



# Rudder

## CHEAT SHEET

### Commands

To update the policies and enforce them

```
rudder agent run -u
```

Other commands and options

```
rudder agent run -i
```

```
man rudder
```

To trigger an inventory

```
rudder agent inventory
```

### Units

In all relevant fields (group, search, etc.), available units are B, KB, MB, GB, TB, PB, ...  
When unit is omitted, it is considered as a value in bytes.  
Use spaces or underscores to format the number (1\_024 or 2 048).

### Advanced search syntax

You can use a query language to specify your search in the search bar:

```
is:node in:ips 192.168.1.2
```

```
is:node|group|parameter|directive|node  
↳ for the item your are searching for
```

```
in:property_name  
↳ for the property you are searching in
```

```
is:* in:name|id|description|long_description|enabled
```

```
is:node in:  
hostname|os_type|os_name|os_version|os|  
os_kernel_version|os_service_pack|architecture|ram|  
ips|policy_server_id|properties|rudder_roles
```

```
is:group in:dynamic
```

```
is:directives in:  
dir_param_name|dir_param_value|technique_id|  
technique_name|technique_version
```

```
is:parameters in:parameter_name|parameter_value
```

```
is:rules in:directives|groups
```

### Conditions

Conditions are context entities represented by a string, that can be either set or not set, depending on context. They allow using conditions to generic method usage. Variable name must match :

```
[a-zA-Z0-9][a-zA-Z0-9_]*
```

#### Available conditions

**Group conditions:** defined only if the node is in the given group (available in the group details)

```
group_group_uuid  
group_group_name
```

**System conditions:** various system information defined by default

```
centos_7, ubuntu_18_04
```

**Result conditions:** defined by the execution of another generic method (available at the bottom of the generic method call configuration)

```
generic_method_name_parameter_value_kept  
generic_method_name_parameter_value_repaired  
generic_method_name_parameter_value_error
```

Conditions manually defined in the agent call:

```
rudder agent run -D my_condition
```

#### Condition expressions

Group	Or	
(condition_expression)		condition other
And	Not	
condition.other		!condition

### Paths

#### On the nodes

Policy server configuration file

```
/opt/rudder/etc/policy_server.dat
```

#### On the server

Directory containing all the configuration policies in a git repository

```
/var/rudder/configuration-repository
```

Directory shared to nodes from the server

```
/var/rudder/configuration_directory/shared-files
```

Directory containing the configuration events (change and errors)

```
/var/log/rudder/compliance/non-compliant-reports
```

Webapp log file

```
/var/log/rudder/webapp/YYYY_MM_DD.stderrout.log
```

### Variables

Variables in directives parameters are evaluated at generation on the server, exceptions are tagged with execution.

Variables in technique editor are evaluated at execution on the nodes.

Node properties can be overridden at execution on the nodes using files containing a "properties" object placed in :

```
/var/rudder/local/properties.d/*.json
```

#### Only in directives

System variables about a node

```
${rudder.node.id}  
${rudder.node.hostname}  
${rudder.node.admin}
```

System variables about a node's policy server

```
${rudder.node.policyserver.id}  
${rudder.node.policyserver.hostname}  
${rudder.node.policyserver.admin}
```

Node properties

```
${node.properties[key]}  
${node.properties[key][subkey]}  
${node.properties[key] | node} execution
```

Default values (only with node properties)

```
${variable | default= "value"}  
${variable | default= "" value with "quotes" ""}  
${variable | default= ${any_other_variable} }  
${variable | default= ${var} | default="fallback"}
```

Javascript engine (with any variable)

```
"${variable}".substring(0,3)
```

Rudder javascript library

```
rudder.hash.md5/sha256/sha512(string)  
rudder.password.auto/unix/aix/("MD5/SHA256/  
SHA512", password [, salt])
```

#### In directives and in the technique editor

Global parameters

```
${rudder_parameter.string_name}
```

From the "Variable (string)" technique

```
${generic_variable_definition.string_name}
```

From the "Variable from command output" technique

```
${generic_cmd_var_def.string_name}
```

From the "Variable from JSON file (dict)" technique

```
${variable_prefix.dict_name[key]}
```

Node properties

```
${node.properties[key]}  
${node.local_custom_properties[key]}
```

#### Only in the technique editor

User variables defined using generic methods

```
${variable_prefix.string_name}  
${variable_prefix.iterator_name}  
${variable_prefix.dict_name[key]}
```

### Mustache Templating

#### Conditions

```
{{#classes.conditions}} {{^classes.conditions}}  
condition is defined condition is not defined  
{/classes.conditions}} {/classes.conditions}}
```

#### Variables

```
{{{vars.node.properties.variable_name}}}  
{{{vars.generic_variable_definition.variable_name}}}  
{{{vars.variable_prefix.string_name}}}  
{{{vars.variable_prefix.dict_name.key}}}
```

#### Iteration

```
{#{vars.variable_prefix.iterator_name}}  
{{{.}}} is the current iterator_name value  
{/vars.variable_prefix.iterator_name}  
  
{#{vars.variable_prefix.dict_name}}  
{{{@}}} is the current dict_name key  
{{{.}}} is the current dict_name value  
{{{.name}}} is the current dict_name[name]  
{/vars.variable_prefix.dict_name}}
```

### Jinja2 Templating

#### Conditions

```
{% if classes.condition is defined %}  
condition is defined  
{% endif %}  
{% if not classes.condition is defined %}  
condition is not defined  
{% endif %}
```

#### Variables

```
{{vars.variable_prefix.my_variable}}
```

#### Iteration

```
{% for item in vars.variable_prefix.dict %}  
{{ item }} is the current item value  
{{ item.key }} is the current item[key] value  
{% endfor %}  
  
{% for key,value in vars.prefix.dict %}  
{{ key }} as value {{ value }}  
{% endfor %}
```

### Useful links

[www.rudder.io](http://www.rudder.io)

[chat.rudder.io](http://chat.rudder.io)

[docs.rudder.io](http://docs.rudder.io)

[issues.rudder.io](http://issues.rudder.io)