Chapter 3

Authoring a vocabulary

A vocabulary is a glossary of concepts used to represent the business domain. A concept can have a name, description, external links, synonyms, acronyms, and relationships to other concepts. A glossary serves two roles:

- It provides an agreed upon human-consumable definition for elements in the business domain. This information can be valuable for the overall life cycle of an application to keep business and technical people aligned around the definition of key concepts.
- It provides a “language” for writing policies in the sense that a concept—once defined in the vocabulary—may be used as part of the condition or result of a policy.

An application or business service can refer to concepts from any number of vocabularies and a vocabulary can be reused across multiple applications.

1. Thanks to Andy, Loretta can now log in, go to the Manage Business Spaces page, and select the “Loan Origination Authoring” space

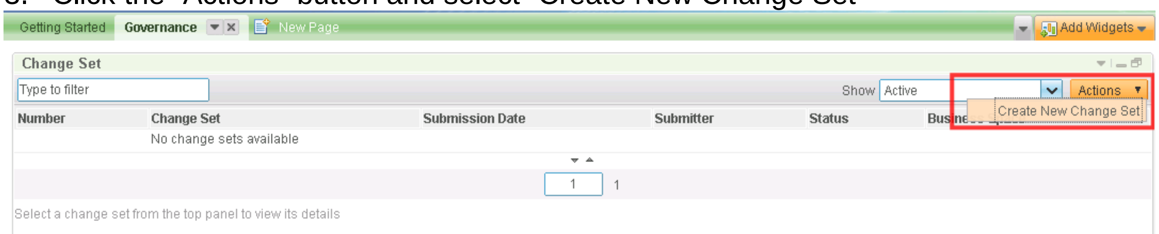
2. Go to the Governance page

All changes made in the Fabric spaces are tracked by the system using change sets. A change set is a group of related changes to objects in the system. When creating or editing objects, the system will ask what change set the changes should go into. A change set starts out in Draft state. When the changes are complete and ready to be approved, you can submit the changes with an optional comment. An administrator or the owner of this space can approve and publish the changes, or reject the changes which will return the change set to draft state. If a user wants to abandon changes that have been done, a change set can be canceled at any time. Canceling a change set returns all of the objects that were changed to their original state.

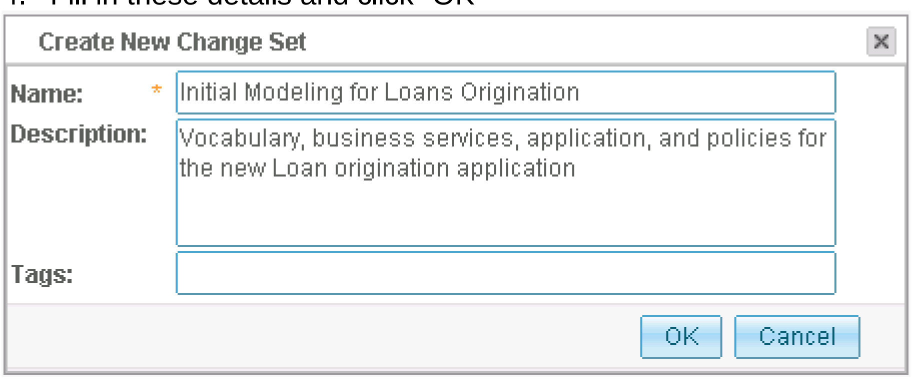
Special constraints are used to ensure that change sets do not logically depend on one another and can be published or canceled independently. To keep things simple, it is easiest to use the same change set for related work even when multiple users are collaborating on the changes.

Loretta decides to create a single change set up front for all of her initial authoring work.

3. Click the “Actions” button and select “Create New Change Set”



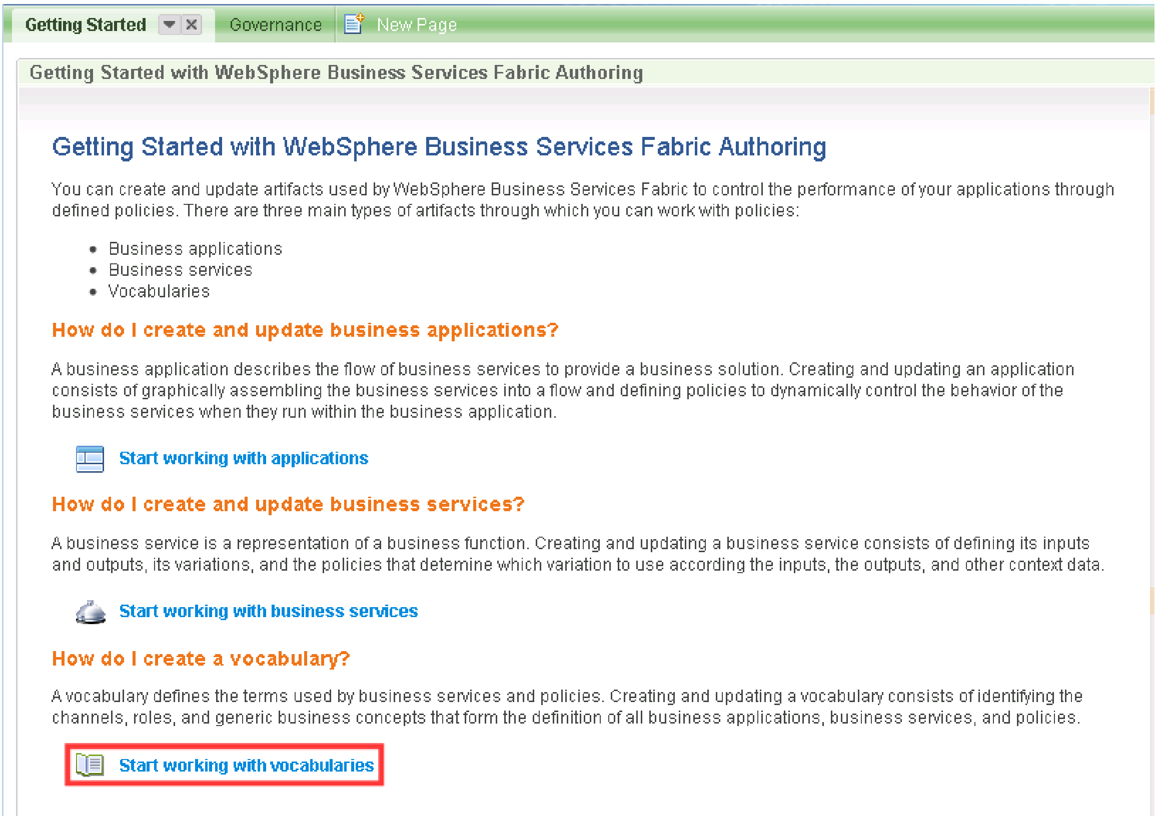
4. Fill in these details and click “OK”



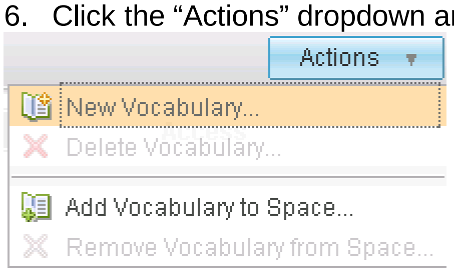
The “Getting Started” page within the authoring space is designed to introduce you to the three main entities they can edit in the authoring space (vocabularies, business services, and applications). The “start working with …” links on this page provide access to additional related pages in this space which will open and become active when the link is clicked.

Start with creating a vocabulary since you need some business concepts before you can complete the definition of your business services or applications.

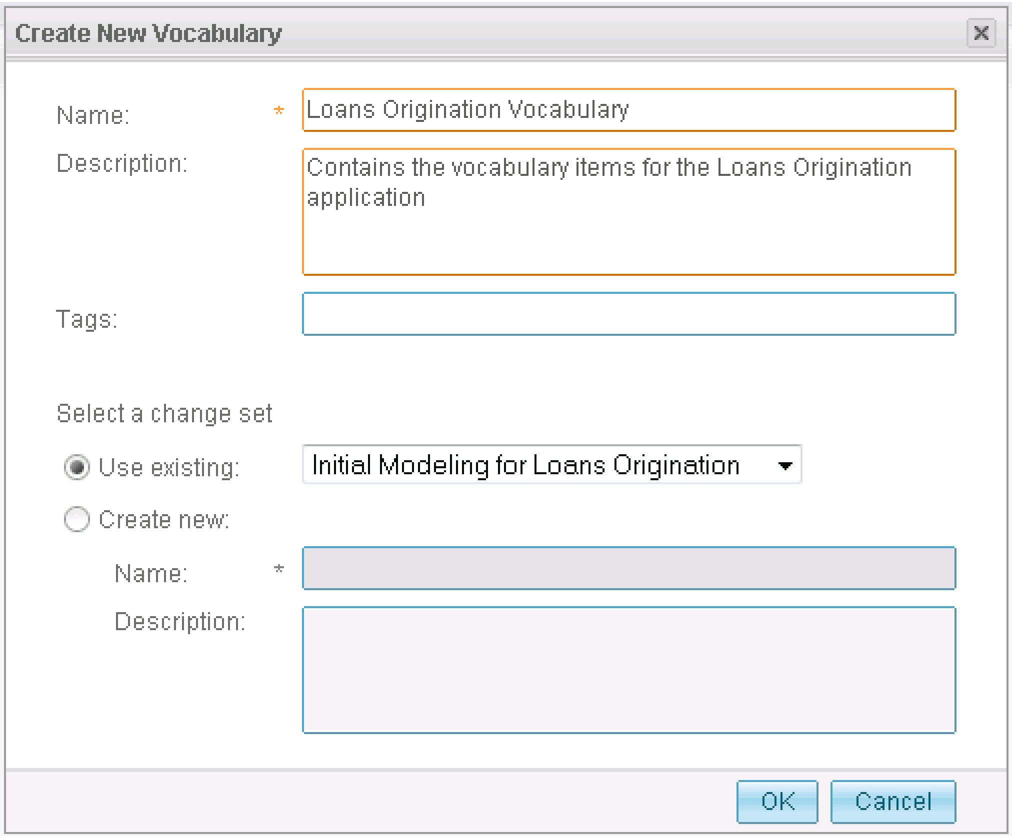
5. Go back to the “Getting Started” page and click the “Start working with vocabularies” link



6. Click the “Actions” dropdown and select “New Vocabulary…”



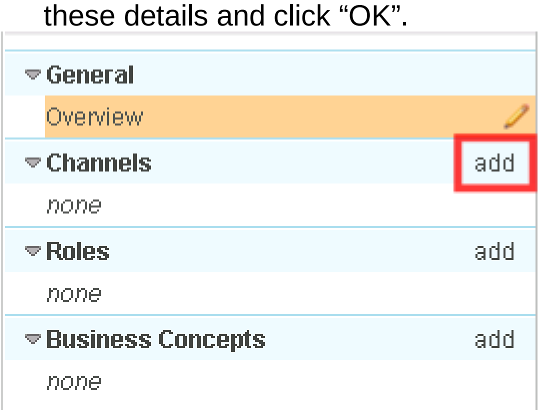
7. Fill in these details and click “OK”

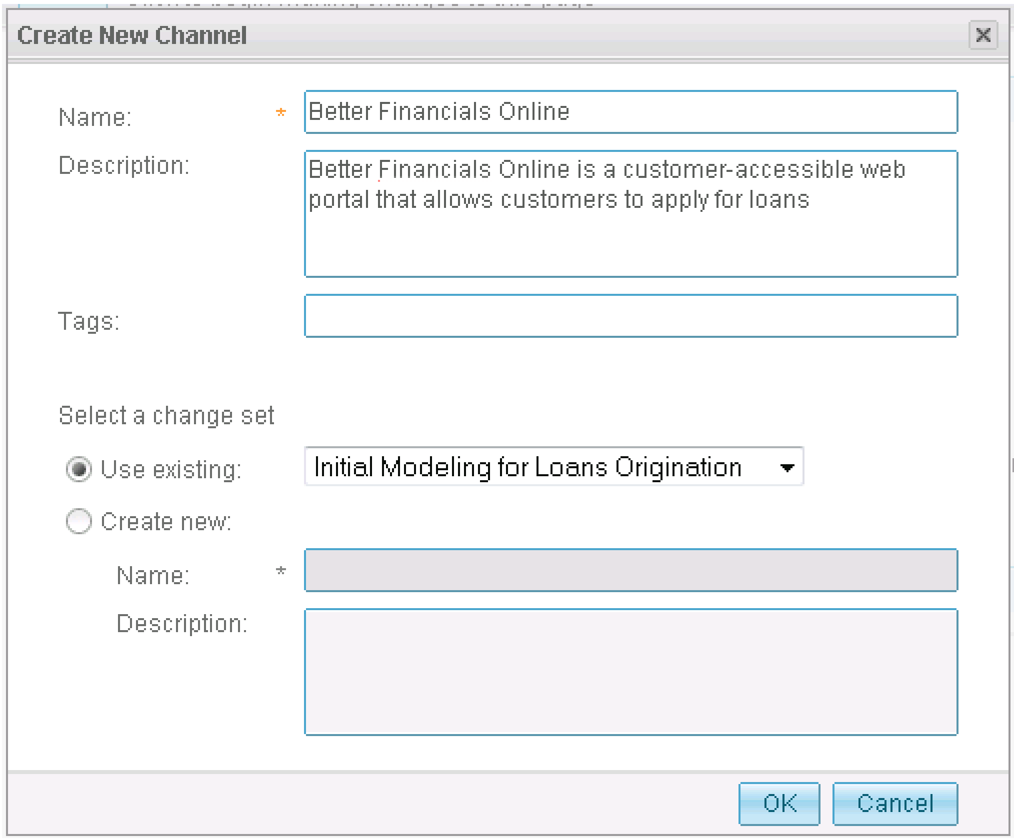


8. Click the link for new vocabulary that you just created to go to the Vocabulary Details page

A **channel** represents a way for end-users to interact with the solution you are providing. Better Financials wants to enable customers to apply for auto loans through a Web portal, or through a call center. The special channel concept type in the vocabulary is used to represent channels. Loretta will create a channel for “Better Financials Online” and another for “Customer Care Call Center”.

9. Add a new channel by clicking the “add” link to the right of the “Channels” heading. Fill in these details and click “OK”.

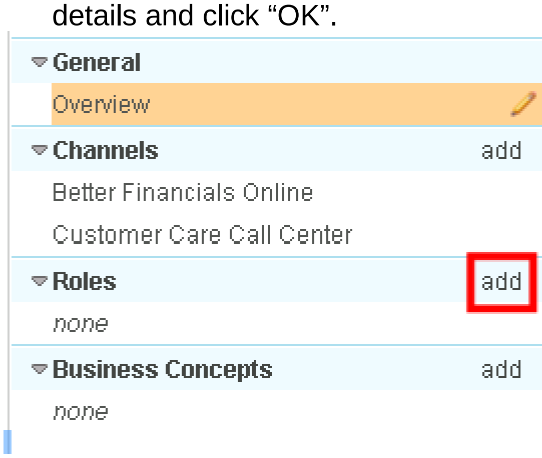


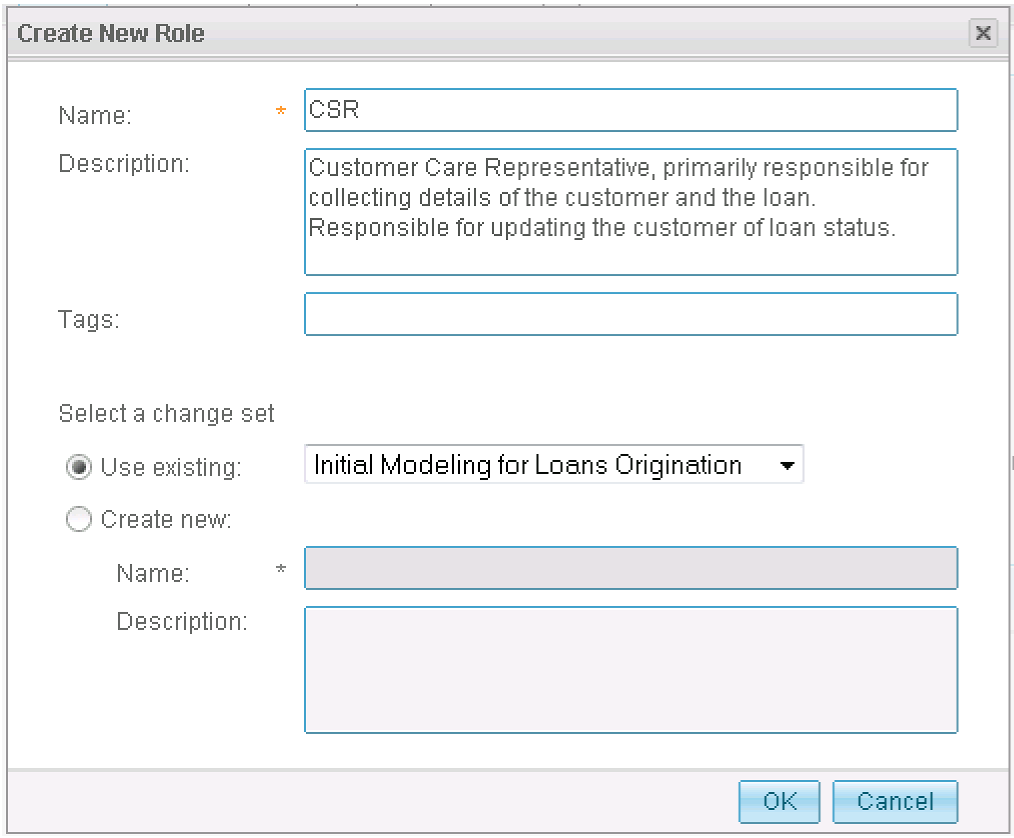


10. Add another channel with these details by following the same steps as you did in Step 8.
    a. Name: Customer Care Call Center
    b. Description: Channel for customers to submit a loan application by calling the Better Financials Call Center

A **role** is another special kind of business concept that can be used to represent what role performs a given task in the business process. Loretta creates a 'CSR' role to represent the customer service representatives who may play a part in the process.

11. Add a role by clicking the "add" link to the right of the "Roles" heading. Fill in these details and click "OK".





12. Add another role with these details by following the same steps as you did in Step 10.
    a. Name: Underwriter
    b. Description: Reviews loans, identifies associated risk, and the customer's assets to determine if a loan can be granted

Other concept types

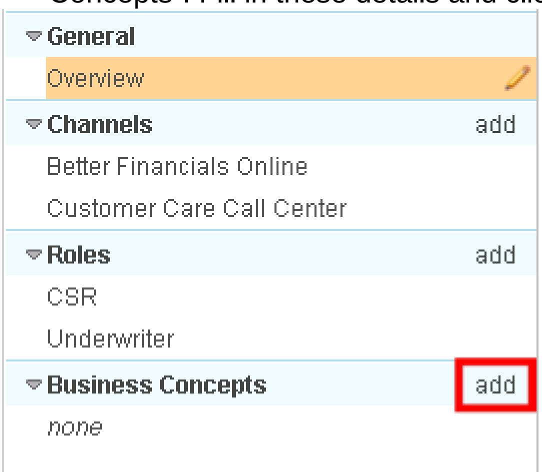
The table below describes the other kinds of concepts that can be added to a vocabulary. Note that it is typically necessary to edit a concept after creating it in order to specify fields such as min and max values, enumerated options, or a units label.

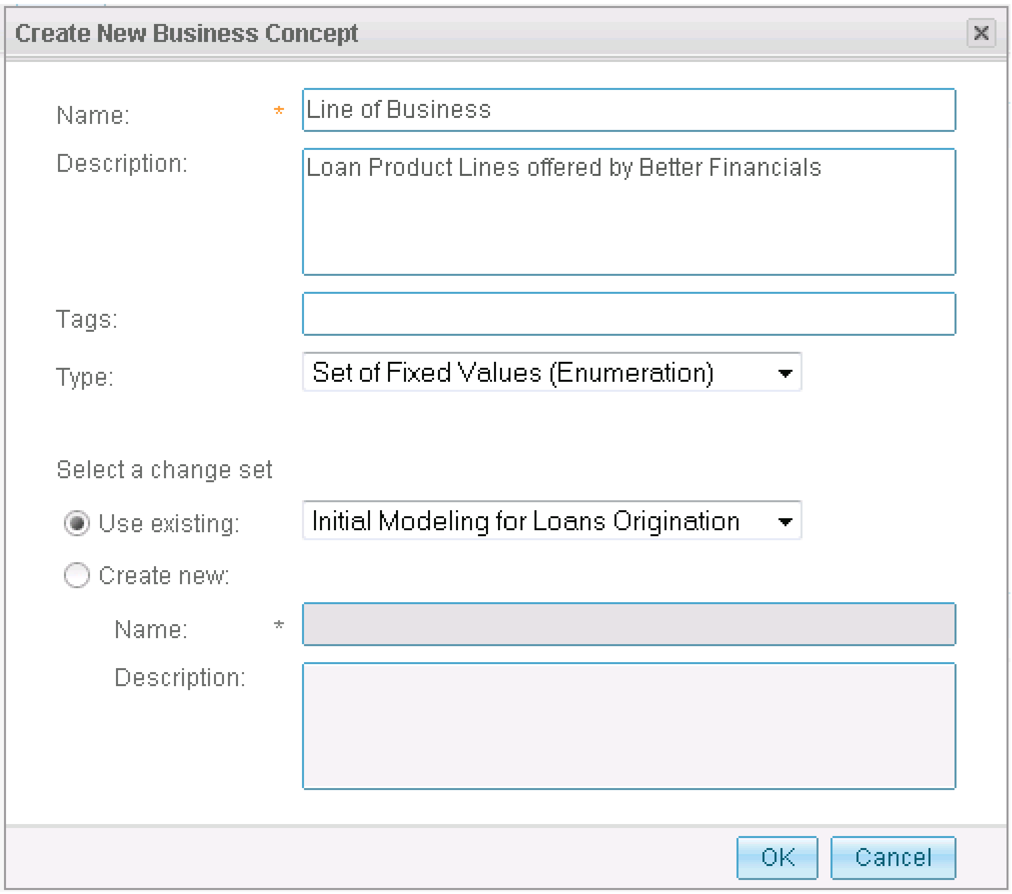
Concept type	Description
Enumeration	Represents text data where the value is one of the specified enumerated values. When used in policies, the options are available for single or multi-select use.
Text	Accepts any non-empty text when used in a policy. Whenever possible, use the more constrained enumeration.
Integer	Accepts numeric values between the specified min and max range. Whenever possible, define a label for the units associated with this numeric value.
Decimal	Like integer, except that decimal values can

Concept type	Description
	specify an allowed number of digits after the decimal point.
Boolean	Allows values of true or false.
Date	Accepts values that are dates.
Object	Used to define concepts that are composed of other concepts. The special “has” relationship implies composition to the system. Object concepts are used to define the inputs and outputs of business services.

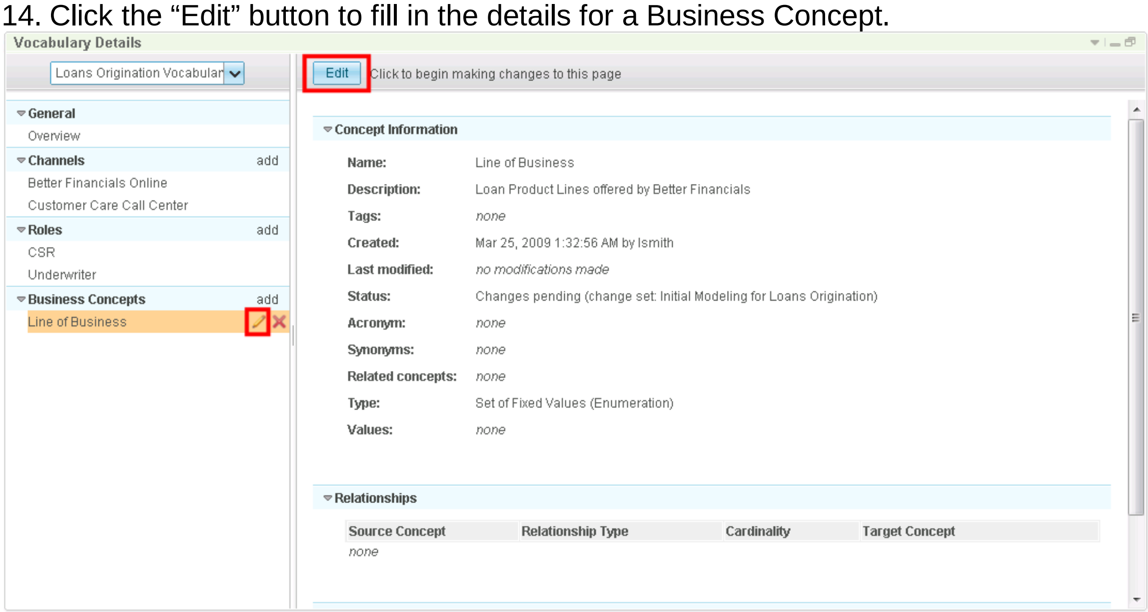
Since you want to control behavior in your process based on the line of business (auto versus RV loans), Loretta creates a “Line of Business”

13. Add a Business Concept by clicking the “add” link to the right of the “Business Concepts”. Fill in these details and click “OK”.

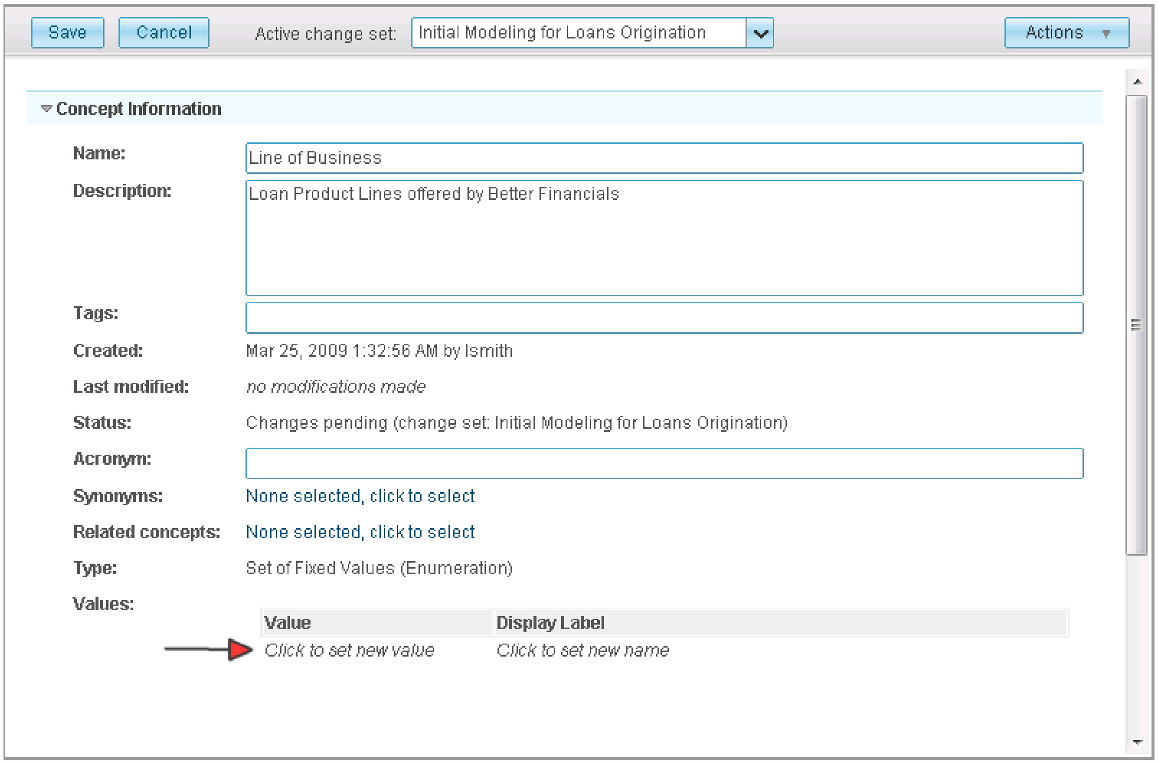




14. Click the “Edit” button to fill in the details for a Business Concept.

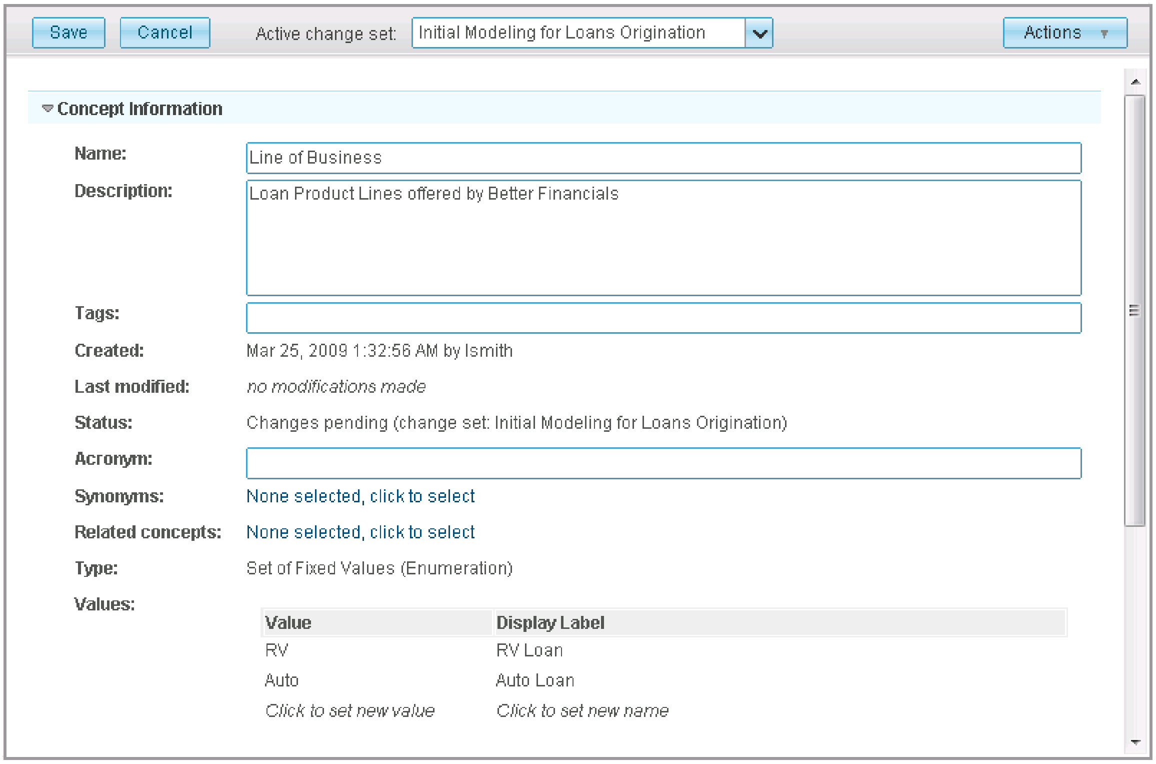


15. For an enumeration, you will need to fill in the “Values” section. Fill in the Line of Business enumeration as shown here and then click “Save”.



When defining enumerated options, the value column represents the actual values that are expected to be seen at runtime while the display label provides a more human-friendly way of presenting the options. For example, in the ACORD standard, the line of business code for “Personal Automotive” is “AUTOP”. If there is no special value representation for an option, put an easy-to-use name in both columns.

Note: the Display label column must be filled for any enumerated option.

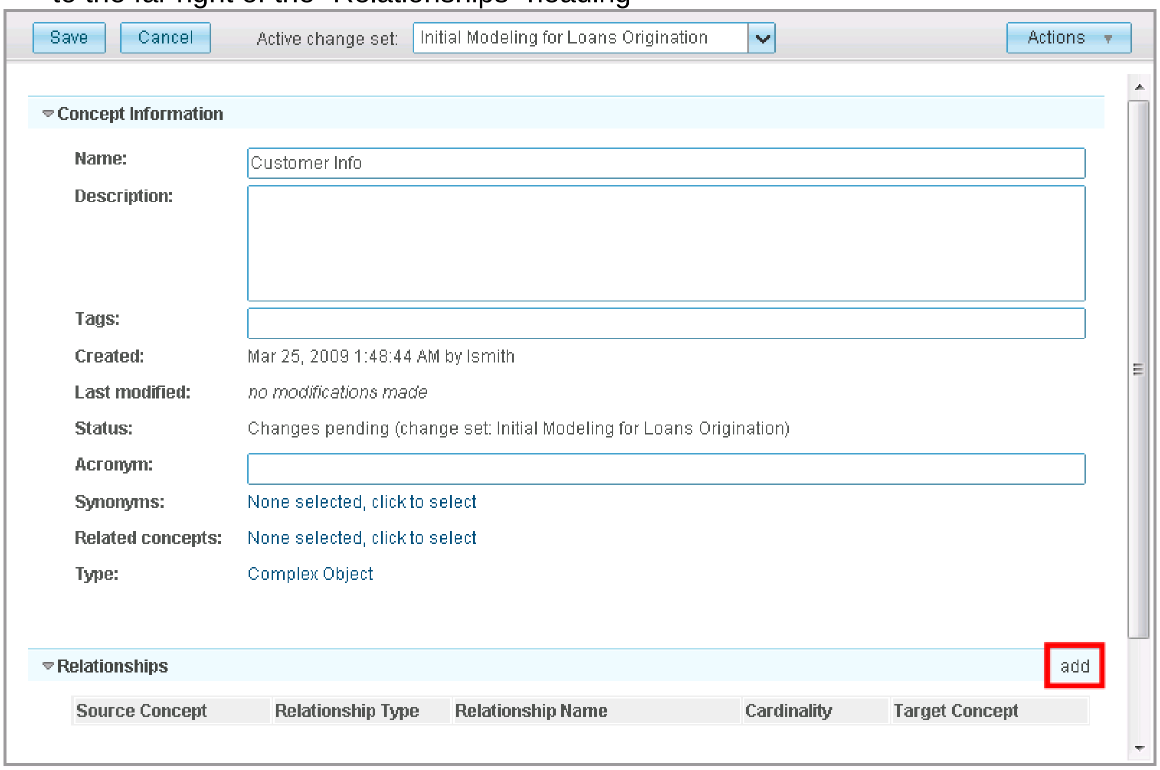

Save
Cancel
Active change set:
Initial Modeling for Loans Origination
Actions
Concept Information
Name:
Line of Business
Description:
Loan Product Lines offered by Better Financials
Tags:
Created:
Mar 25, 2009 1:32:56 AM by lsmith
Last modified:
no modifications made
Status:
Changes pending (change set: Initial Modeling for Loans Origination)
Acronym:
Synonyms:
None selected, click to select
Related concepts:
None selected, click to select
Type:
Set of Fixed Values (Enumeration)
Values:
Value
Display Label
RV
RV Loan
Auto
Auto Loan
Click to set new value
Click to set new name

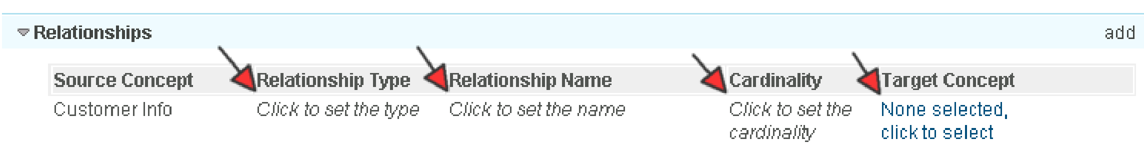
16. Now do steps 12 and 13 again for each of these Business Concepts:

Name	Type	Description	Constraints
Customer Name	Text	The first and last name of the borrower.	
Credit Score	Integer	Score provided for the primary borrower by one of the credit agencies.	Minimum value: 300 Maximum value: 850
Amount of Loan	Decimal	The amount of loan being requested.	Units of measure: USD Minimum value: 500 Maximum value: 20000000
New Customer	Boolean	Has value of true if the customer is creating a new relationship with the bank, false otherwise.	
Collateral	Text	Description of the collateral used to secure the loan.	
Loan Application Date	Date	Date the loan application was filed.	
Loan Final Review Date	Date	Date of the final loan decision.	
Loan Status	Enumeration	Determines whether an internal or external credit check service should be used. Internal credit checks are reserved for existing customers	Options : OPEN (Open), INPROGRESS (In Progress), APPROVED (Approved), REJECTED (Rejected), MOREINFO (More info needed)
Credit Check Type	Enumeration	Determines whether an internal or external credit check service should be used. Internal credit checks are reserved for existing customers.	Options: INTERNAL, THIRD-PARTY
Premium Credit Check	Boolean	Determines whether a premium credit check is required.	

Next, you will create a few object concepts that you will use in the next section to define the inputs and outputs of your business services.

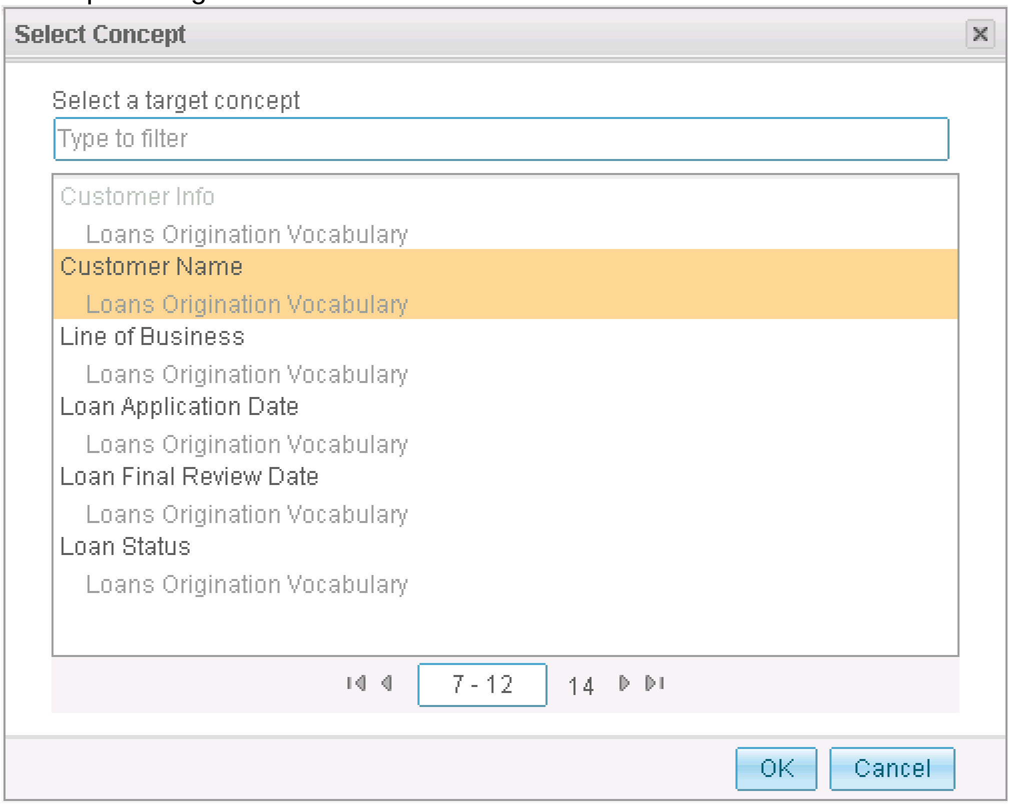
17. Click the “add” link to the right of the “Business Concepts”. Fill in these details and click “OK”.
    a. Customer Info
        i. Description: Information relating to the primary lender applying for the loan
        ii. Type: Complex Object
18. Click the “Edit” button to fill in the details for a Business Concept.
19. For a Complex Object, you need to fill in the “Relationships” by clicking the “add” button to the far right of the “Relationships” heading





    a. Click “Click to set the type” and select “has”
    b. Click “Click to set the name” and type in “customerName”
    c. Click “Click to set the cardinality” and select “exactly one”

d. Click “None selected, click to select”, select “Customer Name” in the “Select Concept” dialog box and then click “OK”



20. Repeat Step 18 so that the Customer Information concept looks like this:

Relationships add

Source Concept	Relationship Type	Relationship Name	Cardinality	Target Concept
Customer Info	has	customerName	exactly one	Customer Name
Customer Info	has	newCustomer	exactly one	New Customer
Customer Info	has	creditScore	at most one	Credit Score

21. Repeat Steps 16 – 19 with these details
    a. Loan Info
        i. Description: Information related to the loan and its processing
        ii. Type: Complex Object
        iii. Relationships:

Relationships

Source Concept	Relationship Type	Relationship Name	Cardinality	Target Concept
Loan Info	has	loanStatus	exactly one	Loan Status
Loan Info	has	loanApplicationDate	exactly one	Loan Application Date
Loan Info	has	collateral	exactly one	Collateral
Loan Info	has	amountOfLoan	exactly one	Amount of Loan
Loan Info	has	lineOfBusiness	exactly one	Line of Business
Loan Info	has	loanFinalReviewDate	exactly one	Loan Final Review Date

    b. Loan Application
        i. Description: Represents a loan application
        ii. Type: Complex Object

iii. Relationships:

Relationships

Source Concept	Relationship Type	Relationship Name	Cardinality	Target Concept
Loan Application	has	loanInfo	exactly one	Loan Info
Loan Application	has	customerInfo	exactly one	Customer Info

22. The vocabulary details page should now look like this: