

Hash Variable

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What is Hash Variable?

Hash Variables gives users greater flexibility and freedom in accessing useful information or relevant run-time values from the system.

A hash variable is a special hash-escaped keyword that can be used in

- Form Builder
- Datalist Builder
- Userview Builder
- Supported plugin configuration properties
- Activity name in Workflow Designer
- External Form URL when mapping an activity to an external form

to return the value of some useful runtime variables from Joget components.

Learning More

Download the tutorial app on [Hash Variables](#) from [Joget Workflow Marketplace](#) to learn more about Hash Variable.

Nested Hash Variable

Since version 3.0.3, a **Hash Variable** can be used inside another **Hash Variable** to form a **Nested Hash Variable**.

The syntax for the inner Hash Variable is wrapped by a pair of curly bracket.

Syntax / Format

```
#prefix.{prefix.variableKey}#
```

Here's some examples:

Example

```
#date.{envVariable.dateFormat}#  
#user.{variable.username}.firstName#  
#form.tableChild.field1[{form.tableParent.childId}]#
```

Escaping the Resultant Hash Variable

The parsed/returned Hash Variable may cause incompatibility with the current context/environment such as syntax error in a script. Therefore, one may pass in additional parameters into the hash variable declared to escape certain characters.

Before ending a hash variable with a hash "#", add a question mark character "?" followed by the required format. You may include multiple by defining semicolon ";" separated values.

- regex
- json
- javascript
- html
- xml
- java
- sql
- url

Example

```
#envVariable.script?java#
```

List of Hash Variables

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Workflow Assignment Hash Variable

Name	Description
Prefix	assignment
Description	To get workflow activity information of the current assignment.
Attributes	<ul style="list-style-type: none">• #assignment.processId#• #assignment.processDefId#• #assignment.processName#• #assignment.processVersion#• #assignment.processRequesterId#• #assignment.activityId#• #assignment.activityName#• #assignment.activityDefId#• #assignment.assigneId#

Scope of Use	<ul style="list-style-type: none"> Elements within and part of a Process. <ol style="list-style-type: none"> Activity Name. Form mapped as part of process activity mapping. Email Tool configuration as part of process tool mapping.
Sample Attribute	<p>To display the assignee's name:</p> <p><code>#user.{assignment.assigneeId}.firstName# #user.{assignment.assigneeId}.lastName#</code></p>

Current User Hash Variable

Name	Description
Prefix	currentUser
Description	To retrieve currently logged in user information.

Attributes	<ul style="list-style-type: none"> • #currentUser.id# • #currentUser.username# • #currentUser.firstName# • #currentUser.lastName# • #currentUser.email# • #currentUser.active# • #currentUser.timeZone# <p>In Joget Enterprise edition, these additional attributes are available:-</p> <p>Organization</p> <ul style="list-style-type: none"> • #currentUser.organization.id# • #currentUser.organization.name# • #currentUser.organization.description# <p>Department</p> <ul style="list-style-type: none"> • #currentUser.department.id# • #currentUser.department.name# • #currentUser.department.description# <p>Grade</p> <ul style="list-style-type: none"> • #currentUser.grade.id# • #currentUser.grade.name# • #currentUser.grade.description# <p>HOD</p> <ul style="list-style-type: none"> • #currentUser.hod.username# • #currentUser.hod.firstName# • #currentUser.hod.lastName# • #currentUser.hod.email# • #currentUser.hod.active# • #currentUser.hod.timeZone# <p>Group</p> <ul style="list-style-type: none"> • #currentUser.groups.id# • #currentUser.groups.name# <p>Employment</p> <ul style="list-style-type: none"> • #currentUser.employee.code# • #currentUser.employee.jobTitle# • #currentUser.employee.isHod# <p>Department HOD</p> <ul style="list-style-type: none"> • #currentUser.department.hod.username# • #currentUser.department.hod.firstName# • #currentUser.department.hod.lastName# • #currentUser.department.hod.email# • #currentUser.department.hod.active# • #currentUser.department.hod.timeZone#
Scope of Use	<ul style="list-style-type: none"> • All components within the App.

Date Hash Variable

Name	Description
Prefix	date

Description	<p>To get date time according to a specified format.</p> <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> <p>Localization In Joget Workflow v5, the returned value would follow current logged in user's timezone. If user's information is not available, then it will use server's timezone.</p> </div>
Attributes	<ul style="list-style-type: none"> • #date. <i>dateFormat</i> # • #date.<i>dateUnit</i>[+]<i>integerValue</i>.<i>dateFormat</i> # <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> <p>Options</p> <p><i>dateFormat</i></p> <ul style="list-style-type: none"> • In Java date format; e.g., yyyy-MM-dd for 2011-06-01 <p><i>dateUnit</i></p> <ul style="list-style-type: none"> • YEAR • MONTH • DAY <p><i>integerValue</i></p> <ul style="list-style-type: none"> • Numeric integer value. E.g. 10 </div>
Scope of Use	<ul style="list-style-type: none"> • All components within the App.
Sample Attributes	<pre>#date.h:mm a# // 12:08 PM #date.EEE,d MMM yyyy h:mm:ss a# // Wed, 4 Jul 2014 12:08:56 PM #date.DAY+7.EEE,d MMM yyyy h:mm:ss a# // Add 7 days on top of current date time - Wed, 11 Jul 2014 12:08:56 PM #date.DAY-1.EEE,d MMM yyyy h:mm:ss a# // Minus 1 days on top of current date time - Wed, 3 Jul 2014 12:08:56 PM</pre>

Environment Variable Hash Variable

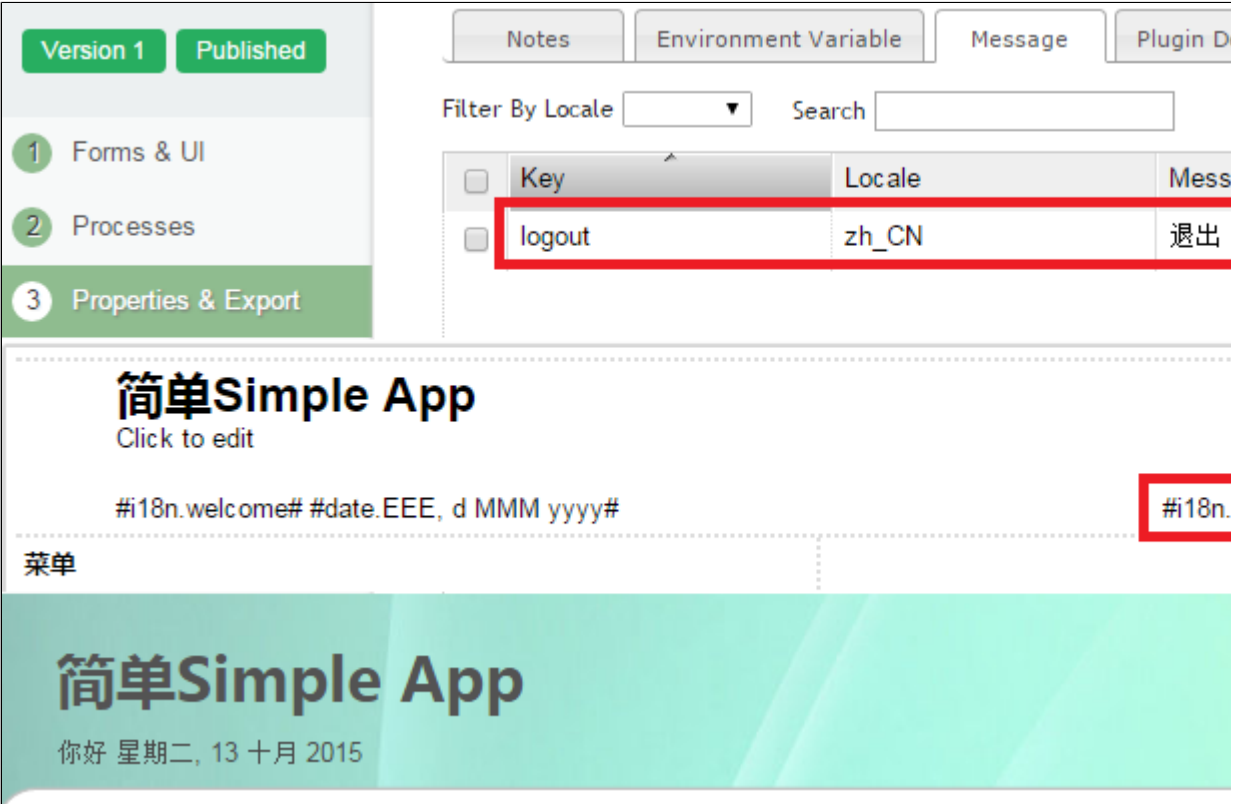
Name	Description
Prefix	envVariable
Description	To retrieve Environment Variable value. Learn more about Environment Variables .
Attributes	<ul style="list-style-type: none"> • #envVariable. <i>keyName</i> #
Scope of Use	<ul style="list-style-type: none"> • Anywhere within the Joget app itself. (i.e. Process, Process Tool, Form, List, Userview)
Sample Attributes	<pre>#envVariable.smtpServer# #envVariable.smtpPort#</pre>

Form Data Hash Variable

Name	Description
Prefix	form
Description	To get field value from form table .
Attributes	<ul style="list-style-type: none"> • #form. <i>tableName</i> . <i>fieldId</i> # • #form. <i>tableName</i> . <i>fieldId</i> [<i>recordId</i>]# (Available in 3.1 and above)

Scope of Use	<ul style="list-style-type: none"> In a Process Tool part of a Process. In a Form. In a process design.
Sample Attributes	<pre>#form.registration.registeredDate# //will use the current record ID #form.registration.registeredDate[0001]# //0001 is the record ID to seek for #form.registration.registeredDate[{variable.recordId}]# //using nested Hash Variable with curly bracket.</pre>

App Message Hash Variable (Internationalization)

Name	Description
Prefix	i18n
Description	To support language localization on application level.
Attributes	<ul style="list-style-type: none"> #i18n. <i>keyName</i> #
Scope of Use	<ul style="list-style-type: none"> All components within the App.
Sample Attributes	<p>#i18n.logout#</p> 
Example	Please see Add Message .

Performer Hash Variable

Name	Description
Prefix	performer
Description	To get user information of the performer of an activity.

Attributes	<ul style="list-style-type: none"> • #performer. <i>activityDefId</i> .id# • #performer. <i>activityDefId</i> .username# • #performer. <i>activityDefId</i> .firstName# • #performer. <i>activityDefId</i> .lastName# • #performer. <i>activityDefId</i> .email# • #performer. <i>activityDefId</i> .active# • #performer. <i>activityDefId</i> .timeZone#
Scope of Use	<ul style="list-style-type: none"> • Elements within and part of a Process. <ol style="list-style-type: none"> 1. Activity Name. 2. Form mapped as part of process activity mapping. 3. Email Tool configuration as part of process tool mapping. <div style="border: 1px solid #ccc; padding: 5px; margin-top: 10px;"> <p>To get activityDefId (activity definition ID), mouseover the activity name in the Activity Mapping tab (Workflow Management Console); there will be an overlay showing the ID.</p> </div> <div style="border: 1px solid #f00; padding: 5px; margin-top: 10px; background-color: #ffe0e0;"> <p>The activity chosen must have already been performed.</p> </div>
Sample Attributes	<ul style="list-style-type: none"> • #performer.runProcess.firstName# • #performer.submitLeave.firstName#

Request Parameter Hash Variable

Name	Description
Prefix	requestParam
Description	To access request parameter' values.
Attributes	<ul style="list-style-type: none"> • #requestParam.<i>parameterName</i>[<i>separator</i>]# • Separator (, or ;) can be indicated if requestParam is used in datalist filter with multiple values, to define the separator character in data output. Comma "," is used as default if no separator is indicated in cases of multiple values.
Scope of Use	<ul style="list-style-type: none"> • All components within the App.
Sample Attributes	<ul style="list-style-type: none"> • #requestParam.key# can be used specifically to obtain Userview Key value. • #requestParam.name[;]# to indicate 'name' variable will store multiple values separated by semicolon. For example, this SQL statement "select * from expenses where title in (#requestParam.title[;]#)" will be translated to "select * from expenses where title in (a,b,c)" to cater for multiple values in "where-in" statement. • In a Userview page, one may access the following attributes. <ul style="list-style-type: none"> • #requestParam.key# • #requestParam.userviewId# • #requestParam.menuId# • #requestParam.appId#

User Hash Variable

Name	Description
Prefix	user
Description	To get user information based on username .
Attributes	<ul style="list-style-type: none"> • #user. <i>username</i> .id# • #user. <i>username</i> .username# • #user. <i>username</i> .firstName# • #user. <i>username</i> .lastName# • #user. <i>username</i> .email# • #user. <i>username</i> .active# • #user. <i>username</i> .timeZone#

Scope of Use	<ul style="list-style-type: none"> All components within the App.
Sample Attributes	<ul style="list-style-type: none"> #user.admin.email# #user.cat.firstName# #user.{requestParam.username}.email# to retrieve the email address of the user passed via url parameter

Userview Key Hash Variable

Name	Description
Prefix	userviewKey
Description	<p>Userview Key Hash Variable is used solely for the purpose of accessing the current Userview key's value.</p> <p>Typical use case for this hash variable are:-</p> <ul style="list-style-type: none"> Filtering a Datalist based on Userview Key. Preloading certain form data field (e.g. subform) in a Form or Form part of a process flow based on Userview Key.
Attributes	<ul style="list-style-type: none"> #userviewKey#
Scope of Use	<ul style="list-style-type: none"> Datalist Binder SQL Chart Userview Menu

Workflow Variable Hash Variable

Name	Description
Prefix	variable
Description	To get the value of a workflow variable in a Process Flow.
Attributes	<ul style="list-style-type: none"> #variable. <i>variableName</i> #
Scope of Use	<ul style="list-style-type: none"> Elements within and part of a Process. <ol style="list-style-type: none"> Activity Name. Form mapped as part of process activity mapping. Email Tool configuration as part of process tool mapping.
Sample Attributes	#variable.approvalStatus#

Request Hash Variable

Name	Description
Prefix	request
Description	To get the value from the current HttpServletRequest object of the page view.

Attributes	<ul style="list-style-type: none">• #request.characterEncoding#• #request.contextPath#• #request.header.NAME# NAME is the custom header name.• #request.locale#• #request.method#• #request.pathInfo#• #request.protocol#• #request.queryString#• #request.remoteAddr#• #request.requestURL#• #request.requestURL#• #request.requestedSessionId#• #request.scheme#• #request.serverName#• #request.serverPort#• #request.servletPath#
Scope of Use	<ul style="list-style-type: none">• All components within the App where there is valid HttpServletRequest object. Such object will not be available in background activity such as in Process Tool triggered as a result of Deadlines.
Sample Attributes	<p>•</p> <p>To retrieve the "Referer" header attribute value in the screenshot above, one may use the following hash variable.</p> <div data-bbox="310 741 1443 915" style="border: 1px solid #ccc; padding: 10px;"><p style="text-align: center;">Hash Variable</p><pre>#request.header.Referer#</pre></div>