Blaise 5 with RTI’s Integrated Field Management System on Field Interviewer Laptops

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Outline

- Integrated Field Management System (IFMS)
- Case Management System (CMS)
- CMS with Blaise Instruments on Laptop
  - Set of Manipula Scripts
  - Converting Scripts to Blaise 5
  - Deployment of Blaise 5 Instrument
  - Installation of Manipula Scripts
  - Audit Data Extraction for a Case
- Conclusion
IFMS is RTI’s standard case management system that supports all field studies on laptops and handhelds.

IFMS is a web-based application responsible for:
- Electronic assignment to field staff
- Transfer of cases
- Data transmission
- Field monitoring
- Standard reports
- Laptop case management

Assigned cases are loaded in the laptop’s database (Blaise, MySQL, and SQLite).
CMS is a .NET application installed on laptops, works hand in glove with IFMS, allowing FIs to:
- Download and upload cases
- Update event and status for a case
- Synchronize the status of cases with a centralized SQL Server database
- Launch instruments
- Enter comments for a case, and much more

CMS works with various software packages including Blaise
Case Management System (CMS) - Changes

- CMS uses configuration table to invoke an appropriate CAI package

<table>
<thead>
<tr>
<th>SampleID</th>
<th>StudyDir</th>
<th>DisplayName</th>
<th>Mock</th>
<th>ShipOutStatus</th>
<th>MinStat_Interview</th>
<th>CAIPkgType</th>
<th>InstDBDef</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>TESTB5</td>
<td>TESTB5 Instrument</td>
<td>0</td>
<td>2000</td>
<td>1036</td>
<td>B5</td>
<td>TESTB5</td>
</tr>
<tr>
<td>2</td>
<td>TESTB5Tr</td>
<td>TESTB5 Instrument - Training</td>
<td>1</td>
<td>2000</td>
<td>1036</td>
<td>B5</td>
<td>TESTB5</td>
</tr>
</tbody>
</table>

- CAI package methods applied for any case on the laptop:
  - **Import** (load a case into the laptop database)
  - **Update event and status** codes for a case
  - **Invoke** an instrument for a case
  - **Export** (extract a case from the laptop database)

- A new CAI package object was added to work with Blaise 5
Main Manipula process script executes one of the methods: “Import” / “Update” / “Invoke” / “Export”

- Can also call other Manipula scripts or run external programs
- Instrument name and case ID are passed as parameters
Challenges in Converting Manipula Scripts to Blaise 5

- Output and input files changed from “Blaise” to “XML” type
- Used “EDIT” function with a Blaise package file name and run mode as “ThickClient”
- Added “ModeID” to any Blaise 5 instrument to distinguish “Production” and “Training” cases in one Blaise database
- Modified Manipula scripts to reinitialize training cases – remove only the training cases and then load them again
- Used “CREATEBDIX = NO” to be able to create ASCII or XML output files, still need “Blaise Data Interface file” to create Blaise output file
Blaise 5 Instrument Deployment as “Stand Alone” – Step 1

- Build a package to deploy on laptop:
  - Change data model project properties “Supported Web Data Entry Client” to “None”
  - Use “Survey specific Timeout” in the session tab to have partial interview data saved every time it is closed (“Quit” vs “Close”)
  - Add to “Blaise Package Specification File” (.bcps) additional files if needed
Blaise 5 Instrument Deployment as “Stand Alone” – Step 2

- Prepare Manipula process script to install the package

```
PROCESS InstallSurvey "Install Survey on Laptop"

AUXFIELDS
Survey: STRING[100]

MANIPULATE
Survey := SELECTFILE('Select survey', ''', 'Blaise Package (*.bpkg)|*.bpkg')
INSTALLPACKAGE(Survey)

END
```

- Copy files on the laptop into a folder with other programs:
  - Manipula.exe
  - Manipula.exe.config
  - System.Data.SQLite.dll – SQLite library
  - Msvcr100.dll – Microsoft Visual C++ Runtime library
  - Survey package file (.bpkg)
  - InstallSurvey (.msux & __locals$$$.bmix)
  - Batch file to run InstallSurvey Manipula script
Installation of Manipula Scripts on Laptop

- **Scripts preparation:**
  - b4cpars.exe
  - InstrumentBuilder.exe

- **Blaise 5:**
  - Uses a Solution with a group of projects
  - Needs data model name and search path when GET method is used
  - After solution is built, all files must be installed on the laptop in a folder as specified in Manipula config file
Audit Data Extraction for a Case

- Use of audit data
- Manipula process script ADT2Blaise changes:
  - Extract data only for a case
  - Output file name has a case ID and a date

- Main Manipula process script calls ADT2Blaise.msux
- Use PowerShell version 4, downloaded for free
Conclusion

- Most of work is done!
- Learned a lot from samples – THANKS!

- Future plans:
  - Define procedures for applying changes to a data model during production
  - Evaluate tools to prepare SAS datasets
More Information

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