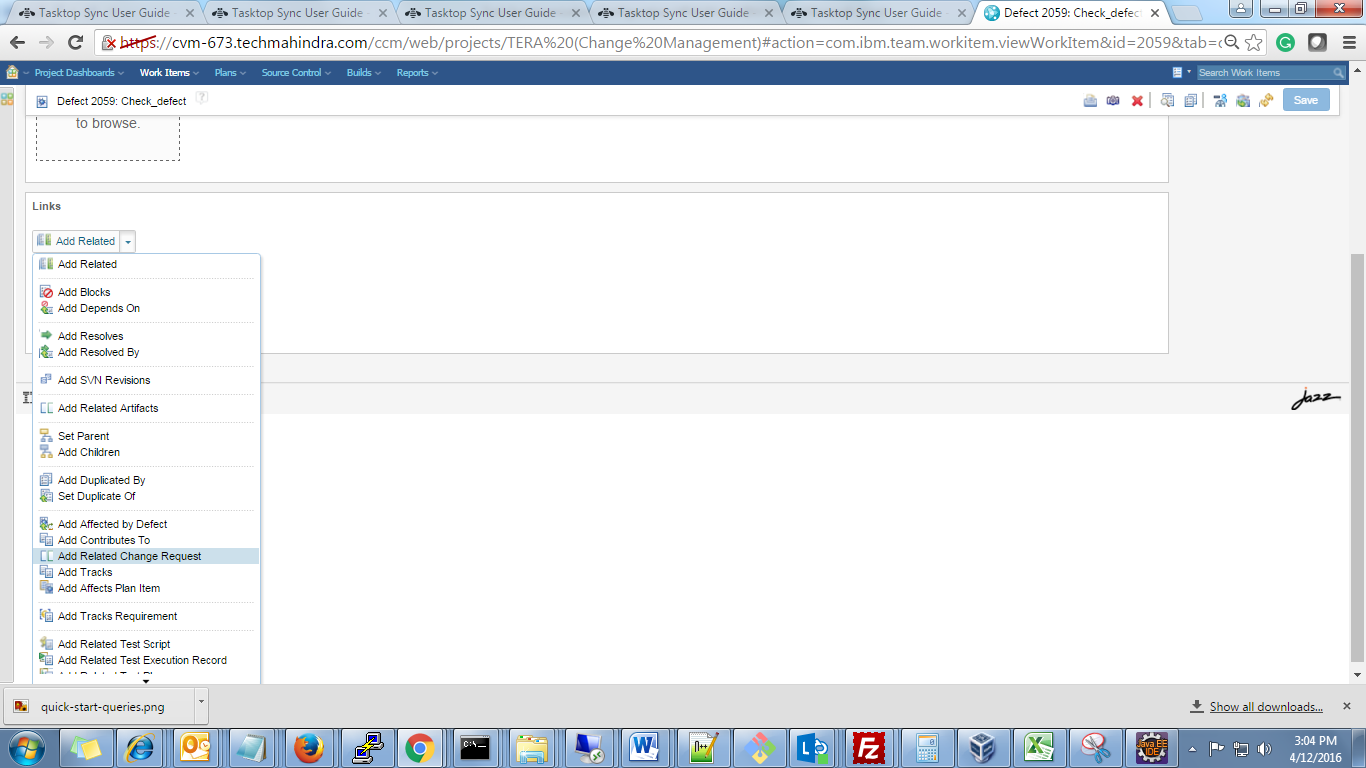


Click on Add... at the right of the Associations header bar:



Select an Application: “Tasktop OSLC Adapter” or whatever you named your server on the Friends page.

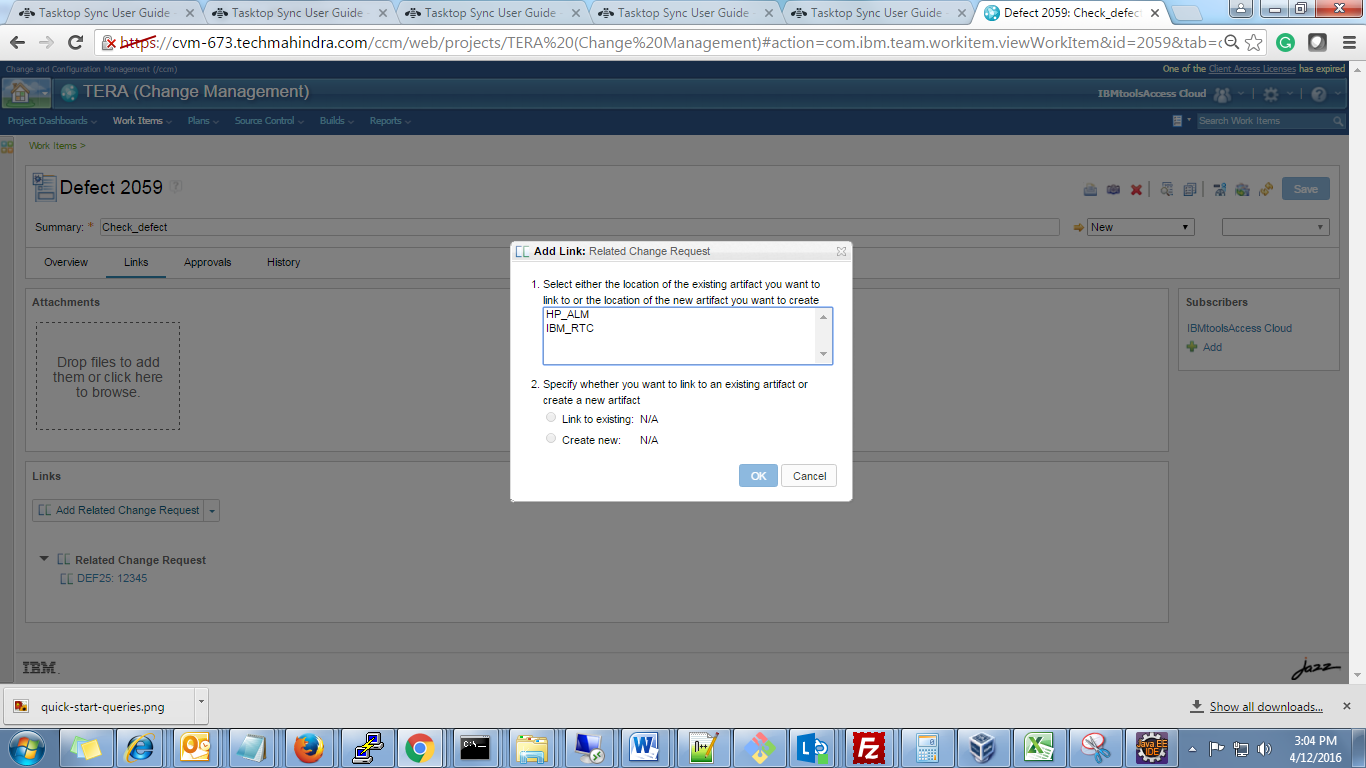




You might get a dialog which asks about secure content; Ensure that you allow mixed secure and non-secure content to be displayed.

Enter a search term and press Search.

Select a search result you would like to link to.



Press OK.

Save the task.

You can now see a small preview of the task by hovering over the link:

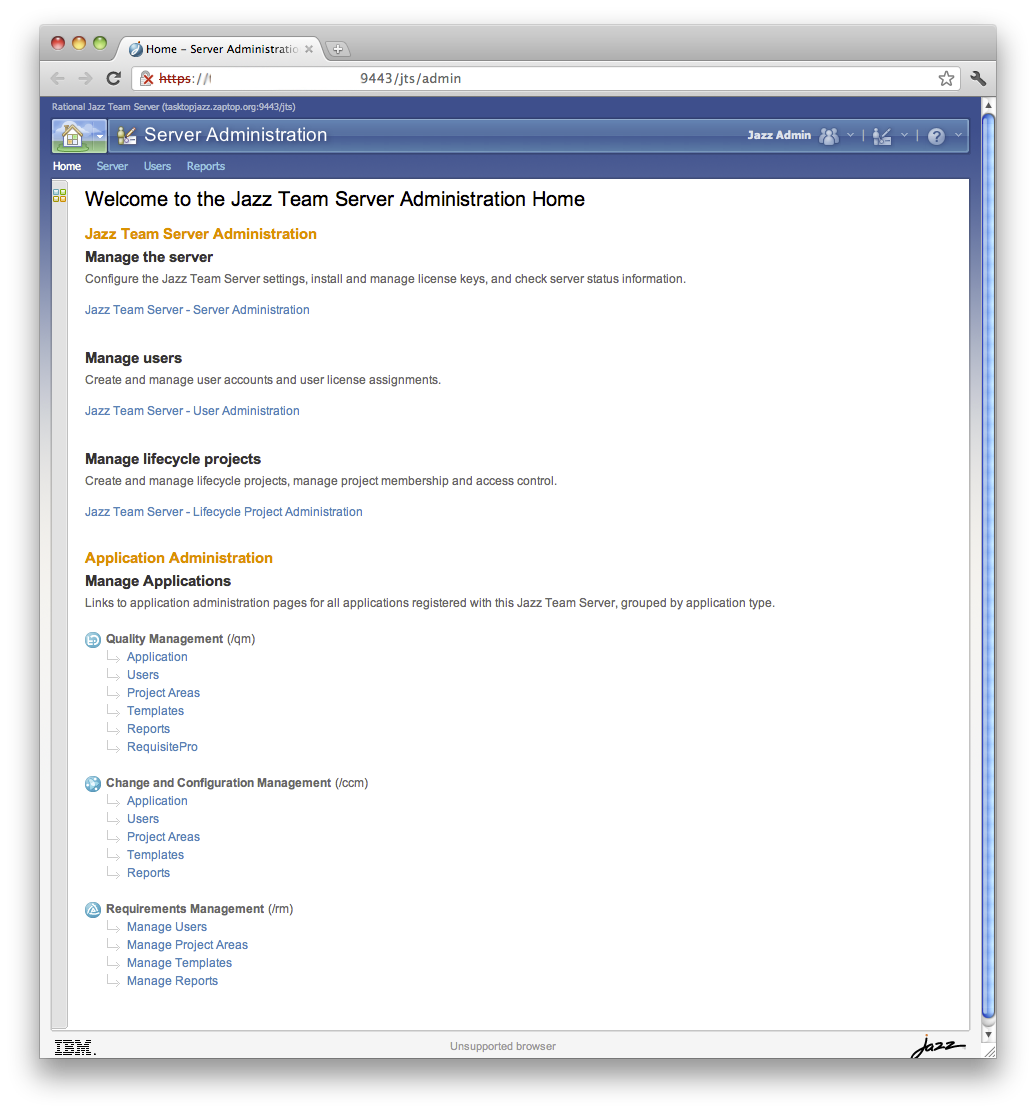
You can click on the hyperlinked task ID in the ID field to open the target task in a new browser.

## IBM Rational Team Concert Requirements Management (Rational Requirements Composer) Configuration

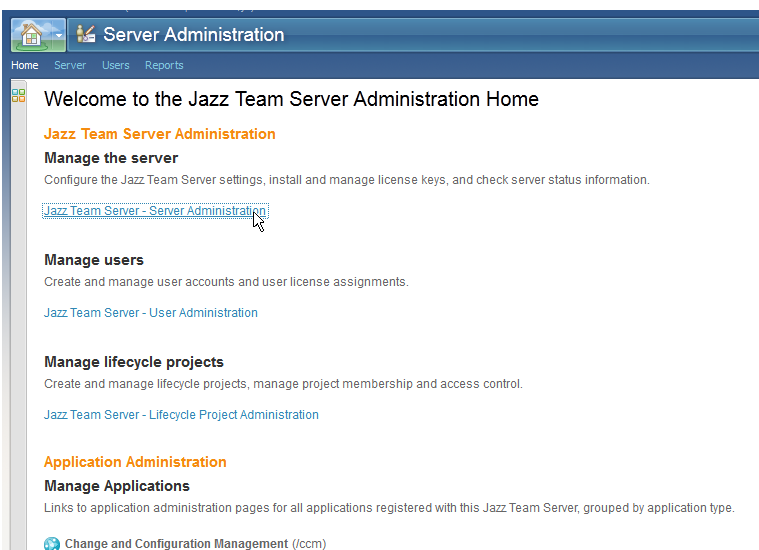
### Configure the Task Linking Server Relationship

To add Task Linking as a service that provides links to related tasks, complete the following steps:

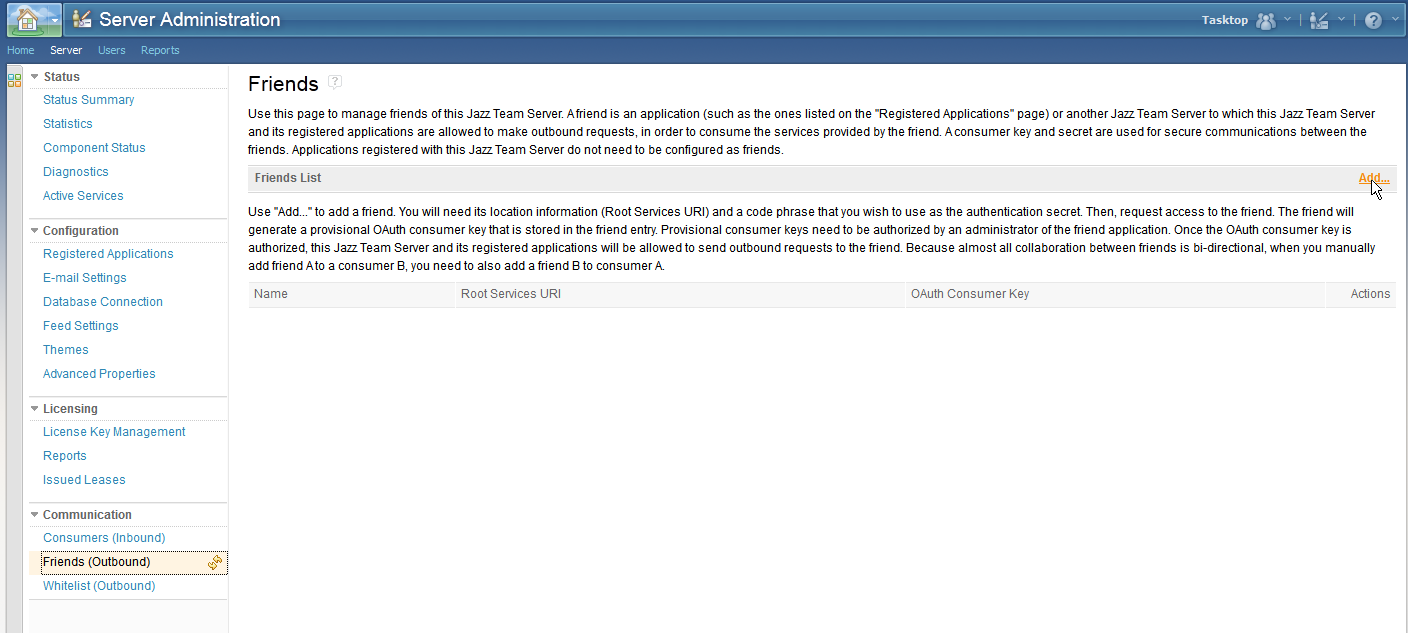
Navigate to the Jazz Team Server Administration Home:



Click on Jazz Team Server - Server Administration under Manage the Servers, and you will get to the Server Administration page:



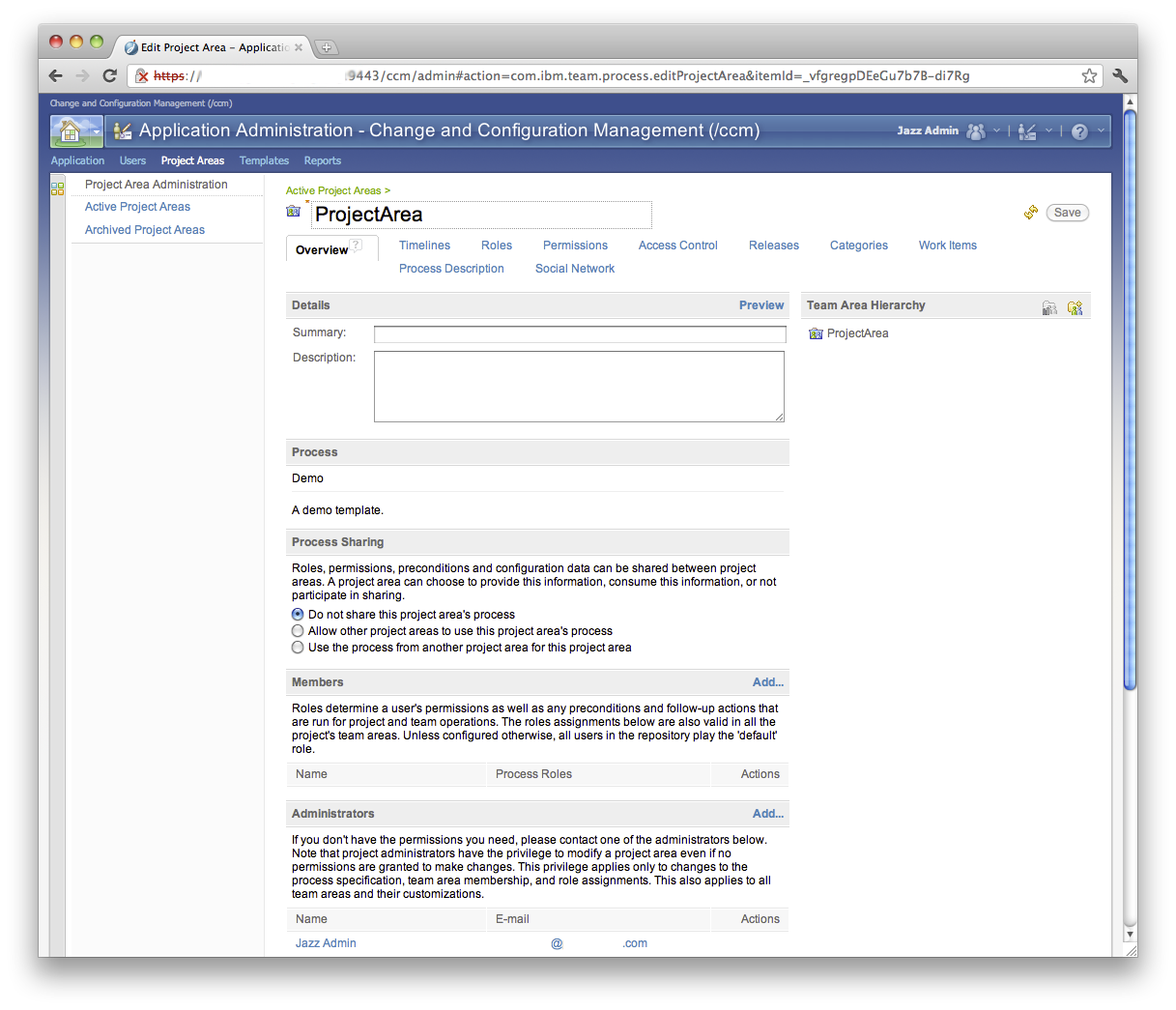
Click on Friends (Outbound) section in the left sidebar. When the Friends page appears, click Add and complete the form using values from your oslc.properties file. These values much match the values in the oslc.properties file exactly.



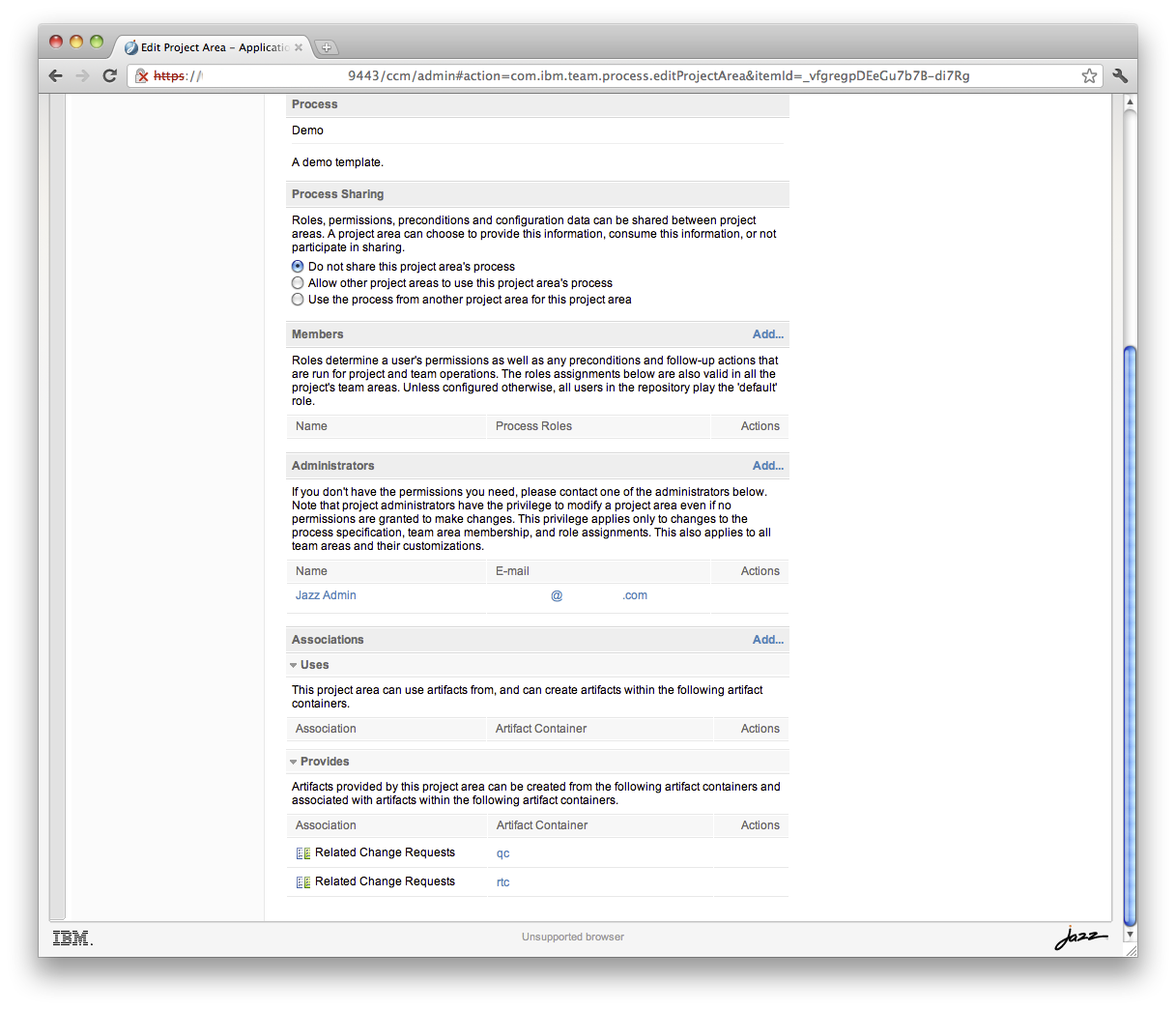
### Configure the IBM Rational Team Concert Change and Configuration Management Project Area

For each Project Area that you wish to enable the consumption of remote tasks using Task Linking, complete the following steps:

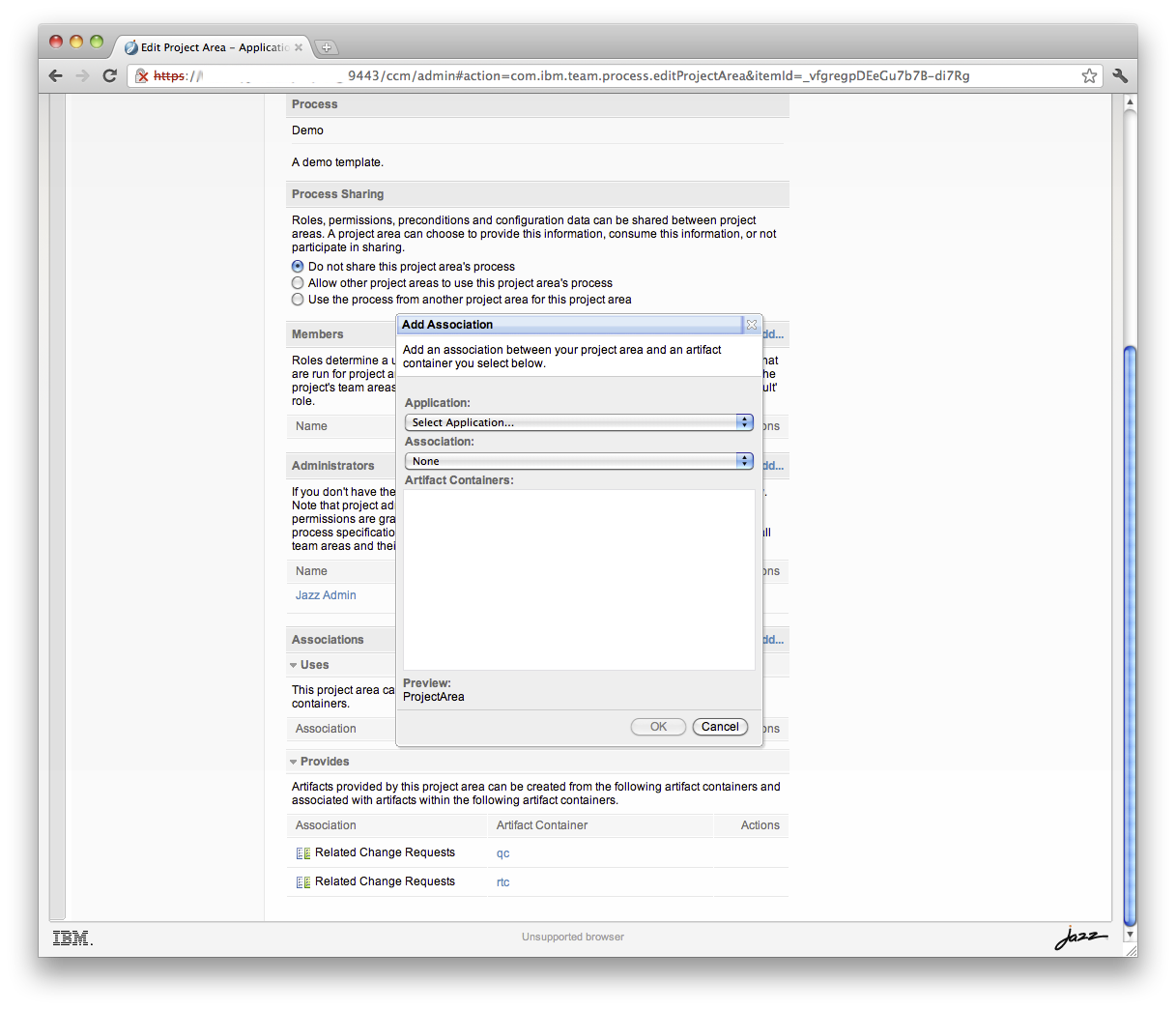
Navigate to the Project Area Administration Page on the top tab bar, then navigate to a project area:



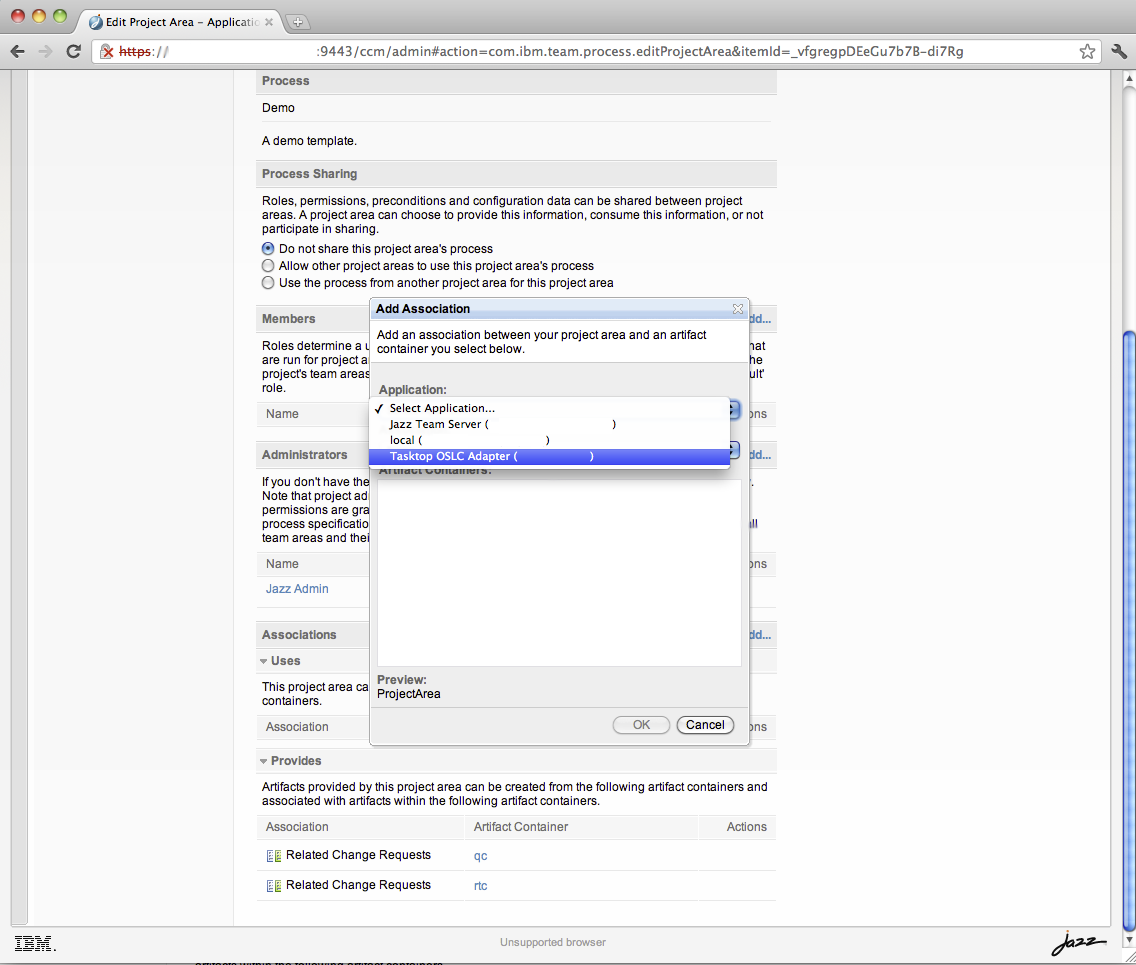
Navigate to the bottom section, Associations:



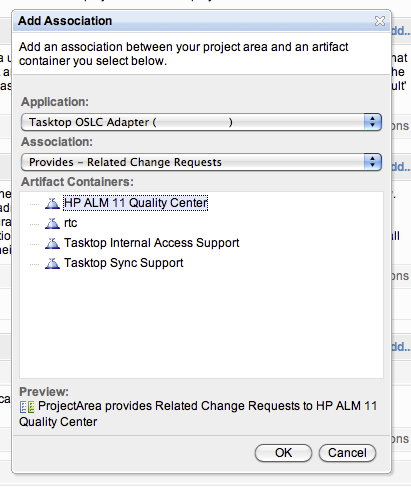
Click on Add... at the right of the Associations header bar:



Select an Application: “Tasktop OSLC Adapter” or whatever you named your server on the Friends page.



Select the desired Association (e.g., Provides - Related Change Requests), and the desired source Artifact Container (e.g., HP ALM 11 Quality Center).



The Artifact Container is where your remote task will be sourced from. The available Artifact Containers are the Task Repositories that are configured in Tasktop Sync.

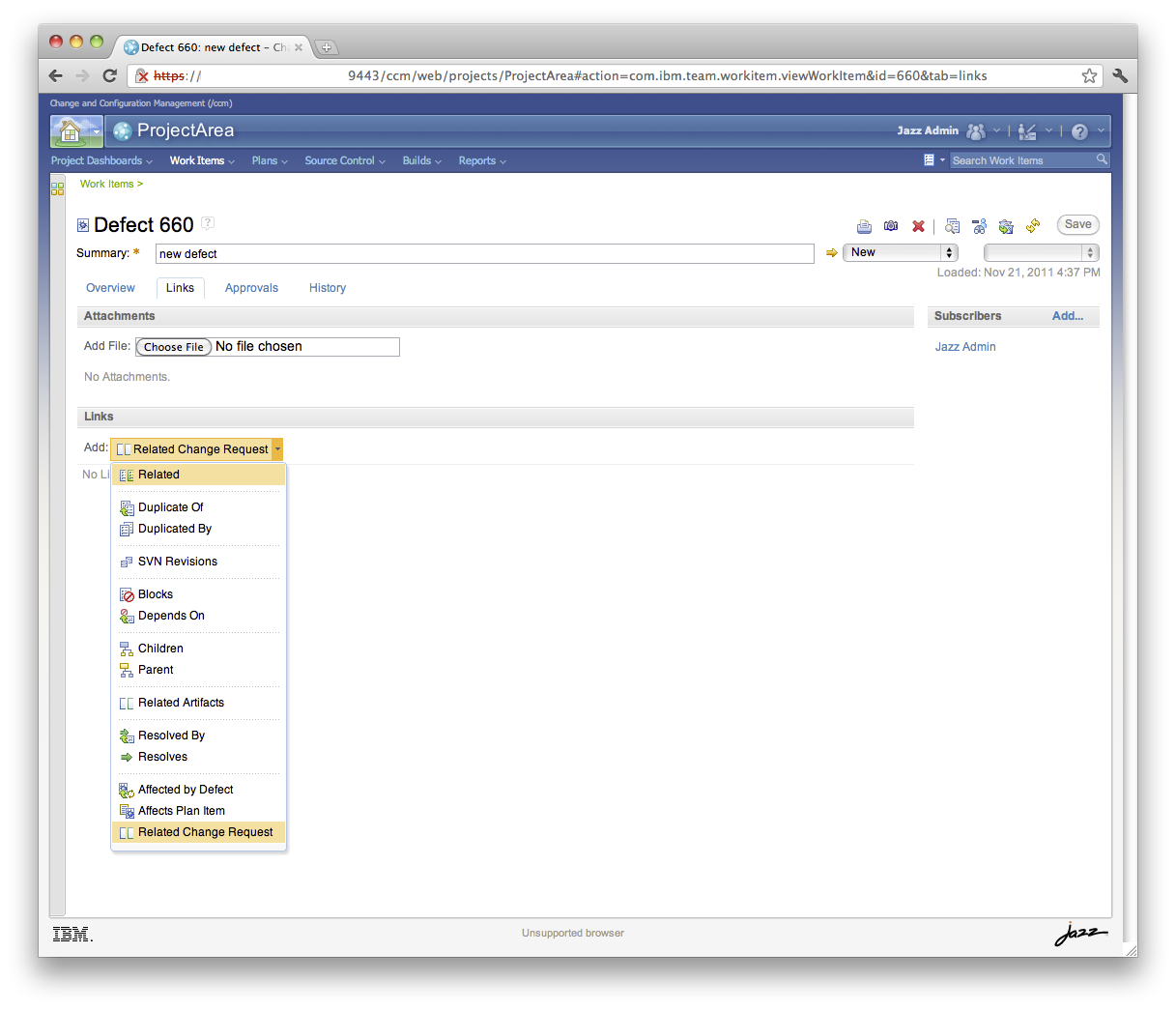
Click on the OK, then the Save button.

### Linking a IBM Rational Team Concert Change and Configuration Management Task to a Remote Artifact

To link a remote task to an IBM Rational Team Concert Change and Configuration Management task, complete the following steps:

Open a task (create one if you need to).

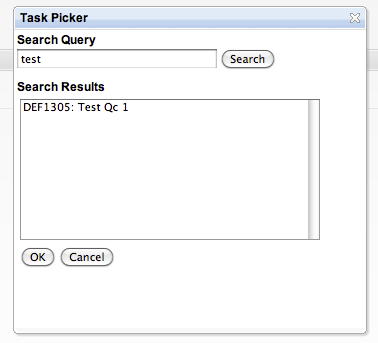
Navigate to the task’s Links tab and select Related Change Request or another association name from the dropdown menu:



You might get a dialog which asks about secure content; Ensure that you allow mixed secure and non-secure content to be displayed.

Enter a search term and press Search.

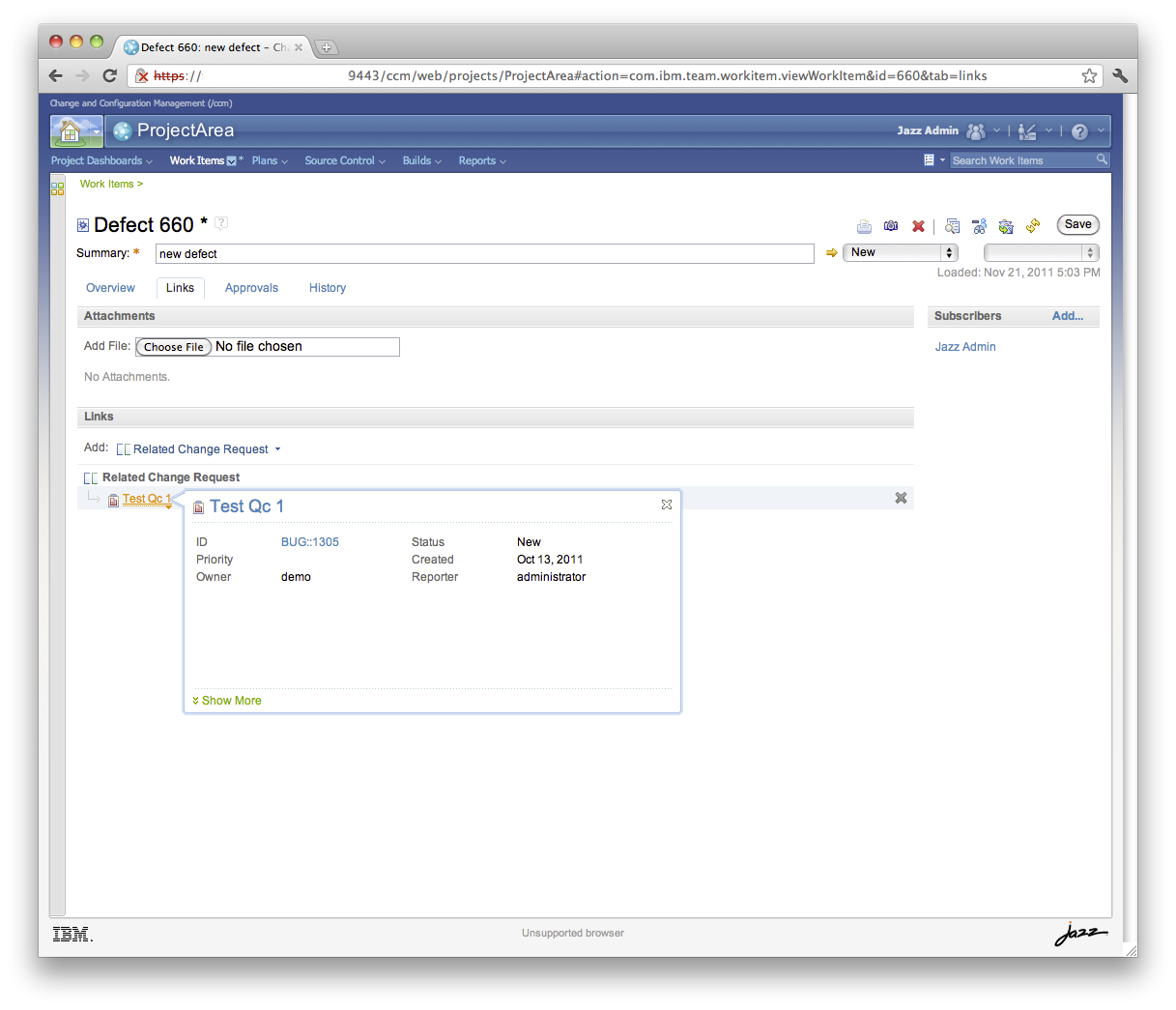
Select a search result you would like to link to.



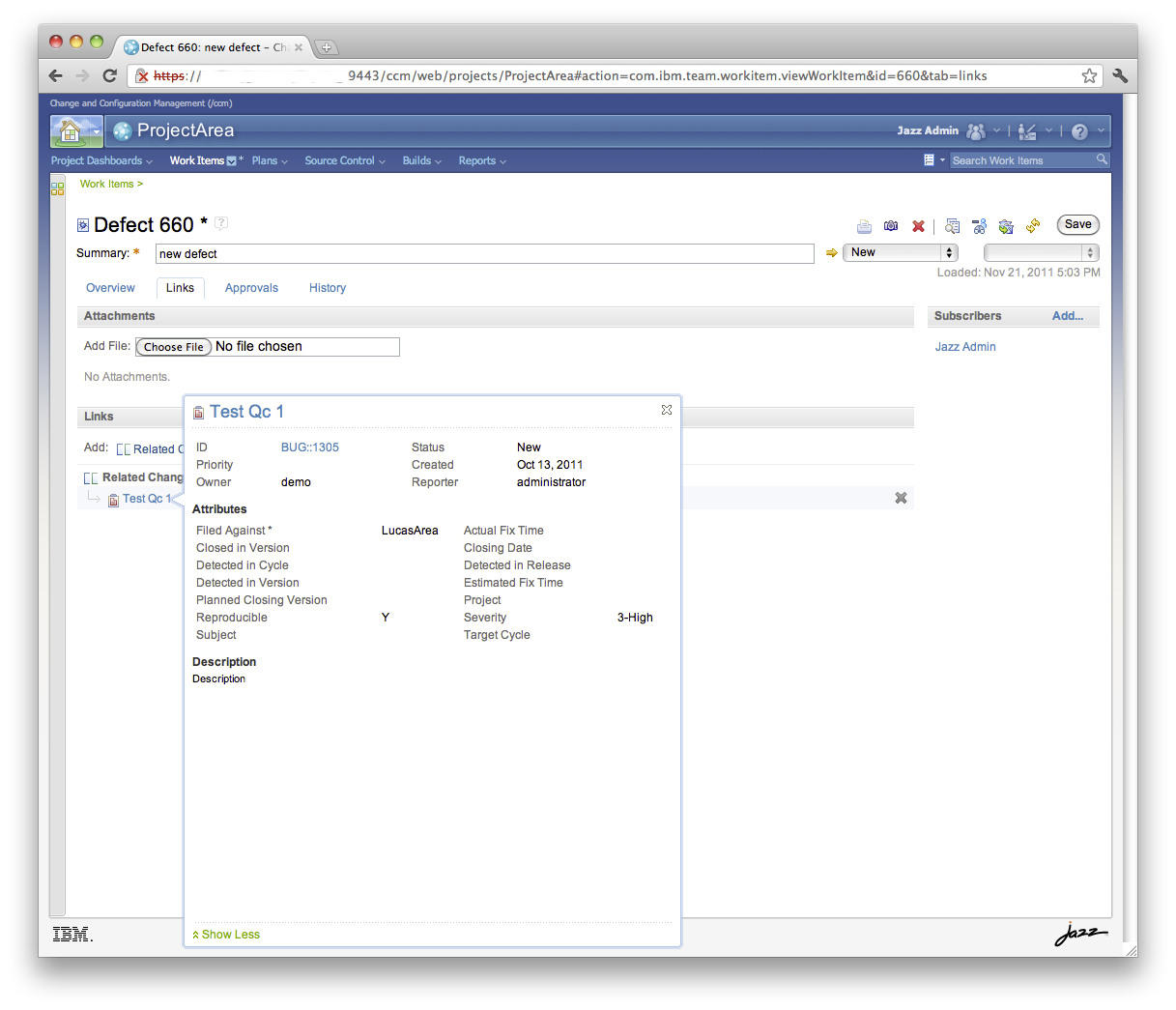
Press OK.

Save the task.

You can now see a small preview of the task by hovering over the link



You can see more detail by clicking the See more link:

 You can click on the hyperlinked task ID in the ID field to open the target task in a new browser.