Cascade-Specific Velocity

Tools and API's Unique to Cascade CMS

Built-in Variables	`$currentPageSiteName - returns a string`
	`$currentPagePath    - returns a string`
	`$currentPage        - returns an object`

Locator Tool (8 methods)	

Invoked with $_.locate() or $_.locate followed by the asset type in camelcase. Asset type does not need to be bolded.	`$_.locate()`
	`$_.locateBlock()        $_.locateLinkable()`
	`$_.locateFile()         $_.locatePage()`
	`$_.locateFolder()       $_.locateSymlink()`
	`$_.locateFormat()       $_.locateReference()`

Parameters
Using the explicit asset method (e.g., $_.locatePage), the Path to the asset is required along with a Sitename. When the asset is located in the site from which it is called, the Sitename is optional. For the non-explicit method, the asset type is also required.
	`$_.locate[Asset Type](PATH, SITENAME)`
	`$_.locate[Asset Type](PATH)`
	
	Example
	`$_.locatePage("path/to/page", "sitename")`
	
	Non-explicit method
	`$_.locate(PATH, TYPE, SITENAME)`

Property Tool (10 methods*)	

The .outputProperties() method displays the properties and methods of an object.
 	
The result is a list with properties (methods) on the left and the output of each method listed to the right. For example, the method "link" returns a string.
	Example
	`$_PropertyTool.outputProperties($currentPage)`
	
	Sample Output Snippet
	`Properties:`
	` - link: String`
	` - metadata: Metadata`
	` - parentFolder: Folder`

.isEmpty() returns true if the object is null, is an empty string, or contains only whitespace characters, otherwise false.	`$_PropertyTool.isEmpty($currentPage.link)`
.isNull() returns true if the object is null, otherwise false.	`#set($page = $_.locatePage("index"))` `$_PropertyTool.isNull($page)`

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[Query API](#) **(27 methods)**	

To initiate a query, create a query object with the *query()* constructor and assign it to a variable.
 	
After all filtering and search options (below) have been specified, you must execute the query to capture the results.
	Creating a Query Object
	`#set($queryObject = $_.query())`
	
	Executing a Query*
	`#set($results = $queryObject.execute())`

Queries are done either by metadata set or content type. When the Site is not specified, the query looks only within the current site.
 	
Once a site-specific asset type is specified, one can search for assets based on that type within other sites by using the .siteName() method.
 	
To search across all sites, use the .searchAcrossAllSites() function.
	`$queryObject.byMetadataSet("Default")`
	
	`$queryObject.byContentType("Event")`
	`$queryObject.byContentType("site://Calendar`
	`                      /Event")`
	
	`$queryObject.siteName("Art Museum")`
	
	`$queryObject.byContentType("site://Calendar`
	`    /Event".siteName("Art Museum")`
	Looks for Events in the Art Museum site (only) that are generated with the Event ContentType located in the Calendar site.
	
	`$queryObject.searchAcrossAllSites()`

By default, queries include non-publishable assets but these can be excluded using "false". Unindexed assets are included by "false".
 	
For MetadataSet queries, all assets based on a particular Set are included by default. You can explicitly **exclude** assets by using the .include method and setting the boolean to *false*.
 	
Limit the number of returned assets with the .maxResults() method. When not specified, the default value is 100. There is a hard limit of 2000 maximum.
	`$queryObject.pubishableOnly(BOOLEAN)`
	`$queryObject.indexableOnly(BOOLEAN)`
	
	`$queryObject.include`*`Folders`*`(BOOLEAN)`
	
	`$queryObject.maxResults(25)`

The .sortBy() method uses a metadata field (e.g., title, startDate, last modified date) or name or path.
 	
The .sortDirection() can also be set.
	`$queryObject.sortBy("displayName")`
	
	`$queryObject.sortDirection("asc")` or
	`$queryObject.sortDirection("desc")`

* Using the Java dot notation, filter and sort methods can be chained for cleaner, more concise, coding.

Cascade PageAPI Syntax Examples

1) Information outside (and usually prior to) the Data Definition XML.

Metadata Set Options

Title - Title generally is used to display in the web browser tab at the top of a page and in the URL.
Display Name - Used to provide a longer label on the page proper.

#set($title = $currentPage.metadata.title)

#set($displayName = $currentPage.metadata.displayName)

#set($summary   = $currentPage.metadata.summary)

#set($teaser   = $currentPage.metadata.teaser)

#set($keywords   = $currentPage.metadata.keywords)

#set($description = $currentPage.metadata.description)

#set($author   = $currentPage.metadata.author)

#set($startDate   = $currentPage.metadata.startDate)

#set($endDate   = $currentPage.metadata.endDate)

the expiration folder is not viewable.

#set($reviewDate = $currentPage.metadata.reviewDate)

Dynamic/Custom Metadata Fields

#set($customName = $currentpage.metadata.getDynamicField("FieldName").value or .values)

Syntax for other commonly used properties of the Page asset type

#set($label = $currentPage.label) ## *.label* *will return a Display Name if it exists; a Title if it exists and*

the DN is empty. If neither DN, nor Title, exist, it returns the page name.

#set($systemName = $currentPage.name)

#set($url = $currentPage.link)

#set($path = $currentPage.path) ## recall $currentPagePath is a builtin variable.

#set($assetType = $currentPage.assetType)

#set($parentFolderName = $currentPage.parentFolder.name)

Tags

#set($tags = $currentPage.tags)   …. returns an array.

2) Structured Data (i.e., content from a Data Definition)

Brief sample XML file:

```
<system-data-structure>
    <mainContent>
            <secondLevelNode>
            <secondLevelNode
    </mainContent>
    <otherContentNode>
    </otherContentNode>
</system-data-structure>
```

Example of selecting a data definition node with an identifier of "mainContent".

#set($**mainNod**e = $currentPage.getStructuredDataNode("mainContent"))

Once inside a node (e.g., <mainContent>), you switch syntax to .getChild() or .getChildren() – which return a node or an array of nodes, respectively:

#set($**sLN** = $mainNode.getChild("secondLevelNode")

Text Field: #set($txt = $_EscapeTool.xml($mainNode.getChild("txt").textValue))

Text Area: #set($txtArea = $_EscapeTool.xml($mainNode.getChild("txtArea").textValue))

WYSIWYG: #set($wysiwyg = $mainNode.getChild("wysiwyg").textValue)

Radio Button: #set($radioBtn = $_EscapeTool.xml($mainNode.getChild("radioBtn").textValue))

Drop Down: #set($dropDown = $_EscapeTool.xml($mainNode.getChild("dropDown").textValue))

Single Checkbox - check to see if contains the one checked value

```
#set($singleCheckBox  = $mainNode.getChild("singleCheckBx").textValues)   ##plural
#if($singleCheckBox.contains("yes"))
    The box was selected (i.e., checked)
#else
    The box was not selected.
#end
```

Multiple Checkbox - output the checked values

```
#set($multiCheckBx  = $mainNode.getChild("multiCheckBx").textValues)
```

- List all values selected: $_DisplayTool.list($multiCheckBx, ", ")
- Loop through the values: #foreach ($checked in $multiCheckBx) $checked #end

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Multi-Select - output the selected values

#set($multiSelect = $mainNode.getChild("multiSelect").textValues)

- List all values selected: $_DisplayTool.list($multiSelect, ", ")
- Loop through the values: #foreach ($selected in $multiSelect) $selected #end

Get Current Date

#set ($currentDate = $_DateTool.getDate())

Modified $_DateTool.difference($lastModified, $currentDate).hours *hours ago*

Calendar - output a string: (10-12-2019)

#set($calendar = $mainNode.getChild("calendar").textValue)

convert to date data type and format

#set ($date = $_DateTool.toDate("MM-dd-yyyy", $calendar))

Date Time - outputs data type string timestamp

#set($dateTimeField = $mainNode.getChild("dateTime").textValue)

   ## *convert to date data type and format as needed*

#set($dateTime = $_DateTool.getDate($mainNode.getChild("dateTime").textValue))

#set($time = $_DateTool.format("h:mm a", $_DateTool.getDate($mainNode .getChild
   ("dateTime").textValue)))

#set($date = $_DateTool.format("full_date",$dateTime))

   ## *for comparing dates*

#set($currentDate = $_DateTool.getDate())

#set($currentDateNumber = $_NumberTool.toNumber($currentDate))

#set($dateTimeNum = $_NumberTool.toNumber($dateTimeField))

Page, File, Block Choosers Note requirement for **.asset**

#set($assetSelector = $mainNode.getChild("assetChooser").asset)

#set($title = $assetSelector.metadata.title)

#set($data = $assetSelector.getStructuredDataNode("mainContent node for *selected* asset"))

#set($image = $assetSelector.getStructuredDataNode("image").asset.link)

#set($origin = $assetSelector.metadata.getDynamicField("origin").value)