

Converting to Blaise 5

Experiences and Lessons Learned

Introduction

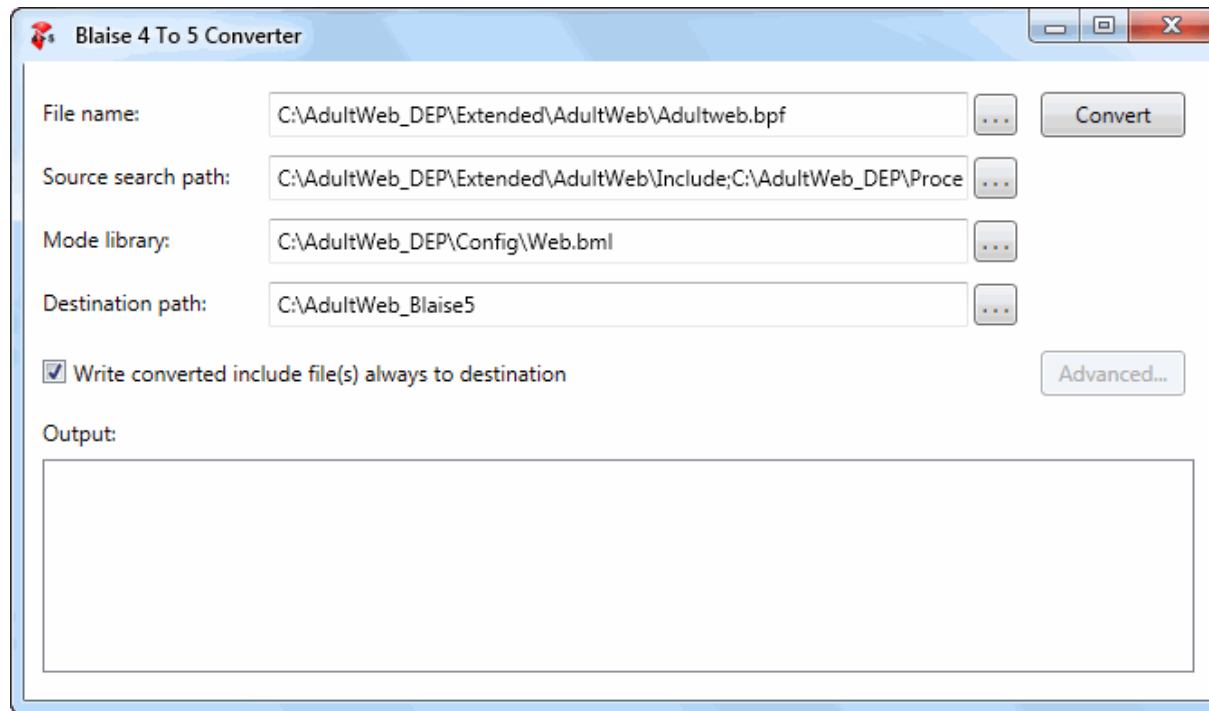
- Initial focus for adoption of Blaise 5
- Development of Blaise 5 conversion strategies

Blaise 5 Control Centre

- Integrated Development Environment (IDE)
 - Source Editor
 - Resource Editor
 - Layout Designer
- Terminology
 - Resource Set
 - Layout Set

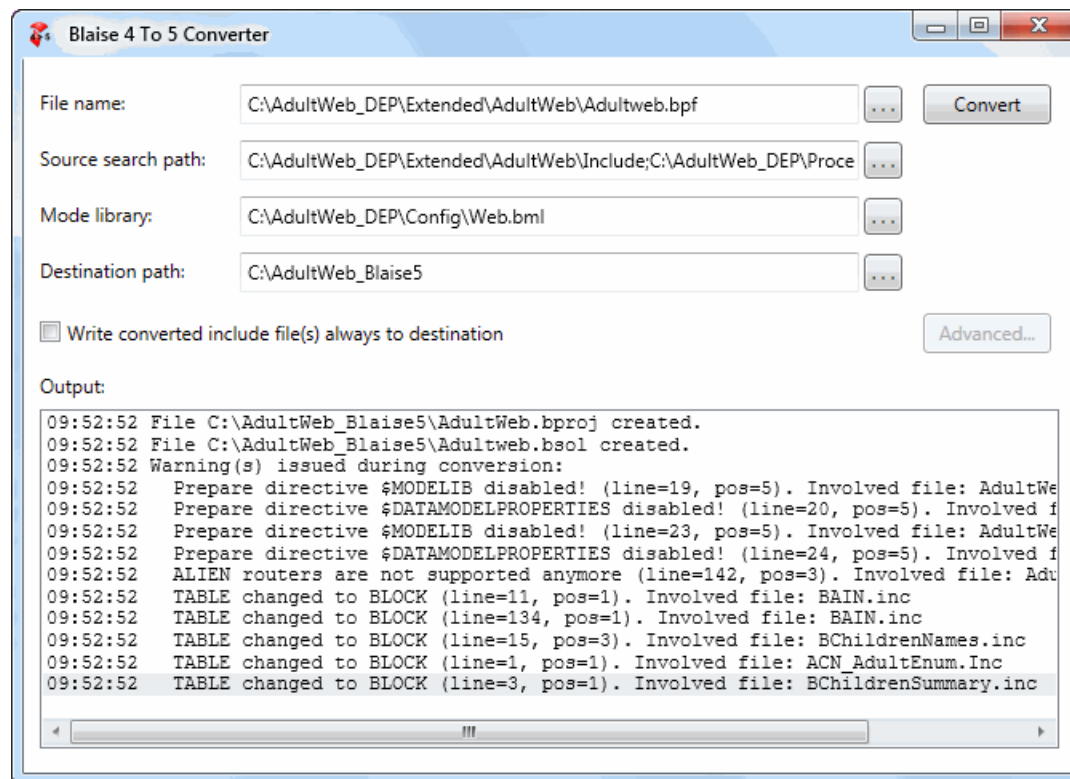
Source Converter

- Blaise 4 to 5 Source Converter tool is the starting point for code conversion.



Output from Source Converter

- Two forms of output – screen output and a log file

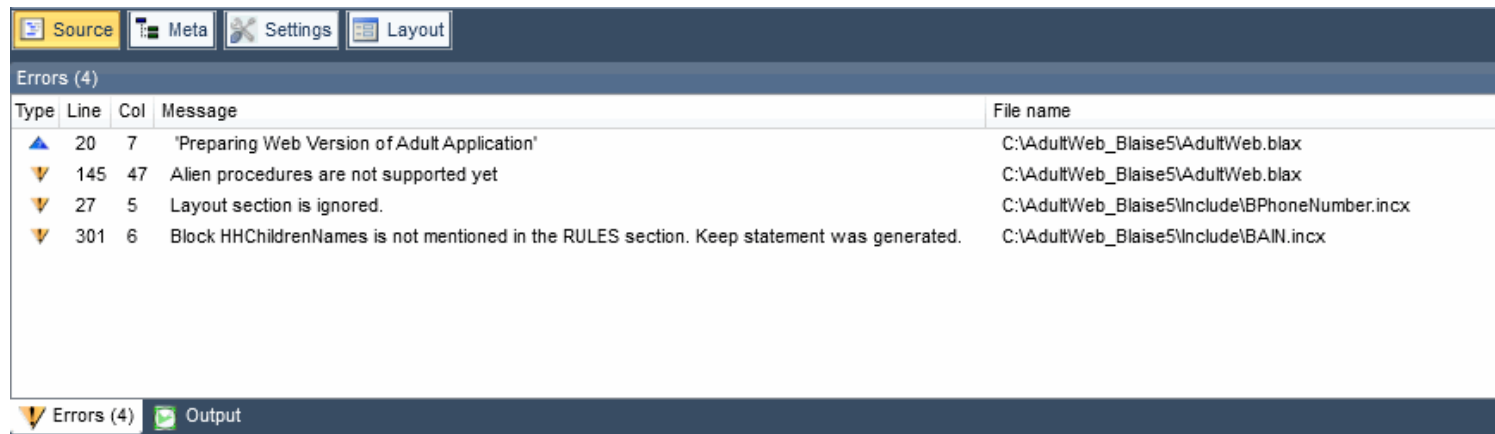


Output from Source Converter-Log File

```
7/11/2013 9:56:00 AM;=====
7/11/2013 9:56:00 AM;Start Blaise 4-->5 Source Conversion, using: Blaise4to5Com.exe, version: 5.0.0.15
7/11/2013 9:56:00 AM;File name: C:\AdultWeb_DEP\Extended\AdultWeb\Adultweb.bpf
7/11/2013 9:56:00 AM;Source search path(s):
C:\AdultWeb_DEP\Extended\AdultWeb\Include;C:\AdultWeb_DEP\Procedures;C:\AdultWeb_DEP\Types;C:\AdultWeb_DEP\Config
7/11/2013 9:56:00 AM;Destination: C:\AdultWeb_Blaise5\
7/11/2013 9:56:00 AM;Write include file(s) to destination: False
7/11/2013 9:56:00 AM;General encoding: 9: CP1252
7/11/2013 9:56:00 AM;Modelib file C:\AdultWeb_DEP\Config\Web.bml read!
7/11/2013 9:56:00 AM;Source file: C:\AdultWeb_DEP\Extended\AdultWeb\AdultWeb.bla
7/11/2013 9:56:00 AM;WARNING. Prepare directive $MODELIB disabled! (AdultWeb.bla, line=19, pos=5)
7/11/2013 9:56:00 AM;WARNING. Prepare directive $DATAMODELPROPERTIES disabled! (AdultWeb.bla, line=20, pos=5)
7/11/2013 9:56:00 AM;WARNING. Prepare directive $MODELIB disabled! (AdultWeb.bla, line=23, pos=5)
7/11/2013 9:56:00 AM;WARNING. Prepare directive $DATAMODELPROPERTIES disabled! (AdultWeb.bla, line=24, pos=5)
7/11/2013 9:56:00 AM;WARNING. ALIEN routers are not supported anymore (AdultWeb.bla, line=142, pos=3)
7/11/2013 9:56:00 AM;WARNING. TABLE changed to BLOCK (BAIN.inc, line=11, pos=1)
7/11/2013 9:56:00 AM;WARNING. ENDTABLE changed to ENDBLOCK (BAIN.inc, line=132, pos=1)
...
7/11/2013 9:56:00 AM;File created: C:\AdultWeb_Blaise5\AdultWeb.blax
7/11/2013 9:56:00 AM;File created: C:\AdultWeb_Blaise5\...\Procedures\ValidateState.prc.incx
7/11/2013 9:56:00 AM;File created: C:\AdultWeb_Blaise5\...\Procedures\GetStateName.prc.incx
7/11/2013 9:56:00 AM;File created: C:\AdultWeb_Blaise5\...\Types\IntegrationTypes.lib.incx
7/11/2013 9:56:00 AM;File created: C:\AdultWeb_Blaise5\...\Types\GeneralTypes.lib.incx
7/11/2013 9:56:00 AM;File created: C:\AdultWeb_Blaise5\...\Types\Adult_Web_Types.lib.incx
7/11/2013 9:56:00 AM;File created: C:\AdultWeb_Blaise5\...\Types\Adult_Types.lib.incx
7/11/2013 9:56:00 AM;File created: C:\AdultWeb_Blaise5\Include\BNismartBreakOff.incx
7/11/2013 9:56:00 AM;File created: C:\AdultWeb_Blaise5\Include\BPhoneNumber.incx
7/11/2013 9:56:00 AM;File created: C:\AdultWeb_Blaise5\Include\BDateTime.incx
```

Source Editor

- Uses an integrated parser
- Example: LAYOUT section



The screenshot shows a software interface with a dark blue header containing four tabs: 'Source' (selected), 'Meta', 'Settings', and 'Layout'. Below the tabs is a window titled 'Errors (4)' containing a table of error messages. The table has columns for 'Type', 'Line', 'Col', 'Message', and 'File name'. The errors are as follows:

Type	Line	Col	Message	File name
▲	20	7	'Preparing Web Version of Adult Application'	C:\AdultWeb_Blaise5\AdultWeb.blax
▼	145	47	Alien procedures are not supported yet	C:\AdultWeb_Blaise5\AdultWeb.blax
▼	27	5	Layout section is ignored.	C:\AdultWeb_Blaise5\Include\BPhoneNumber.incx
▼	301	6	Block HHChildrenNames is not mentioned in the RULES section. Keep statement was generated.	C:\AdultWeb_Blaise5\Include\BAIN.incx

At the bottom of the window, there are two buttons: 'Errors (4)' with a downward arrow and 'Output' with a green icon.

Subsequent Layout Modifications

- Layouts
- Tables
- Groupings

Layout Designer

The screenshot displays the Westat Layout Designer interface. The main window shows a survey instrument titled "Adult Web Instrument (2.21.307.012)" on page 9 of 113. The instrument content includes a question: "What is 'gp9[pChildPointer]'s birthdate?" with input fields for "ENTER MONTH", "ENTER DAY", and "ENTER YEAR", each with a "Select" dropdown. Below this is another question: "So that would make 'gp9[pChildPointer]' *DispChldsCalcAge old?" with radio button options for "Yes", "No", "Don't know", and "Rather not answer". Navigation buttons for "Previous" and "Next" are visible at the bottom of the instrument area.

The left sidebar shows a tree view of the instrument structure, including sections for "AIN.HHChildren.Children (groupable)", "AIN.HHChildren.Children.Person[1] (groupable)", and "AIN.HHChildren.Children.Persc". The "AIN.HHChildren.Children.Persc" section is expanded to show "Page 9" and "Page 10".

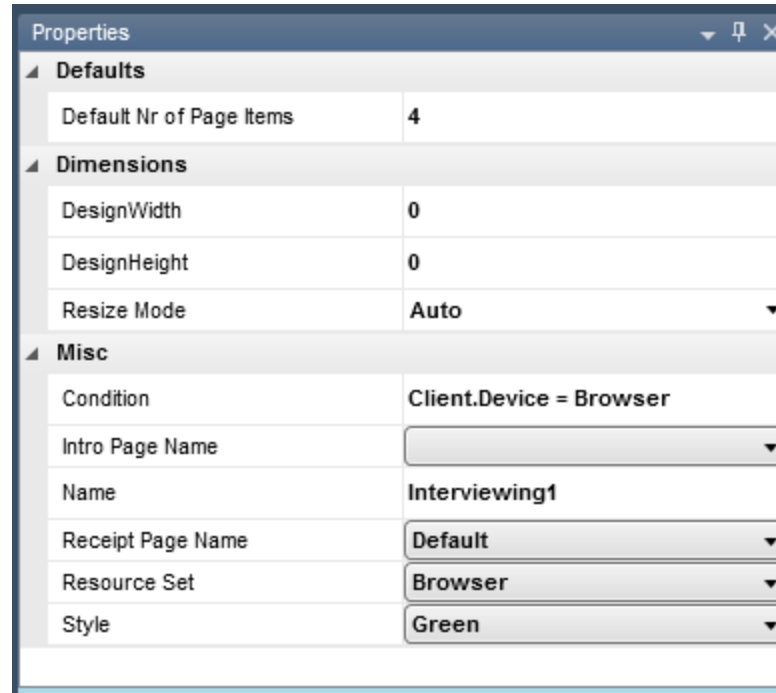
The right sidebar shows the "Properties" panel for the selected "Misc" element. It includes "Layout instructions" for "Template type: FieldPane" (Vertical) and "Template type: DataValue" (DropDownList). The "Parameters" section shows "Height" set to "Stretch", "Margin" set to "5,2,5,3", and "Width" set to "Stretch".

At the bottom of the window, there are tabs for "Source", "Meta", "Settings", and "Layout". The status bar indicates "Page 9 of 113, Field = AIN.HHChildren.Children.Person[1].ChildB" and a window size of "800 * 600".

Layouts

- Property Defaults
- Question Text Only
- Drop Down List

Layout Property Defaults



The screenshot shows a 'Properties' window with three expandable sections: Defaults, Dimensions, and Misc. Each section contains a list of properties and their values.

Defaults	
Default Nr of Page Items	4

Dimensions	
DesignWidth	0
DesignHeight	0
Resize Mode	Auto

Misc	
Condition	Client.Device = Browser
Intro Page Name	
Name	Interviewing1
Receipt Page Name	Default
Resource Set	Browser
Style	Green

Layouts

■ Question Text Only

Adult Web Instrument (2.21.307.012)

Welcome to the National Study about Children. You have been sent the link to this survey because we mailed a short questionnaire to your address and your household answered and gave your name.

Continue

According to your household's answers to our questionnaire, children age 18 or younger live or have lived in your household in the past 12 months, that is, since ^gp0. Is this correct?

Yes
 No

According to your household's answers in our questionnaire, ^gp1 takes care of the children most of the time. Is this correct?

Yes
 No

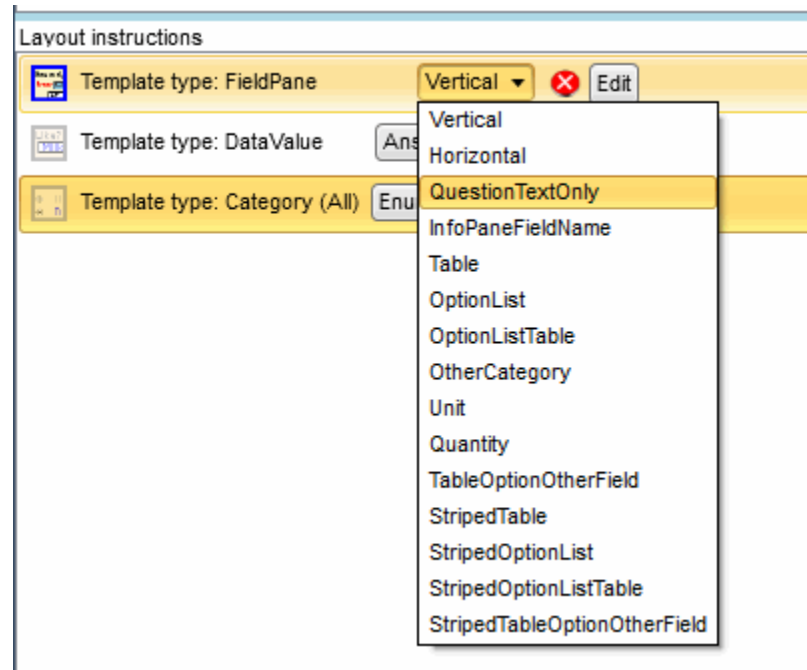
Are you ^gp1?

Yes
 No

Next

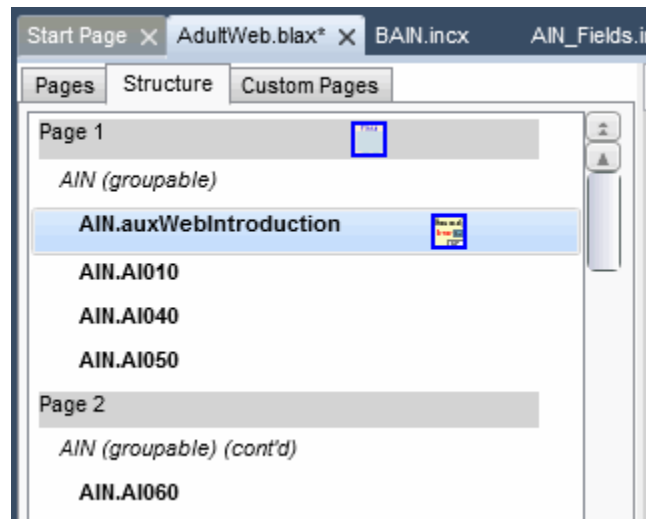
Layouts

Question Text Only



Layouts

Question Text Only



Layouts

Question Text Only

Adult Web Instrument (2.21.307.012)

Welcome to the National Study about Children. You have been sent the link to this survey because we mailed a short questionnaire to your address and your household answered and gave your name.

According to your household's answers to our questionnaire, children age 18 or younger live or have lived in your household in the past 12 months, that is, since ^gp0. Is this correct?

Yes
 No

According to your household's answers in our questionnaire, ^gp1 takes care of the children most of the time. Is this correct?

Yes
 No

Are you ^gp1?

Yes
 No

[Next](#)

Layouts

- Drop Down List

Adult Web Instrument (2.21.307.012)

Girl
 Don't know
 Rather not answer

What is ^gp0[pChildPointer]'s birthdate?

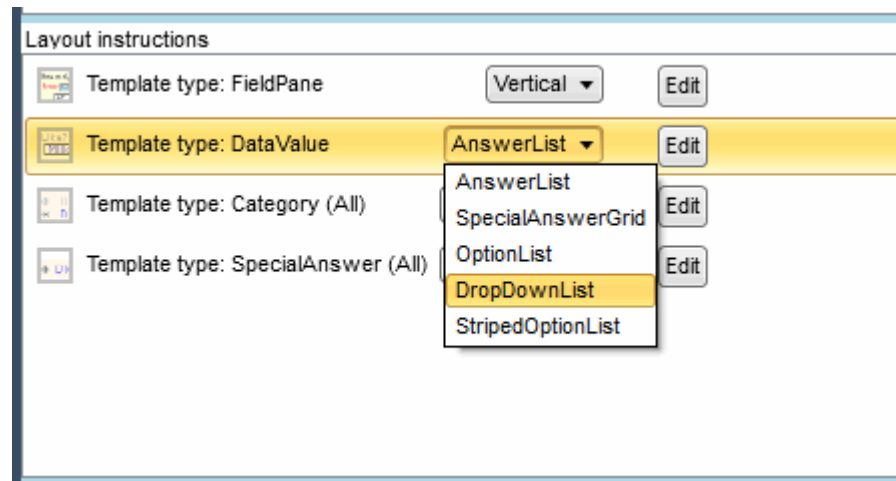
ENTER MONTH

JANUARY
 FEBRUARY
 MARCH
 APRIL
 MAY
 JUNE
 JULY
 AUGUST
 SEPTEMBER
 OCTOBER
 NOVEMBER
 DECEMBER
 Don't know
 Rather not answer

Previous Next

Layouts

Drop Down List



Layouts

Drop Down List

Adult Web Instrument (2.21.307.012)

What is ^gp9[pChildPointer]'s birthdate?

ENTER MONTH	ENTER DAY	ENTER YEAR
Select ▾	Select ▾	Select ▾

So that would make ^gp9[pChildPointer] ^DispChildsCalcAge old?

- Yes
- No
- Don't know
- Rather not answer

Previous Next

Tables

- No TABLE Statement
- Groupable
- Table Templates

Groupable Default View

Adult Web Instrument (2.21.307.012)

Please provide a name, initials, or a nickname for all the children 18 years old or younger who have lived in your household for at least 2 weeks in a row since ^gp0.

ENTER ^gp1 CHILD'S NAME.

If you want to delete a child from the table check the delete row box corresponding to the child you want to delete.

^gp3

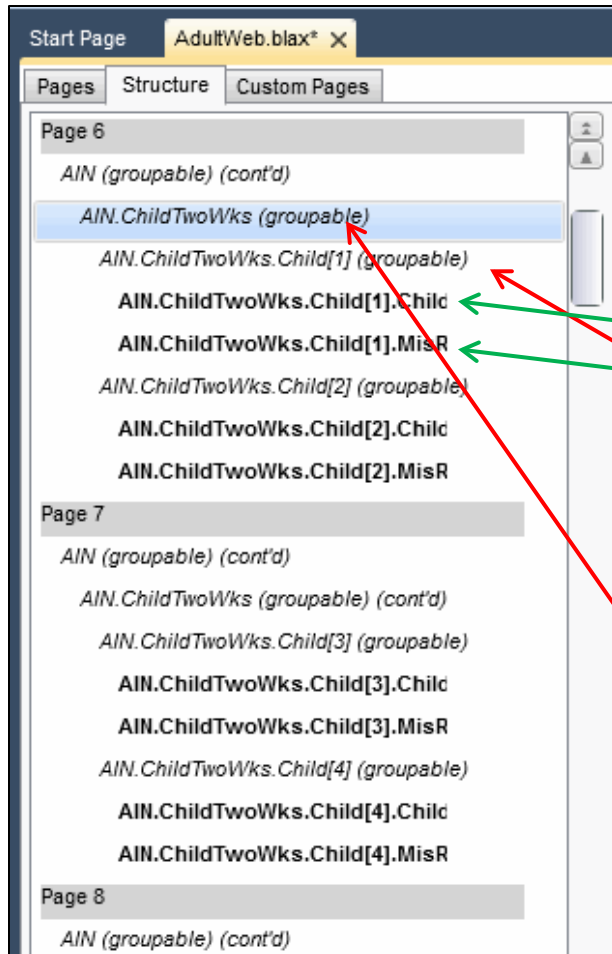
Please provide a name, initials, or a nickname for all the children 18 years old or younger who have lived in your household for at least 2 weeks in a row since ^gp0.

ENTER ^gp1 CHILD'S NAME.

If you want to delete a child from the table check the delete row box corresponding to the child you want to delete.

^gp3

Groupable Default Structure



BLOCK {TABLE} TChildTwoWeeks "Childs Name"

BLOCK BTwoWeekChildren
FIELDS

ChildFNameTwoWk ...

MisReportedChildTwoWk

ENDBLOCK {BTwoWeekChildren}

FIELDS

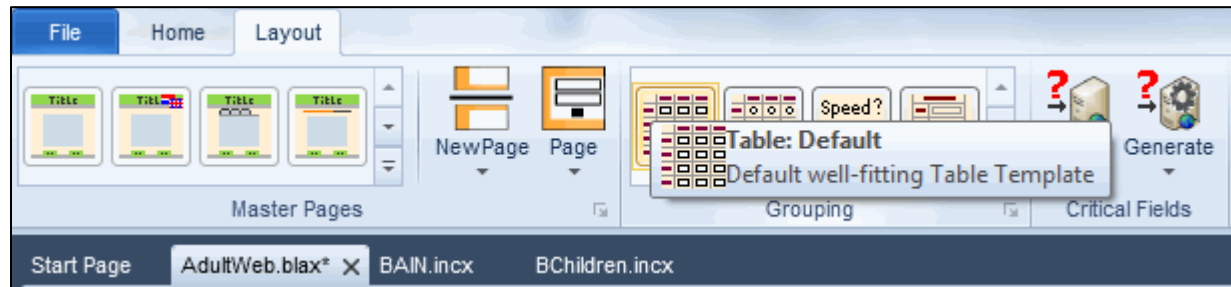
Child : ARRAY [1..5] of BTwoWeekChildren

ENDBLOCK {ENDTABLE} {TChildTwoWeeks}

FIELDS

ChildTwoWks : TChildTwoWeeks

Selecting the Table Template



Structure with the Table Template Applied

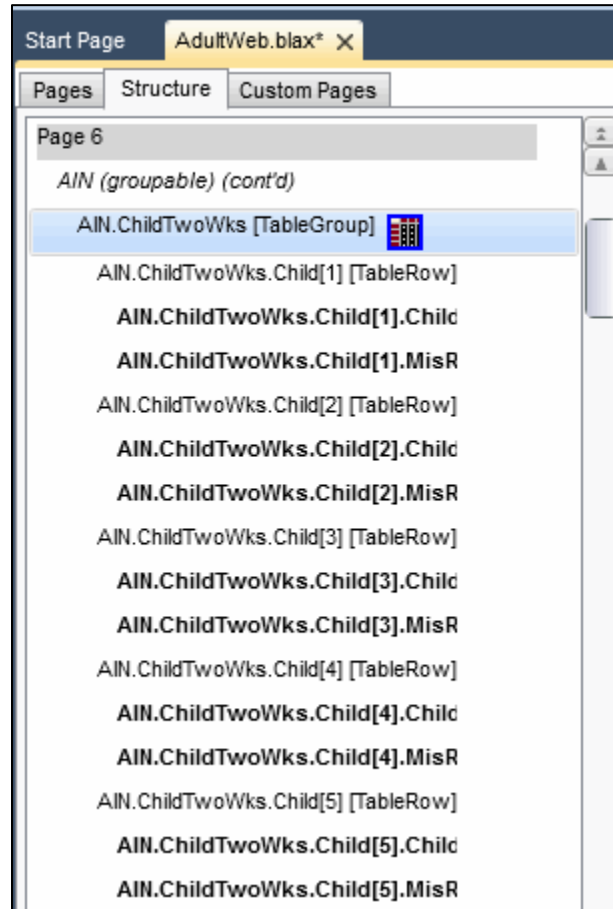


Table View

Adult Web Instrument (2.21.307.012)

	Who Lived in Home Two Weeks in Row	Delete Child?
AIN.ChildTwoWks.Child[1]	<input type="text"/>	<input type="checkbox"/> ^gp3
AIN.ChildTwoWks.Child[2]	<input type="text"/>	<input type="checkbox"/> ^gp3
AIN.ChildTwoWks.Child[3]	<input type="text"/>	<input type="checkbox"/> ^gp3
AIN.ChildTwoWks.Child[4]	<input type="text"/>	<input type="checkbox"/> ^gp3
AIN.ChildTwoWks.Child[5]	<input type="text"/>	<input type="checkbox"/> ^gp3

^DispChildChildrenListed there any other children 18 years old or younger who live or have lived in your household part-time under a shared custody arrangement, but did not live in your household for 2 weeks in a row?

Yes
 No
 Don't know
 Rather not answer

How many children live or have lived in your household part-time under a shared custody arrangement, but did not live in your household for 2 weeks in a row?

Grouping

- Modify source code
- Apply Templates
- Promote Template instructions

Before Grouping

Adult Web Instrument (2.21.307.012)

What is ^gp0[pChildPointer]'s birthdate?
ENTER MONTH

ENTER DAY

ENTER YEAR

So that would make ^gp0[pChildPointer] ^DispChldsCalcAge old?

- Yes
- No
- Don't know
- Rather not answer

Add Group Instruction

FIELDS

...

GROUP ChildDOBGroup

"What is HHChildrenNames.ChildrenNames.Person[pChildPointer].ChildFName's birthdate?"

FIELDS

ChildBirthMonth

{What is ^HHChildrenNames.ChildrenNames.Person[pChildPointer].ChildFName's birthdate?}

"<NEWLINE><I>ENTER MONTH</I>" : TMonth,DK,RF

ChildBirthDay

"<I>ENTER DAY</I>" : TDay,DK,RF {TI1_31}

ChildBirthYear

"<I>ENTER YEAR</I>" : TYear,DK,RF {TI1990_2015}

RULES

ChildBirthMonth

IF ChildBirthMonth = RESPONSE AND ChildBirthMonth <> EMPTY THEN

DoBMonthInteger := ORD(ChildBirthMonth)

IF (ChildBirthMonth.ORD = 4) OR (ChildBirthMonth.ORD = 6) OR (ChildBirthMonth.ORD = 9) OR
(ChildBirthMonth.ORD = 11) THEN

ValidDay29 := '29'

...

ENDGROUP

FIELDS

Insert Group Name In Rules

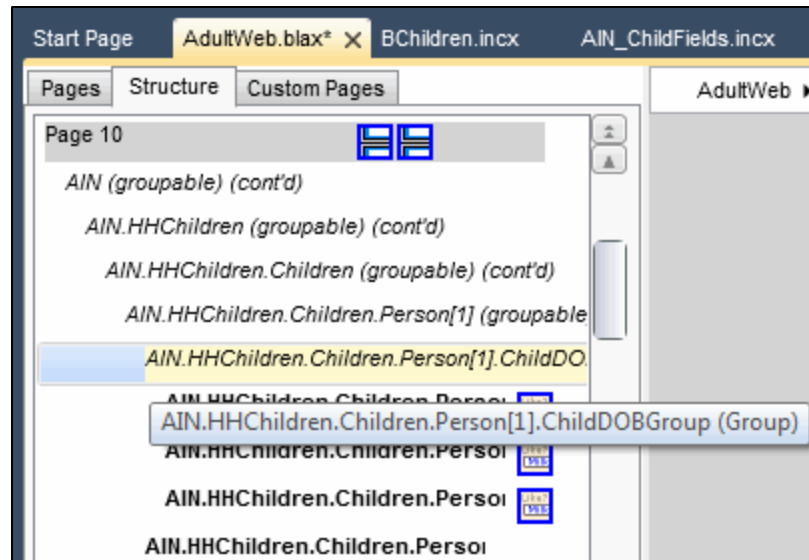
RULES

...

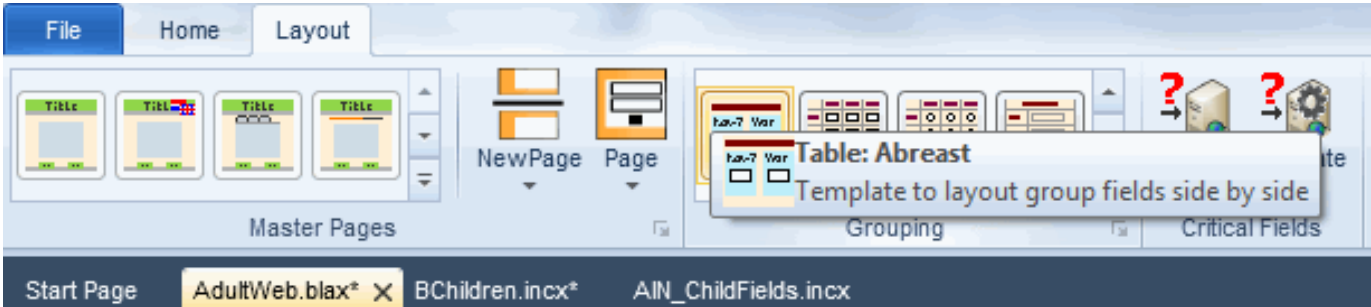
ChildDOBGroup

```
{ ChildBirthMonth
IF ChildBirthMonth = RESPONSE AND ChildBirthMonth <> EMPTY THEN
  DoBMonthInteger := ORD(ChildBirthMonth)
  IF (ChildBirthMonth.ORD = 4) OR (ChildBirthMonth.ORD = 6) OR (ChildBirthMonth.ORD = 9) OR (ChildBirthMonth.ORD = 11) THEN
    ValidDay29 := '29'
    ValidDay30 := '30'
    ValidDay31 := ''
  ELSEIF (ChildBirthMonth.ORD <> 2) THEN
    ValidDay29 := '29'
    ValidDay30 := '30'
    ValidDay31 := '31'
  ELSE
    ValidDay29 := '29'
    ValidDay30 := ''
    ValidDay31 := ''
  ENDIF
ENDIF
ChildBirthDay
ChildBirthYear}
```

View of Structure after modified Source code



Apply Templates



Grouping result

Adult Web Instrument (2.21.307.012)

What is ^gp9[pChildPointer]'s birthdate?

ENTER MONTH ENTER DAY ENTER YEAR

Select ▼ Select ▼ Select ▼

So that would make ^gp9[pChildPointer] ^DispChildsCalcAge old?

Yes

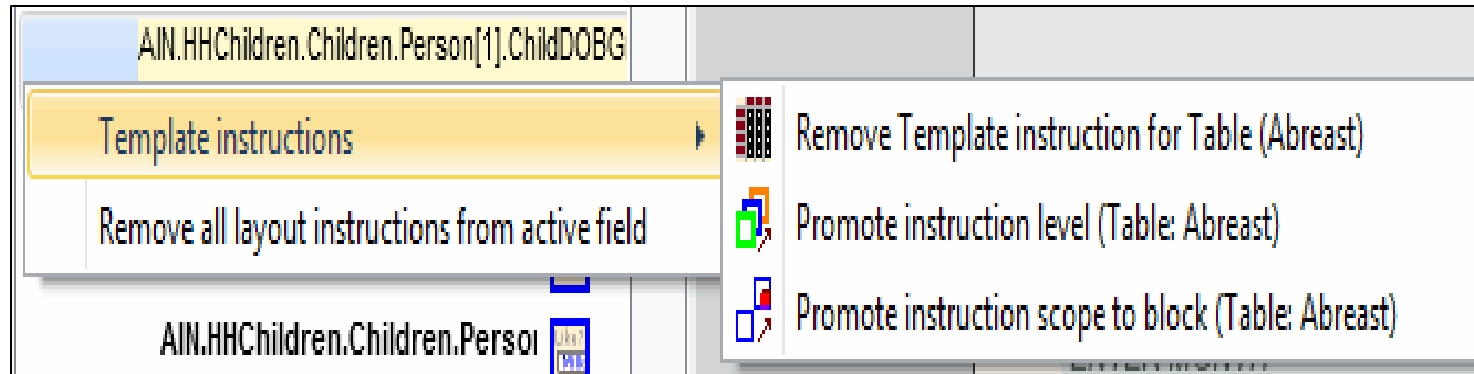
No

Don't know

Rather not answer

Previous Next

Promote Template Instructions



Distributing Blaise 5 to Mobile Platforms

There are two approaches within Blaise 5 that can be adopted to develop a survey on mobile devices.

- Make the survey's web interface mobile aware
- Build native mobile applications that are deployed through an App store

Standard Resource Sets

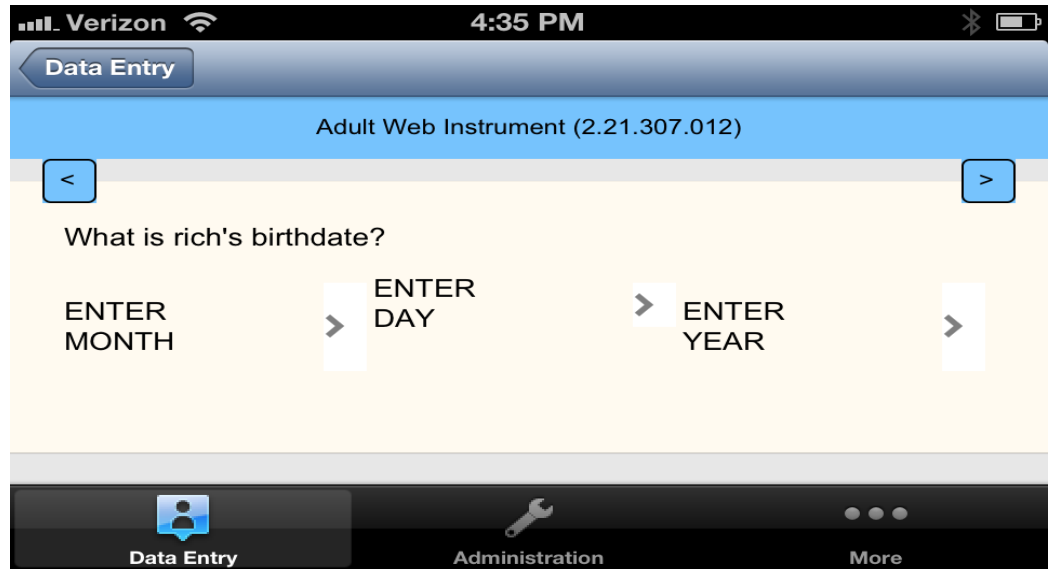
Blaise 5 provides some standard platform Resource Sets

- Browser
- iPhone
- iPad Portrait
- iPad Landscape
- AndroidTabletPortrait
- AndroidTabletLandscape
- Windows Desktop

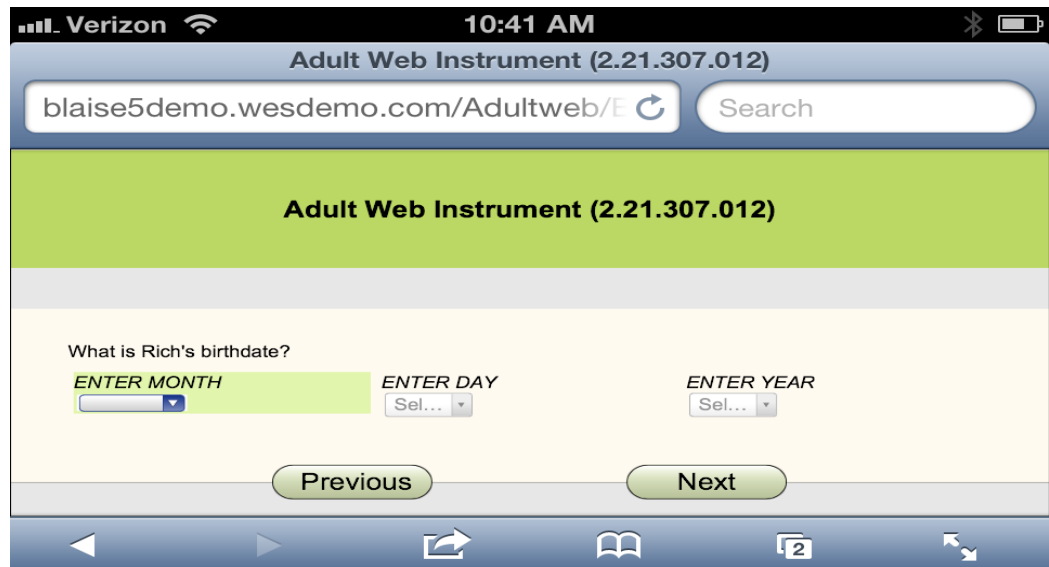
Blaise 5 Benefits

- Using the same application code across all platforms.
- Same links work across all devices
- Flexibility for future devices
- The user experience is the same across all devices

iPhone Blaise App



iPhone Safari Browser



Lessons Learned

- Fully qualified path names
- “Pay me now or pay me later” depending upon the complexity of the pre-converted code
- Critical Items
- Layout Set

Questions?