# CMA – Admin Tool

## 2.1

### A (mainly) technical description

## DepApp – Manipula

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# Introduction

This document describes the CMA Admin tool. This tool is intended to be used for managing surveys that use **CMA 2.5** (although it probably will work also when using CMA 2.0). This second version is intended for supervisors managing the work of interviewers and for managers managing the work around a survey. It also offers some administrator functionality.

Contrary to CMA, the Admin Tool will only work in **connected mode**. It requires direct access to the CMA launcher database on the server. It downloads cases from that database based on what the user selected and writes to that database based on actions from the user. Access is by default handled through the Blaise Services. Optionally this can also be done through the network (requires direct access for the supervisor/manager to the launcher database).

## Most important changes compared to version 1.0

A lot of new functionality has been implemented:

1. The tool now supports 3 different roles: supervisor (already available in 1.0), manager (new in 1.5) and administrator (new in 1.5)
2. Support has been added for a consistency check between the launcher database and survey / attempts database.
3. Support has been added for assigning cases to a supervisor when multiple supervisors can handle cases for the same survey.
4. Support has been added for a combined supervisor / manager role by allowing role switching.
5. Support has been added for importing launcher cases.
6. Support has been added to present a progress report for a selected survey.
7. Support has been added for the refreshing of a case.
8. Support has been added for custom reports
9. Support has been added for maintaining user and management info

# CMA Admin Tool – The pieces

CMA Admin Tool (for short: the Tool) is based on a Blaise Manipula dialogs application which is installed in the Blaise Data Entry app (for short: DepApp) on the client Windows device.

The project for this application has the option 'Is app user interface' checked. The result of this is that in the DepApp all surveys are not visible and the DepApp only displays the Tool for download and install. Download and install are done automatically (depending on a server park setting).

After downloading the Tool, it is started automatically. It connects to the server and downloads and installs two additional Tool specific surveys: **CMA_UserInfo** and **CMA_ ManageInfo**. Also some CMA specific surveys are downloaded and installed like **CMA_Logging**.

## The CMA_UserInfo datamodel

This datamodel is used to define the users and the hierarchical relation between them.

Some important fields in the **CMA_UserInfo** datamodel:

| Name | Description |
|---|---|
| UserID | The ID of the user as defined in the Blaise system |
| UserType | The user type. It can be one of the following values:<br>• **Interviewer**. The user is an interviewer that will be using CMA. Only when defined will it be possible to assign cases to this user by using the Tool<br>• **Supervisor**. The user who manages the work of one or more interviewers<br>• **Manager**. The user who manages the work of one or more supervisors<br>• **Administrator**. The user can import *user info* files and *manage info* files |
| ManagerID | The ID of the manager of the user.<br>The Tool allows for a supervisor that is also the manager of one or more supervisors. This can be achieved by omitting the manager id for the supervisor and specifying the particular supervisor as manager for the supervisors that need to be managed. The Tool will then allow for the supervisor to switch the role from supervisor to manager by clicking the Switch role button. |

When a supervisor accesses the Tool, all interviewers are filtered from the database.
The Tool shows the interviewers in a data grid on the main screen. The data grid also has one entry to allow for functionality not related to a specific interviewer (first line of the data grid; user id <none>). The currently focussed user will be used to filter cases from the launcher database using the **CMA_ForWhom** field. When *<none>* is selected, cases will be filtered for which **CMA_ForWhom** is empty (unassigned cases).

When a manager accesses the Tool, all supervisors are filtered from the database with **ManagerID** being equal to the **UserID** of the manager. The Tool shows those supervisors in a data grid on the main screen. The data grid also has one entry to allow for functionality not related to a specific supervisor (first line of the data grid; user id <none>). The currently focussed supervisor will be used to filter all cases from the launcher database of which the **CMA_ForWhom** field is an interviewer that is supervised by the selected supervisor. When *<none>* is selected all cases will be filtered for the selected survey. In case the manager has no supervisors to manage he will have access to the surveys for which the manager has an entry in the CMA_ManageInfo database.

## The CMA_Manageinfo datamodel

This datamodel is used to define what surveys have to be accessible for the supervisor. The datamodel can also be used to restrict access to specified surveys for specific interviewers and to allow access to a manager not responsible for supervisors (a 'lone manager').
When an interviewer is not present in the database the interviewer can be assigned a case for each survey the supervisor manages. When the interviewer is present in the database the interviewer can only be assigned a case for any of the named surveys in the database.

When a supervisor accesses the Tool, the Tool filters all entries in the database that have been defined for the current user of the Tool. The surveys of those entries are downloaded to the client machine or, when already present, updated if necessary. The Tool shows the surveys in a dropdown on the main screen. The first option in the list can be used to select all surveys at once.

When a manager accesses the Tool, the Tool filters all entries in the database that have been defined for any of the supervisors managed by the current user of the Tool. The surveys of those entries are downloaded to the client machine or, when already present, updated if necessary. The Tool shows the surveys in a dropdown on the main screen.

## The XML-settings file

The Tool reads / writes an XML settings file named settings.xml. This file can be used to specify parameters that influence specific behaviour of the Tool. It is also used to set the initial language. The selected language, the selected survey and the selected user are stored in this file. In the settings file the Tool keeps track when the log file was uploaded the last time. Initial behaviour can be set by providing the CMA_settings.XML and/or the *CMA_AdminSettings.xml* in the CMA Admin tool package.

See [Appendix A](#) for an overview of all available settings.

# The CMA Admin Tool user interface - Supervisor

## The Main screen

This is the first screen of the application. Here the user can select a survey from the surveys drop down box and select a row in the data grid. The user will always have the buttons *Show cases* and *Exit*. The *Export cases, Restore user, Progress* and *Logging* buttons are optional and can be set through the XML settings file.
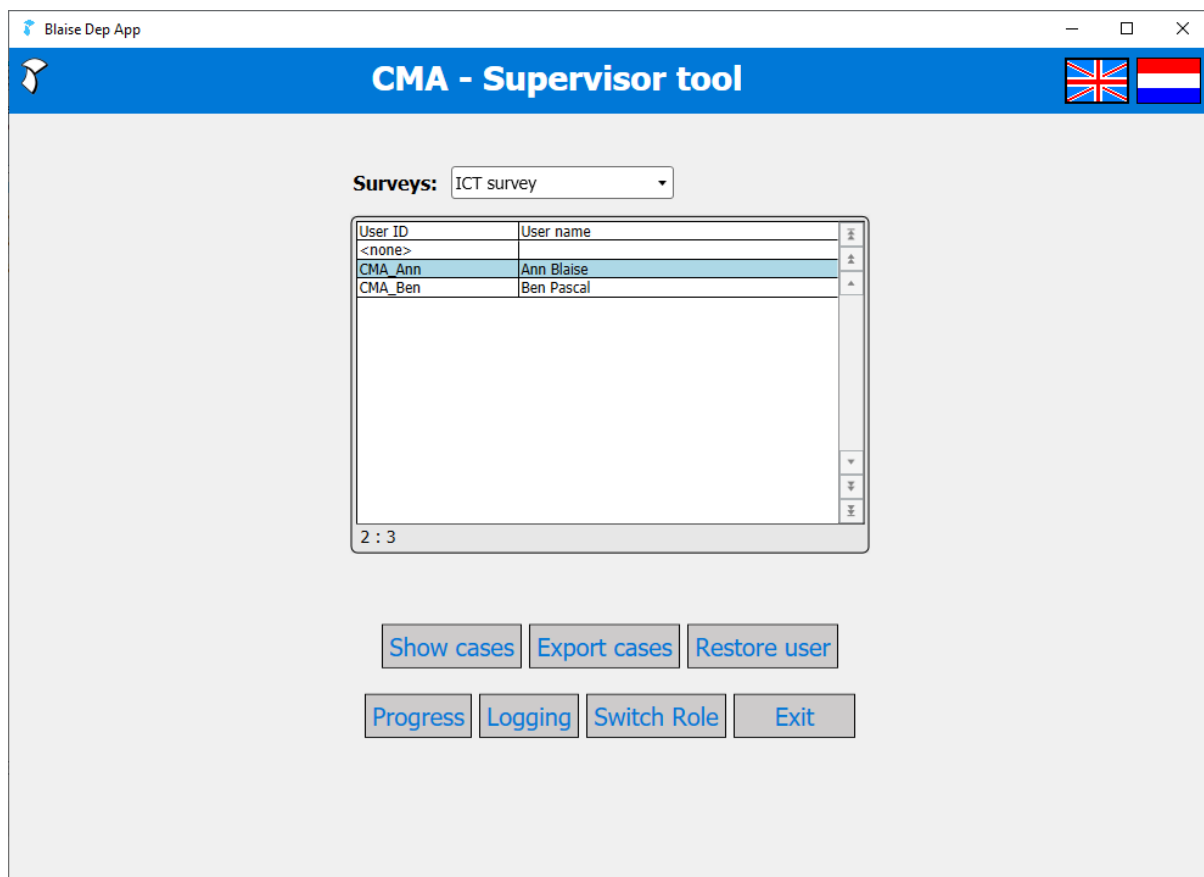


- **Show cases**. When pressed, the Cases screen is displayed. When User ID is <none> the Cases screen will offer the possibility to assign un-assigned cases to one of the interviewers managed by the supervisor. When a real User ID is currently focussed the Cases screen is displayed showing the cases assigned to the selected interviewer.
- **Export cases**. When pressed, cases from the launcher database will be exported to a csv file. Which cases depends on the current selection on the screen:
  - When survey *<All>* has been selected and User ID *<none>*, the launcher cases for all available surveys in the dropdown list for all User ID's in the data grid will be exported.
  - When a survey has been selected and User ID *<none>*, the launcher cases for the selected survey all User ID's in the data grid will be exported.
  - When a survey has been selected and a real User ID, the launcher cases for the selected survey for the selected User ID in the data grid will be exported.

  The user is then prompted if Excel needs to be started to open the csv file.

- *Restore user*. When pressed the user will be prompted for confirmation. For all cases of the selected user the **CMA_Location** field will be set to RESTORE_REQ.
- *Progress.* When pressed an overview will be displayed of the progress of the selected survey.
- *Logging.* When pressed the logging of the currently selected user will be displayed.
- *Switch Role.* When pressed the role of the current user will be switched to manager. This button is only visible when the supervisor also has the manager role.
- *Exit*. When pressed the Tool will be stopped and the main screen of DepApp is displayed.

## The Cases screen

This is the screen where the supervisor can inspect individual cases assigned to the selected user. When no interviewer has been selected the cases screen shows not-assigned cases.



The case screen resembles the main screen of CMA. The filter and select display order behave like in CMA. The details below the data grid show the same information as CMA shows for the focussed case. Below the details a summary of the cases can be displayed.

The cases screen when a parent case is focussed can look as follows:

## List of cases for "CMA_Ann"

**Cases to show:** All    **Filter:**

| Location | Current owner | Survey | Town | Address | Name | Key |
|---|---|---|---|---|---|---|
| CLIENT | cma_ann | Health survey | Gotham City | Main Street 4522 | | 1,1 |
| CLIENT | cma_ann | Health survey | New York | School Street 26 | | 10,1 |
| CLIENT | cma_ann | Household survey | Leamington | 125 Bracken Street | Brain Schulist | 10001 |
| CLIENT | cma_ann | Household survey | Brooklands | 156 Sylvia Street | Luisa McLaughlin | 10002 |
| CLIENT | cma_ann | Household survey | Dallington | 157 Dunarnan Street | Jasen Conn | 10005 |
| CLIENT | cma_ann | Household survey | Somerfield | 104 Plunket Street | Shannon Lebsack | 10007 |
| CLIENT | cma_ann | Household survey | Spreydon | 74 Emerson Street | Sammie Zemlak | 10008 |
| CLIENT | cma_ann | Household survey | St Albans | 99 Albany Street | Ethan Schmitt | 10009 |
| CLIENT | cma_ann | Household survey | Liberton | 78 Dalrymple Street | Gladyce Schuppe | 10010 |
| CLIENT | cma_ann | Household survey | The Glen | 8 Barton Street | Karson Bartell | 10011 |
| CLIENT | cma_ann | Household survey | Kawakawa | 38 Bowen Street | Tara Roob | 10012 |
| CLIENT | cma_ann | Household survey | Beerescourt | 14 Larnach Street | Maci Grady | 10014 |
| CLIENT | cma_ann | Household survey | Hamilton Lake | 191 Paterson Street | Ramona Wolff | 10016 |
| CLIENT | cma_ann | Household survey | Waihi | 68 Cuba Street | Neha Graham | 10019 |

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**Select display order:** Identifier

| ID: | 10001 | Group status: | Not started | Appointment: | |
|---|---|---|---|---|---|
| Last result: | | Last attempt: | | # attempts: | |
| Town: | Leamington | Postal code: | 3432 | Address: | 125 Bracken Street |
| Name: | Brain Schulist | Phone-1: | (027) 7771-083 | Phone-2: | |

| #Cases: | 44 (#Not started: 43, #Completed: 1) | #Attempts: | 1 |
|---|---|---|---|
| Last attempt: | 17-8-2022, 13:21:19 | First/Last interview time: | 17-8-2022, 13:19:45 / 17-8-2022, 13:19:45 |
| Last interview end time: | 17-8-2022, 13:21:19 | Interview time used: | 00:01:34 (00:01:34) |
| First/Last download: | 16-8-2022, 14:44:10 / 17-8-2022, 13:26:53 | First/Last upload: | 17-8-2022, 13:21:27 / 17-8-2022, 13:21:27 |

Accept    Reopen    Close    Transfer    Restore    Release

Show group    Refresh    Back

After clicking the show group button the group screen will appear.



## Household survey

| Key | Survey | Name | Status | Result | Appoint |
|---|---|---|---|---|---|
| 10004 | Household survey | Camila Dickens | Completed | 100:Questionnaire is complete | |
| 10004-L1 | Labourforce survey | Stephen | Started | 337:Contact with someone else | |
| 10004-L2 | Labourforce survey | Margret | Added | | |
| 10004-W1 | Well being survey | Stephen | Added | | |
| 10004-W2 | Well being survey | Margret | Added | | |

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| ID: | 10004 | Group status: | Started | Appointment: | |
|---|---|---|---|---|---|
| Last result: | 100:Questionnaire is complete | Last attempt: | 28-6-2022, 11:18:54 | # attempts: | 1 |
| Town: | Cashmere | Postal code: | 8022 | Address: | 29 Merlewood Avenue |
| Name: | Camila Dickens | Phone-1: | (020) 9050-029 | Phone-2: | |

Show interview    Show attempts    Back

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After clicking the Show attempts button the attempts screen will appear:



The cases screen when assigning a user is allowed:

Selecting a user to be assigned to a case:



*The multi select buttons*
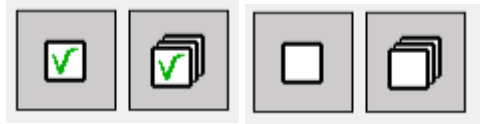


When the setting **sMultiSelect**=yes in the XML settings, 4 buttons are available to select/unselect cases. The first column of the data grid is used to indicate if a case has been selected or not.
A case can also be selected/de-selected by double clicking, using the enter key or using the key combination ctrl-Insert.



*The action buttons*
For cases with **CMA_ForWhom**=EMPTY:

For cases with **CMA_ForWhom**<>EMPTY:

| Change | Accept | Reopen | Close | Transfer | Restore | Release |

For cases with **CMA_ForWhom**<>EMPTY  and **CMA_GroupType**=EMPTY:

| Show interview | Show attempts | Export survey data | Refresh | Back |

For cases with **CMA_ForWhom**<>EMPTY  and **CMA_GroupType**=gParent:

| Show group | Export survey data | Refresh | Back |
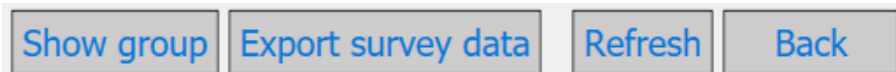
The following buttons can be made available by configuring them in the CMA admin settings file:

- **Assign**. Visible when **sAssignBtn**=*yes* in the XML settings. When pressed the user is prompted to select a user to whom the case needs to be assigned. When a user has been selected, the field **CMA_ForWhom** is assigned the selected user.
- **Change**. Visible when **sEditBtn**=*yes* in the XML settings. When pressed the user can set a new value for various CMA launcher fields in the selected cases like the start date and the end date. For more details see [Changing values in a launcher case](#).
- **Accept**. Visible when **sAcceptBtn**=*yes* in the XML settings. When pressed the value Accepted is assigned to the field **CMA_Status.**
- **Reopen**. Visible when **sReopenBtn**=*yes* in the XML settings. When pressed the value REOPEN_REQ is assigned to the field **CMA_Location**.
- **Close**. Visible when **sCloseBtn**=*yes* in the XML settings. When pressed the value CLOSE_REQ is assigned to the field **CMA_Location**.
- **Transfer**. Visible when **sTransferBtn**=*yes* in the XML settings. When pressed the user is prompted to select a user to whom the case needs to be transferred. When a user has been selected, the value TRANSFER_REQ is assigned to the field **CMA_Location** and the user is assigned to the field **CMA_ForWhom**.
- **Restore**. Visible when **sRestoreBtn**=*yes* in the XML settings. When pressed the value RESTORE_REQ is assigned to the field **CMA_Location**.
- **Release**. Visible when **sReleaseBtn**=*yes* in the XML settings. When pressed the value RELEASE_REQ is assigned to the field **CMA_Location**.
- **Show interview**. Visible when **sShowInterviewBtn**=*yes* in the XML settings. When pressed the interview is displayed in read-only mode. The interview data is extracted from the survey data blob in the launcher case.
- **Show group**. Visible when the focused case is a parent case of a group. When clicked the Show group dialog is activated.
- **Show attempts**. When pressed the Show attempts dialog is started. It shows the attempts made for the case. The attempts data is extracted from the attempts data blob in the launcher case.
- **Export survey data**. Visible when a **sExportCSVBtn**=*yes* in the XML settings and a specific survey has been selected. When pressed the survey data of the cases in the data grid are exported to a csv file. They can then be loaded in Excel.
- **Refresh**. Refreshes the content of the data grid by querying the launcher database on the server.

- **Back**. Back to the previous screen.

For many of these buttons certain rules apply for when the button will be enabled.

In this dropdown the user can select what cases need to be displayed.

# Changing values in a launcher case

When the *Change* button is pressed a dialog will be displayed in which you can specify the new values for the case. The dialog can look for instance as follows:



Which fields are displayed depends on what has been specified in the XML settings file. In the example all available fields are displayed.
By selecting the check box in front of the field text you can set if the value needs to be updated in the case. Initially the check boxes are selected for those fields for which all selected cases have the same value in the field. When equal in all cases the value is displayed in the edit box.

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In the example screen, the start date is 01/11/2022 in all selected records, but the end date is not the same in all selected records and therefore the check box is not checked.

When the *Update cases* button is pressed and confirmed, values will be assigned for all fields for which the check box is checked. Each updated case will receive the value REFRESHCASE_REQ in the **CMA_Location** field. This triggers an update of the case on the client during the next synchronization by the interviewer.

# The CMA Admin Tool user interface - Manager

## The Main screen

This is the first screen of the application. Here the manager can select a survey from the surveys drop down box and select a row in the data grid. The manager will always have the buttons *Show cases, Export cases, Progress, Logging* and *Exit* available. When the manager also has supervisors to manage, the *Restore user* button will be visible. The *Import cases* and *Check* buttons are optional and can be set through the XML settings file.
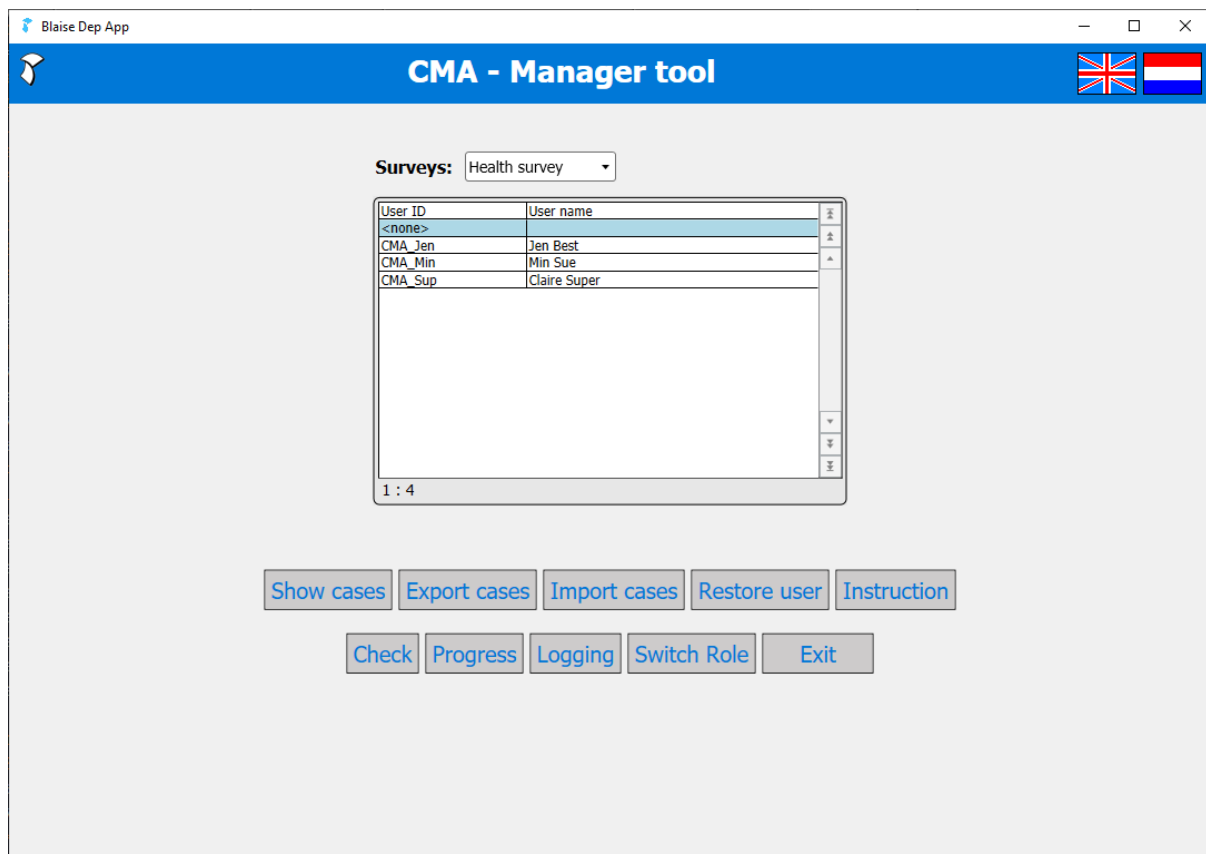


- *Show cases*. When pressed, the Cases screen is displayed. When User ID is <none> the Cases screen will display all cases of the selected survey. When a real User ID is currently focussed, the Cases screen is displayed showing the cases assigned to any of the interviewers managed by the selected supervisor.
- *Export cases*. When pressed, cases from the launcher database will be exported to a csv file. Which cases depends on the current selection on the screen:
  - When a survey has been selected and User ID *<none>*, all launcher cases for the selected survey will be exported.
  - When a survey has been selected and a real User ID, the launcher cases for the selected survey for all interviewers supervised by the selected User ID in the data grid will be exported.
  
  The user is then prompted if Excel needs to be started to open the csv file.
- *Import cases*. When pressed the user will have the possibility to import cases into the launcher database. See the section on Importing launcher cases for more information.

- *Restore user*. When pressed the manager will see a selection screen to select the interviewer and will be prompted for confirmation. For all cases of the selected interviewer, the **CMA_Location** field will be set to RESTORE_REQ.
- *Instruction*. When pressed the manager will see a selection screen to select the interviewer and then can select a case related instruction to be set for the selected user. See the section Create instruction dialog for more information.
- *Check*. When pressed the Tool will check the consistency of the cases in the launcher, the stored attempts and the stored topic data. When not consistent, a dialog will pop up displaying the inconsistent cases. See the section on Checking the consistency for more information.
- *Progress.* When pressed an overview will be displayed of the progress of the selected survey. See the section on Displaying the progress of a survey for more information.
- *Logging.* When pressed the manager will see a selection screen to select the interviewer/supervisor for whom the logging needs to be displayed. See the section on Displaying the logging of a user for more information.
- *Switch Role.* When pressed the role of the current user will be switched to supervisor. This button is only visible when the supervisor also has the manager role.
- *Exit*. When pressed the Tool will be stopped and the main screen of DepApp is displayed.

It is also possible to allow the manager to handle administrator tasks (currently import *user info* and *manage info)* through a setting in the XML settings file. The manager will then see the additional *Admin* button . When clicked the manager will be switched to the administrator role. For details see the section on the user type administrator below

## The Cases screen

This is the screen where the manager can inspect individual cases of the survey. The functionality of the screen is similar to the cases screen presented to the supervisor with one exception:  the manager is not allowed to perform some of the actions like assigning and transferring a case. The following buttons are available:

- **Assign supervisor**. Visible when there is more than one supervisor for the selected survey and **sAssignSupervisorBtn**=*yes* in the XML settings. When pressed the user is prompted to select a supervisor to whom the case needs to be assigned. When a user or <none> has been selected, the field **CMA_Supervisor** is assigned the selected supervisor or made empty. This operation is only allowed for cases that are not in possession of an interviewer.
- **Show interview**. When pressed the interview is displayed in read-only mode. The interview data is extracted from the survey data blob in the launcher case.
- **Show group**. Visible when the focused case is a parent case of a group. When clicked the Show group dialog is activated.
- **Show attempts**. When pressed the Show attempts dialog is started. It shows the attempts made for the case. The attempts data is extracted from the attempts data blob in the launcher case.
- **Export survey data**. When pressed the survey data of the cases in the data grid are exported to a csv file. They can then be loaded in Excel.
- **Refresh**. Refreshes the content of the data grid by querying the launcher database on the server.

- **Back**. Back to the previous screen.

## Importing launcher cases

The Tool supports a flexible way to import cases in the launcher database. This is done using a CSV file or an Excel spreadsheet. The first line in the CSV file/spreadsheet must contain the names of fields that need to receive a value during the import. Each field name can start with a prefix that indicates where the data in the column needs to end up. The following prefix values are supported:

| Prefix | Description |
|---|---|
| launcher: | This indicates that the column contains a value for the launcher. This prefix is optional. |
| topic: | This indicates that the column contains a value for the topic (survey). For instance *topic:person.firstname* will assign the value to the field *person.firstname* in the topic database. |
| contact: | This indicates that the column contains a value for the **CMA_ContactData** fields. For instance *contact:address* will add a field-value pair to **CMA_ContactData** for *address*. |
| custom: | This indicates that the column contains a value for the **CMA_CustomUse** fields. For instance *custom:projectcode* will add a field-value pair to **CMA_CustomUse** for *projectcode*. |
| skip: | This indicates that the column can be skipped by the import process. |

When none of the above prefixes has been specified, the field is assumed to be part of the launcher.
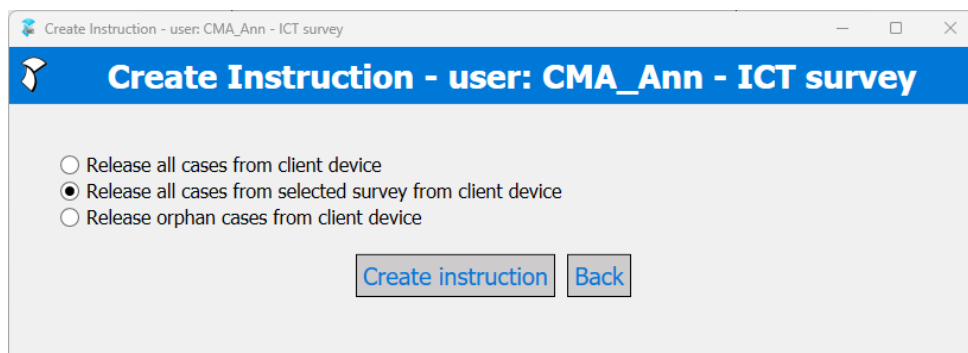
The Tool will check if the field is present in the topic or launcher. A column with name **ID** or **launcher:ID** always needs to be present in the import. When there is an error it will be displayed on the screen and the import will not be executed.

The import supports populating blob type fields. The data in the column of the blob field must then reference a file name on disk. When found it will be loaded in the Blob type field.

Please note that cases in the import that are already present in the launcher database and that are in use (= already downloaded to the device of an interviewer) are skipped during the import.

## Create instruction dialog

After pressing the instruction button the Create instruction dialog appears. Select one of the options and then press the *Create instruction* button. The user will then be asked to confirm the choice.

The first option releases all cases for all surveys from the client device when the user synchronizes with the server. In this example all cases for all survey on the device of user CMA_Ann. All cases on the server assigned to CMA_Ann server will be assigned the value RELEASE_DONE in the **CMA_Location** field.

The second option releases all cases for the selected survey from the client device when the user synchronizes with the server. In this example all cases for the ICT survey on the device of user CMA_Ann. All cases on the server of the ICT survey assigned to CMA_Ann will be assigned the value RELEASE_DONE in the **CMA_Location** field.

The third option releases the so called orphan cases. This are all cases on the client device for which there is no survey installed anymore on the server.

## Checking the consistency

After pressing the Check button on the main screen of the manager the system will check for all launcher cases if there is data in the topic database and data in the attempts database. This will only be done if there is a survey data blob and/or an attempts data blob in the launcher case. In case there is an inconsistency for a case it will be displayed in the Consistency check dialog. An example can be found below where we removed/changed on purpose some entries in the topic and attempts database. For each of the cases the inconsistency is displayed.



Consistency check: ICT survey

**Consistency check: ICT survey**

| ID | Survey data in case | Survey data in database | #Attempts in case | #Attempts in database | Last attempt in case | Last attempt in database |
|----|---------------------|-------------------------|-------------------|-----------------------|----------------------|--------------------------|
| 30 | Yes | No | 1 | 0 | 20221104,10:26:00+01:00 | |
| 33 | Yes | Yes | 1 | 0 | 20221104,10:40:56+01:00 | |
| 39 | Yes | Yes | 3 | 3 | 20221104,10:55:50+01:00 | 20221104,09:55:50+01:00 |

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Repair data    Back

After pressing the Repair data button the inconsistencies will be solved by exporting the blobs from the launcher case to the corresponding databases. The result will be displayed on the screen:



Consistency check: ICT survey

End recovery. Recovered 1 survey data records and 3 attempts data records

OK

## Displaying the progress of a survey

After pressing the Progress button an overview of the current progress of the survey will be displayed. The progress report shows an overview per unique combination of the CMA launcher fields **CMA_ForWhom**, **CMA_InPossession**, **CMA_Location** and **CMA_Status**. The column *Last modification* shows the most recent change of the cases counted. The column *Total* shows the number of case for the unique combination of the 4 fields. Note that the progress report is made by performing a query on the launcher database.

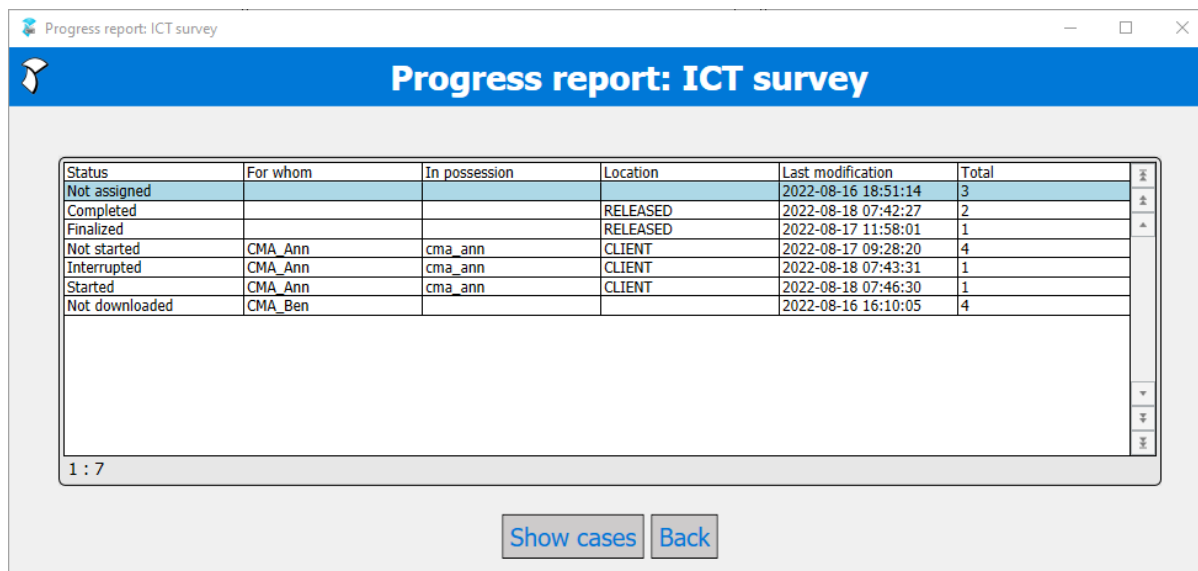An example of how such a progress report can look is displayed below.



**Progress report: ICT survey**

| Status | For whom | In possession | Location | Last modification | Total |
|---|---|---|---|---|---|
| Not assigned | | | | 2022-08-16 18:51:14 | 3 |
| Completed | | | RELEASED | 2022-08-18 07:42:27 | 2 |
| Finalized | | | RELEASED | 2022-08-17 11:58:01 | 1 |
| Not started | CMA_Ann | cma_ann | CLIENT | 2022-08-17 09:28:20 | 4 |
| Interrupted | CMA_Ann | cma_ann | CLIENT | 2022-08-18 07:43:31 | 1 |
| Started | CMA_Ann | cma_ann | CLIENT | 2022-08-18 07:46:30 | 1 |
| Not downloaded | CMA_Ben | | | 2022-08-16 16:10:05 | 4 |

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Show cases | Back

The lines with *RELEASED* in the location column indicate cases that have been handled (*Completed* = response; *Finalized* = non-response). Because they are no longer linked to an interviewer, the cells in the second and third column are empty. The cases with *CLIENT* in the location column are cases on the client device of the user *CMA_Ann* of which 4 have not yet been worked on, 1 has been *Started* and 1 has been *Interrupted*. Interviewer *CMA_Ben* has not yet synchronized with the server. His 4 cases are still waiting to be downloaded to the client device.

By pressing the Show cases button the involved cases will be displayed on the Cases screen dialog.


## Displaying the logging of a user

After pressing the Logging button the logging of the selected user will be displayed. By default it will show the logging uploaded for today and the previous 7 days. This logging window can be changed in the logging dialog.

After changing the number of days you need to press  to update the content of the dialog.

# Logging for user: CMA_Ann

| LogWhen | LogText |
|---|---|
| 20220809,08:37:10+02: | Write settings |
| 20220809,08:37:10+02: | Last sync: 20220808,20:06:11 |
| 20220809,08:37:10+02: | Logging uploaded |
| 20220809,08:37:10+02: | No survey settings found for e374df72-7c4f-40fd-9f8c-9386939b5db5 |
| 20220809,08:37:11+02: | Dependency: 04417ebe-a5f7-4777-bc42-b460358e4d86 <-- e374df72-7c4f-40fd-9f8c-9386939b5db5 |
| 20220809,08:37:11+02: | Dependency: 04417ebe-a5f7-4777-bc42-b460358e4d86 <-- 65390f47-1fc9-4e35-810c-433b351e58f8 |
| 20220809,08:37:11+02: | No survey settings found for 65390f47-1fc9-4e35-810c-433b351e58f8 |
| 20220809,08:37:11+02: | Active survey settings C:\Blaise5\DepApp_DeployFolder\localhost\cma_ann\Surveys\cpi_app\cma_surveyset |
| 20220809,08:37:11+02: | Check survey update for 04417ebe-a5f7-4777-bc42-b460358e4d86 |
| 20220809,08:37:12+02: | srvlist: CPI_App id:04417ebe-a5f7-4777-bc42-b460358e4d86 mainid: wave:Surveystate: 2 Count:1 |
| 20220809,08:37:12+02: | Active survey settings C:\Blaise5\DepApp_DeployFolder\localhost\cma_ann\Surveys\cpi_app\cma_surveyset |
| 20220809,08:37:12+02: | Write settings |

1 : 8303

**Nr of days logging history:** 7

# The CMA Admin Tool user interface - Administrator

The administrator is either a user in the user info with user type *administrator* or a Blaise user that has the role *CMA_Administrator*.

## The Main screen

Here the administrator can import/maintain users and the information on what surveys to manage. The manager will have the buttons *Import user info, Import manage info, Maintain user info, Maintain manage info, Custom reports* and *Exit* available. When a user with the manager role switches to the administrator role there will also be the addition *Manage* button to switch back to the manager role.
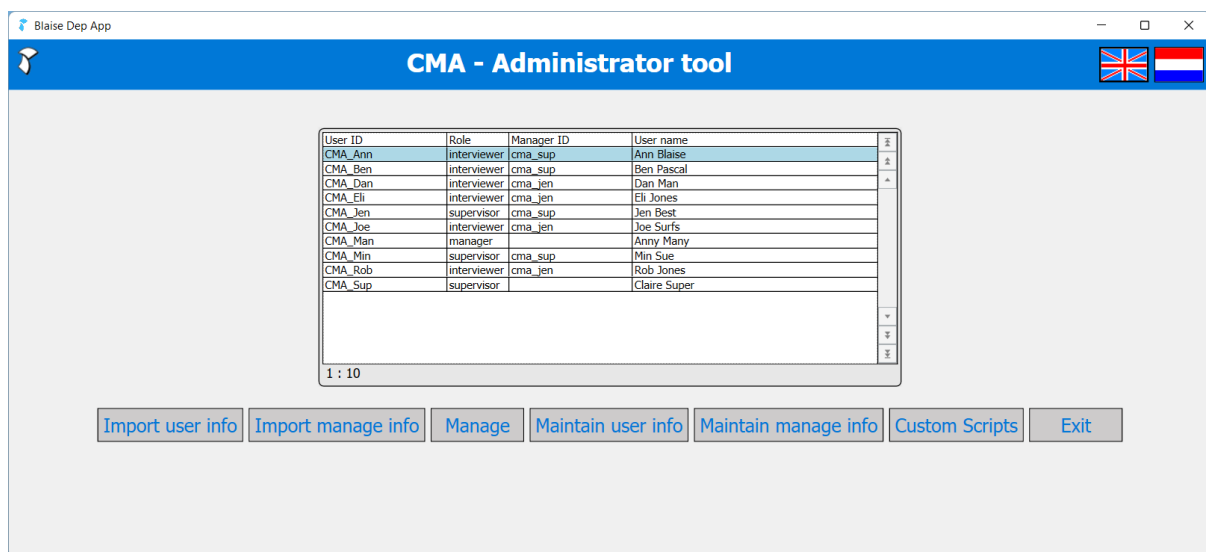


- **Import user info**. When pressed the user will have the possibility to import user info. Both CSV files and Excel spreadsheets are supported. The first line in the CSV file/spreadsheet must contain the names of the fields that need to receive a value during the import. The names must match the names in the **CMA_UserInfo** datamodel. The import adds the cases to the already existing cases in the database.
- **Import manage info**. When pressed the user will have the possibility to import manage info. Both CSV files and Excel spreadsheets are supported. The first line in the CSV file/spreadsheet must contain the names of the fields that need to receive a value during the import. The field names must match the field names in the **CMA_ManageInfo** datamodel. The import adds the cases to the already existing cases in the database.
- **Manage.** Switch role to manager.
- **Maintain user info.** When pressed the user will have the possibility to maintain user info data.
- **Maintain manage info.** When pressed the user will have the possibility to maintain management info data.
- **Custom Scripts.** When pressed, the user will have the possibility to add, edit, delete or run custom Manipula setups.

# Maintain User Info

With *Maintain user info* the user will have the possibility to maintain user info data. When pressed the following dialog will appear:



The dialog has a couple of buttons:

- Add user info. Using this button you will be able to add a new user info record
- Edit user info. For editing the currently selected user info record
- Delete user info. For deleting the currently selected user info record
- Back. This will bring you back to the main management screen

Depending on the clicked button the following dialog will be opened in Add, Edit or Delete mode. For the Edit mode the dialog looks similar to this:

If you click OK in this dialog, the action which you initiated will be executed (either add, edit or delete).

If you click 'Back', no actions will be executed and you will be returned to the previous screen.

# Maintain Manage Info

With *Maintain manage info* the user will have the possibility to maintain management info data. When pressed the following dialog will appear:



The dialog has a couple of buttons:

- Add manage info. Using this button you will be able to add a new manage info record
- Edit manage info. For editing the currently selected manage info record
- Delete manage info. For deleting the currently selected manage info record
- Back. This will bring you back to the main management screen

Depending on the clicked button the following dialog will be opened in Add, Edit or Delete mode. For the Edit mode the dialog looks similar to this:

If you click OK in this dialog, the action which you initiated will be executed (either add, edit or delete).

If you click 'Back', no actions will be executed and you will be returned to the previous screen.

# Custom Scripts

When pressed the user will have the possibility to run execute Manipula scripts which can be used to create custom reports or perform actions in any of the CMA databases. If the button is clicked the Custom Scripts dialog will appear:



This dialog contains a couple of buttons:
- Add. Using this button you will be able to add/setup a new script
- Edit. Using this button you will be able to edit the currently selected script
- Delete. Using this button you will be able to delete the currently selected script
- Start. Using this button you will be able to start/execute the currently selected script
- Back. This will bring you back to the main management screen.

Depending on the clicked button the following dialog will be opened in Add, Edit, Delete or Start mode. For the Edit mode the dialog looks similar to this:

For reports you must/can provide the following attributes:

- Script name. The report name is a mandatory field and should always be provided
- Script. Here you should enter an existing Manipula script. You can also click on the search icon to select a Manipula script on your file system. The script is also a mandatory field
- Parameters. It is possible to pass values to the script by using parameters. Parameters should be passed in using the parameter name followed by the value. The usage of parameters is optional.

If you click OK on this screen, the action which you initiated will be executed (start, add, edit or delete).

When creating a Custom Script, it is recommended to use the CMA_CustomScript_Framework.manx file as a basis for your script. The Admin Tool will pass a number of parameters to the setup such as the data model of the launcher as well as the data models for the selected Topic/Attempts (or the default Attempts survey if no survey is chosen). The framework will also initialize connections with the survey data files of the aforementioned data models and you have the option of passing a message back to the Admin Tool that will be displayed when the script is executed.

When adding or editing a custom script, any data models in the same directory as the msux file will be zipped and stored next to the msux file. It is therefore recommended to create scripts in their own directory alongside any required data models.

# Installation

For the installation it is advised to have a separate server park for the Tool. This server park needs the same settings as the server park in which CMA is installed. Each user that needs to access the admin tool needs to have access to:

- The server park in which the CMA supporting data models (or more specific: the launcher) has been installed.
- The server park in which the admin tool has been installed.
- The server parks that hold the surveys the user needs to manage. All surveys mentioned in the CMA_ManageInfo database for the user that are inaccessible will not be displayed in the dropdown survey list in the Tool.

Each user needs to have at least user permissions *Survey Data Access* and *Apps*.

In the CMA admin tool server park the following packages need to be installed: CMA_AdminTool.bpkg, CMA_ManageInfo.bpkg and CMA_UserInfo.bpkg.


# Setting up the CMA Admin Tool Demo

In the sub-folder *CMA\AdminTool\Demo* you can find the CMA_AdminDemo.bsol solution. The following lines describe setting up the demo:

- Define additional user CMA_Sup. This user will be the supervisor of the users CMA_Ann and CMA_Ben. This user needs to have access to the server parks mentioned in the section on installation and the right user permissions.
- Define additional user CMA_Man. This user will be the survey manager. This user needs to have access to the server parks mentioned in the section on installation.
- Optional: define a Role with name *CMA_Administrator* in the server manager and define a user called CMA_Admin that uses that role and has access to the server parks mentioned in the section on installation and the right user permissions.
- Open the solution and build it. Note that it assumes that the CMA Demo solution has been prepared and set up. You do not need to load cases in the launcher. This can be done in  the Tool.
- Install the multipackage CMA_AdminDemo.mbpkg
- Run the Manipula project FillManageInfo. It will setup the surveys to manage for user CMA_Sup. This import can also be done by the Tool (see below).
- Run the Manipula project FillUserInfo. It will setup the user relations needed for the Admin tool. This import can also be done by the Tool (see below).
- The demo allows for the CMA_Sup user to supervise the two interviewers and to manage the demo surveys. By clicking the *Switch role* button the supervisor can switch to management mode and import the Excel spreadsheets in the demo folder to add cases to the launcher database. The CMA_Sup user will also be able to import *user info* and *manage info* files, for instance to add additional interviewers.

To do the initial import the *user info* file and the *manage info* file you can also start the Tool using user CMA_Admin. You will then be able to import both files using a .csv file or an Excel file.

# The CMA admin tool sources

The CMA admin tool has one solution: CMA_AdminTool.bsol. This solution has the projects which together form CMA admin tool for the supervisor's device. The solution has 3 projects, one for the CMA admin tool interactive client application and 2 for the supporting CMA admin tool data models. CMA admin tool uses the resource database from CMA (CMA.blrd).

## Translating the user interface

The CMA admin tool source (cma_admintool.manx) uses as default language English (EN). When a translation to another language is needed then this can be done by using translation text files (extension .bitt). CMA admin tool is shipped with a translation to Dutch. It can be found in the sub-folder Bitt. For instructions on how to add another language: see the CMA documentation

# Appendix A - The CMA admin tool settings file

An overview of all supported settings in the CMA admin tool settings file.

The following CMA settings are currently supported by the admin tool. Their values can be inherited by adding the *CMA_settings.xml* file to the admin tool package. The value *yes* in the third column indicates that this setting can be overruled in the Survey settings XML file for a specific survey (see the CMA documentation for additional info).

| Name | Description | Survey |
|---|---|---|
| **sLanguageCount** | The number of languages the interviewer can choose from in the CMA user interface. Value can be 0..3, EMPTY. When set to 0 (zero) all languages will be available in the language dropdown control. | |
| **sLanguages** | Array that holds the supported languages. Each array element holds the code in the TLanguage type that represents the CMA languages. | |
| **sShowResult** | By default the result is displayed as code:string. Set this field to 1 if only the code needs to be displayed and to 2 when only the string value needs to be displayed, to 3 for code:string, to 4 for showing the label and 5 for showing code:label. | |
| **sFieldFilterAll** | Field filter to be used when listing the cases of all surveys in the data grid. | |
| **sShowNotStartedTxt** | When set to *yes* the data grid will show the 'Not started' text as status for cases that have am empty status. | |
| **sPreserveLogfileOnClient** | When set to yes CMA will create a file called *cma_logbackup.txt* in which a backup of the uploaded logging will be maintained. | |
| **sSearchCount** | The number of CMA launcher field definitions that will be used for filtering. | |
| **sSearchName[x]** | Name of a CMA launcher field. x=1..sSearchCount. | |
| **sTodayAppointmentPreFix** | String field. The content of this field will be displayed in front of  today's appointment in the cases data grid. | |
| **sTodayAppointmentDetail** | String field. The content of this field will be used as a rich text tag around today's appointment in the case details. For example RED. | |
| **sShowDateFormat** | When set all dates in the user interface will be formatted as specified. Example: *yyyyMMdd* will result in a date like '20211028'. | |
| **sFieldWidths** | Comma separated list that specifies the width in characters of the fields used in the field filter. When not present in the list the width will be determined based on meta and available space in the datagrid. <fieldname>=<width>,<fieldname=width>,... | |
| **sHideResultOfParent** | When set to *yes*, the value of last happening of a parent case (**CMA_GroupType**=*gParent*) will not be displayed as last result on the main cases screen. | |
| **sFieldFilterTopic** | Field filter to be used when listing cases of one topic in the data grid. | yes |

| sFieldFilterGroup | Field filter to be used when listing cases of one group in the data grid. | yes |
|---|---|---|
| sDefaultMode | The mode to be used for the data entry session. It will only be used when -Mode: has not been specified for the command line of the data entry session. | yes |
| sDefaultLayoutSet | The layout set to be used for the data entry session. It will only be used when -LayoutSet: has not been specified for the command line of the data entry session. | yes |
| sDefaultDataEntrySettings | The data entry settings to be used for the data entry session. It will only be used when -DataEntrySettings: has not been specified for the command line of the data entry session. | yes |
| sCustomColCount | The number of custom columns definitions. Maximum allowed is 10. | yes |
| sCustomCol[x].FieldName | String field. The fully qualified name of the field from where to extract the data.  x = 1..sCustomColCount. The data will be stored in the CMA internal field tCustomCol<x>. The custom column will receive the title as defined in the translation file CMA.bitt for tCustomCol<x> or as specified in **sCustomCol[x].Title** (if present). | yes |
| sCustomCol[x].Origin | Enumerated field. The origin of the data. The value can be oContactInfo (value=1; the **CMA_ContactData** will be used) or oCustomData (value=2; the **CMA_CustomUse** will be used using a semicolon as separator).  x=1..sCustomColCount | yes |
| sCustomCol[x].Width | Number. The column width in characters | yes |
| sCustomCol[x].Title | The text to be displayed as title for the column. The field supports multiple languages. This is done by specifying a comma separated list of *<languageID>=<survey name>*, for instance: EN=Address,NL=Adres. x=1.. sCustomColCount. | yes |
| sDefSortCount | The number of sort definitions for  the cases screen. Maximum allowed is 10. | yes |
| sDefSort[x].KeyTitle | The text to be displayed in the sort dropdown box. The field supports multiple languages. This is done by specifying a comma separated list of *<languageID>=<survey name>*, for instance: EN=Address,NL=Adres. x=1.. sDefSortCount. | yes |
| sDefSort[x].FieldCount | The number of fields used in the sort definition. Maximum allowed is 10. x=1.. sDefSortCount. | yes |
| sDefSort[x].FieldName[y] | The field name. It needs to be the name of a field that can also be used in the field filter. x=1..sDefSortCount, y=1.. sDefSort[x].FieldCount. | yes |
| sContactDataSep | Separator for the **CMA_ContactData** field. When not specified the default TAB (char 9) will be used. It is possible to change the separator between the field and the value by specifying two separators. For example, if you want 'field=value,' as pattern you specify for **sContactDataSep** '=,'. It is also possible to specify '=TAB'. | yes |
| sCustomDataSep | Separator for the **CMA_CustomUse** field. When not specified the default ';' (semicolon) will be used. It is possible to change the separator between the field and the  value by specifying two separators. For example, if you want 'field=value;' as pattern you specify for **sCustomDataSep** '=;'. It is also possible to specify '=TAB'. | yes |

The following settings are specific for the CMA admin tool. They can be set through the
*CMA_AdminSettings.xml* file.

| Name | Description |
|---|---|
| **sMultiSelect** | When set to *yes* the user is allowed to select multiple cases for one action. |
| **sRestoreUserBtn** | When set to *yes* the user is allowed to restore all cases for the selected interviewer. |
| **sShowInterviewBtn** | When set to *yes* the user is allowed access to the Topic case (in read-only mode only). |
| **sAssignBtn** | When set to *yes* the user is allowed to assign a not-assigned case to a specific interviewer. |
| **sAssignSupervisorBtn** | When set to *yes* the user is allowed to assign a case to a specific supervisor. |
| **sAcceptdBtn** | When set to *yes* the user is allowed to set the status of a specific case to *Accepted.* |
| **sTransferBtn** | When set to yes the user is allowed to transfer a case to another interviewer or retrieve the case as-is back to the server (TRANSFER_REQ). |
| **sRestoreBtn** | When set to *yes* the user is allowed to restore a specific case (RESTORE_REQ). |
| **sReopenBtn** | When set to *yes* the user is allowed to reopen a specific case (REOPEN_REQ). |
| **sReleaseBtn** | When set to *yes* the user is allowed to release a specific case (RELEASE_REQ). |
| **sCloseBtn** | When set to *yes* the user is allowed to close a specific case (CLOSE_REQ). |
| **sExportCSVBtn** | When set to *yes* the user will be allowed to export survey data of the cases in the data grid to a csv file. |
| **sExportDataBtn** | When set to *yes* the user will be allowed to export launcher data to a csv file. |
| **sImportCasesBtn** | When set to *yes* the manager will be allowed to import launcher cases from a csv / Excel file. |
| **sCheckBtn** | When set to *yes* the manager will be allowed to check the consistency of the CMA databases and correct it when needed. |
| **sLoggingBtn** | When set to *yes* the supervisor will be allowed to access the logging of the selected user. |
| **sProgressBtn** | When set to *yes* the supervisor will be allowed to access the progress of the survey. |
| **sInstructionBtn** | When set to *yes* the manager will be allow to set up an instruction for a specific user. |
| **sMaintainUserInfoBtn** | When set to *yes* the administrator will be allowed to maintain the user info. |
| **sMaintainManagementInfoBtn** | When set to *yes* the administrator will be allowed to maintain the manage info. |
| **sCustomReportsBtn** | When set to yes the manager will be able to navigate to the custom report dialog screen |
| **sEditBtn** | When set to *yes* the supervisor will be allowed to change some fields in the launcher case. Which fields is specified by **sEditParts** |
| **sEditParts** | SET field specifying which launcher fields are allowed to be changed. The following values can be added to the set: |

| SET value: | Launcher field: |
|---|---|
| seStartDate | CMA_StartDate |
| seEndDate | CMA_EndDate |
| seSupervisor | CMA_Supervisor |
| seCmdlineForEdit | CMA_CmdlineForEdit |
| sePreloadForEdit | CMA_PreloadForEdit |
| seAttemptsRoute | CMA_AttemptsRoute |

| | | seDetailsTemplate | CMA_DetailsTemplate |
| | | seCustomUse | CMA_CustomUse |
| | | | |
| **sAllowAdminTasksForManager** | | When set to *yes* the manager will be allowed to do administrator tasks like importing *user info* and *manage info*. | |
| **sAddStartDateToFieldFilter** | | When set to *yes* the **CMA_StartDate** will be added to the field filter used on the cases screen when not already included in the field filter. | |
| **sAddEndDateToFieldFilter** | | When set to *yes* the **CMA_EndDate** will be added to the field filter used on the cases screen when not already included in the field filter. | |
| **sExcelExePath** | | The path to Excel for opening a csv file. | |
| **sExcelOutputPath** | | The path to the folder where the csv files need to be written. When not specified the files will be written to the *Personal* folder (by default the documents folder). | |
| **sShowSummary** | | When set to *yes* the cases screen will show a summary of some data fields of the cases in the data grid. | |
| **sShowUDInSummary** | | When set to *yes* the summary on the cases screen will also show information on the first/last download/upload times. | |
| **sDataExportSep** | | The separator to be used when exporting data to csv files. When not specified a semicolon will be used. | |
| **sDataImportSep** | | The separator used in imported csv files. When not specified a semicolon is assumed. | |
| **sDefaultNrOfDaysLoggingHistory** | | Default value for the number of logging days displayed by the show logging dialog. | |

The following variables in the settings.xml file are used to keep track of values used by CMA admin tool:

| | |
|---|---|
| **sSelectedLanguage** | The language to be used when starting CMA. This field is updated based on the user's choice. |
| **sSelectedSurvey** | The GUID of the selected survey in the dropdown survey box when closing the Tool. |
| **sLastImportFolder** | To keep track of the last folder that was used to import cases. |
| **sSelectedUser** | To keep track of the last selected user. |
| **sNrOfDaysLoggingHistory** | To keep track of the number of logging days specified on the show logging dialog. |

# Appendix B – CMA_CustomScript_Framework.manx

```
PROCESS CMA_CustomScript_Framework

SETTINGS
    CONNECT=NO

USES
    // These will be preloaded for you via cmd line
    Launcher (VAR) // always the launcher datamodel
    Attempts (VAR) // the attempts in cma_surveysettings for the specified survey or default
attempts
    Topic (VAR) // only preloaded if you select a survey from the dropdown
    LogMeta (VAR) // admin tool logging meta

    DATAMODEL mInterchange
    FIELDS
        Message : OPEN
    ENDMODEL

// Survey data files can be opened with the Initialise function
SURVEYDATAFILE sdLauncher : Launcher
```

```
SETTINGS
   OPEN=NO

SURVEYDATAFILE sdAttempts : Attempts
SETTINGS
   OPEN=NO

SURVEYDATAFILE sdTopic : Topic
SETTINGS
   OPEN=NO

TEMPORARYFILE tInterchange : mInterchange
SETTINGS
   INTERCHANGE=TRANSIT

OUTPUTFILE oLog:LogMeta (ASCII) //log file name set on cmd line using file id oLog
SETTINGS
  MAKENEWFILE=NO
  OPEN=NO
  SEPARATOR=';'
  TRAILINGSPACES=NO
  CREATEBDIX=NO

SURVEYLIST srvList

CONST
  cDateTimeFormat = "yyyyMMdd,HH:mm:sszzz"

FUNCTION GetConnectionString : STRING
PARAMETERS pMeta : METATYPE
AUXFIELDS GUID : STRING
INSTRUCTIONS
   GUID := [[pMeta.InstrumentId]]
   srvList.GET(GUID)
   IF srvList.RESULTOK THEN
      RESULT := 'InstrumentId='+GUID+
               ';Serverpark='+srvList.ServerPark
   ENDIF
ENDFUNCTION

FUNCTION Initialise : INTEGER
AUXFIELDS
  res, res1, res2, res3: INTEGER
  GUID: STRING
INSTRUCTIONS
   RESULT := -1
   IF srvList.UserIsAuthenticated THEN
      res := srvList.GETLISTOFSURVEYS
      IF res = 0 THEN
         sdLauncher.SETCONNECTIONSTRING(GetConnectionString([[Launcher]]))
         res1 := sdLauncher.OPEN
         sdAttempts.SETCONNECTIONSTRING(GetConnectionString([[Attempts]]))
         res2 := sdAttempts.OPEN
         IF pTopicLoaded = yes THEN
            sdTopic.SETCONNECTIONSTRING(GetConnectionString([[Topic]]))
            res3 := sdTopic.OPEN
         ENDIF
         RESULT := res1 + res2 + res3
      ENDIF
   ENDIF
ENDFUNCTION

FUNCTION NowDT: STRING
INSTRUCTIONS
  RESULT:= TIMETOSTR(SYSTIME,cDateTimeFormat)
ENDFUNCTION

PROCEDURE AddToLog
PARAMETERS pTextToLog: STRING
INSTRUCTIONS
  oLog.OPEN
  oLog.PUTVALUE('LogWhen',NowDT)
  oLog.PUTVALUE('LogText',pTextToLog)
  oLog.WRITE
  oLog.RELEASE
ENDPROCEDURE
```

```
PROCEDURE AddToRecordFilter
PARAMETERS pFilter : OPEN
INSTRUCTIONS
    IF pFilter <> '' THEN
        IF aRecordFilter <> '' THEN aRecordFilter := aRecordFilter + ' AND ' ENDIF
        aRecordFilter := aRecordFilter + pFilter
    ENDIF
ENDPROCEDURE

AUXFIELDS
    Res : INTEGER
    pTopicLoaded : (yes (1)) // used to conditionally load the surveydatafile, can also be used
in your own setup
    aRecordFilter : OPEN

MANIPULATE
    Res := Initialise
    IF Res = 0 THEN
        AddToLog('CustomScript ' + SETUPNAME + ' initialisation successful')
        //
        // Do things here
        //
        AddToLog('End CustomScript ' + SETUPNAME)
        tInterchange.Message := 'What the user should see in the dialog'
    ELSE
        AddToLog('CustomScript ' + SETUPNAME + ' initilisation failed: sdLauncher=' +
STR(sdLauncher.IORESULTCODE) + ' sdAttempts='+ STR(sdAttempts.IORESULTCODE) + ' sdTopic='+
STR(sdTopic.IORESULTCODE))
    ENDIF
```