What’s New

Highlighting of changes and what this means for your project.

Knowledge session

Blueriq

Topics

During this What's **New** we'll be discussing the following topics.

Introduction

- History
- Categories

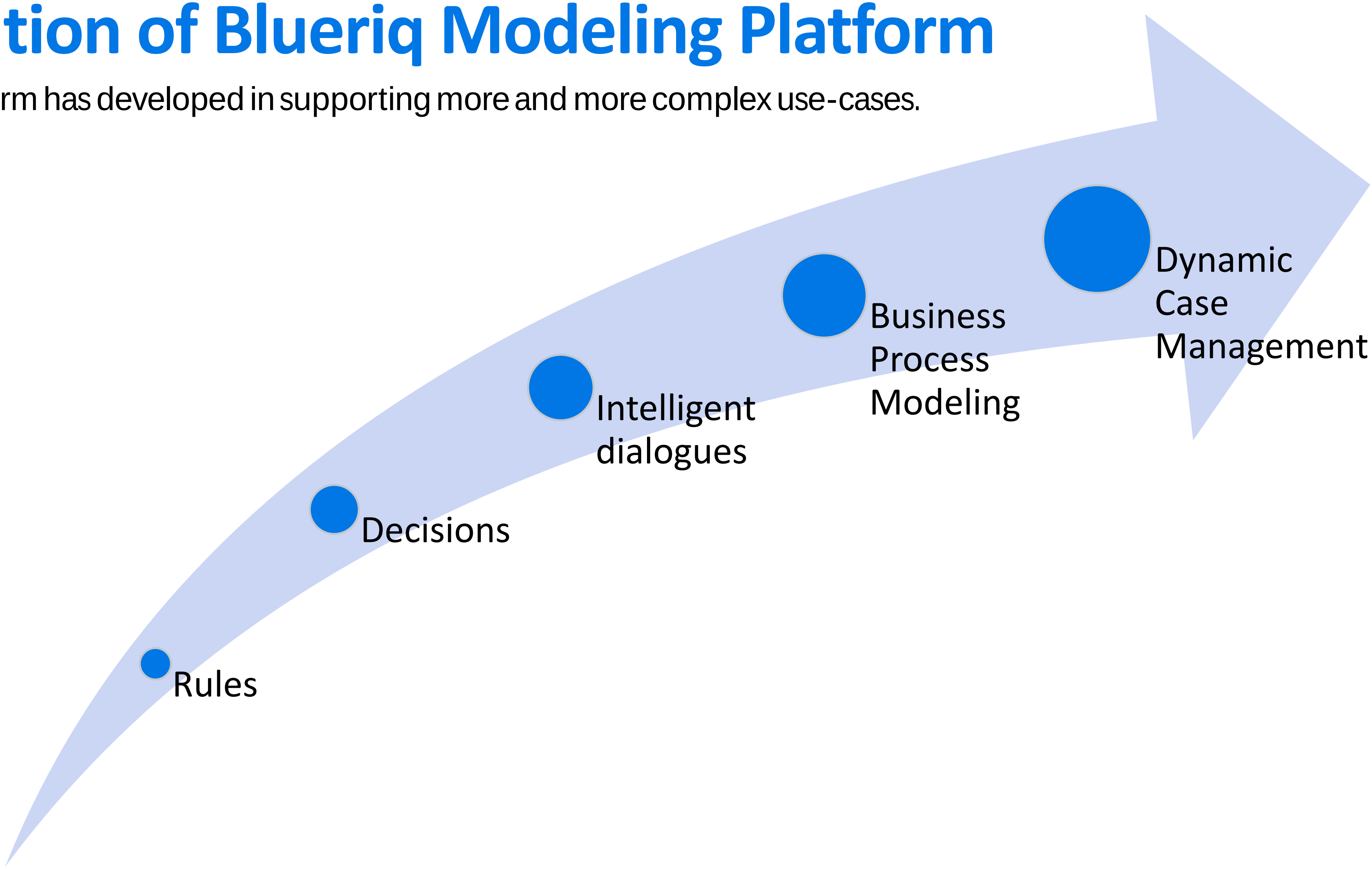
Releases

- Blueriq 10
- Blueriq 11
- Blueriq 12
- Blueriq 13

Improvement tips

Evolution of Blueriq Modeling Platform

Our platform has developed in supporting more and more complex use-cases.



Categories

Though not official sorted into categories by the product development team, we can distinguish certain traits of these changes.

Keeping up with technology

Ensuring we keep up to date with technological developments.

Time to market

Increasing the speed of development and delivery.

Quality

Having means to determine what the state of the model and resulting application is.

Efficiency

Needing less time to do the activities related to the Blueriq products.

Usability

Ensuring a user-friendly interaction with Blueriq products.

Business Engineering

Offering an ever-growing toolset to professionals in order to solve business problems by creating a knowledge model that can be executed.

Integrating Blueriq

Having means to integrate Blueriq into a landscape.

Separation of concerns

Ensuring that functionality, responsibility and implementation of components are separated.

Easy updates

Lowering the bar to adopt new versions and updates.

For each version we´ll be discussing the following topics.

Release version

Studio

- New features
- Enhancements
- Usability
- Unit testing

Runtime

New products

Front-end

Removed

Blueriq 10

Studio

- New features
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- Usability
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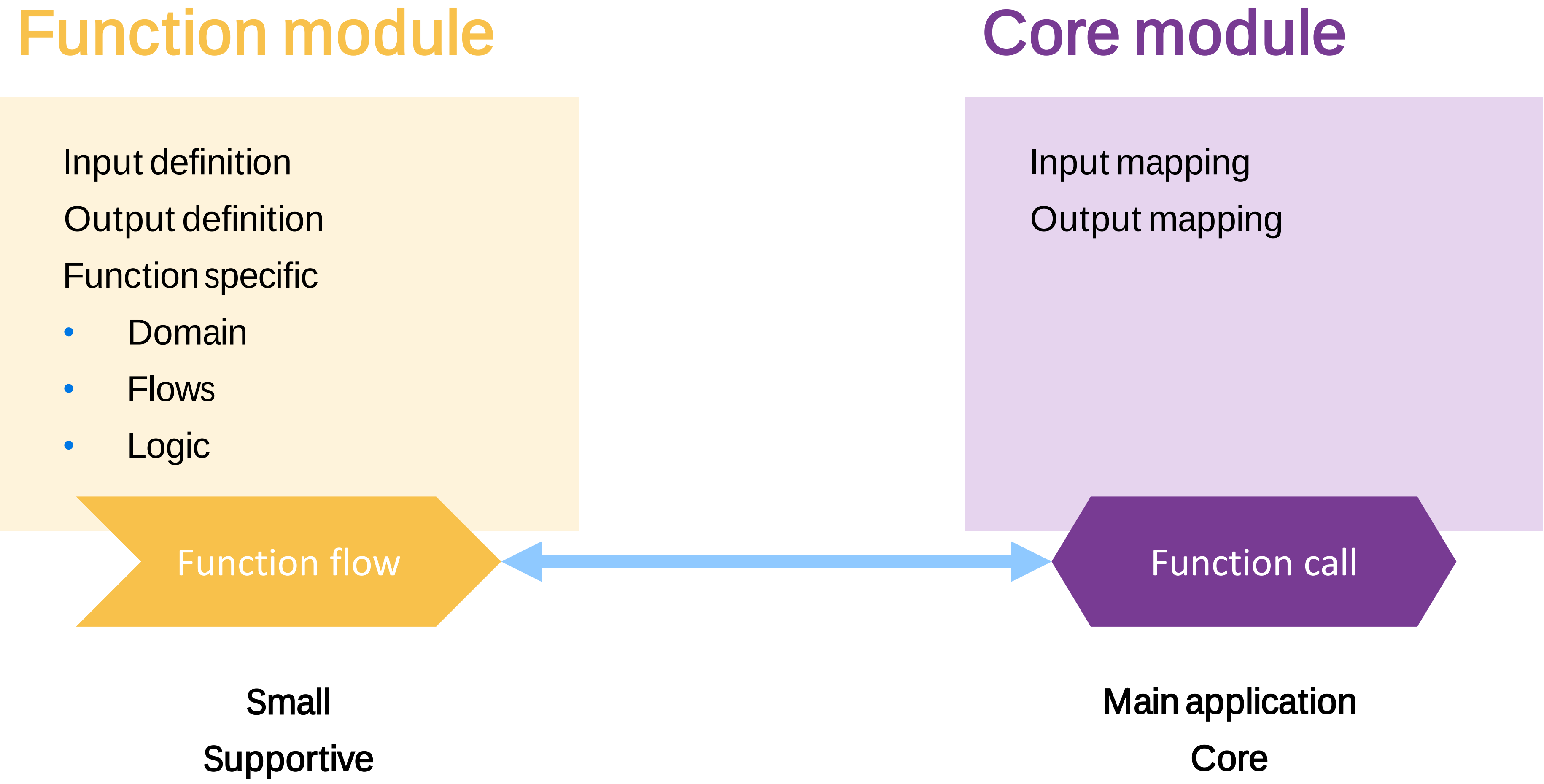
New products

Front-end

Removed

Function flows



Function module

Input definition

Output definition

Function specific

- Domain
- Flows
- Logic

Function flow

Small

Supportive

Core module

Input mapping

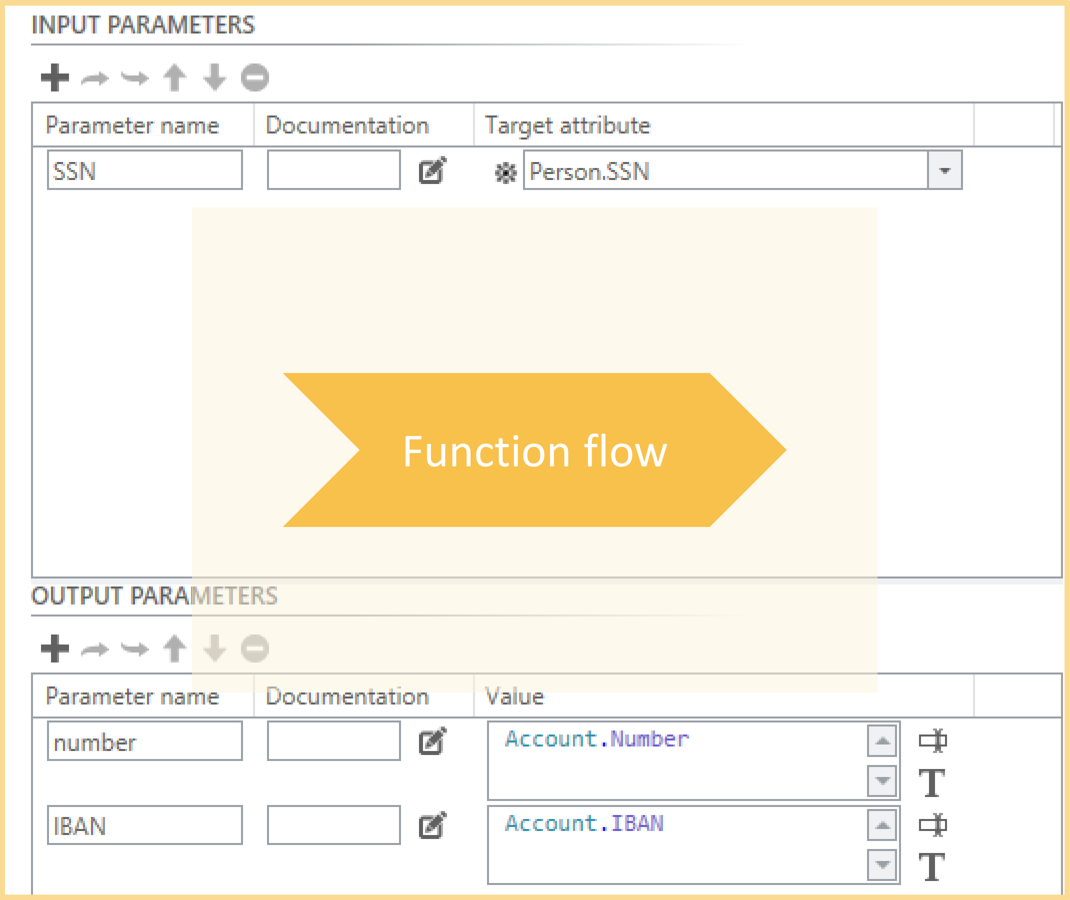
Output mapping

Function call

Main application

Core

Function flows

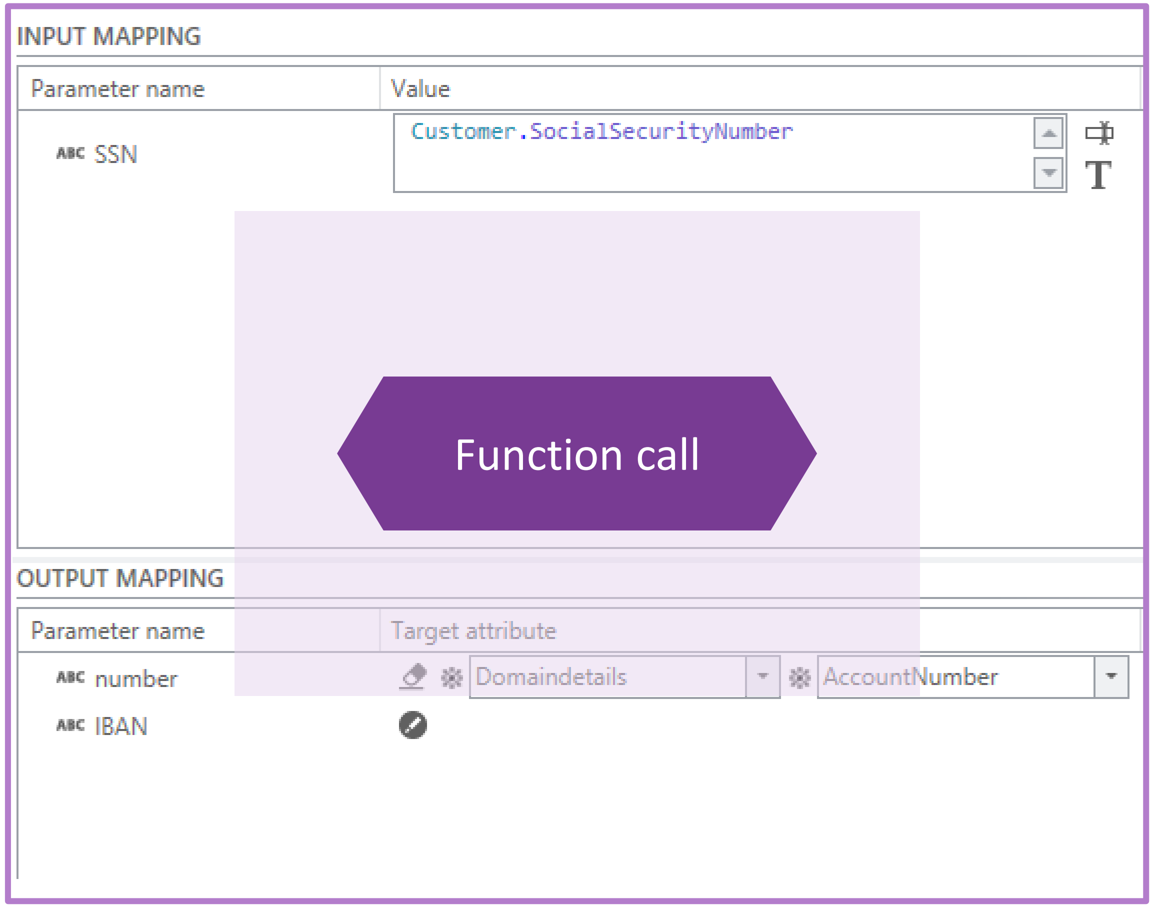


INPUT PARAMETERS

Parameter name	Documentation	Target attribute
SSN		Person.SSN

OUTPUT PARAMETERS

Parameter name	Documentation	Value
number		Account.Number
IBAN		Account.IBAN



INPUT MAPPING

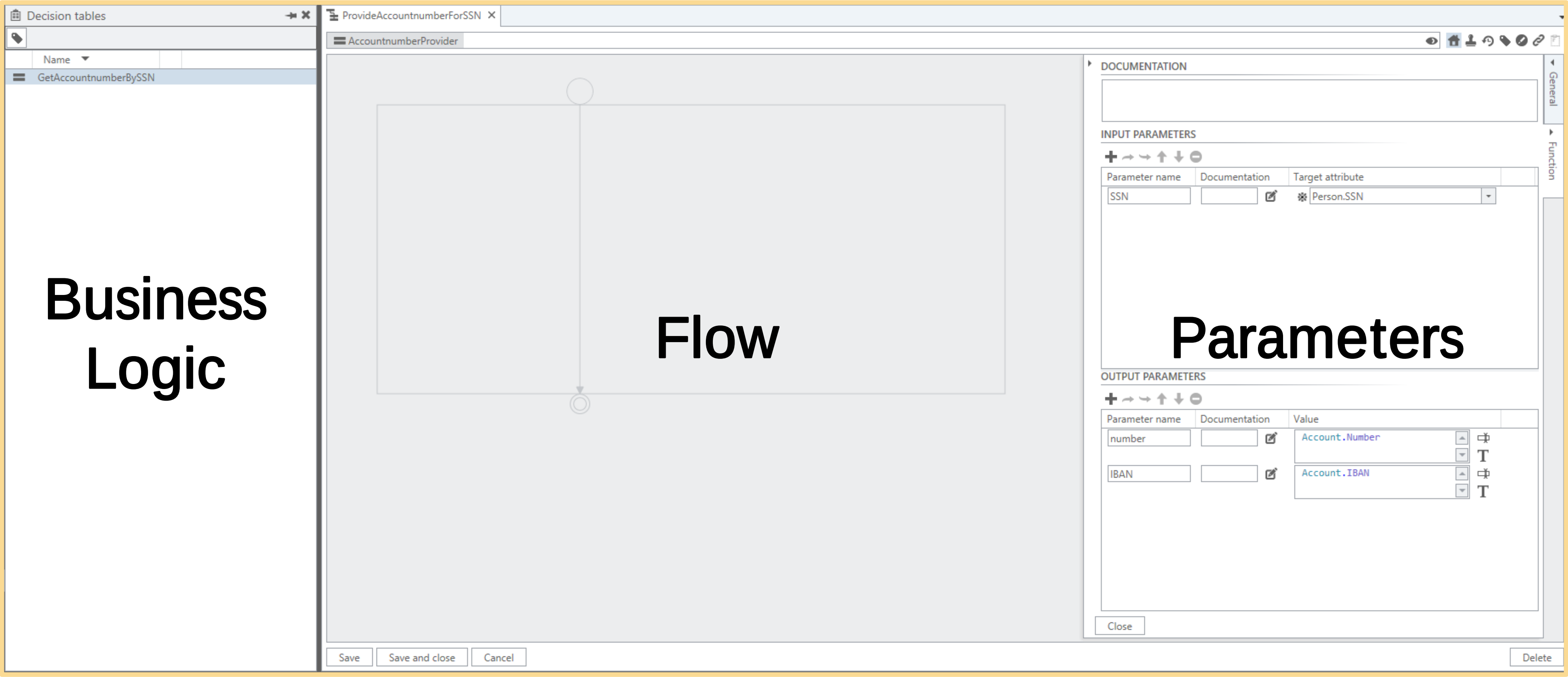
Parameter name	Value
ABC SSN	Customer.SocialSecurityNumber

OUTPUT MAPPING

Parameter name	Target attribute
ABC number	Domaindetails AccountNumber
ABC IBAN	

Function flows

Function module



GetAccountnumberBySSN

AccountnumberProvider

DOCUMENTATION

INPUT PARAMETERS

Parameter name	Documentation	Target attribute
SSN		Person.SSN

OUTPUT PARAMETERS

Parameter name	Documentation	Value
number		Account.Number
IBAN		Account.IBAN

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Blueriq 10

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Removed

Page valid

- **New system attribute: `system.pagevalid` (boolean)**
  - The value of this boolean is:
    - **unknown** if a page has never been validated
    - **false** if the page has been validated and it contains errors (and/or warnings that are shown for the first time)
    - **true** if the page has been validated and all validations are passed successfully
  - The attribute value is recalculated **with every refresh.**
- **Example:** single page design calculation
- **Example:** custom message

Flow on refresh validation

Enhanced with a new parameter

This enables you to let the Runtime validate before of after flowing.

Before flowing (default < 10)

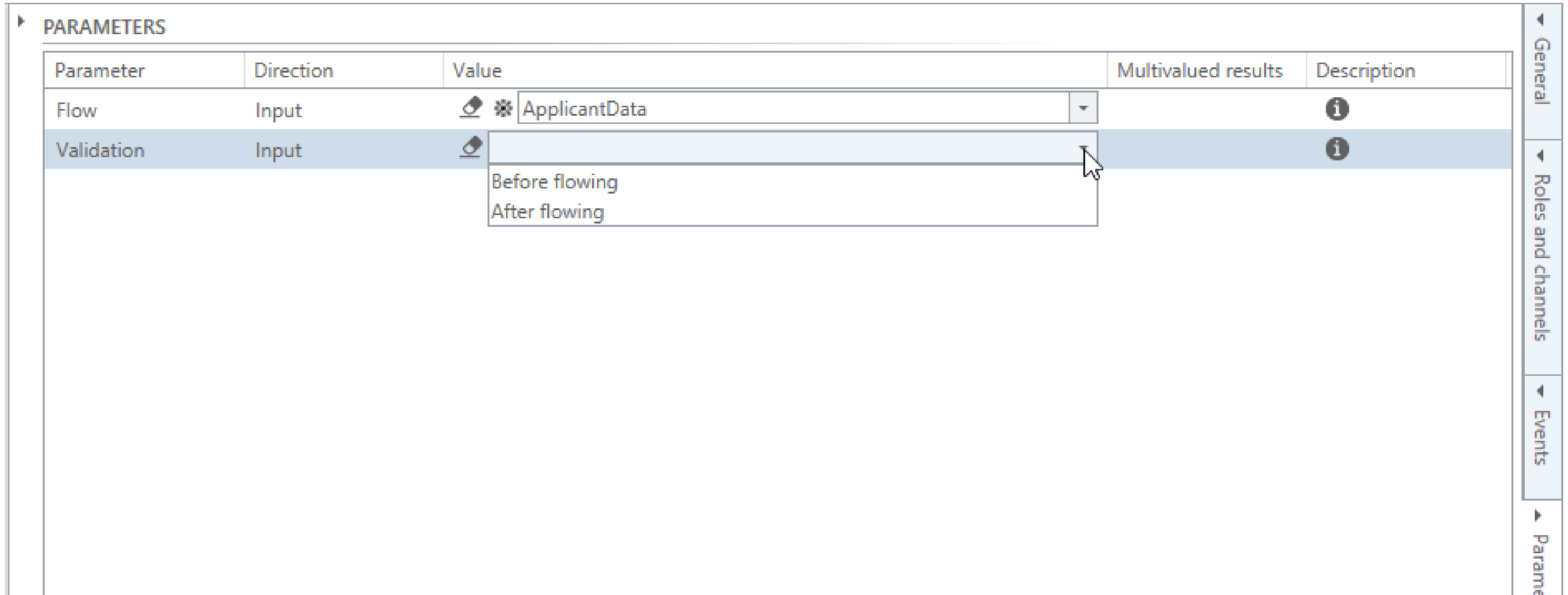
The **page** will be validated before the flow is triggered.

The flow will **not be triggered** if there are errors on the page.

After flowing

The **page** will be validated after the flow is triggered.

The flow **will be triggered** regardless of errors on the page.



PARAMETERS

Parameter	Direction	Value	Multivalued results	Description
Flow	Input	ApplicantData		
Validation	Input			

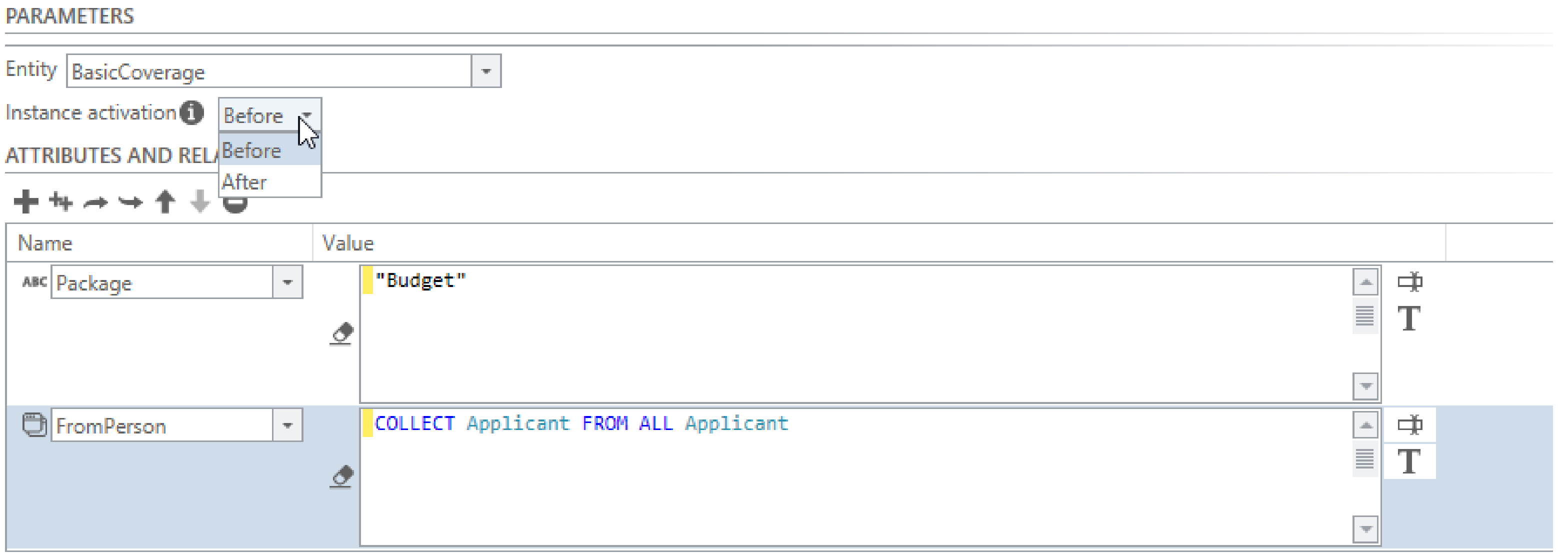
Instance activation

Blueriq has a specific way of activating instances when executing servicecalls.

Instance Create

Instance activation

Select whether the created instance is activated before or after setting the attributes and relations.



PARAMETERS

Entity: BasicCoverage

Instance activation: Before

ATTRIBUTES AND REL

Name	Value
Package	"Budget"
FromPerson	COLLECT Applicant FROM ALL Applicant

Instance activation

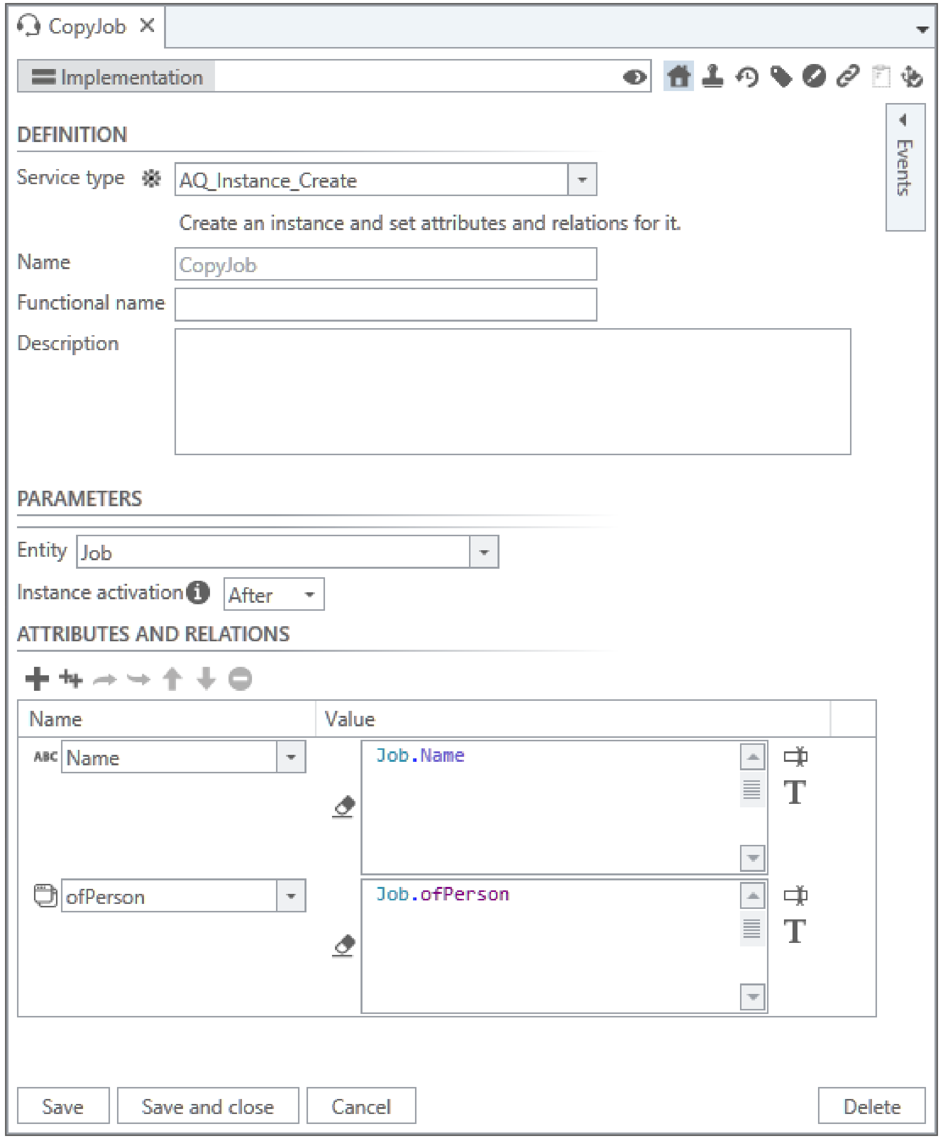
Blueriq has a specific way of activating instances when executing servicecalls.

Instance Create

Copy

- *Current active* Job instance
- *Create new* Job instance
- Instance activation is set to ‘After’

- **New Job** can now be set with `Job.Name` and `Job.ofPerson` from the **Current active Job**



DEFINITION

Service type: AQ_Instance_Create

Create an instance and set attributes and relations for it.

Name: CopyJob

Functional name:

Description:

PARAMETERS

Entity: Job

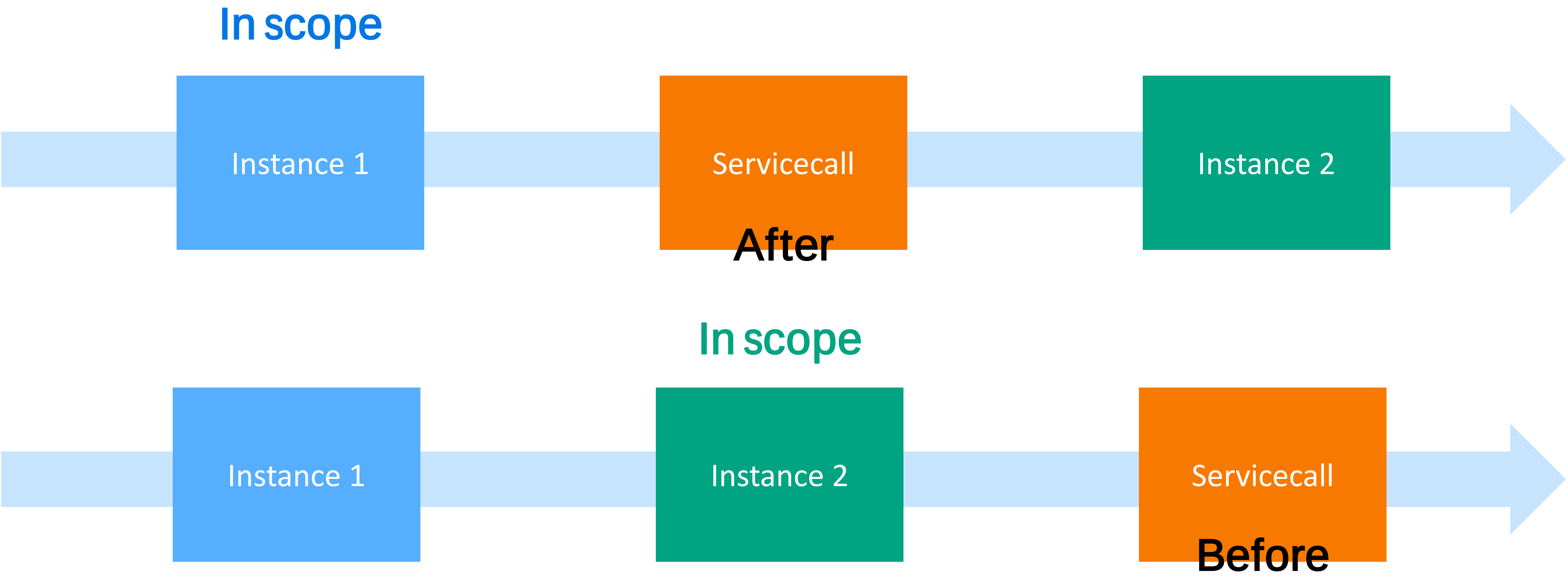
Instance activation: After

ATTRIBUTES AND RELATIONS

Name	Value
Name	Job.Name
ofPerson	Job.ofPerson

Instance activation

The impact of instance activation on scoping within the Runtime.



Instance activation

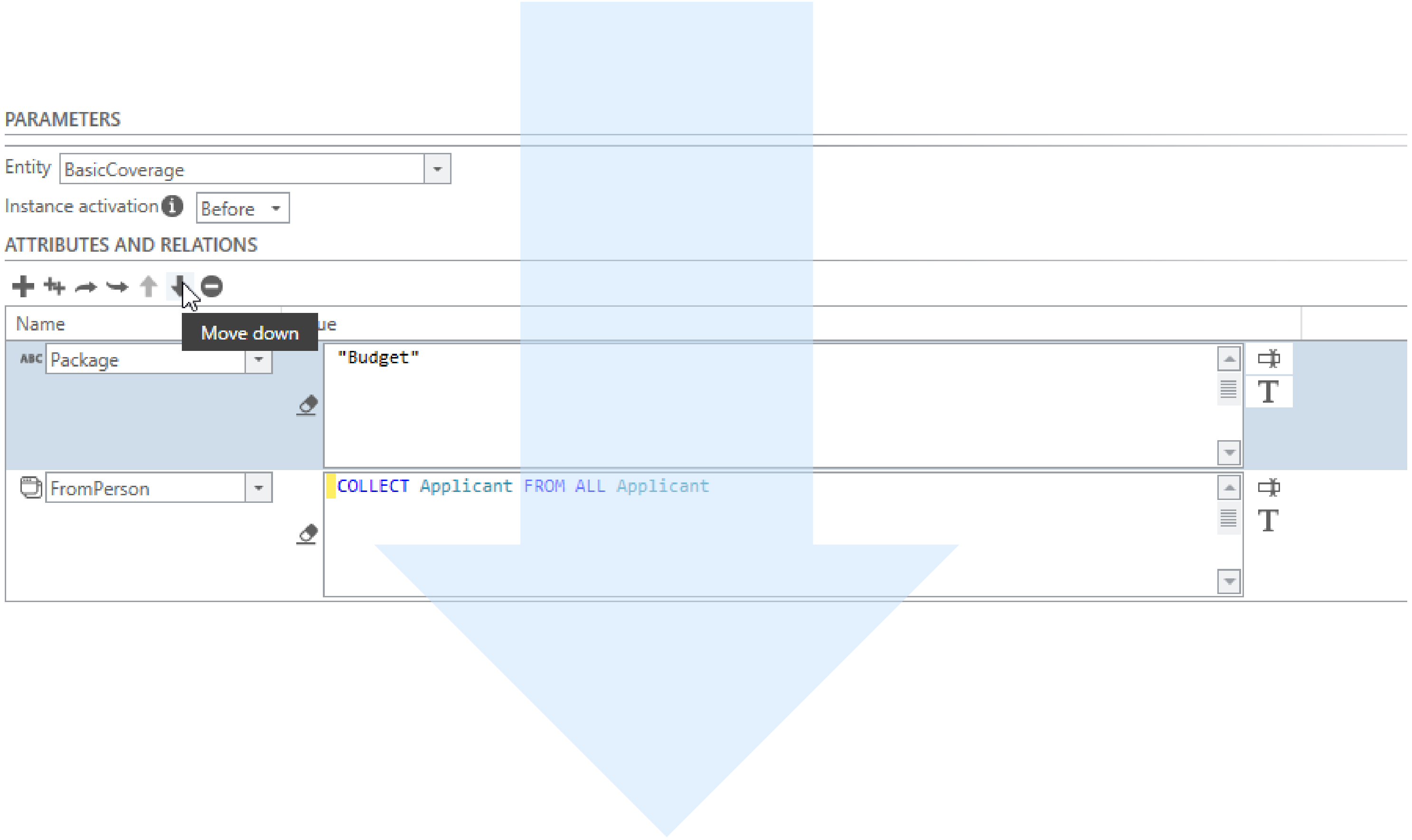
The impact of instance activation on scoping within the Runtime.

Instance Create

Instance Update

These services **execute all lines from top to bottom**.

Attributes and relations will be **set in the order that you specify**.



PARAMETERS

Entity: BasicCoverage

Instance activation: Before

ATTRIBUTES AND RELATIONS

Name	Value
Package	"Budget"
FromPerson	COLLECT Applicant FROM ALL Applicant

SOAP service

The AQ_WebserviceClient is deprecated and will be removed in release 12. In exchange the SOAP and REST clients have been introduced.

AQ_SoapServiceClient replaces AQ_WebserviceClient

This enables Blueriq to use underlying Spring templates for both types of webservice connectors.

Example project available

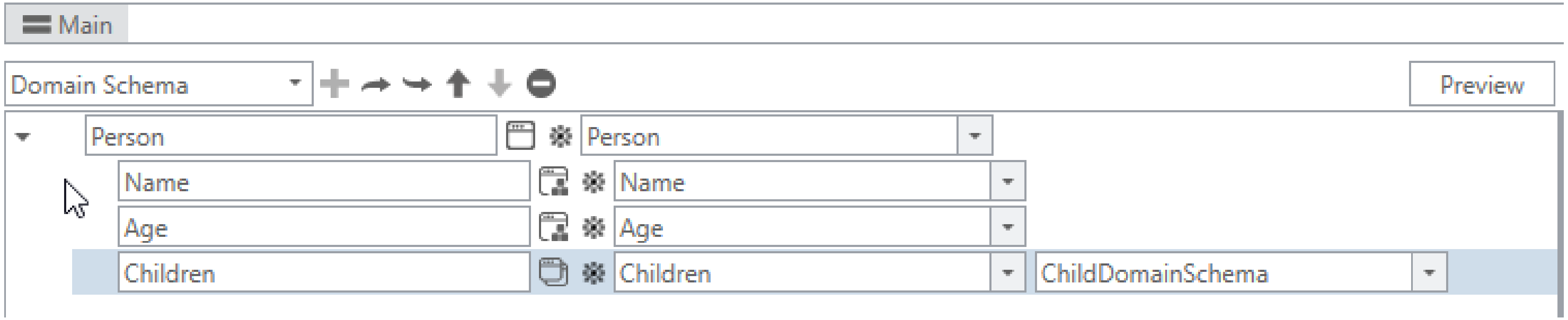
In case you need a reference in what to do and how it works.

Features

- Basic authentication
- Timeout setting
- UsernameToken Profile V1.0
- X.509 Token Profile V1.0
- Signing
- Timestamp
- Encryption
- Logging request / response
- Exception handling for socket timeout
- Exception handling for SoapFault
- Map SoapFault to profile
- Sending and receiving attachments
- Dynamic urls

REST service – Subdomain schema

As an upgrade to the REST functionality **it is now possible to reuse domain schemes** within other domain schemes.



Person	Person	
Name	Name	
Age	Age	
Children	Children	ChildDomainSchema

REST service – Behavior

The behavior of the REST service has been changed in several ways.

	Unnamed JSON arrays	Unknown handling

Before	{
	“rates”: [{
	"period": "Flexibel",
	"rate": 1.9,
	"publicationDate": "Oct 4, 2016 12:00:00 AM"
	},
	…
		Excluded
		An attribute with an unknown value was **not included** in a REST call.

Now	[{ "period": "Flexibel", "rate": 1.9, "publicationDate": "Oct 4, 2016 12:00:00 AM" }, …	**Included as null** An attribute with a **USER set** unknown value will now be included in the message with value **null**

Blueriq 10

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New products

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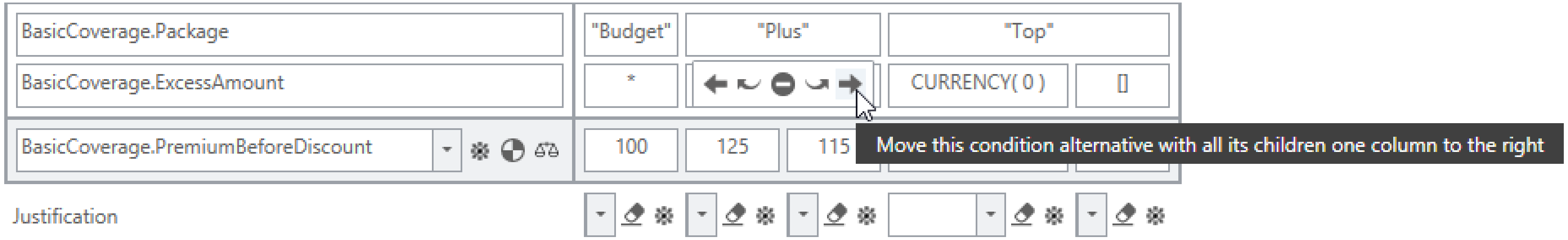
Removed

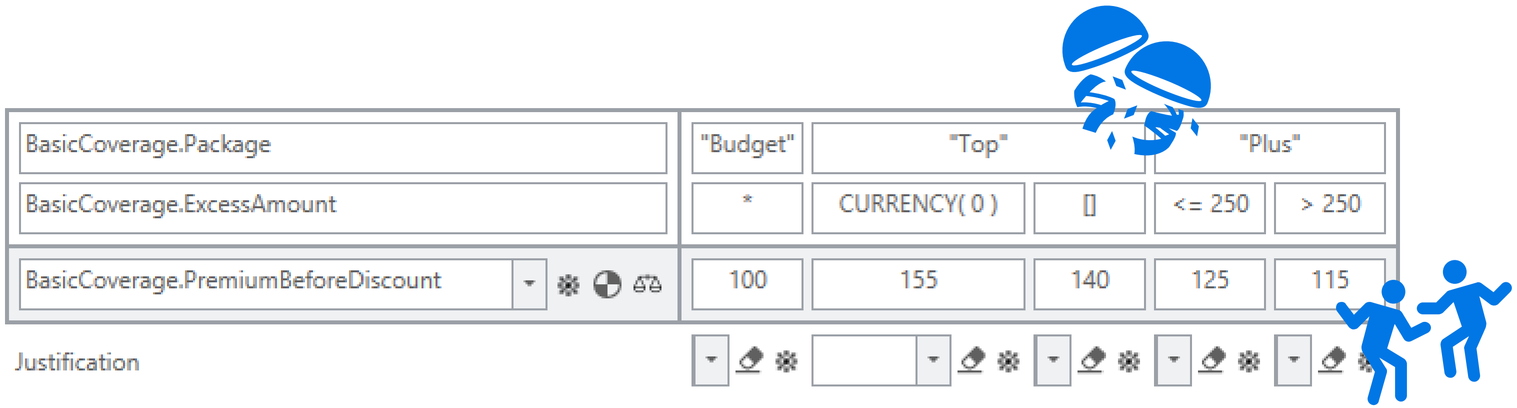
Reordering decision tables

It is now possible to rearrange elements of the decision table without having to add and remove them.



BasicCoverage.Package	"Budget"	"Plus"		"Top"	
BasicCoverage.ExcessAmount	*			CURRENCY(0)	[]
BasicCoverage.PremiumBeforeDiscount	100	125	115		
Justification					

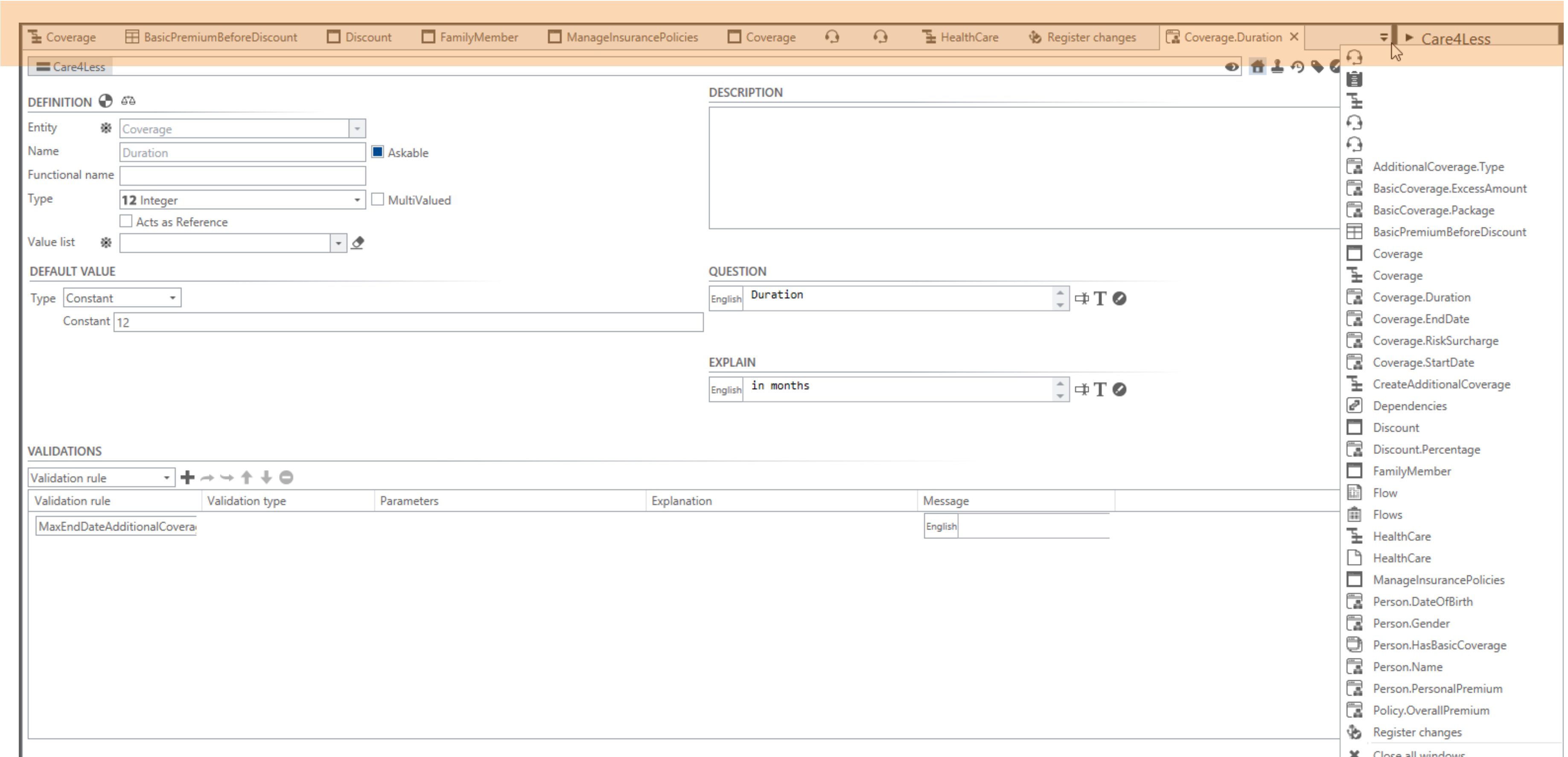
Move this condition alternative with all its children one column to the right



BasicCoverage.Package	"Budget"	"Top"		"Plus"	
BasicCoverage.ExcessAmount	*	CURRENCY(0)	[]	<= 250	> 250
BasicCoverage.PremiumBeforeDiscount	100	155	140	125	115
Justification					

Saving open tabs

Studio will also remember which tabs you had open when switching modules. No more reopening when switching between implementation and mapping modules.



DEFINITION

Entity: Coverage

Name: Duration ☑ Askable

Functional name:

Type: 12 Integer □ MultiValued

□ Acts as Reference

Value list:

DEFAULT VALUE

Type: Constant

Constant: 12

DESCRIPTION

QUESTION

English: Duration

EXPLAIN

English: in months

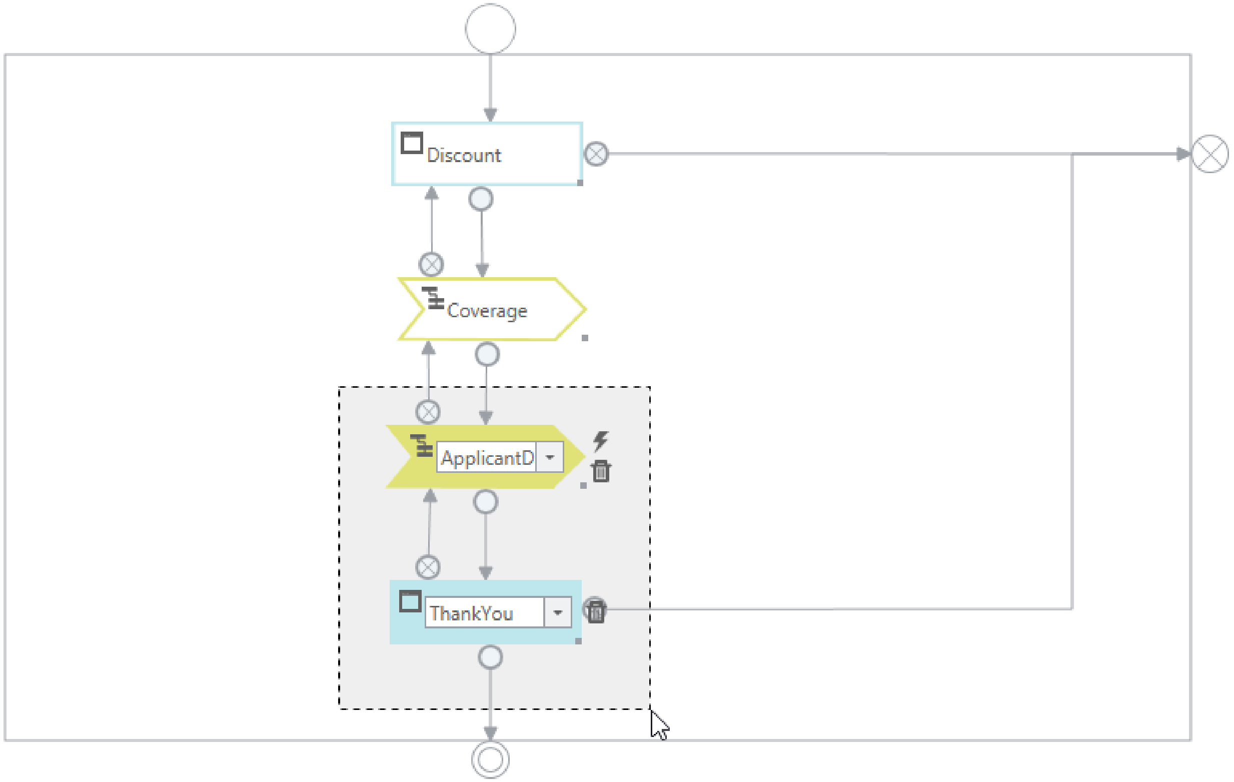
VALIDATIONS

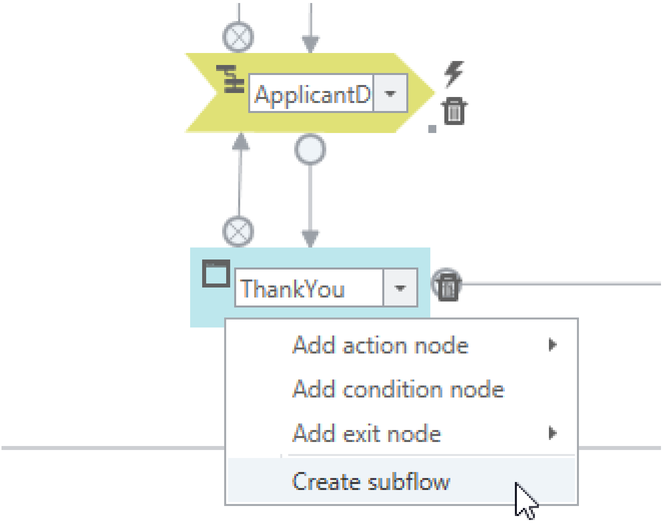
Validation rule

Validation rule	Validation type	Parameters	Explanation	Message
MaxEndDateAdditionalCovera				English

Create reusable flow parts

No longer having a hassle with creating subflows because of this new feature. You can now select elements in a flow and quickly create a subflow on the spot.





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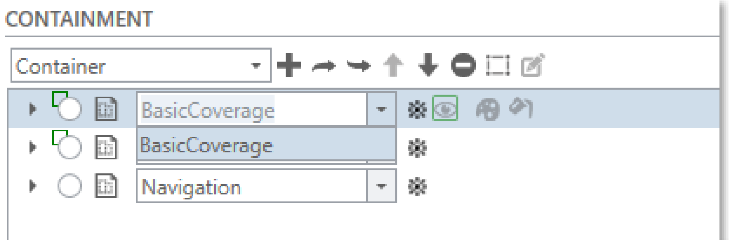
Easily expand and collapse page elements

You no longer have to open each container by hand. The expand all helps opening up elements on a page so you can get a good overview of what's in store.

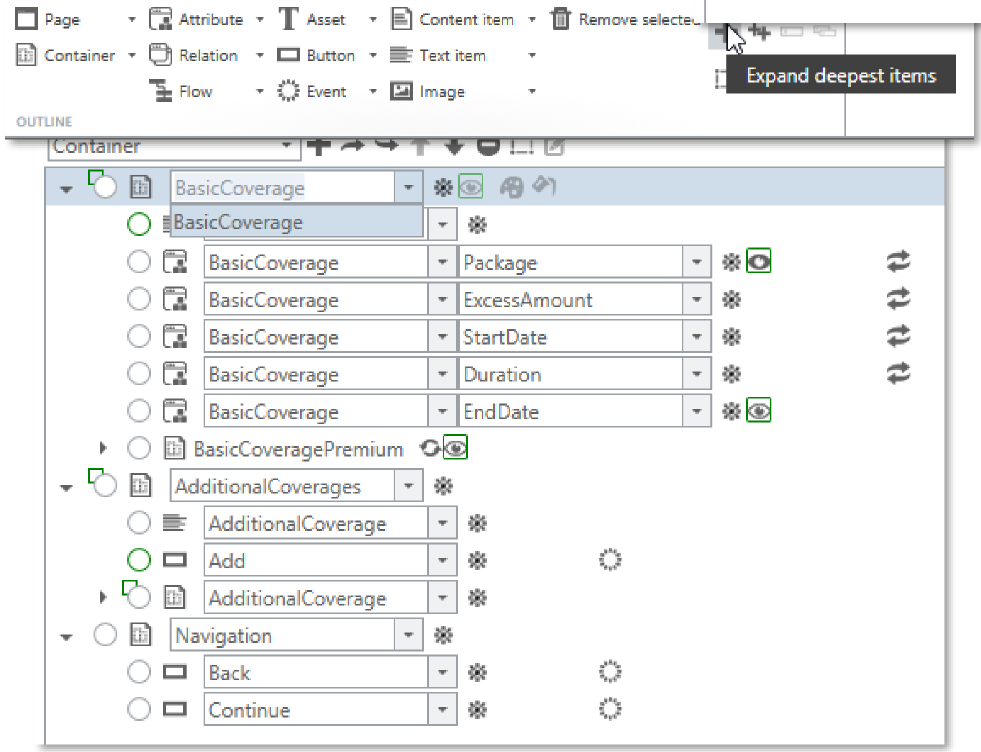


CONTAINMENT

Container

- BasicCoverage
- BasicCoverage
- Navigation

Expand deepest



Page | Attribute | Asset | Content item | Remove selecte
Container | Relation | Button | Text item
Flow | Event | Image

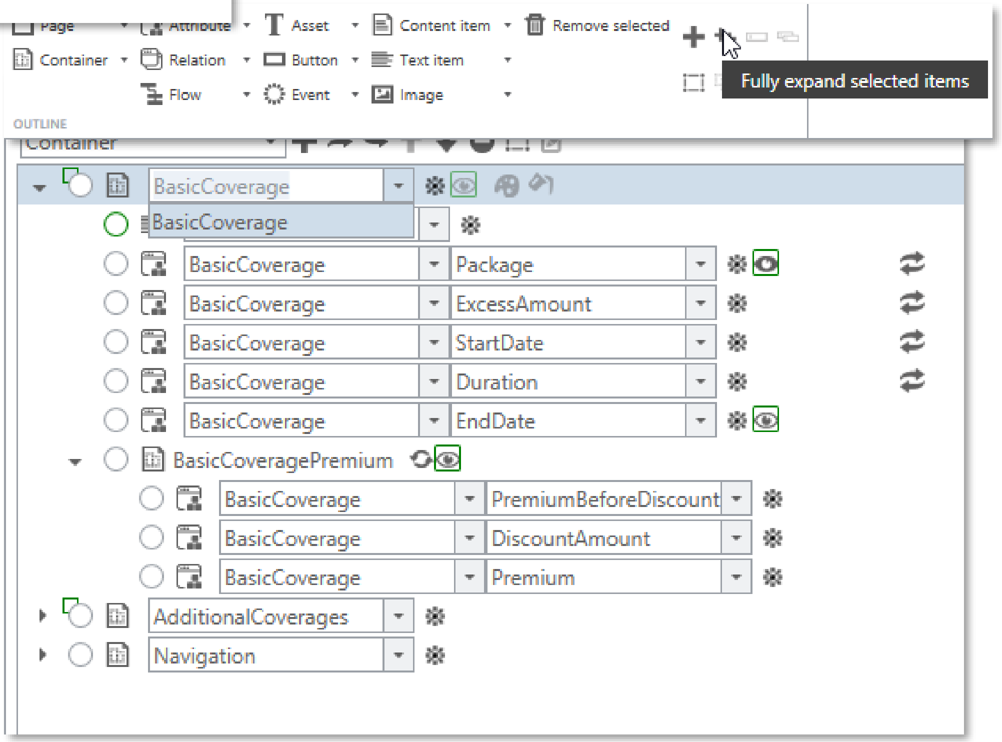
Expand deepest items

OUTLINE

Container

- BasicCoverage
  - BasicCoverage
  - BasicCoverage | Package
  - BasicCoverage | ExcessAmount
  - BasicCoverage | StartDate
  - BasicCoverage | Duration
  - BasicCoverage | EndDate
  - BasicCoveragePremium
- AdditionalCoverages
  - AdditionalCoverage
  - Add
  - AdditionalCoverage
- Navigation
  - Back
  - Continue

Fully expand selected



Page | Attribute | Asset | Content item | Remove selected
Container | Relation | Button | Text item
Flow | Event | Image

Fully expand selected items

OUTLINE

Container

- BasicCoverage
  - BasicCoverage
  - BasicCoverage | Package
  - BasicCoverage | ExcessAmount
  - BasicCoverage | StartDate
  - BasicCoverage | Duration
  - BasicCoverage | EndDate
  - BasicCoveragePremium
    - BasicCoverage | PremiumBeforeDiscount
    - BasicCoverage | DiscountAmount
    - BasicCoverage | Premium
- AdditionalCoverages
- Navigation

Unit testing

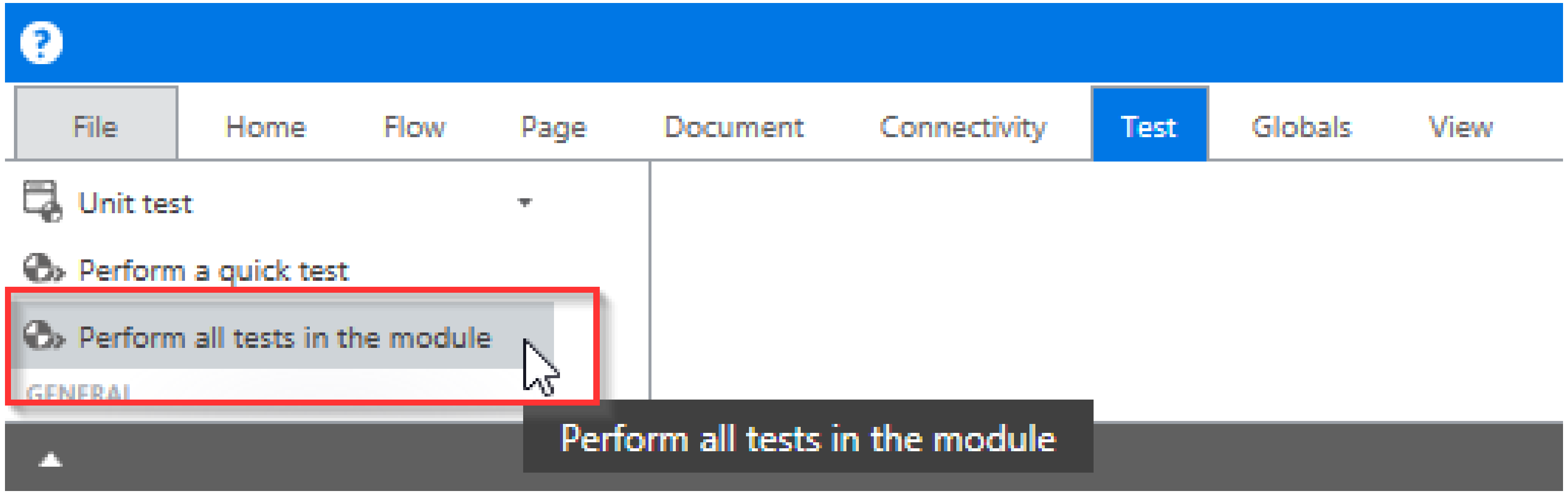
When creating a model it is essential that you can validate its functioning. Unit tests can be used to validate logic components in the model without the need of the Runtime.

Execute all unit test

All test will be executed. The result is an overview of all unit test results.

Profile creation

Improvements have been done to the adding and removing of instance in the test profile.



Pro tip!

Give unit tests a clear name. It should describe the logic being tested and the value that is validated.

Blueriq 10

Studio

- New features
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Runtime

New products

Front-end

Removed

Runtime

A lot has been done to the Runtime as well. Though these changes are technical of nature, some of them could be relevant to the solution you're creating.

Shortcuts for .NET

Introducing shortcuts for .NET based applications.

Cross-site scripting whitelist

Increase security measures by explicitly listing what IS allowed in communication with the Runtime.

Stable runtime keys

The Runtime now handles page models with robust identifiers.

Encrypt passwords

Passwords within property files can now be encrypted with BlueriqEncryptor.

Persistence API

Data can now be stored in any matter you want. Herefore a translation can be made using this API.

Blueriq 10

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New products

Front-end

Removed

New products

During this major releases lifecycle, two new products have been added to the Blueriq ecosystem.

blueriq Control Center

Managing projects

The Control Center allows you to manage and control projects and their modules from a central point.

blueriq Model Analyzer

Static model analysis

A rule-based plugin to SonarQube that is able to measure the quality of models.

Rule examples

- Elements in flow
- Expression complexity
- Diamond module structure
- Gaps in decision tables
- Count number of complex expressions
- And more…

Blueriq 10

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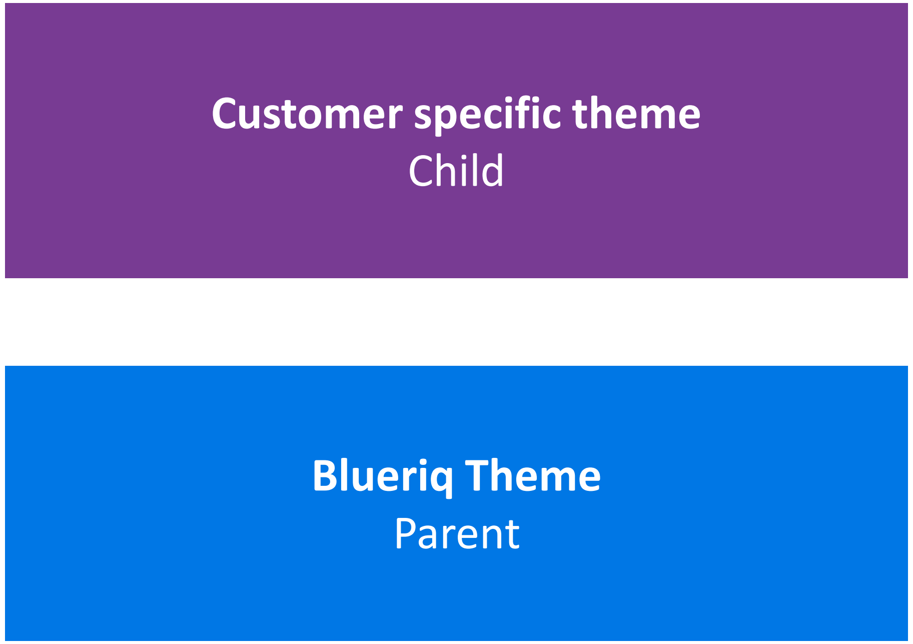
New products

Front-end

Removed

Deprecation of MVC UI



Customer specific theme
Child

Blueriq Theme
Parent

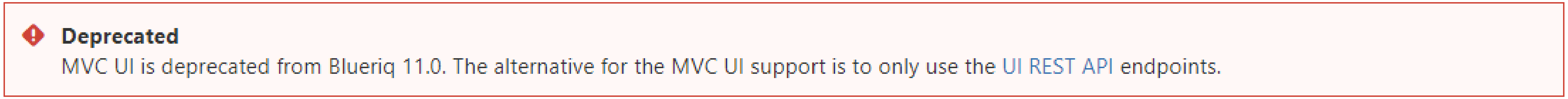
No longer shipped

MVC UI will no longer be shipped with Blueriq starting from version 11.

Still usable though…

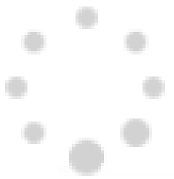
This doesn’t mean you can’t still use your own MVC UI theme.

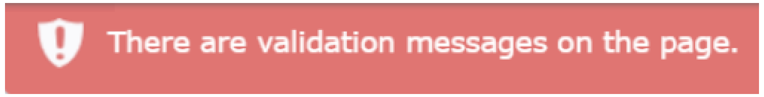
Our community has more information about the details.



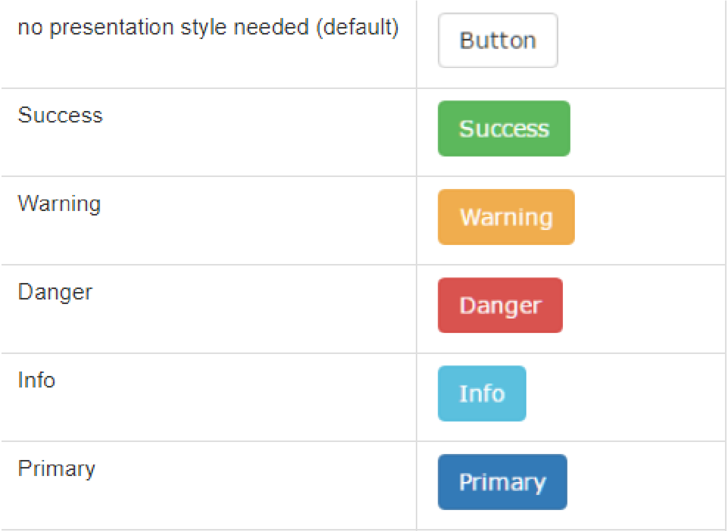
Deprecated
MVC UI is deprecated from Blueriq 11.0. The alternative for the MVC UI support is to only use the UI REST API endpoints.

New elements





There are validation messages on the page.



no presentation style needed (default)	Button
Success	Success
Warning	Warning
Danger	Danger
Info	Info
Primary	Primary

Loading spinner

When transitioning pages takes longer than 150 ms a loading spinner will be shown.

Toast message

If there are invalid elements on the page, but not in view, a toast message will now appear.

Contextual styling

The combination of presentation style and element type determine the result.

Blueriq 10

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New products

Front-end

Removed

No longer available

All (good) things come to an end. These elements are all removed in the major 10 version.

AQ Instance Iterator

AQ Instance Selector

AQ Service Iterator

V8 Webservices

Labs

ODBC connections

See deprecated features for all deprecated features.