Deployer: Deploying a rule project to MWS

This page describes how to deploy a wM Business Rules project to a My webMethods Server, using wM Deployer.

Build a rule project with the Asset Build Environment (ABE)

- Refer to the "webMethods Deployer User's Guide", Chapter "Deploying Assets from a Source Asset Repository"
- Install the Asset Build Environment (ABE) using Installer
- Locate a directory containing rule project sources that were created with Designer - Business Rules Development
  - This can either be in the Designer workspace
  - Or checked out from a Version Control System
  - For example, a "E:\ABE_INPUT\RULES" folder would contain rule project sources for individual rule projects:

```
E:\ABE_INPUT\RULES
        RuleProjectA
                Actions
                Data Models
                Decison Tables
                Decision Trees
                Event Models
                Event Rules
                Rule Sets
        RuleProjectB
                Actions
                Data Models
                Decison Tables
                Decision Trees
                Event Models
                Event Rules
                Rule Sets
```

- Configure the *build.properties* file in "Software AG_directory \common\AssetBuildEnvironment\master_build"
  - Set the *build.src.dir* property to the directory containing rule project sources, for example "E:\ABE_INPUT"
  - `build.source.dir=E:/ABE_INPUT`

- The *build.src.dir* property may also contain directories for other asset types besides Rules, such as
  - Integration Server - *E:\ABE_INPUT\IS*
  - Universal Messaging - *E:\ABE_INPUT\UniversalMessaging*
  - BPM - *E:\ABE_INPUT\BP*
- Configure the *build.output.dir* property in the *build.properties* file
  - This defines the directory where the ABE build will place the created Rules assets, for example
  - `build.output.dir=E:\ABE_OUTPUT`

- Execute the ABE build by calling build.bat or build.sh
  - During the build you might see messages like

```
buildRULES:
...
[RulesArchiveAndAcldFileBuilder] E:\SL101\IS\MyCustomeISPackage is no rule project
...
```

  - This is expected and indicates that the Rules ABE build encountered and skipped sources of a different asset type (for example, and IS package).
- The results of the ABE build will be available in the ABEs output directory under the RULES folder
  - for example:

```
E:\ABE_OUTPUT\RULES
    RuleProjectA.jar
    RuleProjectA.acdl
    RuleProjectB.jar
    RuleProjectB.acdl
```

Create a repository

- Select the Asset Build Environment output directory as "File Directory", for example the "*E:\ABE_OUTPUT*" directory used above.

Configure a Business Rules MWS server

ⓘ Hint: Configuration Required for MWS Server

Before you can hot deploy and merge a rule project using webMethods Deployer, you must configure the file system location used by webMethods Deployer for Business Rules asset deployment.

To configure the file system location:
1. On your file system, open YourInstallationFolder\profiles\<MWS profile>\configuration\custom_wrapper.conf.
2. Add the path to the file system location wrapper.java.additional.110=-DBRMS_SPI2_PERSISTENCE_PATH=YourPath.
3. Save file.
4. Restart My webMethods Server.

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Business Rules MWS Servers

- Configure Business Rules MWS Server
- Refresh this Page

Business Rules MWS Servers

Save

Name	Host	Port	Version	Test	Delete
* No Business Rules MWS servers.					

Save

Configure Business Rules MWS Server

Configure Business Rules MWS Server

* Name	localhostMWS
* Host	localhost
* Port	8585
* User	Administrator
* Password	••••••
* Version	10.1
Root Context	
Use SSL	Yes ● No

Required fields are indicated by *

Configure

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Business Rules MWS Servers

Successfully connected to Business Rules MWS Server localhostMWS. Plugin reports version 10.1.0.0.65

- Configure Business Rules MWS Server
- Refresh this Page

Business Rules MWS Servers

Save

Name	Host	Port	Version	Test	Delete
localhostMWS	localhost	8585	10.1	▶	✖

Save

localhostMWS > Properties

- Refresh this Page

localhostMWS Properties

Name	localhostMWS
* Host	localhost
* Port	8585
* User	Administrator
* Password	••••••••
* Version	10.1
Root Context	
Use SSL	Yes ● No

Save

Create a Deployer project

- Select "Project Type: Repository"

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Projects

- Refresh this Page
- Create Project
- Copy Project

Projects

Name	Description	Home	Lock Status	Authorize	Delete
* No Projects authorized for current User.					

Create Project

Create Project

* Name	RulesToMWS
Description	
Project Type	○ Runtime ● Repository

Required fields are indicated by *

Create

Define a Deployment Set

- Select the Deployer project, click "Define", "Create Set", set "Set" to "Deployment"

- Select the previously created "localRepository"

- Select the localRepository and select the rule project to be deployed (here, "functionalRuntimeTest")

- Check"Unresolved Dependencies" and check "Ignore Missing Dependencies"

Create a Deployment Map

Deployer	RulesToMWS Repository > Map	Create Deployment Map
Projects	Define	Map	Deploy	**Create Deployment Map**

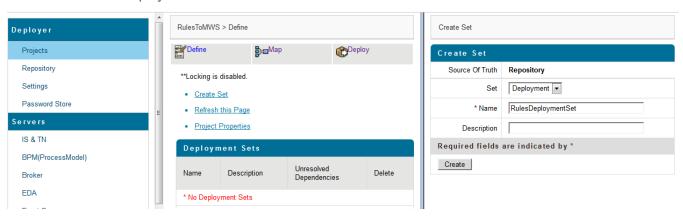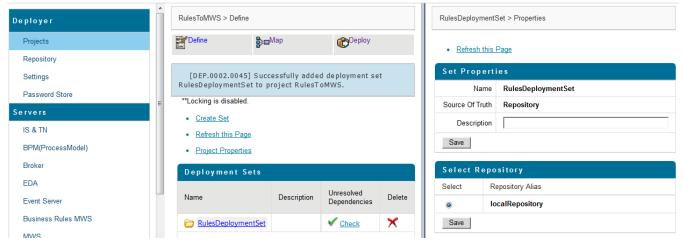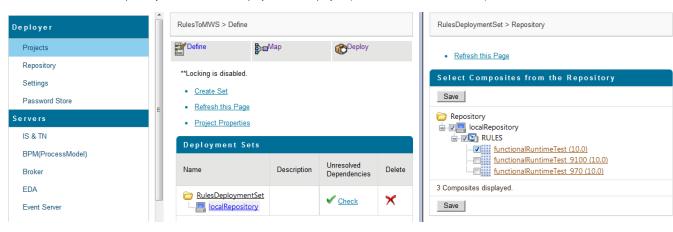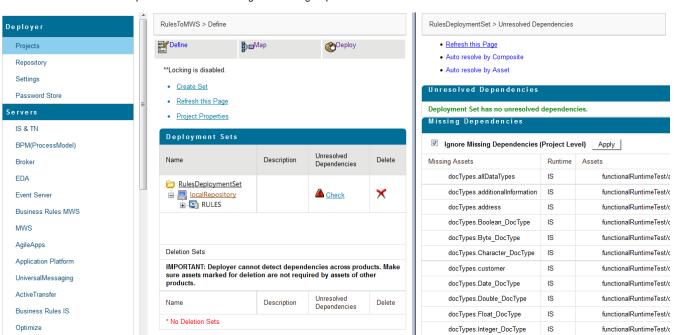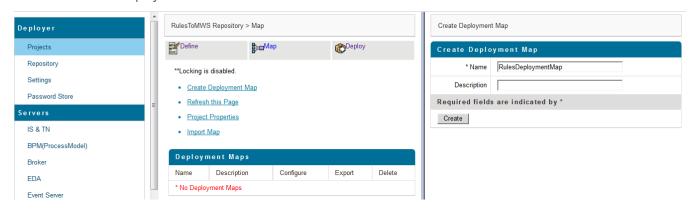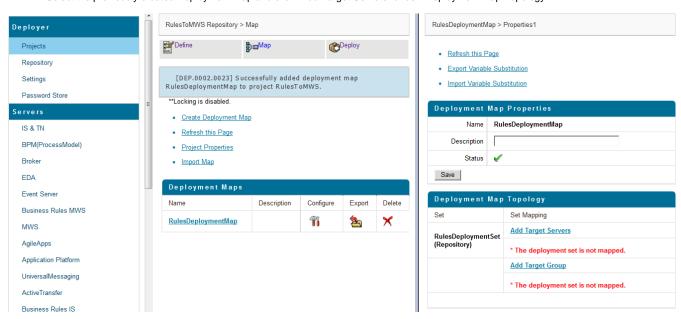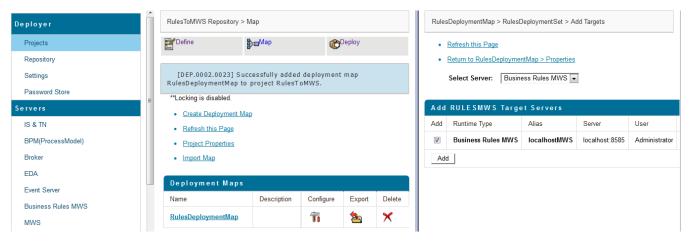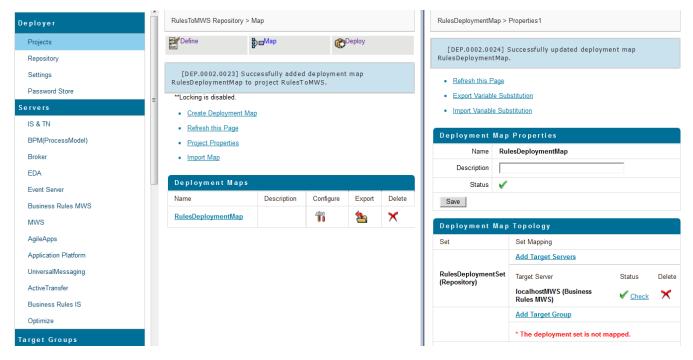| Deployer		
Projects	
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RulesToMWS Repository > Map

Define | Map | Deploy

Locking is disabled.

- Create Deployment Map
- Refresh this Page
- Project Properties
- Import Map

Deployment Maps

Name	Description	Configure	Export	Delete
* No Deployment Maps				

Create Deployment Map

* Name	RulesDeploymentMap
Description	

Required fields are indicated by *

Create

Add a Target Server

- Select the previously created Deployment Map and click "Add Target Servers" under "Deployment Map Topology"

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MWS	
AgileApps	
Application Platform	
UniversalMessaging	
ActiveTransfer	
Business Rules IS	

RulesToMWS Repository > Map

Define | Map | Deploy

[DEP.0002.0023] Successfully added deployment map RulesDeploymentMap to project RulesToMWS.

Locking is disabled.

- Create Deployment Map
- Refresh this Page
- Project Properties
- Import Map

Deployment Maps

Name	Description	Configure	Export	Delete
RulesDeploymentMap		🎨	📤	❌

RulesDeploymentMap > Properties1

- Refresh this Page
- Export Variable Substitution
- Import Variable Substitution

Deployment Map Properties

Name	**RulesDeploymentMap**
Description	
Status	✔

Save

Deployment Map Topology

Set	Set Mapping
RulesDeploymentSet (Repository)	Add Target Servers
	* The deployment set is not mapped.
	Add Target Group
	* The deployment set is not mapped.

- Select Server: "Business Rules MWS" and select the previously created "Business Rules MWS" server

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RulesToMWS Repository > Map

Define | Map | Deploy

[DEP.0002.0023] Successfully added deployment map RulesDeploymentMap to project RulesToMWS.

Locking is disabled.

- Create Deployment Map
- Refresh this Page
- Project Properties
- Import Map

Deployment Maps

Name	Description	Configure	Export	Delete
RulesDeploymentMap		🎨	📤	❌

RulesDeploymentMap > RulesDeploymentSet > Add Targets

- Refresh this Page
- Return to RulesDeploymentMap > Properties

Select Server: Business Rules MWS

Add RULESMWS Target Servers

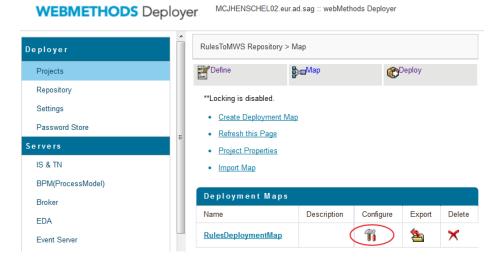| Add	Runtime Type	Alias	Server	User
☑	Business Rules MWS	localhostMWS	localhost:8585	Administrator

Add

Note: If your are deploying to a cluster of MWS servers, you MUST only configure one MWS server, NOT each cluster node. Rule projects are synchronized in the MWS cluster after deployment to this one MWS server. Deploying to multiple MWS cluster nodes in parallel will lead to synchronization errors.

Configure the Deployment Map - "Merge project" and "Hot Deploy project""
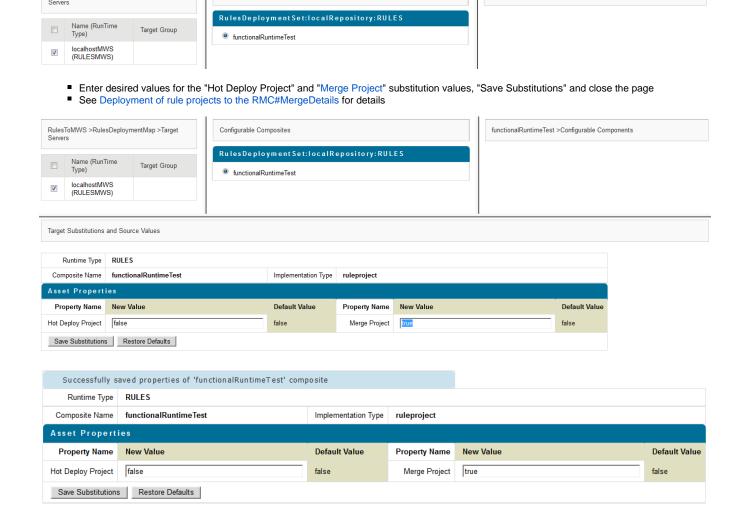
- Select the Deployment Project, click on "Map", click on "Configure" for the Deployment Map

  - Select the "RULESMWS" target server

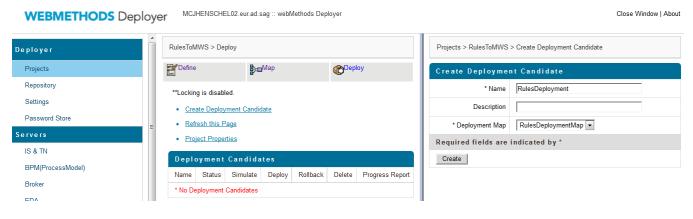 - Select the rule project to configure (here "functionalRuntimeTest")

RulesToMWS >RulesDeploymentMap >Target Servers		
☐	Name (RunTime Type)	Target Group
☑	localhostMWS (RULESMWS)	

Configurable Composites
RulesDeploymentSet:localRepository:RULES
◉ functionalRuntimeTest

functionalRuntimeTest >Configurable Components

- Enter desired values for the "Hot Deploy Project" and "Merge Project" substitution values, "Save Substitutions" and close the page
- See Deployment of rule projects to the RMC#MergeDetails for details

RulesToMWS >RulesDeploymentMap >Target Servers		
☐	Name (RunTime Type)	Target Group
☑	localhostMWS (RULESMWS)	

Configurable Composites
RulesDeploymentSet:localRepository:RULES
◉ functionalRuntimeTest

functionalRuntimeTest >Configurable Components

Target Substitutions and Source Values					
Runtime Type	RULES				
Composite Name	**functionalRuntimeTest**		**Implementation Type**	**ruleproject**	
Asset Properties					
Property Name	**New Value**	**Default Value**	**Property Name**	**New Value**	**Default Value**
Hot Deploy Project	false	false	Merge Project	true	false

Save Substitutions   Restore Defaults

Successfully saved properties of 'functionalRuntimeTest' composite					
Runtime Type	**RULES**				
Composite Name	**functionalRuntimeTest**		**Implementation Type**	**ruleproject**	
Asset Properties					
Property Name	**New Value**	**Default Value**	**Property Name**	**New Value**	**Default Value**
Hot Deploy Project	false	false	Merge Project	true	false

Save Substitutions   Restore Defaults

Create a Deployment Candidate

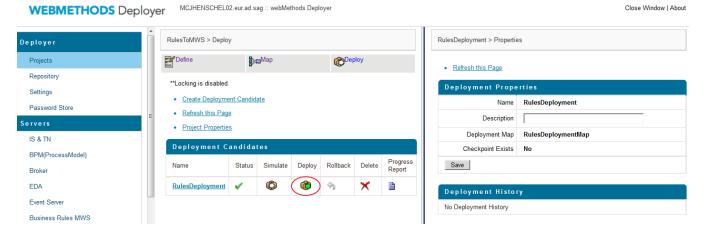- Select the Deployment Project, click "Deploy", "Create Deployment Candidate", select the previously created Deployment Map

WEBMETHODS Deployer   MCJHENSCHEL02.eur.ad.sag :: webMethods Deployer   Close Window | About

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RulesToMWS > Deploy

📄 Define   📊 Map   🔧 Deploy

**Locking is disabled.

- Create Deployment Candidate
- Refresh this Page
- Project Properties

Deployment Candidates					
Name	Status	Simulate	Deploy	Rollback	Delete	Progress Report
* No Deployment Candidates					

Projects > RulesToMWS > Create Deployment Candidate

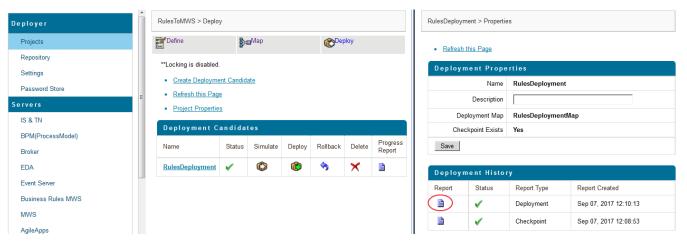| Create Deployment Candidate	
* Name	RulesDeployment
Description	
* Deployment Map	RulesDeploymentMap ▼
Required fields are indicated by *	

Create

Deploy the rule project to MWS

- Select the Deployment Project, click "Deploy" and the "Deploy" icon

- Wait a bit. The rule project will now be deployed and merged, according to the previously set substitution values. This may take a while.
- Check the Deployment report

Target Server: localhostMWS

TimeStamp	Message Type	Asset Type	Asset Name	Message
2017-09-07 12:08:53 CEST	MESSAGE			[DEP.0005.1168] Deleted previously delivered artifacts successfully for RULESMWS.
2017-09-07 12:08:53 CEST	MESSAGE			[DEP.0005.1164] Artifacts delivered successfully to RULESMWS.
2017-09-07 12:08:53 CEST	MESSAGE	ruleproject	functionalRuntimeTest	Merge is activated.
2017-09-07 12:10:13 CEST	MESSAGE	ruleproject	functionalRuntimeTest	Merge finished successfully.
2017-09-07 12:10:13 CEST	MESSAGE	ruleproject	functionalRuntimeTest	Hot deployment is not activated.
2017-09-07 12:10:13 CEST	SUCCESS	ruleproject	functionalRuntimeTest	Successfully activated project [functionalRuntimeTest]

- Voila! The rule project is now deployed to MWS and has been merged with the previously deployed version.