



Session 4: Layout

House style



Blaise

Gaining deeper understanding



Contents



- Quick guide to creating a house style BLRD (demo)
- How to use your established house style BLRD
- Fine-tuning to the specific demands of your project



Quick Guide (1)

- Start with a BLRD that matches your specs as much as possible, e.g.:
 - the CVC.blrd that is shipped with the samples (`\Samples\Demo Questionnaires\StatNethQuestionCatalog`)
 - The default BLRD that is shipped with the system
 - Another existing BLRD
 - E.g. ONS's BLRD, which is available in the Blaise Store
- Note that it's a good idea to start designing for 1 layout
 - Add more Layouts and/or Resource Sets with more specific templates as needed when the first one is ready

Quick Guide (2)



- Change the logo/Add your logo
 - Don't forget the Intro/Receipt/Error/Abort pages
- Add any information you want to share with the respondents to Masterpages
 - Number for technical help
 - Other important data/links
- Add media that establish your look and feel
 - Images for navigation buttons, warnings, help button, etc



Quick Guide (3)

- Change colors to institute colorscheme
(in a style if you want)
 - Background/BorderColor property of Grids, Panels, Buttons, ...
 - E.g. Vertical Fieldpane | errorPanel | Background
- Change fonts
 - FontDefinitions: Default/Controls/Text Roles/User Defined
 - E.g. Hint FieldText Control | FontName | Choose a specific font/ Hover to see what is final result



Quick Guide (4)

- Adjust Applicability /ApplyAutomatically Conditions to match your use cases
 - E.g. Field Pane Templates | Movie | ApplyAutomatically
- Add Field References/Text Roles/Type References
 - These are conventions that your organization has
 - Map your fields/textroles/types in the Layout Designer to access value, name, answerinfo, etc
- Add your language
 - Translate elements to your language
 - Texts, images,...



Quick Guide to creating your own House Style Resource Database

Established House Style



Now what?

New project

- Converted from Blaise 4 survey
- New Blaise 5 survey

Attaching the BLRD



- Go to Edit Project
- Browse to the BLRD you want to use
 - Point to a shared location
 - But keep in mind that any changes you make to the resource database will affect all surveys that use this BLRD
 - Best practice: Make sure you use a local copy in your project folder

Attaching the BLRD



Solution Explorer

B5Complex

- Show Folder containing this item
- Save As ...
- Build Solution
- New Solution
- Open Solution
- Save Solution
- Close Solution
- Clean Solution
- Set Project as Startup**
- Build Project
- New Project
- Open Project
- Edit Project**
- Save Project
- Remove Project
- Project Runtime Parameters
- Edit Project Resource
- Copy Survey Data To Project
- New File
- Add Existing File
- Add Used Include Files
- Remove Unused Includes
- Save File
- Close File

Edit Data model Project

Project Name: IBUCDemo

File name: 1 - 15 Sept - 1615-1800Layout-TCAT1Demo2IBUCDemo_CVC1IBUCDemo.bproj

Main file: IBUCDemo.blax

Guid: 46a2acef-701b-4404-80e2-43dbceb9d006

Include Search path:

Library Search path:

Data model Search path:

Resource Database: DefaultResourceDatabase.blrd

Conditional Defines:

External Search path:

Survey Root:

Cati Role: None Mvc On

Is runnable survey:

Supported Web Data Entry Client:

App Support:

Use CARI:

Ignore Layout Errors:

Ignore Rich text Errors:

Preserve Field-Group order in Data:

Start Condition:

Actions Setup:

Download Interceptor Setup:

Write Interceptor Setup:

Select File

Layout-TCAT > Demo2 > IBUCDemo_CVC

Name	Date modified	Type	Size
Include	27-8-2020 09:12	File folder	
Source	27-8-2020 09:12	File folder	
DefaultResourceDatabase.blrd	19-8-2020 10:35	BLRD File	1.512
HouseStyle.blrd	27-8-2020 12:51	BLRD File	1.940

File name: Blaise Resource Database (*.blrd)





Attaching your Default House Style Resource Database



Where to change the layout

– Source code

- Text Role: TEMPLATE
- Naming conventions
- Layout language

NOTE: If you use the layout language, you need to sync between the Layout Designer and the source code

– Layout Designer

- Choose another template
- Change parameters
- Change number of items on a page
- Change number of rows in a table
- Add page breaks

Where to change the layout



- **Resource Editor**
 - Global level
 - Change a template
 - Create a new template
 - Of the right kind
 - Resource Set specific
 - Override a template
 - Change the template
 - Create a new template



Fine-tuning the layout
to the specific needs
of your project

Future reference



- The next slides are for future reference
 - Overview of some topics that were mentioned in this demo
 - Short explanation of what they are and how to apply them



Naming Conventions

Why?

- To make sure specific templates are automatically applied for all fields/groups that match the condition for that template

How?

In source code (.blax or .incx):

```
GROUP <GRP_Groupname_NP>
```

```
// in BLRD, set ApplyAutomatically condition to: STARTSWITH(GroupableItem.LocalName, 'GRP_') or
```

```
// in BLRD, set RequireNewPage condition to: ENDSWITH(TableGroupDefinition.LocalName, '_NP')
```

```
<FieldName_IWER> : <TTypeName>
```

```
// in BLRD, set ApplyAutomatically condition to: ENDSWITH(FieldDefinition.LocalName, '_IWER') or
```

```
// in BLRD, use the type reference in the ApplyAutomatically condition: FieldDefinition.TypeName = 'TTypeName'
```

- No condition means: the template will be available to use, regardless of naming conventions

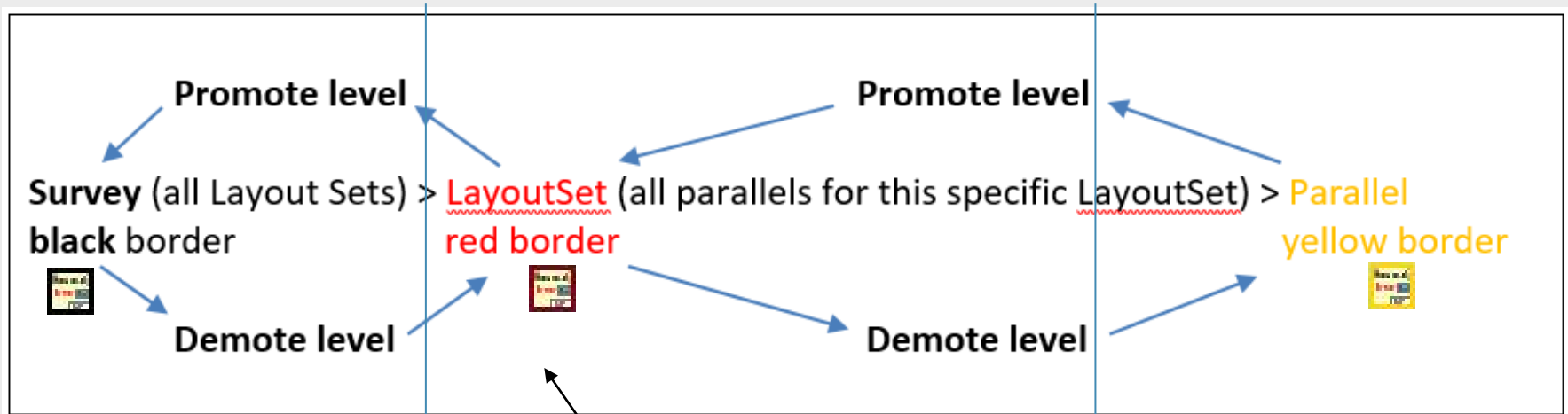
Result?

- Templates that have conditions that match the naming conventions in your data model are applied automatically



How to copy layout

- In the Layout Designer (or use Layout Language in source code)



Instructions can be promoted to **type** or to **block** for all LayoutSets



Instruction is added at LayoutSet level

Instructions can be promoted to **type** or to **block** for all parallels in this LayoutSet



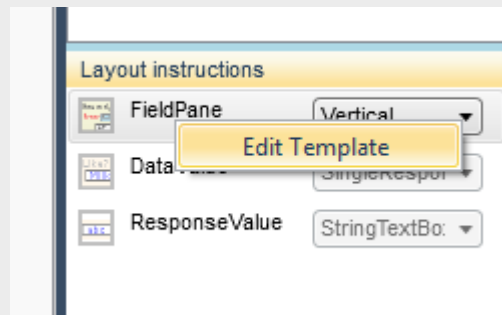
Instructions can be promoted to **type** or to **block** within this parallel



How to find the correct template



- Right-click on the template kind in the Layout instructions in the Layout Designer



- The template will open in the Resource Editor
 - In the Resource Set where it is defined



Resource Sets

The numbers between parenthesis in the structure tree indicate a child count. This image e.g. shows that the *Resource Set* 'Print' has 3 Text Roles (1 default, 1 changed and one new).

Colors show difference with default resource database of this Blaise version

Gray: no Font Definition/Text/ Media/ Template; reference only (override to create a local version)

Green: does not exist (anymore) in defaults (user-defined)

- Blaise Resource Database
 - Languages (2)
 - Text Roles (16)
 - Type References (2)
 - Field References (19)
 - Functions (0)
 - Style Elements (115)
 - Styles (9)
 - Embedded Fonts (0)
 - Font Definitions (78)
 - Media (9)
 - Texts (191)
 - Templates (149)
 - Template Parts (1)
 - Resource Sets (3)
 - Large
 - Smart
 - Print
 - Font Definitions (3)
 - Default (0)
 - Controls (0)
 - Text Roles (3)
 - Category
 - CategoryGroup
 - Description
 - EditMask
 - Help
 - Hint
 - Message
 - PostTxt
 - PreTxt
 - Question
 - SpecialAnswer
 - Tag
 - Template
 - Title
 - ToolTip
 - Watermark
 - User Defined (0)
 - Media (0)
 - Texts (0)
 - Templates (14)

Replenished with global Font Definitions, Media, Texts and Templates

Blue: changed from default (user-defined)

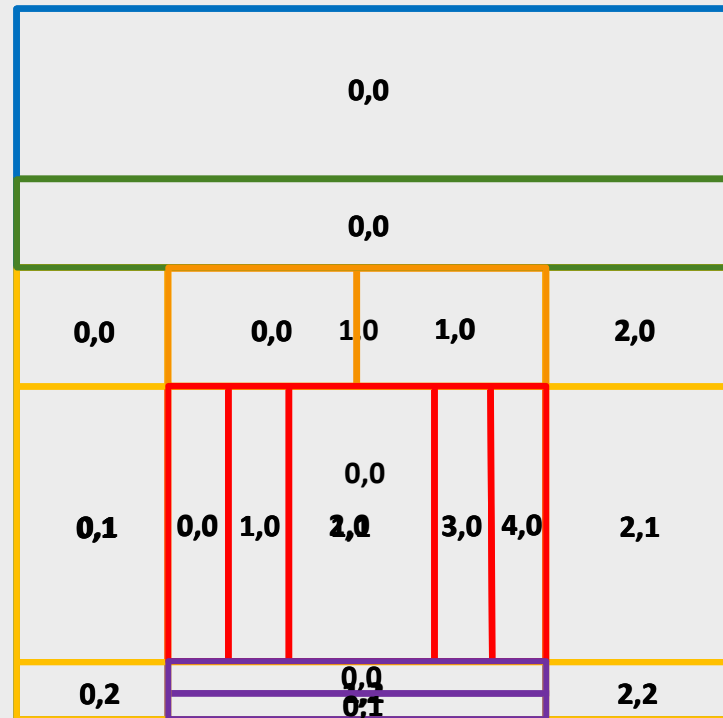
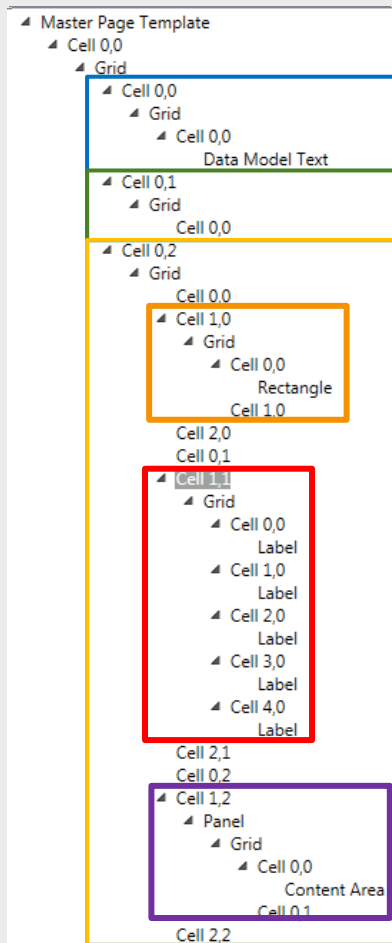
Black: default (defined by Blaise)





How to create a template

Cells are numbered (zero-based) relative to their location in the grid
– on a local level (the numbering resets within a new grid definition)



column row
Cell 0,0

Cell 0,1

Cell 1,0

Cell 0,2

Cell 1,1

Cell 1,2





How to create a template

Height / Width variables:

- Auto: The cell uses the exact space required by the largest element in the cell
 - An auto cell that is empty has no width and cannot be seen
- Star (*): The cell uses as much space as possible
 - Available space is divided among the number of stars (*) in a grid in the same ratio, e.g. * | 3* | * → 1:3:1
- Fixed length (px): the cell uses a fixed number of pixels
- Percentage (%): The cell uses a percentage of the total available space
- Stretch (element-setting): The element uses as much space as possible
- Undefined: Inherits the height/width of any placeholder in that cell. If no placeholder or if still undefined after page-generation, it will become Auto
 - don't use Undefined if there is no placeholder





How to create a template

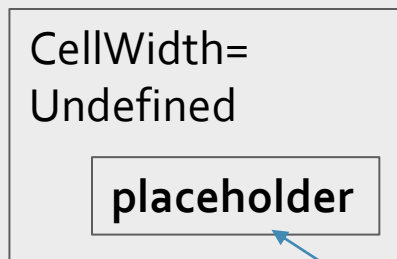
Why use Undefined?

- Less chance of issues with Stretch elements in Auto containers, that would result in unpredictable display situations

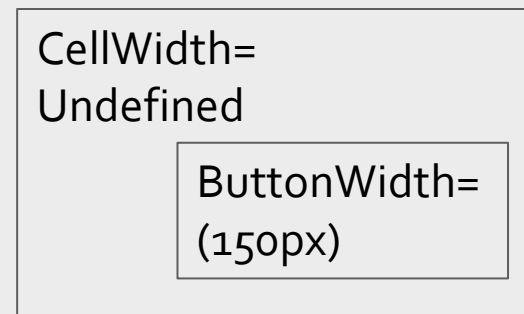
How?

- In the BLRD, set the Width or Height property of a cell or grid to Undefined

Result?



Undefined becomes stretch



Undefined becomes Auto
= 150px in this case



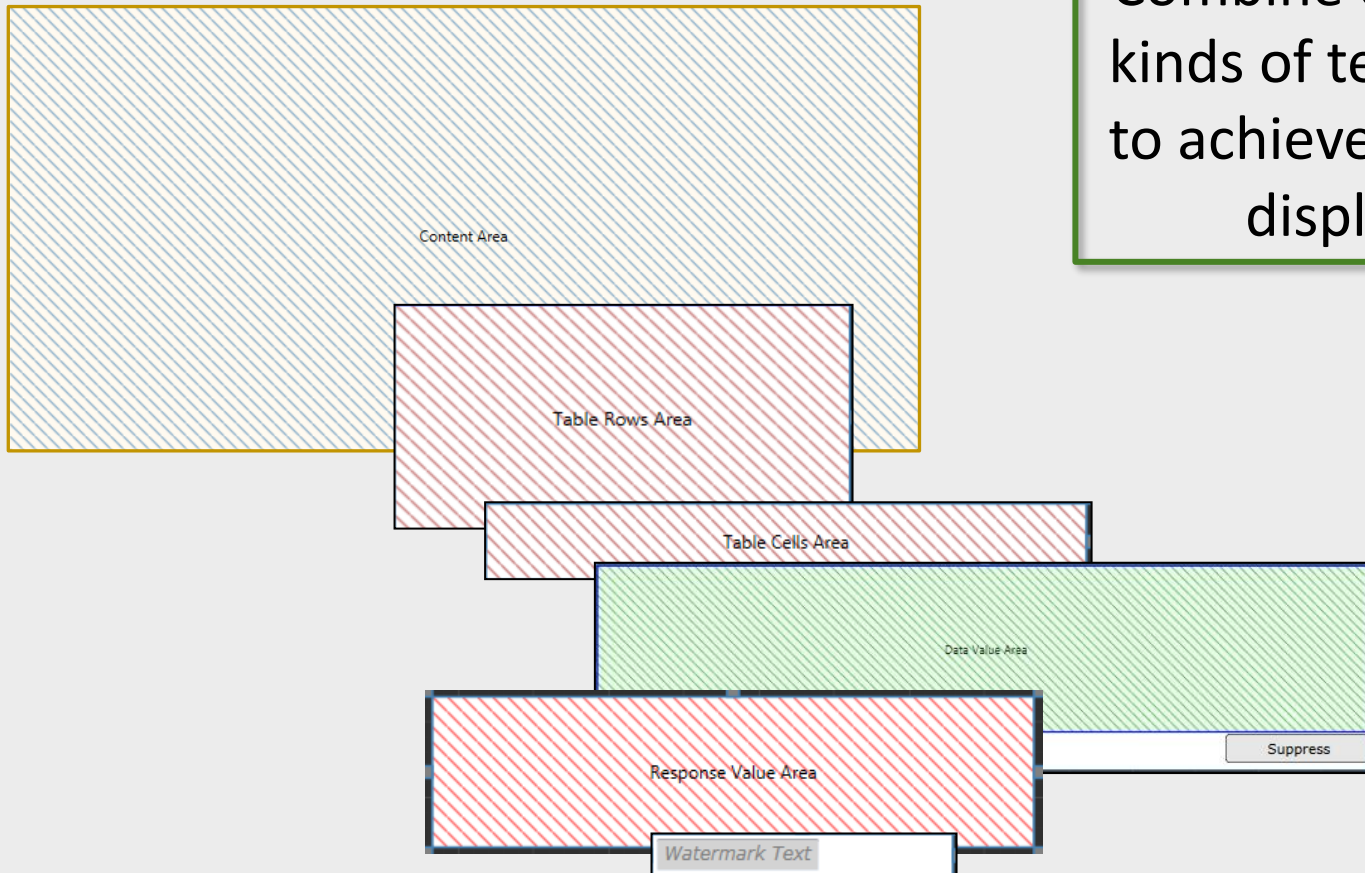
How to create a template

- There are several **placeholders**, pictured as shaded areas in the Design Preview
- Shaded areas will be replaced by another template
 - E.g. Data Value Area will be replaced by a template containing:
 - An Answer List Area and/or
 - A Response Value Area
 - Which in turn will be replaced by other templates



How to create a template

Combine different kinds of templates to achieve needed displays



Applicability Condition



Why?

- This defines if the template should show up in the dropdown that shows possible templates for a question

How?

- In the BLRD, set the Applicability condition to an expression that covers the situations where you want the template to be available:

`FieldDefinition.ValueType.DataType = Enumeration OR FieldDefinition.ValueType.DataType = Set`

- No condition means: it will be available for all questions

Result?

- Template will only be available in the Layout Designer for questions that match the condition. If this template is the first in the stack to evaluate true, it will automatically be used

ApplyAutomatically Condition



Why?

- Less manual work on the layout

How?

- In the BLRD, set the ApplyAutomatically condition to an expression that covers the situations where you want the template to be automatically applied, e.g.:

```
UPPERCASE(FieldDefinition.TypeName) = 'TCURRENCY'
```

- No condition means: you may need to manually choose the template from the list of applicable templates for a question

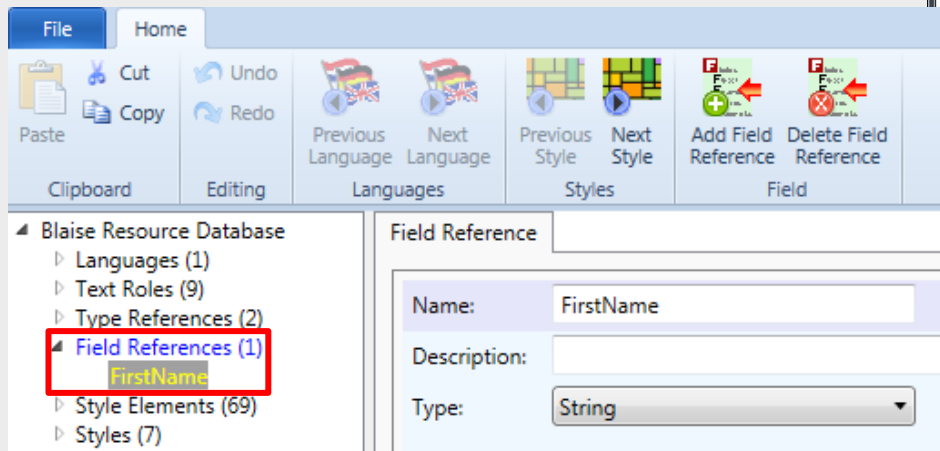
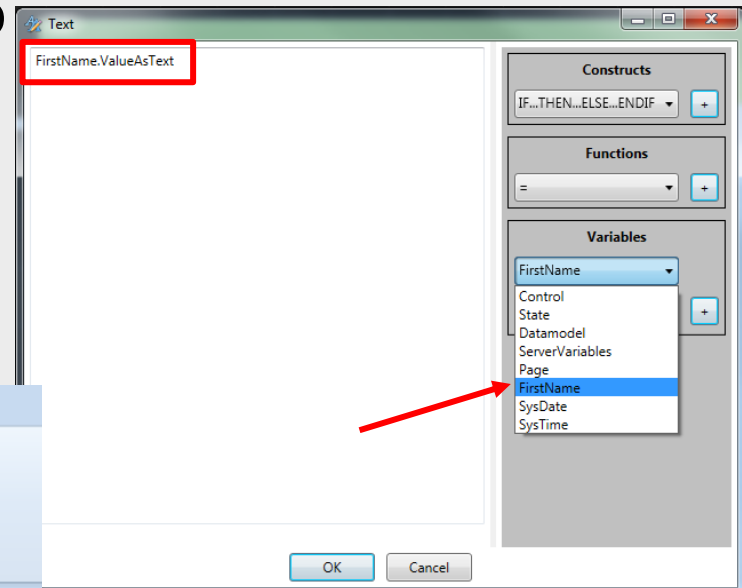
Result?

- Template will be automatically applied if the condition evaluates true



Field References

- Use Field References in an expression to use a property from that field in a template (usually MasterPage)
 - Create a Field Reference in the BLRD
 - Use the Field Reference in an expression for a specific property of a specific template: e.g. `FirstName.ValueAsText`



In the Resource Editor



Field References



The screenshot shows the 'Mappings Management' interface with the 'Field References' tab selected. In the 'Field References' list, 'FirstName (String) -> Person.FirstName' is highlighted with a red box. The 'Field Reference Details' panel on the right shows the following configuration:

- Field Reference Name: FirstName
- Data Type: String
- Field name in Data model: Person.FirstName (with a 'Clear' button)
- Tree view showing 'FlightSurvey' expanded to 'Person: BPerson', where 'Person.FirstName: STRING[20]' is checked and highlighted with a red box.

Make sure the Field Reference is mapped in the Layout Designer

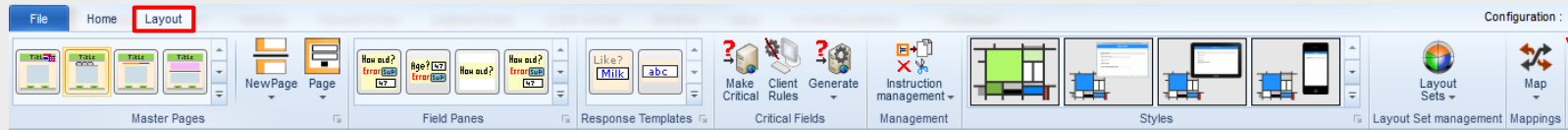
- If the (full) name matches, it will automatically map

The screenshot shows the 'Flight Survey' application at runtime. The title bar reads 'Flight Survey'. The main content area has a green header with the text 'Flight Survey'. Below the header, the name field is populated with 'Tessa', which is highlighted with a red box. A red arrow points from this box to the input field in the form below. The form contains two questions:

- What is your name? (Input field: Tessa)
- What is your last name? (Input field: empty)

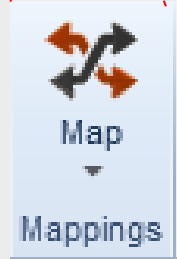
View the result in runtime

Mapping



To map a reference, follow these steps:

- Go to the Layout Designer and click on Map in the Layout Ribbon to open Mappings Management
- Click on the tab you want to map: Languages, Text Roles, Type References, Field References or Functions
- Click on the left side on the name (used in the Resource Database) you want to match with the one in the data model
- Click on the right side on the name (used in the data model) you want to match with the one in the Resource Database
- Click Map



Questions



Any questions?

Thanks



For more detailed information, check out the Help Section:

- Blaise site | Online Documentation 5 (<http://help.blaise.com>)
- Click the link in the right upper corner of the Control Centre
- If you're located in North or South America:
 - Contact blaise@westat.com
- If you're located in the rest of the world:
 - Contact Blaise Support: blaise@cbs.nl
 - Use our JIRA Support portal:
<https://blaisesupport.cbs.nl/servicedesk>