

# How to use Advanced BPMN Actions

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2 - Send newsletter

3 - Web service integration

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# 1 - How to create a Table field

## Table field use

This type of field allows to have more type of fields in it.

It is displayed as a table formed by N columns (depending on the number of fields configured) and N lines (depending on the number of lines the user decides to add). It is useful to store more information in one field.

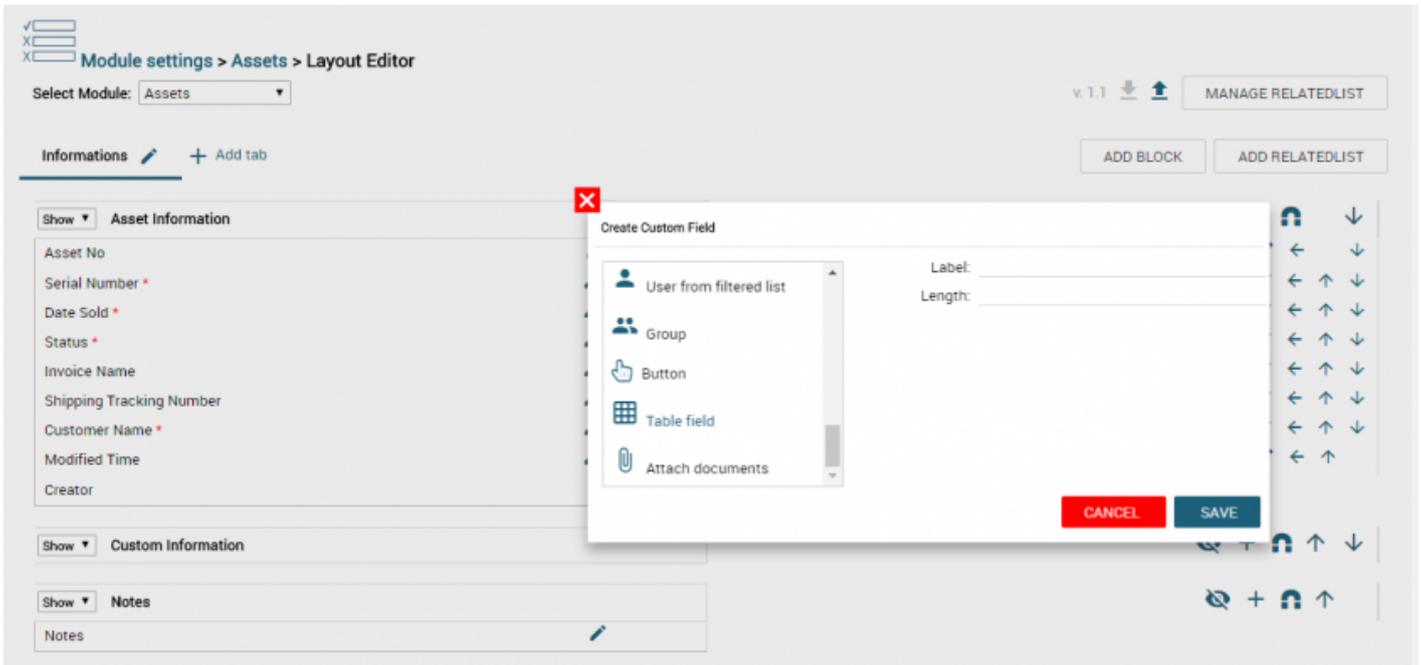
Here below we can find an example.

The screenshot shows the configuration interface for a BPMN-ScriptTask named 'Possible Renewals'. The interface includes a 'Field Label' section with the text 'Possible Renewals'. Below this, there is a list of field types: Text, Text Area, Number, Number with decimals, and Percentage. An 'ADD SELECTED' button is located to the right of this list. Below the list, the 'Selected Columns' section displays a table with the following columns: Name, Date Start, Date End, Contact Email, Contact Phone, and Description. Each column has a corresponding field type icon and a set of configuration options including Length, Permissions, Mandatory Field, and Vai a capo.

Name	Date Start	Date End	Contact Email	Contact Phone	Description
Text	Date	Date	Email	Phone	Text Area
Length: 200	Permissions: Read/Write	Permissions: Read/Write	Permissions: Read/Write	Permissions: Read/Write	Permissions: Read/Write
Mandatory Field: <input checked="" type="checkbox"/>	Mandatory Field: <input checked="" type="checkbox"/>	Mandatory Field: <input checked="" type="checkbox"/>	Mandatory Field: <input type="checkbox"/>	Mandatory Field: <input type="checkbox"/>	Mandatory Field: <input type="checkbox"/>
Vai a capo: <input type="checkbox"/>	Vai a capo: <input type="checkbox"/>	Vai a capo: <input type="checkbox"/>	Vai a capo: <input type="checkbox"/>	Vai a capo: <input type="checkbox"/>	Vai a capo: <input type="checkbox"/>

First we proceed by creating a new table field in the desired module.

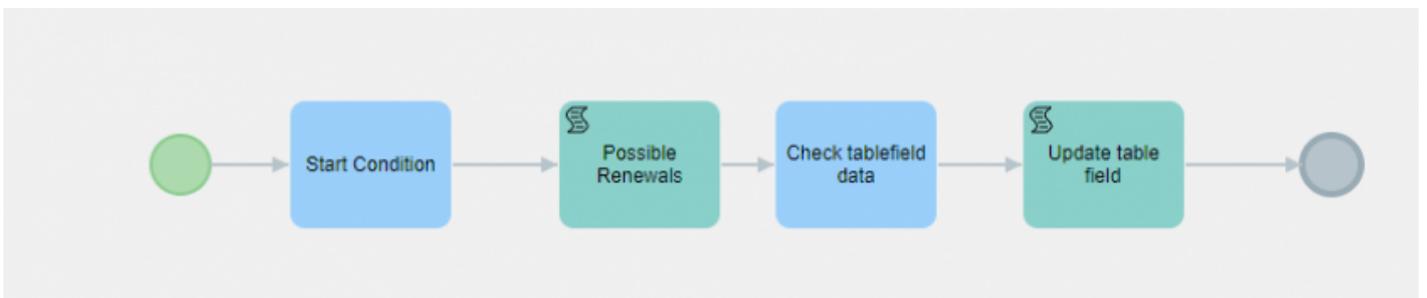
In this case the field will be used to manage the Asset renewals, therefore it will be created in the corresponding module.



Once the table field is created the configuration window above will open.

At this point, is possible to add and name the different type of fields in it (Text, Number, Date...). In this case for each line 6 fields will be present (Text, Date, Email, Telephone, Text Area), 3 of which are mandatory.

# 1 - Basic Process configuration - Installation renewals



Let's proceed with the creation of an easy process to manage the renewal of an Asset. When an installation expires the user will switch the Status to "Out of Order". At this point the process will begin. An eventual renewal will be notified to the user in charge through a pop up. Once one ore more renewals are inserted the record will be updated.

Below you can display the process.

To enable it tick the "Active" box, once ended the chart and the settings.

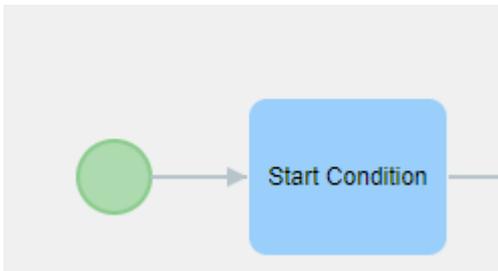
Settings > Process manager

EDIT DIAGRAM BACK vtenex

Name	Description
Asset Renewals	
Active	Version
no	1.0

Diagram

```
graph LR; Start(( )) --> StartCondition[Start Condition]; StartCondition --> PossibleRenewals[Possible Renewals]; PossibleRenewals --> CheckTablefield[Check tablefield data]; CheckTablefield --> UpdateTablefield[Update table field]; UpdateTablefield --> End(( ))
```

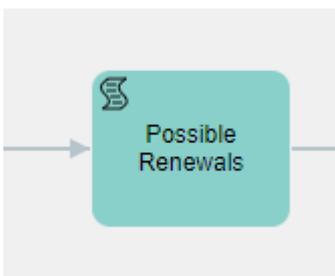


This is the first Task of the process.

As previously said, this must be a Condition Task in order to define the starting entity and its starting features.

In this case the starting entity is the Asset module and the process will begin when the record status will be set on “Out of Service” and a previous renewal is not present, that is to say renewals lines (Table field) equal to zero.

The screenshot shows the configuration for a BPMN-Task named "Start Condition". The entity is set to "Asset". Under "When to run the check", the "on change" option is selected. The "Conditions" section contains two conditions: "Status" is set to "è cambiato in" with a value of "Out-of-service", and "Rinnovi" is set to "ha esattamente" with a value of "0". There are buttons for "SAVE", "CANCEL", "NEW GROUP", and "NUOVA CONDIZIONE".



In the following Task, ScriptTask, the Process Helper is set in order to show the pop up to the assignee for possible renewals.

It is then assigned to the latter by “picking” the assignee of the module from the picklist, we link the entity Assets (related ID), we select the checkbox “show popup in the linked entity” and we include a block with the desired fields. In this case there are two fields:

- **Table field with the same fields as the one previously created**
- **Note field for any reports**

BPMN-ScriptTask: Possible Renewals ScriptTask\_0rvalv

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**Actions**

*No actions configured*

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**Process Helper**

Assigned To: Other | Assigned To | Related to: ID

Status: Running |  Process Name: Seleziona Opzione...

Instructions: Seleziona Opzione...  Show popup in the related entity

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**Manage dynamic form**

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**RENEWALS INFO**

Possible Renewals	Renewals Notes
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BPMN-ScriptTask: Possible Renewals ScriptTask\_0rvalv

**Add table field**

**Field Label** Possible Renewals

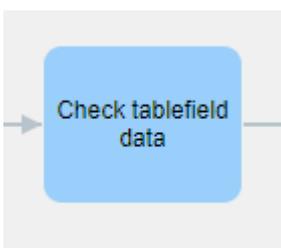
**Columns**

- Text
- Text Area
- Number
- Number with decimals
- Percentage

**Selected Columns:**

Name	Date Start	Date End	Contact Email	Contact Phone	Description
<input type="checkbox"/> Text	<input type="checkbox"/> Date	<input type="checkbox"/> Date	<input type="checkbox"/> Email	<input type="checkbox"/> Phone	<input type="checkbox"/> Text Area
Length: 200	Permissions: Read/Write	Permissions: Read/Write	Permissions: Read/Write	Permissions: Read/Write	Permissions: Read/Write
Mandatory Field: <input checked="" type="checkbox"/>	Mandatory Field: <input checked="" type="checkbox"/>	Mandatory Field: <input checked="" type="checkbox"/>	Mandatory Field: <input type="checkbox"/>	Mandatory Field: <input type="checkbox"/>	Mandatory Field: <input type="checkbox"/>
Vai a capo: <input type="checkbox"/>	Vai a capo: <input type="checkbox"/>	Vai a capo: <input type="checkbox"/>	Vai a capo: <input type="checkbox"/>	Vai a capo: <input type="checkbox"/>	Vai a capo: <input type="checkbox"/>

This is the table field shown in the pop up, the one that, once filled, will be updated in the linked record. In fact the inserted fields are the same as the ones created in the module.



At this point, we check if the user has filled the renewal fields. It is possible to check the number of lines inserted, for example “minimum one”, or check, like in this case, if the user has inserted the renewal notes. The reference entity it’s the dynamic form previously set. The process is on hold until that condition is true.

The screenshot shows the configuration for a BPMN-Task named "BPMN-Task: Check tablefielddata". The task is associated with the entity "[SDF4] Form dinamica (BPMN-ScriptTask: Possible Renewals)". Under the "When to run the check" section, the option "every time the condition is true" is selected. The "Conditions" section contains a single condition: "Renewals Notes" is "diverso" (different) from an empty field. There is a "NEW GROUP" button and a "NUOVA CONDIZIONE" button.



Once the conditional Task is done we proceed with the update of the renewal/s. Therefore we create a Script Task with a Cycle type action. We cycle the number of line inserted in the dynamic form (Possible Renewal field) and for every line “Add tab line” in the field “Renewal” created in the module. Doing so the lines inserted in the pop up will be reported in the record.

The screenshot shows the configuration for a BPMN-ScriptTask named "BPMN-ScriptTask: Update table field". The task is associated with the entity "ScriptTask\_18ml5rl". The configuration shows: "Create a new action" set to "Cycle", "on field" set to "Possible Renewals", "and for each row" set to "Insert table row", and "on field" set to "Renewals". There are "CREATE" and "CANCEL" buttons. A dropdown menu is open for "Renewals", showing options: "[S5] Assets (BPMN-Task: Start Condition)", "Renewals", "Rinnovi", "[SDF4] Form dinamica (BPMN-ScriptTask: Possible Renewal)", and "Possible Renewals". Below this, there is an "Actions" table with one entry: "Add Renewal". There is also a "Process Helper" checkbox.

Action: Cycle

SAVE CANCEL

Action title Add Renewal

Insert row in Renewals of [\$5] Assets (BPMN-Task: Start Condition)

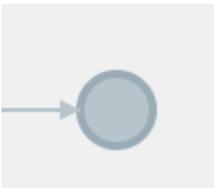
Conditions on field Possible Renewals of [\$DF4] Form dinamica (BPMN-ScriptTask: Possible Renewals) NEW GROUP

Information

Name	Possible Renewals: Name	Select...	Date Start
\$DF4-vcf_2-vcf_3:curr		Select... Somma Minimo Massimo Media Last Current Sequence	Possible Renewals: Date Start
Date End			+ ▼ ... days ▼
Possible Renewals: Date End			Contact Email
+ ▼ ... days ▼			\$DF4-vcf_2-vcf_6:curr
Contact Phone	Seleziona Opzione... ▼	Description	Seleziona Opzione... ▼
\$DF4-vcf_2-vcf_7:curr		\$DF4-vcf_2-vcf_8:curr	

Now we proceed by updating the existing fields.

For each of them we take the entity contained in the Dynamic Form and we select the value "Current" in the pick list, in order to obtain the correct value for each line. Even if this is not the case, if we wanted we could for example obtain the sum or the average of different fields from different lines.



We complete the process by setting the End Event, changing the status in "Ended" and linking it to the entity (Assets).

SAVE CANCEL ADVANCED...

NEW ACTION

Actions

No actions configured

Process Helper

Assigned To

Other Assigned To

Status

Ended

Instructions

Seleziona Opzione...

Related to

--Please select--

--Please select--

[\$] Assets (BPMN-Task: Start Condition)

ID

Product Name

Invoice Name

Customer Name

Sales Order

Manage dynamic form

ADD BLOCK IMPORT BLOCK...

# 1 - Basic Process activation - Installation renewals

## PROCESS ACTIVATION

← Asset Double Panel See-thru Updated today (13 Mar 2018) EDIT 📧 ★ 🔔 🔗 ☰

**Informations** History

**Asset Information**

Asset No ASS1	Product Name Double Panel See-thru Clipboard
Serial Number 3148465131	Assigned To admin (User Administrator)
Date Sold 05-03-2018	Date in Service 05-03-2018
Status In Service	Tag Number
<b>In Service</b>	Shipping Method
Out-of-service	
Shipping Tracking Number	Asset Name Double Panel See-thru
Customer Name demovte	Created Time 05-03-2018 15:05:34
Modified Time 13-03-2018 19:29:21	Sales Order
Creator admin (User Administrator)	

Renewals

Name	Date Start	Date End	Contact Email	Contact Phone	Description
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We can test now the process in action. There are no existing renewal and we set the Status field on "Out of Service".

Processo > test1 SALVA ANNULLA

**INFORMAZIONI RINNOVI**

Possibili Rinnovi

Azioni	Nome	Data Inizio	Data Fine	Email Contatto	Cellulare Contatto	Descrizione
	Rinnovo1	13-03-2018 (dd-mm-YYYY)	13-03-2019 (dd-mm-YYYY)	jack.johnson@learnkop.com	0225462359	Primo Rinnovo Prodotto

Note Rinnovi  
Il Rinnovo è già attivo

AGGIUNGI RIGA

Now the assignee of the record will display a pop up with the chance to add one or more renewals. In this case we add an annual renewal and we fill all the proposed fields.

← Asset Double Panel See-thru Updated today (13 Mar 2018)
EDIT

<b>ASS1</b>	<b>Double Panel See-thru Clipboard</b>
Serial Number <b>3148465131</b>	Assigned To <b>admin (User Administrator)</b>
Date Sold <b>05-03-2018</b>	Date in Service <b>05-03-2018</b>
Status <b>Out-of-service</b>	Tag Number
Invoice Name	Shipping Method
Shipping Tracking Number	Asset Name <b>Double Panel See-thru</b>
Customer Name <b>demovte</b>	Created Time <b>05-03-2018 15:05:34</b>
Modified Time <b>13-03-2018 19:30:21</b>	Sales Order
Creator <b>admin (User Administrator)</b>	

Name	Date Start	Date End	Contact Email	Contact Phone	Description
<b>Renewal1</b>	<b>13-03-2018</b>	<b>13-03-2019</b>	<b>jack.johnson@learnkop.com</b>	<b>0225462359</b>	<b>First Product's Renewal</b>

**Notes** +

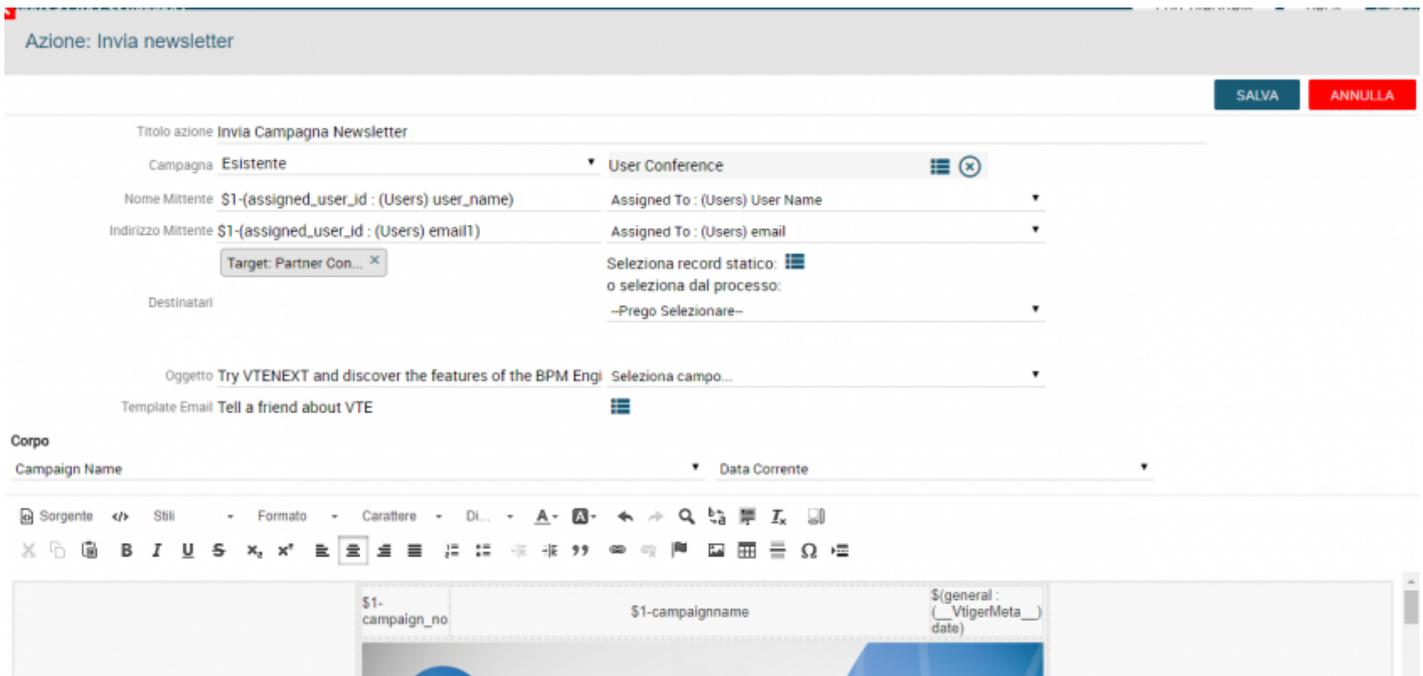
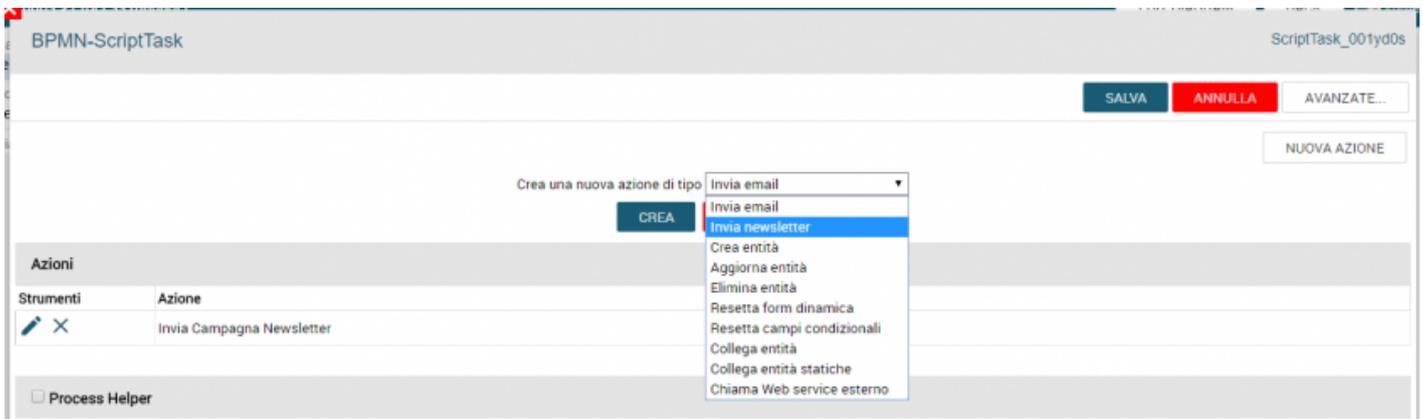
Notes

**Relations**

- + Processes 1
- ! Trouble Tickets
- 📄 Documents
- ✉ Messages

When saving a new line will be added in the field “Renewals”, and among the relates entities we will display the Process module.





We now proceed by configuring this Task. We select a campaign, here we use an existing one (it is also possible to create a new one).

We select name and address of the sender and the receivers. In this case we select the “Partner Conference” target, doing so we take all the related email addresses.

Lastly, instead of writing the email it is possible to select a pre existing template (Email template es. Tell a friend about vtenext).

## Send newsletter.

# Try VTENEXT and discover the features of the BPM Engine

Lunedì 19-03-2018 11:31:10

Dettagli -   

Traduci messaggio



perlin

A: federico.perlin.test@gmail.com



CAM1	User Conference	11:26:30 19-03-2018
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**vtenext**

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**CRM + BPM**

Discover the full potential of the BPM engine for the implementation of your processes

Here below is reported an example of the email received by the recipient of the email.

# 3 - Web service integration

## Web service integration

Using WebServices it is possible to integrate different systems.

Using this function it is possible to receive data from external sources.

This is made possible by using set API that will give back json values, those will become variables that can be used within every process.

The screenshot shows a configuration form for a web service. At the top right, there are three buttons: "TEST WEB SERVICE" (dark blue), "SAVE" (dark blue), and "CANCEL" (red). The form is divided into several sections:

- Name:** "Get TEXT and Code WEBSERVICE". Description: "Returns md5 value and text".
- Description:** A text area for additional details.
- Active:** A checked checkbox.
- Type:** "REST" (dropdown menu).
- Method:** "GET" (dropdown menu).
- Endpoint:** "http://md5.jsontest.com".
- Authentication:** Fields for "User Name" (admin) and "Password" (masked with asterisks).
- Headers:** A button labeled "ADD HEADER".
- Parameters:** A button labeled "ADD PARAMETER".
- Returned fields:** A table with two columns: "Field name" and "Value to extract". It contains two entries: "value" with "original" and "crypt" with "md5". There is an "ADD FIELD" button below.

Helpful text on the right side of the form explains the purpose of several fields: "A name for this web service", "If flagged, the web service can be used in processes", "The type of web service to call", "The HTTP method to use for the request", "The endpoint for the request, for example https://mywebsite.example.com/api/", and "Fields to extract from the Web service result. Only simple flat json and xml objects are supported."

To exploit the potentialities of the Web Service first it is necessary to enter some fundamental parameters.

To do so we go to:

**Settings --> Business Process --> Manager External --> Web Services**

**Settings > External Web services**  
Configure external Web services to be used with processes

Name	Description	Type	Active	Tools
Get TEXT and Code WEBSERVICE	Returns md5 valueand text	REST	Yes	

[Scroll to Top]

Clicking on “Add” it is possible to set a new Web Service with the desired parameters. In this case we use `http://md5.jsontest.com`

**TEST WEB SERVICE** **SAVE** **CANCEL**

Name: Get TEXT and Code WEBSERVICE  
Returns md5 valueand text

Description: \_\_\_\_\_

Active:

Type: REST

Method: GET

Endpoint: http://md5.jsontest.com

Authentication: User Name: admin, Password: \*\*\*\*\*

Headers:

Parameters:

Returned fields:

Field name	Value to extract
value	original
crypt	md5

A name for this web service

If flagged, the web service can be used in processes

The type of web service to call

The HTTP method to use for the request

The endpoint for the request, for example `https://mywebsite.example.com/api/`

Fields to extract from the Web service result. Only simple flat json and xml objects are supported.

Once configured the desired Web Service it can be used in every process. Let's see an example:



- In the **first task** we recall the a Web Service set to become an actual entity of the process.
- In the **second task** the principal entity of the process will be updated with the data given by the Web Service itself.



In this Task we set the use of the previously configured Web Service:

### **New Action Call --> External Web Service**

BPMN-ScriptTask: Call webservice ScriptTask\_13pnz3y

Create a new action

- Send email
- Send newsletter
- Create entity
- Update entity
- Delete entity
- Reset dynamic form
- Reset conditional fields
- Link entities
- Link static entities
- Call external Web service

Tools	Action
	WebService jsonstest

Process Helper

From the pick list Web Service we select the desired one and so all the related data will be displayed.

At this point it becomes an effective entity of the process. In the section Parameters it is possible to add dynamics values to pass to the URL.

The Parameter's name and its value are indeed specified (it can be selected by the pick list "Values").

Action: Call external Web service

SAVE CANCEL

Action title WebService jsontest

Web service Get TEXT and Code WEBSERVICE

--Please select--  
Get TEXT and Code WEBSERVICE

**Authentication**

User Name admin Selezione Opzione... Password \*\*\* Selezione Opzione...

**Parameters**

**Additional parameters**

Parameter name text Selezione Opzione... Parameter value S7-designation Selezione Opzione...  
ADD PARAMETER

**Returned fields**

value original Selezione Opzione... crypt md5 Selezione Opzione...



It is now possible to update any field of the selected entity with the values obtained by the Web Service.

Here we decide to update the field "Description" and so we select in the pick list the entity Web Service.

After that, we select one of the given field, in this case the "crypt" field is highlighted which gives back the md5 value.

**Description Information**

Description

Select Option...  
Select Option...  
SDK Functions  
[S7] Leads (BPMN-Task:)  
[SWS] Web service (BPMN-ScriptTask: WebService jsontest)

Country Select Option...  State

**Description Information**

Description

Select field...  
Back to options  
[SWS] Web service (BPMN-ScriptTask: WebService jsontest)  
Positive result?  
Response code  
Response message  
value  
crypt  
Select field...