



**CATI**

**virtual IBUC 2020, September 17th**



**Blaise**

Gaining deeper understanding



# Overview

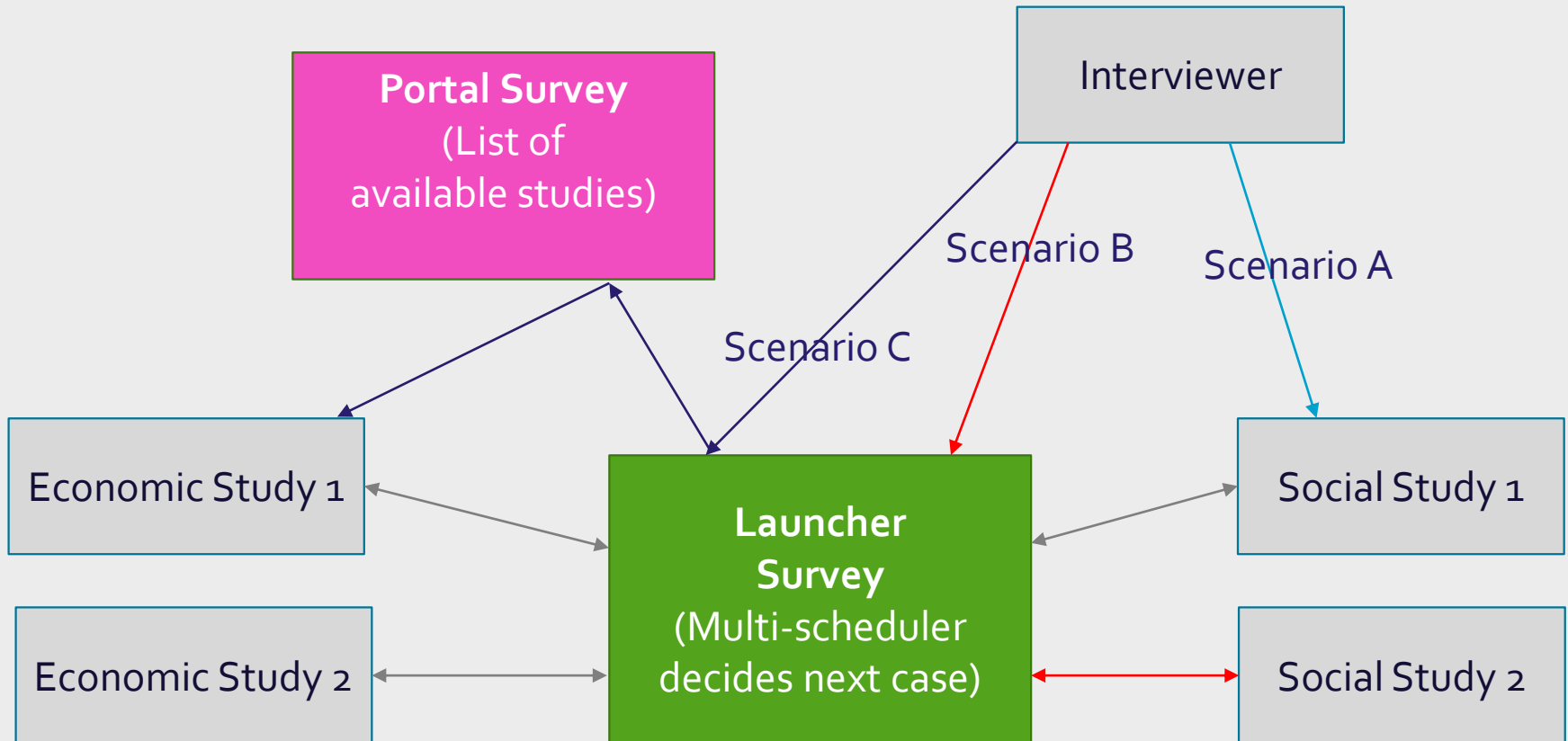
- CATI scenarios
- Multi-scheduler
  - Weighted workload algorithm
- Appointment control
- Custom Reports
- Notes
- Dashboard extensions
- Blaise 5.9 and future CATI plans
- Tips and tricks

# CATI scenarios

- Scenario 1 (Reusable treatments):
  - Entry point: topic instrument
  - Separate treatment surveys for dial/appointment/non-response
- Scenario 2 (Blaise 4 situation):
  - All-in-one survey
- Scenario 3 (Separation of administrative and topic data):
  - Entry point:
    - A: Topic instrument (to work on particular instrument)
    - B: Launcher instrument (to use multi-scheduler)
    - C: Portal instrument (to let interviewer decide)
  - Topic instrument(s)

# Scenario 3

- No administrative data in topic instruments



# Multi-scheduler

- For each possible instrument, run the scheduler
- Check priorities (appointments take precedence)
- If all equal: apply weighted workload algorithm
  - How much time can/should I still spend on survey A?
  - Same for survey B etc.
  - Randomly select a survey based on their weights

# Weighted workload algorithm

- Total Available Time is based on:
  - Average Time for 1 Response (ATR) in seconds, e.g. 1200
  - The number of cases (N), e.g. 1500
  - The desired response target percentage (RT), e.g. 40

$$\text{TAT} = \text{ATR} * \text{N} * \text{RT} / 100$$

e.g.  $\text{TAT} = 1200 * 1500 * 40 / 100 = 720,000$  (200 hours)

In CATI specification (.bttx):

|                          |                           |      |              |
|--------------------------|---------------------------|------|--------------|
| Survey Days              | Workload for one response | 1200 | (In seconds) |
| <b>Launcher settings</b> |                           |      |              |
| ▶ Daybatch               | Target response rate      | 40   | %            |
| Appointment parameters   |                           |      |              |

# Weighted workload algorithm (2)

How much time can be spent on a survey today?

**(Total Available Time (TAT) for whole survey period**

minus

**Total Used Time (TUT) so far)**

divided by

**Remaining Survey Days (RSD) (e.g. 5 out of 10)**

makes

**Remaining Survey Time per Day (RSTD)**

e.g.  $RSTD = (720,000 - 360,000) / 5 = 72,000$  (20 hours)

# Weighted workload algorithm (3)

Remaining Survey Time per Day (RSTD)

minus

Used Survey Time Today

makes

Remaining Survey Time for Today (RSTT)

If  $RSTT \leq 0$ : no case delivered for that survey

If all RSTTs are smaller than or equal to 0: random selection

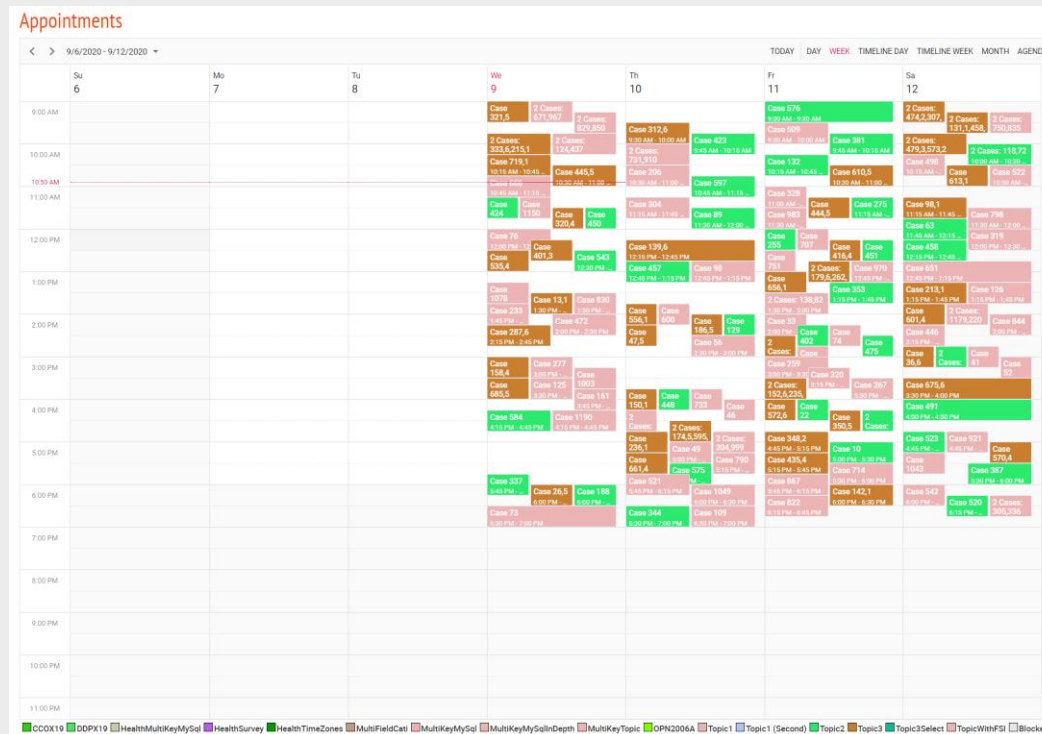
For all surveys with  $RSTT > 0$ , a random selection is made, based on the RSTTs as weights

# Weighted workload algorithm (4)

- Two examples:
  - Survey A: RSTT = 1,000
  - Survey B: RSTT = 4,000
  - Survey C: not a survey day
  - **Result:** P(case survey A):  $1/5$ , P(case survey B):  $4/5$
- Survey A: RSTT = 1,000, but a Hard Appointment is due
- Survey B: RSTT = 4,000, no appointments due
- **Result:** case of survey A, because it is an appointment















# Appointment control

- Gives interviewers / supervisors a visual aid and insight in the number of appointments made



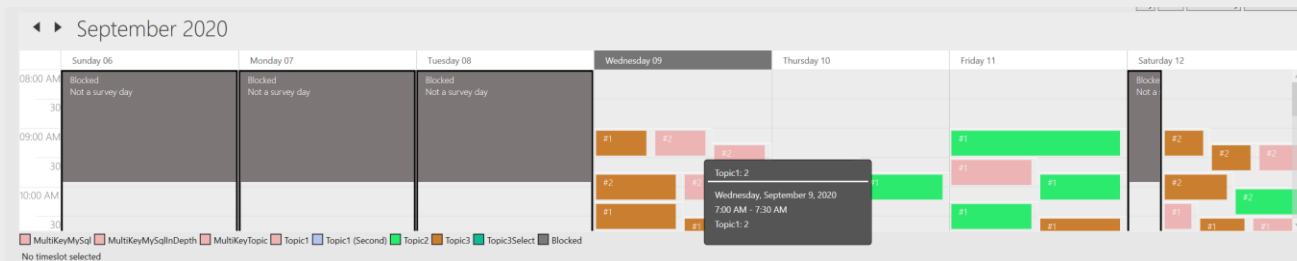
# Appointment control (2)

- Important properties
  - AggregationMode
  - InstrumentSelection
  - TimeInterval

| Parameters   |               |
|--|---------------|
|  ● AggregationMode      | All           |
|  ● AutoEnter            | False         |
|  ● BlockedBackground    | #FF7C76       |
|  ● Height               | Auto          |
|  ● InitialView          | Week          |
|  ● InstrumentSelection  | AllInLauncher |
|  ● IsStretched          | True          |
|  ● Margin               | 5,25,5,5      |
|  ● SelectedBackground  | #FFBEACF1     |
|  ● ShowSurveyDaysInfo | True          |
|  ● TimeInterval       | 15            |
|  ● TimelineDayWidth   | 200           |
|  ● TimelineWeekWidth  | 100           |
|  ● Width              | Stretch       |

# Appointment control (3)

- Interviewer can select a suitable appointment time



# Appointment control (4)

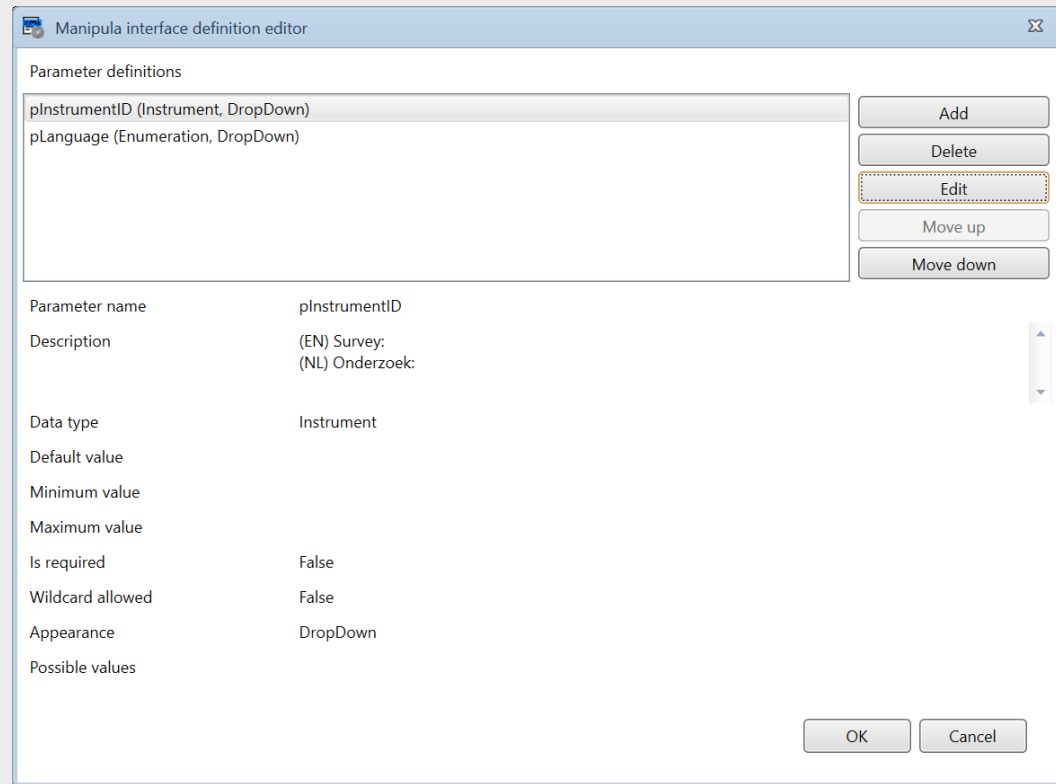
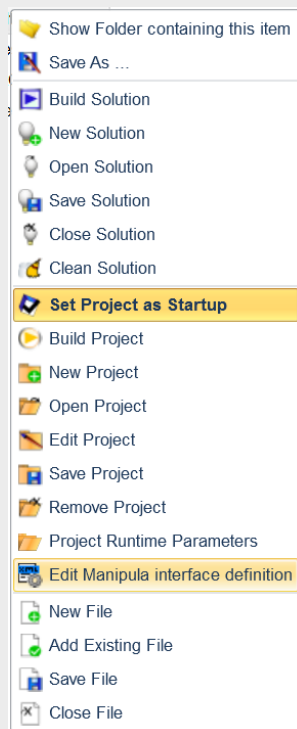
- What the appointment control does in the background: it fills ServerVariables (Cati.AppointType, Cati.AppointStartDate, Cati.AppointStartTime, Cati.AppointValidationStatus) that are used at the end of the session to create an appointment

The screenshot displays the Visual Studio IDE with the Appointment control configuration. The left pane shows the project structure with 'Page 1' selected, containing 'AppointmentByControl (Groupable)' and 'AppointmentControl'. The bottom pane shows 'Layout instructions' with 'MasterPage' and 'Parallel (<All>'. The right pane, titled 'Parameters', lists the following settings:

| Parameter           | Value  |
|---------------------|--|
| Arrangement         | 1 Column   |
| HorizontalScrollBar | None   |
| NextButtonEnabled   | True   |
| OnLoad              | Expression: {Expression State.HasValidAppointment} |
| ShowParallelTabs    | True   |
| ShowProgress        | False  |
| VerticalScrollBar   | Auto   |

# Custom Reports: interface definition

- Improved interface: Manipula Interface Definition file (.midx)



# Custom Reports: settings per run/user

- Adjust parameters more easily
- Reuse previously used settings

Run report 'Call Overview' (3) ×

Clicking 'Run' will start the creation of a new report version.

Survey:  ▼

Language:  ▼

▼

Selected style  ▼

# Notes

- New field function: Notes

CATI Launcher Specification

| Field Name                | Function      | Show in topic                       | Show in viewer                      | Edit allowed                        | Add to history           |
|---------------------------|---------------|-------------------------------------|-------------------------------------|-------------------------------------|--------------------------|
| CATI_Fields.TimeZone      | TimeZone      | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> |
| CATI_Fields.ToWhom        | ToWhom        | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> |
| CATI_Fields.SliceID       | TimeSlice     | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> |
| CATI_Fields.SubPriority   | SubPriority   | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> |
| CATI_Fields.CaseStartDate | CaseStartDate | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> |
| CATI_Fields.CaseEndDate   | CaseEndDate   | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/>            | <input type="checkbox"/> |
| PhoneNumber               | Telephone     | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |
| WorkPhoneNumber           | Telephone     | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |
| Directions                | Notes         | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Buttons: Add, Delete

- This field can be edited from the dashboard

Update daybatch entry '1031'

|                              |         |         |
|------------------------------|---------|---------|
| Future status                | Default | Default |
| Start time (respondent time) | 9:00 AM |         |
| End time (respondent time)   | 9:00 PM |         |
| Group                        |         |         |
| Interviewer                  |         |         |
| Sub priority                 | 0       | 0       |
| Number of dials              | 0       | 0       |
| Number of busy dials         | 0       | 0       |
| Notes                        |         |         |
| Update mode                  | Append  |         |

Buttons: Close, Update

# Dashboard extensions

- Data viewer
- Time spent in summary

# Blaise 5.9 CATI and future plans

- Quota (Aggregate Definitions) (was on list for 5.8)
- Future plans (5.10 or later)
  - Extend appointment control (make medium appointments)
  - Integrate more functionality (case management) in dashboard

# Tips and tricks

- New CATI Specification functions in Manipula:
  - Specification\_IsSurveyDay
  - Specification\_LastSurveyDay
- UseCati DataEntrySetting should be turned on if you want to start a case in CATI mode
  - for topic / launcher (obviously)
  - for other treatments (e.g. Appointment or NonResponse), if started from dashboard

# Questions

- Thank you for your attention