



Optimal Ways of Developing Blaise IS Instruments

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Motivation

Blaise IS:

- Capable
- Powerful
- Open
- Many new features over the years

- But, under documented
 - Existing on-line documentation and example datamodels were very good, just not enough of it.

Method

- Inspected many web-survey screens in many systems as part of Blaise 5 investigation
- Much experimentation
- Experience over several surveys with Blaise IS
 - Primarily at Mathematica
- Frequent communication with the Blaise Team
- Thanks
 - Blaise Team
 - Mathematica for allowing adaptation of their web standards (which I led the development of)

Five Documents

	Name	Summary
Part 1	Blaise IS Samples	Summarizes 'traditional' Blaise IS samples
	Blaise IS ABCs	Mode library, menu, help, languages, Blaise Internet Workshop, simple screens
Part 2	Blaise IS Basics	Multi-question screens, edits, groups
	Blaise IS Elaborate	Custom group, miscellaneous examples, advance use of menu panels
Part 3	Blaise IS Journal	Journal basic and advanced capabilities

There are 275 pages, 375 figures including many tables, graphs, and charts.

Part 1: Blaise IS Samples

The 'Problem':

- 18 Traditional Samples
 - Distributed with Blaise for many years
 - Together they illustrate many features
- But, it took a long time to find what you needed

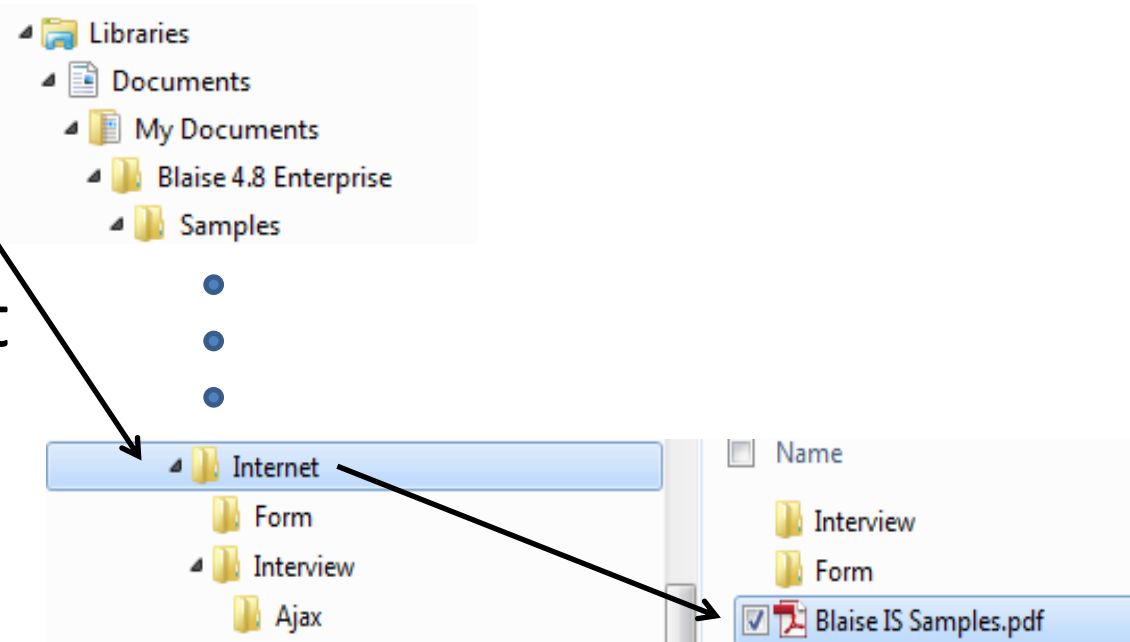
The Solution:

- Write a summary document



Part 1: Blaise IS Samples

- PDF format
 - Internet folder
- 9 tables that cross-reference features
- Many screen shots



Part 1: Blaise IS Samples

Names of 9 Summary Tables

Blaise IS Samples and their Purposes

Use of .ASP Files

Summary of XML Files

Blaise IS Samples and Fieldpanes Available to Each

Blaise IS Samples and Fieldpanes Used in Each

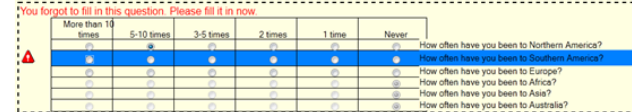
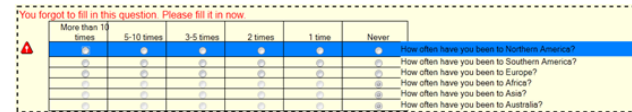
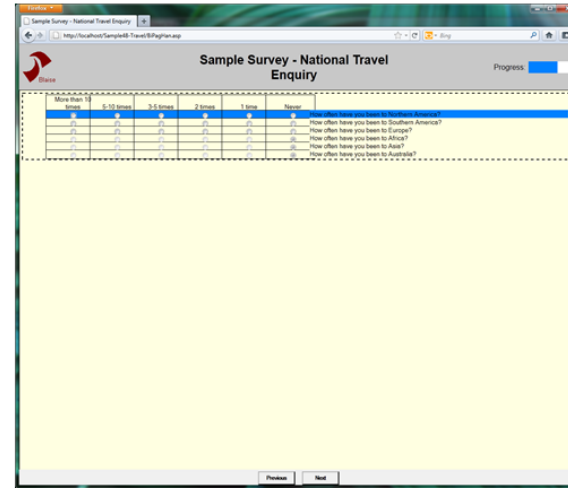
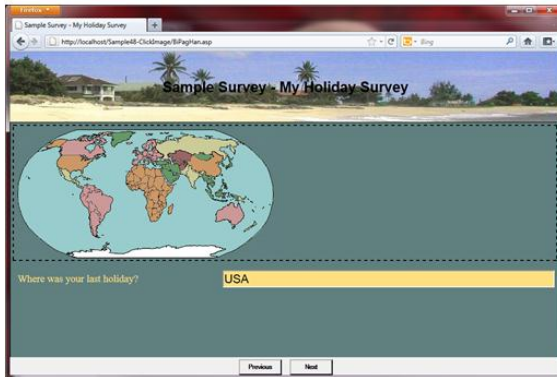
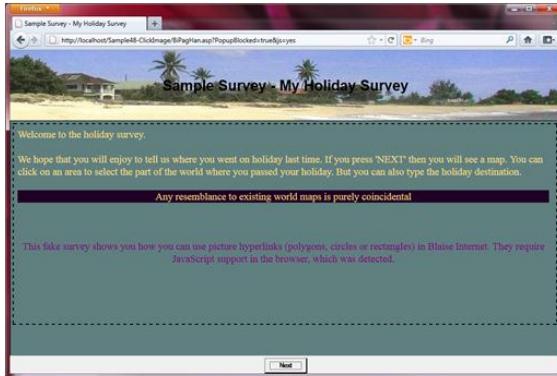
Blaise IS Samples and Groupings Used in Each

Blaise IS Samples vs. Type of Grouping vs. Fieldpanes

Fieldpanes vs. Groupings

Groupings vs. Fieldpanes

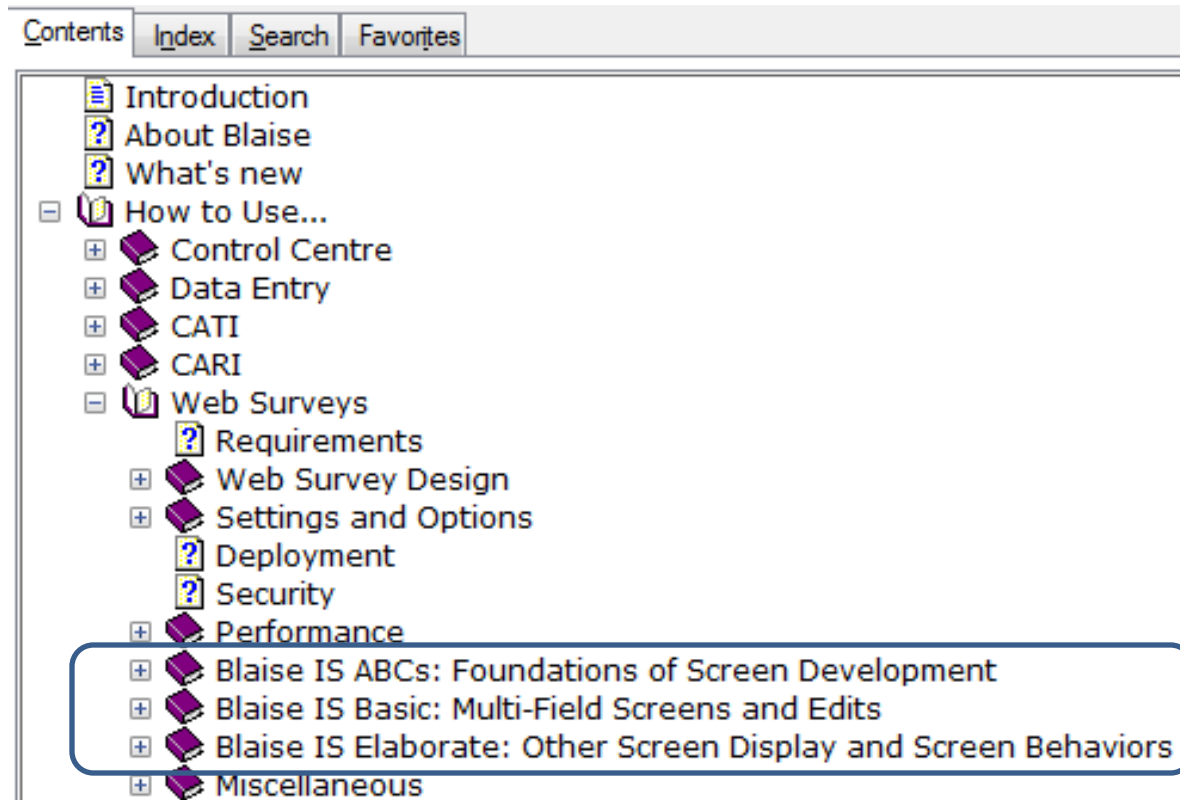
Part 1: Blaise IS Samples



There are 41 pages of screen shots in Blaise IS Samples.pdf (as shown).

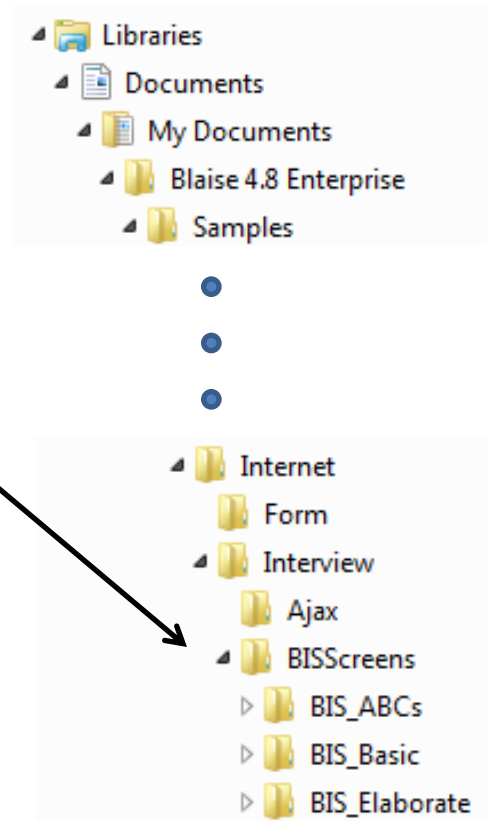
Part 2: Three New BIS Datamodels

They are documented in Blaise On-Line Help:



Part 1: Three New BIS Datamodels

- Screen design principles
- Visual documentation
- Model Blaise IS datamodels
- Model configuration files
 - Mode library, menu, datamodel properties
 - Implement screen standards



Part 2: Three New BIS Datamodels

- Visual

This image shows parts of the screen and the Blaise modules that enable each part.

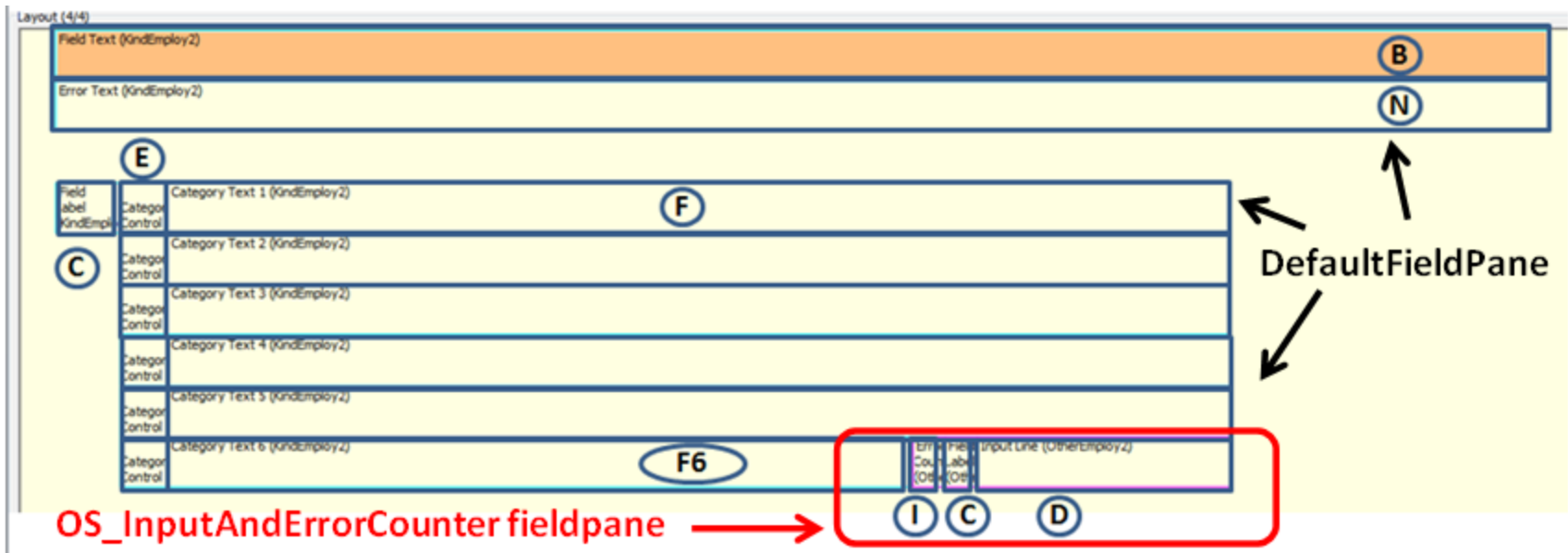
The screenshot shows a web browser window titled "ABCs of Screen Development" in French. The page contains two survey questions. The first question asks for hourly earnings in dollars, with a text input field containing "20". The second question asks for education level, with radio button options ranging from elementary school to a masters degree. Navigation buttons for "Back" and "Next" are visible. At the bottom, there are links for "Frequently Asked Questions (FAQ's)" and "Contacts".

Annotations with arrows point to various UI elements:

- Banner Area (Menu Editor, Style Sheet)**: Points to the top header area containing the page title and progress bar.
- Questions (Fields section, Types library, Mode Library)**: Points to the two survey questions.
- Floating Button Area (Menu Editor)**: Points to the "Back" and "Next" navigation buttons.
- The determination of how many fields to put on any screen (Layout section, Mode Library, field pane depth, in combination with Grid page height)**: Points to the overall layout of the survey questions.
- Link Area (Menu Editor)**: Points to the "Frequently Asked Questions (FAQ's)" and "Contacts" links at the bottom.

Part 2: Three New BIS Datamodels

- **Graphical:** This image from the **Group Layout Editor** shows how 2 field pane definitions come together to form an Other Specify group.



Part 2: Three New BIS Datamodels

- **Graphical:** This image shows the **Browser** implementation of the previous graphic for a particular question.

Which kinds of employment have you had? (B)

Choose all that apply.

Please type the other answer. (N)
To advance without answering, press the Suppress button. Suppress

Self employed (F)

Government (exclude military service)


Military service (exclude civilian military)

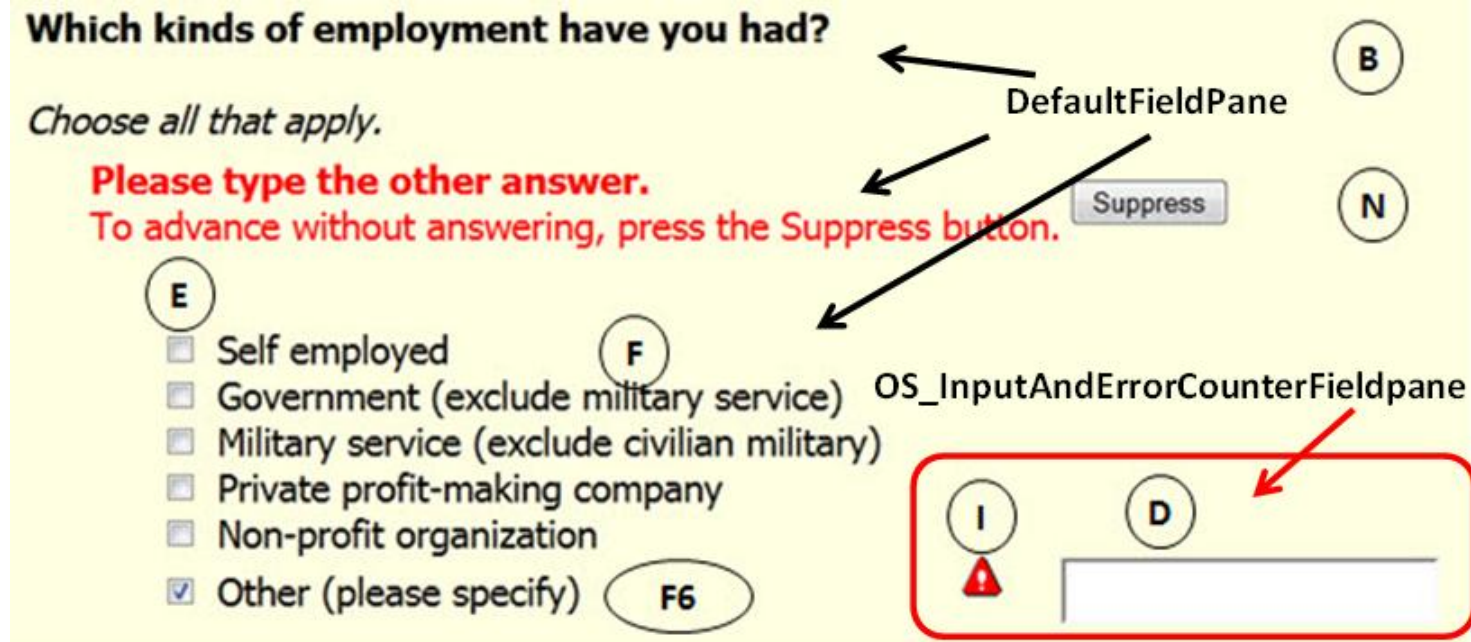
Private profit-making company

Non-profit organization

Other (please specify) (F6)

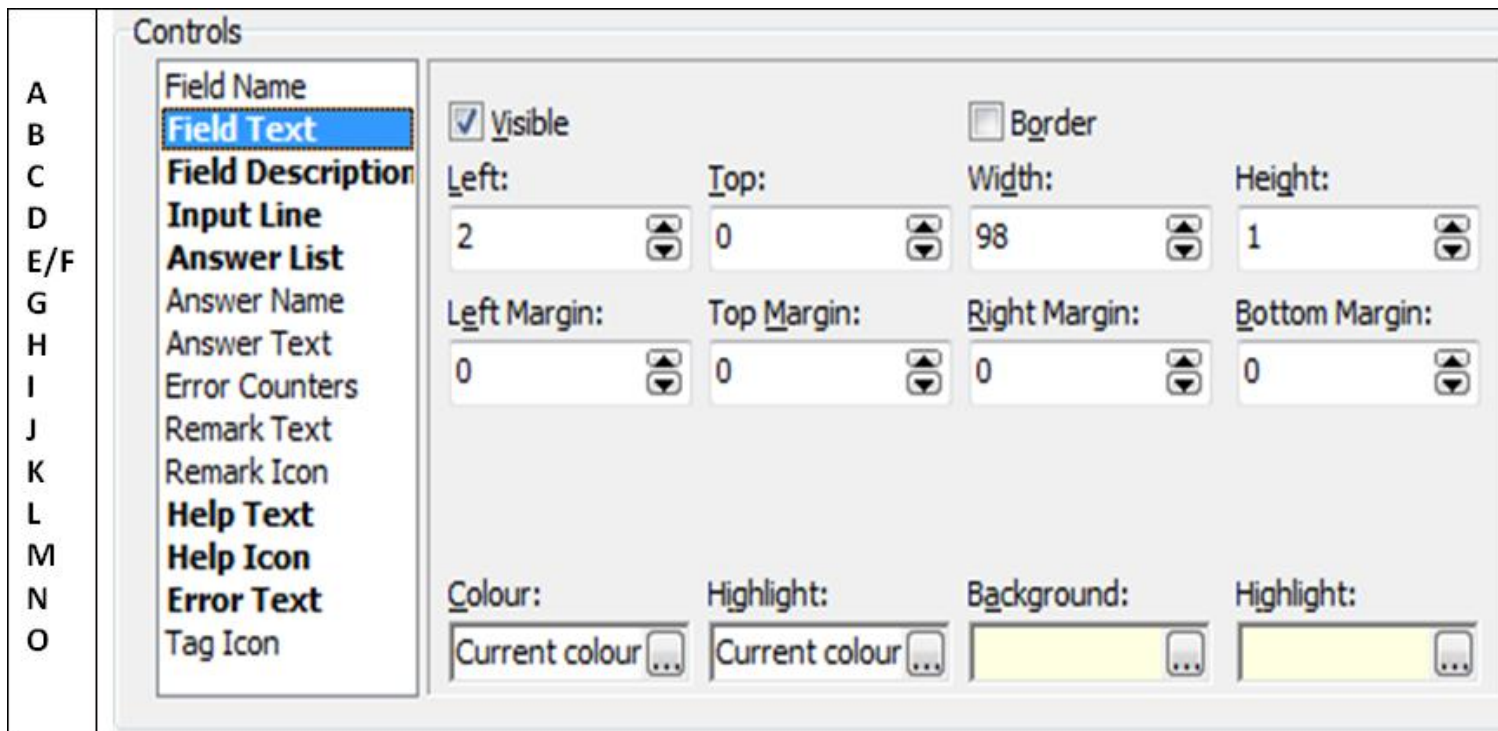
(I) (D)





Part 2: Three New BIS Datamodels

- **Graphical:** This image shows the **Mode Library** relationship to the previous 2 graphics with parts of the fieldpane given letter labels.



Part 2: Three New BIS Datamodels

- **Source code:** This image shows the underlying source code for the images above.

```
|TYPE
. . .
  tKindEmploy2 = (Self "@OSelf employed",
                  Government "@OGovernment (exclude military service)",
                  Military "@OMilitary service (exclude civilian military)",
                  Private "@OPrivate profit-making company",
                  NonProfit "@ONon-profit organization",
                  Other "@OOther (please specify)")

FIELDS
. . .
  KindEmploy2 "Which kinds of employment have you had?
              @/@/@O@IChoose all that apply."
              : SET OF tKindEmploy2
  OtherEmploy2 " " : STRING[20], EMPTY
```

F

F6

B

E

D

Part 2: Three New BIS Datamodels

- **Menu:** Design – Menu elements – Browser rendition

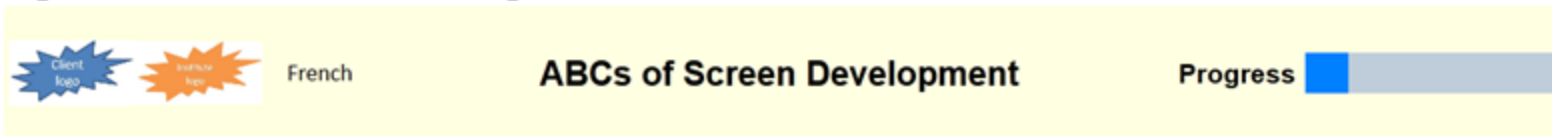
Figure B2a: Visual Specification of the Banner Area



Figure B2b: Schematic Showing the Banner Area Sub-Panel Controls

Client Logo	Institute Logo	Language	\$DICTIONARYTEXT	Progress	<?>	<?>	
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Figure B2c: A Browser Rendering of the Banner Area Schematics



Part 2: Three New BIS Datamodels

- **Menu:** To implement a dynamic side panel for parallel blocks.

The screenshot shows a web browser window with the title 'Elaborate Blaise IS Screens'. The interface is in French. On the left, there is a 'Questionnaire sections' menu with the following items: 'Main Questionnaire' (highlighted with a blue arrow), 'Chief Executive Officer' (Active: Alphie Zeta), 'Chief Financial Officer' (Betty Omega), and 'Chief Information Officer' (Betty Omega). The main content area contains the following text and questions:

These questions are for Alphie Zeta, the Chief Executive Officer.

First are a few questions about your background, then a few questions about the company.

How old are you?

How many years have you worked with Alpha and Beta Preschool?

What is your education level?

- Elementary school
- Some high school
- Graduated high school
- Some college
- Graduated college
- Some graduate school
- Masters or higher degree
- Doctorate or equivalent degree
- Post doctorate degree
- Not applicable

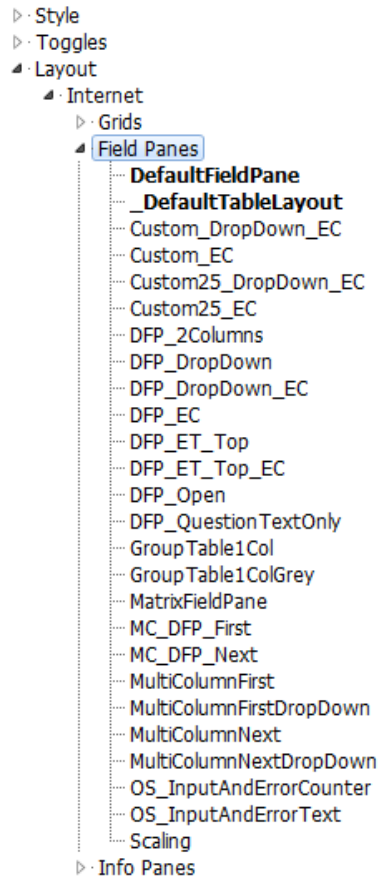
What is your field of study?

- Agricultural Sciences
- Biological or Life Sciences
- Business Management and Administrative Sciences
- Computer and Information Sciences
- Conservation and Natural Resources
- Education
- Engineering and Engineering-Related Technologies
- Health and Related Sciences
- Languages, Linguistics, Literature or Letters
- Liberal Arts or General Studies
- Library Science
- Mathematics and Statistics
- Physical Sciences
- Philosophy, Religion or Theology
- Psychology
- Social Sciences or History
- Social Work
- Visual or Performing Arts, or
- OTHER Field Not Listed

At the bottom of the main content area, there are two buttons: '< Back' and 'Next >'. At the very bottom of the page, there are links for 'Frequently Asked Questions (FAQ's)' and 'Contacts'.

Part 2: Three New BIS Datamodels

- **Mode Library:** Provides 26 model field panes.



- Handle many kinds of situations
- Suited to groups
 - Multi-column, Other Specify, etc
- Meant to be used straight-away in your Blaise IS projects
- Implement a display standard devised by MMPSS
- Shorten your learning curve and speed your first implementations

Part 2: Blaise IS Tools

- **Optimal use:** Illustrations of how to be a super Blaise IS developer.
 - Blaise IS Preview
 - Blaise IS Workshop
 - Stylesheet editor
 - Blaise Layout Editor
 - Menu Editor
 - Mode Library
 - Grouping Dialogs
 - Journal Specification Dialog

Part 2: Blaise IS Tools

- Excruciating detail at times

Figure H7c: Matrix Group Layout Editor Elements and Parameter Values for Phone Collection

Element letter and name	Original Values			Adjusted Values			Fieldpane Element
	Left	Top	Width / Height	Left	Top	Width / Height	
Related Fieldpane = DefaultFieldPane							
Field Text (B)	0	0	1029 / 32	40	0	940 / 64	Field text
Error Text (N)	0	32	1029 / 32	40	64	940 / 32	Error text
Column Title (C-Col)	416+	64	205 / 32	220+	96	60 / 32	Field Description
Row Title (C-Row)	0	96+	414 / 32	40	128+	180 / 32	Answer list
Input Line (D)	456+	96+	160 / 32	226+	128+	60 / 32	Answer list
Error Counter (I)	416+	96+	40 / 32	220+	128+	6 / 32	Error counter
Group Layout Global Settings							
Border = False		Navigation =		Height (derived)		Width	
Original False	Adjusted = False	Original = Horizontal	Adjusted= Horizontal	Original = 192	Adjusted = 224	Original = 1029	Adjusted = 1000

Part 3: Journal

- **Paradata:** Basic server-side and advanced client-side

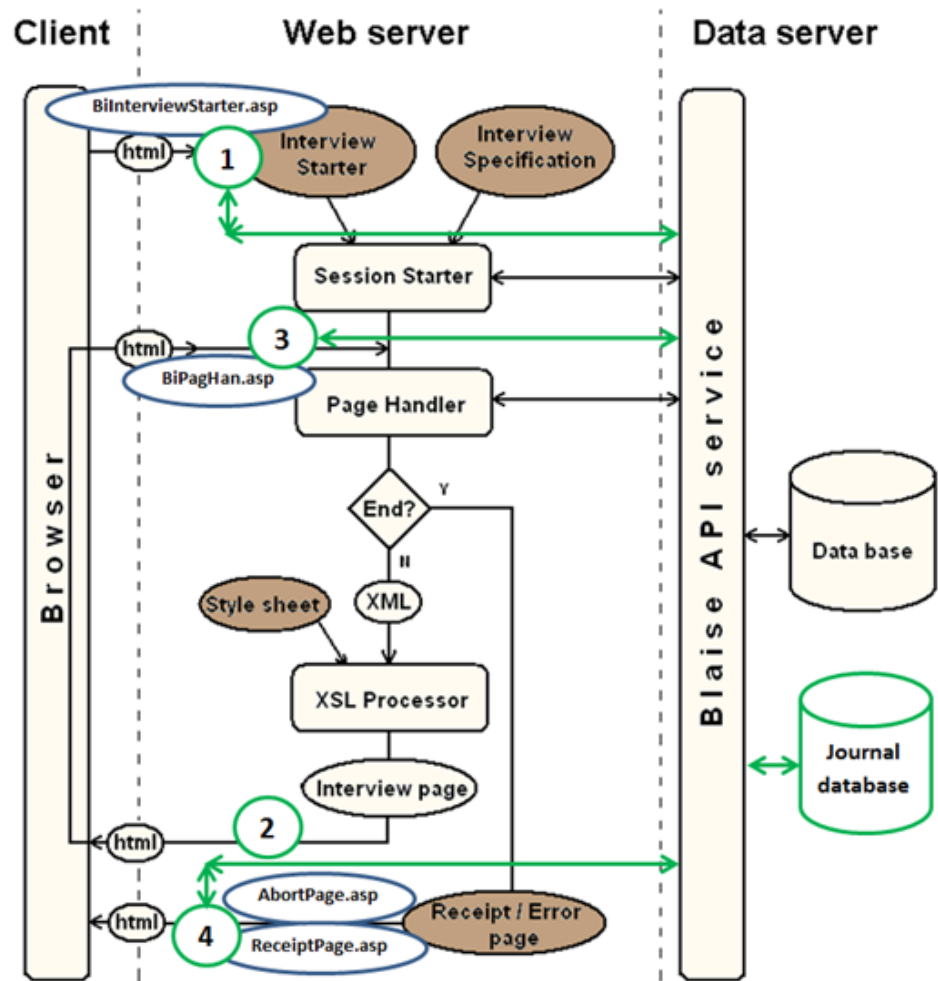
SessionID	PrimaryKey	Action	SubmitStat	PrevPage	CurrentPage	PageStartTime	PrevPageTimeSta	PrevPageLength
8164747		Start			1	20120131105820		0
8164747	1001000	Other		1	1	20120131105829	20120131105820	9
8164747	1001000	Other		1	1	20120131105855	20120131105829	26
8164747	1001000	Next		1	2	20120131105904	20120131105855	9
8164747	1001000	Next		2	3	20120131105944	20120131105904	40
8164747	1001000	Next		3	4	20120131110012	20120131105944	28
8164747	1001000	Next		4	5	20120131110022	20120131110012	10
8164747	1001000	Other		5	5	20120131110035	20120131110022	13
8164747	1001000	Other		5	5	20120131110036	20120131110035	1
8164747	1001000	Other		5	5	20120131110049	20120131110036	13
8164747	1001000	Next		5	6	20120131110100	20120131110049	11
8164747	1001000	Submit	Completed	6		20120131110103	20120131110100	3

Part 3: Journal

- System

Openness:

Several places to insert or modify .ASP pages



Schematic overview of how Interview Mode web surveys work

Conclusion

- Could be written
 - A Blaise IS quick guide
 - Blaise IS accessibility
 - Even more complex screens, such as large tables and data structures
- Blaise IS has evolved over the years, sometimes very quietly
- Blaise IS has surprising power, some of which I was not aware of

Conclusion

- If you wish to ride a race horse rather than a bucking bronco



Conclusion

- If you wish to ride a unicycle easily instead of just trying to stay upright



Conclusion

- If you wish to fly instead of fall



Conclusion

- Then read the Blaise IS documentation
 - Everyone will be happy.

