JavaScript Utilities

- JSONPath Expression, on page 1
- XPath Expression, on page 1
- Date Validation, on page 2
- Time Validation, on page 3

JSONPath Expression

Cisco Unified Call Studio includes a new utility that allows you to use JSONPath expressions in JavaScript to return the values from the JSON(JavaScript Object Notation).

To use this utility, include the following syntax as part of the JavaScript when you define the local variables:

```
importPackage(com.audium.server.cvpUtil);
JSONPathUtil.eval(String inputJSON , String expression);
```

Table 1: Syntax Parameter and Description

Parameter	Description
importPackage(com.audium.server.cvpUtil)	This parameter imports the package to find the XPath values.
JSONpathUtil.eval(String inputJSON , String expression)	This parameter returns the value from the JSON document based on the JSONPath expression provided.

Sample Script of JSONPath function with REST element:

```
importPackage(com.audium.server.cvpUtil);
var inputJSON = {Data.Element.Rest_Client_01.response_body};
JSONPathUtil.eval(String inputJSON , String expression);
```

XPath Expression

Cisco Unified Call Studio includes a new utility that allows you to use XPath expressions in JavaScript to return the values from the XML.

To use this utility, include the following syntax as part of the JavaScript when you define the local variables:

```
importPackage(com.audium.server.cvpUtil);
XpathUtil.eval(String inputXML , String expression);
```

Table 2: Syntax Parameter and Description

Parameter	Description
importPackage(com.audium.server.cvpUtil)	This parameter imports the package to find the XPath values.
XpathUtil.eval(String inputXML, String expression)	This parameter returns the value from the XML document based on the XPath expression provided. **Note** This function returns a Java Object, which needs to be explicitly typecasted before it can be used, for example, *"var value = String(XpathUtil.eval(xml,xpathsearch));"*

Sample Script of XPath function with REST element:

```
importPackage(com.audium.server.cvpUtil);
var xml = {Data.Element.Rest_Client_01.response_body};
XpathUtil.eval(xml , "/Results/Row[age<30]/name");
```

Sample Script of XPath function with DB element:

```
importPackage(com.audium.server.cvpUtil);
var xml ={Data.Element.Database_01.xml_resultset};
XpathUtil.eval(xml , "/Results/customer");
```

Date Validation

Cisco Unified Call Studio includes a new utility that allows you to validate date in JavaScript on local variables.

To use this utility, include the following syntax as part of the JavaScript:

```
importPackage(com.audium.server.cvpUtil);
DateTimeUtil.isValidDate(String dateToValidate, String dateFormat);
```

Table 3: Syntax Parameter and Description

Parameter	Description
importPackage(com.audium.server.cvpUtil)	This parameter imports the package to find the XPath values.
DateTimeUtil.isValidDate(String dateToValidate, String dateFormat)	This parameter verifies whether the date provided is a valid format.
String dateToValidate	This parameter is the input date.

Parameter	Description
String dateFormat	This parameter specifies the format in which the date needs to be validated.
return value	If the input date is in the valid format, the return value is 1. If the input date is not in the valid format, the return value is 0.

The following date formats are supported in JavaScript:

- dd/MM/yyyy
- dd.MM.yyyy
- dd-MM-yyyy
- ddMMyyyy

Note The month must always be represented by the upper case letters MM.

For example:

importPackage(com.audium.server.cvpUtil);

DateTimeUtil.isValidDate("02/05/1990","dd/MM/yyyy");

Time Validation

Cisco Unified Call Studio includes a new utility that allows you to validate time in JavaScript on local variables.

To use this utility, include the following syntax as part of the JavaScript:

```
importPackage(com.audium.server.cvpUtil);
DateTimeUtil.isValidTime(String timeToValidate, String timeFormat);
```

Table 4: Syntax Parameter and Description

Parameter	Description
importPackage(com.audium.server.cvpUtil)	This parameter imports the package to find the XPath values.
DateTimeUtil.isValidTime(String timeToValidate, String timeFormat)	This parameter verifies whether the time provided is a valid format.
String timeToValidate	This is the input time that is validated.

Parameter	Description
String timeFormat	This is the format in which the input time has to be provided.
return value	If the input date is in the valid format, the return value is 1. If the input date is not in the valid format, the return value is 0.

The following time formats are supported in JavaScript:

- hh:mm:ss -24 hour format
- hh:mm:ss am -12 hour format
- hh:mm:ss pm -12 hour format