

## Using the App Link multiple

The **Process App Link (multiple)** is able to refer to several instances of the linked app and displays the data in a table. During the creation of the app link, the design user can determine which components of the instance are to be displayed in the table.

## Use Case

Two app projects were created in ACME's Bidding Process which are used independently from each other:

- Customer Database
- Service Database

Now Irene Adler wants to provide her employees with a new app that supports them in creating proposals.

### On this Page:

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- Usage of the App Link (multiple)
  - Creating a new Instance
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**Related Pages:**

- Using App Links
  - Using the App Link (single)
  - Extending the App Link (multiple)
  - App Links in Role-based Apps
  - Copying Values to Form Fields
- Form Elements
  - Process App Links
- Creating Forms
  - Configuring Tables
- Service
  - Bidding Process

**Related Documentation:**

- BPaaS Entwicklerhandbuch (German)
  - Formular-Erstellung für Fortgeschrittene



## Proposal Preparation

## App Project

To do this, Irene creates the app project Proposal Preparation.

The underlying process in brief:

1. A customer inquiry arrives.
2. An employee creates a ticket for the request.
3. A sales representative processes the ticket and estimates the effort.

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|--|--|
|  | <p>4. If the effort is greater than 5 days, the request must be approved by the production manager before the offer is prepared. If the effort is less than 5 days, an offer can be created directly by the sales representative.</p> <p>5. The offer is sent to the customer by e-mail.</p> |
|--|--|



The app project Service Database is already used to manage ACME's services. Therefore Irene wants to use the existing data in her new app.

ACME Services Database

Service Name  Contact

Services Overview

<input checked="" type="checkbox"/>	Service Name	Contact	Price	Currency	Unit	Max. Discount	Notes
<input type="checkbox"/>	Training 1	David Stringer	120	\$	Hour	15 %	
<input type="checkbox"/>	Training 2	David Stringer	200	\$	Hour	10 %	
<input type="checkbox"/>	Training 3	David Stringer	800	\$	Day	10 %	
<input type="checkbox"/>	Support Level A	Jane Marple	1.500	\$	Month	15 %	Highest support level
<input type="checkbox"/>	Support Level B	Jane Marple	1.000	\$	Month	10 %	
<input type="checkbox"/>	Support Level C	Jane Marple	650	\$	Month	10 %	Lowest Support-Level
<input type="checkbox"/>	Expert Training 1	John Watson	1.000	\$	Day	20 %	
<input type="checkbox"/>	Expert Training 2	John Watson	1.000	\$	Day	20 %	
<input type="checkbox"/>	Expert Training GOLD	John Watson	2.500	\$	Week		Combination of Expert Training includes testing of sample
<input type="checkbox"/>	Individual Product Presentation	David Copperfield	100	\$	Hour		

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Each instance of the Service Database contains the following information:

- Service Name
- Contact
- Price
- Currency
- Unit
- Max. Discount
- Notes

## Usage of the App Link (multiple)

When a customer request arrives, the ACME sales staff is asked to compile an offer meeting the customer's inquiry.

Proposal

Proposal Number: \_\_\_\_\_ Date of Proposal: \_\_\_\_\_

Product: \_\_\_\_\_

Offered Services

Price	Currency	Unit	Contact Person	Available Discount	Service Name

Notes: \_\_\_\_\_

• Edit: Process App Link (multiple)

Name: \_\_\_\_\_

Offered Services Description: \_\_\_\_\_

Hashtags: \_\_\_\_\_

Additional CSS Classes: \_\_\_\_\_

☐ Mandatory

☐ Read Only

☐ Allow Usage of Start Link without Role Check

App Project: \_\_\_\_\_

Service Database: \_\_\_\_\_

Related Page Size: 5

Column Configuration

Configure Column Type

☒ Open Overview in New Tab

☒ Open New App in New Tab

☒ Open Instance in New Tab

☒ Save Value in Instance

Field Name in Container: \_\_\_\_\_

propagatedServices

Since all services are already managed in a separate app, Irene Adler inserts a **Process App Link (multiple)** in the form **Proposal**. The app link is named **Offered Services**.

Now, Irene has to configure the settings of the element:

- In field **App Project** she enters the name of the app project she wants to link to: **Service Database**.
- Since a multiple app link can refer to many instances of the linked app, Irene needs to configure the app link's table. She clicks on **Column Configuration** to open the **Column Configuration** editor.

Columns							
	Column Name	Field Name in Container	Alignment	Hide	Custom Field	Width	Options for Column Type
+	Service Name	serviceName	left	false	<input type="checkbox"/>	text	
+	Price	servicePrice	left	false	<input type="checkbox"/>	text	
+	Currency	serviceCurrency.label	left	false	<input type="checkbox"/>	text	
+	Unit	serviceUnit.label	left	false	<input type="checkbox"/>	text	

START WIZARD

SAVE

CANCEL

Each instance of the **Service Database** contains the following information:

- Service Name
- Contact
- Price
- Currency
- Unit
- Max. Discount
- Notes

But **Irene** only wants to display a part of the information in the proposal form:

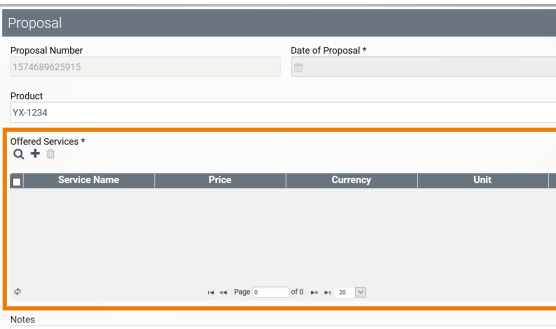
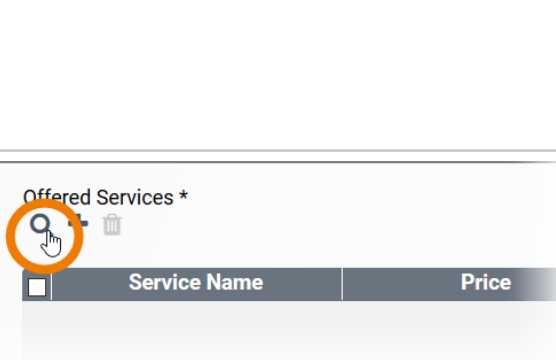

- Service Name
- Price
- Currency
- Unit

So she configures the table of the app link **Offered Services** accordingly.

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	<p>When the input form <b>Proposal</b> is called up, the app link <b>Offered Services</b> is displayed. The app link's table shows the details as configured:</p> <ul style="list-style-type: none"><li>• Service Name</li><li>• Price</li><li>• Currency</li><li>• Unit</li></ul>
	<p><b>Irene</b> is going to test her app now.</p> <p>As she wants to search for already existing instances, she clicks on the icon  of the app link <b>Offered Services</b>.</p>

Services Overview

<input type="checkbox"/>	Service Name	Contact	Price	Currency	Unit	Max. Discount	Notes
<input type="checkbox"/>	Training 1	David Stringer	120	\$	Hour	15 %	
<input type="checkbox"/>	Training 2	David Stringer	200	\$	Hour	10 %	
<input type="checkbox"/>	Training 3	David Stringer	800	\$	Day	10 %	
<input type="checkbox"/>	Support Level A	Jane Marple	1,500	\$	Month	15 %	Highest support l
<input type="checkbox"/>	Support Level B	Jane Marple	1,000	\$	Month	10 %	
<input type="checkbox"/>	Support Level C	Jane Marple	850	\$	Month	10 %	Lowest Support
<input type="checkbox"/>	Expert Training 1	John Watson	1,000	\$	Day	20 %	
<input type="checkbox"/>	Expert Training 2	John Watson	1,000	\$	Day	20 %	
<input type="checkbox"/>	Expert Training G	John Watson	2,500	\$	Week		Combination of E
<input type="checkbox"/>	Individual Produc	David Copperfield	100	\$	Hour		Includes testing c

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Link Selected Values

The click opens the overview of the linked app Custom er Database.

Irene can now select the instances she wants to link:

- To link one instance only, she can click on the needed instance.
- With a multiple app link, she can also link as many instances as she wants using the checkboxes in front of each instance. By clicking on the button **Link Selected Values** she can confirm the whole selection.

Offered Services \*

<input type="checkbox"/>	Service Name	Price	Currency	Unit
<input type="checkbox"/>	Support Level C	850	\$	Month
<input type="checkbox"/>	Expert Training 2	1,000	\$	Day
<input type="checkbox"/>	Training 2	200	\$	Hour

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The selected instances are adopted into the app link's table Offered Services. As configured, only Service Name, Price , Currency a nd Unit are displayed.



Offered Services \*

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<input type="checkbox"/>	Service Name	Price	Currency	Unit
<input type="checkbox"/>	Support Level C	850	\$	Month
<input type="checkbox"/>	Expert Training 2	1.000	\$	Day
<input type="checkbox"/>	Training 2	200	\$	Hour

All displayed instances are links to the instances in the original app [Service Database](#). By clicking on an instance, [Irene](#) can open its original data sheet.

#### Example:

The instance [Expert Training 2](#) is clicked in the app link's table.

#### Service Data Sheet

Service Name	Expert Training 2
Contact Person	
Name	Value
John Watson	John Watson
Price	1.000
Currency	
Name	Value
\$	\$
Unit	
Name	Value
Day	Day
Possible Discount (max.)	
Name	Value
20 %	20 %
Notes	

The instance opens in the corresponding form of the app [Service Database](#), displaying the whole data of the instance.

So using the app link gives the employees the possibility to use parts of the data in an offer and allows also to access the whole information such as discount or contact person without having to display it in the app link.

### Creating a new Instance

Offered Services \*

	Service Name	Price
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Service Data Sheet

Service Information

Pricing

Service Name

Ext

Contact Person

Notes

Price

Currency

Unit

Possible Discount (max.)

Go to overview

Create Service

ACME Services Database

Service Name

Contact


Add a service

Services Overview

	Service Name	Contact	Price	Currency	Unit	Max. Discount	Notes
<input type="checkbox"/>	Training 1	David Stringer	120	\$	Hour	15 %	
<input type="checkbox"/>	Training 2	David Stringer	200	\$	Hour	10 %	
<input type="checkbox"/>	Training 3	David Stringer	800	\$	Day	10 %	
<input type="checkbox"/>	Support Level A	Jane Marple	1,500	\$	Month	15 %	Highest support level
<input type="checkbox"/>	Support Level B	Jane Marple	1,000	\$	Month	10 %	
<input type="checkbox"/>	Support Level C	Jane Marple	850	\$	Month	10 %	Lowest Support Level
<input type="checkbox"/>	Expert Training 1	John Watson	1,000	\$	Day	20 %	
<input type="checkbox"/>	Expert Training 2	John Watson	1,000	\$	Day	20 %	
<input type="checkbox"/>	Expert Training GOLD	John Watson	2,500	\$	Week		Combination of Expert 1
<input type="checkbox"/>	Individual Product Presentation	David Copperfield	100	\$	Hour		includes testing of sam
<input type="checkbox"/>	Extended Product Presentation	David Copperfield	200	\$	Hour	20 %	

Offered Services \*

	Service Name	Price	Currency	Unit
<input type="checkbox"/>	Extended Product Presentation	200	\$	Hour

Users can also create a new instance in the linked app using the icon  of the **Proce ss App Link (multiple)**.

Instead of the overview, the input form of the **Service e Database** app opens and the user can insert the data of a new service directly.

After saving, the data is automatically available on both ends: In the **Service e Database**.

... as well as in the app link **O ffered Services**.

Removing Linked Instances from a Table

Offered Services \*

<input type="checkbox"/>	Service Name	Price	
<input type="checkbox"/>	Extended Product Presentation	200	\$
<input type="checkbox"/>	Expert Training 2	1.000	\$
<input checked="" type="checkbox"/>	Training 3	800	\$
<input type="checkbox"/>	Support Level C	850	\$

You can remove linked instances from the table at any time.

Just activate the checkbox in front of unnecessary instances in the app link's table and click on

icon

Offered Services \*

<input type="checkbox"/>	Service Name	Price	
<input type="checkbox"/>	Extended Product Presentation	200	\$
<input type="checkbox"/>	Expert Training 2	1.000	\$
<input type="checkbox"/>	Support Level C	850	\$

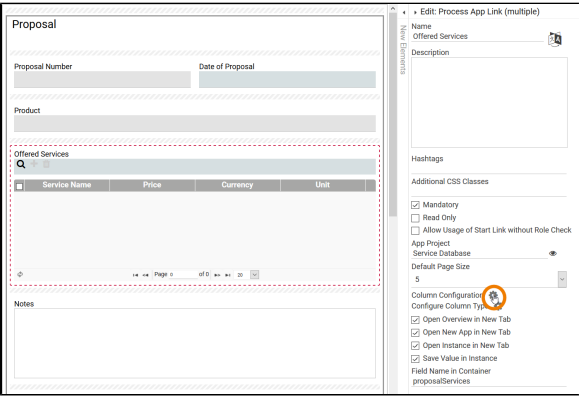
The instance (s) is/are deleted from the app link.

## Adopting Values from Instances

You can also transfer values from the child instances to the instances in the parent app.



**Child Instance** = Instance in opening app  
**Parent Instance** = Instance in current app

	<p>Open the <b>Column Configuration</b> editor of the <b>Process App Link (multiple)</b> in the parent app.</p> <p><b>Example:</b></p> <p>Irene Adler opens the <b>Column Configuration</b> in the <b>Proposal</b> form of the app <b>Proposal Preparation</b>.</p>
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Columns

		Column Name	Field Name in Container	Alignment	Hide	Custom Field	Width	Column Type	Options for Column Type
+	-	Service Name	serviceName	left	false	<input type="checkbox"/>		text	
+	-	Price	servicePrice	left	false	<input type="checkbox"/>		text	
+	-	Currency	serviceCurrencyLabel	left	false	<input type="checkbox"/>		text	
+	-	Unit	serviceUnitLabel	left	false	<input type="checkbox"/>		text	
+	-	Discount	serviceDiscount	left	true	<input type="checkbox"/>		text	

START WIZARD

SAVE

CANCEL

For every value from the child instance you want to transfer, create a separate column in the **Column Configuration** editor of the **Process App Link (multiple)**. Activate the checkbox in column **Hide** to store the values in the parent instances but not showing them in the app link's table.

Example:

Irene adds the value `serviceDiscount` from the child app `Service Database` and hides the column.

Offered Services

	Service Name	Price	Currency	Unit
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The hidden values are not shown in the app link's table. Nevertheless they are adopted and available in the parent app, for example for a calculation.

Example:

The values of form field `serviceDiscount` are not displayed in the app link `Offered Services`, but they are adopted for every linked instance.