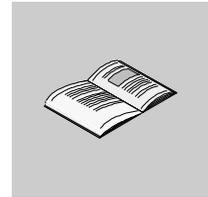


Vijeo Look

SCADA software for small and
medium-sized supervision
applications.

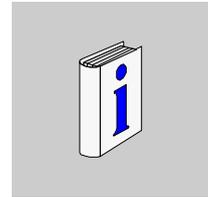
Vijeo Look Eng

Table of Contents



	About the book	5
Chapter 1	General overview of Vijeo Look	7
	Presentation of the Human Machine Interface (HMI)	7
Chapter 2	Installing the product Vijeo Look	9
	At a Glance	9
	Installation of Vijeo Look and its different components	10
	Uninstalling Vijeo Look and its different components	13
	License management	14
	Vijeo Look Registration Request	16
	Vijeo Look Upgrade Registration Request	17
Chapter 3	Main functions of Vijeo Look	19
	At a Glance	19
	The main tools of Vijeo Look	20
	Description of the main functions of the "Insert" menu	22
	Description of the main functions of the "Tools/Application/Configuration Explorer" menu	24
Chapter 4	Reminder about the OFS configuration tool	25
	Reminder about editing aliases	25
Chapter 5	Start-up	29
	At a Glance	29
	Creating a project	30
	Detailed explanations of some parts of the demonstration project	31
	Creating part of the "manufacture" synoptic	32
	Creating part of the "purification" synoptic	35
	Inserting an ActiveX and a Bean component	40
	Writing a variable	42
Index	43

About the book



At a Glance

Document Scope This manual describes how to get started with the Vijeo Look software

User Comments We welcome your comments about this document. You can reach us by e-mail at TECHCOMM@modicon.com

General overview of Vijeo Look

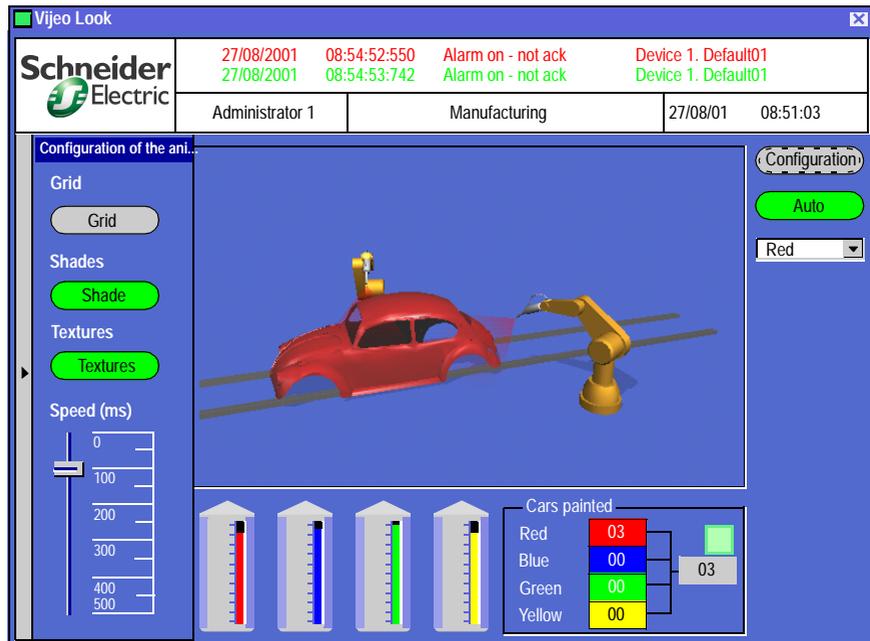
1

Presentation of the Human Machine Interface (HMI)

General

Vijeo Look is a HMI (Human Machine Interface) application. It is operated using Windows 98, Windows ME, Windows NT4 SP6 and Windows 2000. The minimum configuration required is a Celeron 566Mhz with 128 Mb of RAM. Vijeo Look supplies all that is necessary for data acquisition, as well as for the development and visualization of animated synoptics for running PC processes. Real time data acquisition is performed using the OPC Factory Server (OFS) communications server, included in the product.

Illustration using an automated line command:



Using a simple graphic object, it is possible to visualize and /or command a motor, robot or other device by associating it with one or more variables.

The main features of the product are:

- an advanced graphic motor, comprising:
 - libraries of graphic objects that may be configured by the user,
 - editor of advanced native graphic elements,
 - management of CAD type calques,
 - unlimited synoptic size,
 - 24 bit color support,
 - import of images and animations in BMP, JPEG, GIF, AVI, EMF, and WMF formats
 - Zoom function,
 - many types of animations,
 - flexible configuration of user rights,
 - activeX container,
 - VBA motor,
 - Java Bean container,
 - real time data logging tool,
 - interface available in English, French, German or Spanish.
-

Installing the product Vijeo Look

2

At a Glance

Subject of this Chapter

The aim of this chapter is to describe how to install the different components of Vijeo Look.

What's in this Chapter?

This Chapter contains the following Maps:

Topic	Page
Installation of Vijeo Look and its different components	10
Uninstalling Vijeo Look and its different components	13
License management	14
Vijeo Look Registration Request	16
Vijeo Look Upgrade Registration Request	17

Installation of Vijeo Look and its different components

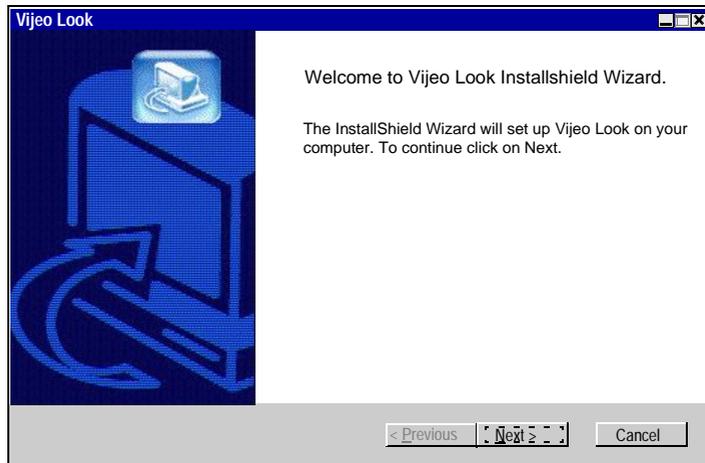
At a Glance

The product is available in CD-ROM format including the installation of Vijeo Look and OPC Factory Server, Visual Basic Application, Java virtual machine, MSDE, LapLink Gold and the communications driver Uni-telway.

Note: Before performing a reinstallation, users are advised to perform a deinstallation (See *Uninstalling Vijeo Look and its different components*, p. 13)

Illustration

The figure below shows the welcome page of Vijeo Look Setup:

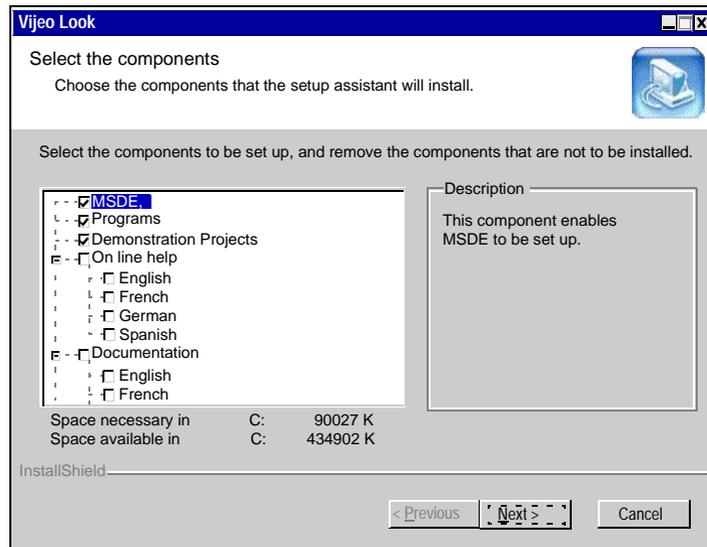


Installing the product

To install Vijeo Look and its components, open the file **Setup.exe**
Description of the different installation stages:

1	Selecting the installation language	Select the required setup language: <ul style="list-style-type: none"> ● German, ● English, ● Spanish, ● French (standard).
2	License contract	If you accept the contract terms, go to the next page.
3	Client information	To customize the software you must enter the following information: <ul style="list-style-type: none"> ● User name, ● Company name.
4	Languages	Select the two languages you wish to use as well as the one to be used by default in the application
5	Setup type	Select the setup type which best suits your needs: <ul style="list-style-type: none"> ● By default, ● Compact (with setup of the demonstration project or the shared libraries), ● Customized (allows user to choose the target directory as well as some options in the setup)

Example using the setup of "LapLink driver":



Description of the different installation stages:

6	Select a program folder	The setup assistant adds the program icons to the chosen program folder (Modicon Telemecanique by default). The assistant creates a "Modicon Telemecanique" sub-folder by default, called "Vijeo Look", in which all the tools associated with the product can be found.
7	Launch installation	Recheck the configuration of parameters before launching the installation.
8	Installing the Uni-telway driver	Once all the components of Vijeo Look have been installed, the installshield will ask you to configure the installation of the Uni-telway driver.

The installshield is installing Vijeo Look and the other components you have selected.

The installshield installs OPC Factory Server by default, followed consecutively by MSDE, Visual Basic Application, Vijeo Look, then Java Runtime and the Uni-telway communication driver.

<p>Note: When installation is complete, do not forget to restart your computer to ensure all the installed components have been taken into account.</p>
--

Uninstalling Vijeo Look and its different components

Description

Note: Before uninstalling Vijeo Look, it is vital to first **transfer the software protections to another computer** (see *Transferring protections*, p. 15), otherwise it will be no longer possible to continue using Vijeo Look.

To uninstall Vijeo Look and the other components, proceed as follows:

- uninstall, using the "Add/Remove programs" command in the "Control Panel", the following programs:
 - Java Runtime Environment,
 - OFS Configuration tool,
 - OPC Factory Server
 - Uni-telway,
 - XWAY,
 - Vijeo Look,
 - MSDE,
 - Laplink (if set up).
 - switch your machine on again.
-

License management

Description

When setting up Vijeo Look you have 21 days to request your license from Schneider Automation.

During these 21 days the status of your software is "Unauthorized" and remains so until entry of the permanent authorization code provided by Schneider Automation.

Reminder:

- once installed, it is necessary to obtain a definitive license,
- once this license has been obtained, it is possible to transfer the license to another work station,
- if you purchase a later version of Vijeo Look, a simple update is all that is necessary.

Note: Once the license has been obtained, it is possible to transfer the license to another work station (see below).

To obtain your license

During the first launch of Vijeo Look, you are asked to enter the "serial number" and "reference number" so that a work station may be identified in order to obtain your license.

To obtain the permanent code of the software:

Step	Action
1	Enter the serial number and reference number, then click "Next". The CopyControl program generates a setup code.
2	You can generate the demand file now or later.
3	Correctly fill in all the information requested, then click "Next".
4	Send this document by Fax or by E-mail to receive the permanent authorization code.

Performing an update.

There are 6 different packages for Vijeo Look:

- "buildtime/runtime" 128 I/O, for a single OFS server,
- "buildtime/runtime" 512 I/O, for a single OFS server,
- "buildtime/runtime" 1024 I/O, for all OPC servers,
- "runtime" 128 I/O, for a single OFS server,
- "runtime" 256 I/O, for a single OFS server,
- "runtime" 1024 I/O, for all OPC servers,

When you purchase Vijeo Look, you can ask for an update in order to have more I/Os.

For this, you must purchase the corresponding commercial reference, then, on receipt of the order, create a license demand as for a first purchase. For an update, the definitive version will only be effective on receipt of the definitive code issued by Schneider.

Transferring protections

It is possible to set up Vijeo Look on several machines; however, once a protection is transferred, Vijeo Look will only be active on the machine possessing the software protections.

It is therefore possible to transfer a protection from one machine to another as follows (example of a transfer from machine A, in which the permanent authorization code is found, to machine B):

- after setup on machine B, note the generated code,
 - on machine A, click "Protection transfer" in the main menu,
 - enter and confirm the setup code of machine B,
 - click "Recover the authorization code" to validate the transfer, the license of machine A is rendered invalid and a new code is generated for machine B.
-

Vijeo Look Registration Request

Information

DATE:

SERIAL NUMBER:

REFERENCE NUMBER:

INSTALLATION CODE:

UPDATE NUMBER:

COMPANY NAME :

CONTACT NAME :

ADDRESS :

CITY :

ZIP CODE :

STATE :

COUNTRY :

EMAIL :

PHONE :

FAX :

[Stick the product label here]

Vijeo Look Upgrade Registration Request

Information

DATE:

SERIAL NUMBER:

REFERENCE NUMBER:

INSTALLATION CODE:

UPDATE NUMBER:

COMPANY NAME :

CONTACT NAME :

ADDRESS :

CITY :

ZIP CODE :

STATE :

COUNTRY :

EMAIL :

PHONE :

FAX :

PREVIOUS SERIAL NUMBER :

PREVIOUS REFERENCE NUMBER :

[Stick the product label here]

Main functions of Vijeo Look



At a Glance

Subject of this Chapter

This chapter describes the main functions available in the synoptics of Vijeo Look.

What's in this Chapter?

This Chapter contains the following Maps:

Topic	Page
The main tools of Vijeo Look	20
Description of the main functions of the "Insert" menu	22
Description of the main functions of the "Tools/Application/Configuration Explorer" menu	24

The main tools of Vijeo Look

At a Glance

The main tools of Vijeo Look are concentrated on the Visual Basic software application, the ActiveX and Beans Components, trend curves, viewers and data bases.

Description of the main tools:



Menu	Submenu	Description
Display Display	Visual Basic editor	This link with Visual Basic is used to develop scripts.
Insert Insert	ActiveX Control	Allows ActiveX controls to be inserted in a synoptic. It should be noted that the ActiveX controls shown in this field must be pre-selected in the menu (see Tools/Ergonomics/ActiveX Controls).
Insert Insert	Bean component	Allows a Bean component to be inserted in a synoptic. Unlike the ActiveX Controls, all Bean components shown in the Project are displayed without pre-selection.
Insert Insert	Trend curves	Enable analog data to be visualized in trend curve form.
Insert Insert	Alarm window	Displays the status of alarms in real time.
Insert Insert	Log window	Displays archived data.
Draw Draw		Allows synoptics to be drawn using native graphic elements.
Animation Animation		Allows the graphic elements of a synoptic to be animated according to real time variables.
Tools Tools	Application	<ul style="list-style-type: none"> ● access to the OFS configuration via the configuration tool, ● access to the Vijeo Look configuration tool (configuration tool of the log server, data server, etc.).

Menu	Submenu	Description
Tools <div style="border: 1px solid black; background-color: #cccccc; padding: 2px; display: inline-block;">Tools</div>	Project	Enables an existing project to be opened, a new project to be created and to restore/archive a project.

Description of the main functions of the "Insert" menu

ActiveX

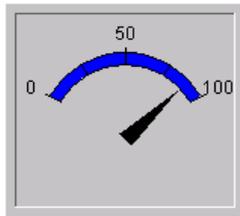
The ActiveX are objects that can be easily programmed using Visual Basic for Application. You can for example insert the ActiveX "Microsoft Web Browser" in order to display an HTML page (see *Example of inserting an ActiveX*, p. 40).

Bean component

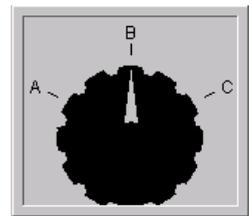
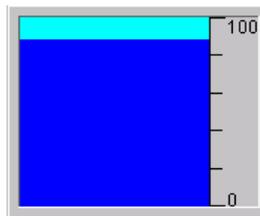
Bean components are objects (like the ActiveX) used to send back data supplied by PLC variables (see *Example of inserting a Bean component*, p. 41).

We can for example display the rotation value of a motor using an analog measuring device.

Some examples of Bean Components:



Measurement devices

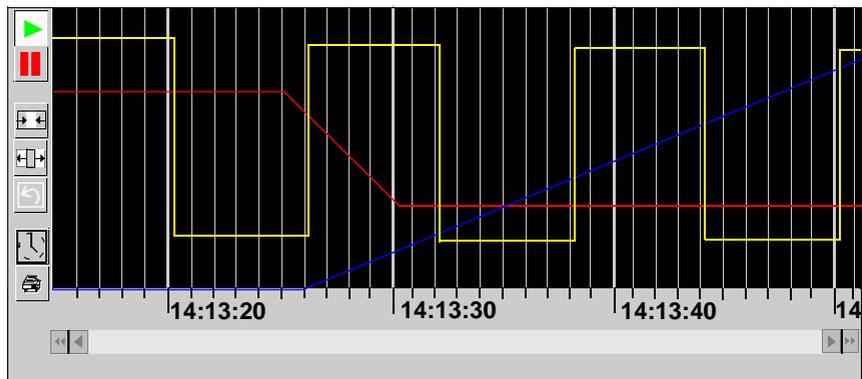


Switch

Trend curves

The trend curve is used to display in graphic form the evolution over time of one or more variables. Several trend curves can be concatenated in a synoptic, the only limitation being the size of the physical space available.

It is also possible to insert several "Trend curve" windows into the same synoptic. Illustration:



The main characteristics of the trend curves are:

- up to eight registers and/or bits can be displayed for each log,
- Log and Real Time modes,
- the coordinate axis (amplitude) is configurable for each "Trend curve" window,
- the abscissa axis (time) is configurable between 1 second and 32767 days,
- zoom functions,
- an unlimited number of log displays per project.

Alarm window

The alarm Viewer is an ActiveX that displays the status of the alarms. Several alarm Viewers can be created in the one synoptic, the only limitation being the size of the physical space available.

Illustration:



The screenshot shows a software window with a toolbar at the top containing icons for alarm actions (stop, start, acknowledge, reset, etc.). Below the toolbar is a table with the following data:

Date	Hour	Title	Name
24/08/01	10:36:25:532	Alarm on - not ack	Device1.Default01
24/08/01	10:36:25:532	Alarm on - not ack	Device1.Default01

The main characteristics of the alarm Viewers are:

- an unlimited number of alarm Viewers in each project,
- the format of the alarm text is totally configurable.

Log window

The Log Viewer is an ActiveX control which displays the data saved in the data base. It is possible to display all the data or, by using filters, to display only a part of the data. Several Log Viewers can be inserted into a synoptic, the only limitation being the size of the physical space available.

The main characteristics of the Log Viewer are:

- an unlimited number of Log Viewers for each project,
- for each Log Viewer, one or more filters can be created,
- Display:
 - change in an alarm's status,
 - change in a bit's status,
 - change in a word's value.

Description of the main functions of the "Tools/Application/Configuration Explorer" menu

General Certain "Configuration explorer" tabs appear only if the "Advanced parameters" option is selected from the "Display" menu of "Configuration explorer".

General parameters Using the general parameters, we can configure:

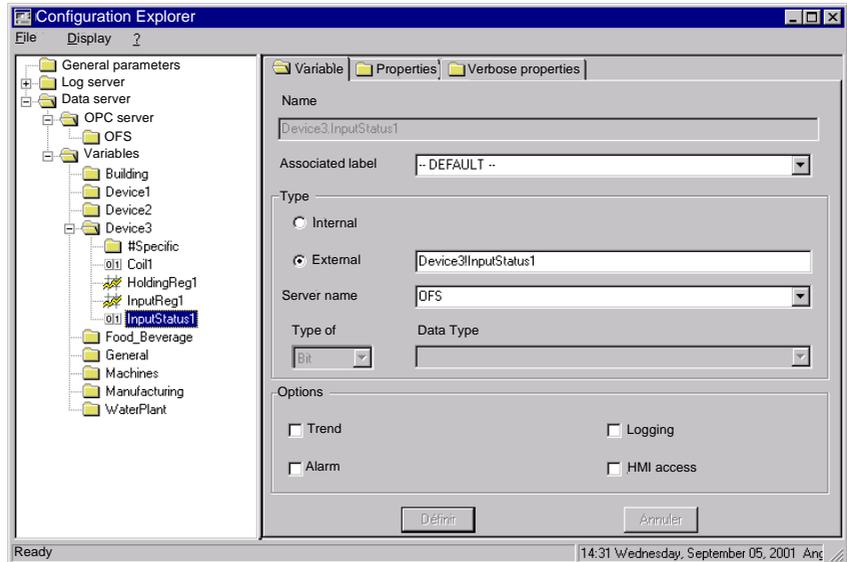
- the filters,
- the association of tags,
- the properties of variables,
- the property ranges of variables,

Log server The log data server collects and saves data in real time from the Real Time Data Server. The trend and log viewers display the logged data.

This version of the software is qualified to use the following standard data bases:

- Access 2000,
- MSDE (Microsoft Data Exchange).

Data server The data server is used to create and to set up the variables (bit, register, text) to be used in synoptics and/or archived. It is also used to enhance the properties of variables by adding user parameters. Illustration:



Reminder about the OFS configuration tool



Reminder about editing aliases

Definition

An alias is a variable used by OFS whose properties include a name, a communication protocol and a table of symbols file (this last property being optional).

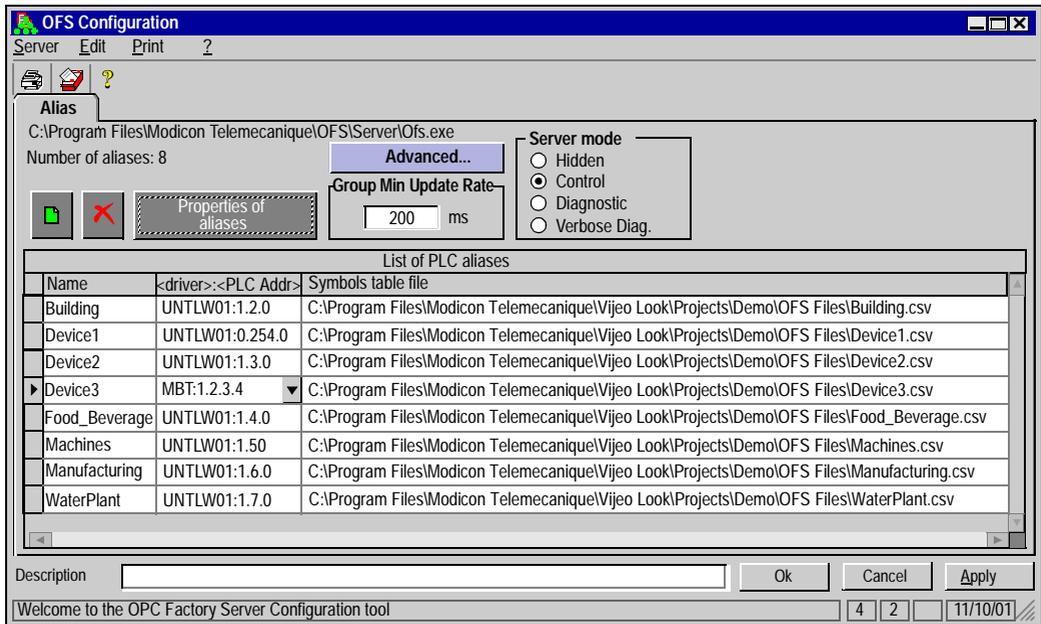
Creating an alias

Aliases are edited using the OFS configuration tool, named "OFSconf.exe", which is found in: ...\\Ofs\OFSconf\OFSconf.exe.

The OFS Configuration Tool main window shows the aliases listed in a grid, the "**Server Mode**" option and the "**Group Min Update Rate**". This data covers most user requirements.

Note: Vijeo Look is preconfigured with OFS. Several aliases have been created for the operation of the demonstration project.

Illustration:



The table below describes the fields of the above screen:

Server mode	<p>Hidden: the server is invisible on screen.</p> <p>Control: the server is iconized but only the system menu is accessible (right mouse click).</p> <p>Diag. : a complete set of diagnostics windows is displayed during server execution, including a plotting window displaying warning and/or error messages.</p> <p>Verbose diag.: the plotting window displays detailed information messages in addition to errors and warnings. The rest is identical to "Diag." mode.</p>
Group Min Update Rate	Minimum update rate allowed for groups. The update rate should be set by the client as a multiple of this value. Numerical value in ms. Range: [10..32767]
"Advanced" button	Display seven additional tabs for experienced users.
Site name	Here the user may enter up to 50 characters of text in order to identify the configuration of the aliases entered. This text appears at the top of the print file. If you make a back-up copy, it is saved in the chosen file. It does not figure in the configuration of the OFS server.
OK	Configuration validation and exiting the Configuration tool.

Apply	Configuration validation without exiting the Configuration Tool.
Cancel	Canceling modifications made since the Configuration tool was launched or since the "Apply" button was activated. A confirmation request message is displayed.

The aliases grid is made up of 3 columns which contain the most important information on each device.

Creating an alias involves:

- assigning a name,
- defining the network address of the device, which includes the network driver and the device address,
- Providing a Symbols table file name (optional),
- setting the alias properties which are related to how the server will behave towards the variables created on that alias.

These operations are all accessible via click-sensitive areas in the grid and the "Alias properties" button.

Note: The information on the number of aliases declared is displayed. The "Create new alias" and "Clear current alias" buttons allow an alias to be added to the grid and the selected alias to be deleted.

Note: Once an alias has been created, it is necessary to close and then reopen the OFS server to integrate any modifications made using the configuration tool.

	<p>CAUTION</p>
	<p>Using the aliases</p> <p>A device should be associated with a single and unique alias. If two aliases point to the same device and are used simultaneously, the communication will malfunction. The properties will be the same for both, and set to the properties of the alias first used to create an item. In the same way, using an alias and accessing the same device directly from the address will have similar results.</p> <p>Failure to observe this precaution can result in injury or equipment damage.</p>

Sort function in the grid:

The aliases can be arranged in the grid according to the parameters associated with the alias:

- Name of alias, driver, symbols table file. Simply click on the upper strip of the grid in the appropriate column. Arrangement in alphabetical order.
 - Other parameters: activate the "Edit ->Sort" menu and select the parameter you want. They are arranged alternately in increasing, or (by clicking again) decreasing order of values (e.g.: for a binary value parameter, increasing signifies all the aliases with the value 0, then all those with the value 1).
-

Symbols table file

A symbols table file can be associated with the alias, in order to provide access to the symbols for the variables of this device. The symbols file is generated by the PLC programming software, e.g. PL7 for Premium/Micro or Concept for Quantum. Clicking in the "Symbols table file" area for the selected alias in the grid brings up a file explorer:

The file types that can be inserted are listed in the "type of files" list box. Select the appropriate file type.

Enter the file of your choice and click "Open". The file name and directory will then be displayed in the grid.

Start-up



5

At a Glance

Subject of this Chapter

The aim of this chapter is to help you with the realization of your projects. We shall explain with the use of concrete examples how some of the demonstration project blocks (delivered with the product) were created.

What's in this Chapter?

This Chapter contains the following Maps:

Topic	Page
Creating a project	30
Detailed explanations of some parts of the demonstration project	31
Creating part of the "manufacture" synoptic	32
Creating part of the "purification" synoptic	35
Inserting an ActiveX and a Bean component	40
Writing a variable	42

Creating a project

Description

The following table describes the procedure to be followed to create, launch, and archive your project:

Step	Action
1	Before launching Vijeo Look, it is necessary to create all the aliases (See <i>Reminder about editing aliases, p. 25</i>) of your project with the OFS configuration tool, <ul style="list-style-type: none">● assign a name,● choose a network (MODBUS+, Uni-telway, etc.)● validate. If you have a symbol table (See <i>Symbols table file, p. 28</i>)file from PL7 or another software, you can assign it to the alias.
2	Once the alias has been created, it is necessary to configure and activate the communication driver (the Uni-telway driver is provided with the product).
3	Launch Vijeo Look.
4	In the "File" menu, click on "New". The window "New synoptic" will then be displayed. Click on OK to access your project.
5	In the "Tools" menu, click on "Application" then "Explorer configuration tool" to configure all your variables , alarms and logs.
6	You are now in Vijeo Look "Edit" mode: you can now create your synoptics.
7	Once your synoptic has been created, select "Execution" mode from the "Mode" menu to test it.
8	You can archive your project by clicking on the "Tool" menu, then "Project", and finally "Archive/Restore".

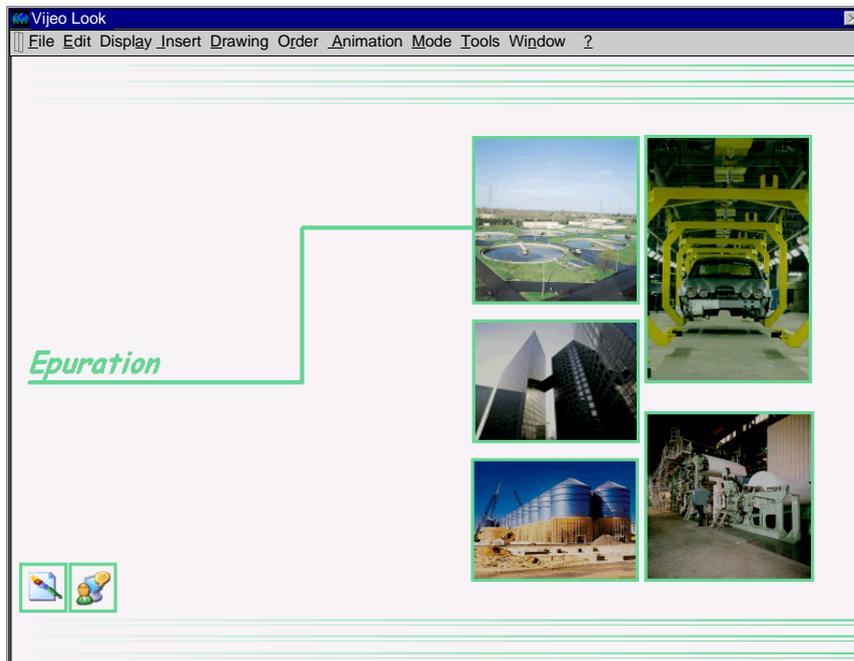
Detailed explanations of some parts of the demonstration project

Description

The Vijeo Look demonstration project is made up of 5 parts:

- manufacturing,
- purification,
- complex machines,
- agri-food
- construction.

Illustration:



In each synoptic there are buttons providing you with explanations on the creation of an animation or an object.

On the following pages you will find explanations which complete those associated of certain parts of the "demo".

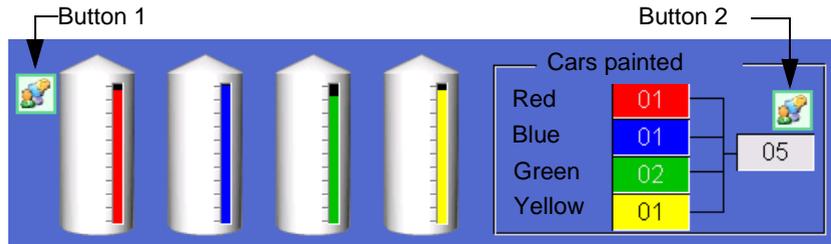
Creating part of the "manufacture" synoptic

General Description

In this demonstration project we can find two buttons (Alt + F1) that explain:

- the creation of the tanks (button 1),
- the creation of the painted cars counter (button 2).

Illustration of the example:



Note: To find out about the properties of a graphic object it is necessary to switch to "Edit" mode, then right click and select "Properties ...".

Description of the "tank" part

This tank along with the bar-chart is composed of two grouped objects:

- an image (bitmap),
- a rectangle.

Inserting an image

To insert an image proceed as follows:

Step	Action
1	<ul style="list-style-type: none"> • Before launching Vijeo Look: <ul style="list-style-type: none"> • copy all your images (only bmp, jpeg, gif, avi, emf, and wmf) into c:\Program Files\Modicon Telemecanique\Vijeo Look\Projects\project name\Bitmap Files, • launch Vijeo Look. • in Vijeo Look, other predefined images can also be inserted by clicking "Tool", then "Project" and "Libraries".
2	In the "File" menu, click "New". The window "New synoptic" will then be displayed. Click on OK to access your project.
3	In the "Insert" menu click "Image" then select and validate. The image is inserted.

Creating a bar chart

To create a rectangle showing the level of the tank, proceed as follows:

Step	Action
1	Before launching Vijeo Look: <ul style="list-style-type: none"> ● create an alias (give a name, and define the network type) in the OFS configuration tool (see <i>Reminder about editing aliases</i>, p. 25), then validate, ● launch Vijeo Look.
2	In the "File" menu, click "New". The window "New synoptic" will then be displayed. Click on OK to access your project.
3	In the "Draw" menu create a rectangle.
4	Select the rectangle that is created and go to the "Animation" menu, "Color", then "Bar chart".
5	The "Draw" and "Aspect" tabs are used to define the object.
6	Select the "Bar chart" tab and click on the arrow of the drop down list in the "Measure" window.
7	Click on the button in the "Clusters" window, select your alias and your variable (giving the level) to be associated with the Bar chart, then validate. The Bar chart is created and defined.
8	Click the "Mode" menu, then "Execution". We are now in execution mode, and the bar chart shows the level of the tank.

Description of the counter part

We can change the value of an object using the mathematical operator "=". Here we add 4 internal variables, which correspond to the number of cars painted per color.

Creating a counter

To create a counter showing the number of cars painted red (for example), proceed as follows:

Step	Action
1	In the "File" menu, click "New". The window "New synoptic" will then be displayed. Give a name to your synoptic, then validate
2	In the "Draw" menu, click on text and write a character string.
3	Select the text then go to the "Animation" menu, "Text", then click "Measurement of states".
4	The "Draw" and "Aspect" tabs are used to define the object.
5	Select the "Display measurement of states" tab and click on the arrow of the drop down list in the "Measure" window.
6	Click on the button in the "Clusters" window, select your alias and your variable (giving the number of cars) to be associated with the text, then validate. The text is defined.

Perform the same procedure four times for this example.

To create a counter showing the total number of painted cars, proceed as follows:

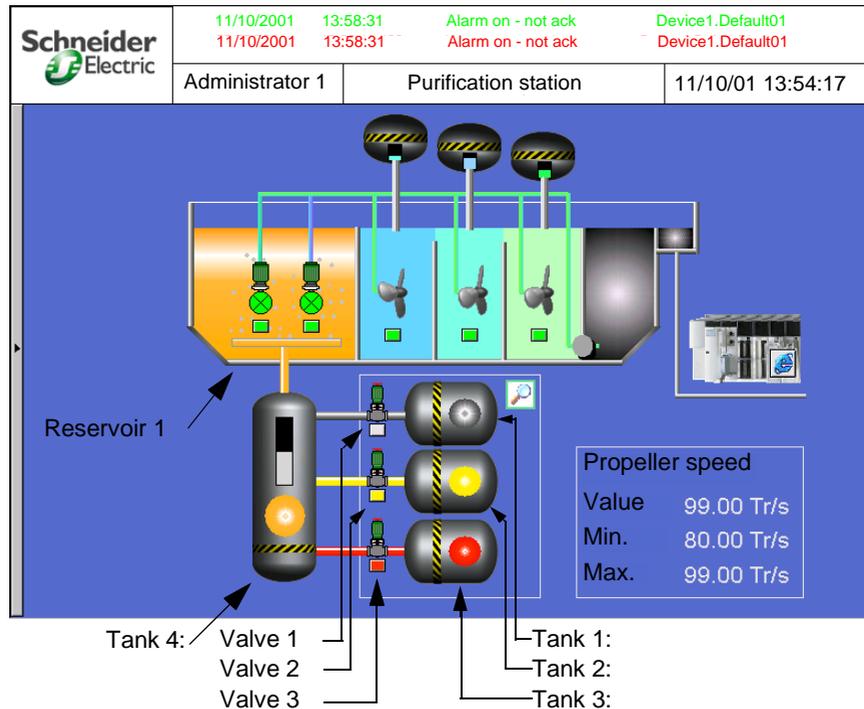
Step	Action
1	In the "Draw" menu, click on text and write a character string.
2	Select the text then go to the "Animation" menu, "Text", then click "Measurement of states".
3	Select the "Display measurement of states" tab and write the formula giving the sum of the four counters: " $= Var1 + Var2 + Var3 + Var4$ " (for example) then validate. The counter showing the total number of painted cars is created.
4	Click the "Mode" menu, then "Execution". We are now in execution mode. The counter shows the total number of painted cars.

Creating part of the "purification" synoptic

Description

This demonstration project uses for the most part the "Status command", via the bits and animation object "Color status groups". As for the "manufacturing demo", the insert images tool is used to integrate the PLC photo.

Illustration of the example:



The tanks have been created by inserting an image, then superimposing an ellipse ("Draw" menu).

The tanks are distinguishable by their contents and their color:

- Tank 1: blue coloring,
- Tank 2: yellow coloring,
- Tank 3: red coloring.
- Tank 4: the coloring color depends on the status of the valves V1, V2 and V3.

Creating an On/Off button

Creating an On/Off button for the valve:

Step	Action
1	Before launching Vijeo Look: <ul style="list-style-type: none"> ● create an alias (give a name, and define the network type) in the OFS configuration tool (see <i>Reminder about editing aliases, p. 25</i>), then validate, ● launch Vijeo Look
2	In the "File" menu, click "New". The window "New synoptic" will then be displayed. Click on OK to access your synoptic.
3	In the "Draw" menu create a rectangle.
4	Select the created rectangle and go to the "Animation" menu, "Send", then "Animated command".
5	The "Draw" and "Aspect" tabs are used to define the object.
6	Select the "Command status" tab and click on the arrow of the drop down list from the "Status" window.
7	Click on the button in the "Cluster" window, select your alias and your bit type variable (giving the valve status) to be associated with the "Command status", then validate.
8	Select the "Colors status" tab, set up the colors of the button according to its status and click on the arrow of the list from the "Status" window.
9	Click on the button in the "Cluster" window, select your alias and your bit type variable (giving the valve status) to be associated with the "Colors status", then validate. The animated Command is created and defined.
10	Click the "Mode" menu, then "Execution". Once in execution mode, one click on the button should change the status and the color.

In this example therefore, three buttons must be created altogether.

The color of the coloring in "tank 4" and in "Reservoir 1" depends on the status of the valves "V1, V2 and V3".

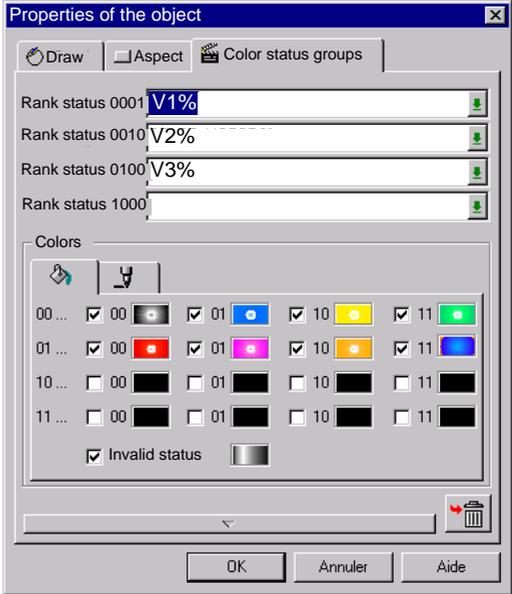
For example: if "V1" = 1, "V2" = 0 and "V3" = 0 then the color is blue.

Summary of possible combinations:

Status of V1	Status of V2	Status of V3	Color
0	0	0	-
0	0	1	Red 
0	1	0	Yellow 
0	1	1	Orange 
1	0	0	Blue 
1	0	1	Pink 
1	1	0	Green 
1	1	1	Light blue 

Creating a "Grouped status"

Changing the coloring color of "Reservoir 1" and "Tank 4" according to the status of the valves (example whereby the coloring color appears in the drawing for "Tank 4"):

Step	Action
1	In the "File" menu, click "New". The window "New synoptic" will then be displayed. Click on OK to gain access to your synoptic.
2	Using the "Draw" menu create an Ellipse.
3	<p>Select the ellipse, then go to the "Animation" menu, "Color", then click "Status groups".</p> <p>The following window appears:</p>  <p>Reading the color palette:</p> <ul style="list-style-type: none"> ● read from left to right, ● associate the two leftmost figures with those next to the color, ● for example: pink = 01 & 01 = 0101.
4	The "Draw" and "Aspect" tabs are used to define the object.
5	Select the "Color status groups",
6	In the "Status of rank 0001" window, associate the variable of valve 1. Click on the arrow from the drop down list.
7	Click on the button in the "Clusters" window, select your alias and variable (giving the valve status) to be associated with the "Status of rank xxxx", then validate. Do the same for "Status of rank 0010" and "Status of rank 0100". The "Status groups" animation has been created and finalized.

Step	Action
8	<p>Tick the boxes of all the possible combinations and assign the corresponding colors to these by clicking on the color window.</p> <ul style="list-style-type: none">● If you wish to create pink, you must add blue and red. Which corresponds to creating an "or" function between the status of V1, V2 and V3 for blue and red, i.e.:<ul style="list-style-type: none">● status for the color blue: 0001● status for the color red: 0100The result is: $0001 + 0100 = 0101$ for the color pink. This value is used to set up the colors in the diagram below. <p>Using the table described above that shows the color according to the status of V1, V2 and V3, it is possible to set up all combinations.</p>
9	<p>Click the "Mode" menu, then "Execution". Execution mode is now activated. To check that it is operating correctly, test the combinations of the table described above.</p>

Inserting an ActiveX and a Bean component

Example of inserting an ActiveX

Using an ActiveX (See *Description of the main functions of the "Insert" menu, p. 22*) you can, by a simple click, create a link in your project to an HTML page, an internet site, etc.

Description of the procedure to follow:

Step	Action
1	Launch Vijeo Look
2	In the "File" menu, click "New". The "New synoptic" window will then be displayed. Click OK to access your synoptic.
3	You are now in "Edit" mode. Pre-select the ActiveX controls in the Tools/Ergonomics/ActiveX Control menu.
4	Click on the "Insert" menu, then "ActiveX Control ...". The ActiveX controls present in this field are pre-selected.
5	Tick and select "Microsoft Web Browser", then validate.
6	Right-click on the ActiveX, then click on "Visualize script".
7	Type the following code (example of accessing the Schneider Automation site): Private Sub Mimic_Open WebBrowser1.Navigate2 ("http://www.schneider-automation.com") End Sub
8	Return to the Vijeo Look synoptic, maximize the ActiveX so as to view a maximum of information, and save your project.
9	Click the "Mode" menu, then "Execution".
10	You are now in "Execution" mode: Internet should open and launch the www.Schneider-Automation.com site

Note: You can, for example, create your own browser on the internet using the tools offered in the ActiveX script. By right-clicking on the mouse, a list appears: click on "List Properties/Methods". All of these tools can be used to develop in VBA and create scripts for your applications.

Example of inserting a Bean component

With Bean components (See *Description of the main functions of the "Insert" menu, p. 22*) objects can be used to display numerical values by creating a link between the variable and the Bean component.

Description of the procedure for displaying a numerical value via an analog device:

Step	Action
1	Launch Vijeo Look
2	In the "File" menu, click "New". The "New synoptic" window will then be displayed. Assign a name to your synoptic, then validate
3	You are now in "Edit" mode. Click on the "Insert" menu, then "Bean Component".
4	Select "widgetsex.jar" then "com" then "schneiderautomation" then "widgets" and finally, click on "MeterEx.class".
5	Select the Bean component inserted, then click on "List of Properties" in the "Display" menu.
6	Click on "Variable Links", then on "input", and, finally, on the right-hand drop down menu.
7	Click on the button of the "Clusters" window: the aliases created in the configuration tool appear. Select your alias and choose the variable to be associated with the Bean component. You can, for example, associate the "Speed" variable from the "Helix1" subdirectory of the alias "Waterplant". Save your configuration. In the "Mode" menu, click on "Execution".
8	You are now in "Execution" mode, and the display pointer indicates the value of the variable.

Note: When a Java Bean is used or inserted, the Java Runtime environment is automatically launched.

Writing a variable

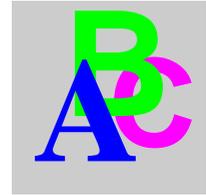
Example using a setpoint

Using the Send Setpoint command, it is possible to change the value of a variable while remaining in execution mode.

Description of the procedure to follow:

Step	Action
1	Launch Vijeo Look.
2	In the "File" menu, click "New". The "New synoptic" window will then be displayed. Click OK to access your synoptic.
3	You are now in "Edit" mode. Click on the "Mode" menu, then on "Text".
4	Type a comment (only visible in "Edit" mode).
5	Select your text then go to the "Animation" menu, "Send", then "Setpoint".
6	Associate your variable in the space provided in the Measurement field by clicking on the drop down menu, then on the button in the "Clusters" window. Next, choose your alias and the variable associated with this alias.
7	Associate a comment with your variable (@ + text) and choose your send mode (keyboard, etc.).
8	Click the "Mode" menu, then "Execution". You are now in execution mode, a simple click on the variable will enable you to change the value using the keyboard or another send mode.

Index



A

- ActiveX, 22
 - Insertion, 40
- Alarm window, 23
- Alias
 - Creation, 27
 - Edit, 25

B

- Bean component, 22
 - Insertion, 41

C

- Creating
 - a "grouped status", 38
 - a bar chart, 33
 - a counter, 33
 - an On/Off button, 36

D

- Data server, 24

I

- Insert menu, 22
- Inserting
 - an image, 32

L

- Log server, 24
- Log window, 23

T

- Tool Menu, 24
- trend curve, 22

V

- Vijeo Look
 - General Overview, 7
 - Installation, 10
 - License, 14
 - Tools, 20
 - Uninstall, 13

W

- Writing a variable, 42

