Agenda

- Blaise 4.8
  - Highlights
- Blaise 4.81
  - Generic Data Storage
  - Internet Performance
- Blaise NG
  - White Paper
  - Technical Working Group
Blaise 4.8

Build 1190, dated June 29, 2007
Blaise 4.8 Highlights

- Architecture
- Basic System
- Internet
- Basil
Architecture

- Blaise 4.8 uses client-server model to achieve efficient concurrent database access
- Centralised data access and CATI functionality through services: Database service and CATI service
- Blaise clients exchange XML messages over TCP/IP with services
- Applications developed in previous versions do not require any changes
- Rule of thumb: only access shared Blaise data files by using Blaise (4.8) tools
When using the services it is not advised to mix the use of Blaise 4.7 or earlier with Blaise 4.8

Installation redesigned: check on prerequisites and developer/server installations

Blaise 4.8 can run side by side with 4.7

Nearly all components got new names: BLAPI4A2.dll has become BLAPI3A.dll

For ease of use in .NET we ship interop assemblies with components: StatNeth.Blaise.Interop.BLAPI 3A.dll
Blaise 4.8 Highlights

- Architecture
- Basic System
- Internet
- Basil
Basic System - Datamodel

- Alien Manipula call
  - ALIEN('calc.msu /P2007', 'tax')

- Multiple layout sections
  - Using the layout identifier of the modelib
Basic System - DEP

- New text control
  - Images, hints, hyperlinks
- Extensions to the menu
  - Expressions, labels
- Audit trail extensions
  - Backup record
Basic System - Manipula

- XML support
  - XSD generator, Import and Export
- Generic setups
  - Meta as run-time parameter
- Meta access
  - Static and dynamic meta available
- Integration of Manipula in DEP
  - INTERCHANGE=SHARED
Basic System - CATI

- Specification program
  - Events, logging, scheduler parameters
- Management program
  - Overview of all appointments
Basic System - Control Centre

- Improved parameters dialog
- Launcher
- 'Build All' command
Basic System - Emulator

- Can run in CATI and non-CATI mode
- Can generate random data
- Can run for a fixed time
Basic System - Delta

- Rewritten in .NET 2.0
- First version of rules graph has been added
- Graph view, tree view plus detail view are synchronized all the time
- Demo
Blaise 4.8 Highlights

- Architecture
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Internet - Page Layout

- Header: Stylesheet
- Panels: Menu File
- Content Area:
  - ModeLib:
    - Font, Colors, Height
  - Datamodel:
    - Layout Section, Text
  - Interview
    Specification:
    - Grouping
Internet - Question Layout

- Determined by ModeLib (FieldPane)
- Increased influence on internet layout:
  - Relative positions of elements
  - New FieldPane elements (internet only):
    - ErrorText, HelpImage, HelpText, RemarkText, TagImage
    - Must be defined explicitly!
- Prepare datamodel with 4.8 Internet ModeLib
- Blaise 4.7 Interviews must be updated!
Create custom layout for grouped questions

- Blaise 4.7: define in stylesheet
- Blaise 4.8: define in interview specification

- Increased flexibility, control over every element in the group
- Demo: **NSSE**
Internet - Blaise Menu

- Specifies panels on Interview Page:
  - Panel:
    - Contains Controls
    - Position: Top, Left, Right, Bottom (floating)
  - Control:
    - Type: Label, Button
    - Multilingual caption
    - Multiple actions
Variable Control properties:
  - Visibility, Caption, Dimensions

Determined by Menu Expression:
  - Subset of Blaise Operators: +, =, ..., ...
  - Interview State: e.g. Page Index
  - Properties of Blaise Fields

Examples:
  - $STOREDPAGEINDEX > 2
  - 20 * Person.Age
Internet - Work Database

- Requires primary key
- Saves incomplete record:
  - At interruption of interview
  - Manual save action
- Continuation of interrupted session:
  - Primary key is known: inspect Databases
  - Respondent can choose
- Complete interview: record is removed
Internet - Journal

- Next best thing to Audit Trail
- Extendable
  - Datamodel driven
Internet - AJAX in Blaise

- Only exchange small amounts of data
- Critical Questions: Update Scope to ‘Answers Only’
Internet - PDA

- Use ‘simple’ stylesheet
- One question per page (small grid in modelib)
Internet - Scalability

Blaise 4.8

- Interview installs / runs on multiple servers
- Data can be stored on separate server

- Performance can be increased by adding servers
- Maximum number of concurrent users depends on number of servers
Internet - Server Roles

- Internet server can have multiple roles
  - Web server
    - Processes requests from respondent
    - Sends new HTML page to respondent
  - Rules server
    - Executes Blaise rules
  - Data server
    - Provides data storage
  - Choose server roles at Blaise installation
Blaise 4.8 Highlights

- Architecture
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- Basil
What is Basil

- Alternative for Data Entry Program
- Specifically used for CASI
- Combines Blaise & Maniplus
Basil

- Advantages
  - Control over layout
  - Control over behavior
  - Easy deployment of instruments

- Disadvantages
  - No graphical design
  - Everything has to be programmed
Basil - Example

- Retail
Blaise 4.81
Blaise 4.81

- DEP. Free navigation in a table
  - Vertical navigation
- Control Centre
  - Data tree view
- CATI
  - More events, case start/end date
  - Support for 'sub priority'
  - Extended access to daybatch in Maniplus
Blaise 4.81

- Internet Performance
  - Stress testing was a problem
  - Starting and ending an interview was expensive
  - Memory usage has been decreased
    - Stylesheet Processor Pooling
Blaise 4.81

- Input Data Store
- OLE DB Data Center
Blaise NG
Project Scope

- SWOT analysis
- User wishes
- Experience
SWOT analysis

- **Strengths**
  - Easy to use for methodologists
  - Can handle complex data models
  - Multi-mode
  - Modular design
  - Central metadata concept
  - Can work stand-alone
  - Can be integrated into existing business processes
SWOT Analysis

- Weaknesses
  - Layout concepts are difficult to understand
  - Blaise language needs to be upgraded
  - Blaise does not have a case management system
  - Version control
  - Security model
SWOT Analysis

- Opportunities
  - Chance to redesign
  - .NET
  - Wish list issues
SWOT Analysis

- Threats
  - Commitment from Statistics Netherlands
  - Timeframe
User Wishes

- Platform
- Meta
- Data
- Layout
- Case Management System
- Mixed Mode Capabilities
- Development Environment
- API
- Documentation
Experience

- Development environment
- Data Entry
- API
- Mixed Mode
Platform

- **Development platform**
  - The platform that the Blaise developers use

- **Design platform**
  - The operating systems where the Blaise development system will run upon

- **Runtime platform**
  - The operating system where Blaise instruments run upon
Research Areas

- Meta
- Data
- Layout
- Development Environment
- Compiler
- Runtime Environment
- Case Management
Meta

- Central Metadata Concept
  - Core meta
    - Independent of source
  - Instrument meta
    - Extra metadata to define an instrument for a specific mode of data collection
  - Process meta
    - Multi-mode settings, case management settings, etc.
  - Para meta
    - Describes paradata, like audit trail information
Data

- Closely related to meta
- Blaise should be able to handle large data models
- Use of industry standard databases
- Cross-survey data storage
- Relational model vs. hierarchical model
- Trigrams
- Proprietary or not
Layout

- Specification language
- Automatic generation of layout
- Screen resolutions
- Different platforms
- Supported controls, user defined controls
Development Environment

- Inventory of features
- Make-or-buy
- Integration with compiler
- Debugging facilities
Compiler

- Definition of the Blaise NG Language
- Compiler features
- Make-or-buy
- Integration into IDE
- Maintainability
Runtime Environment

- As many environments as possible
- Inventory of possible platforms, operating systems and browser environments
- Platform-independent vs. platform specific solutions
- Standards
Case Management

- Support for multi-mode surveys
- Inventory of features
- Security issues (firewalls, etc)
- Specification of case management information
Technical Working Group
Technical Working Group

- Members from major Blaise customers
- Assignment: Technical direction for Blaise NG
- Result: Report, presented to the BCLUB on Tuesday
User Wishes (1)

- Multi Platform system
- XML throughout the system
- RDBMS support
- Layout requirements
- Mixed Mode emphasis
  - Case Management System
- Development Environment
User Wishes (2)

- Language Enhancements
  - Indefinite arrays
- Interoperability
  - SOA
- Documentation
  - Integration of Delta and MQDS
- Compatibility
- Performance
- Security
Directions

- User-Defined meta information
  - Roles, attributes
- Run-time platform investigation
  - Silverlight
  - XForms
- Consistent way to specify layout
  - XAML
  - Combination of current layout specification languages
Path

- Meta definition
- Checking mechanism
- Data storage definition
- Runtime Environment
- Layout definition
- Language definition + Compiler
- Development Environment