ModeShape Tools Reference Guide

Version: 3.2.1.GA

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Introduction

ModeShape tools allows you to publish and unpublish resources to the ModeShape repositories you have made available through your workspace. These repositories are persisted within the workspace, from session to session.

The ModeShape registry is persisted from session to session.

Concepts

This section outlines the concepts that are assumed information when performing tasks with ModeShape tools.

2.1. ModeShape

ModeShape is a component that maintains repositories of resources for your application server, through the implementation of a JCR (Java Content Repository) view. The resources stored can come from many different kinds of systems.

To your applications, ModeShape looks and behaves like a regular JCR repository. Using the standard JCR API, applications can search, navigate and listen for changes in content. However, ModeShape retrieves its content by federating multiple back-end systems (such as databases, services and other repositories). This allows those systems to maintain ownership of the information, while ensuring the unified repository remains current.

ModeShape repositories can be used in a variety of applications. One such application is provisioning and management. In provisioning and management it is critical to understand and keep track of the metadata for models, databases, services, components, applications, clusters, machines, and other systems used in an enterprise environment. Governance takes this further, by also tracking the policies and expectations against which performance can be verified. In these cases, a repository is an excellent mechanism for managing this complex and highly-varied information.

A ModeShape repository does not have to be large and complex. It could be setup to only manage configuration information for an application, or provide a JCR interface on top of non-JCR systems.

Tasks

This section outlines different tasks that can be achieved through the use of the ModeShape tools.

3.1. Register a repository on a new server

Registering a repository on a new server is achieved through the **ModeShape** view. To open the **ModeShape** view navigate to **Window** \rightarrow **Show** View \rightarrow **Other**. From the **Show** View dialog select the **ModeShape** folder followed by the **ModeShape** view and click **OK**.



Figure 3.1. Selecting the ModeShape view

To add a ModeShape repository, click on the **Create a new server** icon that appears in the **Modeshape** view. This view is located in the lower section of your interface, along with other views such as **Severs** and **Console**.

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						()
					C	Create a new

Figure 3.2. Adding a new server for ModeShape repositories

The **New Server** dialog will then appear asking for the URL of the server to connect and your authentication information. You can test your connection to the server by clicking the **Test** button and then clicking the **Finish** button to add the server to the **ModeShape** view.



Note

Upon testing the connection, if a connection cannot be established, the ModeShape server can still be created. Use the **Reconnect** button on the ModeShape View's toolbar to try and connect again at a later time.

	New Server
Enter Serv	ver Information
Define the l	URL and authentication details for this ModeShape server instance.
URL:	
The defa 'htt	URL format is ' <protocol>://<host>:<port>/<context>' and the ult context is 'modeshape-rest'. A sample URL would be p://localhost:8080/modeshape-rest'.</context></port></host></protocol>
Authenticat	tion
User:	
Password:	
🗌 Save pa	assword
9	Saved secret data is stored on your computer in a file that's difficult, but not impossible, for an intruder to read.
Validate se	erver connection: Test
?	Cancel <u>F</u> inish

Figure 3.3. The New Server dialog

Once the server with the ModeShape repository has been added three new options become available within the **ModeShape** view. These options allow you to **Edit server properties**, **Delete a server from the server registry** and **Reconnect to the selected server**. To perform one of these actions either right-click on a server and select from the presented menu of actions, or use the buttons beside the **Create a new server** button seen in *Figure 3.2, "Adding a new server for ModeShape repositories"*.



will have access to all ModeShape repositories on the server. You do not need to register a new connection for each repository on the same server.

3.2. Publish or unpublish a resource

Having registered your ModeShape server instances in *Section 3.1, "Register a repository on a new server*", you can now publish files to the repositories on these servers.

Right-clicking on one or more projects, folders, or files in your Eclipse workspace will display the context menu for those files. This menu will now include a ModeShape submenu that allows you to publish or unpublish the resources to your ModeShape repository.

When only one resource is selected you can also view the locations where that resource has been published. The published locations of a resource can be viewed by right-clicking on an individual resource and navigating the ModeShape context submenu to the **Show Published Locations** option.

🗢 🗁 lib	Assign Working Sets		
core.jar hibernate-all.jar jboss-embedded-a	<u>V</u> alidate Show in Remote Systems view Mark as Deployable		
e testor iar	<u>R</u> un As	>	
thirdparty-all iar	<u>D</u> ebug As	>	
Servers	<u>P</u> rofile As	>	
Servers	T <u>e</u> am	>	
	Comp <u>a</u> re With	>	
	Rep <u>l</u> ace With	>	
	Guvnor	>	
	ModeShape	>	Publish
Property Value	WikiText	~ >	Unpublis
	🖹 Problems 🧟 Tasks 🛞 Seam Components	🖧 Servers	Show Pu

Figure 3.4. ModeShape context submenu

The ModeShape publishing wizard is displayed when you select **publish** or **unpublish** from the context menu.

	Publish to ModeShap	e 🛛 🕅				
Publish the selected files and folders						
Choose the locati and folders will b	on of the JCR repository where your loo e published, and then click "Finish."	cal files				
Location						
Server: http://lo	ocalhost:8080/modeshape-rest	\$ New				
JCR Repository:	repository					
JCR Workspace:	workspace2					
Publish Area:	/files	~				
These files were	selected and will be published:					
/isfHello/WebCo	ntent/index.isp					
✓ Recurse folde	✓ Recurse folders and projects					
Version the published files (shange default in your preferences)						
Version the p		<u>sectores</u> /				
?		Cancel Finish				

Figure 3.5. ModeShape publishing wizard

The publishing wizard (shown in *Figure 3.5, "ModeShape publishing wizard*") allows you to choose which ModeShape Java Content Repositories (JCR) type repository to interact with and displays the selected files the operation will be performed on. When a project or folder is selected all their included files are acted upon.

Publishing to a **Publish Area** will automatically sequence your files to extract useful information and make it available to our repository users. Extracted information depends upon the type of file and the configuration of the ModeShape repository. The location where files will be published is constructed by appending the server URL, the names of the JCR repository and workspace, the path to the publish area, and the path of the files and folders within your Eclipse workspace.

As ModeShape now allows for the versioning of published files you will notice a checkbox labelled **Version the published files (change default in your preferences)**. If you have selected to allow for file versioning in your ModeShape preferences then this checkbox will automatically be checked.

If your server instance does not permit the versioning of files, reguardless of the settings you choose in the preferences for ModeShape, the checkbox labelled **Version the published files** (change default in your preferences) will be greyed out.

	Publish to ModeSha	ape 🛛 🕅				
Publish the selected files and folders						
Choose the location of the JCR repository where your local files and folders will be published, and then click "Finish."						
Location	Location					
Server: http://lo	ocalhost:8080/modeshape-rest	≎ New				
JCR Repository:	repository	\$				
JCR Workspace:	workspace2					
Publish Area:	/files					
These files were	selected and will be published:					
/jsfHello/WebCo	ntent/index.jsp					
✓ Recurse folde	rs and projects					
Version the published files (change default in your preferences)						
	, and ge actaurent you	,				
2		Cancel Finish				

Figure 3.6. ModeShape publishing wizard - server without versioning ability



If you publish a file to a ModeShape repository where a version of the same file has previously been published to the repository by you or someone else, the publishing action will overwrite the file currently in the repository.
When performing an unpublish operation, make sure you are aware of the following:
If you are interacting with a multi-user repository, the version of the file you are unpublishing may have been updated by someone else after you.
It is important to be positive a file is no longer necessary when unpublishing as the file in question will be deleted from the repository with this operation.

When publishing or unpublishing files, you can see the operation output in the **Console** view. The type of information that you can view includes the repository where the operation took place, how long the operation took, the outcome for each file included in the operation, a hyperlink that allows you to open the file in an Eclipse editor, and a ModeShape repository workspace URL.

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ModeSh	ape									
[2] Pu [2] + [2] + [2] + [2] + [2] + [2] Do	blishi Publis Publis Publis Publis ne pub	ng 4 file hed file hed file hed file hed file lishing.	e(s) to ser " <u>/Staging/</u> " <u>/Staging/</u> " <u>/Staging/</u> " <u>/Staging/</u> Elapsed ti	ver "http: DeleteServ eclipse-co PublishDia Publishino me: 3 seco	://localhos verDialog.p ode-formatt alog.png" t gPreference ond(s).	t:8 ng" er-j o U sDia	180" (repos to URL " ht profile.xml RL " http:// alog.png" t	itory " tp://lo " to UR localho o URL "	mode:repo calhost:8 L "http:/ st:8180/r http://lo	ository", w 8180/resour //localhost resources/m ocalhost:81
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			111							

Figure 3.7. Console output

If you wish for certain folders or file types to never be published or unpublished, these conditions can be set through the ModeShape preferences dialog explained in *Section 3.3, "Setting preferences"*

3.3. Setting preferences

The ModeShape **Preferences** dialog allows for resource versioning to be set along with specific file types and folders that you never wish to have published to or unpublished from a ModeShape repository. This dialog is accessed by navigating to **Window** \rightarrow **Preferences** \rightarrow **ModeShape**.

\odot		Preferences	
ty	pe filter text 🛛 🔏	ModeShape	⇔ ~ ⇔~ ¬
⊳	Forge	General settings for ModeShape Tools:	
	FreeMarker Editor	Enable resource versioning	
	Guvnor		
⊳	Help		
	HQL editor		
⊳	Install/Update		
⊳	Java		
⊳	Java EE		
⊳	Java Persistence		
⊳	JavaScript _		
⊳	JBoss jBPM		
⊳	JBoss Tools		
⊳	Maven		
$\overline{}$	ModeShape		
	Ignored Resources		
⊳	Mylyn 📃		
⊳	Plug-in Development		
	Project Archives		
⊳	Remote Systems		
⊳	Report Design		
⊳	Run/Debug		
N			
6			
(?	Cancel	ОК

Figure 3.8. ModeShape preferences dialog

This dialog allows you to set whether resource versioning will be used for your ModeShape repository or not. Ensure the **Enable resource versioning** checkbox is ticked for resource versioning to be activated.

To manage the resources to be published to the repository, click on the **Ignored Resources** menu item under **ModeShape** in the main left **Preferences** menu.

0		Preferences	
ty	rpe filter text 🛛 🔏	Ignored Resources	⇔ ~ ⇔~ ◄
_			
⊳	Forge	✓ .project	Ne <u>w</u>
	FreeMarker Editor	✓ .svn	
	Guvnor		Remove
⊳	Help		
	HQL editor		
⊳	Install/Update		
⊳	Java		
⊳	Java EE		
⊳	Java Persistence		
⊳	JavaScript =		
⊳	JBoss jBPM		
⊳	JBoss Tools		
⊳	Maven		
∇	ModeShape		
	Ignored Resources		
⊳	Mylyn		
⊳	Plug-in Development		
	Project Archives		
⊳	Remote Systems		
⊳	Report Design		
⊳	Run/Debug		
N			
C			
(?	Cancel	ОК

Figure 3.9. ModeShape: Ignored Resources preferences dialog

At this screen you can manage the resources that will not be published to your ModeShape repository. The current excluded file types and folders is presented in the list of checkbox items that appears under the **Ignored Resources** heading.

To add a new file extension type or folder name to be filtered from publishing, click on the **New** button, enter the details and click the **Apply** button so that your preference changes are saved.

Ô		Preferences	×
ty	pe filter text 🛛 🦂	Ignored Resources	⇔• ⇔• ▼
Þ	Drools Task Forge FreeMarker Editor	Use this page to specify a list of file and folder to exclude from publishing operations.	name patterns
	Guvnor	Ignore ratterns.	
⊳	Help	 ✓ .project 	New
	HQL editor	New Ignore Pattern	Nove
	Install/L		
2	Java Enter a file name	or folder name (* = any string, ? = and character	r):
2	Java EE		
V N	Java Per		
V N	JavaScri IRoss iR		
~	JBOSS JB		
~	JEUSS IU Mayon	Cancel OK	
v V	ModeShape		
Ť	Ignored Resources		
⊳	Mylyn		
Þ	Plug-in Development		
,	Project Archives		
⊳	Remote Systems		
⊳	Report Design		
Þ	Run/Debug	Restore Defaults	Apply
<		Thestore Deladits	
(?	Cancel	ОК

Figure 3.10. ModeShape: Ignored Resources preferences dialog

Removing an entry is conducted by selecting an entry from the list in the **Preferences** dialog and clicking on the **Remove** button. Ensure that you click the **Apply** button so that your preference changes are saved.

As the **Preferences** dialog lists file types and folders that will never be published to a repository, it follows that those listed will never be unpublished. If you decide to never have a certain file type or folder publishable, though it has been in the past, ensure that all instances of these are unpublished before setting any preferences for the file type or folder.



Note

Publishing folders or files of a certain file type before setting any preferences inhibiting the publishing of these file types, can be a way of ensuring that you will never remove these files (unpublish) from your ModeShape repositories by accident. However since preference settings are only local to your working environment, in a multi-user ModeShape repository someone else could still remove these files.

Appendix A. Revision History

Revision History Revision 0-0 Wed Sep 29 2010 Initial creation of book by publican

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