



# CMA – Case Management Application

Blaise Team - Virtual IBUC 2020



Statistics  
Netherlands

# Overview

- This presentation is about the new Blaise 5.8.2 ‘sample’ CMA
  - It is more than a sample...
- It will cover...
  - Background
  - Design principles
  - Basics
  - Features
  - ...

... and we will show it if time permits...
- CMA can be found at <path-to-Samples>\Case Management\CMA
  - Documentation is in the [help](#) and in **CMA\_version10.pdf** in the CMA samples folder.
- There is also a paper with Gina Cheung to be found at [http://blaiseusers.org/2020/papers/IBUC2020\\_S3\\_3.pdf](http://blaiseusers.org/2020/papers/IBUC2020_S3_3.pdf)

# CMA - Background

- Blaise stayed away from implementing a generic system
  - We did not believe it could be done ‘elegantly’
    - Too many (conflicting) requirements
  - Data communication between office and interviewer was not part of Blaise
- So everyone made their own system and implemented data communication
  - Statistics Netherland used Maniplus (or Manipula Dialogs as we now like to call it...) to implement Ilse
  - SRC University of Michigan used PowerBuilder and Blaise APIs to develop SurveyTrack

# CMA – How it started

- Gina took initiative already in 2016 (!)
  - Could then only be done using Dep Starter Kit, but each OS needed its own implementation
- Gina revisited the need for CMA early last year
  - By then Blaise had a new tool: Manipula Dialogs
  - We decided to study the feasibility
- Specification of Gina was adapted after internal SN discussion (Phoenix project)
- Around one year ago implementation started
  - The first serious Manipula Dialogs application running in the DEP App (Windows, Android and iOS)
  - It helped mature the DEP Apps

# CMA – Design principles

- It has to handle multiple surveys at the same time
- CMA should do things automatically when possible
  - For instance, installation / de-installation of a survey should be handled by CMA
- It should be possible to see all cases for all surveys in one list
- It should be agnostic from the surveys it has to manage
  - For instance, no knowledge what an outcome code is about
- Organizational specific wishes should be in separate CMA-specific datamodels
- It needs to be easy to set it up in different languages
- Where possible use functionality of underlying Dep App
  - Some additions to Manipula Dialogs were needed for this
  - Important addition: [SurveyList](#)

# CMA – Basics

- Everything revolves around what is called the launcher database
- It is a centralized database that contains **all cases** for **all surveys**  
Each case contains:
  - Information linking it to an entry in a specific survey
  - The information needed to contact the respondent
  - Many administrative fields to manage / to monitor field work
  - Various BLOBTYPE fields (BLOBTYPE was introduced in Blaise 5.5)
- In the launcher each case is assigned to an interviewer that is defined as user in Blaise
- When the interviewer starts CMA, all cases for that interviewer are downloaded to the device and all surveys needed to handle the cases are downloaded & installed

# CMA - Basics

- The interviewer has the following options for a case:
  - Register an attempt
    - For instance a visit to an address and nobody home, a refusal, an appointment...
  - Start the interview and handle it
    - Can result in a completed case or in a break off
    - Attempt will be registered and it knows about result of interview
- CMA will prompt interviewer when connected to internet to synchronize with office server

DEMO...

# CMA - Features

For the developers:

- Support for a survey specification file with some options like *yes/no* register the geo position for the attempt
- Each survey can have a tailored attempts datamodel
- Each survey can have a tailored contact info datamodel and a template to display information on CMA screen
- Full translation of user interface by using a .bitt file (introduced in Blaise 5.6) and language dependent contact info templates
- Launcher case can contain image (BLOBTYPE)
- Launcher case contains 'backup' of attempts and collected survey data (as XML in BLOBTYPE)
- You can allow interviewers to add cases for a survey



# CMA - Features

For supervisors:

- Ability to re-assign cases to another interviewer (from X to Y). This is a two step procedure: First X synchronizes to give them up and Y synchronizes to receive them.
- Ability to restore all cases for a specific interviewer on a new device. This can restore the status of the cases when last synchronizing.
- Ability to release completed cases. This removes them from the interviewer device
- CMA writes a log file of what the interviewer did. This file is uploaded once a day / on demand to the office

# CMA - Future

- What is missing: tooling to manage surveys in CMA
  - We are working on this. Another Manipula Dialog application.
  - For now: use Manipula setup to load cases and change fields in the launcher database and to extract data from the various databases involved
- We are very interested in feedback. Based on feedback we can extend CMA as long as it fits the architecture
- We have a limited list of extensions planned
  - Add a training mode
  - Add support for 'linked surveys'