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Overview

- Basic orientation
 - Site Admin menu
 - o Front end vs. JSP 'blue screen' editing
- Adding an ontology namespace and prefix
- Setting up classgroups
- Adding classes
 - Creating an individual of that class
- Adding data properties
- Adding object properties
- Adding property groups

Basic orientation

Vitro (and by extension VIVO) has three principal functional modes

- Ontology editing and display configuration, typically limited to a site admin and/or an ontology specialist
- Content addition and editing, initially through Vitro user accounts but optionally also via single sign-on
- Browsing and search functions for non-logged in users

Vitro setup and configuration

Vitro is initially configurable by modifying configuration files prior to startup

- Configuration typically happens at installation, documented at https://wiki.duraspace.org/x/VK4OB
- These include the application name, the namespace, the database name, the root user and password, the email service, and several optional additional configurations
- Once Vitro is running, additional changes may then be applied interactively to the application using site admin functions

Site Admin menus

- Data input form (for new entries)
- Ontology editor
 - Ontology list
 - Class management
 - Property management
- Site configuration
- Advanced data tools
- Site maintenance

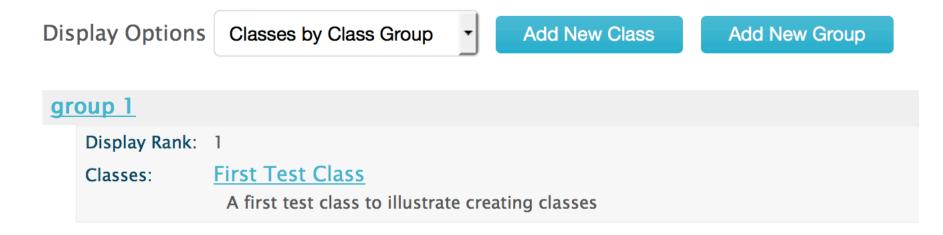
Data input: classgroups

Note that the input form is disabled until at least one classgroup has been created Classgroups serve as a grouping mechanism for purposes of the Vitro application, outside the formal ontology

- They help organize the index page
- They provide the most common means of content organization for browsing via menu pages
- Classes not added to class groups are less visible in the user interface -- this becomes one mechanism to hide or at least de-emphasize content

Classgroup display

Class Groups



Data input

Once at least one classgroup has been created, the data input form is at least partially activated.

However, without classes, content ('individuals') can still not yet be added ...

Ontology Editor menu

Ontology list

- On startup, the only ontology is the "Vitro public constructs" ontology, that supports file upload (primarily images)
- Adding a new ontology really means "Add a new ontology namespace and prefix"
- Try adding

Ontology Editing Form
Creating New Record (* Required Fields)
Ontology name
Test Ontology
Namespace URI* (must begin with http:// or https://)
http://myDomain.com/ontology/test
Namespace prefix test
Create New Record Reset Cancel

Ontology editor: control panel

Ontology Control Panel



Provides

- Filtered views of only the classes and properties in its namespace
- Exporting the ontology separately from content
- A tool to correct or change the ontology URI

Class Management

Class hierarchy

- Four options for viewing
 - All classes (alphabetically by class name)
 - Asserted class hierarchy
 - Inferred class hierarchy
 - Classes by class group
- The hierarchy view shows an expandable tree view of the structure
- It may be easier to find a class on the 'All classes' list, especially in a deep hierarchy



Class editing form (basic fields)

Class Editing Form

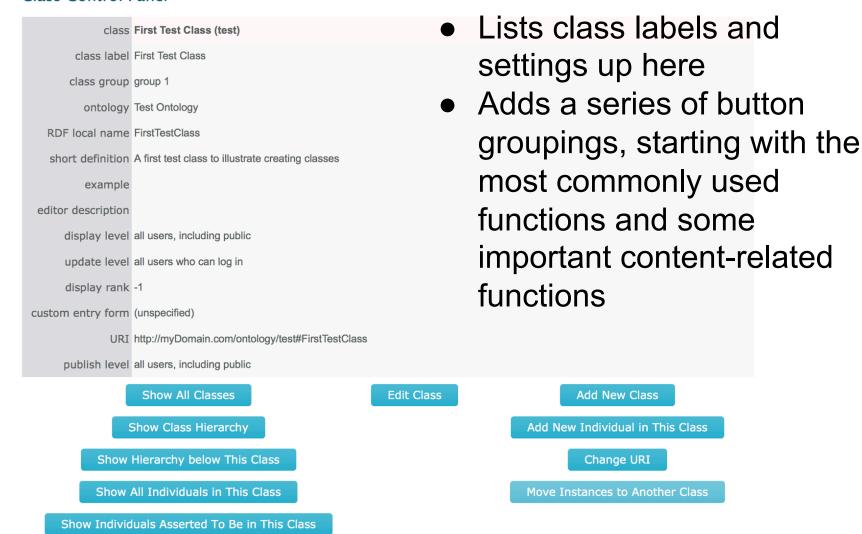
Creating New Record (* Required Fields) Class label Class group group 1 First Test Class for menu pages, search results and the index page by convention use initial capital letters; spaces OK Ontology Internal name* (RDF local name) **Test Ontology** FirstTestClass must be valid XML without spaces; by convention use camel case with an initial capital **Short definition** to display publicly A first test class to illustrate creating classes

Class editing form (advanced fields)

Example for ontology editors			
Description for ontology edite	ors		
Display level	Update level		
all users, including public	all users who can log in ▼		
Publish level			
all users, including public			
Display rank when collating p	property by subclass	Custom entry form	
Create New Record	Reset Cancel		

Class control panel (primary)

Class Control Panel



Class control panel

- These buttons control class hierarchy linkages and support more advanced ontology axioms such as class equivalence, disjointness, and property restrictions
- The "show all ..." buttons are also useful to keep in mind

New Link to Superclass New Link to Subclass Add New Subclass of This Class Assert Class Equivalence **New Disjointness Axiom** Define New Domain Property at This Class

Show All Object Properties Applicable to This Class

Show All Data Properties Applicable to This Class

all values from

Apply Restriction

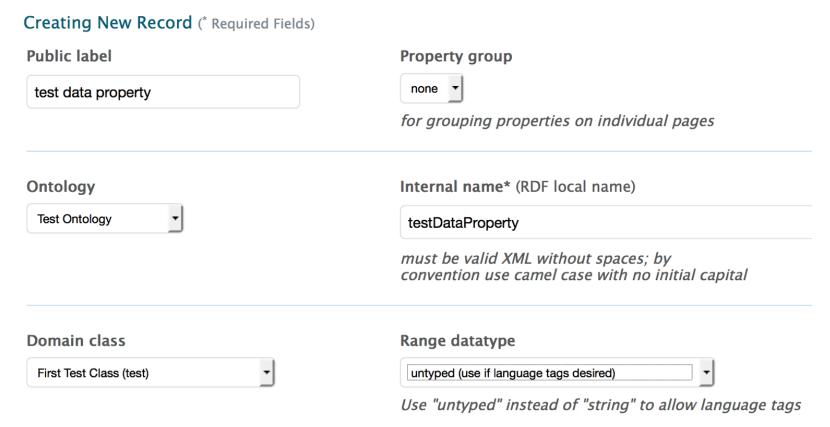
Restrict: • object property data property

Property Management menu

- Object property hierarchy
 - Relationships between entities
- Data property hierarchy
 - Attributes of one entity
- Faux property listing
 - Context-dependent labels for properties
- Property groups

Data property editing -- basic

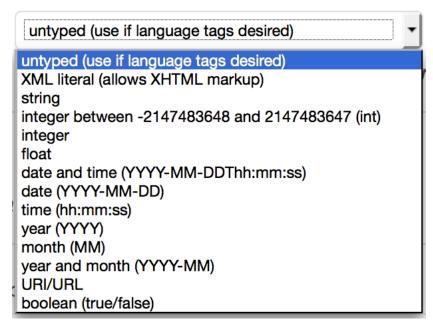
Data Property Editing Form



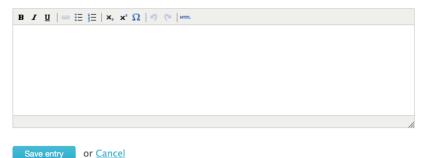
 The few data properties that Vitro initially displays are in the Vitro public constructs ontology

Range datatype choices

Range datatype



Add new entry for: test data property



- Untyped allows language tags
- Use integer, float, boolean, or the various date choices where necessary

Add new entry for: test data property

123456

Save entry or Cancel

Add new entry for: test data property

Itrue

Save entry or Cancel

Add new entry for: test data property

Year Month month Day day

Save entry or Cancel

Data property editing (advanced fields)

Make this property be: functional runctional" property has at most one value	for each individual
Public description for front-end users, as it w	rill appear on editing forms
Example for ontology editors	
Description for ontology editors	
Display level	Update level
all users, including public	all users who can log in
Publish level all users, including public	
Display tier within property group	Display limit before "more" button is displayed
Custom entry form	
Create New Record Reset Cano	cel

Object property editing - basic

Property Editing Form

Parent property	Property group	Property group	
none (root property)	none 🔻		
	for grouping properties on individua	l pages	
Ontology	Internal name* (RDF local name)	Label for public display	
Test Ontology ▼	testObjectProperty	test object property	
	must be valid XML without spaces; by convention use camel case with no initial capital		
Inverse property ontology	Inverse internal name	Inverse label	
Test Ontology	testInverseProperty	test inverse property	
	must be a valid XML name without spaces; by convention use camel case with no initial capital		
Domain class	Range class		
First Test Class (test)	Second Test Class (test)		

Object property editing -- options

make this prope	erty be:			
☐ transitive	□ symmetric	functional	☐ inverse functional	
Public Descripti	on for front-end users,	as it will appear on editi	ng forms	
				h
Example for ont	cology editors			
Description for	ontology editors			
				10
Display level		Update level		
all users, including p	public •	all users who can log in	n •	
Publish level				
all users, including p	public 🔻			

Object property editing - more options

Display tier for this property lower numbers display first	Display tier for inverse property lower numbers display first	When displaying related individuals from different classes, ☐ collate by subclass	
Display limit for this property The limit before the "more" button is di	Display limit for inverse property displayed.		
	Sort direction for related individuals, all blank for ascending, "desc" for descending, "desc" for descending, will be ignored if a custom list view.		
Select related individuals from existing choices? provide selection	Allow creating new related individuals?	Custom entry form	

Create New Record

Reset

Cancel

Populated properties

test:testDataProperty (data property); order in group: −1; display level: all users, including public; update level: all users who can log in; publish level: all users, including public This is an untyped literal entry and can be of arbitrary length and include formatting including Bold Text. Entries may include • lists • list elements that include formatting multiple paragraphs



Faux property listing

- Faux properties are a relatively new addition to Vitro and VIVO to help constrain ontology complexity
- A faux property allows specification of a different label for a property when used with domain and/or range entities of specific types

Property groups

- Property groups are a grouping mechanism similar to class groups
- Adding groups results in tabbed areas of property display across the page
- They work with object properties and data properties alike
 - It's often desirable to be able to interleave data and object properties
- Display ordering applies within property groups

Site Configuration

- Manage profile editing -- proxy editors
- Page management -- setting up menu tabs and/or special purpose pages
- Menu ordering -- changing the order of menu tabs across the page
- Site information -- modifying the site title, contact information, copyright text, etc.
- User accounts

Site Information

Editing Existing Record

Site name (max 50 characters)
Vitro
Contact email address contact form submissions will be sent to this address
Theme vitro -
Copyright text used in footer (e.g., name of your institution)
Copyright URL copyright text links to this URL
Save changes Cancel

User accounts

- We recommend adding a user account at the 'site admin' level and then not running as the root user
- A site admin user has all the privileges needed
- It may be confusing to run as the root user since that user is not subject to some display controls (e.g., property visibility)