



# **Where to find information about MVEL**

## **OnCommand Workflow Automation 5.1**

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# Where to find information about MVEL

You can use the *MVEL Language Guide* to learn more about MVFLEX Expression Language (MVEL).

MVEL is an expression language based on Java syntax. You can use MVEL expression syntaxes in OnCommand Workflow Automation (WFA) workflows—for example, in functions and variables.

## MVEL-enabled fields in OnCommand Workflow Automation

Several fields in OnCommand Workflow Automation (WFA) are enabled for MVFLEX Expression Language (MVEL). You can use MVEL syntaxes in these fields while designing workflows.

The following table explains when and where you can use MVEL syntaxes in the WFA interface:

When...	Where to use...
Creating or editing a workflow	<ul style="list-style-type: none"><li>• <b>Workflow</b> › <i>Details</i> › <i>Return Parameters</i> › <i>Parameter Value</i></li><li>• <b>Workflow</b> › <i>Details</i> › <i>Constants</i> › <i>Value</i></li></ul>
Creating or editing command details in a workflow	<ul style="list-style-type: none"><li>• <b>Commands</b> › <i>Parameters for parameter_name</i> › <i>Enter search criteria</i> › <i>Resource Selection</i> › <i>Finder</i> › <i>Parameters</i></li><li>• <b>Commands</b> › <i>Parameters for parameter_name</i> › <i>Enter search criteria</i> › <i>Resource Selection</i> › <i>Advanced</i> › <i>Execute search only when the following expression evaluates to TRUE</i></li><li>• <b>Commands</b> › <i>Parameters for parameter_name</i> › <i>Advanced</i> › <i>If the following expression is TRUE</i></li><li>• <b>Commands</b> › <i>Parameters for parameter_name</i> › <i>Other Parameters</i></li><li>• <b>Commands</b> › <i>parameter_name</i> › <i>Attributes</i></li></ul>
Creating or editing a command	<ul style="list-style-type: none"><li>• <b>Commands</b> › <i>Command Definition</i> <i>command_name</i> › <i>Properties</i> › <i>String Representation</i></li></ul>
Creating or editing a function	<ul style="list-style-type: none"><li>• <b>Functions</b> › <i>Function</i> <i>function_name</i> › <i>Function definition</i></li></ul>
Creating or editing a template	<ul style="list-style-type: none"><li>• <b>Template</b> › <i>Parameters for parameter_name</i> › <i>Template</i> <i>template_name</i> › <i>Attributes</i> › <i>Value</i></li></ul>

When...	Where to use...
Editing a row	<ul style="list-style-type: none"> <li>• <b>Workflow</b> › <i>Workflow</i> › <i>Repeat row</i> › <i>Repeats</i> › <i>Number of times</i></li> <li>• <b>Workflow</b> › <i>Workflow</i> › <i>Repeat row</i> › <i>Variables</i> › <i>Variables for initial_value and expression</i></li> <li>• <b>Workflow</b> › <i>Workflow</i> › <i>Repeat row</i> › <i>Repeats</i> › <i>For every resource in a group</i> › <i>Resource Search Criteria</i> › <i>Parameters to filter</i></li> <li>• <b>Workflow</b> › <i>Workflow</i> › <i>Add condition</i> › <i>If the following expression is TRUE</i></li> </ul>

## Examples of MVEL syntax

MVFLEX Expression Language (MVEL) syntaxes are used in several OnCommand Workflow Automation (WFA) sample workflows. You should review some sample MVEL syntaxes to learn how to use MVEL in WFA.

The following sections provide some examples of MVEL syntaxes used in WFA.

### Conditional execution

The following MVEL expression is used for conditional execution of a command when the number of volumes found is lesser than 4:

```
$NoOfVolumes < 4
```

### Incremental naming

The following MVEL expression is used for incremental naming of an object:

```
last_volume.name+last_volume.state
```

This MVEL expression uses the last created volume name and the state of the last created volume for naming.

### String representation in commands

The following MVEL syntax is used as a string representation:

```
DestinationCluster + ":" + DestinationVserver + "/" + DestinationVolume
```

## Templates

The following MVEL syntax is used in a template:

```
calculateSnapReserveSize (calculateVolumeSizeFromDataSize ((int) ($fs_size*1.01), $snap_space), $snap_space)
```

This MVEL syntax is used to calculate the percentage of volume capacity to be reserved for Snapshot copies.

## Command details

The following MVEL function is used in the attributes section of a parameters:

```
actualVolumeSize ($VolumeSizeInGB * 1024, volume.snapshot_reserved_percent)
```

The following MVEL syntax is used in the attributes section of a parameter:

```
$VolumeName+'test001'
```

## Workflow constants

The following MVEL syntaxes are used for constants in workflows:

```
convertNullToZero (infinite_volume.max_namespace_constituent_size_mb)
```

```
$Size_TB*1048576L
```

## Return parameters

The following MVEL syntax is use to validate whether the requested size can be allocated:

```
size_remaining == 0 ? '' : throwException('Not sufficient space in capacity_class_aggregate or data constituent of size less than 1 TB can not be created: Total size requested='+$Size_TB+'TB'+', Size remaining='+size_remaining/TB_TO_MB+'TB'+', Infinite volume name='+infinite_volume.name+', Storage class='+CAPACITY_CLASS_LABEL)
```

## Function definition

The following MVEL syntax is used in a function definition, which is used to convert null to zero:

```
def convertNullToZero (data)
{
  if(data == null)
  {
    return 0;
  }
  else
  {
    return data;
  }
}
```

### Repetition of a specific row

The following MVEL expression uses a user input to indicate the number of times a row has to be repeated to create LUNs:

```
$NumberOfLunsToBeCreated
```

### Conditional expressions for a row

The following MVEL expression uses a user input to indicate if the row will be executed:

```
$SetupSnapMirror
```

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