

CONFIGURING IFS AURENA

IFS APPLICATIONS™ 10



IFS ACADEMY



WELCOME

- Timings
- Safety
- Ground rules
- Objectives

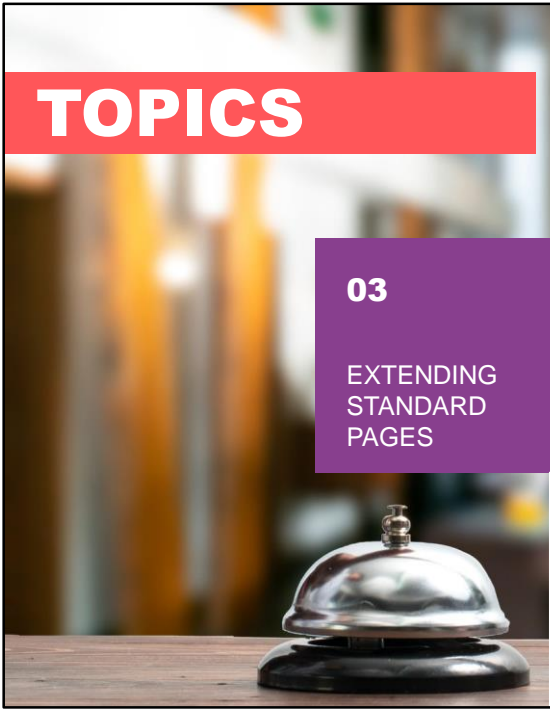



YOUR TRAINER

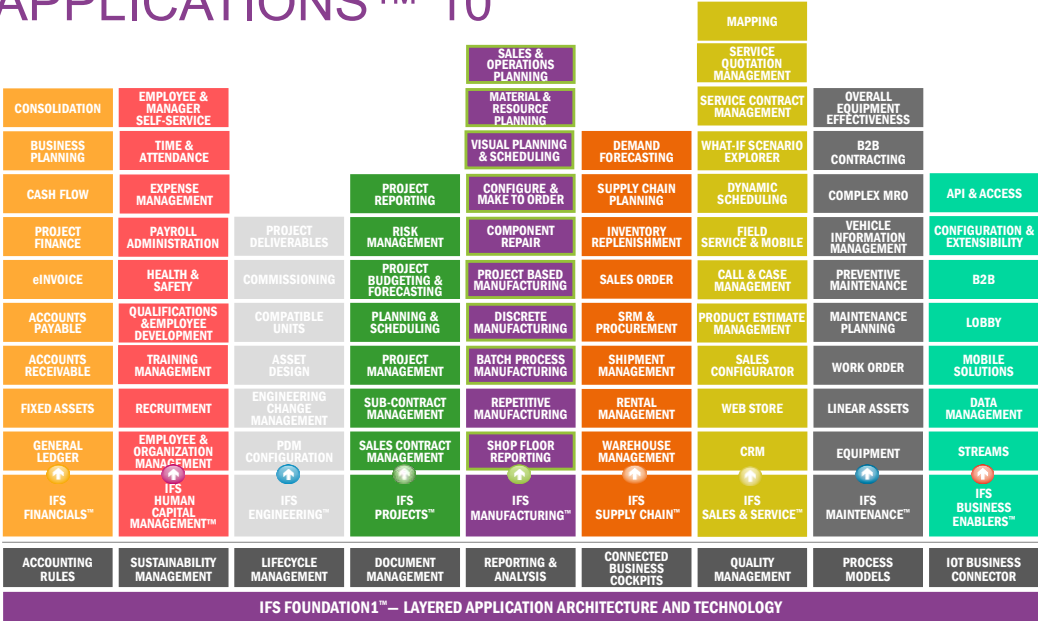
Name:

Contact number:

Email:

 <div>TOPICS</div>	<div>01</div> <div>CONFIGURATION MAPPING</div>	<div>02</div> <div>AURENA PAGE DESIGNER</div>	
	<div>03</div> <div>EXTENDING STANDARD PAGES</div>	<div>04</div> <div>ADDING NEW PAGES</div>	<div>05</div> <div>CUSTOM ACTIONS</div>
	<div>06</div> <div>CUSTOM COMMANDS</div>	<div>07</div> <div>CONFIGURATION CONTEXTS</div>	<div>08</div> <div>NAVIGATOR DESIGNER</div>

IFS APPLICATIONS™ 10



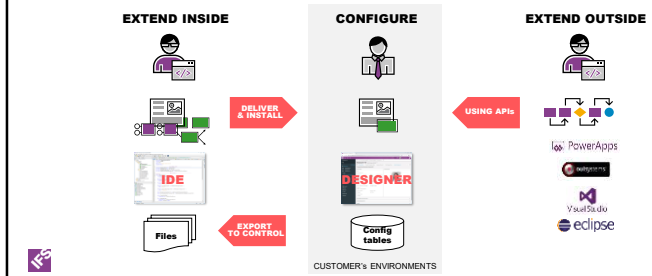
FOCUS AREA

				SALES & OPERATIONS PLANNING		MAPPING SERVICE QUOTATION MANAGEMENT			
CONSOLIDATION	EMPLOYEE & MANAGER SELF-SERVICE			MATERIAL & RESOURCE PLANNING			SERVICE CONTRACT MANAGEMENT	OVERALL EQUIPMENT EFFECTIVENESS	
BUSINESS PLANNING	TIME & ATTENDANCE			VISUAL PLANNING & SCHEDULING	DEMAND FORECASTING	WHAT-IF SCENARIO EXPLORER	B2B CONTRACTING		
CASH FLOW	EXPENSE MANAGEMENT	PROJECT REPORTING		CONFIGURE & MAKE TO ORDER	SUPPLY CHAIN PLANNING	DYNAMIC SCHEDULING	COMPLEX MRO	API & ACCESS	
PROJECT FINANCE	PAYROLL ADMINISTRATION	PROJECT DELIVERABLES	RISK MANAGEMENT	COMPONENT REPAIR	INVENTORY REPLENISHMENT	FIELD SERVICE & MOBILE	VEHICLE INFORMATION MANAGEMENT	CONFIGURATION & EXTENSIBILITY	
eINVOICE	HEALTH & SAFETY	COMMISSIONING	PROJECT BUDGETING & FORECASTING	PROJECT BASED MANUFACTURING	SALES ORDER	CALL & CASE MANAGEMENT	PREVENTIVE MAINTENANCE	B2B	
ACCOUNTS PAYABLE	QUALIFICATIONS & EMPLOYEE DEVELOPMENT	COMPATIBLE UNITS	PLANNING & SCHEDULING	DISCRETE MANUFACTURING	SRM & PROCUREMENT	PRODUCT ESTIMATE MANAGEMENT	MAINTENANCE PLANNING	LOBBY	
ACCOUNTS RECEIVABLE	TRAINING MANAGEMENT	ASSET DESIGN	PROJECT MANAGEMENT	BATCH PROCESS MANUFACTURING	SHIPMENT MANAGEMENT	SALES CONFIGURATOR	WORK ORDER	MOBILE SOLUTIONS	
FIXED ASSETS	RECRUITMENT	ENGINEERING CHANGE MANAGEMENT	SUB-CONTRACT MANAGEMENT	REPETITIVE MANUFACTURING	RENTAL MANAGEMENT	WEB STORE	LINEAR ASSETS	DATA MANAGEMENT	
GENERAL LEDGER	EMPLOYEE & ORGANIZATION MANAGEMENT	PDM CONFIGURATION	SALES CONTRACT MANAGEMENT	SHOP FLOOR REPORTING	WAREHOUSE MANAGEMENT	CRM	EQUIPMENT	STREAMS	
IFS FINANCIALS™	IFS HUMAN CAPITAL MANAGEMENT™	IFS ENGINEERING™	IFS PROJECTS™	IFS MANUFACTURING™	IFS SUPPLY CHAIN™	IFS SALES & SERVICE™	IFS MAINTENANCE™	IFS BUSINESS ENABLERS™	
ACCOUNTING RULES	SUSTAINABILITY MANAGEMENT	LIFECYCLE MANAGEMENT	DOCUMENT MANAGEMENT	REPORTING & ANALYSIS	CONNECTED BUSINESS COCKPITS	QUALITY MANAGEMENT	PROCESS MODELS	IOT BUSINESS CONNECTOR	
IFS FOUNDATION1™ – LAYERED APPLICATION ARCHITECTURE AND TECHNOLOGY									



TAILOR AND EXTEND CUSTOMER SOLUTION

CONCEPTS AND TERMINOLOGY



TAILOR AND EXTEND

WHEN TO CHOOSE WHAT

CONSIDER CONFIGURATION WHEN...	CONSIDER EXTEND ON INSIDE / CUSTOMIZATION WHEN...	EXTEND ON THE OUTSIDE WHEN...
<ul style="list-style-type: none">▪ Changes are small▪ Changes are temporary▪ Preferable that changes are made by consultants / super users	<ul style="list-style-type: none">▪ New capabilities consisting of several objects, logic, ui▪ Changes require overriding existing logic▪ Changes require writing an amount of SQL or PLSQL code/script	<ul style="list-style-type: none">▪ 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 Aurena and declarative development

Good practice to export and store in the customer repository





IEE AND AURENA

CONFIGURATION MAPPING

CONCEPT MAPPING

IFS IEE – IFS AURENA

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

CONCEPT MAPPING

IFS IEE – IFS AURENA

IFS EE	IFS Aurena	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

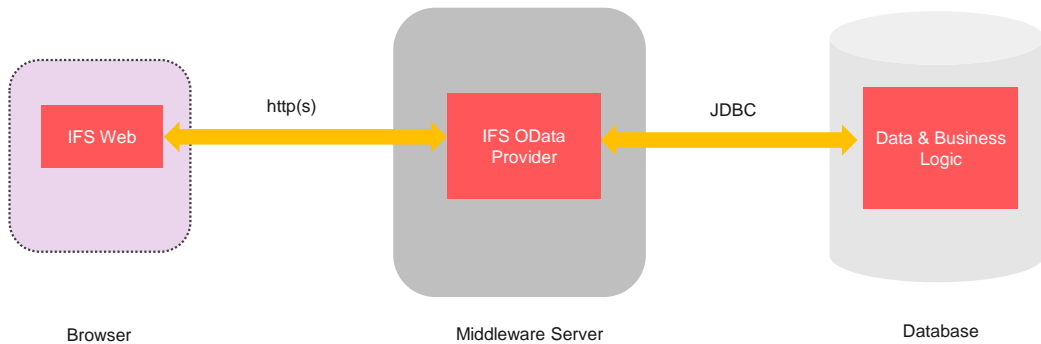


INTRODUCTION TO

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 AURENA

TERMINOLOGY

Selectors

FR_AIRBUS

Name: Airbus France
Association No: 49210632300016
Category: Customer

FR_AIRBUS_GERMANY

Name: Airbus Germany
Association No: 64114654640044
Category: Customer

NA1057

Name: Lockheed Customer 1057
Association No:
Category: Customer

1010

Name: Sweden Customer
Association No:
Category: Customer

1020

Name: Internal Customer
Association No:
Category: Customer

BP1

Name: Team BP1
Association No:
Category: Customer

Customer Information

FR_AIRBUS - Airbus France

Customer 360

Manage Data Processing Purposes

Groups

Customer: FR_AIRBUS

Association No: 49210632300016

Logo:

General Information Y

Default Language: French

Country: FRANCE

Category: Customer

Creation Date: 11/16/2010

Form of Business: Standard

Identifier Reference: Demo User

ID Reference Validation: None

Customer Usability: 2 - Active

Customer Tax Usage Type:

Custom Method

1

Description: name

Item: ItemDefault

2

Description: Tel Set

Item: Tel

3

Description: Standard

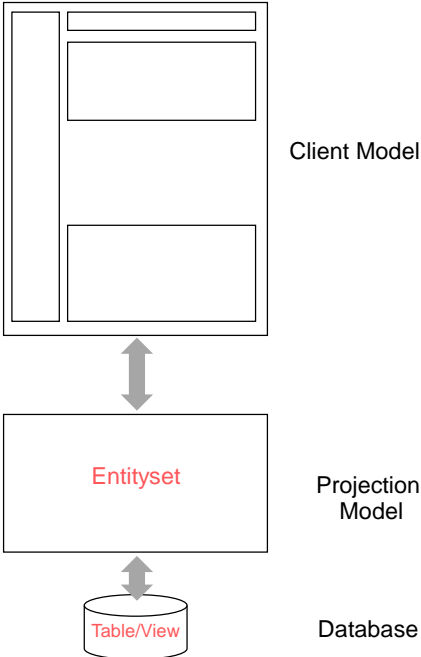
Item: Standard

Our ID at Customer

1

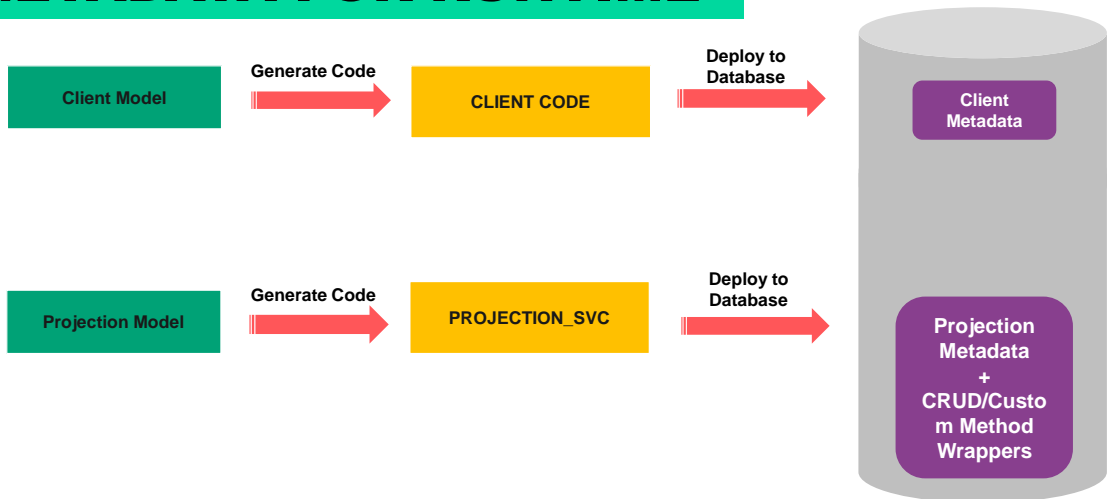
Company

Our ID:



CODE GENERATION

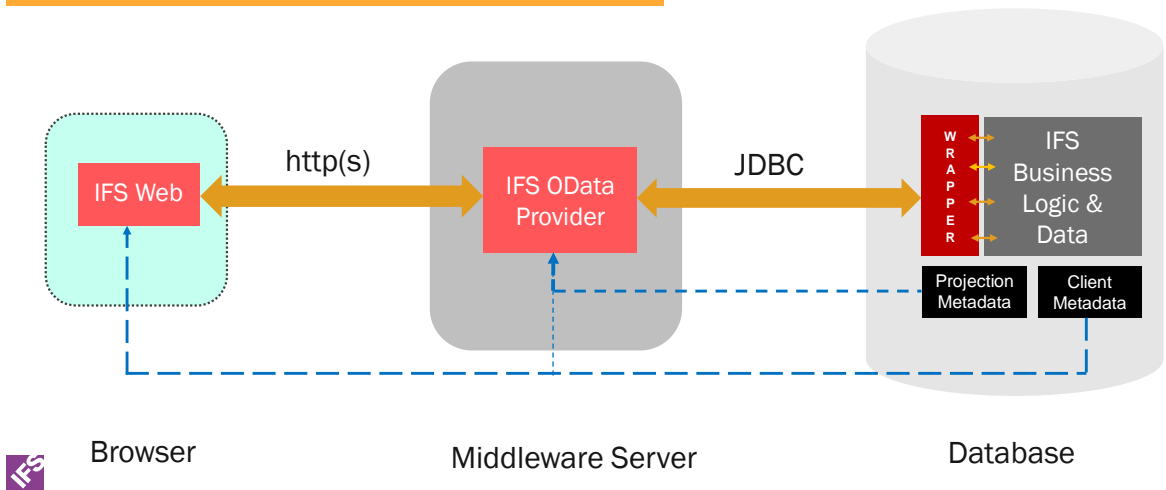
METADATA FOR RUNTIME



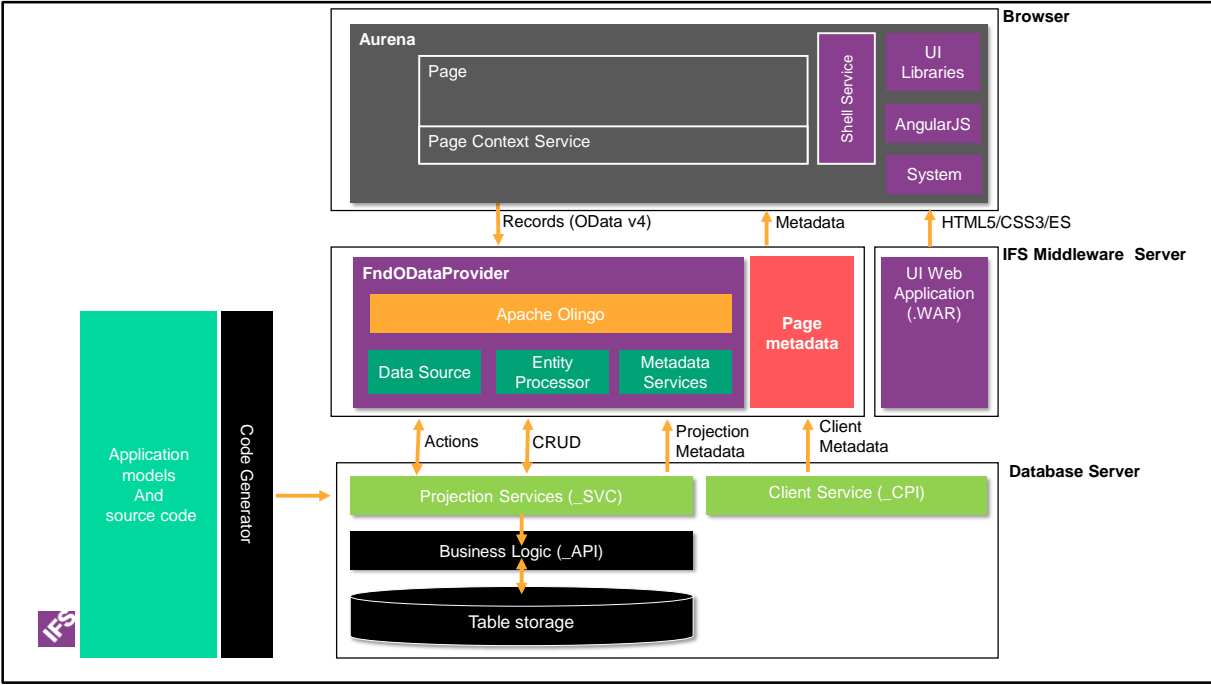
- *.client file results in creating *_CPI plsql package in the database that generates the metadata to define the client.
- *.projection file results in *_SVC plsql package that generates the projection metadata used by IFS OData Provider to create the database request. This package also contains the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





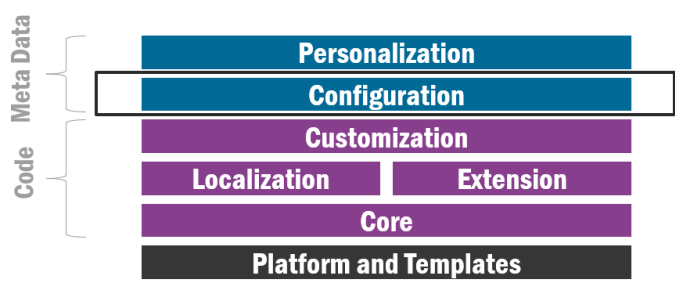
INTRODUCTION TO

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 [Aurena](#)
- Applied changes to pages are stored as **configurations** and are application wide



AURENA PAGE DESIGNER

CONFIGURED PAGE

Page name
is changed

Field is set to
mandatory

Field 'Duplicate
Lead' is hidden

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

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

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

Contacts

Configured page

Section label
is changed

PAGE DESIGNER

INTRODUCTION

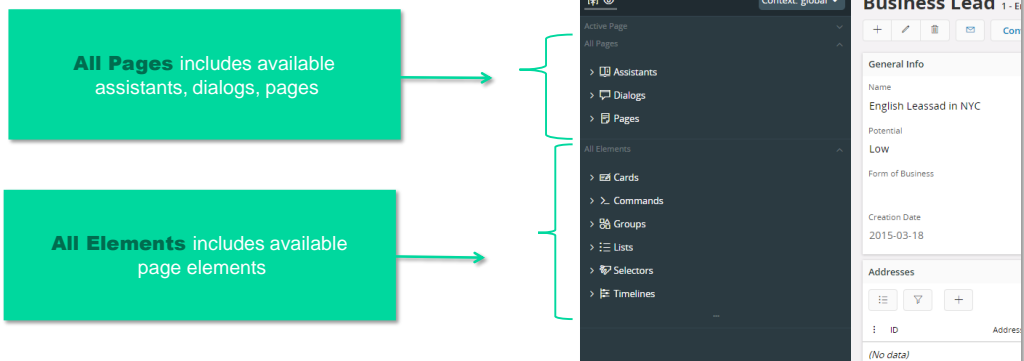
The **Active Page** section displays the meta data that builds up the current page

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

The screenshot displays the Page Designer interface for the 'BusinessLeadDetailPage'. The left sidebar shows the 'Active Page' section with a tree view of the page's meta data, including 'BusinessLeadDetailPage', 'Datasource', 'Entity', 'Label', 'Commandgroups', and 'Content'. The 'Content' section is expanded, showing 'BusinessLeadDetailsSelector', 'General Info', 'Addresses', 'Contacts', 'Representatives', 'Business Activities', 'Business Mails', 'Duplicate Info', 'Note', and 'Journal'. The main area shows a 'Business Lead' form with fields for 'Name', 'Potential', 'Form of Business', 'Creation Date', and 'Addresses'. The form is titled 'Business Lead 1 - English Leassad in N' and includes a 'Convert to Customer' button. The bottom of the sidebar shows 'All Pages' and 'All Elements' sections.

PAGE DESIGNER

PAGES AND ELEMENTS



PAGE DESIGNER

PREVIEW, SAVE AND PUBLISHING

Save

Publish/unpublish

Enable/disable Preview

The screenshot displays the Page Designer interface for a 'Business Lead' detail page. The left sidebar shows a tree view of the page structure, including sections like 'General Info', 'Addresses', 'Contacts', 'Representatives', 'Business Activities', 'Business Mails', 'Duplicate Info', 'Note', and 'Journal'. The main area shows the 'Business Lead' form with fields for Name, Potential, Form of Business, Creation Date, and Addresses. The 'Addresses' section is expanded, showing a table with columns for ID, Test, Address 1, Address 2, Address 3, and Address 4. The 'Contacts' section is also visible below the addresses.

PAGE DESIGNER

DUPLICATE, REVERT CHANGES

Save

Publish/unpublish

Enable/disable Preview

List of available pages

Make a duplicate

Revert changes

The screenshot displays the Page Designer interface for the 'BusinessLeadDetailPage'. The left sidebar shows a tree view of the page structure, including sections like 'General Info', 'Addresses', 'Contacts', 'Representatives', 'Business Activities', 'Business Mails', 'Duplicate Info', 'Note', and 'Journal'. The main area shows the 'Business Lead' form, which includes fields for 'Name', 'Association No', 'Potential', 'Default Language', 'Form of Business', 'Annual Revenue', and 'Currency'. The 'Duplicate Lead' button is visible in the 'Form of Business' section. The 'Addresses' section shows a table with columns for 'ID', 'Address 1', 'Address 2', 'Address 3', and 'Address 4'. The 'Contacts' section shows a table with columns for 'ID', 'Main', 'Add To Campaign', and 'Create Business'.

ID	Address 1	Address 2	Address 3	Address 4
1	www	rrr	yyyl	yyll
10	Address1	2333		

ID	Main	Add To Campaign	Create Business



IFS AURENA

CONFIGURATION CONCEPTS

- Custom Attributes
- Custom Logical Units
- Custom Actions & Commands
- Configuration Context
- Application Configuration Packages

AURENA CONFIGURATIONS

CUSTOM ATTRIBUTES

- Custom Attributes are available in IFS Aurena
- Includes Custom Attributes created as **Custom Fields in IFS Enterprise Explorer**
- Custom Attributes are added to pages in IFS Aurena using the **Page Designer**





WORKING WITH PAGES

CUSTOM LOGICAL UNITS

CUSTOM LOGICAL UNITS IN AURENA

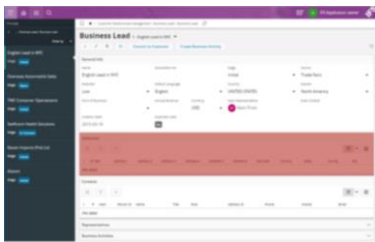
EXTEND STANDARD PAGES

As an Admin,
I want to add a Custom Logical unit as a List to a standard page

CUSTOM LOGICAL UNITS IN AURENA

EXTEND STANDARD PAGES

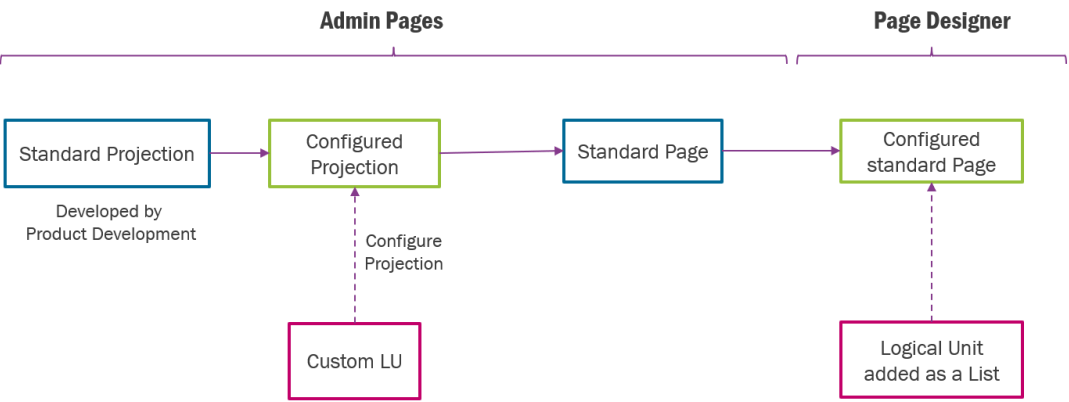
- A standard IFS Aurena Application page can be extended with **Custom Logical Units**
- Custom Logical Units created in **IFS Enterprise Explorer** can be used in IFS Aurena
- Custom Logical Units are added to pages In IFS Aurena by configuring the Projection the standard application page is based on
- 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 AURENA

EXTEND STANDARD PAGES





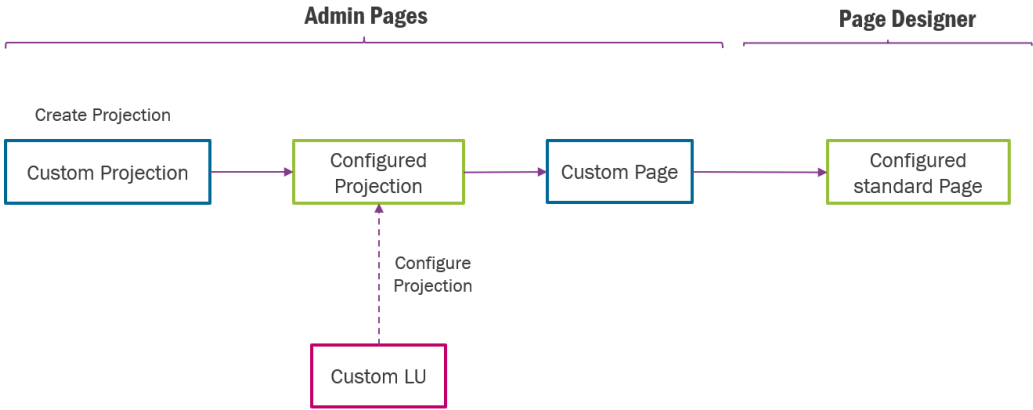
CUSTOM LOGICAL UNITS IN AURENA

CREATE NEW CUSTOM PAGES

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

CUSTOM LOGICAL UNITS IN AURENA

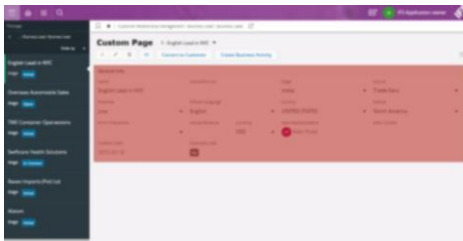
CREATE NEW CUSTOM PAGES



CUSTOM LOGICAL UNITS IN AURENA

CREATE NEW CUSTOM PAGES

- Custom Pages can be created in IFS Aurena
- 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

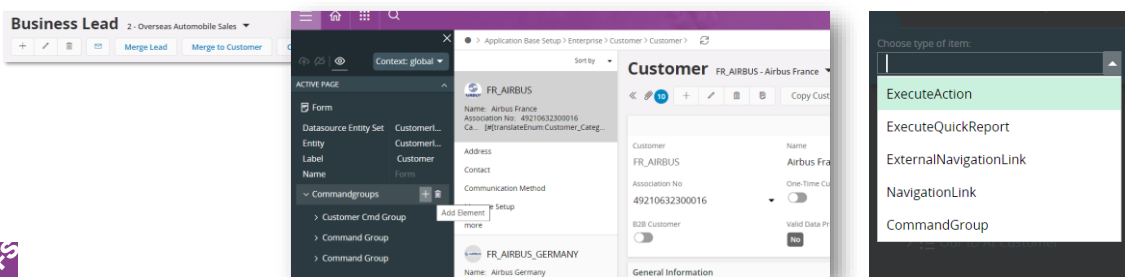




CUSTOM ACTIONS AND COMMANDS

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 Aurena 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.

Test page

... / Application Configurations / Manage Projections

New Projection Configuration

New Projection Configuration

Projection Configuration

Projection Configurations

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	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



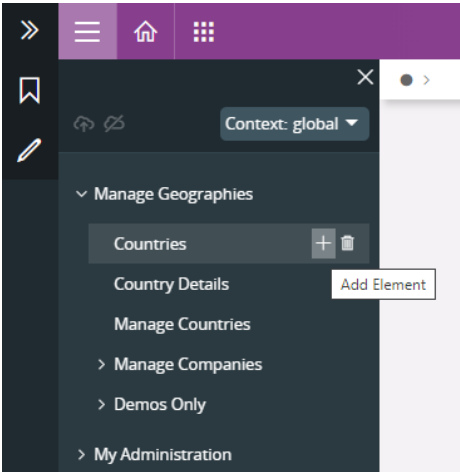
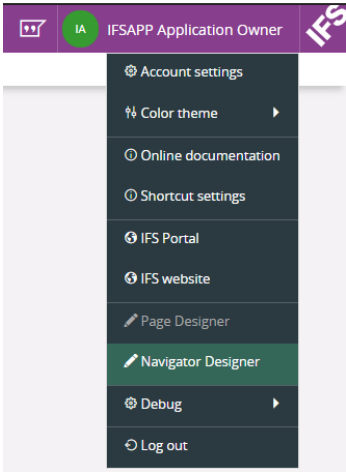




INTRODUCTION TO **NAVIGATOR DESIGNER**

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.





NAVIGATOR DESIGNER

DEMO



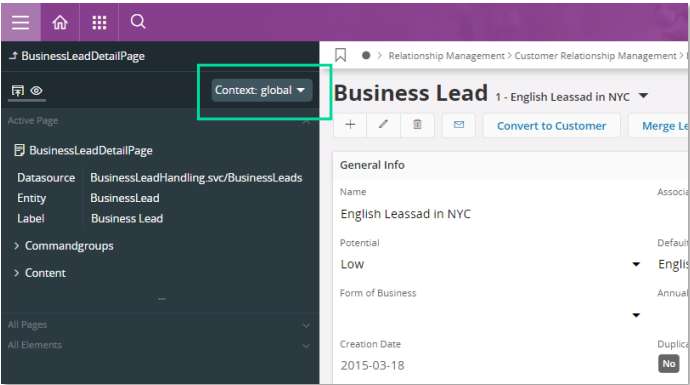
INTRODUCTION TO

CONFIGURATION CONTEXT

CONFIGURATION CONTEXT

GLOBAL CONTEXT

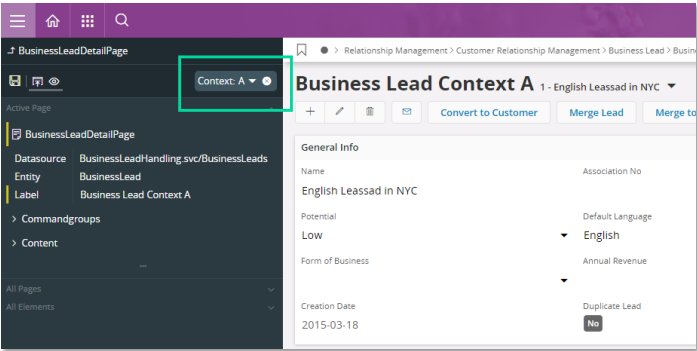
Configurations in a **global context** affects all users in an environment



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		
<input checked="" type="checkbox"/>	Scope Id	Label
<input type="checkbox"/>	A01	A first context
<input type="checkbox"/>	A02	A second context

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

Configuration Context Overview

	Scope Id	Label	Global Context Condition
<input type="checkbox"/>	A01	A first context	Company=11
<input type="checkbox"/>	A02	A second context	Company=10

Solution Manager > Application Configurations > Configuration Context Mappings

Configuration Context Mappings

	Context	Description	Condition
<input type="checkbox"/>	A10	Demo Context	company = 10
<input type="checkbox"/>	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.)

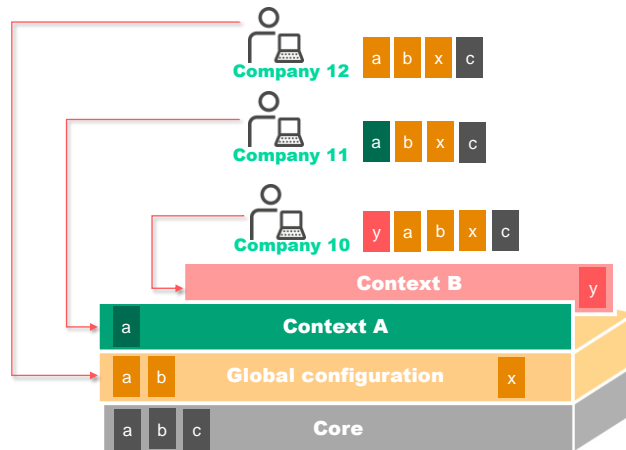
CONFIGURATION CONTEXT

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



CONFIGURATION CONTEXT

DEMO

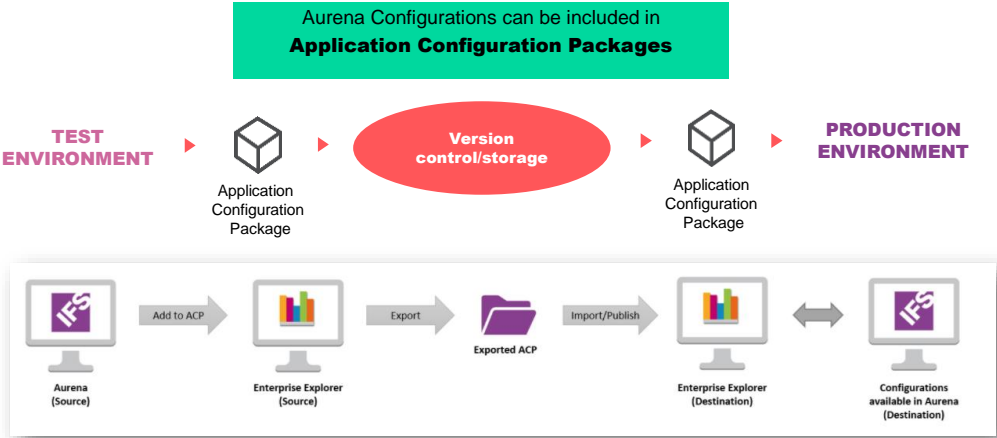


APPLICATION CONFIGURATION PACKAGES

ACP IN AURENA

APPLICATION CONFIGURATION PACKAGES

CONFIGURATION EXPORT AND IMPORT





WRAP-UP



QUESTIONS?



PLEASE PROVIDE US FEEDBACK



THANK YOU



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