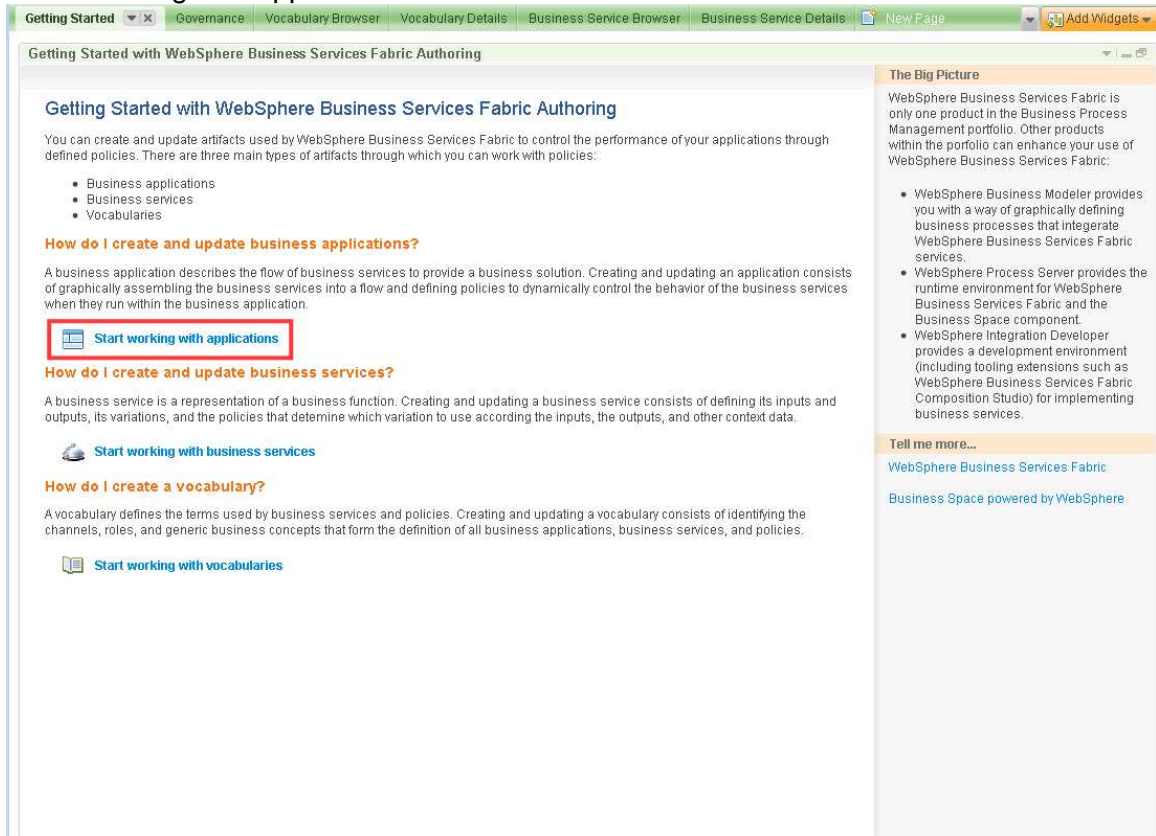


# Chapter 5

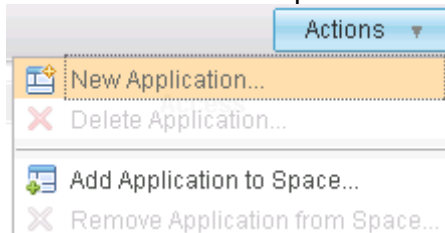
## Defining an application

In this chapter Loretta will create an application to represent the Better Financials Loan Origination solution. In the authoring space, defining an application involves creating a simple process flow that represents the tasks in the process in terms of existing business services. An application typically also contains policies.

1. Go back to the “Getting Started” page by clicking the appropriate tab and then click the “Start working with applications” link.



2. Click the “Actions” dropdown and select “New Application...”



3. Fill in these details and click "OK"

**Create New Application** [X]

Name: \*

Description:

Tags:

Select a change set

Use existing:

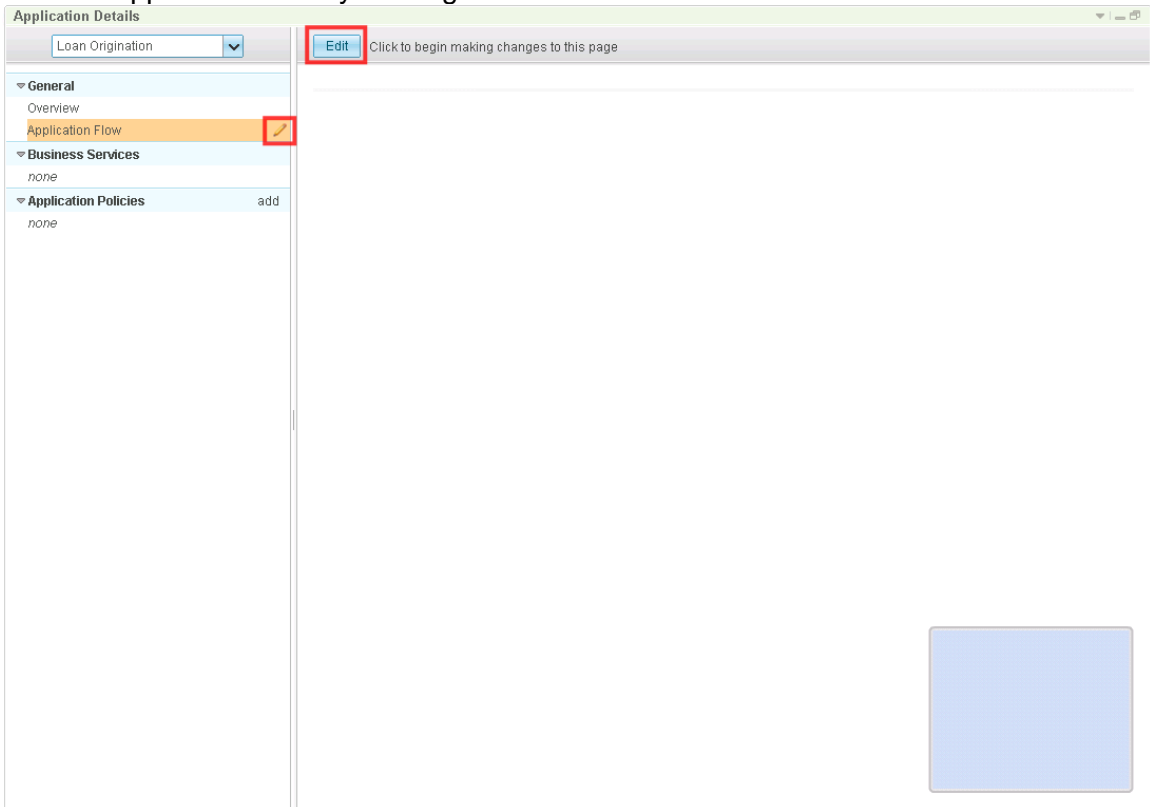
Create new:

Name: \*

Description:

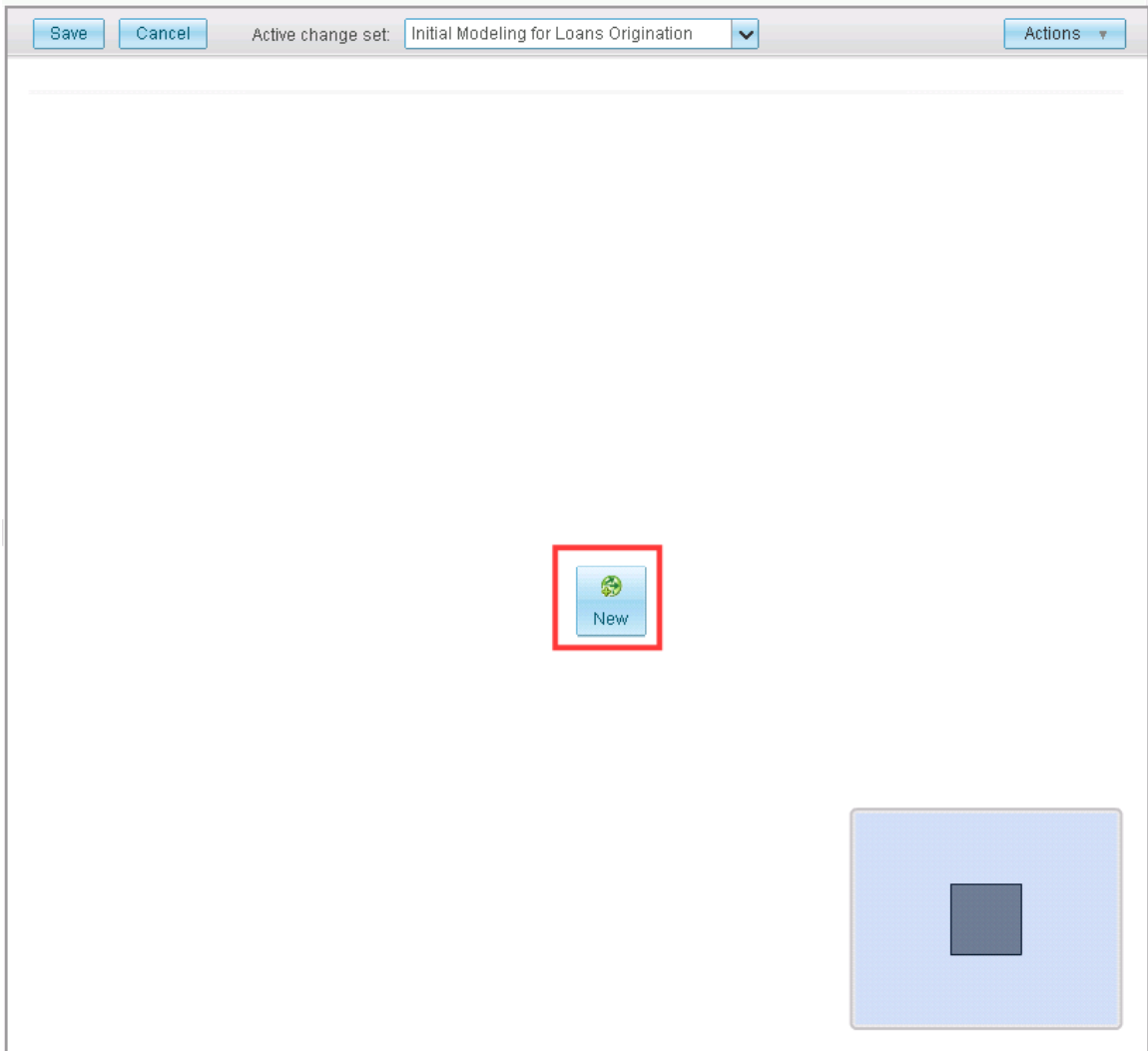
4. Click "Loan Origination" to go to the application details page

5. Edit the Application flow by clicking the “Edit” button

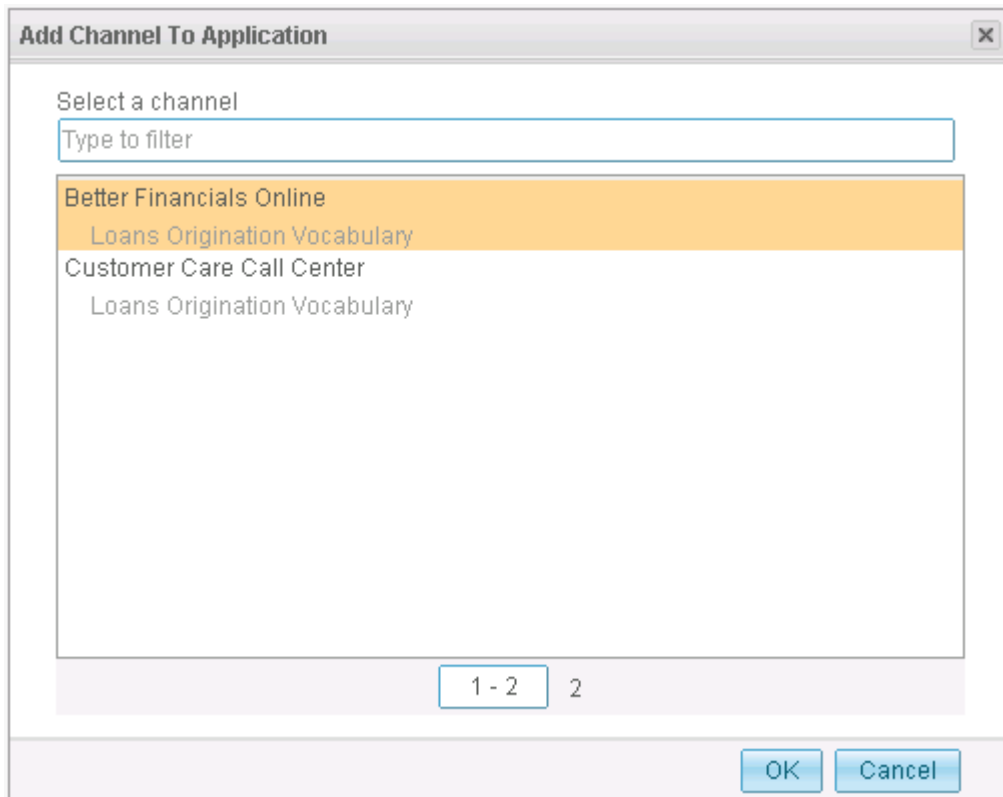


First, you will add the channels that represent the ways that the ways that Better Financials is exposing this new application. An application flow must have at least one channel.

6. Click the “New” button



7. Select "Better Financials Online" and click "OK".



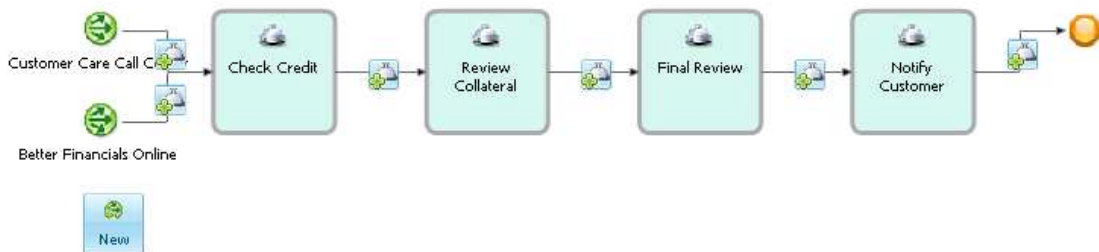
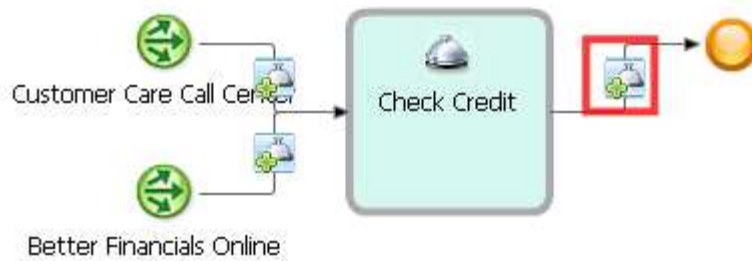
8. Do Steps 6-7 again but this time select "Customer Care Call Center".

Next, you will lay out the set of tasks for your simple Loan process.

9. Add a Business Service to the application flow by clicking the small square button on the wire



10. Select "Check Credit" and click "OK".
11. Add the other Business Services in this order following the Check Credit service: Review Collateral, Final Review, and Notify Customer.

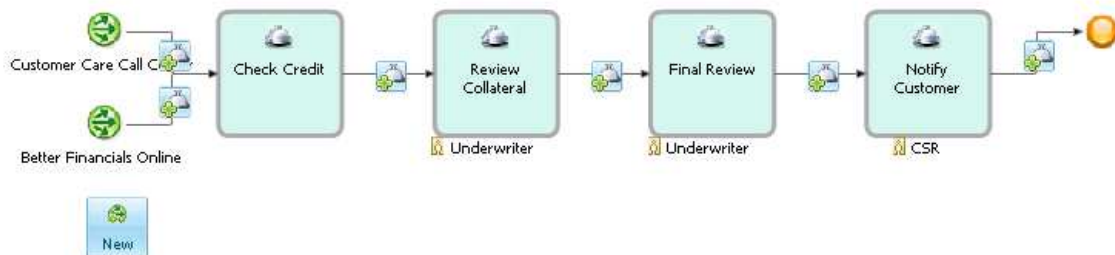
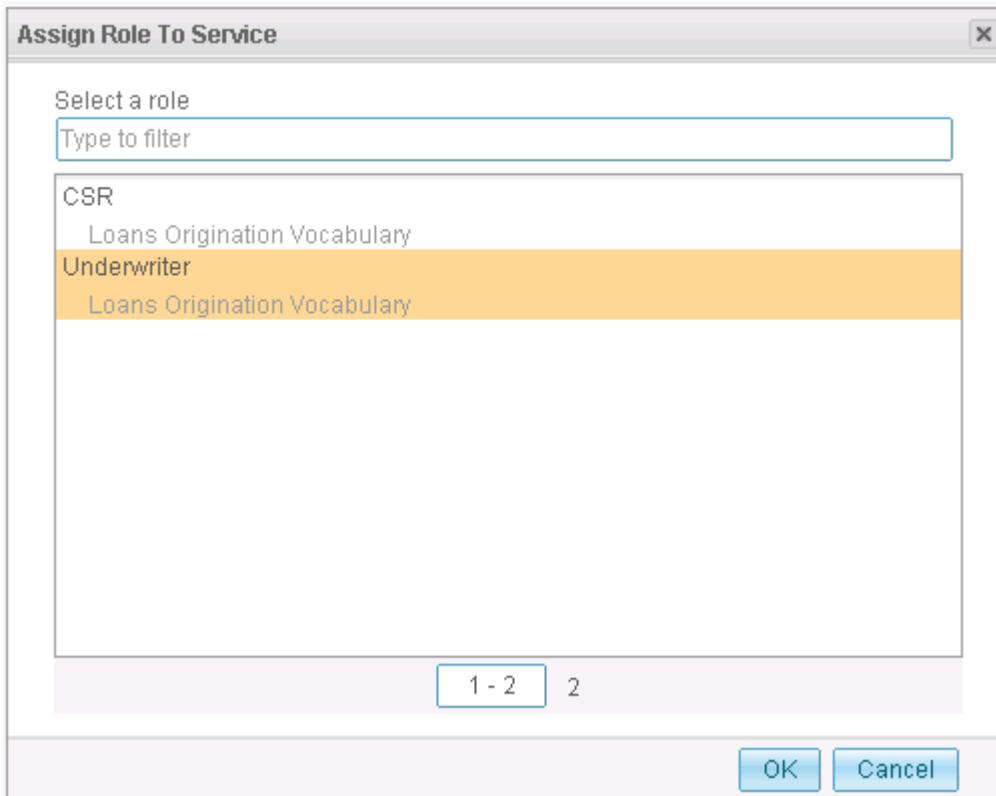


You can also optionally associate a service performer or role with a given task. A policy can include a when condition that specifies a role, so that policy is only considered when a task with that role is invoked.

12. Add roles to the services by hovering over the service square and clicking the “Add Role” button.

Review Collateral::Underwriter, Final Review::Underwriter, Notify Customer::CSR





13. Click “Save” to save the new application flow

Next, you will create some application-scoped policies. These come in two flavors that can be distinguished by their scoping statements.

If a policy has the statement “FOR <Application>”, then it will apply for every step in the application flow based on the whether the WHEN condition is satisfied. Since this kind of policy is not specific to any business service, the results that can be added to the THEN clause are limited to setting business parameters. Similar to what you did for some of your credit check policies in the last chapter.

If a policy has the statement “For <Application> in <Business Service>”, then it will apply only in situations where the given business service is being invoked *within* the given application. Since this policy is specific to a business service, such policies can be used to specify a process variation to select when invoking that business service.

## Policy Override Semantics

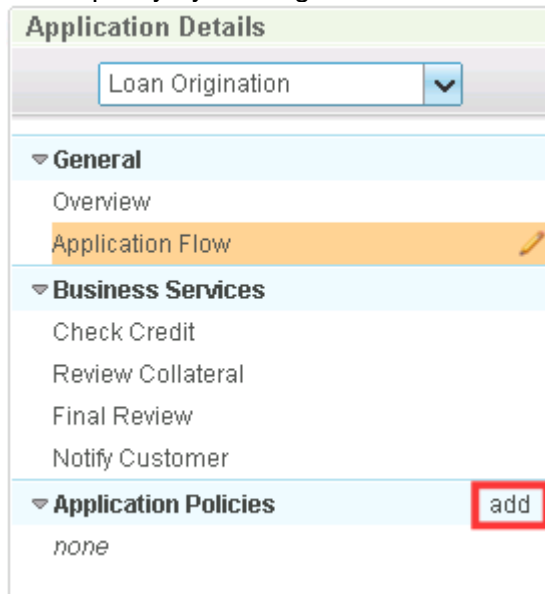
Often, it is necessary to use a policy to establish some default behavior and to have other policies that override this behavior for special circumstances. For example, you will want to override the business service policy that determines that the Final Review business service should use human underwriting.

At runtime, the system considers all policies that match given their FOR and WHEN conditions and merges the results into a single composite policy. In the end, there can be only one selected process variation and only one value assigned to any given concept. The system uses these rules to determine which settings to use:

- Settings from Application-scoped policies take precedence over settings from Business Service-scoped policies.
- If two settings are both defined at the Application or Business-Service level, the **priority** field is used to disambiguate. The setting that comes from a policy with the largest integer priority value will take precedence.
- If neither of these schemes can be used to disambiguate the value for a given setting, a policy conflict error will happen at runtime.

## Policies for Credit Check

14. Add a policy by clicking the “add” link to the right of the “Application Policies” header



The screenshot shows a web interface titled "Application Details". At the top, there is a dropdown menu currently set to "Loan Origination". Below this, the interface is organized into sections:

- General**: Contains "Overview" and "Application Flow" (the latter has an edit icon).
- Business Services**: Contains "Check Credit", "Review Collateral", "Final Review", and "Notify Customer".
- Application Policies**: This section is currently empty, showing "none". A red box highlights an "add" button located to the right of the "Application Policies" header.



15. Fill in these details and click “OK”

**Create New Application Policy**

Name: + Credit Check Third-party override

Description:

Tags:

Business Service: Check Credit

Select a change set

Use existing: Initial Modeling for Loans Origination

Create new:

Name: \*

Description:

OK Cancel

New customers can not take use the internal credit check capability since the bank will have no information on fresh clients. In the last chapter, a policy established that the credit check type should default to INTERNAL. You will refine that logic with a new policy that says:

FOR: Check Credit in Loan Origination,  
WHEN: New Customer is equal to True  
THEN: Set *Credit check type* to Third-Party

16. Edit the policy so that it looks like this and then click “Save”

Active change set:

---

▼ **General Information**

**Name:**

**Description:**

**Tags:**

**Created:** Mar 25, 2009 10:57:40 AM by lsmith

**Last modified:** *no modifications made*

**Status:** Changes pending (change set: Initial Modeling for Loans Origination)

---

▼ **External Links** add

---

▼ **Policy Details**

**Effective Date:**

**Expiration Date:**

**Priority:**

For  
Check Credit in this application (Loan Origination)

When  
New Customer is equal to True

Then  
Set Credit Check Type to Third-Party

### Review Collateral

The business decides that collateral reviews are unnecessary for the auto line of business. The default policy establishes a human collateral review, but you want to make an exception for autos. Loretta creates this policy:

▼ General Information

**Name:** Review Collateral Auto override  
**Description:** none  
**Tags:** none  
**Created:** Mar 25, 2009 11:04:22 AM by Ismith  
**Last modified:** Mar 25, 2009 11:04:22 AM by Ismith  
**Status:** Changes pending (change set: Initial Modeling for Loans Origination)

▼ External Links

none

▼ Policy Details

**Effective Date:**  
**Expiration Date:**  
**Priority:** 0

**For**  
Review Collateral in this application (Loan Origination)

**When**  
Line of Business is equal to Auto Loan

**Then**  
Select No Collateral review in Review Collateral

## Final Review

The business decides that an expensive manual underwriting can be replaced with the automated variation if the amount of the requested loan is less than \$25, 000. If the loan has already been rejected or flagged as needing more information, you will route it to the automatic variation. Loretta creates this policy to manage this:

▼ Policy Details

**Effective Date:**  
**Expiration Date:**  
**Priority:** 0

**For**  
Final Review in this application (Loan Origination)

**When**  
Amount of Loan is less or equal to 30000  
OR Loan Status in (More Info Needed,Rejected)

**Then**  
Select Automated Underwriting in Final Review

## Notify Customer

Typically, the customer can automatically be notified of the status of their loan application. However, in some situations, it is determined that more information is needed to approve the

loan. In that case, a customer service representative needs to get in contact with the applicant to acquire the needed information. Loretta creates this policy to represent this:

▼ General Information	
<b>Name:</b>	Notify Customer Human override
<b>Description:</b>	<i>none</i>
<b>Tags:</b>	<i>none</i>
<b>Created:</b>	Mar 25, 2009 11:48:03 AM by Ismith
<b>Last modified:</b>	Mar 25, 2009 11:48:03 AM by Ismith
<b>Status:</b>	Changes pending (change set: Initial Modeling for Loans Origination)

▼ External Links	
	<i>none</i>

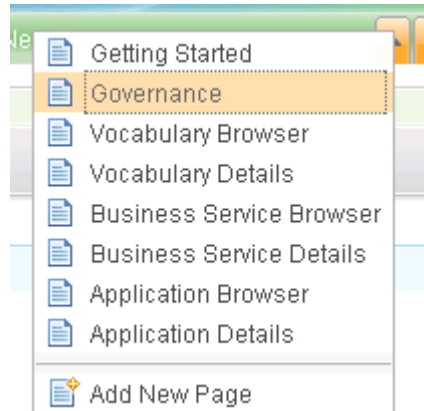
  

▼ Policy Details	
<b>Effective Date:</b>	
<b>Expiration Date:</b>	
<b>Priority:</b>	0
<b>For</b>	Notify Customer in this application (Loan Origination)
<b>When</b>	Loan Status is equal to More Info Needed
<b>Then</b>	Select Human Notification in Notify Customer

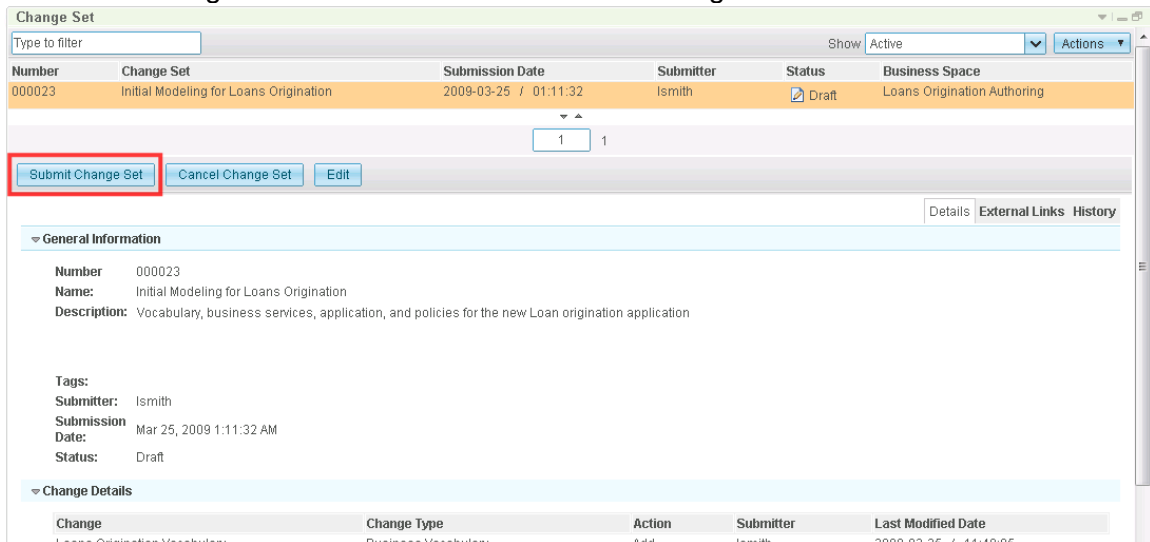
### Working with Change Sets

Initial authoring of the application is complete and Loretta is ready to submit these changes. Although anyone editing in the authoring space can contribute changes to the change set, only the administrator or the user who created the change set in the first place may submit the changes.

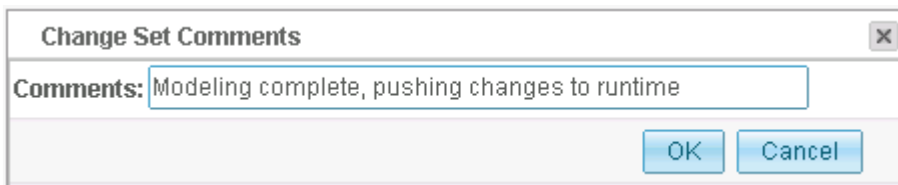
Go to the Governance page by clicking the dropdown arrow to the left of the “Add Widgets” button and selecting “Governance”



17. Select the change set and then click the “Submit Change Set” button



18. Fill in the comment and click “OK”



As soon as Loretta submits the changes, the change set moves from Draft to Pending state. Any object listed in a change set that is in Pending state is locked such that no user can change those objects until the changes are either published or rejected.

Your administrator, Andy, now needs to review and publish these changes.

1. Andy logs in to Business Space, opens the “Loans Origination Authoring” space, and goes to the governance tab. Reviewing change sets can also be done from the administration space.

The “show” drop down in the upper right corner can toggle the view to show change sets in various states. The “Active” setting shows all change sets that have not been published or canceled.

2. Find the change Set and click “Approve Change Set”.

Number	Change Set	Submission Date	Submitter	Status	Business Space
000023	Initial Modeling for Loans Origination	2009-03-25 / 01:11:32	Ismith	Pending	Loans Origination Authoring

Approve Change Set    Reject Change Set

Details    External Links    History

**General Information**

Number: 000023  
Name: Initial Modeling for Loans Origination  
Description: Vocabulary, business services, application, and policies for the new Loan origination application

Tags:  
Submitter: Ismith  
Submission Date: Mar 25, 2009 1:11:32 AM  
Status: Pending

**Change Details**

Change	Change Type	Action	Submitter	Last Modified Date
Loans Origination Vocabulary	Business Vocabulary	Add	Ismith	2009-03-25 / 11:48:05

3. Fill in the comment and click “OK”. The comments associated with a change set are visible under the history tab.

Change Set Comments

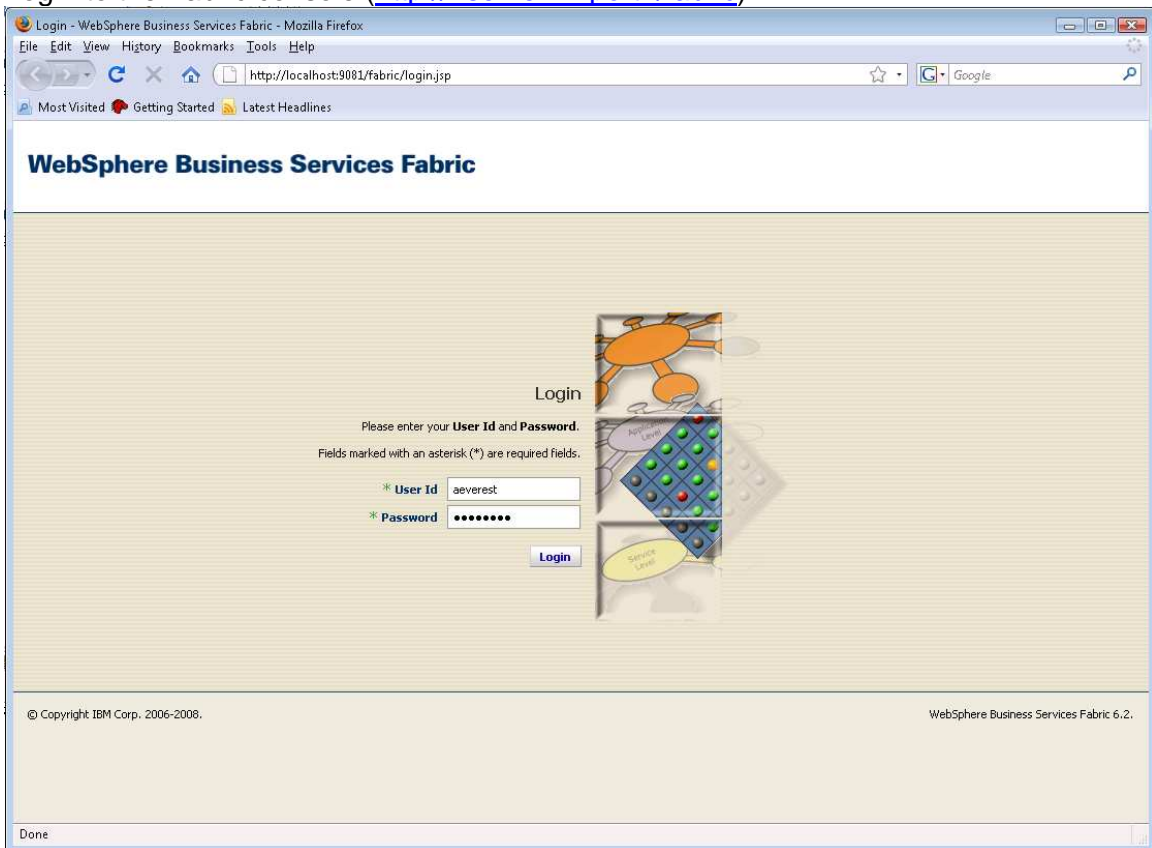
Comments: Looks good

OK    Cancel

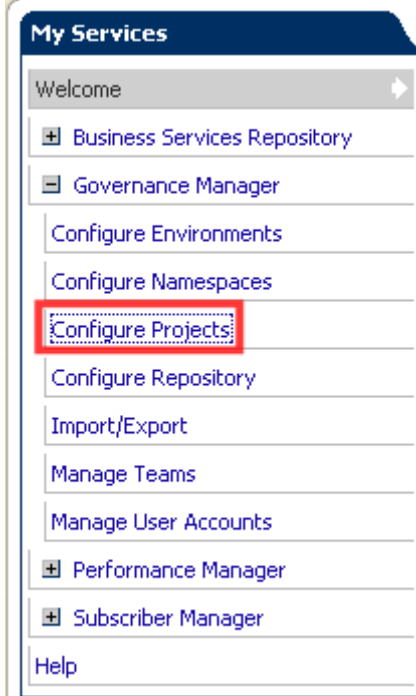
4. Click “Publish Change set”, and then click “OK” in the dialog box that pops up (comment is already filled in).

When reviewing the change set, Andy notices that a new vocabulary was created and is being used by the Application. Andy knows that this means he needs to go to the Fabric Governance Manager in the Fabric console to do a little configuration for Reba before she gets started with the Business Service perspective in WebSphere Integration Developer.

5. Log into the Fabric console (<http://<server>:<port>/fabric>)



6. Go to Governance Manager->Configure Projects



Notice that a Fabric project was automatically created for the Loan Origination application and for each of the business services that you created. When Reba creates a

Fabric project in WebSphere Integration Developer, this is the project that she is connecting to. A current limitation in the Fabric requires a namespace import for a vocabulary to be manually added. Each vocabulary is a namespace that belongs to the Fabric Business Glossary project.

7. Select the “Loan Origination” project

**Configure Projects**

**Project Selection**

View  rows at a time

10 rows Page 1 of 1

<a href="#">Project Name</a>	<a href="#">Project Type</a>	<a href="#">Description</a>	<a href="#">Last Modified</a> ↑
<a href="#">Loan Origination</a>	Composite Business Application	--	Mar 25, 2009 10:55:39 AM
<a href="#">Notify Customer</a>	Business Service	Notify the customer about the status of the loan	Mar 25, 2009 2:11:30 AM
<a href="#">Final Review</a>	Business Service	Review loan risk and decide whether to approve or reject the loan	Mar 25, 2009 2:10:44 AM
<a href="#">Review Collateral</a>	Business Service	Review collateral information to ensure coverage of the loan amount	Mar 25, 2009 2:10:03 AM
<a href="#">Check Credit</a>	Business Service	Automated Credit check	Mar 25, 2009 2:08:47 AM
<a href="#">Fabric Business Glossary</a>	Vocabulary	Used to store all Business Vocabularies.	Mar 25, 2009 1:16:12 AM
<a href="#">Fabric Governance</a>	Legacy Business Service	Used to store project, namespace, and environment objects	Mar 24, 2009 10:33:11 AM
<a href="#">Fabric Business Service Model</a>	Ontology	Contains the schema namespaces that define the internal model used by IBM Business Services Repository	Mar 24, 2009 10:33:11 AM
<a href="#">Organizations, Users, and Roles</a>	Legacy Business Service	Used by IBM Business Services Subscriber Manager to store organizations, users, and role relationships	Mar 24, 2009 10:33:11 AM
<a href="#">User Policies</a>	Legacy Business Service	Policies created using the Customized Policy application programming interface are stored in this project	Mar 24, 2009 10:33:11 AM

Page 1 of 1

8. Go to the “Namespaces” tab and click the “Import Namespaces” button.

**Configure Projects**

**Project** Loan Origination [Back to Projects](#)

[Project Details](#) [Project Team](#) **[Namespaces](#)**

**Owned Namespaces**

2 rows

<a href="#">Namespace</a> ↑	<a href="#">Type</a>	<a href="#">Description</a>
<a href="#">Loan Origination (Technical)</a>	Instance	
<a href="#">Loan Origination (Business)</a>	Business	

[Create a Namespace](#)

**Imported Namespaces**

8 rows

<a href="#">Namespace</a> ↑	<a href="#">Type</a>	<a href="#">Description</a>	<a href="#">Primary Project</a>	<a href="#">Remove</a>
<a href="#">Review Collateral (Technical)</a>	Instance		<a href="#">Review Collateral</a>	<input type="checkbox"/>
<a href="#">Review Collateral (Business)</a>	Business		<a href="#">Review Collateral</a>	<input type="checkbox"/>
<a href="#">Notify Customer (Technical)</a>	Instance		<a href="#">Notify Customer</a>	<input type="checkbox"/>
<a href="#">Notify Customer (Business)</a>	Business		<a href="#">Notify Customer</a>	<input type="checkbox"/>
<a href="#">Final Review (Technical)</a>	Instance		<a href="#">Final Review</a>	<input type="checkbox"/>
<a href="#">Final Review (Business)</a>	Business		<a href="#">Final Review</a>	<input type="checkbox"/>
<a href="#">Check Credit (Technical)</a>	Instance		<a href="#">Check Credit</a>	<input type="checkbox"/>
<a href="#">Check Credit (Business)</a>	Business		<a href="#">Check Credit</a>	<input type="checkbox"/>

[Import Namespaces](#) [Remove Imports](#)



9. Select the “Fabric Business Glossary” project

Fabric Business Glossary

10. Enable the check box next to the “Loans Origination Vocabulary” namespace and then click “Import Namespaces”

Configure Projects

Loan Origination

**Import Namespaces**

Fields marked with an asterisk (\*) are required fields.

**Info**

- Select a **Project** and **Namespaces** to import.

**Project Selection**

Fabric Business Glossary

**Namespace Selection**

1 rows

<input type="checkbox"/>	Namespace	Type	Description
<input checked="" type="checkbox"/>	Loans Origination Vocabulary (Business)	Business	

With this step complete, the appropriate vocabularies will show up in the business service perspective in WebSphere Integration Developer.