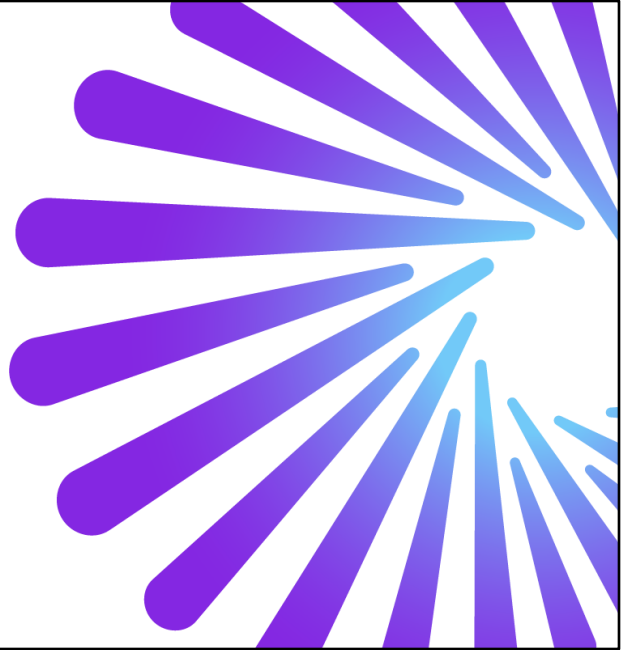


Custom Object Configurations IFS Cloud

IFS Academy



Welcome

- Timings
- Safety
- Ground rules
- Objectives



Agenda

01 Configuration Mapping

02 Aurena Page Designer

03 Extending Standard Pages

04 Adding new Pages

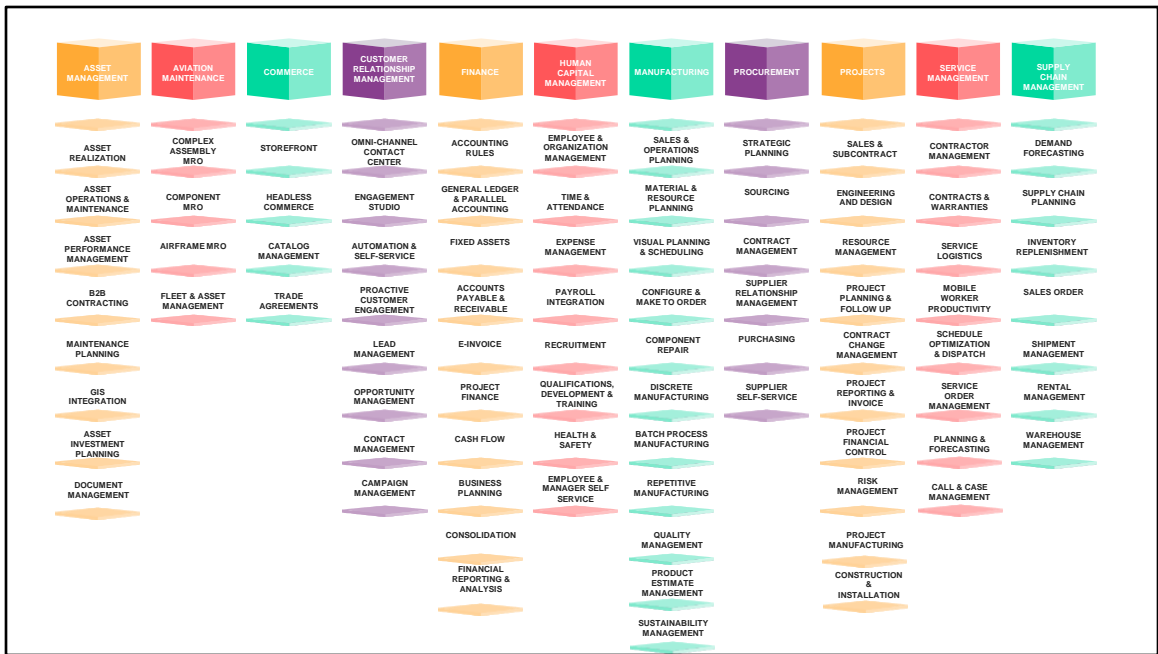
05 Custom Actions

06 Custom Commands

07 Configuration Contexts

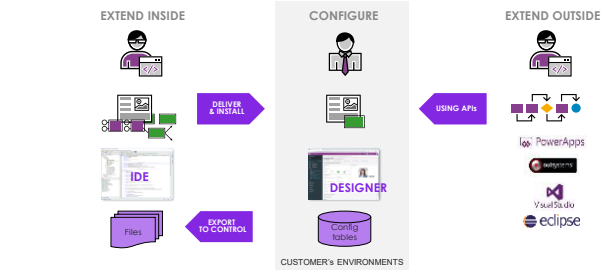
08 Navigator Designer





Tailor And Extend Customer Solution

Concepts And Terminology



Tailor And Extend

When To Choose What

CONSIDER CONFIGURATION WHEN...

- Changes are small
- Changes are temporary
- Preferable that changes are made by consultants / super users

CONSIDER EXTEND ON INSIDE / CUSTOMIZATION WHEN...

- New capabilities consisting of several objects, logic, UI
- Changes require overriding existing logic
- Changes require writing an amount of SQL or PLSQL code/script

EXTEND ON THE OUTSIDE WHEN...

- Building workflows/apps that interacts with multiple applications
- You want to surface functionality through a 3rd party UX

Gets faster to do, and easier to carry forward with IFS Cloud and declarative development

Good practice to export and store in the customer repository



IFS EE And Aurena Configuration Mapping



Concept Mapping

IFS IEE – IFS Cloud

IFS EE	IFS Cloud	Upgraded
Custom Fields	Yes Custom Attribute + Page Configuration	<ul style="list-style-type: none"> The attributes with definition and storage are upgraded Layout needs to be redone Assumes the pages in IFS Cloud are based on same data source as in IFS Enterprise Explorer
Custom Logial Units	Yes	Yes
Custom Page	Yes	No (redo)
Custom Enumeration	Yes	Yes
Custom Screen Layout + Page Properties	Yes Aurena Page Designer	No (redo)
Custom Menu	Partly Command + Custom Action	No (redo)
Custom Tabs	Partly (not possible to add other pages as tabs)	No (redo)



Concept Mapping

IFS IEE – IFS Cloud

IFS EE	IFS Cloud	Upgraded
Conditional Fields	No	No
Information Cards	No	No - Deprecated
Custom Events	Yes	Yes
Event Actions	Yes	Yes (URL:s needs to be updated manually)
Application Configuration Packages	Yes	Yes

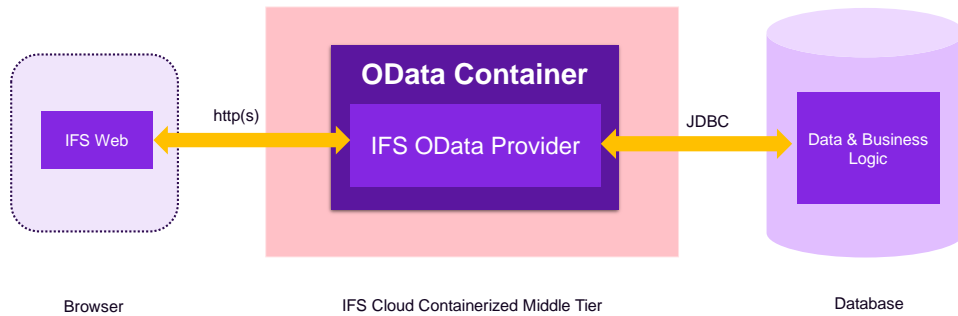


Introduction to Aurena Architecture



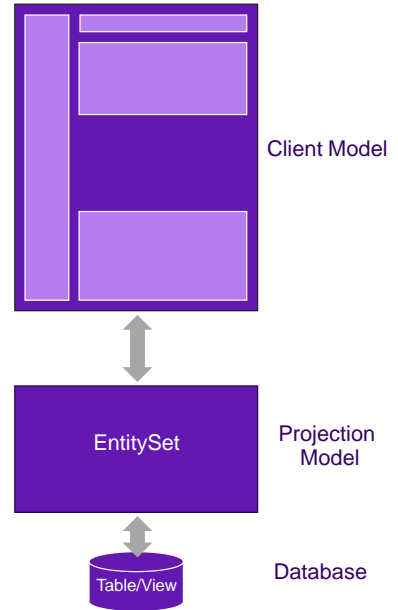
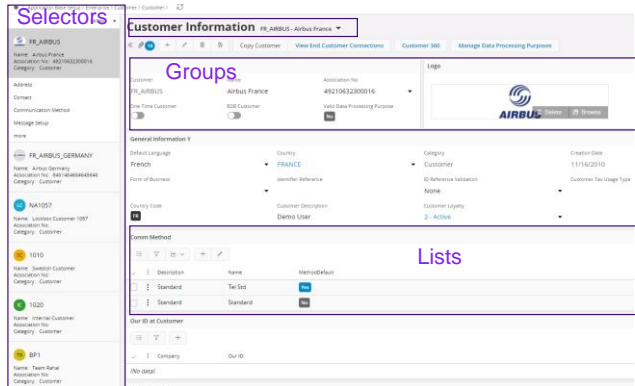
Architecture Overview

Key Components



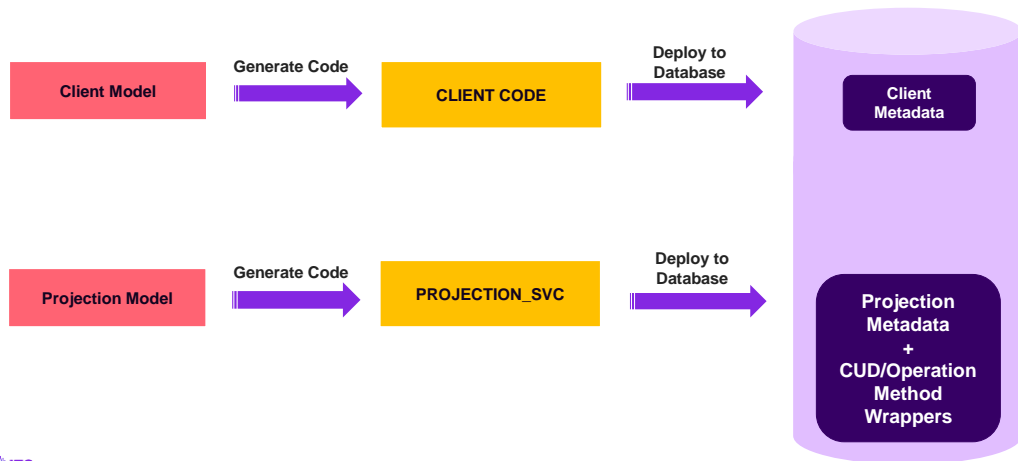
1. IFS Web : Is the client side runtime component for Aurena
2. IFS Odata Provider: Is the middle tier component that exposes services to the client (by acting as a gateway to the DB)
3. The Aurena client interacts with the data and business logic in the database via the odata provider

IFS Cloud Terminology



Code Generation

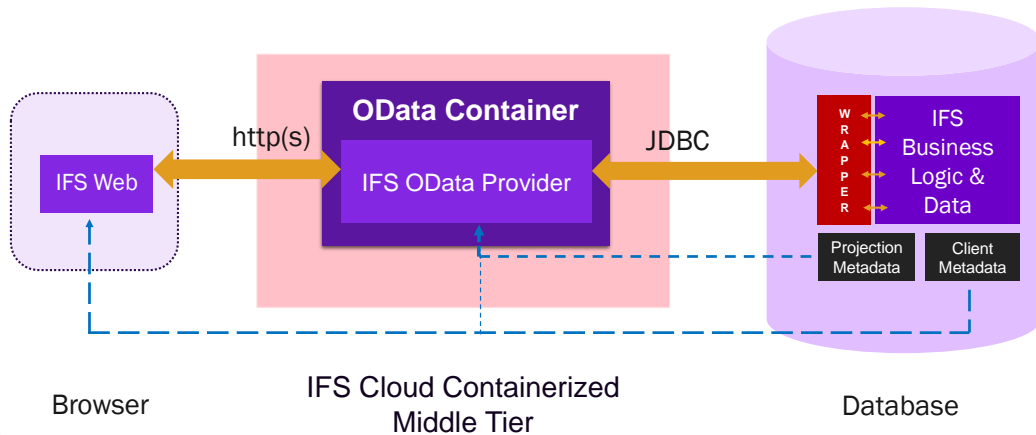
Metadata For Runtime



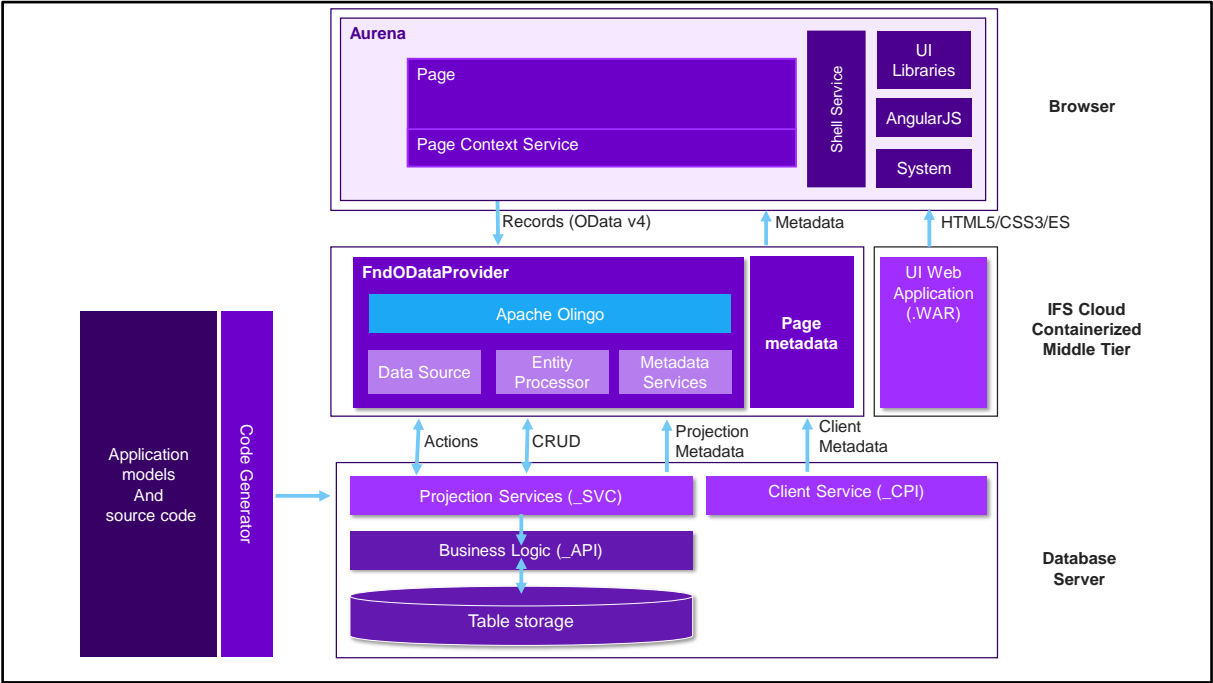
- *.client file results in creating *_CPI plsql package in the database that generates the metadata to define the client.
- *.projection file results in *_SVC plsql package that generates the projection metadata used by IFS OData Provider to create the database request. This package also contains the wrapper methods for CRUP operations.

Architecture Overview

Runtime Metadata



- Metadata stored in the DB are used by client runtime and OData provider
- Odata provider does not call the LU's New, Modify, Delete directly
- Instead they are wrapped by CRUD_* methods in Projection SVC package
- All access to the DB LU logic (_APIs) is done via the SVC package



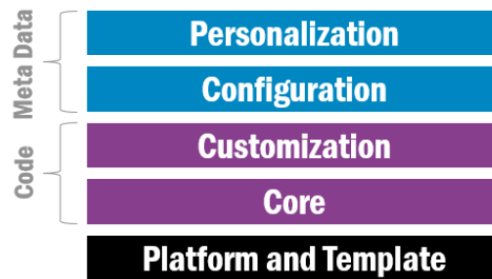
Introduction to Aurena Page Designer



Page Designer

Technical Overview

- The Page Designer is a tool to modify the standard layout and behavior of application pages in IFS Cloud
- Applied changes to pages are stored as configurations and are application wide



Page Designer

Functionalities

- Add Custom Attributes to a page
- Edit Page Labels, Field Labels and section Labels
- Hide Fields
- Set fields to mandatory
- Change the placing of fields
- Add new elements to a page
- Rearrange elements on pages
- Configure steps in assistants



Aurena Page Designer

Configured Page

Relationship Management > Customer Relationship Management > Business Lead > Business Lead

Business Lead

Cancel New

General Info

Lead ID	Name	Association No	Stage
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Source	Potential	Default Language	Country
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Market	Form of Business	Annual Revenue	Currency
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Main Contact	Creation Date	Duplicate Lead	
<input type="text"/>	<input type="text"/>	<input type="text"/>	

Addresses

1	ID	Address 1	Address 2	Address 3	Address 4	Address 5	Address 6
(No data)							

Contacts

Standard page



Relationship Management > Customer Relationship Management > Business Lead > Business Lead

Business Lead Information

Cancel New

General Information

Lead ID	Name	Association No	Stage
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Source	Potential	Language	Country
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Market	Form of Business	Annual Revenue	Currency
<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
Main Contact	Creation Date		
<input type="text"/>	<input type="text"/>		

Addresses

1	ID	Address 1	Address 2	Address 3	Address 4	Address 5	Address 6
(No data)							

Contacts

Configured page

Section label is changed

Page name is changed

Field is set to mandatory

Field 'Duplicate Lead' is hidden

Page Designer

Introduction

The Active Page section displays the meta data that builds up the current page

All Pages and All Elements contains all pages and elements available in the current Page Model

The screenshot displays the IFS Page Designer interface for a 'Business Lead' page. The left sidebar is divided into three sections: 'Active Page', 'All Pages', and 'All Elements'. The 'Active Page' section is expanded, showing a tree view of the page model. The 'All Pages' and 'All Elements' sections are collapsed. The main area on the right shows the 'Business Lead' page form, which includes sections for 'General Info', 'Addresses', and 'Contacts'. The 'General Info' section contains fields for Name, Potential, and Form of Business. The 'Addresses' section contains a table with columns for ID, Text, Address 1, and Address 2. The 'Contacts' section contains a table with columns for ID, Text, and Address 1. The 'Business Lead' page is currently selected, and its details are displayed in the main area.

ID	Text	Address 1	Address 2
1	English Leased in NYC		

ID	Text	Address 1
1	English Leased in NYC	

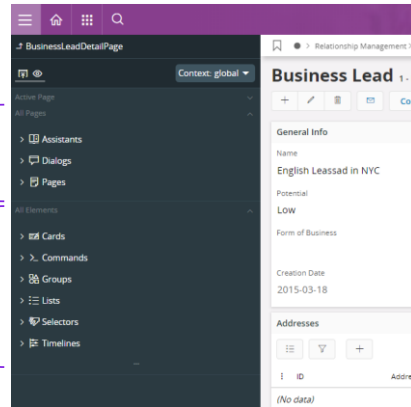


Page Designer

Pages & Elements

All Pages includes available assistants, dialogs, pages

All Elements includes available page elements



Page Designer

Preview, Save & Publishing

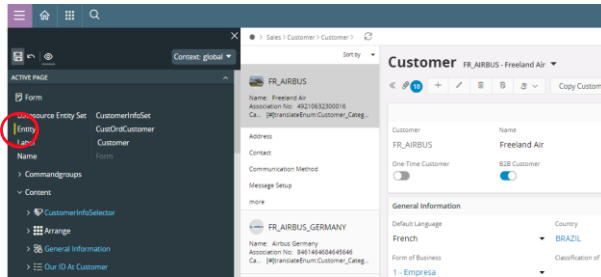
Save
Publish/Unpublish
Enable/Disable Preview

The screenshot shows the IFS Page Designer interface for a 'Business Lead' page. The left sidebar displays a tree view of the page structure, including sections like 'General Info', 'Addresses', 'Contacts', 'Representatives', 'Business Activities', 'Duplicate Info', 'Note', and 'Journal'. The main area shows the 'Business Lead' form with various fields and sections. The 'General Info' section includes fields for Name, Association No, Potential, Default Language, Form of Business, Annual Revenue, Currency, Creation Date, and Duplicate Lead. The 'Addresses' section is currently empty, and the 'Contacts' section is also empty. The interface includes a top navigation bar and a bottom status bar.



Page Designer

Change Indicators



Item or child item is changed and is not yet saved.

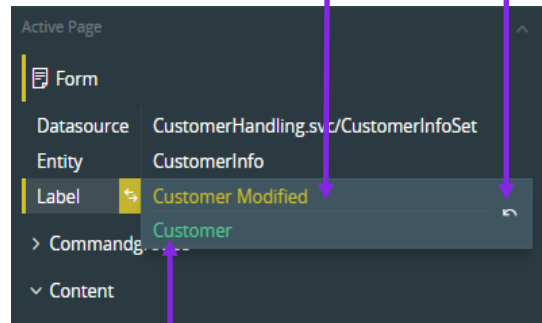
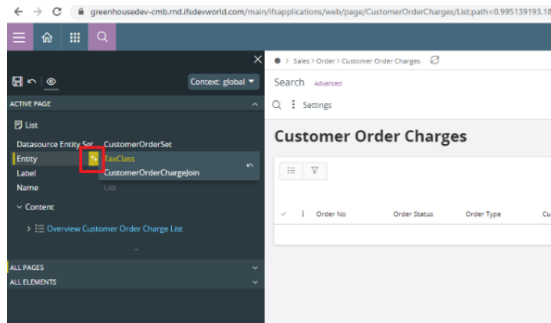
Item or child item is configured but the configuration is not published.

Item or child item is configured and is fully published.



Page Designer

Inspect Changes



Previous Value

Undo/Revert Configurations

Current Value

White – Unsaved changes
Green – Saved Changes





IFS Cloud

Configuration Concepts

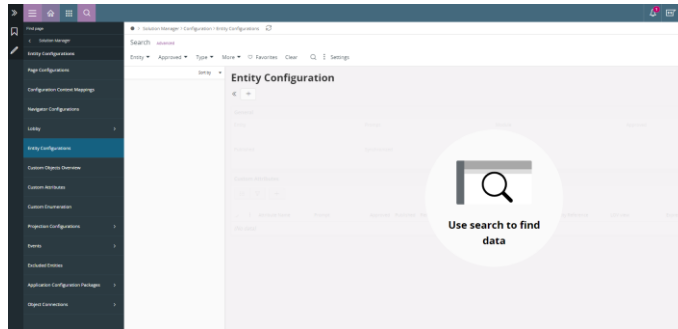
- Custom Entities
- Custom Attributes
- Custom Enumerations
- Custom Actions & Commands
- Configuration Context
- Application Configuration Packages



IFS Cloud Configurations

Custom Entities

- Custom Entities are created using Entity Configurations page in IFS Cloud.
- In IFS Cloud, the option to create a default Projection specific to the new Custom Entity is available.



IFS Cloud Configurations

Custom Attributes

- Custom Attributes are available in IFS Cloud
- Custom Attributes can be added to an entity via the Entity Configurations Page.
- Custom Attributes are added to pages in IFS Cloud using the **Page Designer**
- Types of Custom Object Attributes are;
 - **Persistent** - An editable attribute which is stored in the database
 - **Read-only** - A read-only attribute that displays an existing value
 - Reference - References from the current Entity to its referenced Entities
 - Expression - SQL expression will return the value
 - Select statement - Can include bind-variables in a where clause



IFS Cloud Configurations

Persistent Reference Custom Attributes

✕ Add Custom Attribute - CustomerInfo

Custom Attribute Type — Reference — Properties — Approve information

Custom Attribute Details

Attribute Name	Prompt	Comment
PERSATTR	Persistent custom jattr	

Custom Attribute Type

☒ Persistent Field
☐ Read Only Field

Data Type

Data Type
Reference

Reference Format

☒ Restricted
☐ Set Null

Previous Next Finish Cancel



IFS Cloud Configurations

Custom Attributes

- Custom Attributes can be added to an entity using the 'Add Custom Attribute' assistant.

The screenshot displays the 'Entity Configuration' page for the 'TestAcademy' entity. The interface includes a search bar at the top, a navigation menu on the left, and a main content area. The 'General' tab is selected, showing details for the entity 'TestAcademy'. The 'Custom Attributes' section is visible, showing a table with columns for Attribute Name, Prompt, Approval, Published, Field Type, Comments, No of Transactions, Entity Reference, UI view, Expression, and Data Type. The table currently shows '(No data)'.

Attribute Name	Prompt	Approval	Published	Field Type	Comments	No of Transactions	Entity Reference	UI view	Expression	Data Type
(No data)										



IFS Cloud Configurations

Custom Attributes - Approved Detail Views

- By default, only the main view for an Entity will be extended with the new custom attribute.
- If you need the custom attribute to appear in another view related to the entity, select such additional views using the Approved Detail Views dialog.

The screenshot displays the IFS Cloud Configuration interface. On the left, a sidebar shows 'Entity Configuration' and 'Custom Attributes'. The main area is titled 'Entity Configuration' and shows a table with columns: Entity, Custom Info, Process, and Action. Below this, a 'Custom Attributes' section shows a table with columns: Attribute Name, Parent, Approved, Action, and Comment. A dialog box titled 'Approved Detail Views for 'CustomsInfo'' is open, showing a table with columns: View Name, Approved, Published, Available, and Custom Field View Name. The table lists 'CUSTOMS_INFO_PUBLIC' and 'CUSTOMS_INFO_PUBLIC'.

Entity Configuration

Entity	Custom Info	Process	Action
Entity	Customs Info	Entity Type	Approved
Approved	Customs Info	Entity Type	Approved

Custom Attributes

Attribute Name	Parent	Approved	Action	Comment
TEST_CUSTOMS_INFO	Test Custom	Approved	Entity Type	Entity Type

Approved Detail Views for 'CustomsInfo'

The default Custom Fields are initially created only by the base view. They can also be created by one or more detail views owned by the Logical Unit. The detail views are listed below and must first be Approved before the actual Publish operation adds Custom Fields to them.

View Name	Approved	Published	Available	Custom Field View Name
CUSTOMS_INFO_PUBLIC	Approved	Published	Available	CUSTOMS_INFO_PUBLIC

Close



IFS Cloud Configurations

Custom Enumerations

- A Custom Enumeration is a **fixed list of values** that can be stored in a specific Custom Attribute.
- Each value has a database representation and client representation.
- It is also possible to translate each added enumeration client representation.

Solution Manager / Configuration / Custom Enumeration

Custom Enumeration Priority

Disapprove Publish View Download Application Configuration Package

General

Enumeration Name	Prompt	Comment	Approved
POPriority	Purchase Order Priority		<input checked="" type="checkbox"/>
Published	Synchronized	ACP	
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		

Enumeration Items

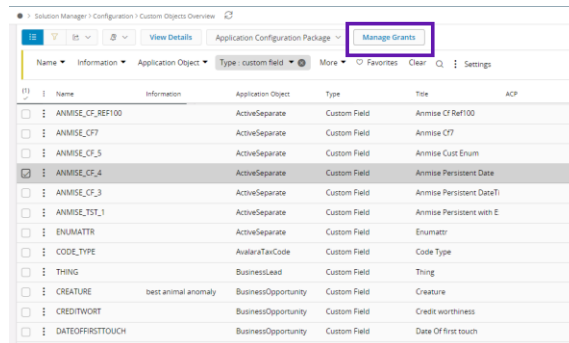
✓	Do View	Client Value	Seq No	Approved	Published	Number of Translations
<input type="checkbox"/>	1	Priority 1	10	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0
<input type="checkbox"/>	2	Priority 2	20	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0
<input type="checkbox"/>	3	Priority 3	30	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	0



Custom Objects

Manage Grants

- Grants can be managed for a custom object associated with a projection
- The user will be navigated to the permission sets page of the projection where the configuration resides.



Solution Manager > Configuration > Custom Objects Overview					
Name		Information	Application Object	Type: custom field	More
					Favorites Clear
					Settings
<input type="checkbox"/>	ANMISE_CF_REF100		ActiveSeparate	Custom Field	Anmise CF Ref100
<input type="checkbox"/>	ANMISE_CF7		ActiveSeparate	Custom Field	Anmise CF7
<input type="checkbox"/>	ANMISE_CF_5		ActiveSeparate	Custom Field	Anmise Cust Enum
<input checked="" type="checkbox"/>	ANMISE_CF_4		ActiveSeparate	Custom Field	Anmise Persistent Date
<input type="checkbox"/>	ANMISE_CF_3		ActiveSeparate	Custom Field	Anmise Persistent DataTi
<input type="checkbox"/>	ANMISE_TST_1		ActiveSeparate	Custom Field	Anmise Persistent with E
<input type="checkbox"/>	ENUMATTR		ActiveSeparate	Custom Field	Enumattr
<input type="checkbox"/>	CODE_TYPE		AvatarTaxCode	Custom Field	Code Type
<input type="checkbox"/>	THING		BusinessLead	Custom Field	Thing
<input type="checkbox"/>	CREATURE	best animal anomaly	BusinessOpportunity	Custom Field	Creature
<input type="checkbox"/>	CREDITWORT		BusinessOpportunity	Custom Field	Credit worthiness
<input type="checkbox"/>	DATEOFFIRSTTOUCH		BusinessOpportunity	Custom Field	Date Of first touch



Custom Objects

Extract Configuration

- The Configuration Extractor page is used to extract the configurations from an installation to be analyzed by the Update Analyzer to find potential issues that needs to be handled when taking a new update.

Custom Objects

Extract Configurations

✓	:	Name	Information	Application Object	Type
<input type="checkbox"/>	:	A123	A123	A123	Custom
<input type="checkbox"/>	:	A_G_R_E_E_M_E_N_T_CLP		AGREEMENT	Custom
<input type="checkbox"/>	:	ASHDLKTEST	Ashdlk	AbcClass	Custom
<input type="checkbox"/>	:	SHARKEVENT	Test	AbcClass	Custom
<input type="checkbox"/>	:	ASHDLKTEST	ea2	AbcClass	Custom
<input type="checkbox"/>	:	SHARKEVENT	Test	AbcClass	Custom
<input type="checkbox"/>	:	SHARKEVENT	Test 2 - faulty	AbcClass	Custom



A woman with glasses and a plaid shirt is holding a tablet in a server room. The room is dimly lit with blue light from the server racks. Other people are visible in the background.

Demo - Custom Entities & Attributes



Aurena Configurations

Projection Configurations

There are two main types of Projection Configurations that are available in IFS Cloud.

- Creating a New Projection
- Extending an existing Projection

• > Solution Manager > Configuration > Projection Configurations > New Projection Configuration

New Projection Configuration

● Select Configuration Type ● Create New Projection ● Select Entities ● [Model Associations] ● [Add Actions] ● [Publish Projection]

Configuration Type

☒ Create New Projection

☐ Configure Standard Projection

◀ Previous ▶ Next Finish Cancel



IFS Cloud Configurations

Projection Configurations - Category

- Set the category depending on the purpose with the Projection as in which application it should be available
- Available category options are as below:

Option	Description
Users	Projection available in the Main (Business to Employee/B2E) application.
External B2B	Projection available in the Business to Business (B2B) application.
Integration	Projection available for integration purposes, for external systems to be integrated with IFS Cloud.
Users & External B2B	Projection available for both B2E and B2B application.



IFS Cloud Configurations

Entity Associations

- This is required when the user wants to filter the records of the Entity in relation to the Configuring Projection.
- This is the typical master detail scenario user finds in the application.

The screenshot displays the 'Projection Configuration' for 'Personhandling'. The 'Entity Associations' section is highlighted with a red box. It shows a table with the following data:

Association Name	Parent Entity	Child Entity	Association Approval	Association Publication
Personhandle	Person	PERSON_ID	Yes	Yes



Working with Pages

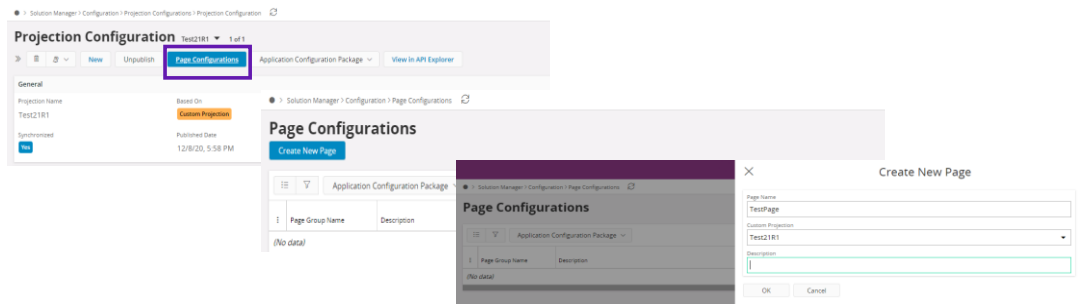
Extend Standard Pages



Page Configurations

Creating Custom Pages

- A page can be designed in mainly two ways:
 - An overview page - Uses a list to show all records
 - A detail page - Only a single record is shown at a time. It needs a selector to iterate through all the records



Custom Entities In IFS Cloud

Extend Standard Pages

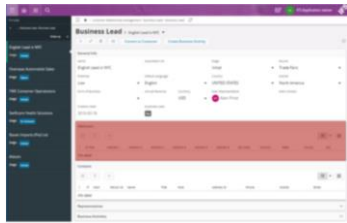
As an Admin,
I want to add a Custom Entity as a list to a standard
page.



Custom Entities In IFS Cloud

Extend Standard Pages

- A standard IFS Cloud Application page can be extended with **Custom Entities**.
- Custom Entities are added to pages In IFS Cloud by configuring the Projection the standard application page is based on the Aurena Page Designer is used to configure the layout of the page

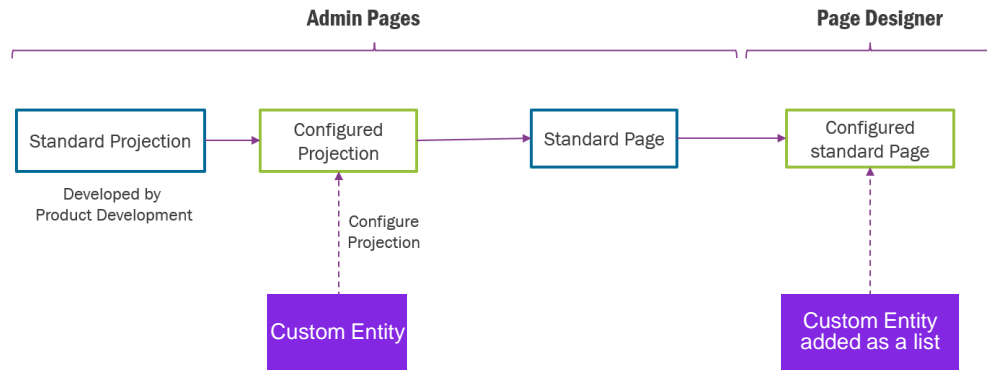


The Custom Logical Unit data can be visualized as a new section in a standard page



Custom Logical Units In IFS Cloud

Extend Standard Pages





Custom Logical Units In IFS Cloud

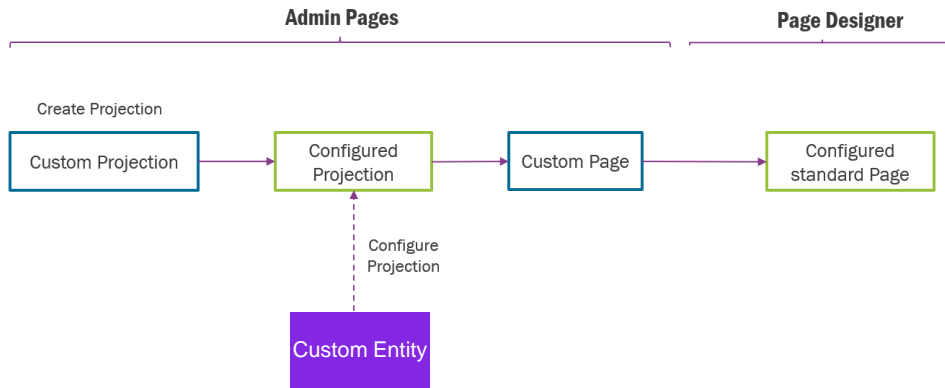
Create [New](#) Custom Pages

As an Admin,
I want to create a Custom Page based on a Custom Logical Unit



Custom Logical Units In IFS Cloud

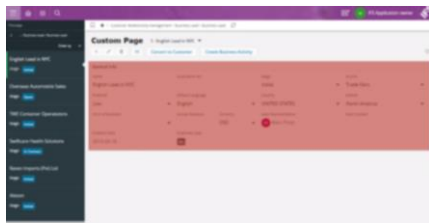
Create New Custom Pages



Custom Logical Units In IFS Cloud

Create New Custom Pages

- Custom Pages can be created in IFS Cloud
- A new Projection is created which includes the Custom Logical Units
- A Custom Page is created based on the **new Projection**
- The Aurena Page Designer is used to configure the Layout of the Custom Page



A new Custom Page based
on a Custom Logical Unit



A woman with glasses and a plaid shirt is holding a laptop in a server room. The room is dimly lit with blue light from the server racks in the background. The text "Demo - New Custom Page" is overlaid on the right side of the image.

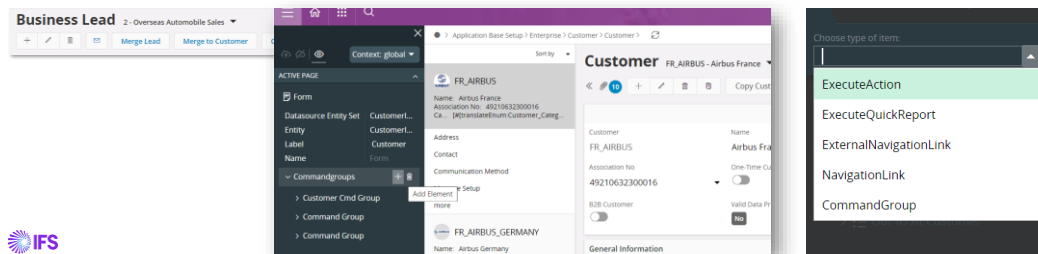
Demo - New Custom Page



Custom Actions And Commands

Commands

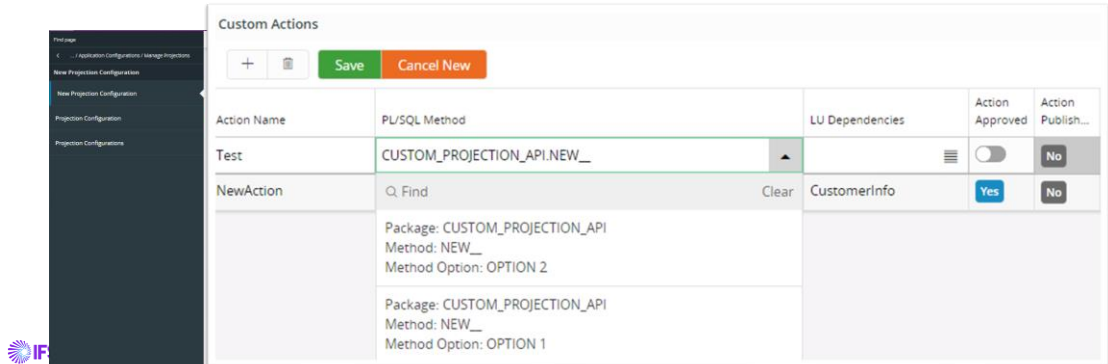
- Commands are added as buttons to pages and can be added to the page top header and above lists and group sections
- They are added to Aurena Pages using the Page Designer
- Commands provides the functionality to:
 - **Execute Action** - Call an existing Method in IFS Applications
 - **Navigation Link** - Navigate between application pages, with or without parameters.
 - **External Navigation Link** - Navigate to an external URL, with or without parameters.
 - **Execute a Quick Report** - Order a Quick Report from a page that does not have the report as a standard Command.



Custom Actions And Commands

Custom Actions

- Custom Actions provides the possibility to add additional actions to IFS Cloud Projections.
- As any Projection action, a Custom Action can be added as a command to a page.
- Custom Actions are defined in the Projection by referring an existing PL/SQL method in the business logic.



Custom Actions

+ - Save Cancel New

Action Name	PL/SQL Method	LU Dependencies	Action Approved	Action Publish...
Test	CUSTOM_PROJECTION_API.NEW_		<input type="checkbox"/>	No
NewAction	Q Find Clear	CustomerInfo	<input checked="" type="checkbox"/>	No
	Package: CUSTOM_PROJECTION_API Method: NEW_ Method Option: OPTION 2			
	Package: CUSTOM_PROJECTION_API Method: NEW_ Method Option: OPTION 1			

Custom Actions And Commands

Custom Actions – Current Limitations

- Custom Actions support methods which have simple Parameters (VARCHAR2, NUMBER, DATE) or no Parameters at all.
- Custom Actions currently do not support Methods such as,
- Return data (Functions or methods with OUT Parameters)
- Complex Data Types (PL/SQL Record Types)
- BLOB, CLOB Parameters
- PL/SQL methods exposed in Projections (_SVC package), client metadata package (_CPI) and Report package (_RPI) methods



A woman with long dark hair, wearing glasses and a blue and white plaid shirt, is holding a tablet and looking at it. She is in a server room with blue lighting and server racks in the background. The text "Demo – Custom Actions And Commands" is overlaid on the right side of the image.

Demo – Custom Actions And Commands



Custom Events And Event Actions

Events

- All Events are shown in navigator location **Solution Manager/Configuration/Events**.

Solution Manager > Configuration > Events > Events

Navigation: New Custom Event | New Event Action | Show Action | View Details | Application Configuration Package

Entity	Event ID	Description	Event Enabled	Event Type	Configuration Package
ApprovalRouting	APPROVAL_ROUTE_COMPLETE	Approval Route is completed	<input type="checkbox"/>	Application Defined	
ApprovalRouting	STEP_READY_FOR_APPROVAL	New step is ready for approval	<input type="checkbox"/>	Application Defined	
ApprovalRouting	STEP_REJECTED_NODOC	Approval Route is rejected	<input checked="" type="checkbox"/>	Application Defined	
ApprovalRouting	STEP_APPROVED	Approval Routing Step is Approved	<input checked="" type="checkbox"/>	Application Defined	
AuthorityApprovalPer	AUTHORITY_APPROVAL_EXPIRED	Authority approval has expired	<input type="checkbox"/>	Application Defined	
BatchTransferHandle	DOC_TRANSFER_COMPLETE	Document Transfer is Complete	<input type="checkbox"/>	Application Defined	
BpaTestEntity	BPA_TEST_ENTITY_TEST	TEST Event for BPAs	<input checked="" type="checkbox"/>	Custom Defined	
Case	LEAD	Test	<input checked="" type="checkbox"/>	Custom Defined	
Case	Ann's Test	Ann's Test	<input type="checkbox"/>	Custom Defined	
New Event Action	D	The case is modified.	<input type="checkbox"/>	Application Defined	
Show Action	R_1_1	Event used for Aurena Native push notifications. Do not	<input checked="" type="checkbox"/>	Custom Defined	
View Details	DIRED	The solution is modified.	<input type="checkbox"/>	Application Defined	
Application Configuration Package	D	The task is modified.	<input type="checkbox"/>	Application Defined	



Custom Events

- Application Defined Events are defined in the business logic delivered by IFS while Custom Defined Events are configured in Solution Manager and is technically executed by database triggers.
- A new event can be added by selecting **New Custom Event** assistant.
- The event can be fired on three different occasions:
 - New - New objects are created (A new row in the table is created)
 - Update - Objects are changed (A row in the table has been modified)
 - Remove - Objects are removed (A row in the table is removed)

Custom Events

Create Custom Events

● > Solution Manager > User Interface > Custom Objects > New Custom Event

New Custom Event

● Set Event ID and Description ● Add Object Details ○ Select Attributes ○ Add Additional Attributes

Event ID: ABSENCE_REQUEST_CON Description: Send E-mail to supervisor at absence request confirmation

◀ Previous ▶ Next Finish Cancel

● > Solution Manager > User Interface > Custom Objects > New Custom Event

New Custom Event

○ Set Event ID and Description ● Add Object Details ○ Select Attributes ○ Add Additional Attributes

Object Details tabview

Logical Unit: HolidayRequest Table: HOLIDAY_REQUEST_TAB

Fire When:

New objects are created Objects are removed Objects are changed Only when these attributes are changed: REQUEST_ID,DATE_FROM,RELAT

◀ Previous ▶ Next Finish Cancel



Event Actions

- An event Action can be either **System Defined**(delivered by IFS) or **Custom Defined**.
- A new custom event action can be created by using the New(+) command which will open the **New Event Action** assistant.
- The Event Action must be enabled in order to be triggered. Enabling an Event Action implicitly also enables the Event.

Solution Manager > Configurations > Events > Event Actions

Application Configuration Package

(T)	Event	Description	Logical Unit	Action	Action Type	Action Enabled	System Defined	Allow Subscription
<input type="checkbox"/>	DELIVERY_DATE_OR	A customer order line's planned deliv	CustomerOrder	event set up by JAAPUK	E-Mail	<input checked="" type="checkbox"/>	FALSE	<input type="checkbox"/>
<input type="checkbox"/>	DEMO_ITEM_PRICE	Demonstration of IFS Custom Events.	CustomerOrderLine	Stop the user from entering a base pr	Execute Online SQL	<input type="checkbox"/>	FALSE	<input type="checkbox"/>
<input type="checkbox"/>	DEMO_ITEM_PRICE	Demonstration of IFS Custom Events.	CustomerOrderLine	Email Supply Chain manager when ba	E-Mail	<input type="checkbox"/>	FALSE	<input type="checkbox"/>
<input type="checkbox"/>	DEMO_NEW_CUSTC	Fires when a new Customer record is	CustomerInfo	Send Outbound Message to Connect -	Application Message	<input type="checkbox"/>	FALSE	<input type="checkbox"/>
<input type="checkbox"/>	DEPR_PROPOSAL_B	Depreciation proposal executed in ba	DeprProposal	Send an E-mail	E-Mail	<input type="checkbox"/>	TRUE	<input type="checkbox"/>



Event Actions

Action Types

- There are different types of actions that can be performed when an event is triggered.

Action	Description
E-Mail	Sends a mail to receiver using Mail Server setup in IFS Connect.
Execute Online SQL	The action Execute Online SQL is intended to execute a method (or UPDATE or INSERT), not to return any values.
Application Message	Creates an Application Message to be handled by IFS Connect.
Task	Creates a Task to one or many users. Tasks are shown to users in IFS Cloud in the My Tasks page.
Workflow	Calls the embedded Camunda workflow engine to start a pre-defined workflow before or after the Event is triggered depending on configuration.
Streams Message	Creates a new stream message
REST Call	Sends a REST Call using REST Sender setup in IFS Connect

Custom Events

Export Custom Events

- A Custom Defined Event can be exported to the file system as a (*.ins) file.
- Select the **Custom Defined Event** detail page and select the command **Export Custom Event**.
- The Event can then be imported into another environment by executing the export file in the database.
- Custom Events can also be exported using Application Configuration Packages.

Event Actions

Adding Conditions

- Conditions can be set in order to control the execution of the action. The action will be performed only if all conditions are met.
- When using the condition type 'LIKE' if the condition value contains '%' or '_' characters an escape character '\' should be used to avoid confusion with wildcard characters that can also be used.
- When using the condition type 'IS NULL' a condition value is not needed as it will not be considered for that condition type.

A woman with long dark hair, wearing glasses and a blue and white plaid shirt, is holding a laptop and looking at the screen. She is in a server room with blue lighting and server racks in the background. The text "Demo – Custom Events" is overlaid on the right side of the image.

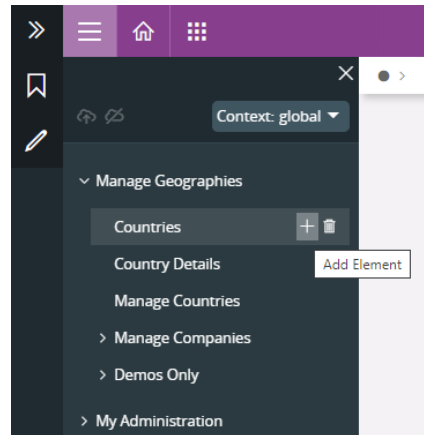
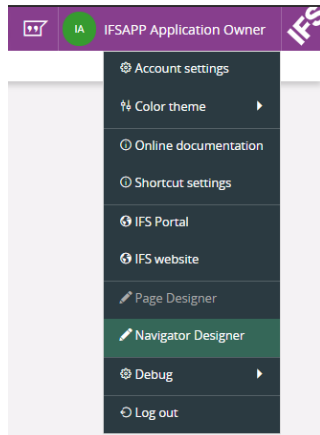
Demo – Custom Events



Introduction to Navigator Designer



Working with Navigator Designer



Working with Navigator Designer

- Change a navigator node label
- Hide a navigator node
- A new navigator node can be a navigation reference to:
 - An external URL
 - An Aurena page or assistant
 - A Custom Page
 - A Lobby page
 - or a menu node to create a new navigator folder.



A woman with long dark hair, wearing glasses and a blue and white plaid shirt, is holding a tablet computer. She is standing in a server room with blue ambient lighting and server racks in the background. The text "Demo – Navigator Designer" is overlaid on the right side of the image.

Demo – Navigator Designer



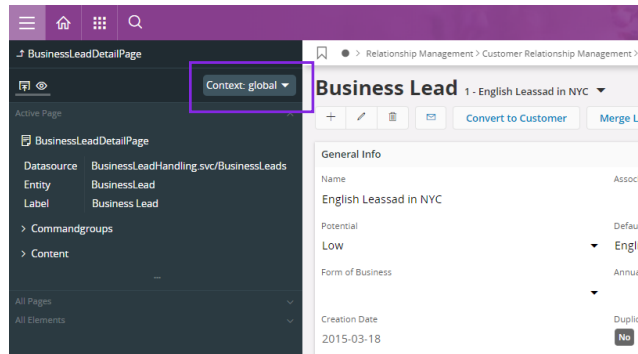
Introduction to Configuration Context



Configuration Context

Global Context

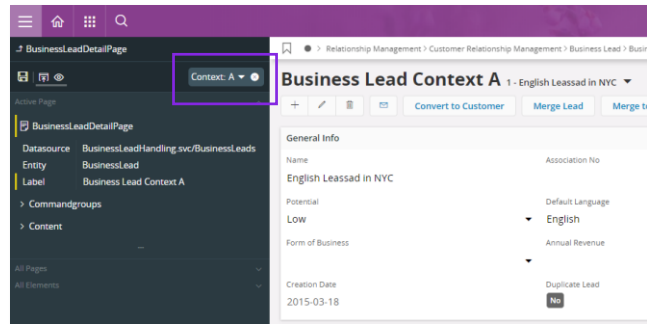
Configurations in a
global context affects all
users in an environment



Configuration Context

Define New Contexts

To support multiple parallel configurations of the same page, separate contexts can also be defined.



Configuration Context

Reaching Pages Defined For Custom Contexts

- When configurations are made for the **global context**, then these configurations will be used as soon as an application user navigates to the page in any way.
- The global configurations behave the same as if the application was **customized**.
- For Custom Contexts it is the opposite. No user will ever use a configuration from a specific context if **not specifically defined**. There are two ways to do this.
 - **Implicitly**: by mapping users or user groups to a **configuration context**.
 - **Explicit navigation directive**: Specify the configuration context to be used directly on a navigation URL as an attribute called "**scope**"
- The framework will use contexts in the following order:
 - **Explicit context directive on an URL > Mapped default context > Global Context > Application Core**



Configuration Context

Explicit Navigation To A Context

<https://<environment details>/main/ifsapplications/web/page/CrmCustomer/CrmCustomerPage;scope=A>



Configuration Context

Connect A Global Context Condition to Scope

- An **application context condition** can be connected to a Scope if a parallel configured version of a page is wanted as default (instead of the global version)
- This connection is done on the **Configuration Context Overview** page

Solution Manager > Application Configurations > Configuration Context Overview

Configuration Context Overview		
Scope Id	Label	Global Context Condition
A01	A first context	Company=11
A02	A second context	Company=10



Configuration Context

Define a Configuration Context Condition

It is currently possible to use 'global context variables' (company, ledger or wage class) and (User and UserGroup) when defining the global context condition for the scope.

Solution Manager > Application Configurations > Configuration Context Overview

Scope Id	Label	Global Context Condition
A01	A first context	Company=11
A02	A second context	Company=10

Solution Manager > Application Configurations > Configuration Context Mappings

Context	Description	Condition
A10	Demo Context	company = 10
U10	Demo Users	usergroup = DemoUsers



Configuration Context

Example Scenarios

1. No configuration made on a page

User gets Core (IFS Product Development delivered) version of the page

2. Configuration made on a page in a global context

Users get global configuration

3. Configuration made on a page connected to Context A

Users that navigate to the page through a link with ;scope=A in the URL gets the configured page defined in Context A.

4. Configuration made on a page connected to Context A and Context A condition is 'company=10'

Users that navigate to the page through a link with ;scope=A in the URL get the configured page in Context A.

Users with *global company* = 10 gets the configured page in Context A by default.

Users not affected by condition in Context A get global configuration if such exist (users with global company that is not company 10)

5. A page has configurations in both Context A and Global context

User navigating through a link or that has global company = 10 will see configurations made in global context and Context A.

The configuration in the "highest" layer will be available for the users. (See next slide.)



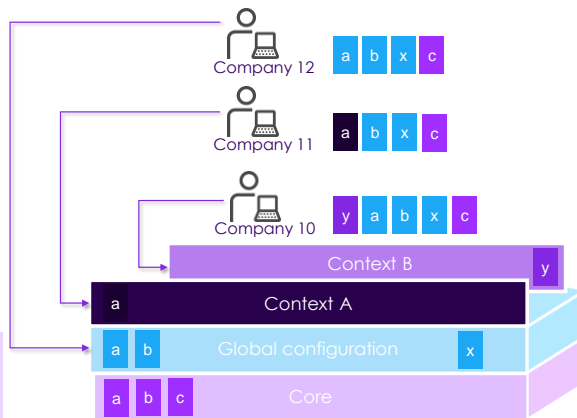
Configuration Context

Example

Defined Contexts
Global context conditions

- Context A
company=11
- Context B
company=10

a = configured artifact in in Context A
y = configured artifact in Context B
a,b,x = configured artifacts in global context
a,b,c = artifacts in Core application



A woman with glasses and a plaid shirt is holding a tablet in a server room. The room is dimly lit with blue light from the server racks. Other people are visible in the background.

Demo – Configuration Context



Translations In Configurations

Translatable Attributes

- When a Label is configured through the Aurena Page Designer translations need to be added for relevant languages.
- Users can navigate to the Translatable Text page and add translations to those Configurations.
- **Context** is added to the Translation Path.
- Main Type of the translations is **CONFIGURATION CLIENT**.



Translations In Configurations

Translatable Attributes

Search [Advanced](#)

Attribute ID ▾ Component ▾ CONFIG ▾ Path ▾ More ▾ Favorites Clear 🔍 Settings

Translatable Text

⌵ ▾ ⌵ ▾ ⌵ ▾
[View Text Translations](#)
[Add Translations](#)

(1)		Prog Text	Layer	Component	Path	Sub Type	Name	Attribute ID	Main Type
<input checked="" type="checkbox"/>	⋮	Cf_Yl	User	CONFIG	[global] MaintEngApp.lay	Data Field	layout.groups.Taskinform	2751774	Configur...
<input type="checkbox"/>	⋮	Cf_Name	User	CONFIG	[global] TestNewPage.lay	Data Field	layout.lists.new.content.f	2751895	Configur...
<input type="checkbox"/>	⋮	Cf_Wheels	User	CONFIG	[global] TestNewPage.lay	Data Field	layout.lists.new.content.f	2751896	Configur...
<input type="checkbox"/>	⋮	new	User	CONFIG	[global] TestNewPage.lay	Table Window	layout.lists.new.\$(name)	2751897	Configur...
<input type="checkbox"/>	⋮	CodePart	User	CONFIG	[global] TestAshdk.layou	Data Field	layout.groups.testAcco	2764818	Configur...
<input type="checkbox"/>	⋮	testAcc	User	CONFIG	[global] TestAshdk.layou	Group Box	layout.groups.new.testAc	2764819	Configur...
<input type="checkbox"/>	⋮	TestList	User	CONFIG	[global] TestAshdk.layou	Table Window	layout.lists.new.TestList	2764820	Configur...
<input type="checkbox"/>	⋮	>> T	User	CONFIG	[global] DisplayActivityCa	Command	command.NavigateToCi	2768669	Configur...



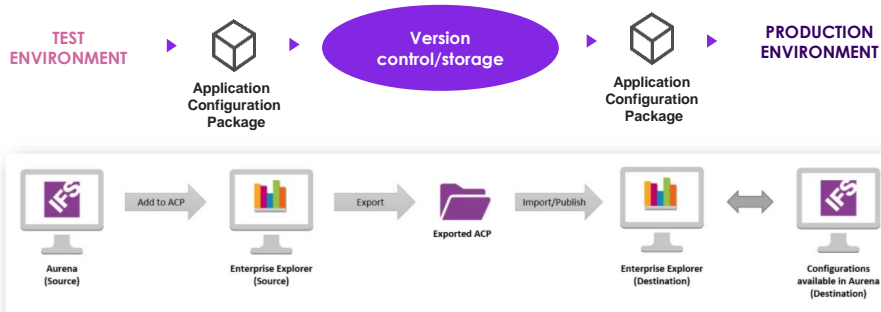
Application Configuration Packages (ACP) in IFS Cloud



Application Configuration Packages

Configuration Export And Import

IFS Cloud Configurations can be included in Application Configuration Packages



Application Configuration Packages

Create ACP(1)

- Packages are created in the **Application Configuration Package** page in Solution Manager.

The screenshot shows the 'Application Configuration Package' page in Solution Manager. The left sidebar contains a navigation menu with the following items: 'Find page', 'Solution Manager / Configuration', 'Application Configuration Packages', 'Application Configuration Package', 'Configuration Extractor', and 'Import Configuration'. The main content area is titled 'Application Configuration Package' with a dropdown menu set to 'Cars'. Below the title are two buttons: 'Save' (green) and 'Cancel New' (orange). The 'General' section contains three input fields: 'Name' (with the value 'Cars'), 'Author' (with the value 'IFS R&D'), and 'Description' (with the value 'Custom Cars'). There is also a 'Last Modified Date' label. Below this is the 'Import Details' section, which includes a table with columns: 'Version', 'Imported Date', 'Origin', and 'Version Time Stamp'. The 'Items' section features a table with columns: 'Name', 'Type', 'Associated Object', 'Definition Changed', 'Approved', 'Published', and 'In Sync'. The table currently displays '(No data)'. The IFS logo is visible in the bottom left corner of the page.



Application Configuration Packages

Create ACP(2)

- Through Custom Objects page

Solution Manager > Configuration > Custom Objects Overview

View Details

Application Configuration Package

Manage Grants

(1)

	Name	Information		Title	ACP
<input type="checkbox"/>	Applicant	Manage Applicant	View Application Packages	ird	Applicant
<input checked="" type="checkbox"/>	AshdikTest	AshdikTest	Custom Enumeration	AshdikTest	
<input type="checkbox"/>	AshdikTest2	AshdikTest2	Custom Enumeration	dlktEst32	TEST_ACP

Add to Application Configuration Package

Add to Existing Package

Create New Package

Package Name

Description

Cancel



Application Configuration Packages

Translate Configuration Items in ACPs

- It is also possible to add or update translations for configuration items in the Application Configuration Package page.

• > Solution Manager > Configuration > Application Configuration Packages > Application Configuration Package

Application Configuration Package **TestApp**

➤ ⚙️ + ✎ 📄 📁 Publish Export **Manage Grants** Validate Import Application Configurations **Manage Translations** ♥

General

Name	Author	Description	Last Modified Date
TestApp	R&D Project Environments		10/28/2020

Import Details

Version	Imported Date	Origin	Version Time Stamp

Items

📄 ▼ 📄 + 📄

✓	🔍	Name	Type	Associated Object	Definition Changed	Approved	Published	In Sync
<input type="checkbox"/>		CarHandling	Custom Projection		10/28/2020	Yes	Yes	Yes



Application Configuration Packages

Export an Application Configuration Package

- This allows configurations of one environment to be installed in another environment.
- A package is exported from the **Application Configuration Package** window using the option **Export**.

The screenshot shows the 'Application Configuration Package' window for a package named 'TestApp'. The 'Export' button in the top toolbar is highlighted with a red box. To the right, the 'Export Package' dialog is open, showing a 'Version' field with '1.0' and a 'Comment' field with 'Test'. The dialog has 'OK' and 'Cancel' buttons at the bottom.

Application Configuration Package - TestApp

General

Name	Author	Description	Last Modified Date
TestApp	R&D Project Environments		10/28/2020

Import Details

Version	Imported Date	Origin	Version Time Stamp
---------	---------------	--------	--------------------

Items

Name	Type	Associated Object	Definition Changed	Approved	Published	Sync
CarHandling	Custom Projection		10/28/2020	Yes	Yes	Yes

Export Package

Version: 1.0

Comment: Test

OK Cancel



Application Configuration Packages

Install Application Configuration Packages

With Application Configuration Packages, installation is carried out in three distinct steps;

- Validate
- Import and
- Publish

Installation can be done in 2 ways:

1. IFS Solution Manager Import Configuration window
2. Installation using IFS Installer



A woman with long dark hair, wearing glasses and a blue and white plaid shirt, is holding a tablet computer. She is standing in a server room with blue ambient lighting and server racks in the background. The text "Demo – Using an ACP" is overlaid on the right side of the image.

Demo – Using an ACP



Wrap-up



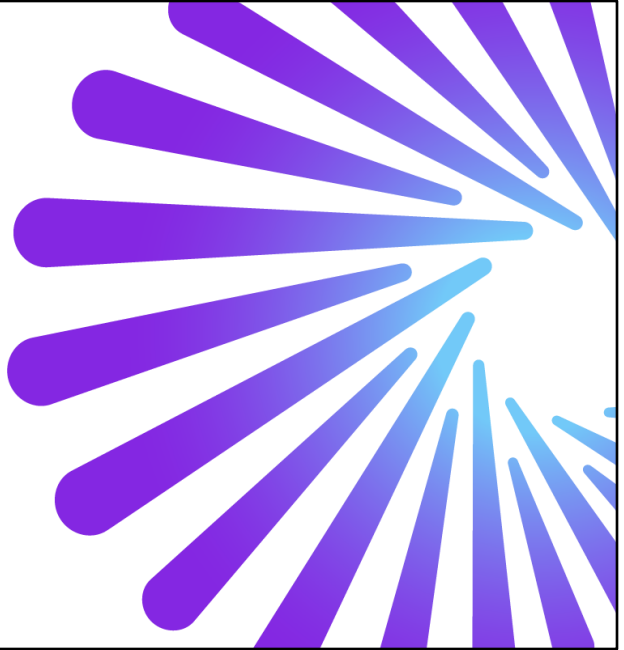




**Please Provide
Us Feedback?**

Thank you!

#MOMENTOFSERVICE





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