

Application Note

Example of user log on Magelis HMI with
XB5S5B2L2 biometric switch.



Version: 1.0



Advanced Technical Support - Brazil

Schneider
Electric

Technical Specifications

Hardware:

HMIGTO4310
XB5S5B2L2

Firmware:

XB5S5B2L2
V1.0

Software:

Vijeo Designer

Versão:

6.1 SP3.1



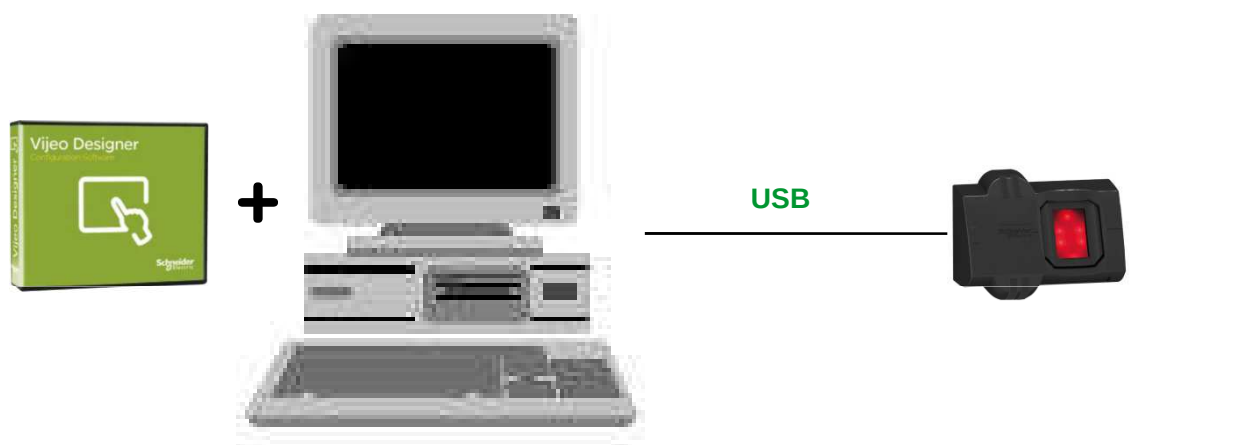
Advanced Technical Support - Brazil



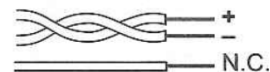
Compatibility

Magelis HMIs	
	Biometric USB switch
	XB5S5B2L2
Magelis <i>i</i> PC	Yes
XBTGT (except GT1000 series)	Yes
XBTGK	Yes
XBTGC	Yes
HMIGTW	Yes
HMIGTO	Yes
HMIGXO	Yes
HMISTU	Yes
HMISTO	No
HMISCU (according to version)	Yes

Connection Diagram- Configuration



XB5S5B2L2



+ : 24 Vdc, Brown / Marron / Braun

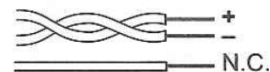
- : 0 V, Blue / Bleu / Blau

N.C. : Not connected, Black / Non connecté,
noir / Nicht angeschlossen, Schwarz

Connection Diagram- Application



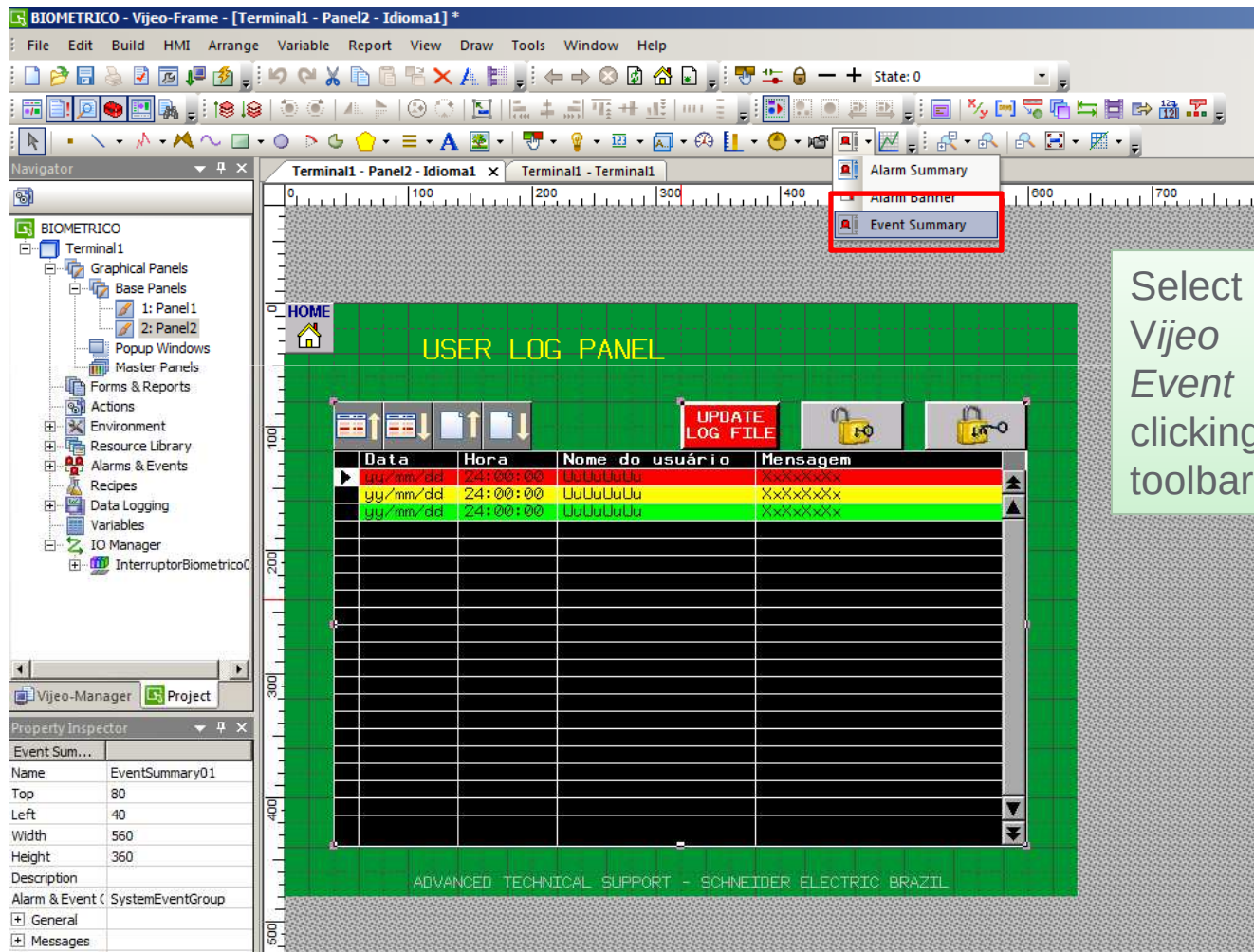
XB5S5B2L2



+ : 24 Vdc, Brown / Marron / Braun
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Vijeo Designer

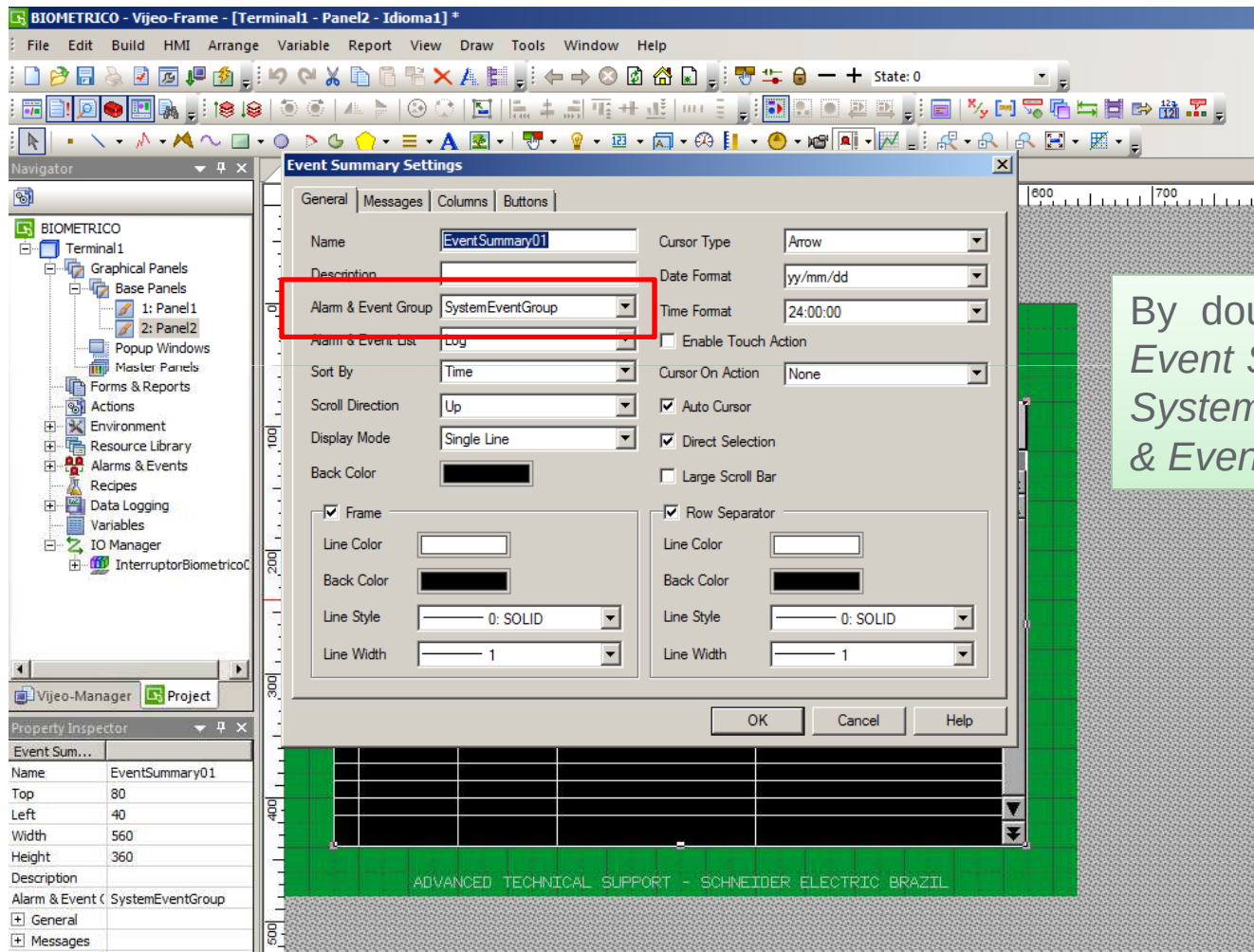
- LOG visualization config



Select the desired panel on *Vijeo Designer* and insert *Event Summary* object by clicking on graphical tool toolbar.

Vijeo Designer

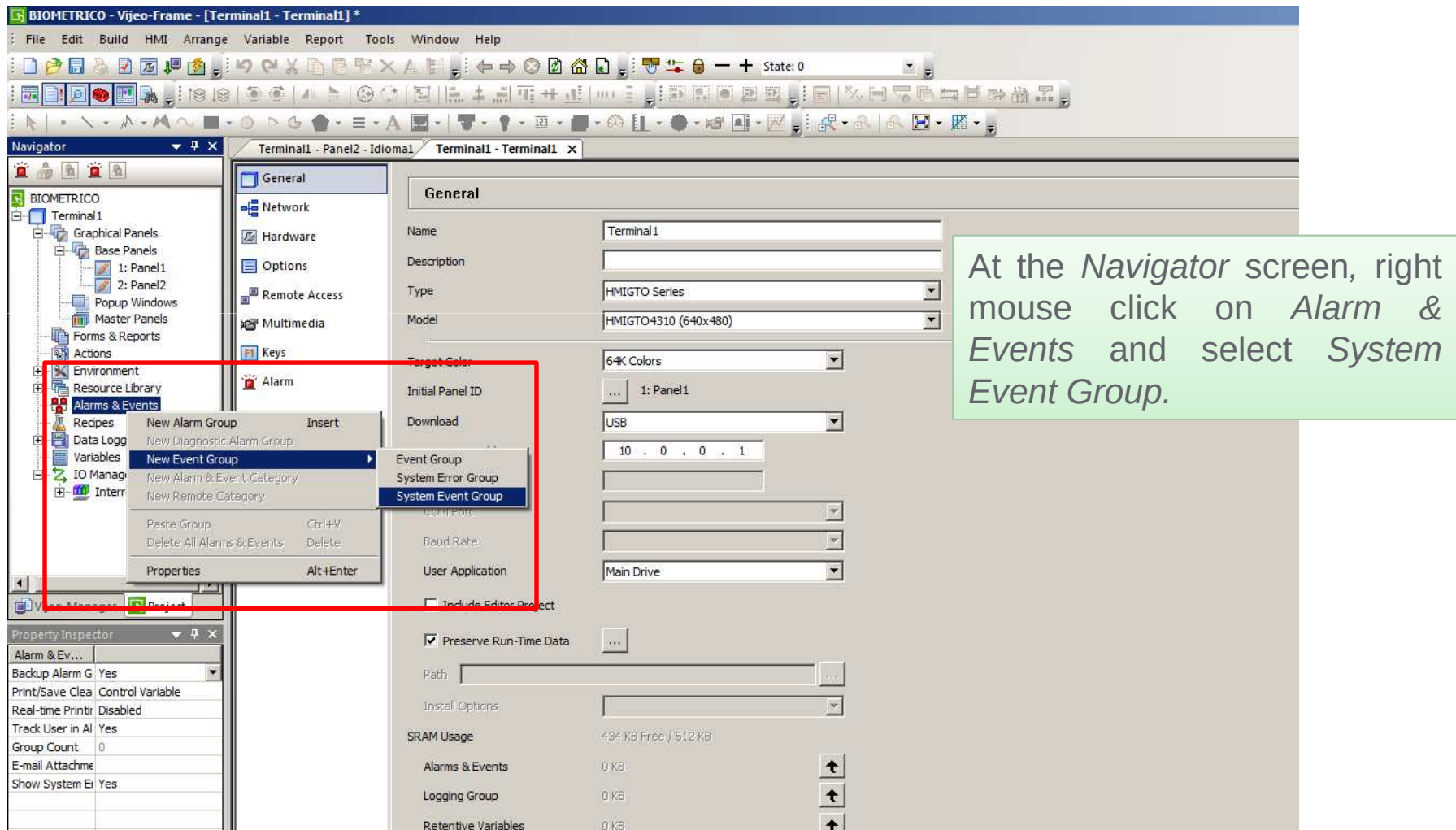
- LOG visualization config



By double mouse clicking at *Event Summary* object , select *SystemEventGroup* on *Alarm & Event Group* window.

Vijeo Designer

- LOG visualization config



Vijeo Designer

- LOG file config

Go to *System Event Group* screen, select *Yes* to *Backup Records* and *SRAM & File* to *Record Storage*. This config will allow generated files to be saved on a removable media (removable USB media, CF ou SD Card)

Check *Save to file* option, then click on *Configure* button and in the next window define Boolean variable to *Control Variable*. On *Save to* screen, select the *System Event Group* created previously.

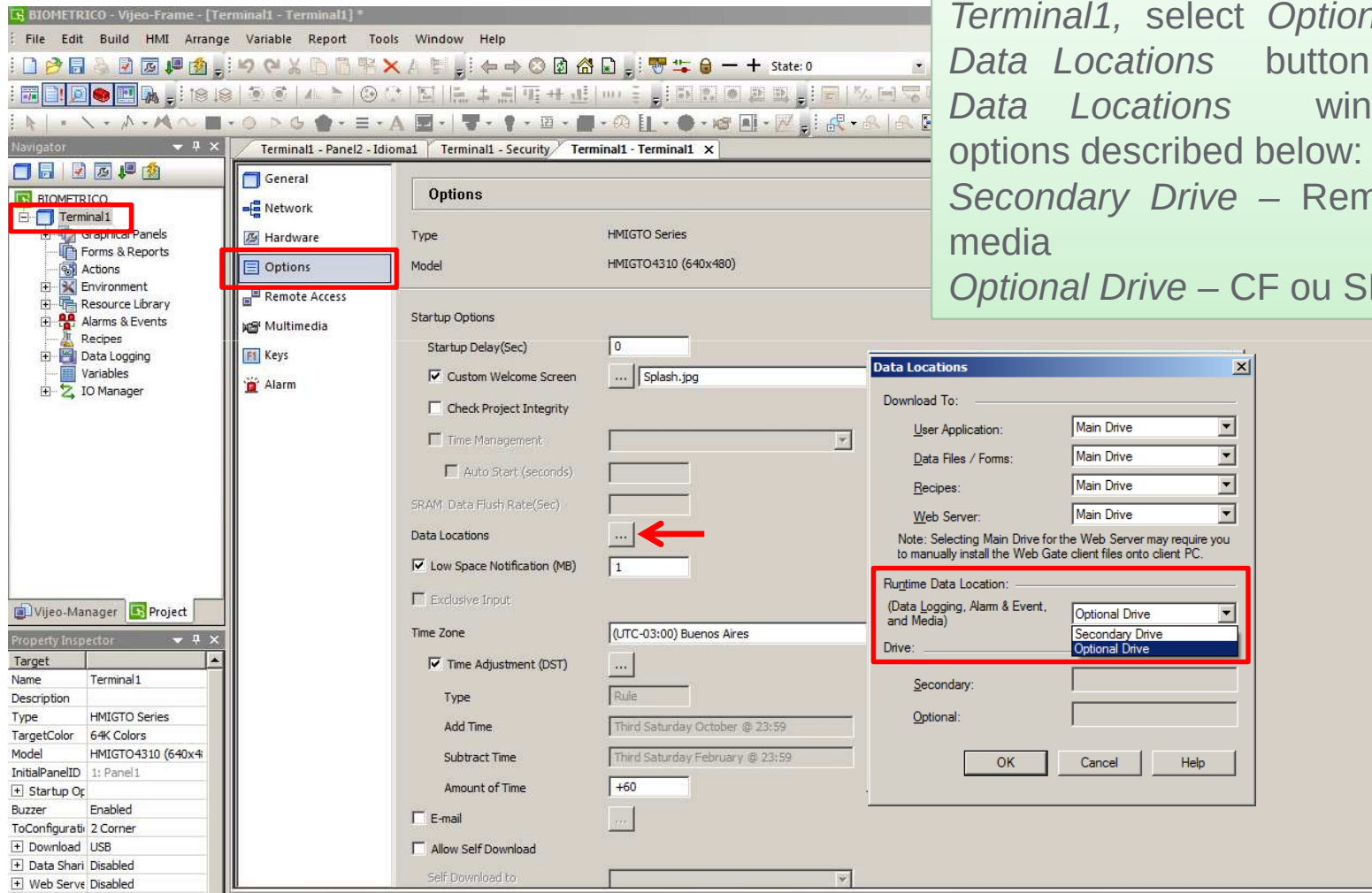
Vijeo Designer

- LOG file config

By double mouse clicking, select *Terminal1*, select *Options*, click on *Data Locations* button and in the *Data Locations* window, select options described below:

Secondary Drive – Removable USB media

Optional Drive – CF ou SD Card.



Vijeo Designer

- LOG config

The screenshot shows the Vijeo Designer software interface. On the left is a Navigator pane with a tree view containing 'BIOMETRICO', 'Terminal1', 'Graphical Panels', 'Base Panels', '1: Panel1', '2: Panel2', 'Popup Windows', 'Master Panels', 'Forms & Reports', 'Actions', 'Environment', 'Data Files', 'Security', 'Languages [Idioma1]', 'Resource Library', 'Alarms & Events', 'Recipes', 'Data Logging', 'Variables', and 'IO Manager'. The main workspace displays a 'USER LOG PANEL' with a table. A red arrow points to an 'UPDATE LOG FILE' button. The table has columns: Data, Hora, Nome do usuário, and Mensagem. The first row is highlighted in red and contains the following data:

Data	Hora	Nome do usuário	Mensagem
dd/mm/aa	dd:mm:ss	uuuuuuuu	xxxxxxxx
dd/mm/aa	dd:mm:ss	uuuuuuuu	xxxxxxxx

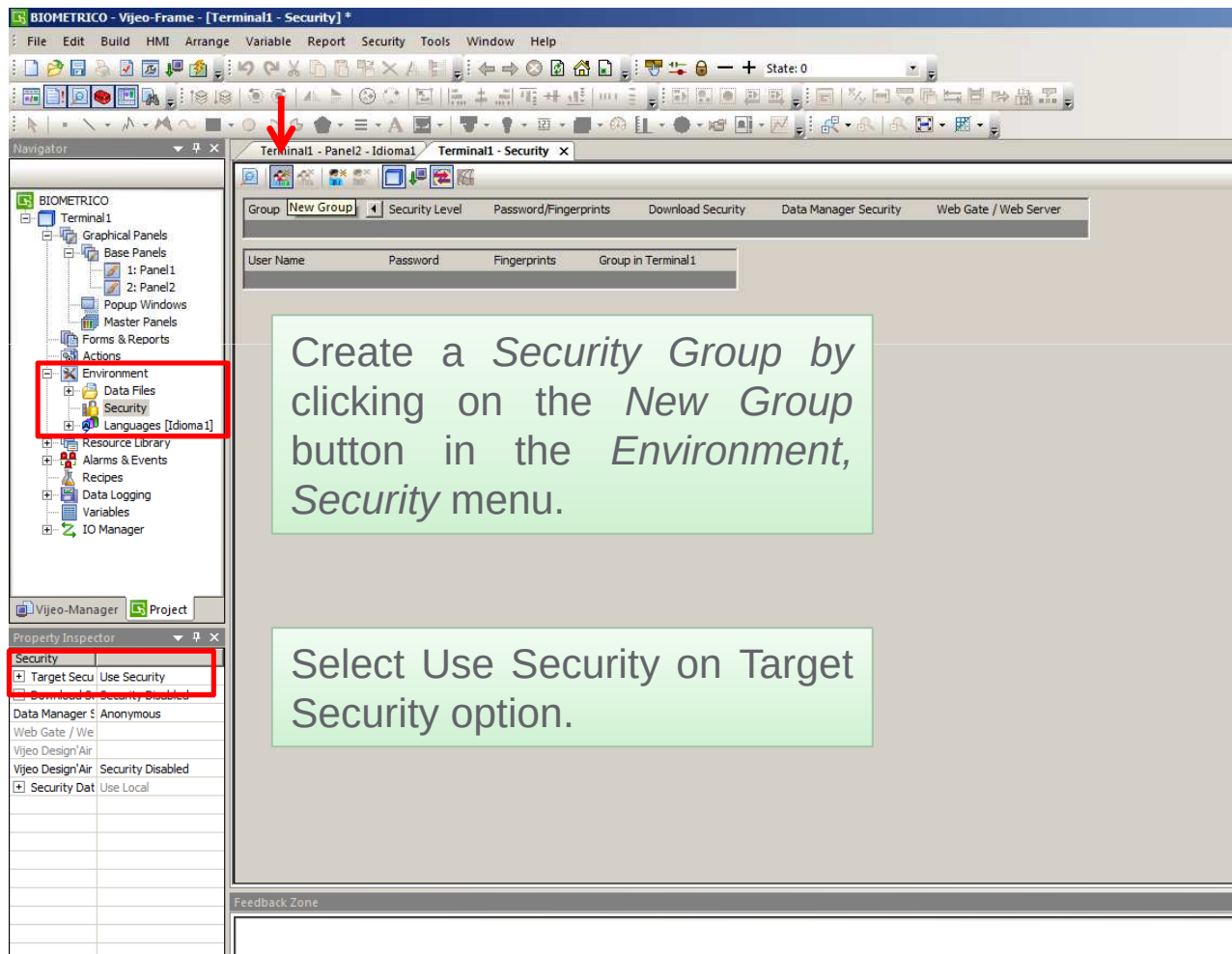
Overlaid on the right is the 'Switch Settings' dialog box. The 'General' tab is active. The 'Mode' is set to 'Switch'. The 'Name' is 'Switch01'. The 'State' is 'Up'. The 'Lamp' is set to 'Enter a valid Condition Expression, If...'. The 'When Touch' tab is selected. The 'Operation' is 'Word'. The 'Source' is '4'. The 'Operation' is 'Set'. The 'Destination' is 'CONTROL_VAR'. The 'Word Set (CONTROL_VAR)' is set to '00005'. The 'Apply' button is highlighted.

To update the LOG's file, you should enter a value of 4 (four) in *Control Variable*. For more details, go to help menu 16.3.6.3 – *Control Tab Settings*,

In this example we created an Update button that is in charge of updating the LOG's file with latest changes, saving on removable media. You can create another method to do the same function(creating *Actions*).

Vijeo Designer

- Creating Security Groups



Vijeo Designer

- Creating Security Groups

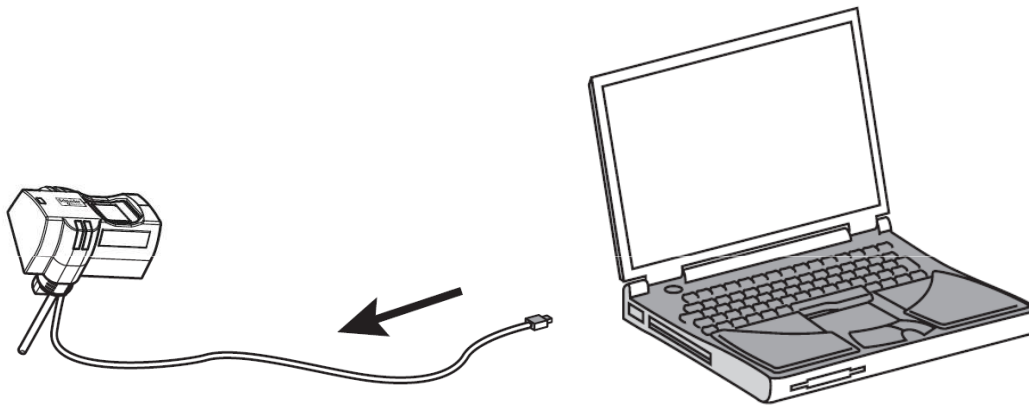
The screenshot shows the Vijeo Designer interface with the 'Terminal1 - Security' window open. The 'Security Group' table is highlighted with a red box, and a red arrow points to the 'Password/Fingerprints' column. The table contains the following data:

Group	Security Level	Password/Fingerprints	Download Security	Data Manager Security	Web Gate / Web Server
SecurityGroup01	1	Fingerprints	Allowed	Read/Write/Delete	Read Only

Below the table, there is a section for 'User Name', 'Password', 'Fingerprints', and 'Group in Terminal 1'. A text box in the center of the window states: 'Change Password/Fingerprints window to Fingerprints. Other parameters need to be configured according to project definitions.'

Vijeo Designer

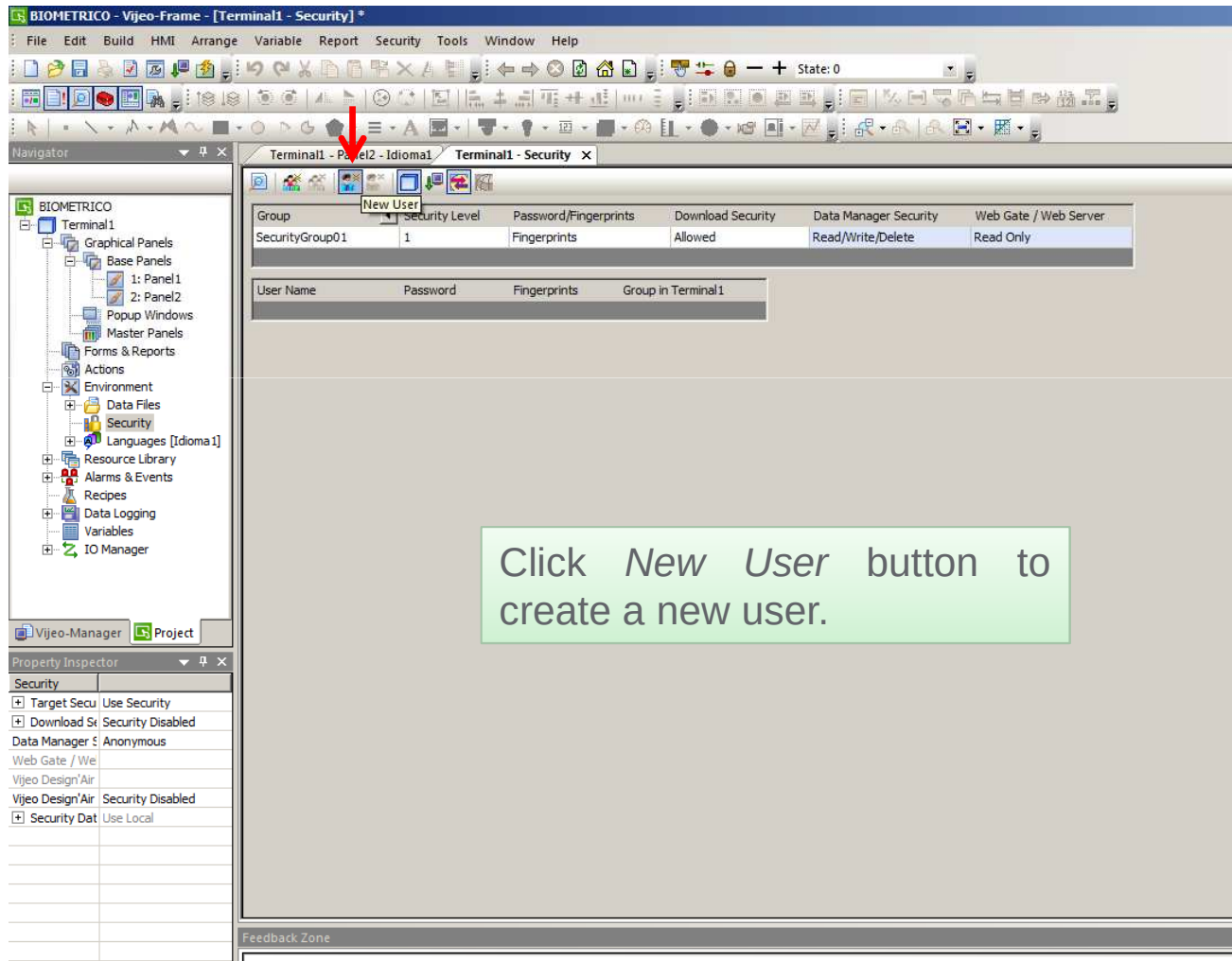
- Creating Security Users



Biometric switch connected to USB port.

Vijeo Designer

- Creating Security Users - PC



Vijeo Designer

- Creating Security Users – PC

To create your credentials, insert all requested information (User Name, password), select Security Group then click on *Start* button to validate fingerprints,

You should register 2 different fingerprints, reading each one three times.

BIOMETRICO - Vijeo-Frame - [Terminal1 - Security]

File Edit Build HMI Arrange Variable Report Security Tools Window Help

State: 0

Navigator

Terminal1 - Panel2 - Idioma1 Terminal1 - Security x Terminal1 - Terminal1

Group	Security Level	Password/Fingerprints	Download Security	Data Manager Security	Web Gate / Web Server
SecurityGroup01	1	Fingerprints	Allowed	Read/Write/Delete	Read Only

User Name	Password	Fingerprints	Group in Terminal1
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Create User - Target

User Name: User1

Password:

☒ Use Password

Confirm Password:

Fingerprints

☒ Use Fingerprints

Provide three sample fingerprints from each of two fingers.

Finger No. 1:

Finger No. 2:

74

Remove finger

Start

Security Group: 1:SecurityGroup01

OK Cancel

Vijeo Designer

- Creating Security Users - PC

After that, you'll see a success message on *Fingerprints* screen, otherwise, repeat the procedure again.

Create User - Target

User Name: User1

Password:

☒ Use Password

Confirm Password:

Fingerprints

☒ Use Fingerprints

Provide three sample fingerprints from each of two fingers.

Finger No. 1:

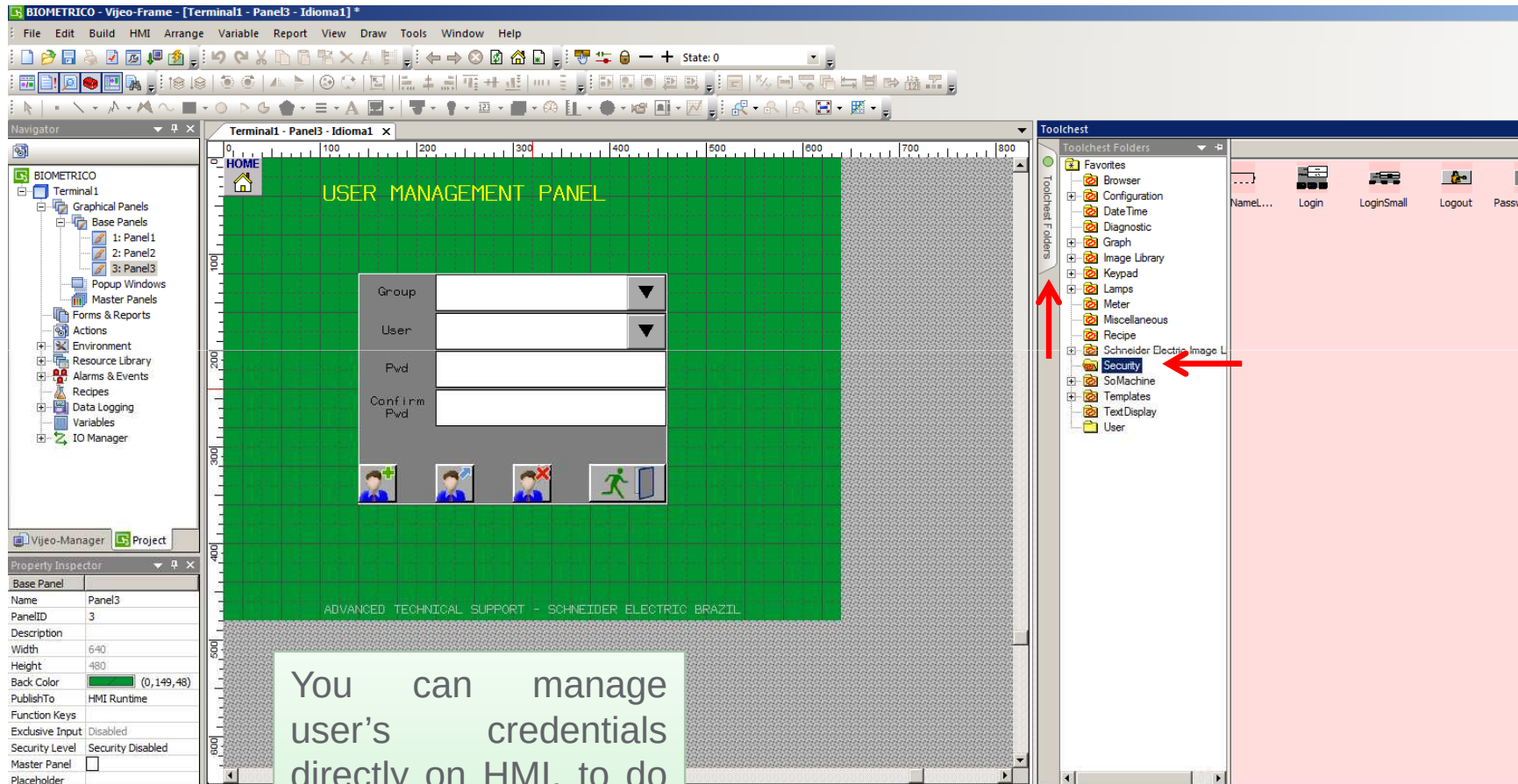
Finger No. 2:

Fingerprint capture successful!

Security Group: 1:SecurityGroup01

Vijeo Designer

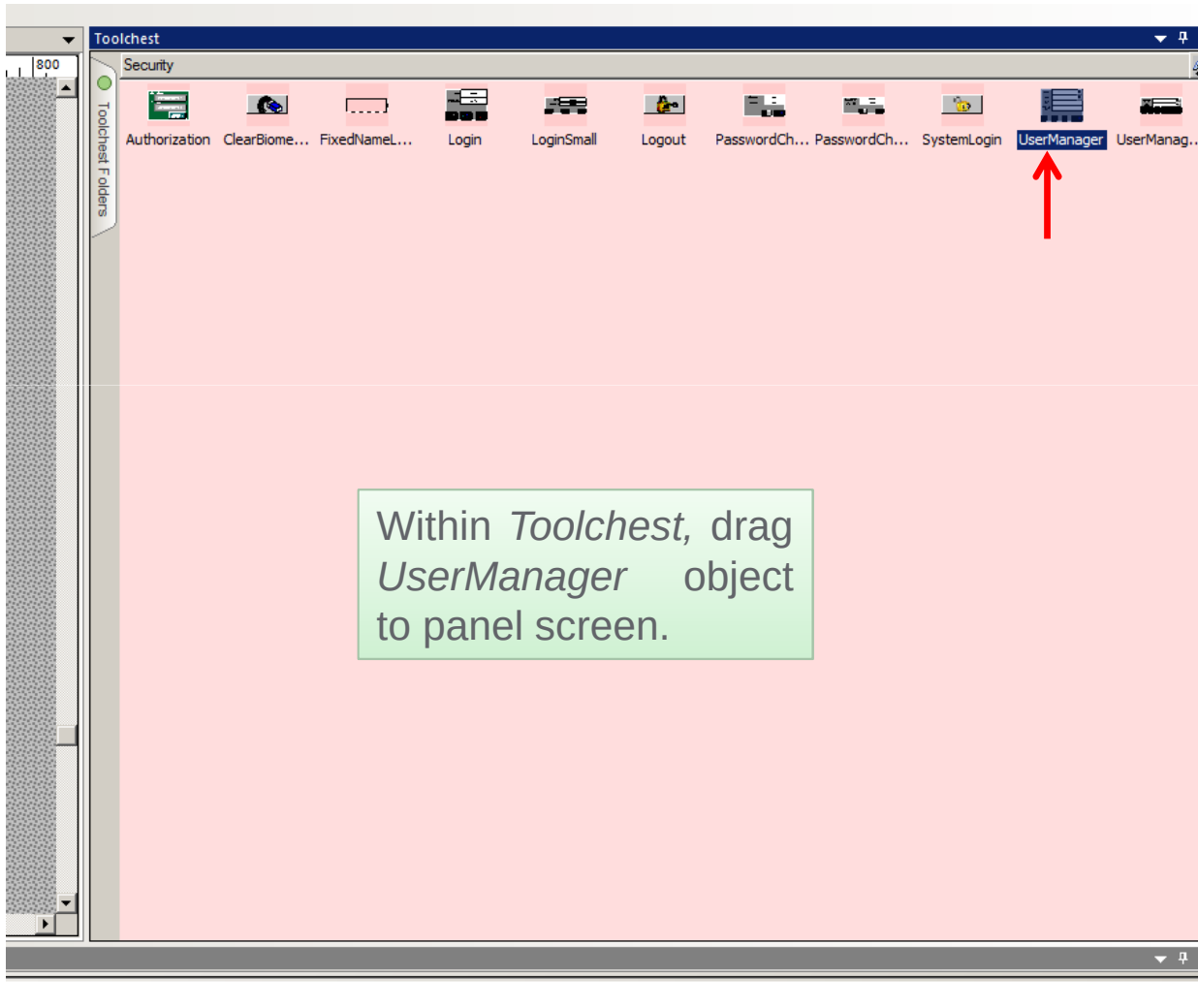
- Creating Security Users - HMI



You can manage user's credentials directly on HMI, to do that, go to *Security* on *Toolchest Folders*.

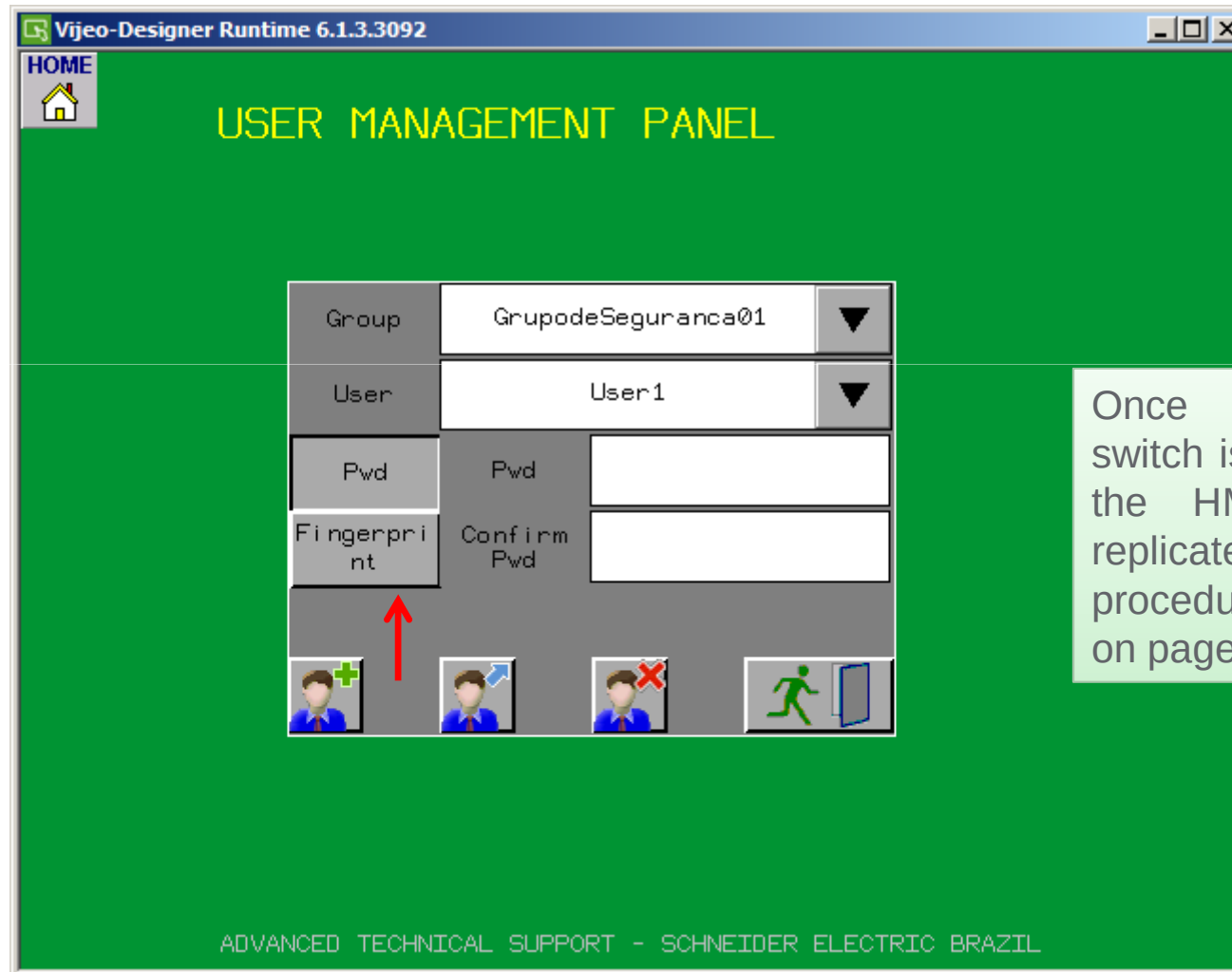
Vijeo Designer

- Creating Security Users - HMI



Vijeo Designer

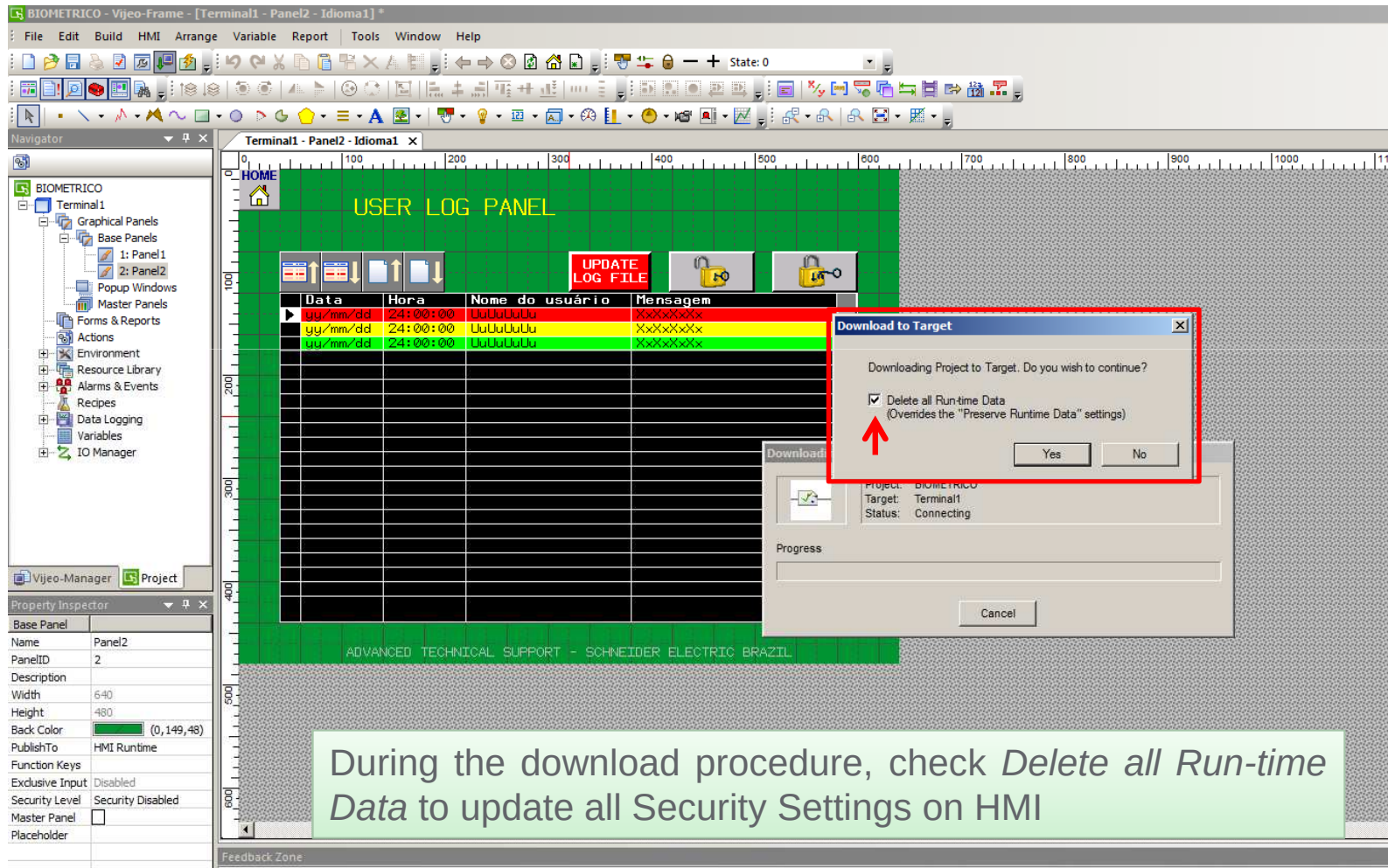
- Creating Security Users - HMI



Once the biometric switch is connected to the HMI, you can replicate the same procedure mentioned on pages 16 and 17.

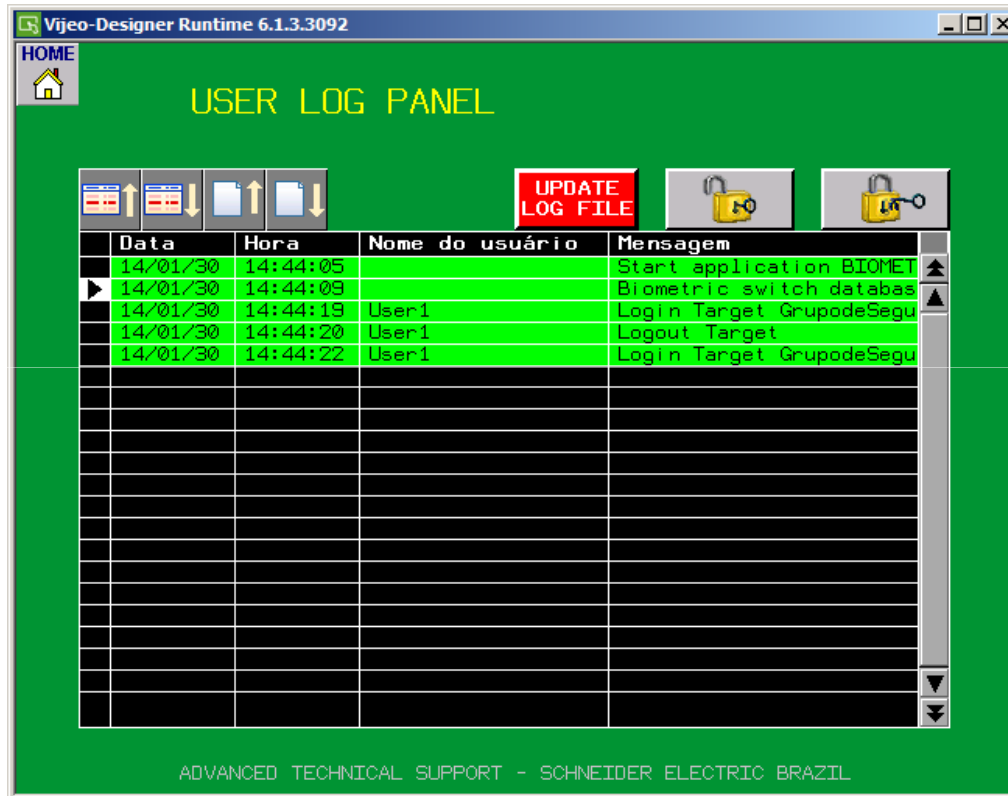
Vijeo Designer

- Downloading to HMI



Vijeo Designer

- Program simulation



You can use the simulator to test all configuration (biometric switch must be connected to the computer).