Mawens Workflow Helper Tool

Version 1.0.1.7

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I What is a Workflow in Dynamics CRM?

You can extend the functionality of Microsoft Dynamics CRM by creating workflows. You can use a workflow to model and automate real world business processes.

These processes can be configured to run in the background or in real time and can optionally require user input. Workflow processes can start automatically based on specified conditions or can be started manually by a user.

II What is Mawens Workflow Helper Tool?

Using Mawens Workflow Helper Tool you can extend out-of-box functionality of Dynamics CRM in below 6 categories:

I. Child Items
- Execute Process for Childs from Child
- Execute Process for Childs from Parent

II. Date Functions
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- Add or Subtract Days
- Difference Between Days
- Format Date
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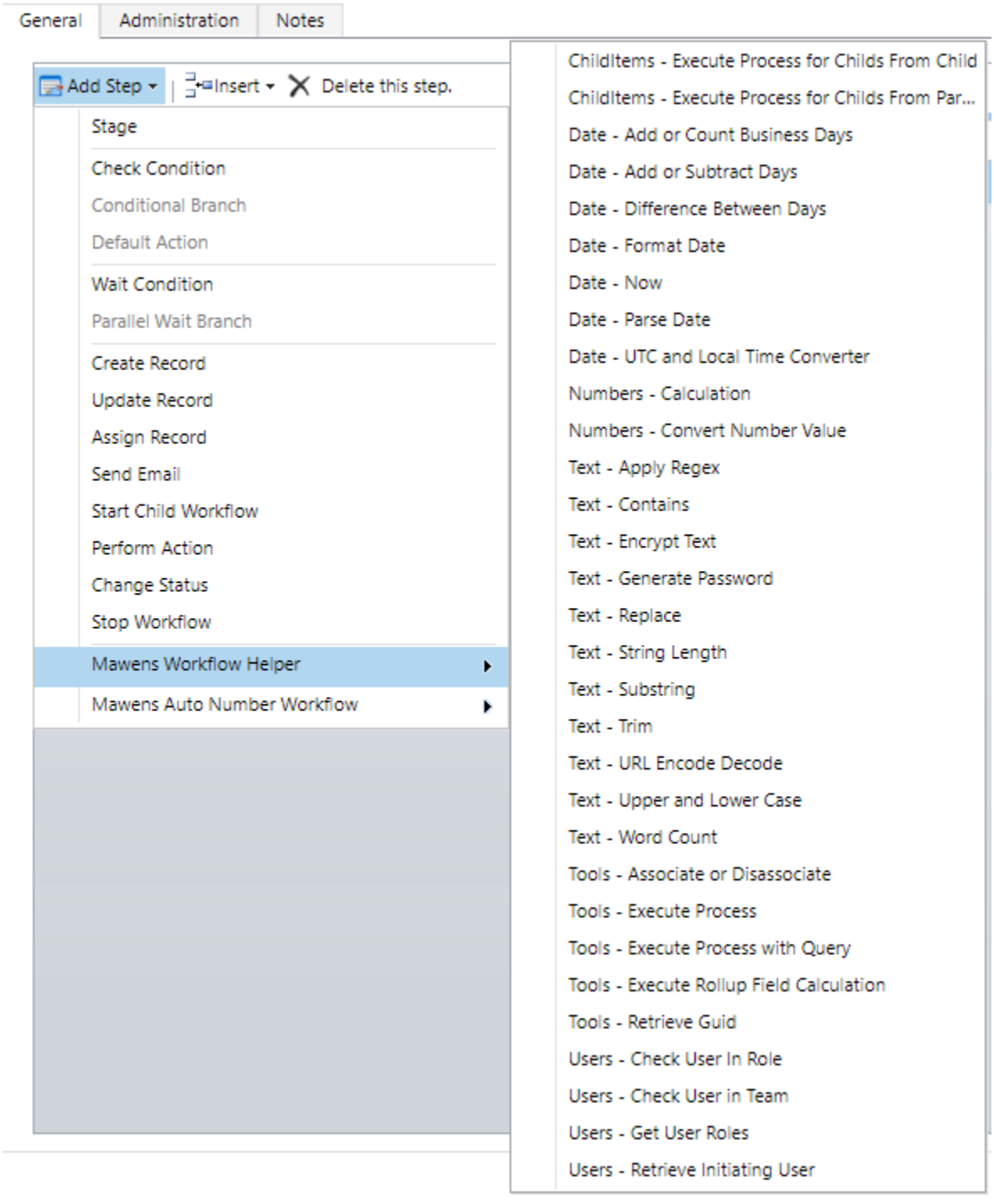
III Accessing to Mawens Workflow Helper Tool

First you must login Dynamics CRM Web interface and navigate Settings->Processes from menu.

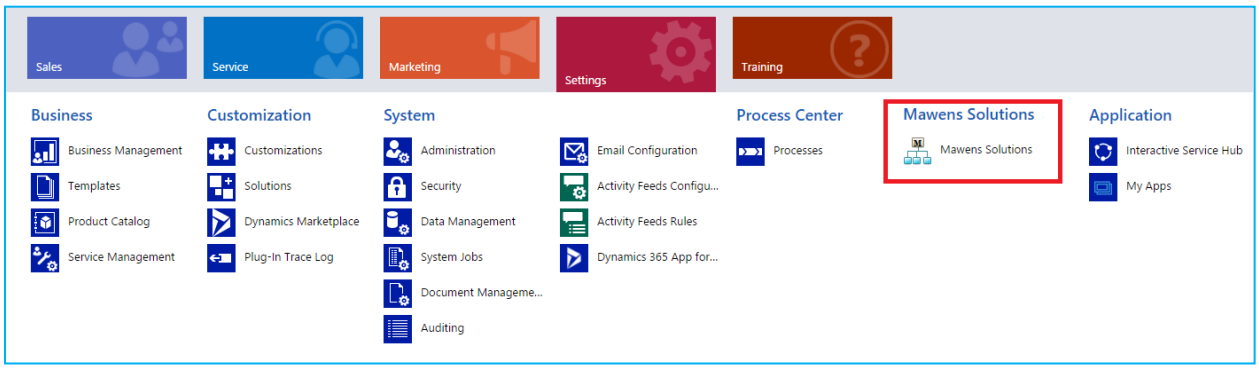
Using "New" button you can access create a new workflow or you can select and open an existing workflow form the list.

In workflow design screen, you can access to Mawens Workflow Helper from bottom of "Add Step" menu.

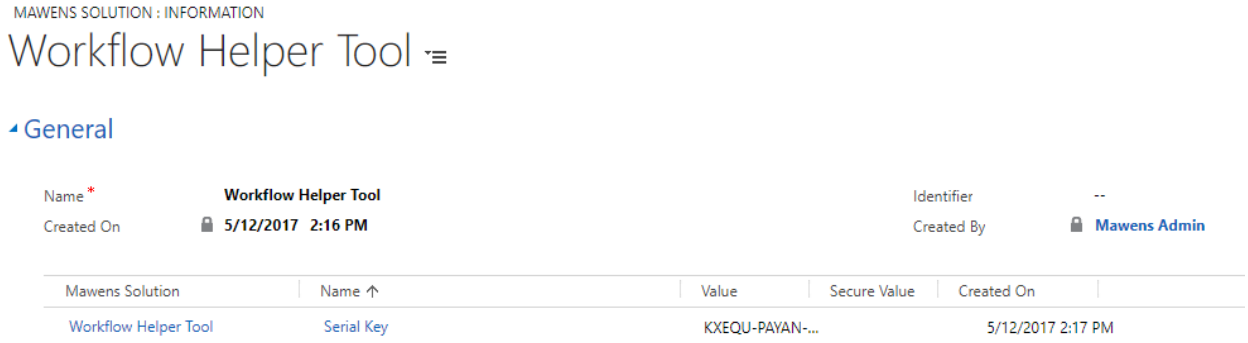


IV License

When you installed Mawens Workflow Helper Tool solution, it will automatically create required entities. You can access them under Settings->Mawens Solutions menu items.



At first work, workflow activity will create “Serial Key” item. If you already have a valid license number, you can change “Serial Key” value. Trial version will not work after 30 days.



V About Mawens Business Solutions

Mawens Business Solutions, with its expert team and history of successful large-scale projects in the constantly emerging IT sector, is offering its customers professional solutions using the latest technology. Its own vision, qualifications, experience and values it possesses, Mawens is committed to creating custom tailored solutions for the organization by integrating the dynamic processes taking place in Information Technology with the needs of the organisations.

Mawens is trying to change companies to “New Generation Organisation”. Mawens aims to unleash the true potential of organisations to establishing software infrastructures works with the organisation ecosystem including a complete manner the entire process is allowing person in the team independently access to system without time and location. These are done via applying right “Business Model” and “Change

Management" methodologies to including with accurate, fast and easy way to communicate for uncover the customer experience.

Mawens Business Solutions has delivered hundreds of projects in this regard has taken its place among the most trusted software companies, with offices in located in Turkey and United Kingdom. It is not just focusing to organisations' today also focusing to tomorrow on delivering next-generation solutions that will allow you to be ready.

For more information please visit: http://www.mawens.co.uk

VI Child Items

1 Execute Process for Childs From Child

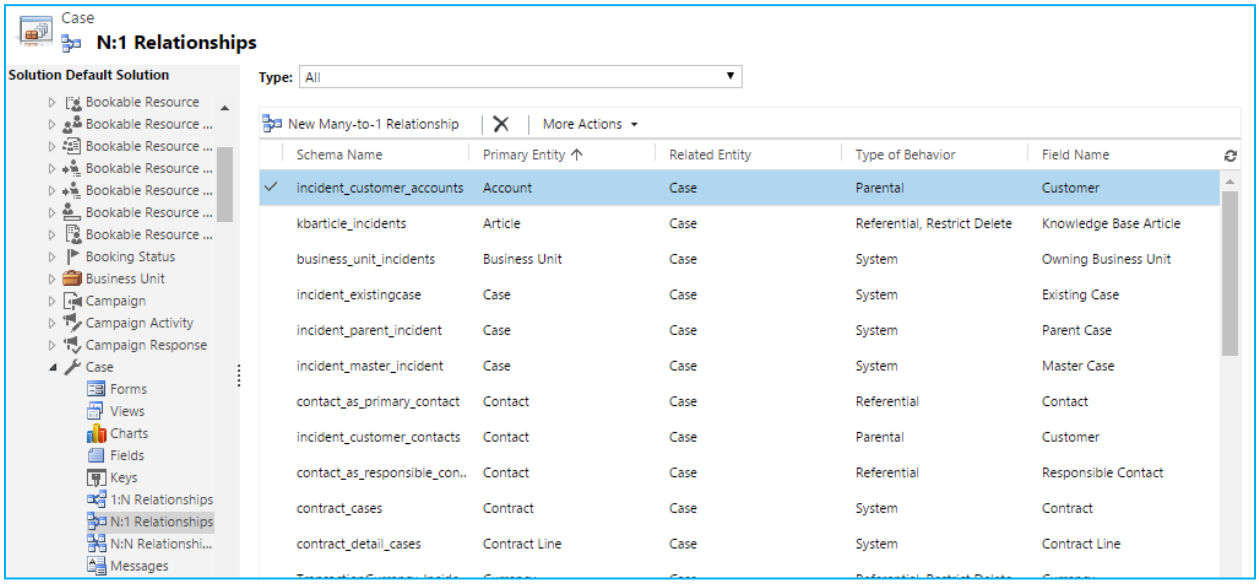
Input Parameters

Parameter	Type	Default
Relationship Name	`string`	
Process	`EntityReference - ReferenceTarget("workflow")`	

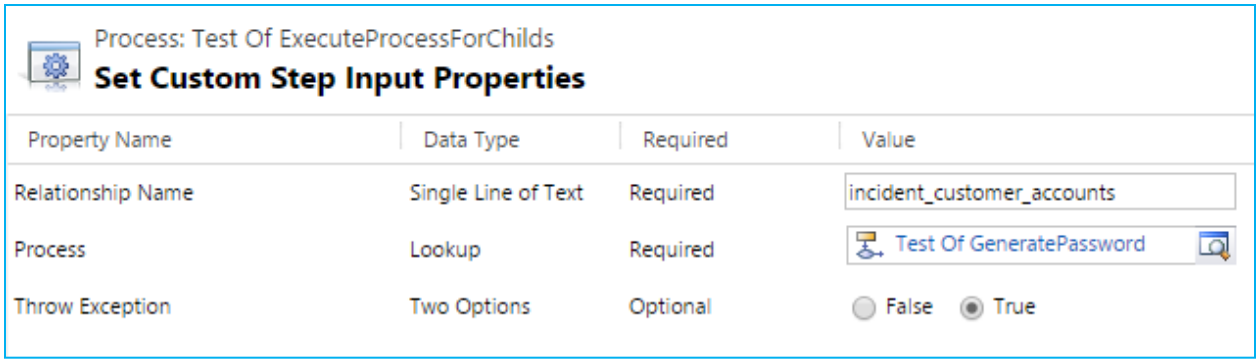
Output Parameters

Parameter	Type	Default
Result	`bool`	

Using this step, you can trigger any process on child items of a parent record.
"Relationship Name" is name of relationship between entities via fields. You can find this value under Entity relationships section in customisations. For example, if you want to trigger a workflow on case records, when something happened on parent account record, you must give the relationship schema name (in this example: "incident_customer_accounts") You can see from below screenshot.



If successfully executed your process on child records, the output parameter returns "True".



2 Execute Process for Childs From Parent

Input Parameters

Parameter	Type	Default
`Parent Record URL`	`string`	
`Relationship Name`	`string`	

Child Item	EntityReference -
Process	ReferenceTarget("workflow")

Output Parameters

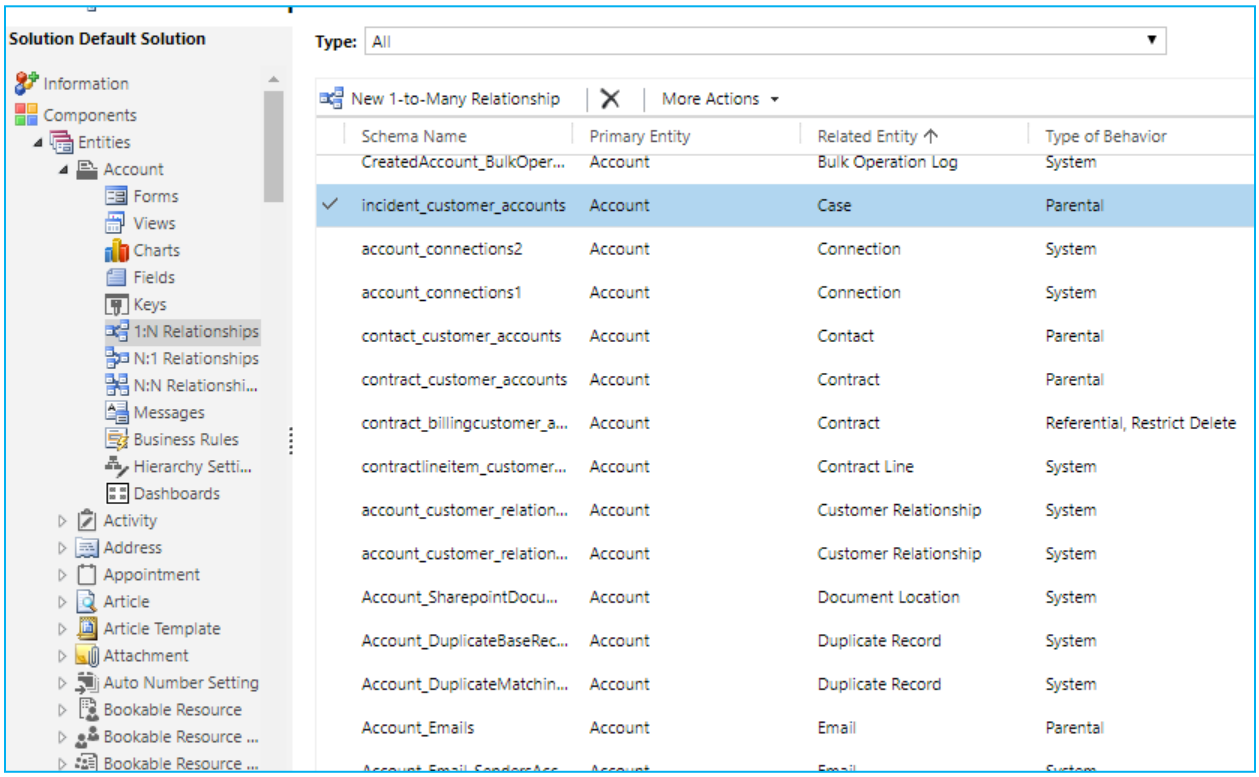
Parameter	Type	Default
Result	bool	

Using this step, you can trigger any process on parent items of a child record.

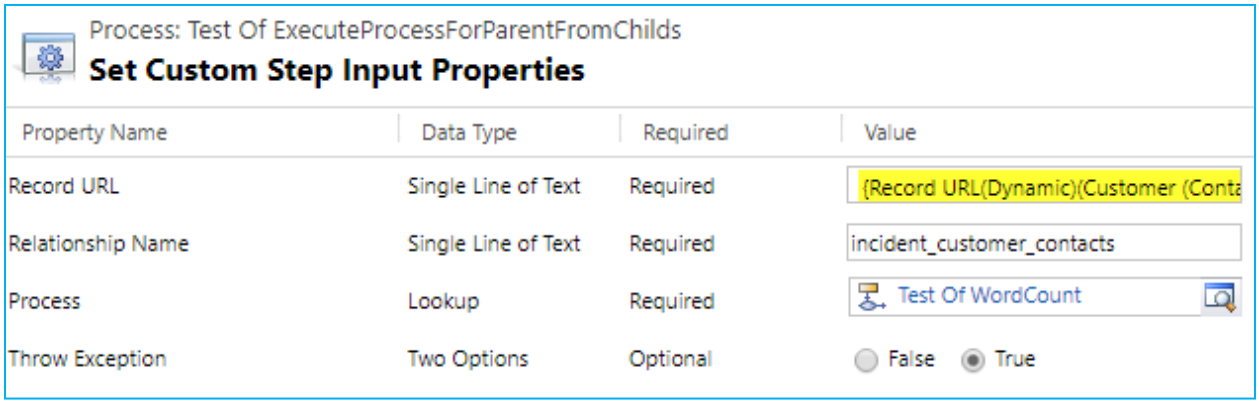
The "Record URL" input parameter is the corresponding entity registration link which is parent entity record.

"Relationship Name" is name of the relationship between entities via fields. You can find this value under Entity relationships section in customisations.

For example, if you want to trigger a workflow on account records, when something happened on child case record, you must give the relationship schema name (in this example: "incident_customer_accounts") You can see from below screenshot.



If successfully executed your process on parent record, the output parameter returns "True".



VII Date Functions

1 Add or Count Business Days

Input Parameters

Parameter	Type	Default
Start Date	DateTime	1900-01-01T00:00:00Z
End Date	DateTime	1900-01-01T00:00:00Z
Days To Add	int	0
Just Retrieve Business Days Count	bool	False

Output Parameters

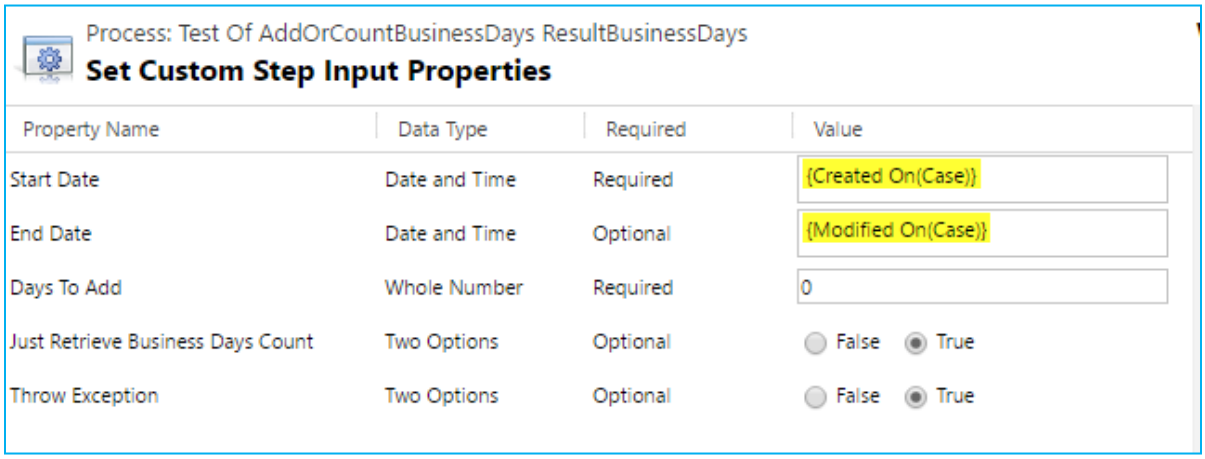
Parameter	Type	Default
Result Date	DateTime	1900-01-01T00:00:00Z
Result Business Days	int	

The function has two different modes, which vary according to the "Just Retrieve Business Days Count" input parameter.

Result Business Days Mod:

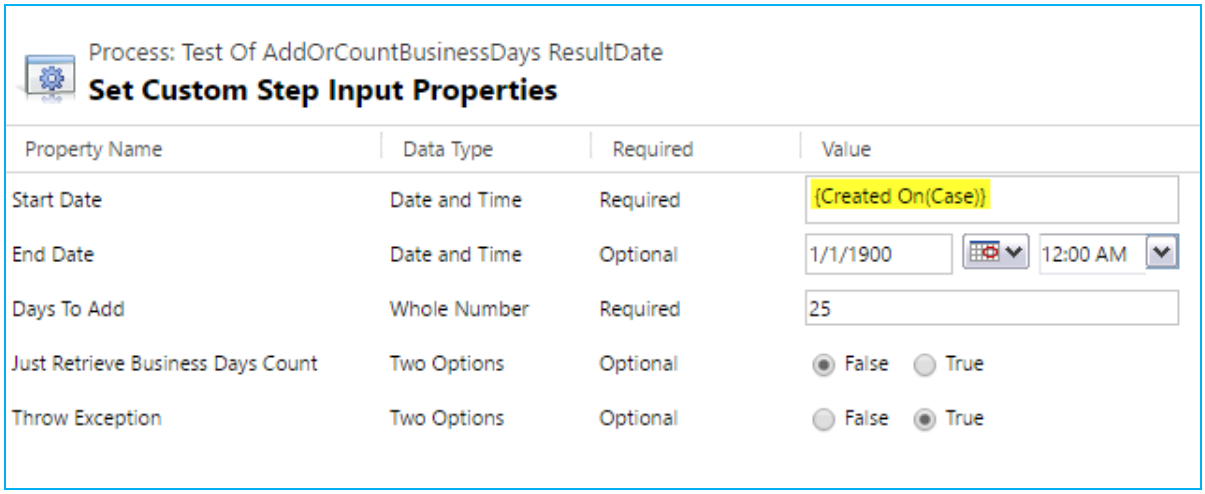
It calculates the number of working days between two dates.

Mandatory input parameters "Start Date", "End Date" and output parameter "Result Business Days".



Result Date Mod:

Adds the workday as a "Days To Add" value to the "Start Date" date and returns the result as "ResultDate".



2 Add or Subtract Days

Input Parameters

Parameter	Type	Default
Date	DateTime	1900-01-01T00:00:00Z
Add or Subtract	bool	False
Years To Add or Subtract	int	0
Months To Add or Subtract	int	0
Weeks To Add or Subtract	int	0
Days To Add or Subtract	int	0
Hours To Add or Subtract	int	0
Minutes To Add or Subtract	int	0

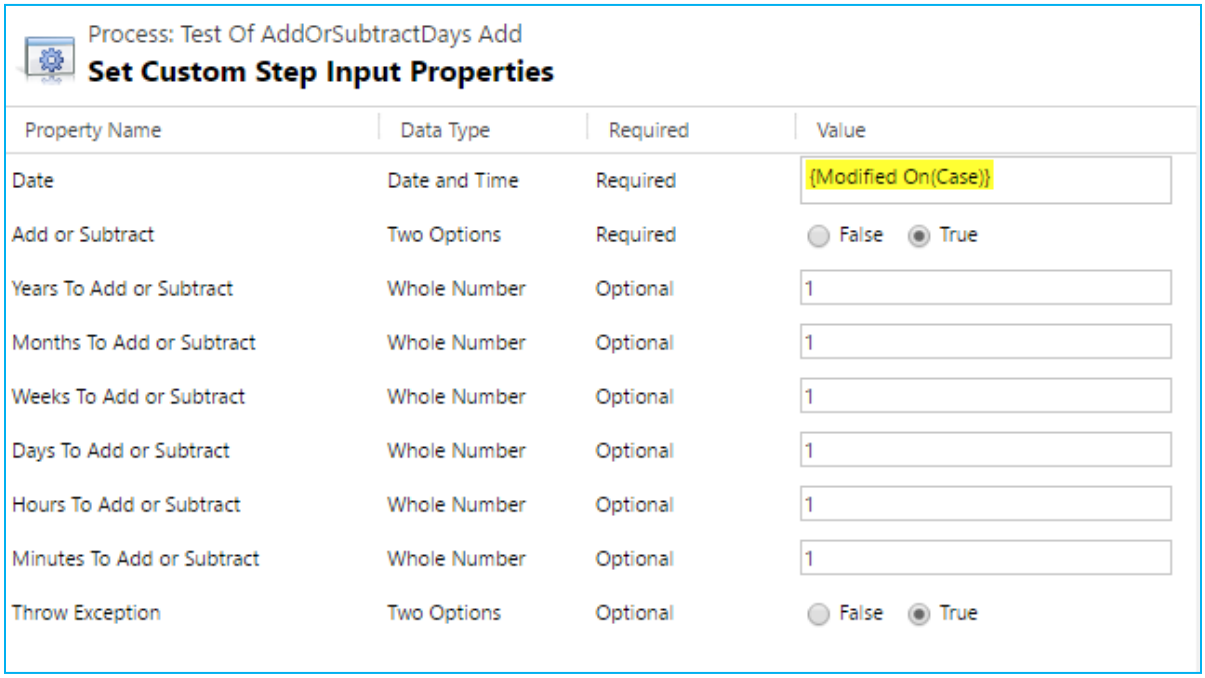
Output Parameters

Parameter	Type	Default
Result	DateTime	1900-01-01T00:00:00Z

The function has two different modes which vary according to the "Add or Subtract" input parameter.

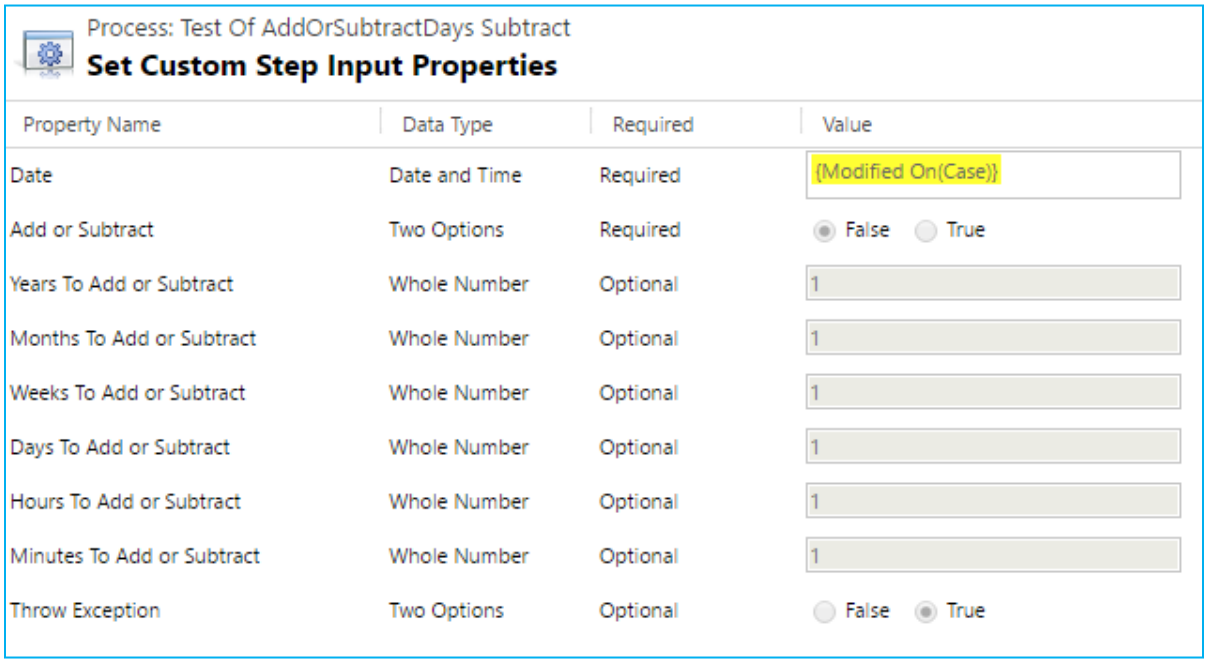
Add Mode:

It inserts values of input parameters "Year", "Months", "Weeks", "Days", "Hours" and "Minutes" into the "Date" input parameter value. Returns the calculated result value.



Subtract Mode:

It extracts the input parameters of "Year", "Months", "Weeks", "Days", "Hours" and "Minutes" to the "Date" input parameter value. Returns the calculated result value.



3 Difference Between Days

Input Parameters

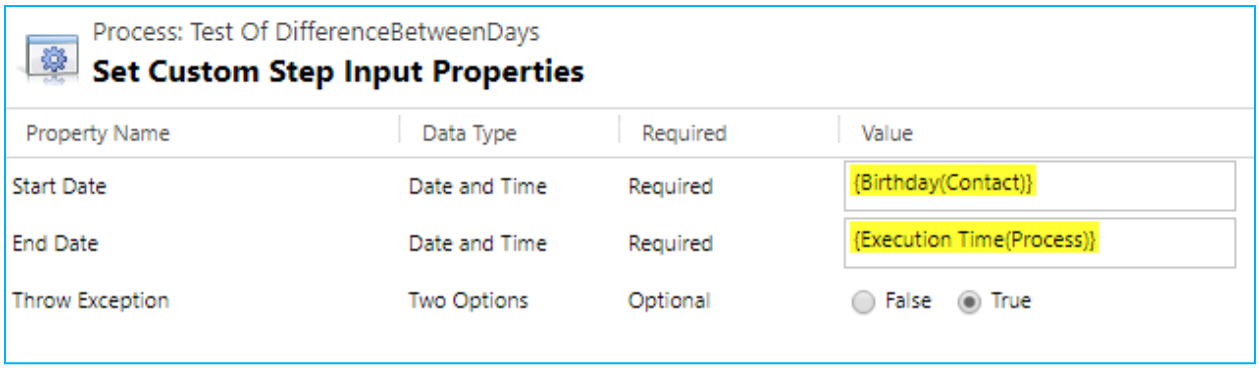
Parameter	Type	Default
Start Date	DateTime	
End Date	DateTime	

Output Parameters

Parameter	Type	Default
Result	DateTime	

The method makes calculation to find days' count between two dates using with "Start Date" and "End Date".

Result date returns with "Result" parameter.



4 Format Date

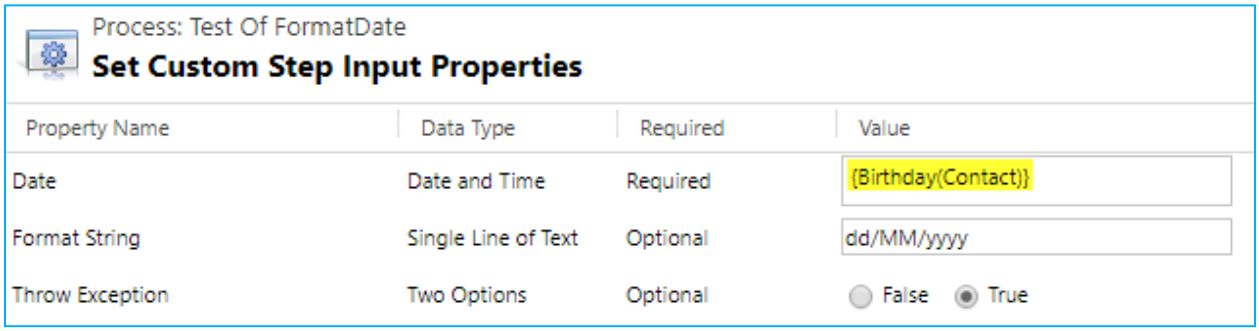
Input Parameters

Parameter	Type	Default
Date	DateTime	1900-01-01T00:00:00Z
Format String	string	

Output Parameters

Parameter	Type	Default
Result	DateTime	

The method makes calculation to find the formatted date using with "Date" and "Format String". Result date returns with "Result" parameter.



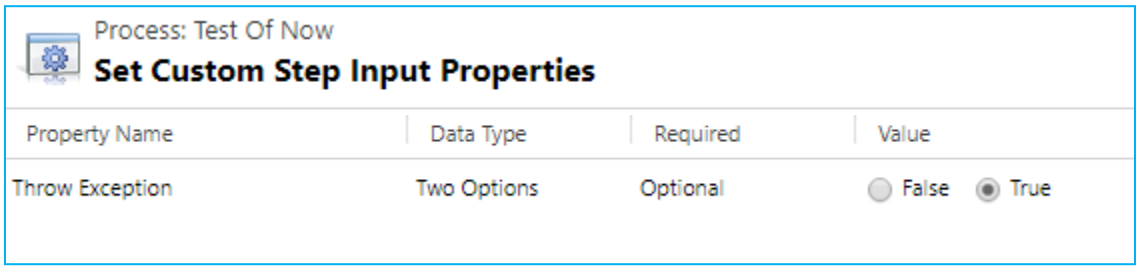
5 Now

Output Parameters

Parameter	Type	Default
Result	DateTime	

The method finds current DateTime.

Result date returns with "Result" parameter.



6 Parse Date

Input Parameters

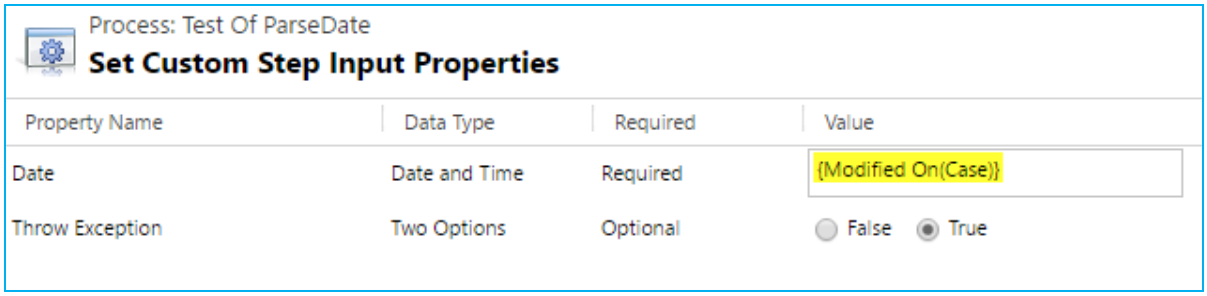
Parameter	Type	Default
Date	DateTime	1900-01-01T00:00:00Z

Output Parameters

Parameter	Type	Default
Day Of Week	int	
Day Of Year	int	
Year	int	
Month	int	
Day	int	
Hour	int	

Date String	string
Time String	string

The "Date" input parameter is returned by calculating "Day Of Week", "Day Of Year", "Year", "Month", "Day", "Hour", "Minute", "Date String", "Time String"



7 UTC and Local Time Converter

Input Parameters

Parameter	Type	Default
Time Zone Code (Leave -1 to use User's Time Zone)	int	
UTC DateTime - Input	DateTime	1900-01-01T00:00:00Z
Local DateTime - Input	DateTime	1900-01-01T00:00:00Z
UTC to Local(True) - Local to UTC(False)	bool	False

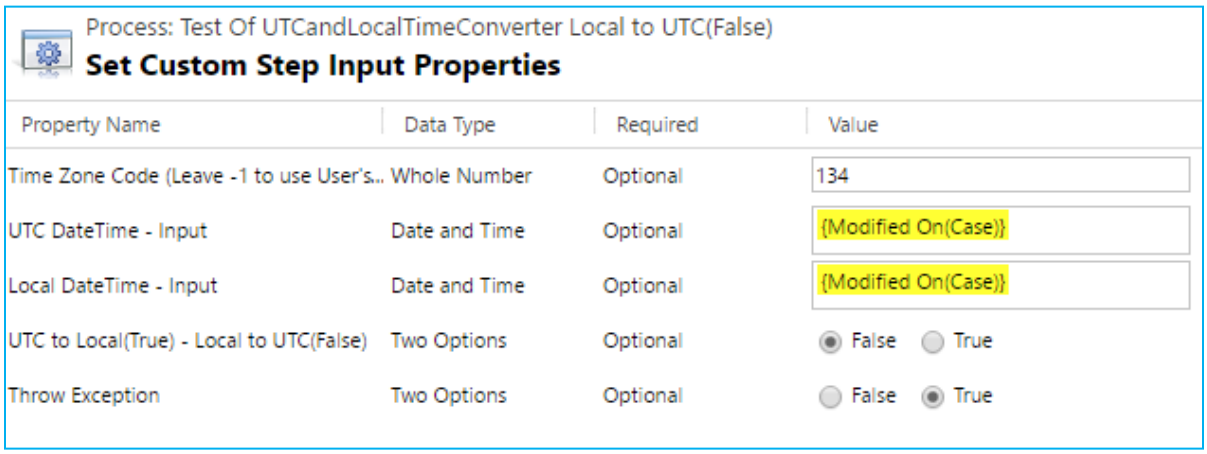
Output Parameters

Parameter	Type	Default
UTC DateTime - Output	DateTime	1900-01-01T00:00:00Z
Local DateTime - Output	DateTime	1900-01-01T00:00:00Z

The function has two different modes, which vary according to the input parameter "UTC to Local (True)" or "Local to UTC (False)".

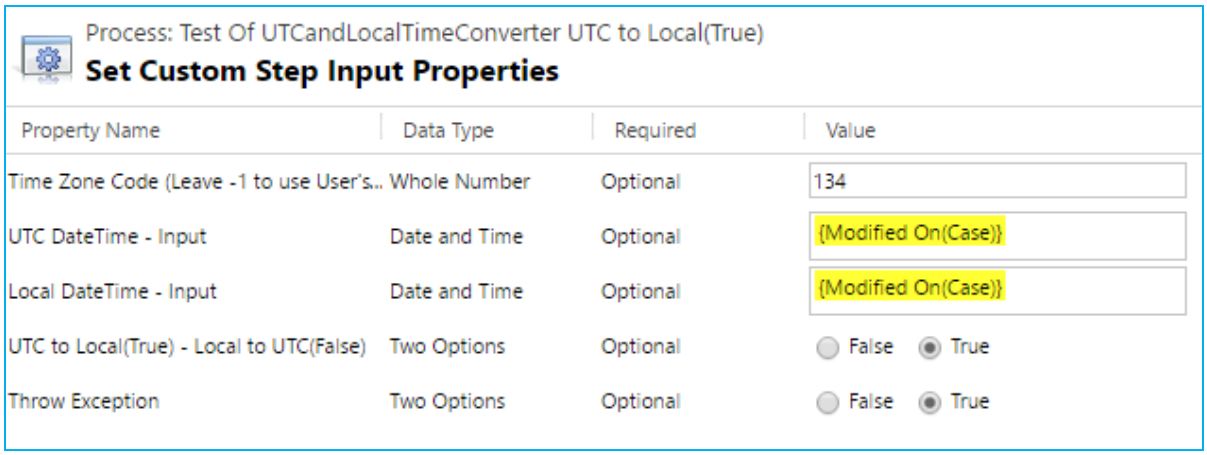
Local to UTC (False) Mode:

"UTC DateTime - Output" parameter is used to calculate UTC date value by input parameters of "Local DateTime - Input" and "Time Zone Code".



UTC to Local(True) Mod:

The "Local DateTime - Output" parameter is used to calculate the Date value in the LocalTime format with the "UTC DateTime - Input" and "Time Zone Code" input parameters.



VIII Numbers Functions

1 Convert Number Value

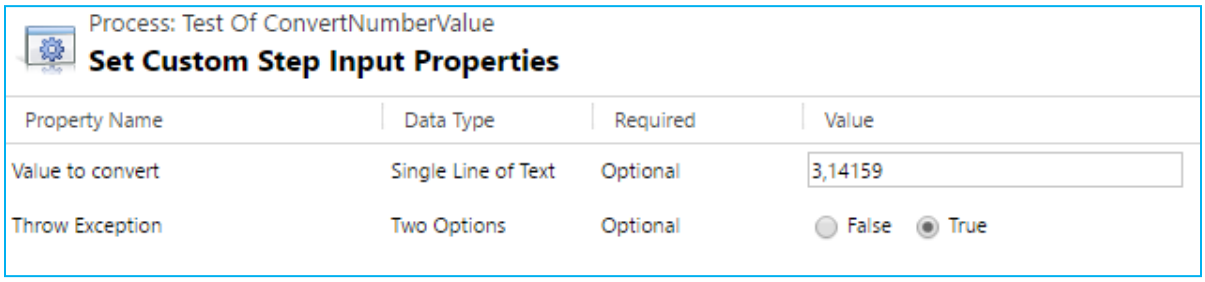
Input Parameters

Parameter	Type	Default
Value to convert	string	0

Output Parameters

Parameter	Type	Default
Decimal	decimal	
Money	Money	
Float	double	
Rounded Number	int	
Truncated Number	int	
Number as a String	string	

The value contained in the "Value to convert" is converted to other numeric types and returned with the output parameters.



2 Calculation

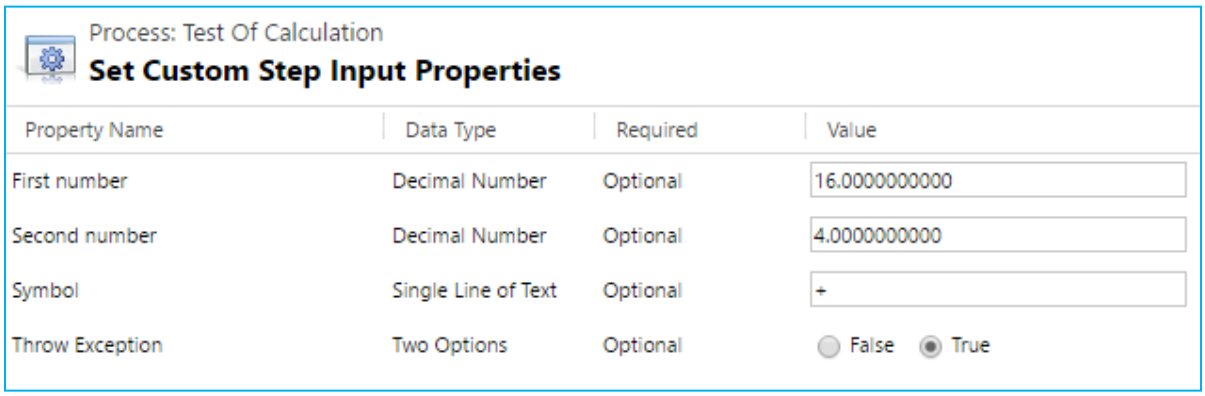
Input Parameters

Parameter	Type	Default
First number	decimal	0
Second number	decimal	0
Symbol	string	+

Output Parameters

Parameter	Type	Default
Result	decimal	

The mathematical operations entered with "First number" and "Second number" values "Symbol" ("+", "-", "/", "*") are applied. Result in the "Result" parameter is returned.



IX Strings

1 Apply Regex

Input Parameters

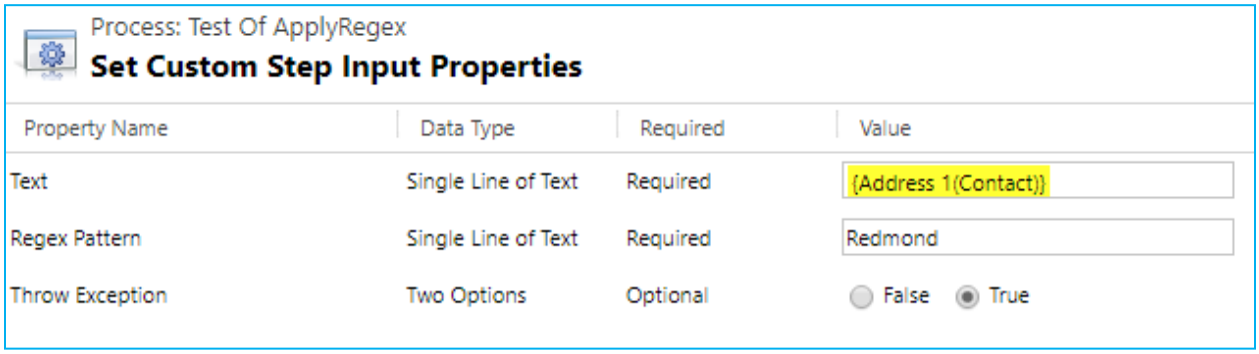
Parameter	Type	Default
`Text`	`string`	
`Regex Pattern`	`string`	

Output Parameters

Parameter	Type	Default
`Result`	`bool`	
`Matched String`	`string`	

The method makes the calculation to find the matched value using "Text" and "Regex Pattern".

"Result" returns methods status and "Matched String" returns matched value.



2 Contains

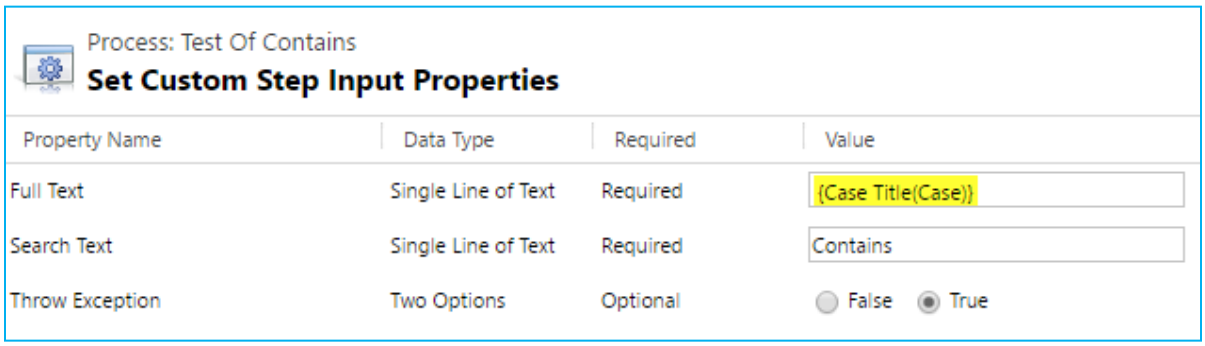
Input Parameters

Parameter	Type	Default
`Full Text`	`string`	
`Search Text`	`string`	

Output Parameters

Parameter	Type	Default
`Result`	`bool`	

"Search Text" input value searches in "Full Text". If the record is found, the output parameter returns "True".



3 Encrypt Text

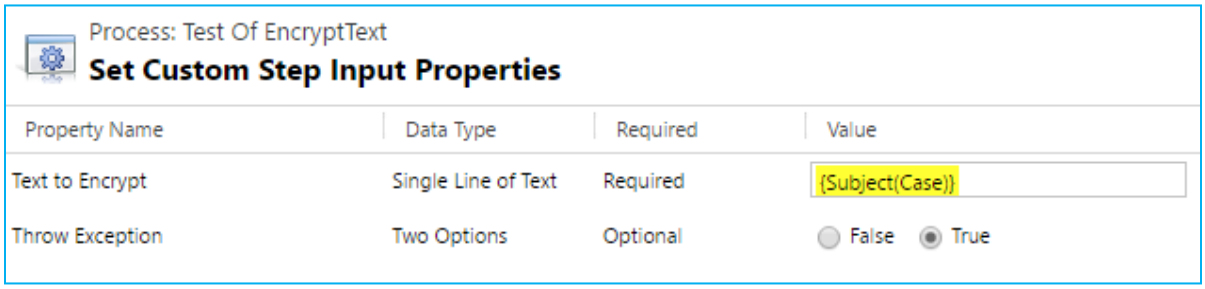
Input Parameters

Parameter	Type	Default
Text to Encrypt	string	

Output Parameters

Parameter	Type	Default
Result	string	

"Text to Encrypt" input value is encrypted in MD5 format. The result is returned with the value "Result".



4 Generate Password

Input Parameters

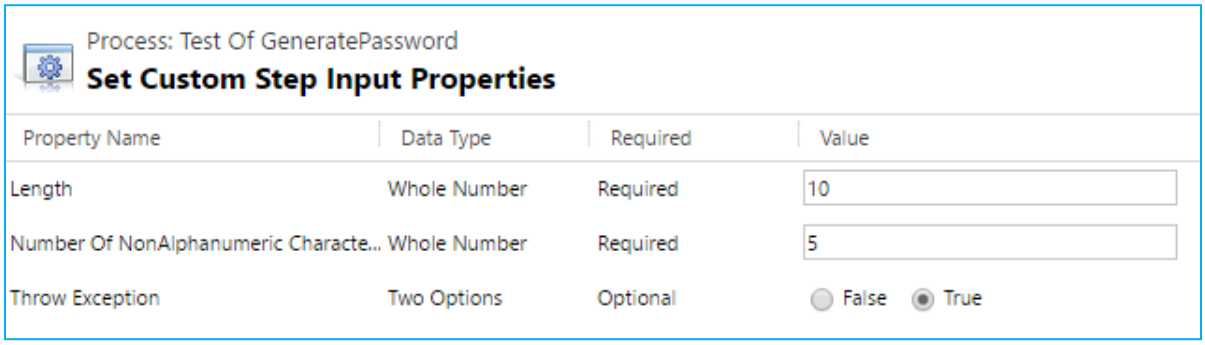
Parameter	Type	Default
Length	int	
Number Of NonAlphanumeric Characters	int	

Output Parameters

Parameter	Type	Default
Result	string	

The "Result" value is generated using the "Length" and "Number Of NonAlphanumeric Characters" input parameters.

The number of characters of the password to be generated is the "Length" value, the number of alphanumeric external characters is determined by the "Number Of NonAlphanumeric Characters" input parameter.



5 Replace

Input Parameters

Parameter	Type	Default
`Text`	`string`	
`Existing Value`	`string`	
`New Value`	`string`	
`isCaseSensitive`	`bool`	`False`

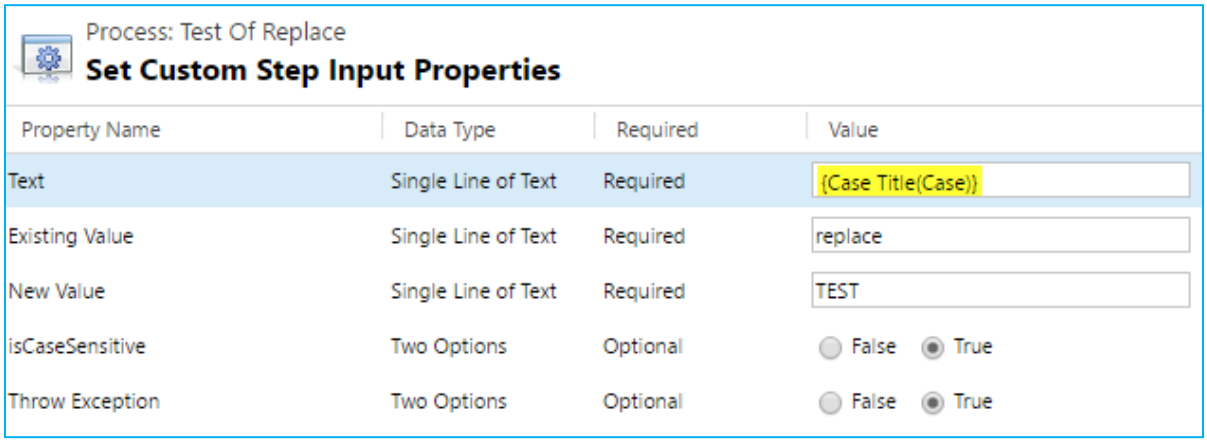
Output Parameters

Parameter	Type	Default
`Result`	`string`	

"Result" value "Existing Value" string value is found in "Text" input parameter and it is changed with "New Value" value.

If the "isCaseSensitive" parameter is "True", it is expected to match the case when searching.

The output parameter "Result" is returned.



6 String Length

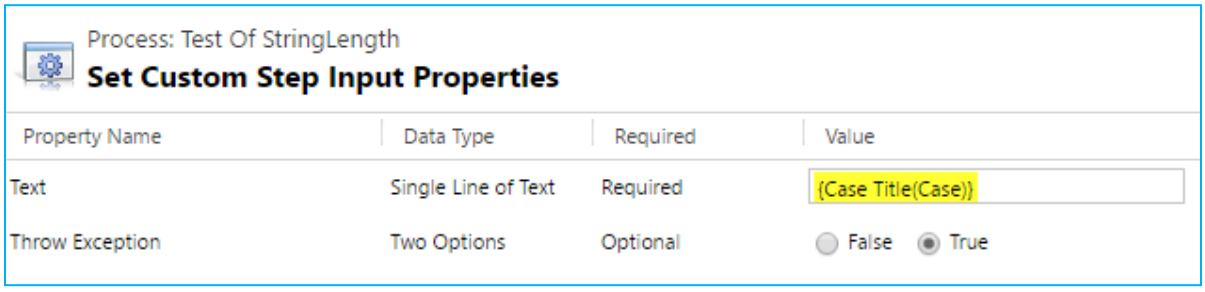
Input Parameters

Parameter	Type	Default
`Text`	`string`	

Output Parameters

Parameter	Type	Default
`Result`	`string`	

The entered "Text" parameter finds the number of characters and returns them as "Result" value.



7 Substring

Input Parameters

Parameter	Type	Default
Text	string	
From Left To Right	bool	
Start Index	int	
Length	int	

Output Parameters

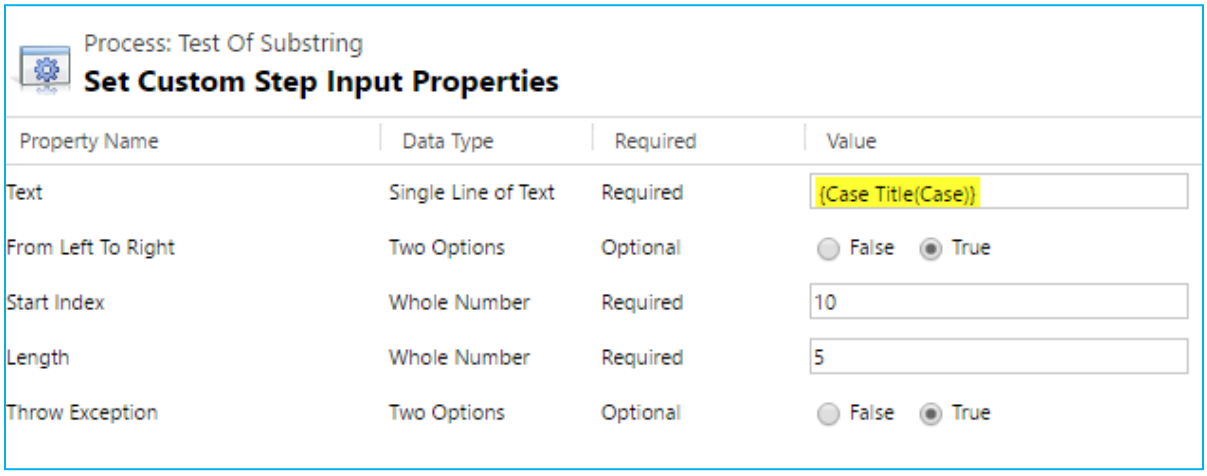
Parameter	Type	Default
Result	string	

If the "From Left To Right" input parameter is True;

The "Text" input parameter value characters are searched from the left to the beginning of the "Start Index", and the characters of "Length" are taken as the "Result" parameter.

If the "From Left To Right" input parameter is False;

"Text" input parameter value characters are started from right to left starting from "Start Index" and characters of "Length" number are obtained and returned as "Result" parameter.



8 Trim

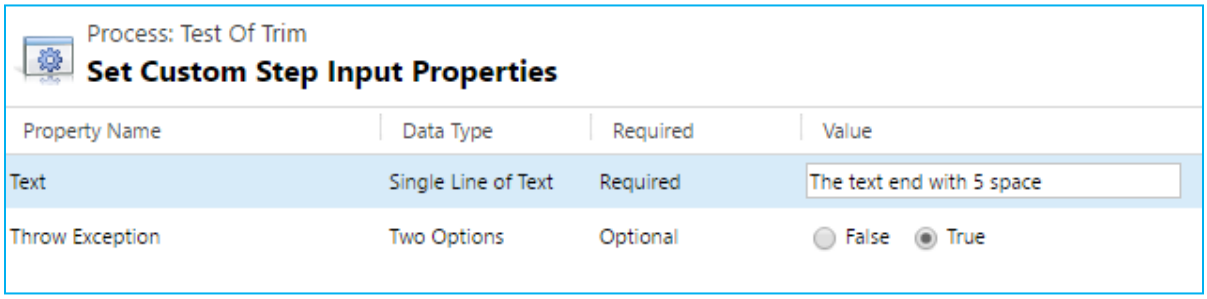
Input Parameters

Parameter	Type	Default
Text	string	

Output Parameters

Parameter	Type	Default
Result	string	

The space character at the end of the "Text" parameter is deleted and it is returned with the value "Result".



9 Upper and Lower Case

Input Parameters

Parameter	Type	Default
Text	string	
Capitalize All Words	bool	False
First Letter Only	bool	False
Lower Case All	bool	False
Upper Case All	bool	False

Output Parameters

Parameter	Type	Default
Result	string	

"Capitalize All Words" is True;

The "text" input parameter value is provided with the "Result" value so that all the words in the first characters will be upper case.

"First Letter Only";

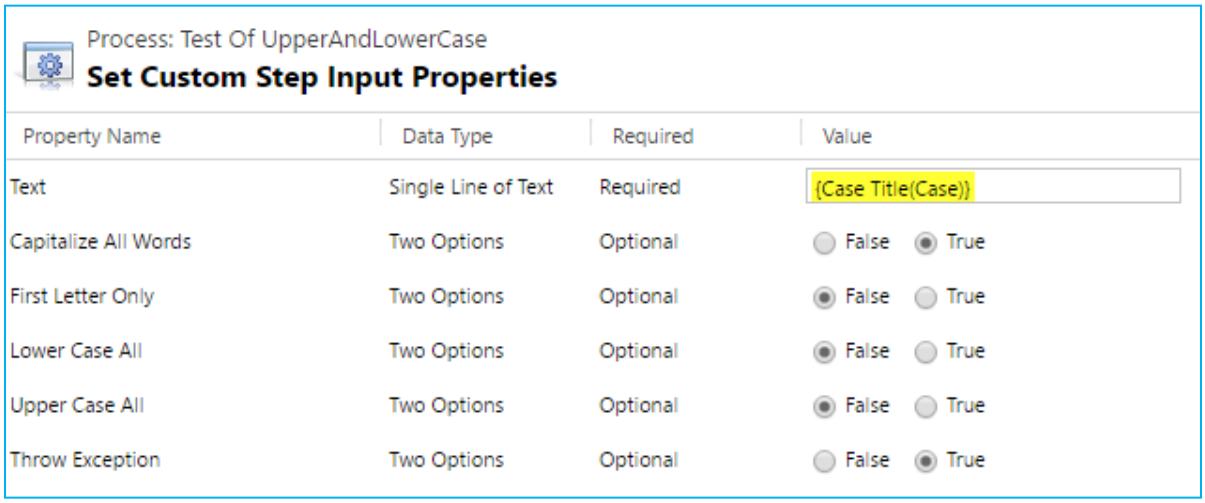
The "Text" input parameter value is returned with the value "Result" as the first character is capitalized.

"Lower Case All";

The "Text" input parameter value is provided with the value "Result" so that all characters are in lower case.

"Upper Case All";

The value of the "Text" input parameter is returned with the value "Result" as all characters are capitalized.



10 URL Encode Decode

Input Parameters

Parameter	Type	Default
Is Encode?	bool	True
Text	string	

Output Parameters

Parameter	Type	Default

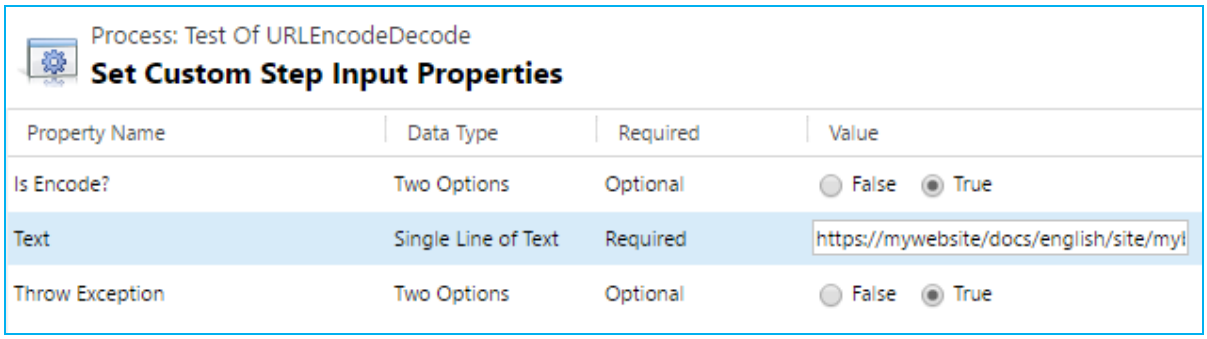
Result	string

"Is Encode?" If the value is True;

The value of the "Text" parameter is passed through the URLEncode operation, and the result is returned with the "Result" parameter.

"Is Encode?" If the value is False;

The value of the "Text" parameter is passed through URLDecode and the URL is returned to the normal format with the value "Result" parameter frozen again.



11 Word Count

Input Parameters

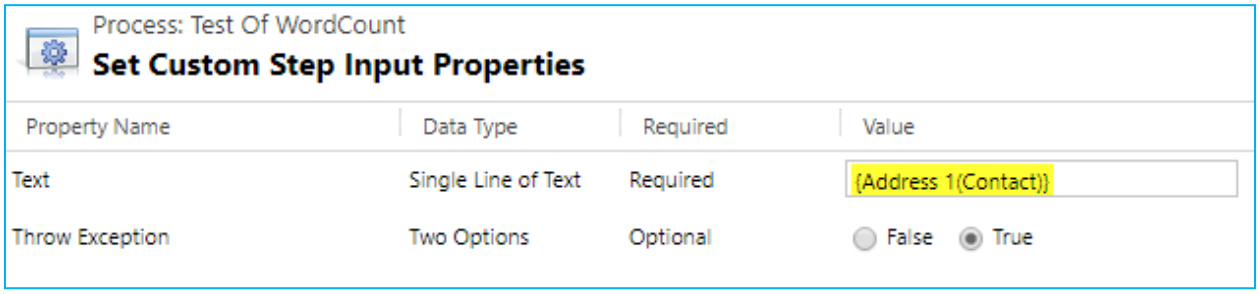
Parameter	Type	Default
Text	string	

Output Parameters

Parameter	Type	Default
Result	string	

The method makes the calculation to find the count of to word using "Text".

"Result" returns count value.



X Tools

1 Associate or Disassociate

Input Parameters

Parameter	Type	Default
Relationship Name	String	
Record URL	String	
Associate(true) or Disassociate(false)	bool	False

Output Parameters

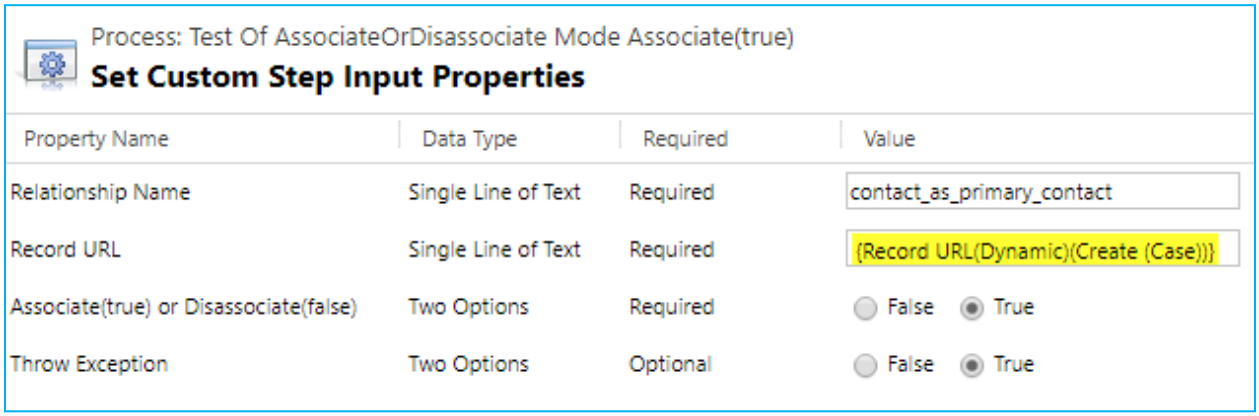
Parameter	Type	Default
Result	bool	

If the " Associate(true) or Disassociate(false)" input parameter is True;

The " Record URL" input parameter value will associate of the " Relationship Name" entity record reference. Associate result is taken as the "Result" parameter.

If the " Associate(true) or Disassociate(false)" input parameter is False;

The " Record URL" input parameter value will associate of the " Relationship Name" entity record reference. Associate result is taken as the "Result" parameter.



2 Execute Process

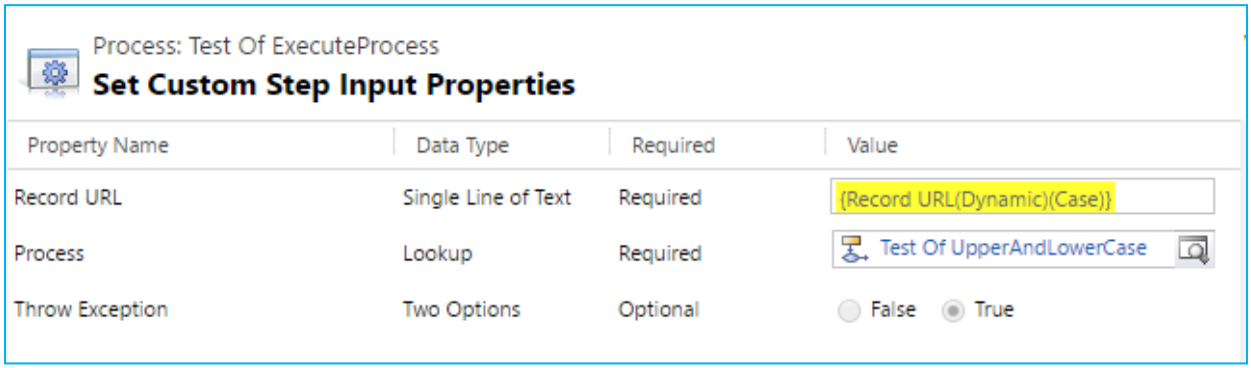
Input Parameters

Parameter	Type	Default
Record URL	string	
Process	EntityReference - ReferenceTarget("workflow")	

Output Parameters

Parameter	Type	Default
Result	bool	

The "Record URL" input parameter is the corresponding entity registration link. In the "Process" input parameter there is the desired workflow to run in the corresponding register. The workflow result is returned as "Result".



3 Execute Process with Query

Input Parameters

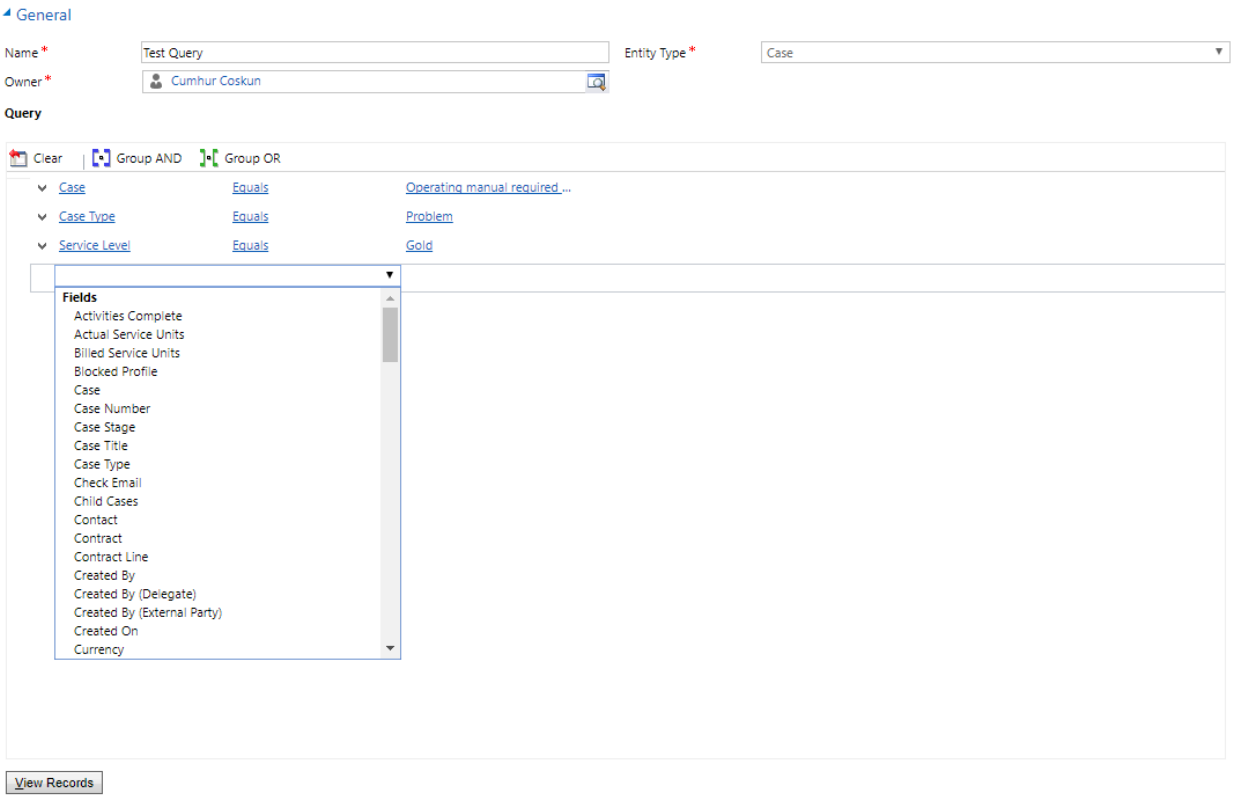
Parameter	Type	Default
goalrollupquery	EntityReference	
Process	EntityReference	

Output Parameters

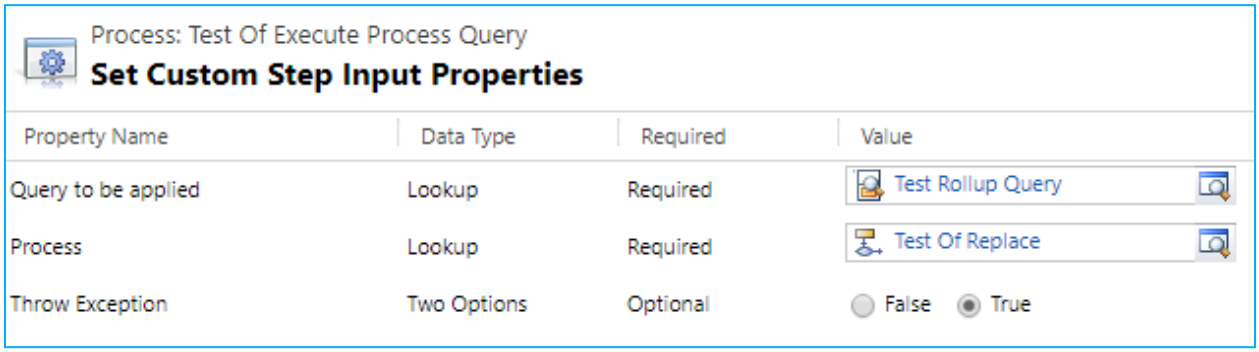
Parameter	Type	Default
Result	bool	

"goalrollupquery" input parameter contains the Rollup Query reference. The "Process" input parameter is the link to the process which we want to run.

A query can be like that:



Information on whether or not it is successful is returned with the value "Result".



4 ExecuteRollupFieldCalculation

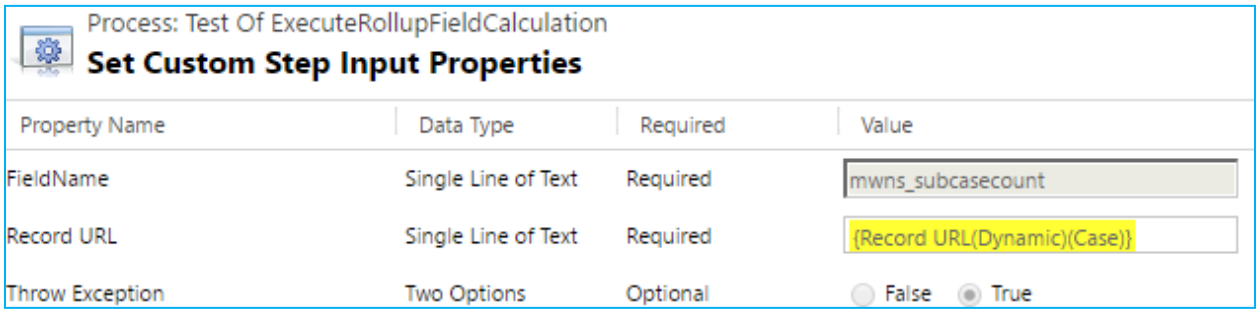
Input Parameters

Parameter	Type	Default
FieldName	string	
Record URL	string	

Output Parameters

Parameter	Type	Default
Result	bool	

"FieldName" input parameter contains the information of rollup field name. The "Record URL" input parameter is the link to the relevant entity record. Rollup field value is recalculated for the moment. Information on whether or not it is successful is returned with the value "Result".



5 RetrieveGuid

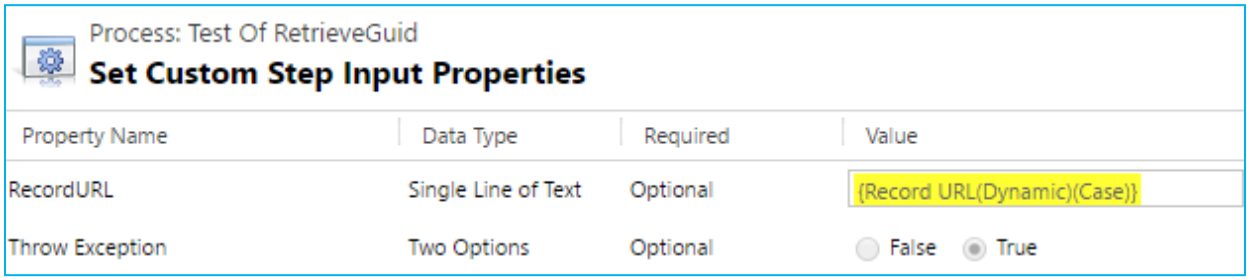
Input Parameters

Parameter	Type	Default
RecordURL	string	

Output Parameters

Parameter	Type	Default
RecordId	string	

The "Record URL" input parameter is the link to the relevant entity record. The record of the entity is returned with the record ID value "RecordId".



XI Users

1 Check User in Role

Input Parameters

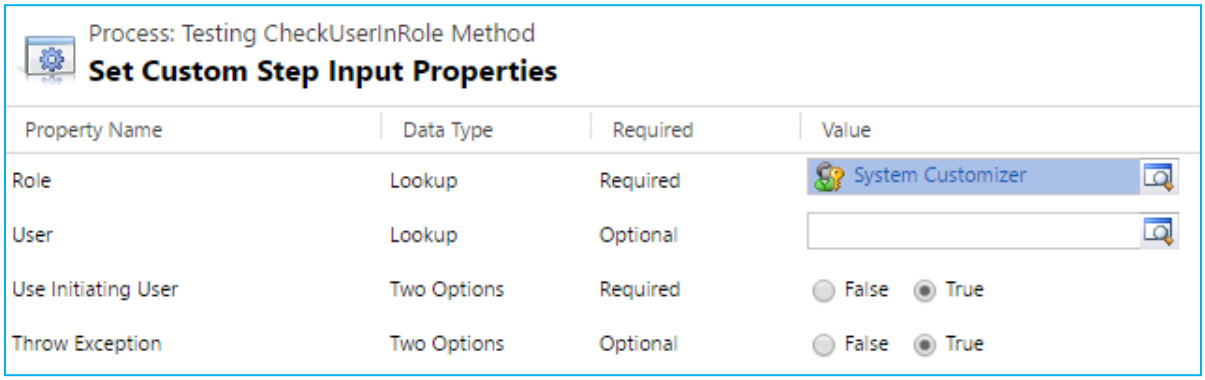
Parameter	Type	Default
Role	EntityReference - ReferenceTarget("role")	
User	EntityReference - ReferenceTarget("systemuser")	
Use Initiating User	bool	

Output Parameters

Parameter	Type	Default
isUserInRole	bool	

The security role entered in the "Role" input parameter is provided with the value "isUserInRole" to indicate whether it is defined in the user entered in the "User" input parameter.

If the "Use Initiating User" parameter is set to True, the relevant security role is searched for the CRM user who is currently performing the operation.



2 Check User in Team

Input Parameters

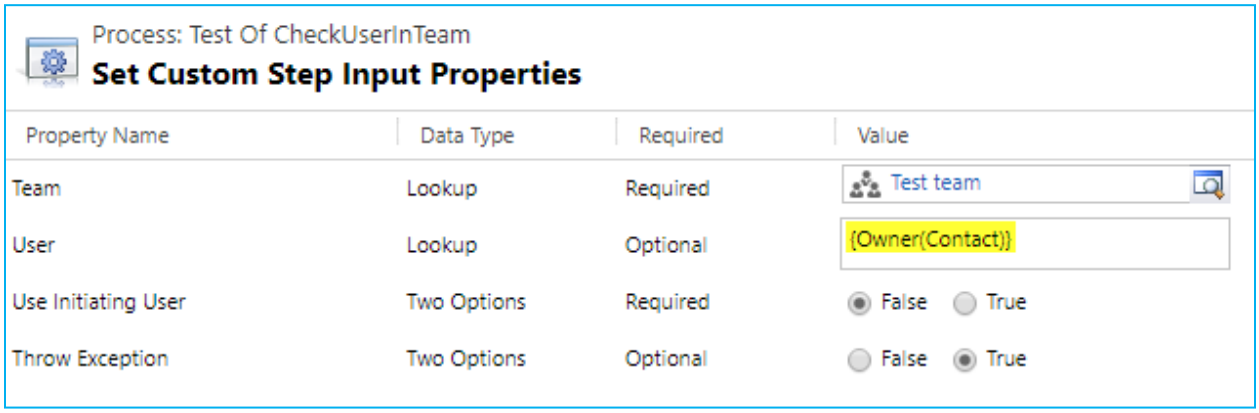
Parameter	Type	Default
Team	EntityReference - ReferenceTarget("role")	
User	EntityReference - ReferenceTarget("systemuser")	
Use Initiating User	bool	

Output Parameters

Parameter	Type	Default
isUserInRole	bool	

The team information entered in the "Team" input parameter is provided with the value "isUserInTeam" to indicate whether it is defined in the user entered in the "User" input parameter.

If the "Use Initiating User" parameter is set to True, the relevant team is searched for the CRM user who is currently performing the operation.



3 Get User Roles

Input Parameters

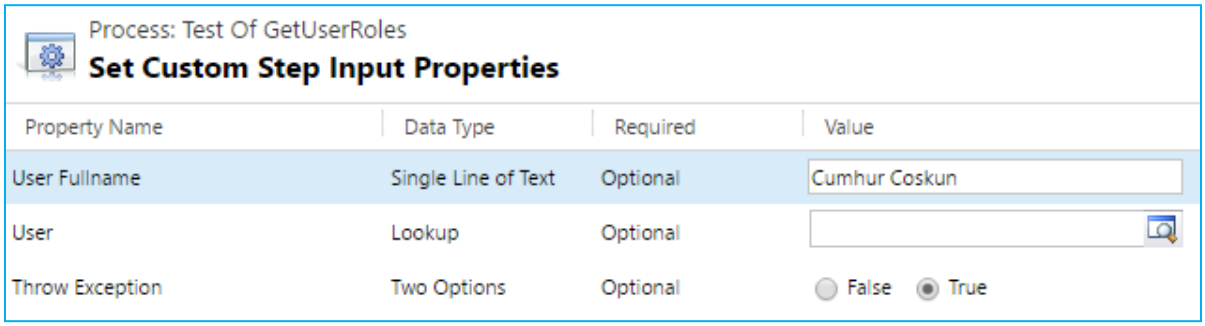
Parameter	Type	Default
User Fullname	string	
User	EntityReference - ReferenceTarget("systemuser")	

Output Parameters

Parameter	Type	Default
Role List	string	

The security role list assigned by using the user name surname information entered in the "User Fullname" input parameter or the user information selected in the "User" input parameter is returned with the "Role List" value.

If "User Fullname" is entered, this parameter is used first. If it is left empty, "User" parameter is searched.



4 Retrieve Initiating User

Output Parameters

Parameter	Type	Default
Initiating User	`EntityReference - ReferenceTarget("systemuser")`	

The information of the currently active user is returned with the "Initiating User" output value.

XII Uninstall Mawens Workflow Helper Tool

To uninstall, first delete any workflows which include Mawens Workflow Helper Tool you have created. Then uninstall as usual, by deleting the solution under solutions list.

Thank you for your interest in Mawens Workflow Helper Tool.