

USER MANUAL

CODIMG PREMIUM

Version 4.1.0 9 August 2019

codimg



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0.SYSTEM REQUIREMENTS

Minimum requirements

Operating System

Windows 7 with Service Pack 1 (32 or 64bits) Windows 8 (32 or 64bits)

Hardware

RAM Memory: 4GB

Processor: Intel © Core i5 or equivalent

Video memory: 256MB dedicated memory (not share with general RAM)

Screen resolution: 1366 x 768

At least 300MB free hard disk space to install software

Recommended requirements

Operating System

Windows 10 (32 or 64bits)

Hardware

RAM Memory: 8GB

Processor: Intel © Core i7 or equivalent

Video memory: 512MB dedicated memory (not share with general RAM)

Screen resolution: 1920 x 1080

At least 300MB free hard disk space to install software

Minimum requirements necessary to...

Capture and register actions in real time

Using video cameras via FireWire:

1x FireWire port (IEEE1394) or 1x PCMCIA (Expresscard) free Slot to add external FireWire Port

Using hard disk video camera and USB Digitizer (e.g. Hauppauge USB Live-2):
1x USB2 or USB3 port

Overhead projector or secondary monitor

1x HMDI (recommended) port or 1x VGA port

Video storage

Computer hard disk or external hard drive USB2 or USB3 can be used to store videos.

Useful links

FireWire: http://en.wikipedia.org/wiki/IEEE 1394

CPUs: http://www.cpubenchmark.net/ HDMI: http://en.wikipedia.org/wiki/HDMI

VGA: http://en.wikipedia.org/wiki/VGA_connector

External Hard Drive: http://www.amazon.com/External-Hard-Drives-Storage-

Add-Ons/b?ie=UTF8&node=595048



1. KEYBOARD SHORTCUTS

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1.1 Video player

M: Advance frame by frame. Press once to advance just one frame.

N: Rewind frame by frame. Press once to rewind just one frame.

B: Fast forward up to 3X speed. Press once to cycle through speeds.

V: Rewind up to 3X speed. Press once to cycle through speeds.

Left/right arrow keys: Short jump through video with configurable time.

Up/down arrow keys: Medium jump through video with configurable time.

Shift + left/right arrow keys: Long jump through video with configurable time.

Spacebar: Play/pause video.

Shift + Enter: Full screen video playback.

Esc: Exit full screen mode. To switch between full screen and previous video play size, double click on the title bar of the respective window.

L: Continue the video after playing a register.

Note: You can also see the video player short cuts while registering in the Video Opt tab in the register control window.

R: Replay the last register shown

+: Refresh the real time review



1.2 Timeline

1: Play next register (action) in the selected register.

2: Play previous register (action) in the selected register.

3: Add selected register to a selected list from the presentation.

Control+3: Add selected register to a selected list from the presentation adding all the multiple angles from the analysis.

Insert: Add a selected register to the selected list from a presentation.

C: Create register in a selected category.

Del: Delete selected register/s.

A: Go to the following category.

Q: Go to the previous category

Control+T: Hide/ show Timeline

Note: whilst the Timeline is hidden, registers can be only viewed by categories and not in chronological order.

4, 5, 6, 7: Change between video angles

D: Make a drawing on the actual frame in the video player.

Ctrl + M: Make a new row by merging the selected rows.

Ctrl + C: Change the colour of the selected row.

S: Make an .mp4 video, with the selected registers, keeping the original resolution.

Ctrl + Supr: Delete the selected rows and the registers contained in them

Shift + O: Make a new row with the opposite registers of the selected row

Shift + Drag: Make a copy of the selected registers in a different row

Alt + D: Delete all the descriptors of the selected row

W: Open data matrix

C: In presentations. Change the color of the selected list/register.

°\a: Full screen.

0 (Zero): Set an standard layout for the Timeline and Video player

E: Go to the end of the register.

+: Zoom-in in the timeline

-: Zoom-out in the timeline

Right click when closing: Close timeline and go to My Analysis



Right click when opening a presentation: Open the last presentation

Right click when opening a dashboard: Open the last dashboard.

Right click when opening a datamatrix: Directly open the Full matrix.

Ctrl+mouse wheel: zoom in/zoom out timeline

Click+mouse wheel: vertical scroll.

Alt+M: Merge all the open analyses in a new one

Ctrl+S: Make a copy of the selected analysis

From presentations:

M: Merge selected lists.

D: Duplicate selected lists.

C: Change the colour of the selected register/list.

N: Make a new list

S: Select all the visible registers

Shift+S: Select all the registers

F: Change the font colour from black to white or vice versa

E: Go to the end of the register.

F5: Refresh list's information.

Shift+3: Make a new list with the selected registers

Ctrl+C: Copy the selected registers

CtrL+V: Paste the selected registers

S: Slow motion

Alt + S: Make a copy of the selected presentation.

Alt + M: Merge all the open presentations in a new one

Ctrl+ ■: Make a new presentation

Double click on presentation tab: Open the folder where the presentation is saved

From show presentations:

E: Enable/disable edition mode.

T: Show/hide text

S: Slow motion



1.3 Category template

Click + drag: Move selected buttons

Alt + click + drag the bottom-right corner of a button: Change size of a button.

Hold Ctrl + click: Select multiple buttons individually.

Click on the background and drag: select multiple buttons at once

Control+Z: Undo changes.

Double click: Create a button which behaves as a category

Ctrl + double click: create a button which behaves as a descriptor

Arrows: move selected object

1.4 General shortcuts

Shift + P: Show all opened windows. In the case you close **Codimg Premium** with one or several windows on a secondary monitor or projector, those windows will not be shown if you open the program again without connecting the secondary monitor or projector. This combination of keys fixes this problem.

I: Sets the START for the selected register to the current video position. (Timeline and presentations)

O: Sets the END for the selected register to the current video position. (Timeline and presentations)

Ctrl: Open window for independent text notes while registering

Note: whilst the TimeLine is hidden, registers can only be viewed by categories and not by chronological order.

ESC: From registering environment. Close all the open manual categories.

Ctrl+ESC: From registering environment. Delete all the open manual categories.

Alt+I: Sets the START for the selected register to the current video position and go to next register.

Alt+O: Sets the END for the selected register to the current video position and go to next register.



1.5 Main menu

ESC: Closet he program.

Ctrl + C: Open comparison.

Ctrl + P: Open video player.

Ctrl + H: Open the merge and convert video files tool.

Ctrl + Q: Open the quick video merge tool.

Ctrl + O: Open options.

Ctrl + B: Open an external .nac.

M: Open My Analysis.

P: Open Presentations.

L: Open the last analysis used in Timeline.

1: Real-Time registering.

2: Register without Video Source.

3: Register from File.

Ctrl + N: Make a new template.

Ctrl + U: Check updates.

Ctrl + L: Open the registration and activation of your license.

F12: Remote support.

F1: User Manual.

F2: Video helps.

F3: open web page.

Shift + P: Open the last used presentation.



2. QUICK GUIDE

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2.1. Real-Time register

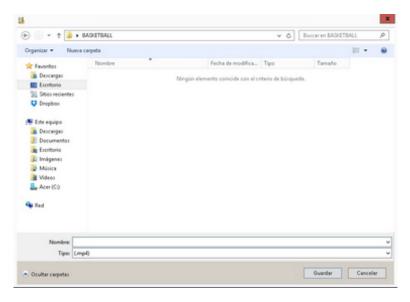
Real-Time register is the environment where videos can be viewed from an external source (video camera, video converter, etc.) connected to the FireWire port of the computer. While a video file is being created (digitized) with external images, user can use a category template to register actions.

In other words, both video and actions register are created simultaneously. At the end of the event, user will have all the actions in a Timeline, where they can be easily analysed and managed.

1.- Click on 'Real-Time Register' on the main menu.



2.- Enter the name of the video file to be captured. Then click on 'Save'.



3.- The video will be in .MP4 format and compressed quality.



4.- Open or create a category template to record the actions of the generated video.

To create a category template, click on 👪 .

To open a category template, click on



With this version of the program, you can configure your button template on two levels:

A primary level (4.1 Categories) and other secondary level (4.2 Descriptors).

You can relate a primary action with one or two (or more) secondary actions when you are registering, as all buttons are independent.

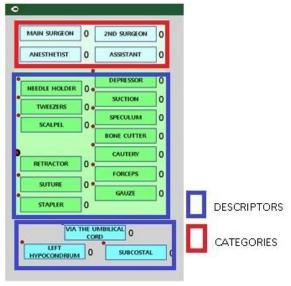
This program (**Codimg Premium**) offers unlimited buttons to distribute between categories and descriptors.

4.1 categories

If you have selected 'Create new category template', users should insert the desired categories (buttons) by typing the name on the **New Name box** by clicking .



Template example:





4.2 Descriptors:

Descriptors define how, when and where the registered actions take place. We could say that descriptors are like 'adjectives' to categories.

In order to ensure that all registers are classified in the best possible way, when actions are registered (by clicking on the appropriate button), users can also click respective descriptors which are defining them.

For example:

Categories (actions) = (medicine: bleed, stitch, cut...) (education: quick answer, not confident, ask...)

Descriptors (people) = Lehman, Jansen...

Descriptors (locations) = (medicine: torso, leg, right, left...)

Descriptors (quality) = well done, bad...

User can register actions and click descriptors as follows:

Quick answer (click) + Jansen (click) + well done (click).

4.3 Creating descriptors:

User can create descriptors in two different ways (See picture 4.1):

1-On the category screen:

Click a button in the template and then click option It behaves as a DESCRIPTOR, or keeping pressed the Control key and double clicking the category template's background.

2-As an independent descriptor template:

Click to open the following window. To add descriptors, enter the desired name and click.







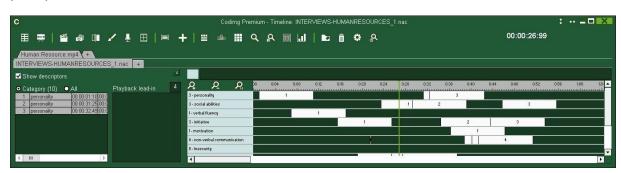
5.- To start the video capture, click

Then click the categories (buttons) created for that purpose as they arise.

. In order to play, compare, classify or change the recorded actions, To pause, click click to open the record editing environment (Timeline).



6.- This environment contains all the recorded actions which are shown by categories (rows) in an intuitive Timeline.





These are all the available **Timeline options**:

- Zoom : you can maximise or minimise the Timeline. To show the entire Timeline, click
- Change the start or end of a record: Place cursor on the left (start) or right (end) of the record and when it changes to , then left click and drag it in one of the two possible directions.
- Temporary displacement of record (without affecting its length): Place cursor in the middle of the record and when it changes to , then left click and drag it in one of the two possible directions.
- Add category (row): Right click on the name of a category (row) and select Add row. Then enter a name and click Ok. Timeline would have a maximum of 50 categories or rows (depending on the number of categories previously created in the buttons template)
- Edit category name (row): Right click on the name of the category to be edited, select Edit category name and click
- Delete category (row): Right click on the name of the category to be deleted, select Delete row and click on Yes.
- **Duplicate category** (row): Right-click on the name of the category to be duplicated and select **Duplicate row**.
- -Timeline's tools: See section 5.2



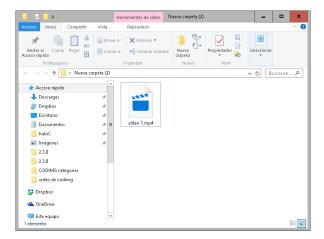
2.2 Viewing and recording from file

This is the environment where a video file can be seen and actions are recorded in the category template created by the user.

1.- Click on Register from File on main menu.



2.- Select the video file you wish to watch and click Open.



3.- Open or create a category template to record the actions of the generated video

To create a category template, click on 👪 .



With this version of the program, you can configure your button template on two levels:

One primary level (3.1 Categories) and other secondary level (3.2 Descriptors).





You can relate a primary action with one or two secondary (or more) actions when you are registering, as all the buttons are independent.

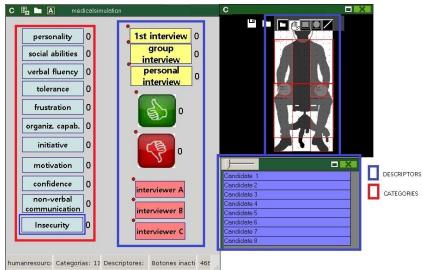
This program (Codimg Premium) offers unlimited buttons to distribute between categories and descriptors.

3.1 categories

If you have selected **Create new category template**, insert the desired categories (buttons) by typing the name on the **New Name box** clicking .



Template example:



3.2 Descriptors:

Descriptors define how, when and where the registered actions take place. We could say that descriptors are like 'adjectives' to categories.

In order to ensure that all registers are classified in the best possible way, when actions are registered (by clicking on the appropriate button), users can also click on the respective descriptors to define them.

For example:

Categories (actions) = (medicine: bleed, stitch, cut...) (education: quick answer, not confident, ask...)

Descriptors (people) = Lehman, Jansen...

Descriptors (locations) = (medicine: torso, leg, right, left...)

Descriptors (quality) = well done, bad...

User can register actions and click descriptors as follows:

Quick answer (click) + Jansen (click) + well done (click).



3.3 Creating descriptors:

User can create descriptors in two different ways (See picture 4.1):

1-On the category screen:

Click the button you want and then click the option It behaves as a DESCRIPTOR, or keeping pressed the Control key and double clicking the category template's background.

2-As an independent descriptor template:

Click to open the following window. To add descriptors, enter the desired name and click.



4.- To record actions

Click or **Record actions**, then click the video to play and finally click categories (buttons) created for that purpose, as they arise.

To pause, click the video image. To play, compare, classify or change the recorded

actions, click 📴 to open the record editing environment (Timeline).

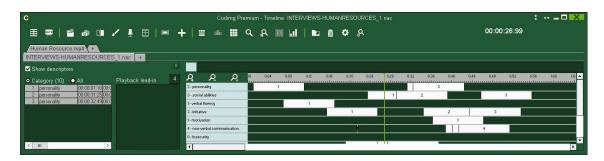








5.- This environment contains all the recorded actions which are shown by categories (rows) in an intuitive Timeline



These are all the available **Timeline options**:

- Zoom : you can maximise or minimise the Timeline. To show the entire Timeline, click
- Change the start or end of a record: Place cursor on the left (start) or right (end) of the record and when it changes to , then left click and drag it in one of the two possible directions.
- Temporary displacement of record (without affecting its length): Place cursor in the middle of the record and when it changes to , then left click and drag it in one of the two possible directions.
- Add category (row): Right click on the name of a category (row) and select Add row. Then enter a name and click on Ok. Timeline would have a maximum of 50 categories or rows (depending on the number of categories previously created in the buttons template).
- Edit category name (row): Right click on the name of the category to be edited, select Edit category name and click ...
- Delete category (row): Right click on the name of the category to be deleted, select Delete row and click Yes.
- **Duplicate category** (row): Right-click on the name of the category to be duplicated and select **Duplicate row**.
- -Timeline's tools: See section 5.2



2.3 Register without Video Source

Actions from a sport event can be registered without a video opened or a capture device connected to the computer. For example: while one person is recording a sport event, another one can be on the other side of the pitch registering actions.

Once the event is over, the database can be linked to and synchronized with the registered actions on the respective video.

1.- Click Register without Video Source



2.-Choose the name of the file to generate and click



3.- Open or create a category template to record the actions of the generated video.

To create a category template, click on

To open a category template, click on



With this version of the program, you can configure your button template on two levels:

One primary level (3.1 Categories) and other secondary level (3.2 Descriptors).

You can relate a primary action with one or two secondary (or more) actions when you are registering, as all the buttons are independent.

This program (Codimg Premium) offers unlimited buttons to distribute between categories and descriptors.

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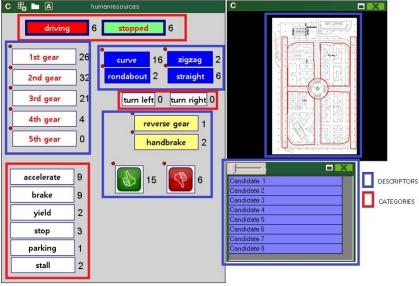


3.1 categories

If you have selected **Create new category template**, insert the desired categories (buttons) by typing the name on the **New Name box** clicking .







3.2 Descriptors:

Descriptors define how, when and where the registered actions take place. We could say that descriptors are like 'adjectives' to categories.

In order to ensure that all registers are classified in the best possible way, when actions are registered (by clicking the appropriate button), user can also click respective descriptors to define them.

For example:

Categories (actions) = (medicine: bleed, stitch, cut...) (education: quick answer, not confident, ask...)

Descriptors (people) = Lehman, Jansen...

Descriptors (locations) = (medicine: torso, leg, right, left...)

Descriptors (quality) = well done, bad...

User can register actions and click descriptors as follows:

Quick answer (click) + Jansen (click) + well done (click).

3.3 Creating descriptors:

Users can create descriptors in two different ways (See picture 4.1):

1-On the category screen:

Click the button you want and then click option It behaves as a DESCRIPTOR, or keeping pressed the Control key and double clicking the category template's background.

2-As an independent descriptor template:





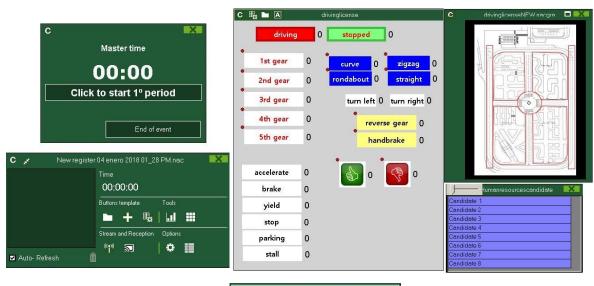
Click <u>to open the following window</u>. To add descriptors, enter the desired name



4.- To record actions

Click or Record actions.

Click to start 1º period Click to start registering and then click categories (buttons) created for that purpose, as they arise.



To stop registering the event click





5.- Link databases with a video

When registering a event without video source it is necessary to link the created databases with a video in order to get access to the Timeline. To do this click My analysis.



Select database you want to link with (it will be shown in red due it has no video).



Double click the database and select the video and click Open.



Synchronize the video with the start period times you set during the registering





To play, compare, classify or change the recorded actions, click to open the record editing environment (Timeline).





6.- This environment contains all the recorded actions which are shown by categories (rows) in an intuitive Timeline.



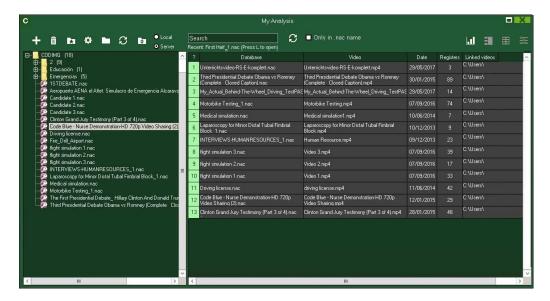
These are all the available Timeline options:

- Zoom : you can maximise or minimise the Timeline. To show the entire Timeline, click
- Change the start or end of a record: position the cursor on the left (start) or right (end) of the record and when it changes to possible directions.
- Temporary displacement of record (without affecting its length): place the cursor in the centre of the record and when it changes to , left click and drag it in one of the two possible directions.
- Add category (row): Right-click a category (row) and select Add row. Then enter a name and click Ok. Timeline can stand a maximum of 50 categories or rows (Depending on the number of categories previously created in the buttons template).
- Edit category name (row): Right-click the category to be edited, select Edit category name and click ...
- Delete category (row): Right-click the category to be deleted, select **Delete row** and click **Yes**.
- Duplicate category (row): Right-click the category to be duplicated and select Duplicate row.
- -Timeline's tools: See section 5.2



2.4 My analysis

In this environment, you can consult all the Codimg databases created or imported by the user.



To access presentations, timeline or the viewing and record environment, double click to database (green means available) and select your preferred option.

You can also open several databases at once by selecting the databases you want and then clicking

If the database is in red, this means the associated video is in a different location than the last time it was used, it has a different name or the video has been deleted. If the video is still available, it can be associated by double clicking the red database and searching for it.

Following actions can be performed:

- Create subfolders: click the desired folder and then click
- Delete folders (and the databases they contain) or databases: click the desired folder and then click
- Assign favourite folder: click the desired folder and then click
- Select folder directory: click and select directory.

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3. CATEGORIES TEMPLATE

3.1 Categories template icons Page 28

3.2 Creating categories templates Page 30



3.1 Categories template icons



A) Button properties

- Create a new category (button).
- Create a customized button.
- Delete all categories created in actual template.
- Open window to rename and save category template.
- Add properties of the blue highlighted category to other selected categories.
- Clones selected category (button).
- EBB Categories and descriptor searcher.
- Make a window with independent descriptors
- Create a graphical descriptor (see 5.12)
 - Order the data matrix
- Make a dashboard
- Open an already created template

a) Interface

- Open the window to customize font and colour of the category.
- Open the window to add an image to a category (button).
- Fit the size of the image to the size of the category.

b) Links

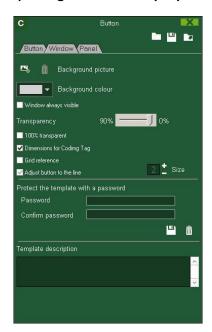
Add link between buttons.

Delete link between buttons.

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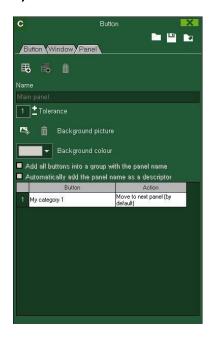


B) Categories window properties



- Lock categories template with password.
- Delete password.

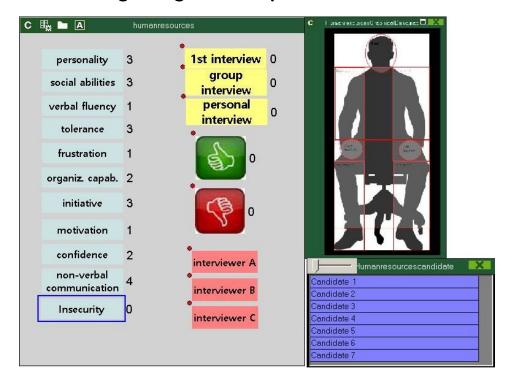
C) Panels window



- Make a new panel
- Duplicate panel



3.2 Creating categories templates



This program allows user to configure your button template on two levels:

One primary level (4.1 Categories) and other secondary level (4.2 Descriptors).

You can relate a primary action with one or two secondary (or more) actions when you are registering as all the buttons are independent.

This program offers unlimited buttons to distribute between categories and descriptors.

3.2.1 Categories

Insert categories (buttons) you wish by clicking 🛅, or by double-clicking the category template's background.

You can also make customized shaped categories by clicking 🔼 (see 4.12)

By default, created categories are automatic (a preset time will be recorded before and after the moment you click on the button), but you will also be able to create manual categories (so you will have to click on the button to start recording and then at the end of the action to stop registering).

PRE

POST

To change the preset time of the automatic categories, click

To set a decimal time for a category just type it on the time box.

To change automatic categories into manual categories, click Manual mode.

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3.2.2 Descriptors:

Descriptors define how, when and where the registered actions take place. We could say that descriptors are like 'adjectives' to categories.

In order to ensure that all registers are classified in the best possible way, when actions are registered (by clicking on the appropriate button), user can also click on the respective descriptors with to define them.

For example:

Categories (actions) = (medicine: bleed, stitch, cut...) (education: quick answer, not confident, ask...)

Descriptors (people) = Lehman, Jansen...

Descriptors (locations) = (medicine: torso, leg, right, left...)

Descriptors (quality) = well done, bad...

User can register actions and click descriptors as follows:

Quick answer (click) + Jansen (click) + well done (click).

You can also add descriptor to already registered action by click on the register and then on the descriptor you want.

3.2.3 Create descriptors:

Users can create descriptors in two different ways (See picture 4.1):

1-On the category screen:

Click the button you want and then click option It behaves as a DESCRIPTOR, or keeping pressed the Control key and double clicking the category template's background.

2-As an independent descriptor template:

Click to open the following window. To add descriptors, enter the desired name and click.



Descriptors can also be added automatically, without clicking them, if you select

The descriptor is automatically added at each click

This option can be changed from the register window by right-button click the descriptor.

To set a specific amount of descriptors that a category should have click on the behavior tab and set the amount of descriptors you want in the



When accessing the timeline a window in where you can look for the registers not containing the minimum amount of descriptors you chose will be automatically open.

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3.2.4 Other options for creating categories templates

3.2.4.1 Graphical options (size, color, pictures, etc.) of the buttons.

To change the place of a button, click and drag it.

To change the order of the button, right click with the mouse on the button and select **Send to the back** or **Send to the front**, with this option, user will be able to bring buttons to front or send them to back as if they were layers.

To change the size of a button, keep pressing the ALT key and drag the lower right corner of the button, or keeping pressed the Shift+Alt keys in order to keep the original the aspect ratio.

To block the position and size of a button click on Lock

You can round the corners of a button from Colour 50

To change the color of the button click

To add an image (picture) to a button, click and then click to fit the size of the image to the button.

To change the font and text colour of a button, click Ax.

To undo last change, press Ctrl+Z.

Having multiple buttons selected you can change their name by changing just one of the buttons. This way you will have several buttons with the same name.

To show/hide a button during action's registering click Visible button while registering

To use a button as a partial or full frame for the template click on Inactive button

From Window Properties tab:

To show/hide the background grid click 🗹 Grid reference

To adjust the button to a line of the background grid click Adjust button to the line
You can change the size of the lines od the background grid by setting a number in the

Size box

To create templates with predefined Codimg Tag size select Codimg Tag dimensions

3.2.4.2 Equalize properties and clone buttons

To equalize properties of buttons (categories or descriptors), choose buttons that you want, click and choose the properties to equalize.

To clone a button (all the properties of the new button will be the same than the original one) choose a button, click and select the amount of buttons you want to create.





3.2.4.3 Add hot keys

Select a button and then choose one of the keys in the list shown below.



3.2.4.4 Auto-list property.

When this property is assigned to a button in a categories template, a list with all the actions registered under this parameter will be created automatically in the presentation.

How to create Autolists:

In the category template, select one button (category or descriptor).

Select Auto List in the behave tab.

How to load Autolists:

Click in Timeline.
Select Create presentation or Open presentation.

If you select Create presentation:

- Enter a name and click Save.
- In the pop-up message, click Accept.

If you select Open presentation:

- Select one presentation and click Open.
- Click in Timeline.
- Select Load Autolists and they will be added automatically to the presentation.

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3



3.2.4.5 Autopresentation property.

When this property is assigned to a button in a categories template, a presentation (.pre) will be automatically created with all actions containing this parameter classified by videos.

How to create Autopresentations:

In the category template, select one button (category or descriptor).

Select Auto Presentation in the behave tab.

How to load Autopresentations:

When accessing Timeline, Autopresentation will be loaded and created automatically.

How to access an Auto-Presentation:

- Click in Timeline.
- Select Open presentation.
- Double click the AUTOPRE folder.
- Select a presentation and click Open.

3.2.4.6 Links between buttons

With this tool you can register multiple actions with a single click. This means that when one of them is registered, the other/s will be registered at the same time.

Example:

On a flight simulation if you click on **Take off**, the actions **Take off** and **In the air** are automatically registered.

To make a link between buttons keep pressing the space bar key and click on the main button, then click on the button you want to link to the main button.

You can link categories and descriptors using any combination of them.

Example.

CAT—CAT CAT—DESC DESC—DESC DESC—CAT

To change the behaviour of a link click on the link tab. Click on the link you want to change and select the option you want.

For CAT-CAT links you can choose a delay time, with this option the linked button will appear before the main button in the timeline.

Example:

On a TAKE OFF - IN THE AIR link without delay the registers will show as TAKE OFF and then IN THE AIR in the timeline





On a TAKE OFF - IN THE AIR link with delay the registers will show as IN THE AIR and then TAKE OFF in the timeline

For a DESC-CAT and DESC-DESC link you can choose in to which category will the descriptors be added

To the next: The descriptor will be added into the next category you register

To the previous: the descriptor will be added to the latest registered category

To both: the descriptor will be added to the last registered category and to the next category to be registered.

To check the direction of a link keep pushed the name of the link.

To see the links in the observation environment keep pushed the ${\color{orange} \,}^{}$ icon



3.2.4.7 Exclusion property for manual categories

This property is conceived to avoid opposite manual categories being opened at the same time.

Example:

Categories such as IN THE AIR and ON THE GROUND cannot be opened at the same time as they are opposite conditions. Including the exclusion property between these categories, when clicking on IN THE AIR, then ON THE GROUND will be automatically closed.

If you want to do what is explained before, follow these steps:

- 1- Choose IN THE AIR category.
- 2- Click exclusions tab and look for ON THE GROUND category in the list and check it.



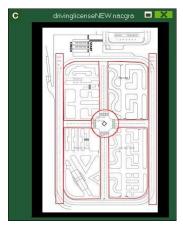


3.2.4.8 Graphical descriptors

Graphical descriptors are descriptors with images (usually fields, pitch, courts, etc.). They act like normal descriptors and they help to localize actions in different positions or places within the game.

Create graphical descriptors:

- 1 –Click on
- 2 Choose the image (.jpeg, .jpg or .bmp) to be used as graphical descriptor and double click. **Codimg** provides users with more than 50 images related to playing surfaces of more than 10 sports.
- 3 Use any of the following icons to edit the selected graphic descriptor:
 - Select an image
 - Select and modify created zones
 - Make rectangular zones
 - Make oval/circular zones
 - Make zones by hand



4- Click to save the graphic descriptor

Open graphical descriptors:

- 1- Click and choose **Open a graphical descriptor**.
- 2- Choose a graphical descriptor (.nacgra) and double click.



Link a graphical descriptor to a category template:

- a) From main menu:
- 1- On the main Codimg Premium menu, click File, Open categories template.
- 2- Choose a categories template (.naccat) and double click.
- 3- Click and select Open a graphic descriptor.
- 4- Choose a graphical descriptor (.nacgra) and double click.
 - To another graphic, click and choose a graphical descriptor (.nacgra) and double click.
 - Click to save the graphical descriptor.

b) From Register from File:

- 1- In the categories window, click
- 2- Click and select Open a graphic descriptor.
- 3- Choose a graphic descriptor (.nacgra) and double click.
 - If you wish to change to another graphic, click , choose a graphic descriptor (.nacgra) and double click.
 - Click to save the graphic descriptor.

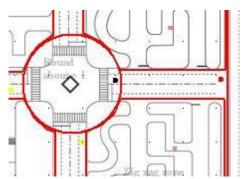
Use of graphical descriptors

In the **Observation and Registering actions** environment, with a graphic descriptor users can register the exact place where different actions occur by clicking on the image.

First of all, users must click on a category and then on the area where the action occurred. For example, first click (category) **Yield** and then click the graphic descriptor in the area where the **Yield** occurred.

Example:

- Click yield and then, click on the corresponding zone.





3.2.4.9 Lock category templates with a password

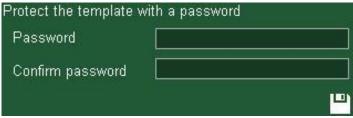
Follow these steps:

Click on Windows properties tab.



Type the password you want in the box under **Protect the template with a password.**

Type the same password in the box under Repeat password.



Click to check that both passwords are the same.

If you want to delete the password to set a new one or leave it without password, click

3.2.4.10 Search and replace text in buttons:

Follow these steps:

- 1- Click HB icon.
- 2- Insert text to be searched. Coincidences will appear as text is typed.



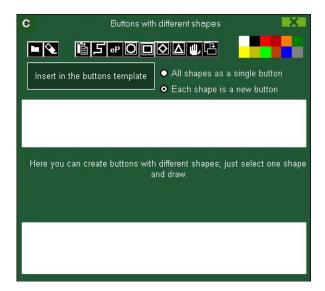
- 3- Insert new text to replace searched one.
- 4- Click icon.



3.2.4.11 Customized shape button:

Instructions:

- 1- Click on 🛕 icon.
- 2- Draw the shape you want for you new button.



To use an image as a button click and look for the image you want.

By default each shape will be a new button. If you want to create a new single button with all the shapes you have drawn click on **All shapes as a single button**.

3- click on Create new button

3.2.4.12 Change the order of the data matrix

With this tool you can change the order of the categories and descriptors in the data matrix.

Click the icon



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Select the category or descriptor you want to replace, then drag and drop it where you want.



3.2.4.13 Wildcard button.

A button with this property will define the end of any category clicked after it (ignoring the PRE time the last one had).

To use this property follow these steps:

- 1- Select a button and click on the Wildcard button option in the behaviour tab
- 2- Begin a register of actions.
- 3- Click on the button with the **Wildcard button** property. This button will begin to blink as if it is a manual category button.
- 4- When the action you want to register ends click on the proper category to register it. This way the button with the **Wildcard button** property will stop blinking. The total length of the register will be the elapsed time between the click on the button with the **Wildcard button** property and the click on the category you wanted to register.

3.2.4.14 Category rating.

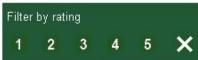
With this property you can give a rating (from 1to 5) to the category you click, this will help you to find in a better way the registered actions once you are in the Timeline.

To use this property follow these steps:

- 1- Select a button and click on the Activate rating option in the behaviour tab.
- 2- During the register of actions select the rating of each category by clicking on the category and then on the rating that will pop up.



3- Once in the Timeline click on and choose the rating which categories you want to show.







Note: You can use the keyboard to add a rating using the number keys from 1 to 5. In the case you are using keyboard shortcut for you categories and they are any number key between 1 and 5 you should activate the "Rating using keyboard (1,2,3,4,5)" property. With this property you can use the keyboard for both, registering actions and adding ratings. Please follow these steps

1- Pres the number key (1,2,3,4,5) to register the category with the corresponding shortcut



The category rating will be automatically opened.

2- Set the rating you want by pressing the corresponding key (1,2,3,4,5) or close the rating by pressing Esc.



3.2.4.15 Groups of buttons

With this property you will be able to make groups of different buttons. To do this click on the tab "Groups", choose the button you want and click on 🖬 and type the name of the group.

Example:

To make a group of students choose the students (John, Bob, James) click on and type a name for the group . Now those 3 students are part of the same group

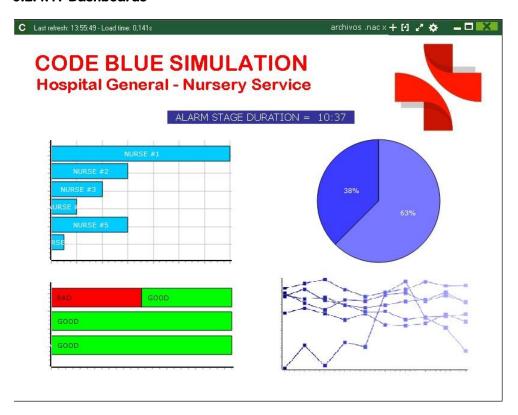
3.2.4.16 Export templates to Codimg Tag

Click and select Export template to Codimg Tag.

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3.2.4.17 Dashboards



The Dashboards will allow you to see a graphical representation of the actions happened in the event, making easier to understand what happened during the event

Charts

To open a dashboard click on 💷 and choose the dashboard you want, then click on To open several dashboards at the same time select all of them and click on To create a dashboard click — on and select "make a new chart"

Choose the kind of chart you want to make and then click on the categories and descriptors you want to show. The pie and donut charts can only contain a single category in the case of adding descriptors, the lines chart can contain only categories or only descriptors

To change the colour of any element in the chart click on it and choose the color you want. To add the same color to all the elements you are adding to the chart click on "Same colour for each series"

You can select multiple items in a dashboard by keeping pressed the Ctrl key and clicking on the item.

Now you can modify the size and position of an item and this will modify the rest of items of the same kind (charts, data labels, text labels and time labels). If you delete an item all the selected items will be deleted.

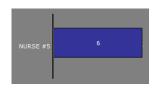
Right clicking on an item when having multiple selected you can line up all the items Line up selected to the left vertically or horizontally by choosing the options Line up selected to the top

To lock any element in the dashboard right click and choose the option you want.



To show the amount of time during an action took place instead of the amount of actions happened click on Values in time mode

Amount of actions happened:



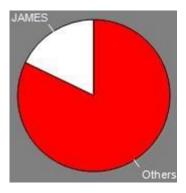
Amount of time during the actions took place:



To create a chart relative to a group select any of the pie or donut charts and click on the categories or descriptors you want to see, then click on "Relative to a group" and choose the group which contains the categories or descriptors you selected before. Now the chart show the value of the action selected in relation to the total amount of the group

Example:

If you select a person relative to a group which contains the total amount of people you can see participation of a person in relation the participation of the rest. To do this select the person you want, select "Relative to a group" and select the group which contains all the people.

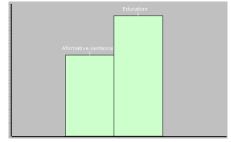


To create a chart which works as a filter click on the category you want, then on the descriptors you want and lastly on "Filtered mode", when this option is active you will only see the categories which contains all the descriptors selected

Example:

In a debate, to see all the affirmative answers of a candidate about education. Select the category Speaker 1, the descriptor affirmative answer and the descriptor education. Select "Filtered mode". Now you will only see in the chart the affirmative answer about education by Speaker 1

Normal Mode:



Filtered Mode:





Labels

Labels will able you to see a numerical representation of actions happened in an event, making easier to understand what happened during the event

You can make 3 different kinds of labels, the simple label, the time label and the data

and set a name for the label, to change the colour of To make a simple label click on Background colour this label shows only text and can be use to organize the label click the dashboard

and set a name for the label, to change the colour of To make a time label click on Background colour this label shows a timer which is the time of the the label click actual video .

To make a time label click on and select the categories and descriptors you want to show.

Example:

To make a label which show the total amount of confident actions made by a candidate click on the name of the candidate and on the descriptor confidence

Candidate 5. confidence =

Background colour To change the colour of the label click

To set a nickname for a label type the nickname on the corresponding box and select Nick name now the label will show the text you set for it

Label without nickname: confidence, initiative, motivation = Label with nickname: positive =

To hide the text of a label and only show the numeric value of it click on Hide the text

To show the amount of time during an action took place instead of the amount of action happened click on Values in time mode

Amount of actions happened:

Amount of time during the actions took place:

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To create a label relative to a group select the categories or descriptors you want to see, then click on "Relative to a group" and choose the group which contains the categories or descriptors you selected before. Now the label show the value of the action selected in relation to the total amount of the group as a percentage, to see it as a absolute value click on 🏻 Absolute value

Percentage GOOD = 89% Absolute value GOOD = 25.

To see the labels ID's keep pressing Alt Gr. This will help you making label relative to another label.

To make a label which behaves as a sum of elements click on the category you want, then on the descriptor you want and lastly on "behave as sum", when this option is active the label will show the total amount of the categories containing one of the descriptor summed to the total amount of categories containing the other descriptor.



Example:

In a debate, to see all the affirmative answers of a candidate and all interventions about education. Select the category *Speaker 1*, the descriptor *affirmative answer* and the descriptor *education*. Select "behave as a sum". Now you will see in the data label all the affirmative answer and all the intervention about education by Speaker 1

To set an alarm set the value the label must reach to activate the alarm.

Example:

To set an alarm by amount of errors make a label, select the category error, set the value you want for each alarm level, for example 1,3,5. Now when the label reaches the value 1 the first alarm will activate, when the label reaches the value 3 the second alarm will activate and when it reaches value 5 the last alarm will activate.





Alarm 2:



Alarm 3:



Calculation for data labels

You can add calculation to a data label what will modify its value as you want. To do so click on edit data label and then on now you can choose the kind of calculation you want to do. You can calculate simple values for a single data label (add, substract, multiply or divide depending on a specific number) and you can also calculate values from several data labels (add, substract, multiply or divide the values of 2 different labels)

To do a calculation depending on a specific number click on the kind of calculation you want in the drop-down menu and add the value you want in the corresponding box. Click on accept and you data label will be automatically modified

To do a calculation from several data labels click on select the data label you want to use and then select the kind of calculation you want to do in the drop-down menu.

Keep in mind you can do several calculation for each data label. For example adding the value from 2 different data label and then multiplying the result by 2, to do so you will need to make a calculation depending on a specific number and a calculation from several data labels.

Example:

In an evaluation you can count the total amount of mistakes and then calculate the total amount of points by the different kinds of mistake. To do so make a data label with the kinds of mistake you want

MINOR = 12 SERIOUS = 16 VERY SERIOUS = 9

Now add a calculation depending on a specific number to each label so you can see how many points a person gets. For example, for the serious mistake you will multiply the value by 2.

	Operation	Value	Result
â	х	2	= 0

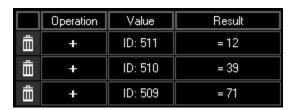




This way you can see the total amount of points by each kind of mistake

SERIOUS = 32 MINOR = 12VERY SERIOUS =

To calculate the total amount of points in the evaluation you can make a calculation from several data labels. To do so just make a new data label and do the calculation adding the 3 data labels you did before.



This way you can get total amount of points in the whole evaluation

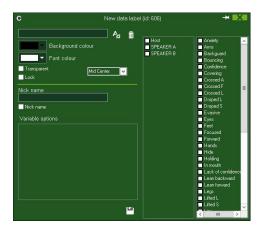
Total

Variable label.

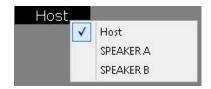
With this option you can make a label which will modify a variable involved in any chart or data label in your dashboard. To do so you first have to make a group containing all the related variables.

Right click on the dashboard and select "Variable label".

Select the category or descriptor you want as a base for the variable label. By default all categories or descriptors in the same group of the selected category or descriptor will be selected.



To change the variable click on the Variable label and select the one you want, this way all the labels or charts with the original variable will change into the selected one.



By right button clicking on any label or chart and selecting Lock the variable change you will block that label or chart against the variable change, so it will always show the same information.





Labels from Descriptor calculator.

You can make a data label based on the result of a Descriptor calculator search. To do so do a Descriptor calculator search in the timeline and save the criteria used. From a Dashboard, right click on the background, choose "Descriptor calculator label" and select the criteria you want to set the new data label.

Associate datalabels to a specific row order in limeline.

With this option you can make a datalabel based on the order of the categories in the Timeline, ignoring the name of the category.

To do so you have to make a new datalabel and click on Now you have to select the row you wish to use and any descriptors you want to add.

Clicking on Auto create all you will automatically make a label for each row in combination to the selected descriptors.

Example: Having a template for the individual analysis of students, you will order the datamatrix to always show the same order (for example Front row, Mid row, Back row)

When making the datalabel by rows, this will always show the data of the students by group.

In a new class day the students changed, but the order of the groups remains. This will allow a dashboard to show the data of a new analysis without any modification to it.

In the first day the first row was for Student 1. In the second day the first row is for Student A.

Day 1	Day 2	Day 3
Student 1 = 16	Student A = 11	Student 1 = 13
Student 2 = 8	Student B = 14	Student 2 = 19
Student 3 = 12	Student C = 10	Student C = 10
Student 4 = 7	Student D = 8	Student D = 14
Student 5 = 14	Student E = 12	Student E = 12

Label for the last 5 actions.

This datalabel will show the result of the last 5 registers of a category depending on up to 3 different descriptors.

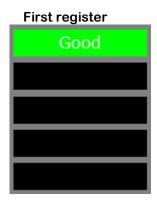
To do so you have to right click on the background of the dashboard and select "last 5 actions" Now select the category you want and then the descriptors.

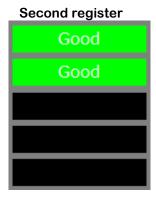


The name of the descriptor will automatically appear next to a colour box. This will be the colour the datalabel will show when combined with the category.



When saving the datalabel it will make 5 different datalabels. These will show the last 5 registers of the selected category and will modify its colour depending on the added descriptor.







Resize dashboard content.

With this option you can modify the size of the dashboard window and all the objects in it.

To do so click on and change the size of the window.

Now all the object keep the same size ratio they had before.

Regular resize:

Window+content resize:





Dashboard backup.

Clicking on from the dashboard window you can open or make a backup from your dahsboards. Clicking on the Create backup you will create a new backup which will save the actual configuration of all your dashboards. If you select any backup from the list below and click on Restore backup you will open the backup, getting access to the previous configuration of your dashboards.

Note: When you delete multiple ítems at the same time, a new backup will be automatically created



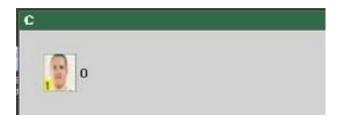
3.2.4.18 Make a button using a screen cut

This tool will allow you to make a button containing an image without needing to adjust the size of the image.

To use this tool you will need to open any screen cut tool, for example the snipping tool which Windows provide by default. Open the image you want to use and snip/screen cut it.



Right click on the template's backgroun an click on "Paste pictura and create category"



3.2.4.19 Lock descriptors

With this option you will avoid to register a descriptor by mistake in a determinate category.

To lock a descriptor choose the category in which you DO NOT want that descriptor.

In the behavior tab select Des. Blocked and then choose the descriptors you want to lock.

Now you will not be able to add those descriptors to the selected category

Block descriptor on manual categories.

With this option you will avoid adding descriptors to manual categories which are closed.

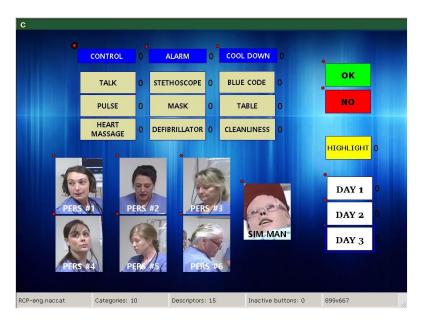
To do so, select a manual category and click on The descriptor is automatically added at each click from the behaviour tab. Now you can only add descriptors to this category when it is open



3.2.4.20 Set an image as background

With this option you can use an image a background for your template.

To insert an image click on Window and then on finally choose the image you want to use.



3.2.4.21 Nick name for buttons

You can add a nick name for your buttons with the objective of saving space in your templates.

To do so click on the button you want from the edit template window. Then click on Nick name and type the nick name you want in the text box

Button without nick name : Button with nick name: CHRISTOPHER SMITH CHRIS

Note: In timeline, datamatrix and action searcher the button will keep it's original name (without nick name)

3.2.4.22 Do not show categories in play by play

You can choose which categories you will show in the Play by Play when doing a real time streaming.

To do so select the category you want and click on ^{✓ Add to Play by Play} in the lower part of the behavior tab

Note: By default all the categories will be shown in the Play by Play

3.2.4.23 Counters in time mode for the manual categories

You can show the length of time registered while using a manual category instead of the amount of times you have registered it.

To do so select the manual category from the category template edition window and click on Time label

Button in time mode:

Candidate 3 00:26





3.2.4.24 Panels flow.

Now you can make templates divided by panels in order to minimise the space taken by the template and also keep a logical flow when taking your data.

To do so, open any template or make a new one.

From "Panels" tab click on to make a new panel

You can make as many panels as you want and each panel will contain unlimited buttons.

To make a flow you will need to edit the tolerance of the panel and the behaviour of every button in it.

The tolerance is the amount of buttons you can click before automatically jumping to the next panel. Tolerance will only affect buttons with the default behaviour "Go to next panel" so buttons with "Do nothing" behaviour will not affect the tolerance and buttons with "Go to a specific panel" will ignore the tolerance and will automatically jump to the panel you set.

Example: When clicking on Interaction a jump to Students panel will occur. The Students panel has a tolerance of 2, what means I can click on 2 students before jumping to the next panel. When clicking on the second student I will automatically jump to the next panel. In case that only a student where involved in the interaction you can click on one student and go to the next panel by clicking on corresponding panel. Clicking on 🔛 will take you to the last panel you were.

By default the behaviour for all the buttons is "Go to next panel" To edit the behaviour of a button right click on it and click on "Panels flow" then select the option you want for that button.

Go to home panel Do nothing Go to next panel Go to a specific panel

You can name each panel individually in the Name box. To go from a panel to another

you can use the menu or the dropdown menu you will find next to the panel Name box

Click on to duplicate a panel keeping all its buttons and flows

By clicking on Add all buttons into a group with the panel name you can set the actual panel as a group, this way all the buttons contained in the panel will be part of the same group. The name of the group will be the same as the name of the panel.

By clicking on Automatically add the panel name as a descriptor you can set the panel as an automatic descriptor, this way every time you click on a category in the panel a descriptor will be added to that category. The descriptor will be the same as the name of the panel

Singularities:

Graphical options for templates (size, colour, background image...) can be set all panels individually, 100% transparency property will be common for all the panels.

You can use all the hot keys for your buttons in each panel. Hot keys are not shared between panels.



You cannot make a link between buttons in different panels

By default the behaviour of any linked button will be "Do nothing" in case of changing that behaviour you should only change the behaviour to one of the buttons in the link chain.

Example: In a A-B-C-D link chain, you change the behaviour of the C buttons in to "Go to panel 2". When clicking on A you will register A-B-C-D and automatically jump to panel 2

Jumping to another panel will not stop manual buttons.

You can use exclusions for manual buttons in different panels

Automatically added descriptors will be added on all the categories, no matter in which panel the button is.

You can block descriptor panels different to that of the category.

Search and replace tool will only affect the showing panel.

It is possible to set a panel flow for an inactive button. This way you can jump between panels without registering any category or descriptor.

From the registering environment, clicking on up you can make an initial load of your panels, this way when beginning the analysis the move between panels will be faster

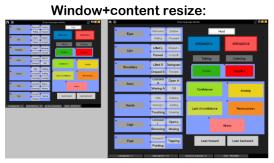
3.2.4.25 Resize template content.

With this option you can modify the size of the template window and all the buttons in it by keeping their size ratio.

To do so, click on and resize the window.

Now all the buttons keep the size ratio they had before.







4. VIEWING AND REGISTERING

Now the three options to view and record an event will be explained.

4.1 Register from file	Page 54
4.2 Real-Time register	Page 59
4.3 Registering without Video Source	Page 68





4.1 Register from file

This is the working environment in which a video file is seen and the actions are recorded by a category template created by the user.

Follow the steps below to work with this environment:

1.- Click on Register from File on main menu.



- 2.- Select the video file you wish to watch and click Open.
- 3.- Open or create a category template to record the actions of the generated video.

To create a category template, click on 👪 .



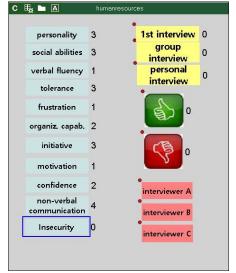


4.- To register actions.

Click or check the option Register actions.

Click the video image to play and then click on the categories (buttons) created for that purpose, as they arise.











Click the video to pause the playback. (The video will go back for the time you have set in the

To order registers History Click and select **Order registers History by time** or **Order registers History by creation**.

- 1- Order registers History by time: last action shown will be the last moment of the video registered.
- 2- Order registers History by creation: last action shown will be the last moment of the video registered in the current actions register.

Example:

An analyst is reviewing an event for the second time and then he registers new actions in the middle of that event. With this new tool he will be able to choose how the registers are listed in the register control: whether the last one shown in the list is the last of the event or the last one clicked. The purpose of this feature is so that you can easily check the last registers created regardless of where they appear chronologically in the video.



Options for descriptors:

and select Last descriptor sets the end time for the category. With this option, if a user registers a descriptor beyond the time set for a category, this category will change its final time to include this descriptor within the time of the category. Or Allow having the same descriptor several times in a category. When this option is enabled, users will be able to add the same descriptor in one register. If this option is disabled, a descriptor cannot be clicked more than once. Example:

ANSWERS A PARTNER --- eye contact, smiles, vocalizes, good, smiles

To draw onto the image, click This drawing will be saved in your database

To go to a specific moment in the video, click 🎑, then select the time you want to go



0.05x 0.25x 0.50x 0.75x

To play a video in slow motion click on and select the speed you want

To see a list containing all the register from the category you want click on the register/category counter

To stream data on real time in the same local network click on



Keep pushing the icon to see the shortcuts of you buttons.

Click on And choose the size of the window you want to use. The window size will be determinate by the resolution of the video playing.

you can fix the actual window layout as a standard by selecting the option Clicking I "Save layout"

When selecting "Load layout" all the windows will go back to the last saved layout

Click and the register control window will be minimized.

To add an independent text note press the Ctrl key (see annex 8.3 part 1.4)

To quickly modify buttons, right click the button you want and choose what you want to modify on the drop-down menu.

Categories' menu:

Change the category name Change the descriptor name Deactivate auto-add descriptor Activate auto-add descriptor

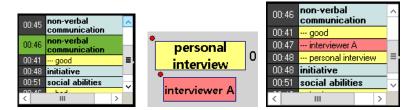
Descriptors' menu:

Change the category name Change the descriptor name Deactivate auto-add descriptor Activate auto-add descriptor





To add a descriptor on an already registered category, click the register in the box on the left of the register control window and click the descriptor you want to add.



Now the category contains the descriptors personal interview and interviewer A



To add a descriptor to the next category you register instead of the last category you registered keep pressed the Insert key and click on the descriptors you want. The descriptors icon will change into green what indicates that descriptor will be added to the next category.

You can still add descriptor to the latest category you registered just click on the descriptors as normal.

To add a note to an already registered category, click right the register which is in the box on the left of the register control window and add a note. By default, notes are equal to category descriptors.

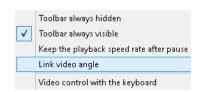
To save the note, click



To play, compare, classify or change the recorded actions, click to open the record editing environment (Timeline).

5- Link different videos from the same event

With this tool you can link up to 4 different videos from different angles of an event. To do this click on and select the option link video angle







Then select the tab where you want to add the video and click on



Select the video you want to and synchronize it with the original using the time scroll if necessary. Once finished click on and you will see the different videos at the same time

To change views between the different videos and mosaic (4 videos at the same time) select the view you want by clicking on 1 2 3 4 ##



Now you can make a video with any view you are showing at the moment of the production of the video (any single video o al of them at the same time)

To reorder the additional videos keep the Ctrl key pressed and drag the video to the position you want when showing the mosaic view.

Click on you can select between using the 4, 5, 6, 7 keys as keyboard shortcuts for registering actions or as a way to move from one angle to another.

6. Registering from an audio file.

You can make an analysis using an audio file instead of a video file.

To do so, begin a new register from file and select the .mp3 or .wav file you want to analyse. Now make your registers as normal, as if you were using a video file.

Note: All the tools in the timeline will work as if the analysis was done with a video file, except for the drawing tool

When exporting the file you will always get a .mp3 file.





4.2 Real-Time register

This is the environment in which video images can be viewed from an external source (video camera, video converter, etc.) connected to the computer's FireWire port. While a video file is being created (digitized) with external images, users can use a category template to register actions.

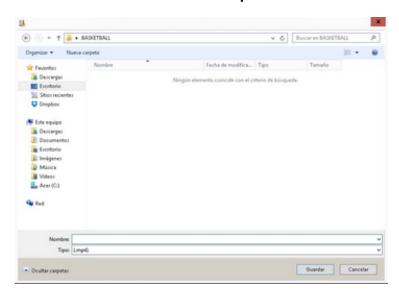
In other words, the video and the action registered are created simultaneously. At the end of the event, user will have all the actions in a Timeline, where they can be easily analysed and managed.

Follow the steps below to work with this environment:

- 1.- Connect the camera to the PC
- 2.- Click Real-Time Register on the main menu.



3.- Enter the name of the video file to be captured. Then click on Save.



4.- The video will be in .MP4 format and will be stored with compressed quality.



5.- Open or create a category template to record the actions of the generated video.

To create a category template, click on 👪 .

To open a category template, click on

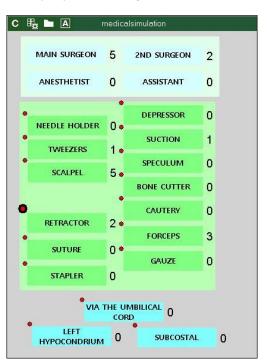


6.- To start the video capture, click

Then click on the categories (buttons) created for that purpose as they arise.







To pause the video capture click

To order registers History Click and select Order registers History by time or Order registers History by creation.

- 1- Order registers History by time: last action shown will be the last moment of the video registered.
- 2- Order registers History by creation: last action shown will be the last moment of the video registered in the current actions register.



Example:

An analyst is reviewing an event for the second time and then he registers new actions in the middle of that event. With this new tool he will be able to choose how the registers are listed in the register control: whether the last one shown in the list is the last of the event or the last one clicked. The purpose of this feature is so that you can easily check the last registers created regardless of where they appear chronologically in the video.

Options for descriptors:

Click and select Last descriptor sets the end time for the category. With this option, if a user registers a descriptor beyond the time set for a category, this category will change its final time to include this descriptor within the time of the category. Or Allow having the same descriptor several times in a category. When this option is enabled, users will be able to add the same descriptor in one register. If this option is disabled, a descriptor cannot be clicked more than once.

Example:

ANSWERS A PARTNER --- eye contact, smiles, vocalizes, good, smiles

To draw onto the image in the current video, click. This drawing will be saved in your database.

To add an independent text note press the Ctrl key (see annex 8.3 part 1.4)

Click and the register control window will be minimized.

To stream data on real time in the same local network click on



Keep pushing the A icon to see the shortcuts of you buttons.

Click on and choose the size of the window you want to use. The window size will be determinate by the resolution of the video playing.

Clicking you can fix the actual window layout as a standard by selecting the option "Save layout"

When selecting "Load layout" all the windows will go back to the last saved layout

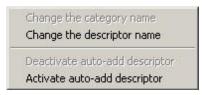
To quickly modify buttons, right click the button you want and choose what you want to modify on the drop-down menu.

Categories' menu:

Descriptors' menu:

Change the category name
Change the descriptor name

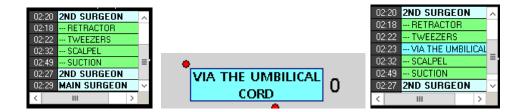
Deactivate auto-add descriptor
Activate auto-add descriptor



To add a descriptor to an already registered category, click the register in the box on the left of the register control window and click the descriptor you want to add.

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Now the category contains the descriptors Via the umbilical cord



To add a descriptor to the next category you register instead of the last category you registered keep pressed the Insert key and click on the descriptors you want. The descriptors icon will change into green what indicates that descriptor will be added to the next category.

You can still add descriptor to the latest category you registered just click on the descriptors as normal.

To add note to an already registered category, right click in the register in the box on the left of the register control window and add note. By default, notes are equal to the descriptors of the category.

To save the note click



To play, compare, classify or change the recorded actions, click to open the record editing environment (Timeline).

Make a real time capture with delay

During a real time register you can set a 5 seconds delay between the real time and the recorded time, this way you can get some extra time to register all your actions.

To do so click on and wait 5 seconds. You will automatically see a small window popping up in the top left corner of the player window. In that window you will be able to see the real time video, in the video player you will see the same video with a 5 seconds delay, this will allow you to have a 5 seconds advantage to click all the actions once you saw them on real time.

To choose the delay time while real time capturing right button click on in the Real Time Register environment and select the option you want.

To go back and see the actions in real time click on





Go to a previous moment of the recording

During the real time registering of actions you can go to any moment of the recorded video to review any action

To do so click on and then on the moment of the video you want to see. You will automatically see a small window popping up in the top left corner of the player window. In that window you will be able to see the real time video, in the video player you will see the moment you selected.

To go back and see the actions in real time click on 🞑

Register data wirelessly in real time from Tag.

You can get real time data in your PC from any device using Codimg Tag connected to the same local area network you are. This way several people can register different aspects of an event at the same time while making a common database for all of them.

To do so, you must first connect all the devices to the same local area network

Start a new real time register in Codimg and click on I from the register control window.

Search servers From Codimg Tag main menu tap on 🔛 and then tap on that will search for any Codimg software working in the network

In Codimg you have to give access to the devices with Codimg Tag you want to allow to receive data from.

Now you can send data in real time from Codimg Tag to Codimg. To do so tap on 🌬 from the registering environment in Codimg Tag and then tap on the action as they happen.

Note: Now every category or descriptor being registered on Codimg Tag will also be registered in Codimg.

In Codimg from tab you can see which devices are sending data to Allowed Devices Codimg and from tab you can see all the allowed devices.

From Codimg you can deny access to a device after it has been connected, to do so just uncheck it from the allowed devices tab. You can also delete the allowed devices list by clicking on 🛄

Play by play window for registered actions.

You can see a list showing all the registered action by clicking on 📕 from the register control window







From this list you can review the actions you want by clicking on them.

You can see actions of a single category just by selecting the one you want in the upper dropdown menu.

To change a registered action from one category to another you can click on the name of the category and select a new one.



To delete a register select it and click on

To delete a descriptor, double click on the descriptors list next to the category name and click on 💹 next to the descriptor you want to delete.

To delete all the descriptors contained in a register click on the register you want and then on 🍱

To limit the amount on registers shown in the play by play window, click on the dropdown menu and choose the amount of registers you want to show.



Clicking on 🕰 this window will be automatically open when getting in the registering environment

Select audio source when capturing.

When making a real time registering you can select the audio source you want from the corresponding dropdown menu, before the capture begins.

This way you can use an external microphone instead of the microphone provided by the capture device you are using.

Video capture with GPU.

With this option you can use your GPU to capture video during a real time registering. This will do a better use of your PC resources, allowing to capture in higher resolutions while doing parallel process such as real time streaming

To activate the video capture with GPU, start a real time register and from the configuration menu click on the "performance" tab, then on the option corresponding to your GPU



Note: this option will not be available on computers without GPU





Dual capture.

With this option you will be able to capture a video from two different sources at the same time. This will allow you to have two different angles from the same event

To do so, you have to begin a real time register and from the configuration menu click on 2nd angle and then on Enable 2nd angle lastly select the device you want to use as second angle and beging the capture.

Note: to capture two different cameras you will need two capture devices. To make a dual capture with IP camera you will not need a second capture device.







Clicking on 1 you can change between the first and second angles in both, mosaic view and video on video view.

From video on video view, you can change the main angle by double clicking on the secondary angle. You can also change the place where the secondary is shown, by dragging the secondary video window to the corner of the player you want.

Manage IP address.

Now you can save and manage the address of your IP cameras

To do so, begin a real time register and from the configuration menu select "IP Camera". Now set the IP camera address and click on lastly, set a nickname for the IP address and click on accept.

You can open any previously saved IP address by clicking on and selecting the one you want.

You can check the connection by clicking on

TEST IP



Collaborative analysis in real time.

With this option you can get in real time the data being registered in up to 4 other devices in the same WiFi network. This means, you can make an analysis between several people in different PC and all of them will have the data registered by the rest on real time

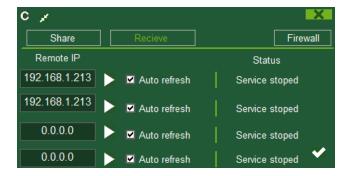
To do so, you have to start a real time analysis and then click on from the register control window

In the PC sharing the data you have to activate the option Enable share from the Share tab.



No you have to type the IP address showing in all the PCs you want to use as receivers.

From the *Recieve* tab you can set up to 4 PCs from which you can receive the actions being registered in real time. To do so, just type the IP address of each PC and then click on



Now you can click on a register from a sharing PC and it will be seen in the receiver PCs

Clicking on Auto refresh the new registers will be automatically shown after a maximum of 20 seconds.

From the play by play table you will be able to see all the registers made in your PC and also the registers made on the sharing PCs.

Singularities:

Registers send by another PC will show according to the video being captured in the receiving PC.

The actions will be automatically synchronized. This means, the different PCs will always show the correct action even if they were using different video sources.





Actions registered by another user cannot be deleted by a receiving PC.

Clicking on the Firewall tab you will automatically Access your PC's firewall configuration.

Youtube capture.

With this option you can capture in real time any video in Youtube. This will allow you to use videos or live streamings as your video source.

To do so, you just have to copy the link to the video/live stream. Then from Real Time Registering select the option to use an IP camera and paste the link as if it is the IP address of a camera.





4.3 Registering without Video Source

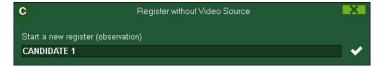
Actions from a sport event can be registered without a video opened or a capture device connected to the computer. For example: one person is recording a sport event and the other one can be on the other side of the pitch registering actions.

Once the event is over, database can be linked and synchronized with the registered actions on the respective video.

1- Click on Register without Video Source.



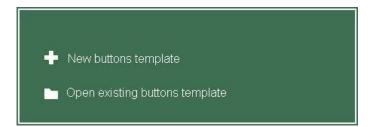
2.-Choose the name of the file to generate and click



3.- Open or create a category template to record the actions of the generated video.

To create a category template, click on

To open a category template, click on L

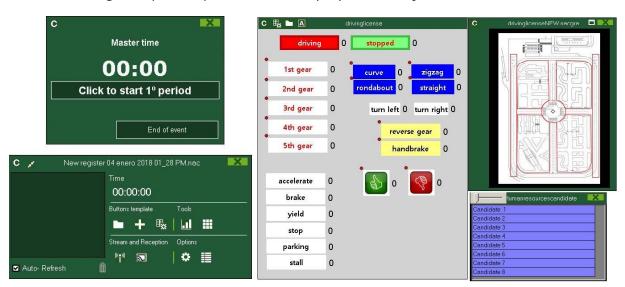




4.- To register actions.



Then click categories (buttons) created for that purpose as they arise.



To order registers History Click and select Order registers History by time or Order registers History by creation.

- 1- Order registers History by time: last action shown will be the last moment of the video registered.
- 2- Order registers History by creation: last action shown will be the last moment of the video registered in the current actions register.

Example:

An analyst is reviewing an event for the second time and then he registers new actions in the middle of that event. With this new tool he will be able to choose how the registers are listed in the register control: whether the last one shown in the list is the last of the event or the last one clicked. The purpose of this feature is so that you can easily check the last registers created regardless of where they appear chronologically in the video.

Options for descriptors:

Click and select Last descriptor sets the end time for the category. With this option, if a user registers a descriptor beyond the time set for a category, this category will change its final time to include this descriptor within the time of the category. Or Allow having the same descriptor several times in a category. When this option is enabled, users will be able to add the same descriptor in one register. If this option is disabled, a descriptor cannot be clicked more than once.

Example:

ANSWERS A PARTNER --- eye contact, smiles, vocalizes, good, smiles

To add an independent text note press the Ctrl key

Click and the register control window will be minimized.

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To stream data on <u>real</u> time in the same local network click on (see 8.2)

Keep pushing the A icon to see the shortcuts of you buttons.

Clicking you can fix the actual window layout as a standard by selecting the option "Save layout"

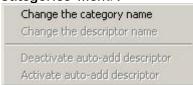
When selecting "Load layout" all the windows will go back to the last saved layout

To stop registering the event click

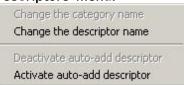


To quickly modify buttons, right click to the button you want and select what you want to modify on the drop-down menu.

Categories' menu:



Descriptors' menu:



To add a descriptor to the next category you register instead of the last category you registered keep pressed the Insert key and click on the descriptors you want. The descriptors icon will change into green what indicates that descriptor will be added to the next category.

You can still add descriptor to the latest category you registered just click on the descriptors as normal.

To add a descriptor to an already registered category click the register in the box on the left of the register control window and click the descriptor you want to add.







Now the category contains the descriptors Well done and 1st gear



To add a note to an already registered category, right-click the register in the box on the left of the register control window and add the note. By default, notes are equal to the category descriptors.

To save the note click





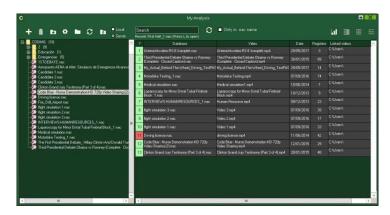


5.- Link databases with a video

When registering a event without video source it is necessary to link the created databases with a video in order to get access to the Timeline. To do this click My analysis.



Select database you want to link with (it will be shown in red due it has no video).

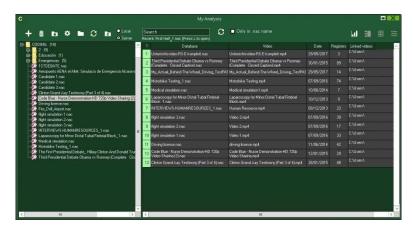


Double click the database and select the video and click Open.





Synchronize the video with the start period times you set during the registering



To play, compare, classify or change the recorded actions, click to open the record editing environment (Timeline).





5. TIMELINE

This environment contains all the registered action shown by categories (rows) in an intuitive Timeline in which you can modify you register, change its duration, add notes or drawings, etc. You can also make presentations or video to show your registers. Now all the Timeline options will be explained:

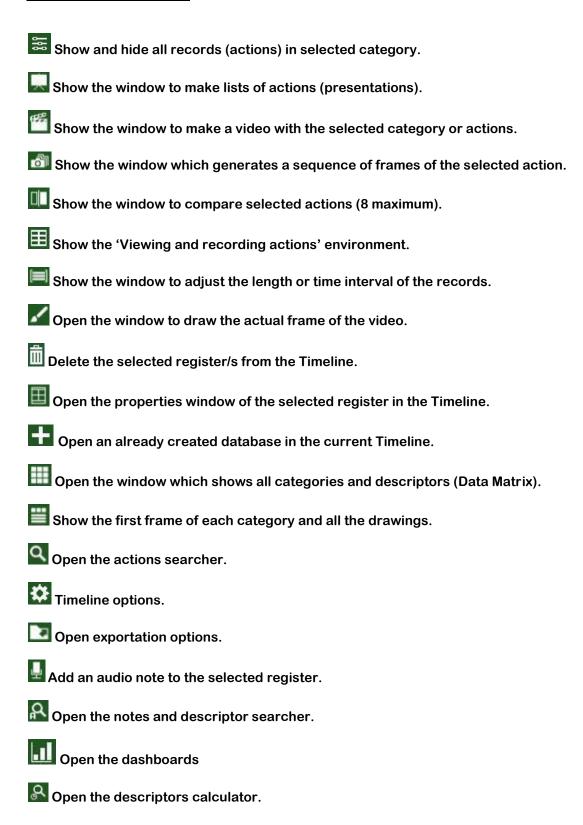
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5.1 Timeline icons





5.2 Timeline tools

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5.2.1 Show/hide register list

This tool shows/hides the list of registers the Timeline contains in a clear and easy way.



Registers can be shown by categories or chronological order.







5.2.2 Presentations

With this tool you can make a list with registers in order to create a presentation and then show them o make a video with them. In this version of the program you can use as many videos (databases) as you want.



5.2.2.1 To make a presentation

To make a presentation, click from the Timeline and then Make a new presentation.

Make a new list by clicking . You can change the name of the list by double clicking it.



Select register you want and press the key number 3 to add them to the list. . Press ctrl+3 to add the register including all the multiple angles.



You can select registers on the left of Timeline or from the Data Matrix or from Actions searcher.

To delete a list click 🗓.

You can also make a presentation with all the registers in the timeline by clicking and then choosing "Make a presentation with the contents of the timeline" option. If you keep the Ctrl key pressed while doing the previous process you will add all the registers of the timeline in mosaic view in case of having additional angles.



To edit registers from the presentation:

To edit a register from the presentation, double click it or click



In this window, you can add notes, pictures and drawings. You can also change the duration of the register.

To change the length of a register, click on the start/end of a register and when the icon turns up, just drag the register to the moment that you want.

To add a drawing, click at the moment of the video you want to It will be saved in your database so it will be shown in the presentation.

To add a picture, click at the moment of the video you want to. It will be saved in your database so it will be shown in the presentation.

To change the time the drawing or picture should be shown (5 seconds by default), click



With these options, you can modify an already added drawing or picture.



You can add a note by typing what you want on the proper text box.

To set a presentation as favourite click on . Now this presentation will be automatically open when opening a timeline.





Descriptors . You can use any To add descriptors to the register click on descriptor in your analysis or make a new one just by typing it in the corresponding text box. To add the descriptor click on . To delete a descriptor click on . next to name of the descriptor.

Note: This changes will only affect the register in the presentation not in the

To add an audio note click (see 5.2.17)

To go to the next register, click

To add a register to a new list, click on . Now you can make new lists by clicking on f T. To add the actual register to another list, select the list you want and click on f X

To edit the presentation:

You can organize the presentation in some different ways:

a) Lists: each list contains a kind of action.

	Lists (9)	No.	Time
iii	operations centre	3	00:09
iii	control tower	2	00:18
iii	firefighters	8	01:17
iii	police	8	00000

b) Using front pages to split between a bunch of actions and another



To create a front page click



Click or to undo/redo the last changes



Click on to see the list of already created front pages, select **creation order** and the front pages will be ordered by creation date (newest or oldest first).

Modify the time while the front pages are shown selecting it on

Create front pages using .ppt: select the .ppt file and drag it to the presentation window. The slides of the .ppt file will become front pages.



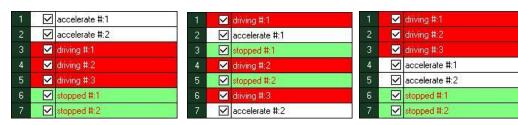
To edit an already existing front page, double click on it in the presentation. Now click on and select "Edit front page"

You can also order you registers in different ways, by clicking an then choosing



one of these options:

Name: Time: Colour:



Set list structure as favourite

With these options, users will be able to save a list structure to be used in future presentations.

To do this, right click the mouse over a list and select **Save the list structure as favourite**.

To load a list in the new presentation, right click the mouse and select **Load favourite** lists

If you want that your favourite list structure is loaded automatically select **Auto-load favourite lists for new presentations**



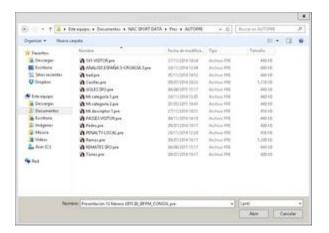


To import a presentation:



To import a presentation, click

Search the .PRE file you want to import.



Select lists you want to import and click



Lists to import:







Import videos into a presentation.

There are 2 options:

A) Select the video/videos you want to import and drag them to the presentation window.



B) Click on , select import video and then select the video/videos you want to import.

Note: Each imported video will be a new register in the presentation.



Import images as front pages into a presentation.

There are 2 options:

A) Select the image/images you want to import and drag them into the presentation window



B) Click on , select import image and then select the image/images you want to import.

Note: Each image you import will be added as a new front page in the presentation.

Copy, cut and paste registers in the presentation.

- A) Select the register you want in a list, right mouse button click and choose copy or cut. Select the list where you want to paste the registers, right mouse button click and choose the paste option.
- B) Select the register you want in a list, drag them into another list to copy them. rag them into another list while keeping pressed the Ctrl key to cut them.

You can also copy and paste between presentations.

Change the name/colour of several register at once.

Select the register you want to modify by keeping pressed the Ctrl key and clicking on the register, then make the change you want.

Split additional angles in a presentation.

With this option you can change the way you show your registers. In the case of having a register with additional angles in mosaic view you can split it in to several registers in a single angle view.

To do so select the register in mosaic view you want, right mouse click on it and select "Split angles" This has make as many registers as different angles the original register had.

Group registers in a presentation.

With this option you can change the way you show your registers being able to group registers from a same action with different angles. You can also group registers from different actions, what will make a comparison of those registers.

To do so select up to 4 registers in your presentation, right mouse click on one of them and select "group angles". This has make a single register with a mosaic view on the registers previously selected.

You can delete any video angle by right clicking on it and selecting the proper option.

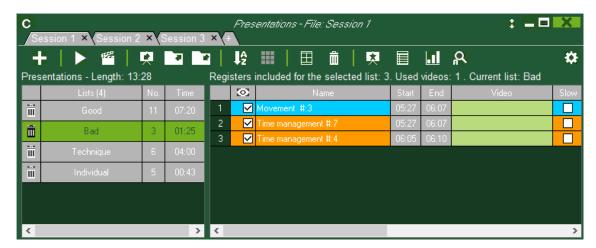




Multiple tabs for presentations.

With this option you can work with several presentations at the same time, being able to combine them.

To do so, open a presentation and click on 🗄 on the upper left corner of the window. Now select another presentation to open.



The changes made in one of the presentations will not affect the rest.

Pressing Alt + S will make a copy of the selected presentation

To make a new presentation with the content of all the opened presentations, press Alt + M

Pressing Ctrl +

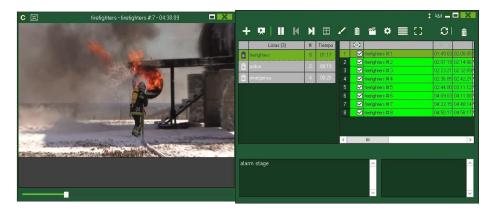
will make a new presentation.

You can change a presentation by double clicking on its tab.



5.2.2.2 Show a presentation

To show a presentation, click



In this window, the presentation that you choose will be shown.



To show notes and descriptors of a presentation, click Descriptors

To show text directly over the video right button click on the video window and select "overlay text in video". Now select the options you want.



Note: The final videos will NOT have overlay text.

To reproduce a register after another with stopping the video, click Continuous reproduction

In this program you can add a drawing that CANNOT be saved by clicking



You can show the previous or next register by clicking or by pressing keys 1 and 2.

To show the video on full screen, click

To play a video in slow motion click on 🏻 and select the speed you want

By default, video will stop when it shows a picture/drawing so you must to click on the video to continue the playback. To use the selected stoppage time (5 seconds by default) click Use the stop time





Import videos into a presentation.

There are 2 options:

A) Select the video/videos you want to import and drag them to the presentation window.



B) Click on , select import video and then select the video/videos you want to import.

Note: Each imported video will be a new register in the presentation.

Import images as front pages into a presentation.

There are 2 options:

A) Select the image/images you want to import and drag them into the presentation window



B) Click on , select import image and then select the image/images you want to import.

Note: Each image you import will be added as a new front page in the presentation.

Import PowerPoint as front pages in a presentation.

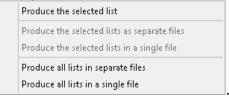
To create front pages using .ppt: select the .ppt file and drag it to the presentation window. The slides of the .ppt file will become front pages.





5.2.2.3 To produce a presentation

To produce a video with the selected presentation, click and select one of the

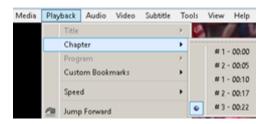


options in the drop-down menu

To produce an .mp4 video with chapters in the registers you want just check the corresponding option.

Thanks to chapter you will be able to jump between registers when using the VLC media player.

To see the registers in the VLC media player click on **playback** and then on **chapters**, finally click on the register you want to see



To add a transition between 2 registers in your presentation click on then on "add video transition" and select the transition you want. Clicking on the list the transition will added after each register.

Note: Video transition will only be shown on the final video. It will NOT be shown when showing a presentation from the software

You can select the output video format in the video production window.



Click to start the production.

Type the name of the file that will be produced and click on Save.

codimg



5.2.2.4 Presentation script.

You can make a script showing the elements contained in a presentation to use it as a guide when showing your presentation, and as a method of sharing information.

To do so, open a presentation and click on . You can select between showing notes and descriptors, just notes or just descriptors you can also choose to show or not your drawings. To make the script click on

In the script you will see the notes and descriptors from your registers and also some more info which will help you when showing your presentation.

Now all the icons in the script will be explain.

Ð	Minute of video when the register begins
Ō	Register length.
	The registers is in slow motion.
로	The register contains an audio note.
MPŲ	The register is a .mp4 chapter.
	Register's notes.
믑	Register's descriptors.

By default the first frame of each register will be used as a thumbnail for de script. The first 5 drawings of the register will also be shown in the script.

To change the thumbnail in the script you can pause the video at the moment you want from the registers edition window in presentation, click on 📃 and then on 🔀

To use a drawing as a thumbnail for the script double click on the register from the presentation window, right click on the drawing you want to use and click on "use image as thumbnail for the script". In case of using a drawing as a thumbnail that drawing will not be shown in the drawings section of the script.

5.2.2.5 Matrix from presentation.

Now you can make a data matrix from multiple lists and the same time. To do so, select the lists you want and click

5.2.2.6 Notes and descriptors searcher from presentations.

Clicking on by you will make a search by notes or descriptors in the selected list of a presentation.

5.2.2.7 Dashboards from presentations.

Now you can open a dashboard based on the registers in a list from a presentation. To do so select the list you want and click on I from the presentation window.

codima



5.2.3 Make a video

With this tool you can make a video with the selected registers.

1-To make a video select the register you want in it and then click





2- Select output format and quality you want and click



a drop-down menu will appear showing more options for video By clicking quality.



To upload a video to Sharimg select Save and upload to Sharimg

To show notes and descriptors in the video, click Texts and choose the option you want.



To add audio to the video click Process audio and choose the option you want.







To add an external audio file to the video click

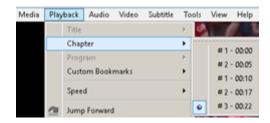


And then click and choose the file you want

To produce an .mp4 video with chapters in each register select ☑ Insert chapters in the .mp4 file in the production options windows.

Thanks to chapter you will be able to jump between registers when using the VLC media player.

To see the registers in the VLC media player click on playback and then on chapters, finally click on the register you want to see



To add a logo to the final video click on it from the video making window and then click on 🖴



Add the logo you want by clicking on 🖴 and looking for the file and select the place on which the logo will be.

Note: The recommended size for the logo will depend on the final video's resolution.

3- Type the name on the file you are going to produce a click on Save.





5.2.4 Frame maker

With this tool you can split a video into separate images.

1- Select a register and click on ...

2- Select the amount of frames you want to extract from the video Min. (15) Max. (300)



Click to draw in current frame

Click to save the actual image a .jpg file.

Click to save all images as .jpg files.

Click to play all the images.

Click to produce a video with all the extracted images.



5.2.5 Compare actions

With this tool you can compare up to 8 different videos (registers).

1- To compare registers just select them in the grid on the left of Timeline by keeping pressed Control key and clicking .



You can draw by clicking

To synchronize the beginning of one of the videos, click until the moment you desire. Then, repeat the process with other videos.

To play all the videos at the same time, click and

To compare two actions by overlapping them instead of having one next to the other.

click on Clicking on from the comparison window you can make a video showing the overlapped actions. The exported video will not contain any drawing.

To see the videos on full screen, click

To compare an action from the timeline with an external video click on Clicking on a new action will show it in the comparison tool. The external video will never change.

codimg



5.2.6 Synchronize Timeline

With this tool you can modify the time of you registers in an quick and easy way. This is useful for situation when the video is wrong synchronized so the registers do not show actions properly.

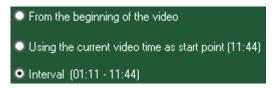
To open the tool, click 🖳



Look in the list for the categories you want to move and chose what you want to modify (beginning or end of a register, or moving the time of a register) and then select how

seconds in positive to move to the right in negative to move to the much time left.

You can choose to move the registers from the beginning of the video or from the actual moment of it. This way you can synchronize just the registers from the 2° try for example. . You can also select a time interval in the timeline and modify the registers in it.



Click on to make the changes.

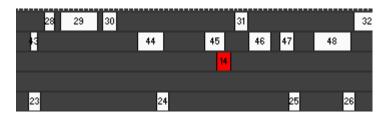
Time



Anchor register.

With this tool you can use a register as a reference to synchronise your analysis.

To do so, select the register you will use as a reference while keeping pressed the Alt key. The reference register will be in red colour in the Timeline.



Now go to the moment of the video that corresponds to the moment in which the reference register should be and press Ctrl+A to synchronise the analysis

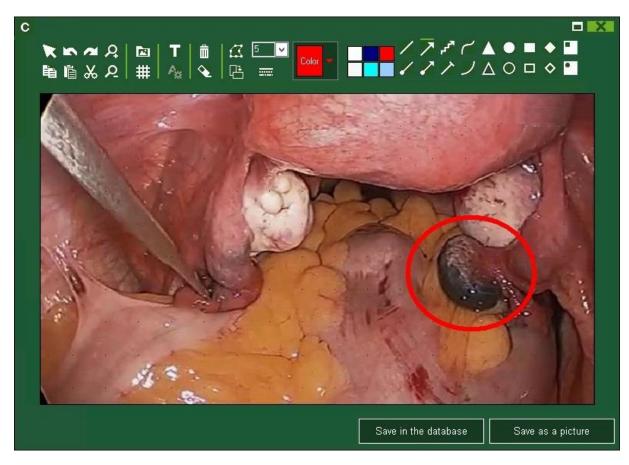
Note: In case any registers is set out of the total vieo time, it will not be deleted, but it will not show any action in the video when selecting it.



5.2.7 Drawing tool

With this tool you can add a draw onto an exact moment of the video.

To make a draw click



To undo or redo a draw click or respectively.

To change the font, color and background of a text click on

To add a reference grid in order to make a draw click on

To break a form click on 🅰

To save the draw as a .jpg file click

If you want your drawing to appear in presentation and videos, click **Save in the database**. Drawing will be shown for 5 seconds by default.



5.2.8 Open a database in the Timeline

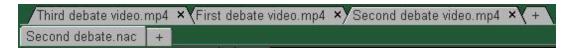
With this tool you can work with as many databases as you want in a single timeline. This allows to make presentations and videos of several events.

To add a database, click



Select a database. Double click it and click **Go to the Timeline**, or select several databases and click

To change from a database to another one, click the tab you want.



To create a presentation with registers from several databases, make a new presentation and add the registers you want. Then, select another already opened database in the timeline and add the registers to the opened presentation.

codimg



5.2.9 Register properties window

In this window, you can modify timing and drawing of your registers, but also add notes and descriptors.

To open the registers' properties window, click or double click a register.



To modify a drawing, click

To add a picture to the register, click on

You can add a note by typing what you want on the proper text box.

To add an audio note click [a] (see 5.2.17)

To add a descriptor, select one in the descriptor list and click

To modify the time of the register, drag the beginning or the end of the register to the moment you want.

To go to the next register click f M. To go to the previous register, click f M.

codimg



5.2.10 Data matrix

In this window you can see in a clear and quick way all the categories and descriptors. You can consult numerically all the actions registered and see them immediately.

To access to the data matrix, click



To change from view by categories to view by descriptors, click Show by Descriptors



To add a selected register in the data matrix to a presentation, click or press key 3 if the presentation is already opened.

To produce a video with the register selected in the data matrix, click



To open the register properties window, double click a register or click

To export the data matrix, click and choose one of these options



Clicking on you can show the datamatrix from an specific time gap of the event.

To make a new row from datamatrix result select any intersection and then click on



This way you can see the relation between two descriptors in a single category

Example:

To know how many correct answers were given by a student select the intersection ANSWER – correct and make a new category.

Now you can look for the intersection Answer correct - Student A to see the correct answers given by student A.



Customized Matrix

To make a customized matrix click on and select "customized matrix" option.



Choose the categories and descriptors you want to show at the matrix.

You can also make groups of categories or descriptors by selecting several elements at once (keep the Ctrl key pressed), right button click and select "make a new group" option.

You can save the customized matrix clicking on

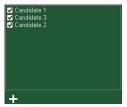
To open an already made customized matrix you can select the proper option on the box at the left of an opened matrix or clicking on

You also have a list with the 10 latest used customized matrix which you will find by clicking on ur in the box at the left of an opened matrix

Multiple matrix

To make a multiple data matrix, you have to have a second database opened in the Timeline (See section 5.2.9)

Click "Make a multiple data matrix with all the opened databases" and choose the databases you want to see in the matrix



Click S

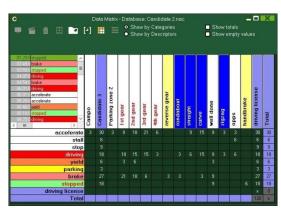
codimg



Simple data matrix:



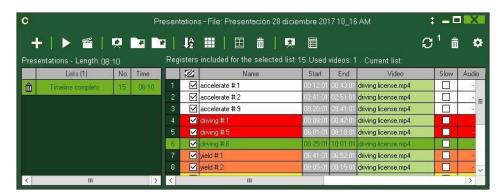
Multiple data matrix:



Data matrix from presentation's list

You can also make a data matrix that only shows the register you have in a list:

Open a presentation



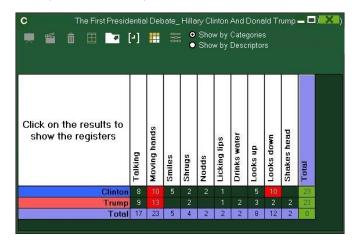
Select a list and click



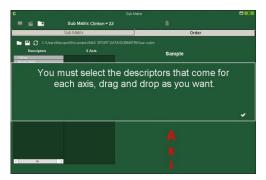


Submatrix

A submatrix is a relation between the descriptors which a category contains, so it will relate descriptors to descriptors.



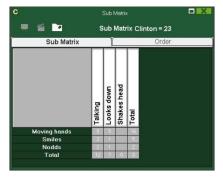
In order to make a submatrix double click the category you want in the data matrix.



Chose the descriptors you want to see from the list on the left and drag then to the X or Y axis box.



Click on Sub Matrix tab to see your new submatrix







Combination of descriptors in the data matrix.

With this tool you can filter your actions by using a combination of several descriptors from your data matrix. This will allow you to filter you actions in a much deeper way.

To do so, open a data matrix and click on 📵



Now keep pressing the Alt key and click on the descriptors you want to combine

From the upper box you can select the relation between the descriptors by clicking on the button between the descriptors

The possible relations are:

AND: Both descriptors are in the same action at the same time.

NOT: The descriptors are not in the same action at the same time

OR: The action contains one of the descriptors, the other or both descriptors at the same time.

Example:

To get all the arguments against for the first subject by Speaker A:



To get all the against by Speaker A for any subject but the first:



To get all the arguments against any subject by Speaker A or Speaker B



This option excludes the arguments by any other speaker

Clicking on you will make a new descriptor that will be added to all the actions which agree to the combination criteria you selected. This new descriptor will be shown as the last descriptor in the matrix

You can set an specific name for the new descriptor from the "Nickname" box.

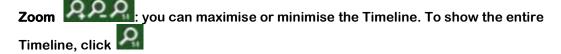
To save the combination criteria, click on open any saved criteria by clicking on

To delete the set criteria click on





5.2.11 Timeline options



Change the start or end of a record: position the cursor on the left (start) or right (end) of the record and when it changes to Left click and drag it in one of the two possible directions.

Temporary displacement of record (without affecting its length):place the cursor in the centre of the record and when it changes to . Left click and drag it in one of the two possible directions.

Add category: Right click the name of a category (row) and select **Add row**. Then enter a name and click on **Ok**. Timeline can have a maximum of 50 categories or rows (depending on the number of categories previously created in the buttons template).

Edit category name (row): Double click on the name of the category in the timeline. Type the new name in the text box and click on to save the change. Pressing the Enter key will save the changes and automatically go to edit the next category.

Delete category (row): Right click the name of the category to be deleted. Select **Delete row** and click **Yes**.

Duplicate category (row): Right click the name of the category to be duplicated and select **Duplicate row**.

Order the Timeline: Right button click on any category and choose "Order the Timeline by...". You can order the Timeline by colour, name, number of registers o customized.

Make a new register in a category: select the category in which the register will be made, place the vertical position marker at the moment you want, right button click on the selected category and click **Make a new register in this category** or press the "C" key.

Make a new category with the selected registers: To make a new category containing the selected registers click on All from the registers grid to see all the registers in chronological order. Select the registers you want click on and then on "make a new category with selected registers" option

Show/hide a category: Select the category you want and click the Hide category or Show category option.

Show/hide total sum of registers: Right button click on the Timeline and select the **Show/hide total sum of registers**

codimg



Add databases of the same video: This option mixes all databases of a same video in a single database. This feature is useful in case two or more people are working in the same action registering from two or more computers

Follow these steps:

- 1- Click icon and select **Add database (from the same video).**
- 2- Select a database and click Open.
- 3- Select the categories you want to add to the actual analysis and click on .The registers from this database will be automatically added to previously opened analysis.

Hide/show TimeLine: From the Timeline's options menu, select Hide Timeline.

Note: whilst the TimeLine is hidden, registers can be only viewed by categories and not in chronological order.

Merge overlapped registers: with this option the register that are overlapped will became a single register

Note: once the registers have been merged, this change cannot be undone.

Overlay information on the video (notes and descriptors): To show text directly over the video right button click on the video window and select "overlay text in video". Now select the options you want.



Note: The final videos will NOT have overlay text

Merge rows in timeline: To merge two rows in timeline select both rows keeping the Ctrl key pressed. Right mouse click and select "Merge rows"..This will make a new row containing all the registers from the previously selected rows

Copy registers: To copy a register from a category to a different category, select the registers you want by keeping pressed Ctrl and then use Shift + mouse drag to move the register to the category you want.

Delete descriptors: To delete all the descriptors from each register in a category, select the category you want and pres Alt+D





Colour filter in timeline: From timeline you can filter your categories by colour showing just those with a specific colour. To do so click on the colour you want to hide in the box you will find over the categories names. To show a hidden colour click on it again.







Hidden categories will not be shown in the data matrix.

Make opposing registers: To make a new category with opposing register to those contained by a category select the original category and press on Shift+O

Example: In a debate, having the interventions of a participant you can automatically obtain the the interventions of the opponent participant. To do so select the category Participant A and press on Shift+O





Participant A and Participant B (Opposing registers)



Continuous playback of a category: You can watch all the registers of a category in a continues playback by clicking on



5.2.12 Actions searcher

In this window users will be able to search any action. An example of a search might be: "I want to see all the right turns by Candidate 3 on the second try". Once made this search, you can immediately make a film or save your search in collection of actions.

The search can be done from one only match or whole season, without limits.

To access to actions searcher, click .



Select database you want to search in and click . Then, click to start searching actions.

Users will be able to search actions in categories or descriptors by selecting





To add registers to a presentation click or push key 3 if there is a presentation already opened.

To make a video with all the registers already searched, click

To see selected register, click

The search can be done from one only match or whole season, without limits.

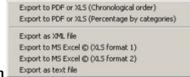
codimg



5.2.13 Export

With this tool you can export you database in some different ways:

- As .XLS file showing the registers in chronological order.
- As .XLS file showing the percentage of categories.
- As . XML file in order to work with other programs.
- As .XLS file.



To export, click and select desired option

You can export just the categories you select when making an .XML file to do so just click the .xml export option you want and then select the categories you want in the window



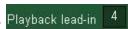




5.2.14 Access to the moment a descriptor appears

In Timeline:

- 1-Click Show descriptors
- 2- Insert backwards motion (in seconds) to view the descriptor Playback lead-in



3- Click the register with descriptor(s) to be viewed.



4- Click the descriptor to be viewed.

ALABM	07:08:10
NURSE #5	07:08:10
GOOD	07:08:10
SIM MAN	07:11:09

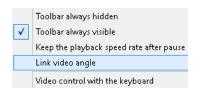
In Data Matrix:

- 1- Click Show descriptors
- 2- Insert backward motion (in seconds) to view the descriptor 5 Playback lead-in time
- 3- Click the descriptor to be viewed.



5.2.15 Link different videos to a single database

With this tool you can link up to 4 different videos from different angles of an event. To do this click on and select the option link video angle



Then select the tab where you want to add the video and click on

Select the video you want to and synchronize it with the original using the time scroll if necessary. Once finished click on and you will see the different videos at the same time

To change views between the different videos and mosaic (4 videos at the same time) select the view you want by clicking on 1 2 3 4 H or pressing the 4, 5, 6, 7 keys



Now you can make a video with any view you are showing at the moment of the production of the video (any single video o al of them at the same time)

To add the mosaic view to a presentation press ctrl+3

From a presentation you can delete any video angle by right clicking on it and selecting the proper option.

codimg



5.2.16 Make an audio note

1- From Timeline:

- a) Select a register in Timeline.
- b) Click .



- c) Click Start recording.
- d) Once the recording is finished, so as to save audio note, click

2- From the register properties window:

- a)In Timeline register block, double click a register.
- b)In Audio Notes section, click ...



- c)Click Start recording.
- d)Once the recording is finished, so as to save audio note, click

3- From presentations:

- a)Once the presentation is opened double click on the register you want.
- b)Click #

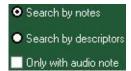


- c)Click Start recording.
- d)Once the recording is finished, so as to save audio note, click



5.2.17 Notes and descriptors' searcher

- a) In the Timeline click ${\color{red} {\Bbb A}}$ icon.
- b) Choose between making a search by notes or descriptors.

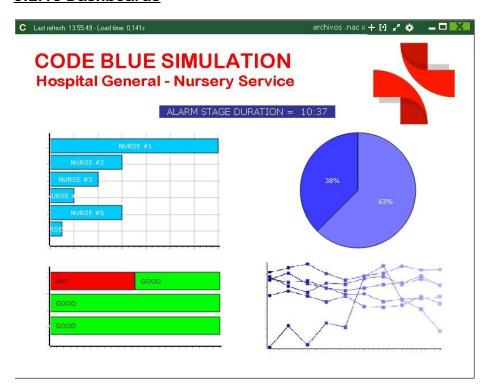


C) Type the text you want to search. While you type the number of coincidences will be shown.





5.2.18 Dashboards



The Dashboards will allow you to see a graphical representation of the actions happened in the event, making easier to understand what happened during the event

5.2.18.1 Make a dashboard

You will have 2 ways to show your information on your dashboard.

1. Charts

To open a dashboard click on and choose the dashboard you want, then click on To open several dashboards at the same time select all of them and click on To create a dashboard click un on and select "make a new chart"

Choose the kind of chart you want to make and then click on the categories and descriptors you want to show. The pie and donut charts can only contain a single category in the case of adding descriptors, the lines chart can contain only categories or only descriptors

To change the colour of any element in the chart click on it and choose the color you want. To add the same color to all the elements you are adding to the chart click on "Same colour for each series"

You can select multiple items in a dashboard by keeping pressed the Ctrl key and clicking on the item.

Now you can modify the size and position of an item and this will modify the rest of items of the same kind (charts, data labels, text labels and time labels). If you delete an item all the selected items will be deleted.

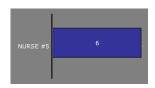
Right clicking on an item when having multiple selected you can line up all the items Line up selected to the left vertically or horizontally by choosing the options Line up selected to the top



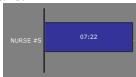
To lock any element in the dashboard right click and choose the option you want.

To show the amount of time during an action took place instead of the amount of action happened click on Values in time mode

Amount of actions happened:



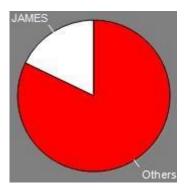
Amount of time during the actions took place:



To create a chart relative to a group select any of the pie or donut charts and click on the categories or descriptors you want to see, then click on "Relative to a group" and choose the group which contains the categories or descriptors you selected before. Now the chart show the value of the action selected in relation to the total amount of the group

Example:

If you select a person relative to a group which contains the total amount of people you can see participation of a person in relation the participation of the rest. To do this select the person you want, select "Relative to a group" and select the group which contains all the people.

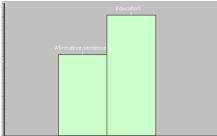


To create a chart which works as a filter click on the category you want, then on the descriptors you want and lastly on "Filtered mode", when this option is active you will only see the categories which contains all the descriptors selected

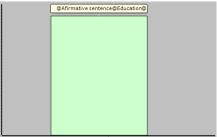
Example:

In a debate, to see all the affirmative answers of a candidate about education. Select the category *Speaker 1*, the descriptor *affirmative answer* and the descriptor *education*. Select "Filtered mode". Now you will only see in the chart the affirmative answer about education by Speaker 1





Filtered Mode:







2. Labels

Labels will able you to see a numerical representation of actions happened in an event, making easier to understand what happened during the event

You can make 3 different kinds of labels, the simple label, the time label and the data label

To make a simple label click on and set a name for the label, to change the colour of the label click Background colour this label shows only text and can be use to organize the dashboard

To make a time label click on and set a name for the label, to change the colour of the label click Background colour, this label shows a timer which is the time of the actual video.

To make a time label click on and select the categories and descriptors you want to show.

Example:

To make a label which show the total amount of confident actions made by a candidate click on the name of the candidate and on the descriptor confidence

Candidate 5, confidence = 3

To change the colour of the label click Background colour

To set a nickname for a label type the nickname on the corresponding box and select Nick name now the label will show the text you set for it.

Label without nickname:
confidence, initiative, motivation = 6

Label with nickname: positive = 6

To hide the text of a label and only show the numeric value of it click on Hide the text

To show the amount of time during an action took place instead of the amount of action happened click on Values in time mode

Amount of actions happened:

Amount of time during the actions took place:

NURSE #1 = 13 N

NURSE #1 = 09:51

To create a label relative to a group select the categories or descriptors you want to see, then click on "Relative to a group" and choose the group which contains the categories or descriptors you selected before. Now the label show the value of the action selected in relation to the total amount of the group as a percentage, to see it as a absolute value click on Absolute value

Percentage GOOD = 89% Absolute value GOOD = 25/28

To see the labels ID's keep pressing Alt Gr. This will help you making label relative to another label.

To make a label which behaves as a sum of elements click on the category you want, then on the descriptor you want and lastly on " behave as sum", when this option is active the label will show the total amount of the categories containing one of the descriptor summed to the total amount of categories containing the other descriptor.



Example:

In a debate, to see all the affirmative answers of a candidate and all interventions about education. Select the category *Speaker 1*, the descriptor *affirmative answer* and the descriptor *education*. Select "behave as a sum". Now you will see in the data label all the affirmative answer and all the intervention about education by Speaker 1

To set an alarm set the value the label must reach to activate the alarm.

Example:

To set an alarm by amount of errors make a label, select the category error, set the value you want for each alarm level, for example 1,3,5. Now when the label reaches the value 1 the first alarm will activate, when the label reaches the value 3 the second alarm will activate and when it reaches value 5 the last alarm will activate.

Alarm 1:







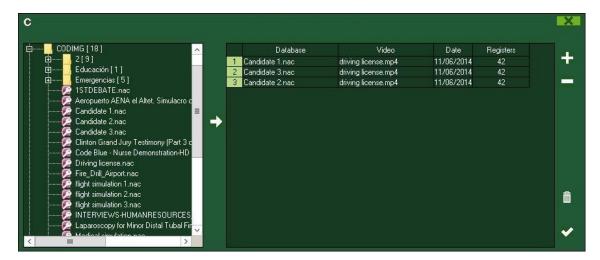
Alarm 3:



Multiple dashboards from Timeline

Having several databases opened in the Timeline you can do a multiple dashboard containing information of all those databases

To do so click on . If you want to add another analysis you can do it by clicking on , selecting the analysis you want, clicking on and finally on .



You can hide one or more analysis when having a multiple dashboard. To do so uncheck the analysis you want and click on 🗾



You will also be able to open a multiple dashboard directly from My analysis environment choosing the analyses you want and clicking on



Calculation for data labels

You can add calculation to a data label what will modify its value as you want. To do so click on edit data label and then on now you can choose the kind of calculation you want to do. You can calculate simple values for a single data label (add, substract, multiply or divide depending on a specific number) and you can also calculate values from several data labels (add, substract, multiply or divide the values of 2 different labels)

To do a calculation depending on a specific number click on the select the kind of calculation you want in the drop-down menu and add the value you want in the corresponding box. Click on accept and you data label will be automatically modified

To do a calculation from several data labels click on select the data label you want to use and then select the kind of calculation you want to do in the drop-down menu. Keep in mind you can do several calculation for each data label. For example adding the value from 2 different data label and then multiplying the result by 2, to do so you will need to make a calculation depending on a specific number and a calculation from several data labels.

Example:

In an evaluation you can count the total amount of mistakes and then calculate the total amount of points by the different kinds of mistake. To do so make a data label with the kinds of mistake you want

Now add a calculation depending on a specific number to each label so you can see how many points a person gets. For example, for the serious mistake you will multiply the value by 2.

	Operation	Value	Result
â	х	2	= 0

This way you can see the total amount of points by each kind of mistake

To calculate the total amount of points in the evaluation you can make a calculation from several data labels. To do so just make a new data label and do the calculation adding the 3 data labels you did before.

	Operation	Value	Result
â	+	ID: 511	= 12
â	+	ID: 510	= 39
â	+	ID: 509	= 71

This way you can get total amount of points in the whole evaluation

Total = 83



Variable label.

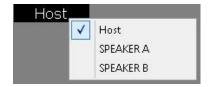
With this option you can make a label which will modify a variable involved in any chart or data label in your dashboard. To do so you first have to make a group containing all the related variables.

Right click on the dashboard and select "Variable label".

Select the category or descriptor you want as a base for the variable label. By default all categories or descriptors in the same group of the selected category or descriptor will be selected.



To change the variable click on the Variable label and select the one you want, this way all the labels or charts with the original variable will change into the selected one.



By right button clicking on any label or chart and selecting Lock the variable change you will block that label or chart against the variable change, so it will always show the same information.

Reorder the preview.

When opening a dashboard from multiple databases and clicking on any bar, section or label you can select the order in which the registers will be shown.

To change the order in which the registers are shown click on Order by anlysis name (nac) Now the registers will be shown in chronological order by analysis.

Chronological order:

Order by anlysis name (.nac) Maximize the window when opening			
1	Subject A	28:13:10	28:39:21
2	Subject A	42:24:09	42:49:16
3	Subject A	44:57:06	45:44:00
4	Subject A	49:18:02	49:31:23
5	Subject A	56:49:17	57:15:16
6	Subject A	58:33:12	59:26:23
7	Subject A	71:19:17	71:49:17

By analysis order:

✓ Order by anlysis name (.nac) Maximize the window when opening			
5	Subject A	56:49:17	57:15:16
6	Subject A	58:33:12	59:26:23
16	Subject A	144:00:08	144:33:03
17	Subject A	146:05:24	146:26:17
19	Subject A	170:25:09	170:55:18
20	Subject A	172:06:16	172:23:06





Edit registers properties

You can edit a register properties directly from the preview window of a chart or label. To do so click on any bar/section or label to see the action contained by that element.

Now double click on any register you want to modify or click on

Labels from Descriptor calculator.

You can make a data label based on the result of a Descriptor calculator search. To do so do a Descriptor calculator search in the timeline and save the criteria used. From a Dashboard, right click on the background, choose "Descriptor calculator label" and select the criteria you want to set the new data label.

Associate datalabels to a specific row order in limeline.

With this option you can make a datalabel based on the order of the categories in the Timeline, ignoring the name of the category.

To do so you have to make a new datalabel and click on Now you have to select the row you wish to use and any descriptors you want to add.

Clicking on Auto create all you will automatically make a label for each row in combination to the selected descriptors.

Example: Having a template for the individual analysis of students, you will order the datamatrix to always show the same order (for example Front row, Mid row, Back row)

When making the datalabel by rows, this will always show the data of the students by group.

In a new class day the students changed, but the order of the groups remains. This will allow a dashboard to show the data of a new analysis without any modification to it.

In the first day the first row was for Student 1. In the second day the first row is for Student A.

Day 1	Day 2	Day 3
Student 1 = 16	Student A = 11	Student 1 = 13
Student 2 = 8	Student B = 14	Student 2 = 19
Student 3 = 12	Student C = 10	Student C = 10
Student 4 = 7	Student D = 8	Student D = 14
Student 5 = 14	Student E = 12	Student E = 12



Label for the last 5 actions.

This datalabel will show the result of the last 5 registers of a category depending on up to 3 different descriptors.

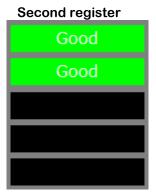
To do so you have to right click on the background of the dashboard and select "last 5 actions" Now select the category you want and then the descriptors.

The name of the descriptor will automatically appear next to a colour box. This will be the colour the datalabel will show when combined with the category.



When saving the datalabel it will make 5 different datalabels. These will show the last 5 registers of the selected category and will modify its colour depending on the added descriptor.







Resize dashboard content.

With this option you can modify the size of the dashboard window and all the objects in

To do so click on and change the size of the window.

Now all the object keep the same size ratio they had before.

Regular resize:









Dashboard backup.

Clicking on it from the dashboard window you can open or make a backup from your dahsboards. Clicking on Create backup you will create a new backup which will save the actual configuration of all your dashboards. If you select any backup from the list below and click on Restore backup you will open the backup, getting access to the previous configuration of your dashboards.

Note: When you delete multiple ítems at the same time, a new backup will be automatically created

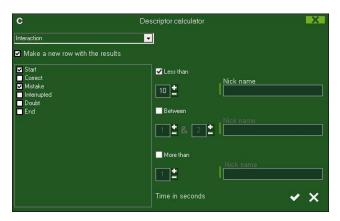




5.2.19 Descriptor calculator

With this tool you can find those registers attending to a specific condition related to their time.

To do so select the category you want and click on



Now select the descriptor you want to use a base for the search. The "begin" and "end" option means the moment the register begins and ends. Select the value you want and finally select the condition.

Example: To know the amount of Attacks in where a Shot happened in less than 10 seconds after the beginning of the attack select the Attack category, click on select Begin and Shot, set a 10 seconds time and click on . Now all the Attacks in which there were a Shot in less than 10 seconds from the beginning will have a new descriptor which will allow you to find them in the datamatrix.

You will also be able to make a new category with the registers you searched by clicking on <a> Make a new row with the results

To add a nickname to th Nick name	ne seach result type the nickname you want in the
The final category will h	text box next to the rule you want to user for the search. has its original name plus the nickname.
	ia for a Descriptor calculator you must set the criteria you wan licking on you will save the name for the criteria.

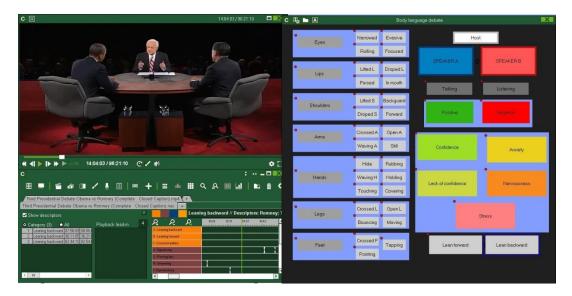
The saved criteria will me shown, so you can reuse them whenever you want

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5.2.20 Open a template in timeline

With this option you will be able to edit your registers in faster and easier way. To open a button template in timeline click on and select the corresponding option.



Now you can add categories by clicking on them in the button template at the moment you want.

To add descriptor to already existing registers, select the register you want to add descriptors to and then click on the descriptors you want to add to the selected registers. To add descriptors to multiple registers at once, select the registers you want by keeping pressed the Ctrl key and then click on the descriptor you want.

Note: Descriptors will be added at the moment the video shows when clicking on them. In case of adding a descriptor out of the registers time it will be added at the end of the register.

Note: Buttons shortcuts 1, 2 and 3 keys will not work when the using the buttons template in timeline

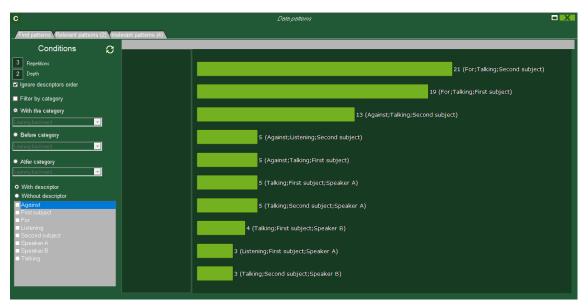
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5.2.21 Data patterns.

With this tool you can find patterns that are repeated in an analysis in order to understand in a better way how an event evolves.

To do so, click on in the timeline



Now you can set the conditions the patterns have to fulfill.

In the first place you have to select the minimum amount of repetition to consider a coincidence as a pattern. You also have to select the minimum amount of descriptor the actions have to meet.

Repetitions

Depth

3

You can do this from the menu

Setting an 8 value for repetitions will only show those patterns which are repeated 8 or more times

Setting a 3 value for depth will only show those patterns which contain 3 or more descriptors.

Both conditions must be fulfilled in order to show a pattern. All the descriptors must be in the same order on every action.

Clicking on grant lignore descriptors order the descriptors order will not be taken in account. To do a deeper filter you can use the option Filter by category in combination with • With the category to focus on a specific category. Before category for actions happening just after the selected category. After category for actions happening just before the selected category.

Lastly, you can specify descriptor you want to include or exclude from the patterns

 With descriptor search from the menu Without descriptor

To see the registers in a pattern, click on any of the results. You can send any register to a presentation by pressing the 3 key.





You can teach the software how to react to certain patterns. This way you can ignore patterns which don't give useful information. You can also set a pattern as an important pattern. To do so, you have to right mouse click on any of the results.

Setting a pattern as irrelevant will totally ignore that patter in future searches. You can see your irrelevant patters from the proper tap. To re include the patter in future searches, select the pattern and click on

Setting a pattern as relevant and giving it an alias, will make this pattern to be automatically searched in future analyses. You can consult the relevant patterns in the proper window. Clicking on will add a descriptor with the alias of the patterns to all the registers in it, so you will be able to find those registers with any of the filtering

tools. To do a search based on your relevant patterns click on . Clicking on Search for relevant patterns automatically you will force the search of the patterns every time a new analysis is open. Checking "Auto add nickname" will automatically add the descriptor to the registers in that pattern.

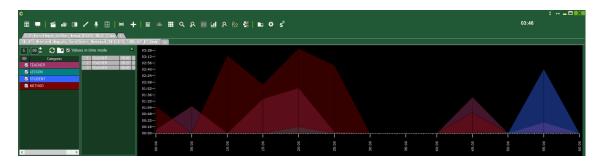




5.2.22 Category frequency chart.

With this tool you can see a graphical representation of the amount of actions by category happened during an event, and even compare them.

To do so, click on , select the categories you want to add to the chart and then on



By clicking on any of the areas in the chart you will see the actions happened at that moment.

You can modify the time interval by setting the want you want on

You can show value my duration of the action in an interval by clicking on ✓ Values in time mode



6. MY ANALYSIS

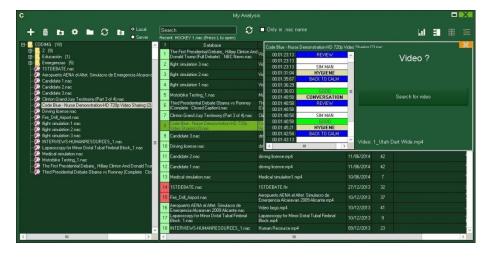
In this environment you can consult all the databases created or imported by the user.



To access to presentation, timeline or registering environment, double click the name of any green database you want and choose want you want to do.



If the databases is shown in red colour, this means that there is no video linked to that database due it is in a different place, it was deleted or it has another name. If the video was not deleted, you can link it with by double clicking the name of the database a looking for the video.



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You can also:
Make subfolders: Click any folder and then click
Delete folders (and the databases in it) or delete databases: Click any folder (or
database) and then click 🔟.
Assign a favorite folder: Click any folder you want and then click
Choose folders' path: Click and then select the path.
Open several databases at the same time: Choose the databases you want and click open selected databases these databases will be opened at once in the Timeline
Open databases folder: Click icon.
Auto-link videos: With this option you can quickly link videos to your analysis in case you moved them to any other folder.
To do so right click on any analysis with a non linked video. Select the "auto-link" option and search the folder where the video is. The software will automatically search for any coincidence in that folder an it will link the videos to their corresponding analysis
Note: This option will look in to the path folder by folder. This means that in case of searching in the whole unit C: the software will look in the whole hard drive (this process can take a long time)
Quickly search for an analysis: With this option you can quickly search and specific analysis by its name, video or creation date. If you want to search an analysis depending exclusively on its name, ignoring the video name, file path and analysis date click on Only in .nac name.
Access a folder in a server: With this option you can save your analysis in a shared folder for your whole organization. To see the folders in the server click on Server
Refresh the analyses list: Click on
Export Excel/xml: With this option you will make a new file for each selected analysis. Select the analyses you want, click on and select the option you want.





7. TOOLS

7.1 Merge and convert video files	Page 128
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7.1 Merge and convert video files

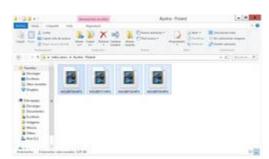
With this tool you can convert multiple video files into one video file in .AVI format. Input formats supported by Codimg are: .AVI, .WMV, .MOV, .MPEG, .MPG, .MOD, .M2V, .MTS, .M2TS, .VOB, .MP4 and .AVS.

To use this tool, follow these steps:

- 1- In the Codimg main menu, click on Tools.
- 2- Click on Convert MPEG-2 to .AVI.



- 3- Click #
- 4- Select the video(s) you want to convert to .AVI and click on Open.



5- Click

6- Enter a name and select a location for the video that will be generated.

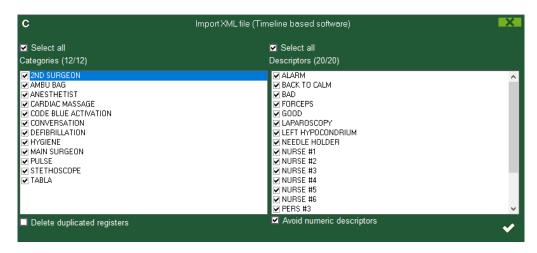




7.2 Import/Export .XML Files

- * To import a .XML folder:
- a) At the main menu of the program, click on Tools.
- b) Select Import.
- c) Select Import .XML
- d) Click .
- e) Look for the .XML files and open them.

After selecting the file you want to import, a new window will show allowing you to select what categories and descriptors will be imported.



Clicking on Avoid numeric descriptors you will automatically deselect all the descriptors containing just numeric values. This means the descriptor name does not contain any letter, though it can contain symbols such as:,-,.,

- f) Select name and destination for the .NAC Database and click on Save.
- h) Select the video which you want to link with the .NAC Database and double click it.
- i) Click on Open the Timeline.



- * To export a .XML folder:
- a) Once the Timeline is opened with the folder to export, click
- b) Select Export .XML.
- c) Select name and destination. Then, click Save.

Note: You can export just the categories you select when making an .XML file to do so just click the .xml export option you want and then select the categories you want in the window







7.3 Import databases from Codimg Tag

In Main Menu, in the tools section, select Import/Import from Codimg Tag Click and select database to import.





7.4- Quick merge videos from same source

With this tool you can convert multiple video files into one video file in the same format of the original videos.

Example: Files from a video camera which makes several files from a single match. This merge is only valid for files of the same source

Input formats supported by Codimg are: .AVI, .WMV, .MOV, .MPEG, .MPG, .MOD, .M2V, .MTS, .W2TS, .VOB, .MP4 and .AVS.

To use this tool, follow these steps:

- 1- In the Codimg main menu, click on Tools.
- 2- Click on Quick merge videos from same source



- 3- Click on .
- 4- Select the video(s) you want to merge and click on Open.
- 5- Click on



6- Enter a name and select a location for the video that will be generated



7.5- Quick merge videos from same source and analysis file (.nac)

With this tool you can convert multiple video files into one video file.

To use this tool, follow these steps:

- 1- In the Codimg main menu, click on Tools.
- 2- Click on Quick merge videos from same source and analysis file.



- 3- Click on 🛨.
- 4- Select the video(s) you want to merge and click on Open.
- 5- Click on

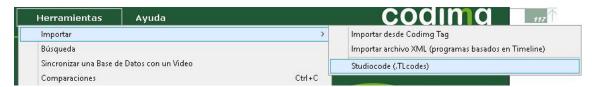


6- Enter a name and select a location for the video that will be generated

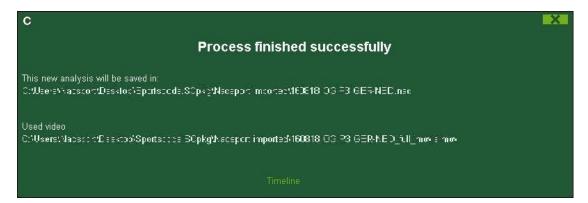


7.6 Import .TLcodes from StudioCode

You can import the work you have done in StudioCode into Codimg keeping your information. To do so click on the Tools tab in the main menu, then on import and select the corresponding option.



Now look for the .TLcodes file you want to import and double click on it. It will be in the corresponding .SCpkg folder. Codimg will automatically look for the video and link it to the newly made database.



To open the analysis and begin working click on Timeline

Imported files will be saved in "Codimg imported" folder inside .SCpkg folder





7.7 WiFi import from Codimg View

To make an export through a local area network you have to start the reception from Codimg in your PC.

To do so, click on the Tools tab from Codimg's main menu. Click on Import and select WiFi import from iPad. You will see a PIN code which you will have to insert in Coding

View to begin the process. You can randomly change the PIN code by clicking on

Having an analysis open from Codimg View tap on and select Search for Codimg

All the connected devices will automatically show up. Select the device you want and insert the PIN code you can see in your PC, finally tap on Send files to Codimg

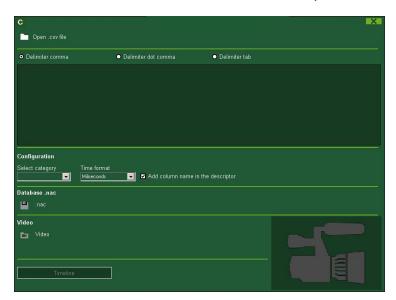
The exported files will be saved in the [CODIMG DATA>Databases Codimg> iPad imported folder in the Documents folder from your PC





7.8 Import CSV files.

From main menu, in the tool section click on import and then select csv files.



Click on and select the file to import

Now you have to select the kind of delimiter used for the .csv file



Select the column from the .csv file which will be used as categories for Codimg using



Select the time format used in the .csv file from the menu



Clicking on Add column name in the descriptor you can add the name of the rest of columns to their values and use them as descriptors.

You can uncheck any column you don't want to use

Clicking on you will make a Codimg database

Finally click on to select the video used for the .csv file and click on to access the Timeline.

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8. ANNEX

8.1 Import and export databases	Page 138
8.2 Real time streaming	Page 139
8.3 General options	Page 143





8.1 Import and export databases

Import and export Codimg databases is as easy as copy the database you want and paste it in another PC.

Export:

You can use 2 different methods:

- 1.- From My documents folder
 - 1-Go to My documents folder.
 - 2- Open CODIMG DATA folder
 - 3- Open Databases CODIMG folder
 - 4- Copy the .NAC files you want from this folder

2.- From Codimg databases

- 1- From Codimg main menu click Codimg databases.
- 2- Select the database you want to export.
- 3- Right click the database and click Copy.

Import:

You can use 2 different methods:

- 1.- From My documents folder
 - 1- Go to My documents folder.
 - 2- Open CODIMG DATA folder.
 - 3- Open Databases CODIMG folder.
 - 4- Paste .NAC files you want from this folder.

2.- From Codimg databases

- 1- From Codimg main menu, click Codimg databases.
- 2- Right click any folder and click Paste to import an already copied file.



8.2 Real time streaming

This tool allows you to stream in real time all the data you get while registering an event through a local network and into any device in that same network

Streaming from registering environment:

To do this click on in the registers control window in the registering environment.

To stream a dashboard click on select the dashboard you want to open and click

Set in any internet browser in any device your computer's IP. You can find you IP in the upper-left corner of you window



To change the streaming settings click on



To change the time interval in which the data is streamed to the devices click on the drop-drown list of the option you want to change

To choose the refresh time of the data in the device which receives the streaming click on the drop-drown list of the option you want to change

To start the data streaming automatically each time you start a new registering clic on Start web server automatically

To create presentation's lists automatically with the registers you select in the devices receiving the streaming click on Make presentation with the remote lists

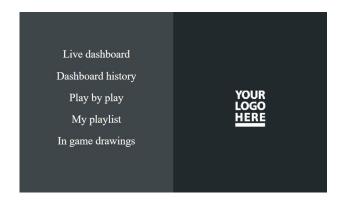
To not stream the plays in real time click on Do not stream the Play by Play

To automatically begin the streaming of a dashboard when you open it click on ✓ Stream the open dashboard automatically

To see the streamed data type the IP of you PC in any internet browser in any device connected to the same local network your PC is connected to.







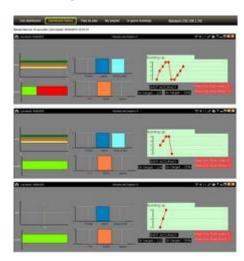
To see a dashboard in real time click/tap on "Live dashboard"3

In this environment you will see the actual view of the dashboard which is showing in the registering data PC



To see an historical record of the dashboards though an event click/tap on "Dashboard history"

In this environment you can see the evolution of an event though the dashboards generated during that event





To see the stream of plays in real time click/tap on "Play by play"



In this environment you can see all the actions registered in the event. To do this click/tap on to produce the action in the PC, then click/tap on to see the action at you device.

Clicking/taping on you will set that action as a favourite.

To see the list of favourite actions click/tap on "My playlist"



To see the actions click/tap on them. This action can be seen after losing the connection to local network

To see drawings in real time click on "In game drawings"





8.2.1 Save in the streaming PC the videos saw by the receiver device during a real time streaming.

With this option you can save a video file of the actions requested by any receiver device through the real time streaming option

To do so you have to set a folder to save the videos. From Codimg's main menu click on "Tools" and then on "Options". Now select the tab Web server. In the lower part of the window click on and select the folder to save the videos.

Now every time you click on from the receiver device you will also make a video in the previously selected folder.

The name of the file will always show the name of the category and the time of the recording when it was made.



Note: If you use any shared folder (Dropbox, Hubic, Google drive...) To save the files, this will be available in the reciever device without internet connection, once the shared folders are synchronized.



8.3 General options

8.3.1 Show video player time.

Now you can choose between 4 different ways to show the video player time. To do so go to the option menu by clicking on the tools tab on the software's main menu. Click on the "video player" tab and select the option you want.



8.3.2 Add angles as separate videos/mosaic.

Having an analysis with multiple angles you can choose between using the 3 key to add every single angle or to add all angles as a mosaic.

To do so, go to main menu, tools tab and then to options. Once there click on

Timeline

and select the option you want.



8.3.3 Check the server status.

With this option you can quickly check the status of the server where your databases are.

To do so, click on "options" in the "Tools" tab from the main menu. Now click on "Storage folders".

Click on Server and type the IP address of the server. Now click on "check connection"



From now on every time you Access the server from "My analysis" there will be a server status check. In case there is no connection to the server an error message will appear:





8.3.4 Change storage folders path

You can set a new path for the storage folders in a quick and simple way. To so, from the main menu of the software you have to click on tools and then on options. From "Storage folders" section click on Use Nacsport DATA default path and select the new path.

To use the older path again, just click on





coding . video analysis to improve.