

Chapter 3

Authoring a vocabulary

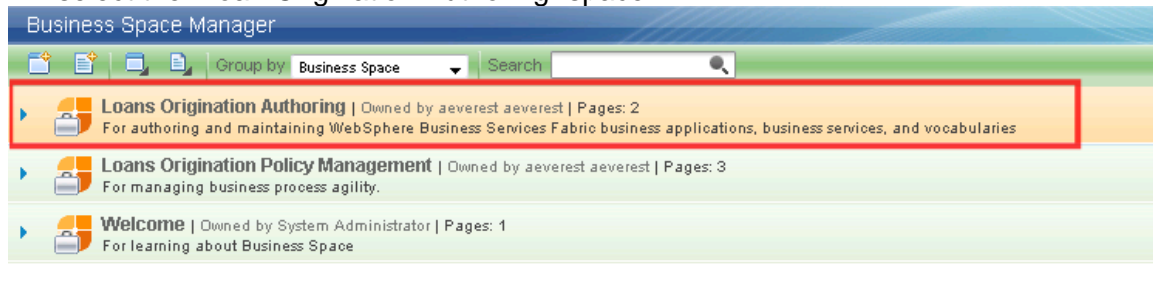


A vocabulary is a glossary of concepts used to represent the business domain. A concept can have a name, description, external links, synonyms, acronyms, and relationships to other concepts. A glossary serves two roles:

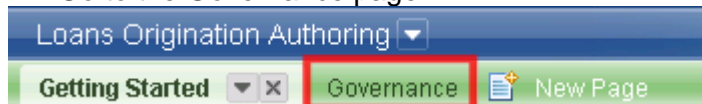
- It provides an agreed upon human-consumable definition for elements in the business domain. This information can be valuable for the overall life cycle of an application to keep business and technical people aligned around the definition of key concepts.
- It provides a “language” for writing policies 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



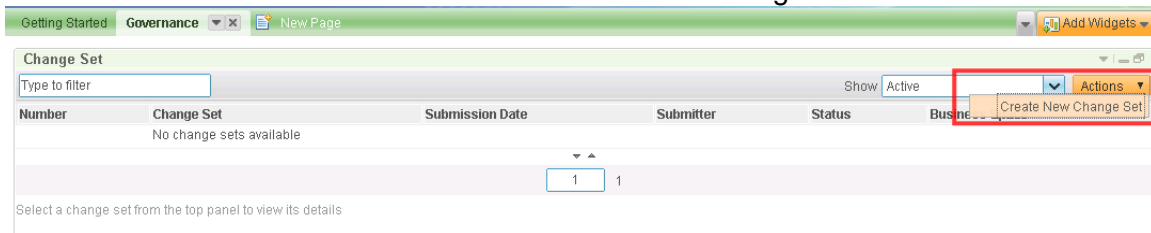
All changes made in the Fabric spaces are tracked by the system using change sets. A change set is a group of related changes to objects in the system. When creating or editing objects, the system will ask what change set the changes should go into. A change set starts out in Draft state. When the changes 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

Getting Started Governance New Page

Getting Started with WebSphere Business Services Fabric Authoring


Getting Started with WebSphere Business Services Fabric Authoring

You can create and update artifacts used by WebSphere Business Services Fabric to control the performance of your applications through defined policies. There are three main types of artifacts through which you can work with policies:

- Business applications
- Business services
- Vocabularies


How do I create and update business applications?

A business application describes the flow of business services to provide a business solution. Creating and updating an application consists of graphically assembling the business services into a flow and defining policies to dynamically control the behavior of the business services when they run within the business application.

 [Start working with applications](#)


How do I create and update business services?

A business service is a representation of a business function. Creating and updating a business service consists of defining its inputs and outputs, its variations, and the policies that determine which variation to use according the inputs, the outputs, and other context data.

 [Start working with business services](#)





How do I create a vocabulary?

A vocabulary defines the terms used by business services and policies. Creating and updating a vocabulary consists of identifying the channels, roles, and generic business concepts that form the definition of all business applications, business services, and policies.

 [Start working with vocabularies](#)

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

Actions ▾

-  New Vocabulary...
-  Delete Vocabulary...
-  Add Vocabulary to Space...
-  Remove Vocabulary from Space...

7. Fill in these details and click “OK”

Create New Vocabulary

Name: * Loans Origination Vocabulary

Description: Contains the vocabulary items for the Loans Origination application

Tags:

Select a change set

Use existing: Initial Modeling for Loans Origination

Create new:

Name: *

Description:

OK Cancel

- 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”.

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

▼ General	
Overview	
▼ Channels	add
none	
▼ Roles	add
none	
▼ Business Concepts	add
none	

Create New Channel [X]

Name: * Better Financials Online

Description: Better Financials Online is a customer-accessible web portal that allows customers to apply for loans

Tags:

Select a change set

Use existing: Initial Modeling for Loans Origination

Create new:

Name: *


Description:

OK Cancel

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".

▼ General	
Overview	
▼ Channels add	
Better Financials Online	
Customer Care Call Center	
▼ Roles add	
none	
▼ Business Concepts add	
none	

Create New Role

Name: * CSR

Description: Customer Care Representative, primarily responsible for collecting details of the customer and the loan. Responsible for updating the customer of loan status.

Tags:

Select a change set

Use existing: Initial Modeling for Loans Origination

Create new:

Name: *

Description:

OK Cancel

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”.

▼ General

Overview

▼ Channels add

Better Financials Online

Customer Care Call Center

▼ Roles add

CSR

Underwriter

▼ Business Concepts add

none

Create New Business Concept [X]

Name: * Line of Business

Description: Loan Product Lines offered by Better Financials

Tags:

Type: Set of Fixed Values (Enumeration) ▼

Select a change set

Use existing: Initial Modeling for Loans Origination ▼

Create new:

Name: * []

Description: []

OK Cancel

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

Vocabulary Details

Loans Origination Vocabulary [Edit] Click to begin making changes to this page

▼ General

Overview

▼ Channels add

Better Financials Online

Customer Care Call Center

▼ Roles add

CSR

Underwriter

▼ Business Concepts add

Line of Business [Edit] [X]

▼ Concept Information

Name: Line of Business

Description: Loan Product Lines offered by Better Financials

Tags: none

Created: Mar 25, 2009 1:32:56 AM by Ismith

Last modified: no modifications made

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

Acronym: none

Synonyms: none

Related concepts: none

Type: Set of Fixed Values (Enumeration)

Values: none

▼ Relationships

Source Concept	Relationship Type	Cardinality	Target Concept
none			

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”.

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
 Click to set new value	Click to set new name

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 Ismith

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

Save Cancel Active change set: Initial Modeling for Loans Origination Actions

▼ Concept Information

Name: Customer Info

Description:

Tags:

Created: Mar 25, 2009 1:48:44 AM by Ismith

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: Complex Object

▼ Relationships add

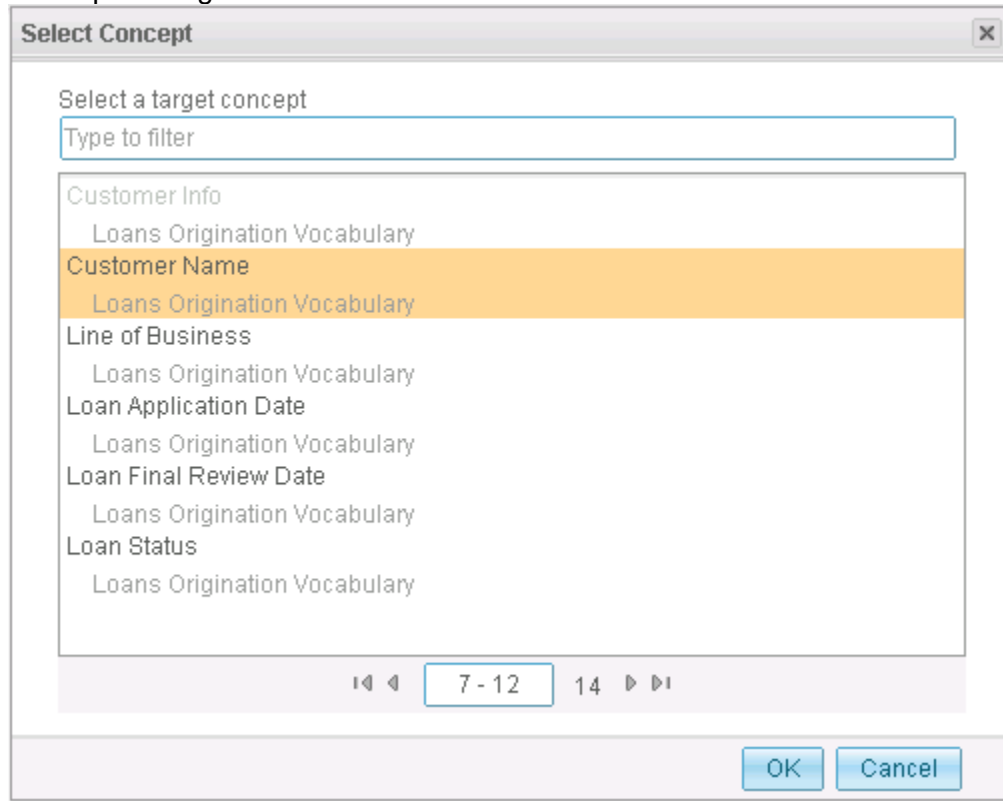
Source Concept	Relationship Type	Relationship Name	Cardinality	Target Concept
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▼ Relationships add

Source Concept	Relationship Type	Relationship Name	Cardinality	Target Concept
Customer Info	Click to set the type	Click to set the name	Click to set the cardinality	None selected, click to select

- Click “Click to set the type” and select “has”
- Click “Click to set the name” and type in “customerName”
- 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				
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:

Vocabulary Details

Loans Origination Vocabulary ▼

▼ **General**

Overview 

▼ **Channels** add

Better Financials Online

Customer Care Call Center

▼ **Roles** add

CSR

Underwriter

▼ **Business Concepts** add

Amount of Loan

Collateral

Credit Check Type

Credit Score

Customer Info

Customer Name

Line of Business

Loan Application

Loan Application Date

Loan Final Review Date

Loan Info

Loan Status

New Customer

Premium Credit Check