Intuitive software for HMI configuration

Vijeo Designer
Producer of your HMI configuration software
Vijeo Designer Offering

A leading publisher of software solutions for the development of HMI applications for terminals and industrial PCs Magelis range.

1. Intuitive design workshop for faster development (Simulation on PC for easy debugging)
2. A user friendly graphical interface for efficient operator dialogue
3. A repository of information that is easily shareable
4. Multimedia function (analog and digital video) for optimal monitoring
5. Native multilanguage function for simple duplication of your applications
6. Automated recipe update
7. Direct access to machine user manuals
8. Web Gate function for remote control (maintenance and centralized assistance)
9. Vijeo Citect Web Gate Client for total MES transparency with equipment
10. Automated recipe update
11. Vijeo Citect Web Gate Client for total MES transparency with equipment
Recipes for flexible and efficient production management

Printing easy to implement for publishing production-related documents (delivery slip, production reports, etc.)

Historical data for perfect traceability

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Vijeo Designer Offering

Vijeo Designer is built on the following principles: HMI application programming software should be **easy to use**, make extensive use of **standard technologies**, and use the **popular Java programming language** in scripts.

**Easy to Use**

The Vijeo Designer interface is intuitive and straightforward. Complex application features such as driver communications can be configured through a simple set of dialog boxes. Simple application features, such as changing panels, playing sound files, changing languages, running scripts, opening popup, and changing data values can be created through an easy to follow Wizard.

The Vijeo Designer Navigator and Toolbars allow users to easily traverse through Vijeo’s developer environment of even most complex application.

**Java Programming Language**

For more complex operations, Vijeo Designer employs the Java programming language for use in Scripts. Scripts provide limitless potential for developers to create processes for their applications.

Developers can use a simple Wizard to program a script to run when an alarm occurs, when a panel changes, when the HMI shuts down, when a timer expires, or under many other user definable events.

**Standard Technologies**

Vijeo Designer utilizes standard technologies such as Web Browsers, Screen Snapshots, Video, CF Card/USB Storage, and Printer support, to empower your HMI applications.
Multimedia
Vijeo Designer supports a wide array of multimedia technologies:

> **Web Browser.** The browser enables HMI applications to connect to any Transparent Ready Web Server (Class B) and view remote documents such as Excel .xls*, Word .doc*, Power Point .ppt*, Adobe Acrobat .pdf*, HTML .htm, and Video Files*.

* Only viewable on iPC and XBT GTW HMIs.

> **Screen Capture.** Using screen capture you can take a snapshot of an event as it happens on your HMI and save the snapshot to CF Card, USB Storage, or network storage.

> **Video.** Video support allows you to record and view live video on your HMIs. Video feeds from nearly any kind of Video camera, including Web Cameras**, are supported. Live video is recorded on the HMI using a versatile codec that can be easily converted into iPod or PDA compliant video.

** Web Cameras are only supported for iPC and XBT GTW.

CF Card/USB storage/Network Storage
Data files, project backups, Video, and Screen Captures can be stored on CF Cards, USB storage devices, or network storage. This level of versatility allows you to easily access your data and back it up.

Printer Support
With access to 80% of the HP printer portfolio, you can output HMI runtime data to a printer or create and print reports on your applications as you develop them. Text/ASCII printers, HP PCL3, PCL5 and Epson ESC/P printers are also supported.

Vijeo Designer’s Philosophy
The Vijeo Designer Philosophy is Multiple support for platforms, communication, languages, protocols, and accessibility.

> **Multi-Platform.** Vijeo Designer supports all the Magelis panel series: iPC Series, XBT GTW Series, XBT G Series, XBT GT Series, XBT GK Series.

> **Multi-Panel Communication.** Data can be shared between 8 different panels.

> **Multi-languages.** Up to 15 different languages can be used in an application. Applications can switch dynamically between languages during runtime.

> **Multi-protocols.** Multi-protocol supports enables you to connect your HMIs to a wide variety of equipment.

> **Multi-access.** Communicate from anywhere with HMI. With Web Gate, you can connect through an internet browser to your HMI from any location in the world. Or, by using Input Synchronization, you can connect and control a panel from any other panel in the same network.

Vijeo Designer’s Dynamics
An ever changing and demanding market place requires a software with a strong dynamic.

Vijeo Designer meets the needs of the changing market place by releasing a new software version twice-a-year. This enables Vijeo Designer to provide the most up-to-date technologies and features for our customers all the time.

We meet the needs of our customers through our worldwide customer support team. This team can assist any customer with the most basic of concerns to the most advanced problem.

Dedicated Services
A dedicated Vijeo Designer team can assist you in migrating your installed base over to Vijeo Designer.
Multi-Platform Architecture

Multi-platform support is one of the defining features of Vijeo Designer. With its ability to quickly and easily design specialized applications for a wide variety of Magelis HMI terminals, Vijeo Designer gives you the flexibility to develop and configure the perfect system for your market.

Download and run Vijeo Designer applications on any Magelis HMI terminal installed with Vijeo Designer Runtime. Applications can be easily converted from one platform to another with a simple mouse-click. You save time and money by having one design program for all your terminals.

- Developing applications is fast and easy.
- Employees only need to learn one design tool.
- Old terminals can be easily replaced with newer models.

Versatile Connectivity

Vijeo Designer makes it easy to connect and configure equipment, controllers, and peripherals to Magelis HMI terminals with little to no setup. Utilizing the wide range of connection ports available on Magelis HMI terminals, including Ethernet ports, serial links with several physical interfaces such as RS-232C, RS-422 and RS-485, fast USB ports, Vijeo Designer with Magelis HMI terminals provide versatile solutions for all aspects of your automation and control system.
Magelis XBT GT Series

Magelis XBT GT Series terminals provide a touch panel interface that can be used in a wide range of roles, including machine control, security access, alarm monitoring, and data logging. With features including multimedia support, Web Gate functionality, and data sharing, there’s no limit to how you choose to implement your Magelis XBT GT terminal.

Vijeo Designer’s visual layout makes accessing and customizing every feature of your Magelis XBT GT terminal intuitive and quick whether you are working with an optimized 3.8-inch monochrome panel, or a large 15-inch TFT 65,536 color graphical interface.

<table>
<thead>
<tr>
<th>Port</th>
<th>Connection</th>
<th>Number of Device</th>
<th>Transmission Speed</th>
</tr>
</thead>
<tbody>
<tr>
<td>COM1</td>
<td>SUB-D 9 pins RCS232C / RCS422 (RS485)</td>
<td>32</td>
<td>115.2 Kbps</td>
</tr>
<tr>
<td>COM2(1)</td>
<td>RJ45 Modbus 2 -wire RS485</td>
<td>32</td>
<td>12 Mbps(2)</td>
</tr>
<tr>
<td>Ethernet</td>
<td>RJ45 10BASE-T 100BASE-TX</td>
<td>48</td>
<td>10 Mbps 100 Mbps</td>
</tr>
<tr>
<td>USB</td>
<td>USB Module to RJ45</td>
<td>1</td>
<td>1 Mbps</td>
</tr>
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</table>

(1) Siemens MPI direct
(2) 115.2 Kbps only for XBT GT2110

<table>
<thead>
<tr>
<th>DRAM Memory</th>
<th>16 MB</th>
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<th>32 MB</th>
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<tr>
<td>SRAM Data</td>
<td>512 KB</td>
<td>128 KB</td>
<td>512 KB</td>
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<td>Flash EPROM</td>
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<tr>
<td></td>
<td>NAND</td>
<td>16 MB</td>
<td>16 MB</td>
<td>32 MB</td>
<td>32 MB</td>
</tr>
<tr>
<td>Video RAM</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>32 MB*</td>
<td>32 MB*</td>
</tr>
</tbody>
</table>

* 32 MB extension
Magelis XBT GK Series

Magelis XBT GK Series terminals offers the best-in-class features of the Magelis XBT GT Series with the addition of built-in programmable function keys, keypads, and an industrial pointer device. Although programming a function key requires only a few simple mouse-clicks, it offers a wide range of customizable options.

You can decide how the user interacts with the terminal, using one of or a combination of the following ways:

- Use the touch panel interface.
- Use the built-in function keys and industrial pointer.
- Replicate the XBT GK function keys and industrial pointer on a keyboard and mouse connected to the USB port of the XBT GK.

<table>
<thead>
<tr>
<th></th>
<th>XBT GK2120</th>
<th>XBT GK2330</th>
<th>XBT GK5330</th>
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</thead>
<tbody>
<tr>
<td>DRAM Memory</td>
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<td>32 MB</td>
<td></td>
</tr>
<tr>
<td>SRAM Data</td>
<td>512 KB</td>
<td>512 KB</td>
<td></td>
</tr>
<tr>
<td>Flash EPROM Application</td>
<td>NOR 8 MB</td>
<td>NAND 8 MB</td>
<td>32 MB</td>
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<tr>
<td>Video RAM</td>
<td>-</td>
<td></td>
<td>32 MB*</td>
</tr>
</tbody>
</table>

* 32 MB extension

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<th>Connection</th>
<th>Number of Device</th>
<th>Transmission Speed</th>
</tr>
</thead>
<tbody>
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<td>COM1</td>
<td>SUB-D 9 pins RC232C / RC422 (RS485)</td>
<td>32</td>
<td>115.2 Kbps</td>
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<tr>
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<td>RJ45 Modbus 2-wire RS485</td>
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<td>12 Mbps</td>
</tr>
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<td>Ethernet</td>
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<td>1 Mbps</td>
</tr>
</tbody>
</table>

(1) Siemens MPI direct
Magelis XBT GTW Series

Magelis XBT GTW Series terminals offer all the advantages of a Windows XP® embedded system along with a useful collection of pre-installed client applications including an Internet browser, an email client, and readers for .doc, .xls, .ppt, and .pdf documents.

Use Vijeo Designer to easily transform your Magelis XBT GTW into a powerful operator terminal.

| Number of variables (internal and external authorized per project): | 8,000 on XBT GT/GK, 12 on XBT GTW |

<table>
<thead>
<tr>
<th>Touch Screen Resolution (Pixel) Processor</th>
<th>RAM (SRAM)</th>
<th>Storage/ Internal Driver Reader Extension</th>
<th>Ethernet Ports I/O Ports</th>
<th>Power Supply Certifications Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>XBT GTW Series</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>XBT GTW450</td>
<td>8.4” LCD TFT SVGA 800 x 600 Celeron M</td>
<td>256-1024 MB</td>
<td>Compact Flash 1 GB 1 or 2 x PCMCIA (Type 1 or Type 3)</td>
<td>1 x 10/100 RJ45 4 x USB, 1 x RS-232, DIO</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100... 240 VAC, UL508, CSA Internet Explorer, Media Player, Office Reader, Vijeo Designer, Runtime</td>
</tr>
<tr>
<td>XBT GTW750</td>
<td>15” LCD TFT SVGA 1024 x 768 Celeron M</td>
<td>256-1024 MB</td>
<td>Compact Flash 1 GB Diskette and CDROM 2 x PCMCIA (Type 1 or Type 3)</td>
<td>1 x 10/100 RJ45 2 x USB, 2 x RS-232, 2 x PS2, 1 x LPT1</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td>100... 240 VAC, UL508, UL1604, CSA Internet Explorer, Media Player, Office Reader, Vijeo Designer, Runtime</td>
</tr>
</tbody>
</table>
Magelis Smart and Compact iPC Series

Magelis Smart iPCs and Magelis Compact iPCs offer the openness of Windows® based systems, the durability of industrial PCs, and the convenience of having the same cut-out and screen sizes as dedicated terminals, which makes converting from a Magelis graphical terminal to a Magelis iPC, and vice versa, extremely quick and simple.

Vijeo Designer lets you take advantage of Magelis iPC’s advanced features such as native Web browser support, third-party MPEG video playback and secondary data storage. The Magelis Smart iPC offers a silent solution with no moving parts, while the Magelis Compact iPC includes a hard drive and DVD drive for greater versatility.

Thanks to two Ethernet connections able to handle two separate networks, Magelis XBT GTW, Smart and Compact iPCs are perfect for mixing HMI control and video control (using Video over IP) on the same panel.

### Specifications

**Smart Series**

<table>
<thead>
<tr>
<th>Model</th>
<th>Touch Screen Resolution (Pixel)</th>
<th>Processor</th>
<th>RAM (SRAM)</th>
<th>Storage/Internal Driver Reader Extension</th>
<th>Ethernet Ports</th>
<th>Power Supply Certifications</th>
<th>Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Smart 8,4&quot;</td>
<td>8.4” LCD TFT SVGA 800 x 600 Celeron @ M 600 MHz</td>
<td>Celeron M @ 600 MHz</td>
<td>256-1024 MB</td>
<td>Compact Flash 1 GB 1 or 2 x PCMCIA (Type 1 or Type 3)</td>
<td>1 x 10/100 RJ45, 4 x USB, 1 x RS-232, DIO</td>
<td>100... 240 VAC, UL508, CSA Internet Explorer, Media Player, Office Reader, Vijeo Designer, Runtime</td>
<td></td>
</tr>
<tr>
<td>Smart 12”</td>
<td>12” LCD TFT SVGA 800 x 600 Celeron M @ 600 MHz</td>
<td>Celeron M @ 600 MHz</td>
<td>256-1024 MB</td>
<td>Compact Flash 1 GB 1 ou 2 x PCMCIA (Type 1 or Type 3)</td>
<td>2 x 10/100 RJ45, 4 x USB, 2 x RS-232, DIO</td>
<td>100... 240 VAC, UL508, CSA Internet Explorer, Media Player, Office Reader, Vijeo Designer, Runtime</td>
<td></td>
</tr>
<tr>
<td>Smart 15”</td>
<td>15” LCD TFT XGA 1024 x 768 VIA 667 MHz or Celeron M @ 600 MHz</td>
<td>VIA 667 MHz or Celeron M @ 600 MHz</td>
<td>256-512 MB, 256-1024 MB</td>
<td>CF 512 MB ou 1 GB Diskette and CDROM 2 x PCMCIA (Type 1 or Type 3)</td>
<td>1 x 10/100 RJ45, 2 x USB, 2 x RS-232, 1 x PS2, 1 x LPT1</td>
<td>100... 240 VAC, UL508, UL1604, CSA Internet Explorer, Media Player, Office Reader, Vijeo Designer, Runtime</td>
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</table>

**Compact iPC Series**

<table>
<thead>
<tr>
<th>Model</th>
<th>Touch Screen Resolution (Pixel)</th>
<th>Processor</th>
<th>RAM (SRAM)</th>
<th>Storage/Internal Driver Reader Extension</th>
<th>Ethernet Ports</th>
<th>Power Supply Certifications</th>
<th>Applications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Compact iPC 8,4”</td>
<td>8.4” LCD TFT SVGA 800 x 600 Celeron M @ 1.3 GHz</td>
<td>Celeron M @ 1.3 GHz</td>
<td>512-1024 MB</td>
<td>20 GB ou greater 1 x PCI, 1 x PCMCIA (Type 1 or Type 3)</td>
<td>1 x 10/100 RJ45, 4 x USB, 1 x RS-232</td>
<td>100... 240 VAC, UL508, CSA Internet Explorer, Media Player, Office Reader, Vijeo Designer, Runtime</td>
<td></td>
</tr>
<tr>
<td>Compact iPC 12”</td>
<td>12” LCD TFT SVGA 1024 x 768 Celeron M @ 1.3 GHz</td>
<td>Celeron M @ 1.3 GHz</td>
<td>256-1024 MB</td>
<td>20 GB ou greater 1 x PCI, 1 x PCMCIA (Type 1 or Type 3)</td>
<td>2 x 10/100 RJ45, 4 x USB, 1 x RS-232</td>
<td>100... 240 VAC, UL508, CSA Internet Explorer, Media Player, Office Reader, Vijeo Designer, Runtime</td>
<td></td>
</tr>
<tr>
<td>Compact iPC 15”</td>
<td>15” LCD TFT XGA 1024 x 768 VIA 667 MHz ou Pentium 4 M @ 1.7 GHz</td>
<td>VIA 667 MHz ou Pentium 4 M @ 1.7 GHz</td>
<td>256-512 MB, 256-2048 MB</td>
<td>20 GB ou greater Diskette and CDROM 1 x PCI, 2 x PCMCIA (Type 1 or Type 3)</td>
<td>1 x 10/100 RJ45, 2 x USB, 2 x RS-232, 1 x PS2, 1 x LPT1</td>
<td>100... 240 VAC, UL508, UL1604, CSA Internet Explorer, Media Player, Office Reader, Vijeo Designer, Runtime</td>
<td></td>
</tr>
</tbody>
</table>
Ease of Use

Vijeo Designer uses an intuitive, multi-window, graphical interface to simplify application design.

The interface is icon driven for drag-and-drop simplicity, and all settings are configurable using easy-to-read dialogs.

With a powerful integrated help system, Windows Vista® support, strong support of turnkey solutions for standard HMI requirements, such as alarms and recipes, and a library of over 4000 customizable images, Vijeo Designer provides the tools you need to develop your applications fast and efficiently.

Tool Windows

Tool windows display information about the project, terminals, and parts. They let you modify settings and properties with a few mouse-clicks.

Graphical Objects

Use Vijeo Designer’s large selection of graphical objects to quickly create a dynamic and effective interface. Create simple shapes, such as circles and rectangles, or complex shapes, such as scales and bezier curves. Or create new objects by grouping shapes together.
Ease of Use

Animation

Vijeo Designer provides easy to use dialogs to enable animation in the graphical objects you create. Simply assign variables to control the color, fill, size, position, rotation, and visibility. Tool chest items are pre-configured with their own behaviors to make animation even easier to use. Along with the objects in the graphical library, you can also animate JPEG, bitmap, and WMF images files.

Downloads

Update user applications and the Vijeo Designer Runtime with a single download. When downloading the modified application to the terminal, Vijeo Designer automatically downloads the latest Runtime as needed.

Depending on the terminal connections, you can download over the Ethernet port, Serial port, or USB port. You can also download to a CF card or USB drive and use it to download to a terminal if a physical connection cannot be made between the editor PC and the terminal.

HMI Objects

HMI objects provide turnkey solutions for common graphical HMI objects such as lamps, switches, and data displays, each with their library of images.

Data Manager Tool

With the Data Manager tool, you can use wizards to easily:
- edit recipe files on the HMI
- convert recipe files and data logging files generated at run time to .csv or .txt files
- Transfer those files between the HMI and PC.
Multi-Platform Support
Applications created for a particular terminal can easily be converted to a different terminal type with a single mouse-click.

This allows for easy application conversion when upgrading terminals or for reusing the same application among multiple terminals.

In the Editor, the panel conforms to your selected target’s characteristics (such as screen size and color) and capabilities (such as networking abilities).

Multi-Language Support
Supporting 40 alphabets, including English, Chinese, Cyrillic, Arabic, and Hebrew, Vijeo Designer makes it easy to add text in several languages to the labels in each object and change between the languages in runtime.

Multi-Language Support

Simulation
Test your application before going into production using Vijeo-Designer’s simulation feature. Simulation displays exactly what appears on the HMI terminal. You can also simulate PLCs attached to the terminal and their variable values.

Toolchest and Image Library
Customize your application using professionally designed, ready-to-use graphical objects from the Toolchest. With a library of over 4000 images, categorized into logical folders, the exact image you need is easy to find.

You can resize each image can be resized without any loss to the image quality.
Error Handling

Vijeo Designer makes handling compiler errors quick and easy. The Feedback Zone displays the error number and the error message. Double-click the message to be taken directly to the error.

PLC Symbol Imports

Vijeo Designer’s advanced PLC symbol import feature allows you to import symbol and variable files from PLC control software such as Unity Pro, TwidoSuite, PL7, Concept, ProWORX32, and ModSoft, and use them right away in your HMI application. Changes to PLC configuration are easily updated in Vijeo Designer as PLC symbols are linked to Vijeo Designer variables.

As the API symbols are linked to the Vijeo Designer variables, changes made to the API software configuration are easily updated in Vijeo Designer.

Reports

Create reports to see an overview of your panels and variables. Panel reports display all objects on a panel. Reports can also display information about each object when the Object Information property is enabled. Variable reports can display a list of all variables and their cross references, or a filtered list of only the variables you wish to display.

On the terminal, you can use the Screen Snapshot feature to capture a summary page to create a report.

Develop your own production reports that enable you to publish your own delivery slips and production reports (printer support, bar codes, etc.).

You can save the report to file or print it. You can generate a report from alarm files, recipe files, and data logging files.
HMI Features

Take advantage of Vijeo Designer’s key HMI features, designed to ensure ease-of-use, and comprehensive enough to ensure powerful solutions for your production process.

Alarm System
Build an extensive alarm system that will log an alarm for each error that occurs. Create an easy-to-read alarm display, where the panel operator can view detailed alarm information, quickly diagnose faults, and reduce system downtime.

Simple Alarm Configuration
- Monitor bit addresses by setting up basic alarms with discrete variables, or monitor word addresses by setting up alarms with integer or float variables.
- Set the alarm type – Limit, Deviation by Percent, or Deviation by Fixed – to trigger alarms when the variable value goes out of range.

Reliable Alarm Monitoring
- Select an Alarm Summary view-Active, History, and Log. The Alarm Summary displays a list of alarm messages and other pertinent information about the alarm, such as the date and time when the alarm was activated or restored.
- Select an Alarm Banner to display active and unacknowledged alarm messages on a specific panel or on all panels.
- Print alarms and save alarm logs.
- Output an alarm to the digital output port and alert panel operators by playing a sound file or changing the backlight color.

Data Logging Feature
Analyze, audit, and track performance in a production process using Vijeo Designer’s powerful data logging functions, and display logged data on a clearly drawn trend graph.

In your production process, you may need to collect data for the purposes of figuring out volume, speed, or units produced over a period of time. Or you may need to collect data about certain elements on a production line to comply with company guidelines.

Alarm Configuration:
Use of variables and alarm components

- Configure Vijeo Designer to display and monitor diagnostic alarms in an alarm summary or alarm banner. You can set up an alarm category so you can display and monitor both diagnostic alarms and variable alarms.
- Use alarm groups to organize your variable alarms and display them in an alarm summary.
- Define alarm severity and alarm thresholds so that the alarm triggers when an input value deviates from the threshold value.
- Set alarm behavior for acknowledging alarms.

Whether your application is large or small, Vijeo Designer’s comprehensive alarm system provides you with the capability to configure, manage, monitor, display and acknowledge alarms by using variable values and alarm parts.
Powerful Solution for Data Collection

With Vijeo Designer’s data logging feature, you can:

➤ **Determine how often you want your data collected**, at regular intervals or when a trigger is activated.

➤ **Manage how much data is being stored** and where the data will be stored—in DRAM, SRAM, USB storage, CF card, or network storage.

➤ **Convert data logging files** into .csv files so you can collect and process your data in a database.

➤ Copy data logging files to a storage device.

➤ Configure your trend graph to monitor logged data from multiple terminals.

➤ **Display logged data in Real-Time Trend Graphs**, Historical Trend Graphs, or Plot Trend Graphs. Use Vijeo Designer’s Toolchest to easily create the graph that you want.

Recipes Feature

Maintain a consistent production process with Vijeo Designer’s Recipe feature, which provides a state-of-the-art operator interface to monitor or control machines or automated processes.

The Recipe feature allows you to work with multiple recipe values at the same time.

Using the Send operation, you can write recipe values from the terminal to your equipment. Using the Snapshot operation, you can read recipe values from your equipment to the terminal.

In a production process, it is always important to maintain consistency and develop an environment that is adaptable to change. With Vijeo Designer’s Recipes, you can create an operator interface, define your production parameters, create a snapshot of all the parameters, collect the data in one recipe file, or change your entire production process simply by loading a new recipe. Its simplicity allows you to easily adapt to workflow changes without having to go through a complex process.
Intuitive, User-Friendly Operator Interface

> **Easy-to-use Recipe spreadsheet editor.**
> Ability to create multiple recipes in a recipe group.
> Ready-made Recipe parts for managing recipes.
Use buttons such as Load, Save, and Send for creating custom screens. Or use complete parts such as Recipe Manager for all recipe operations so you can be up and running right away.
> Manage recipe groups or perform recipe operations by using the built-in parts to easily create a Recipe Manager and buttons for loading, saving, sending, and taking snapshots.
> Ability to control the Min/Max values that the operator can enter at Runtime.
> Ability to copy recipe files to a storage device.
> Ability to use Data Manager to retrieve, send, and edit recipe files, and to convert recipe files to .txt or .csv files.

> Create or modify recipes at Runtime. Send and retrieve recipe data on the equipment.
> Use the snapshot operation to update recipe data from the equipment to the terminal, and then use the Import or Upload function to update recipes in the Editor.

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**Recipes:**
32 groups of 256 recipes containing 1024 ingredients
Security
Guard the integrity of your terminals and projects with Vijeo Designer’s powerful security features. Use security to control special operations that only authorized operators should perform. Provide a high level of security for your system to prevent accidental or deliberate actions that could potentially damage the integrity of your system.

Proactive Security Measures
With an easy-to-use interface, you can build a secured application by defining different levels of security and different users, creating a security login window, and assigning access to panels, parts, terminals, and Web Gate connections.

Protection from Potential Security Breaches
> Prevents unauthorized operators from opening protected Vijeo Designer applications.
> Prevents unauthorized operators from accessing a terminal’s secured panels, secured objects such as switches and data displays, secured popup windows, secured function keys, and secured parts.
> Locks out objects from unauthorized operators, by providing the ability to gray out locked objects, display a locked-out icon on the object, or set locked objects to be invisible.
> Stops unauthorized operators from downloading projects to a secured terminal.
> Prevents unauthorized operators from using the Command Line or the Data Manager to transfer Runtime data to and from the terminal.
> Prohibits unauthorized operators from using Web Gate to access a terminal.
> Logs the operator out after a certain amount of inactivity time, ensuring an operator doesn’t stay logged into an unattended terminal.

Data Logging:
80 on XBT GT11xx,
100 on XBT GT/ GK2xxx+, 250 on XBT GTW

Use the Security toolbar to create or delete security groups and users, and to perform other operations

Configure security definitions for the security group

Set up a new user, and assign a password and security group
Graphical Objects

Create a dynamic and illustrative interface using Vijeo Designer’s large selection of graphical objects.

Vijeo Designer provides effective design tools for you to create applications. With the different types of graphical objects available – shapes, parts, and Toolchest and image library – and easy object configuration, you can quickly develop an easy-to-use, intuitive, and consistent user interface for panel operators.

You can place graphical objects on a panel and use them individually or in combination with other objects to create a clear, visual representation of your production process, machinery, and other hardware.

Animate the graphical objects you create by assigning variables to control the color, fill, size, position, rotation, touch, visibility, and animation.

Draw Basic Shapes

- Features basic shapes such as the rectangle, line, dot, arc, ellipse, pie, polyline, polygon, text object, and image object.
- Create designs that represent production lines, conveyor belts, and other types of machinery processes. Design text labels and messages.
- Import and paste images from other sources onto the panel.

Draw Parts with Advanced Graphic Functions

- Choose HMI objects such as switches, lamps, data displays, video, meters, message displays, bar graphs, trend graphs, and alarm summary to display and control process information, providing panel operators with useful information to manage the process.
- Quickly and easily create date displays, switches and other ready-to-use HMI objects.

Place Images from the Toolchest and Image Library

- Choose from over 4000 professionally designed, ready-to-use graphical images from the Toolchest and Image Library.
- Easy-to-find images, which are organized in folder categories.
- Use the simple drag-and-drop method to place the image on your panel.
- Comes pre-configured with animation settings to make these Toolchest images even easier to use.
Vijeo Designer Customization

Vijeo Designer’s powerful features and intuitive user interface offers flexible solutions and the ability to customize your applications quickly and easily.

**Actions**

Vijeo Designer’s Actions feature enables you to set up global and panel actions so that at Runtime, you can effortlessly run an operation. This feature limits the need to create scripts, which can be complicated and time-consuming.

Instead, Vijeo Designer provides an Actions Wizard to help you set up many custom triggers and features quickly and easily, and an Actions Editor, which is an easy-to-read spreadsheet view of each action that has been created.

**Customizable Triggers and Features**

- Specify a trigger type to determine when the action will be run at Runtime.
  - on a periodic basis, such as every 10 minutes
  - on a schedule, such as every Monday and Wednesday at 08:00
  - based on conditions met, such as when the variable value is greater than 50
  - when an event occurs, for instance, on startup, on shutdown, on low space, or when touch panel.

- Create global actions that you can apply to your whole application or panel actions that you can apply to a specific panel.

- Set up interlock and specify the condition to enable the action to run.

**Supports Numerous Operations**

- Set up bit, word, or string operations.
- Change a panel or return to the previous panel.
- Open or close popup windows.
- Set up the sound options for a sound file.
- Change system and user languages.
- Set up Web Browser operations to enable you to navigate through documents and web content.
- Set up video operations.
- Set up a script.
- Retrieve system information.
- Copy data generated during runtime from the main or secondary drive to an optional drive on a terminal.
- Set up Runtime operations, such as restart Runtime, exit Runtime, display the configuration menu, or lock/unlock the system for maintenance downtime.
Multi-Language Support

In a Vijeo Designer project, you can set up multiple user languages, allowing you to easily switch languages at Runtime and adapt to the languages your product serves.

You no longer need to create and manage separate projects for each language you want to support.

Vijeo Designer enables you to apply different languages to a single project, saving you valuable time and effort on project development and maintenance.

Easily Adaptable to Language Demand

> Apply the system languages you want to display in the Vijeo Designer Runtime Configuration menu and error messages. Vijeo Designer supports multiple system languages, including English, French, German, Italian, Spanish, and Chinese Simplified.
> Apply the user application languages you want to display on your panel at runtime. Labels, text strings, alarm messages, and text objects will display the languages you defined. The user application languages available are dependent on the selected fonts.
> Define the language you want displayed in the Vijeo Designer Editor.
> Specify the font for your language. Many fonts are available for the supported languages.
> Ability to import or export language strings from a text file. This feature makes it easy for you to send language strings to translators for localization, eliminating the need to have a dedicated translator on-site to localize each panel and allowing you to decrease localization costs.
> Determine the method you want to use to switch languages. You can use Actions or create switches.
> Provides a winning solution for OEMs who want to target diverse global marketplaces or for large end-users who want to synchronize their manufacturing process globally, and create a single HMI application for all their plant locations throughout the world.
Resource Libraries

With the Resource Library, you can create a common look and feel in the color, font, text, and images in your application. Rather than configuring those settings again, you can reuse the resources again in the switches, lamps, data displays, and other graphic objects you create.

By carefully planning, designing, and then creating your resources, you can set up an intuitive user interface and a consistent look-and-feel to images, messages, and color schemes on your panels.

What You Can Count On

➤ Reduced maintenance. A change in color scheme, text string, font, or image need to be made in only one location – the Resource Library.
➤ Reduced errors. HMI applications that use the Resource Library create consistency. As a result, panel operators are less likely to misunderstand messages or color scheme.
➤ Reduced localization. In a multi-language application, when the same string is used in multiple objects, you only need to send out one string for localization if you use the Resource Library, not multiple instances of the same string.

Efficiency Enhanced

➤ Color, text, font, and image resources are supported by switches, lamps, message displays, meters, bar graphs, selectors, data displays, and color animation.
➤ Ability to define color, text, font, and image settings for the states supported by the object.
➤ Ability to define integer values for each property in each state.
➤ Easy to apply Resource Libraries to Vijeo Designer parts.
➤ Features easy-to-use Resource Editors that display the states and properties of objects associated with the resource.

Time Zone and Daylight Saving Time*

On embedded terminals, you can adjust the time zone and configure Daylight Saving Time in Vijeo Designer Editor or at Runtime.

*Available in Vijeo Designer Version 5.0.
Master Panels

Save time by creating a master panel of common objects and shared interface controls that can be applied to multiple panels in your application.

Like templates, master panels store common objects that can be used for all base panels, enabling you to create a consistent look and feel across your application and save development time.

You can use either one master panel or layer multiple master panels. Master panel layers allow you to choose the common objects that will show up on a panel and to determine the order in which the panel layers will be displayed at Runtime.

With master panel layers, you have the flexibility to use a master panel that contains all common objects or one that only contains select objects.

Reduce Time, Reuse Objects

> Features an efficient way to create common objects or images once and apply your panel design to many panels in your application. Examples of objects or images you may want to create only once are menus, navigation controls, common views, headers, and footers.

> Reduces panel creation and maintenance time. All you need to do is to make changes in the master panel. The changes you make are applied to all the panels that use the master panel. For example, a change to the company logo in the header needs only to be updated on the master panel.

> Allows VARs and OEMs to customize the look and feel of their applications.

> Enables you to set up an expression or variable that controls whether the panel layer will show or hide at Runtime.

> Allows system integrators to customize an HMI application for each specific customer – a valuable feature that enables system integrators to offer premium services to their customers.
Multimedia Features

Video Designer offers a wide range of multimedia features, providing perfect solutions for monitoring, reporting, training, and troubleshooting.

**Video**

Offering live video display, live video recording, video playback, and video snapshot, Video Designer’s video features are ideal for monitoring, training, and troubleshooting.

Video Designer provides a customizable Video Display part, a standard video signal to match your camera’s video signal, and comprehensive video settings and options for straightforward configuration.

**Recording, video (Magelis XBT GTxx40):**

3.2 Mb per minute with a maximum of 10 minutes per file. Up to 200 files managed (reading, creation)

**Extensive Video Capability**

Display live video from the terminal’s camera to monitor areas where faults typically occur, for example, a production line or a piece of machinery.

- Ability to record live video from the terminal camera’s video feed, important for recording errors that occur and for finding their causes.
- Plays video recorded on the terminal and video files (supports MP4 file format) added to your applications.
- Ability to save video to file for record keeping.
- Ability to copy the recorded video file to a storage device.
- Supports PAL and NTSC video signals.
- Ability to display live video feed on XBT GTW and Smart/Compact rPC terminals using a video capture device, such as a webcam.
- Ability to take a snapshot of the video display and store it in JPEG format or print it, typically used to capture information on the display for monitoring and troubleshooting purposes.
Image Capture Viewer

Vijeo Designer’s convenient Viewer makes displaying JPEG images on the panel easy. You can configure an Image Capture Viewer part to display on the terminal screen and video snapshots, saved in JPEG file format.

On XBT GT terminals, for video recorded at 320x200 resolution, you can store up to 200 video files (10 minutes maximum per video), captured at 3.2 MB/min.

For Magelis iPC and XBT GTW terminals, the maximum number of video files you can store depends on your capture hardware capability and your storage capacity.
**Report printing**

This integrated function meets the publishing needs linked to the precise steps in your process. It is used for printing, without screen display required, a report in a per-defined format whose variables will be replaced by the current values for the process. Printers dedicated to this type of use (Barcode printing) are supported.

**Screen Snapshot**

**Vijeo Designer’s built-in screen capture utility provides reporting and troubleshooting solutions.**

While working within an application, there are many instances where screen captures are necessary. Vijeo Designer’s Screen Snapshot feature makes it easy for the panel operator to take a snapshot of the terminal screen, and then print it or store it in JPEG file format.

**Supports Multiple Viewer Operations**

- Ability to view the images stored in the Snapshot folder created in Runtime.
- Enables you to expand the view of the image to fit full screen on the panel.
- Provides a keypad that enables the panel operator to perform Viewer operations, such as scrolling up and down the JPEG image file list and deleting an image from the list.

**So Easy to Use, Instant Results**

- Create a screen capture of a trend graph to show results for a variable.
- Capture a screen so you can use the data displayed on the screen for reports.
- Capture an alarm summary to display faults and troubleshoot.
- Copy screen snapshot files to a storage device for record keeping purposes.
**Browser Object**

Get quick access to information. Using the Browser, open documents on the terminal to get help and other relevant information.

Depending on the Browser configured on the application, the panel operator can display documents that reside either locally on the terminal or remotely on the Internet or network. This enables an operator to easily open help information, access useful plant floor data or display pertinent data about the task. Intuitive Browser controls help you easily navigate through your documents and web content.

The Browser object is the perfect means for panel operators to access all documents that provide vital information pertinent to the smooth operation and maintenance of machinery. All documents are in one place within reach, eliminating the risk of losing any required documents.

**Easy-to-Use Browser Interface**

- Vijeo Designer provides two Browser objects: Internet Explorer® Browser or Multi-Platform Browser. With both browsers, the panel operator can access help and link to reference materials stored on the terminal.

- With the Internet Explorer® Browser, which uses the IE® Engine, the panel operator can follow links and navigate to other web sites, display video, and view live video feeds from a webcam. Using supported plug-ins, the Internet Explorer Browser can open Excel and PDF documents. You can also download add-ons from the Internet. The Internet Explorer Browser is available for XBT GTW and IPC terminals.

- Choose from switches, browser controls, and string keypads to manage documents and web content on the browser. The panel operator can use those controls to perform familiar browser operations, such as displaying or changing documents in the browser.

- Supports a system keypad that displays when the panel operator touches an area on the web site or document. The panel operator can use the keypad to input data into a document or web site.
Data Management

Simplified project file management with Vijeo Designer’s powerful data management features and the Data Manager Tool.

Data Files
Import document, sound, text, and video files to your application. At Runtime, panel operators have the capability to view web content, read procedures from a text document, play a video file, or hear a sound to warn them of alarms.

Vijeo Designer enables you to import files and use them in your application:
• Browser file, such as .htm
• Sound files, such as .wav
• Text files, such as .txt
• Video files, such as .mpeg or .mp4

Data Sharing:
Up to 300 variables on XBT GT/GK (400 on XBT GTW) exchanged between 8 (32) terminals

Powerful Data Import Tool
• Import Browser files, such as HTML and .txt files. The panel operator can open these documents directly in the Browser on the terminal, displaying help or other information that may contain links.
• Add sound files (.wav files) and associate sounds with touch animation, scripts, and alarms. You can add sounds such as a beep or a chime to warn a panel operator of an alarm, or voice to guide a panel operator through tasks.
Add text files (.txt files), and configure a Text Display part to display the contents of the text file on a panel, providing the panel operator with clear, concise information needed to perform a task.

Add video files, such as MPEG4 files, and configure a Video Display part to play recorded video. The panel operator can watch the video, ideal for training or troubleshooting.

You can set up manual project backups or automatic project backups. You can restore any version of the project in the backup history. Alternatively, you can back up the project file and all other files associated with the project (such as sound files, image files, and text files) by downloading those files to the CF card. This backup solution is available for terminals that support CF cards.

Managing Data Locations

Vijeo Designer’s Data Location Settings enable you to manage the storage of runtime data files on the terminal effectively.

Store your recipe files, data logging files, alarm files, video files, and project backup files on the main drive, secondary drive, or optional drive on your terminal.

- The optional drive, such as a USB drive, enables you to easily extract data from the main and secondary drives.
- The main drive handles short-term storage, primarily storing and running the application.
- The secondary drive, which is removable, is ideal for longer term storage for files, such as application backup files, data logging files, and recipe files.

Competent Data Storage Solutions

- Easy-to-use interface to configure the data locations for file storage.
- Ability to store many different files.
- Ability to store data files on a removable USB drive or CF card.

Offering Backup Solutions

You can back up alarm messages to a terminal’s SRAM. Even when Runtime has been shut down and restarted, this function enables alarm messages to still display in the alarm summary.

You can use Vijeo Designer’s Backup Manager to create project backups and store them on your PC.
**Data Manager Tool**

Vijeo Designer’s powerful Data Manager Tool allows you to manage and transfer data to and from terminals that support an Ethernet or USB connection.

You can manage recipe files, data logging files, alarm files, video files, snapshot files, and application backup files on terminals. The Data Manager Tool offers you a graphical user interface to retrieve files.

You can install Data Manager on any computer, independent from Vijeo Designer.

As an alternative to the Data Manager Tool, you can use the Command Line Tool to create your own automated process for retrieving data files and integrate it into your automation workflow.

**Comprehensive, Effective Tool**

> Retrieve recipe files, data logging files, alarm files, video files, screen snapshot files, and application backup files from a terminal.
> Send and edit recipe files.
> Convert retrieved recipe files and data logging files into .csv or .txt files, so you can easily manipulate data and create graphs and reports on your data.
> Ability to delete retrieved files.
> A license-free, standalone tool with an easy-to-use and graphic-oriented GUI, designed for panel operators who need to send and retrieve files without knowing how the application has been set up.

**Graphical user interface (GUI):**
File transmission and retrieval

**Data storage:**
Alert files, video, project backup files on the main or secondary drive
Multi-Protocol Architecture

Build a flexible, highly adaptable system by taking advantage of Vijeo Designer’s scalable multi-protocol architecture.

Vijeo Designer can communicate with a large selection of programmable logic controllers (PLC), peripherals, and other equipment, all connected to a single HMI terminal. The equipment can be different models from various manufacturers with different types of connections.

With Vijeo Designer’s multi-protocol architecture, you can adopt Vijeo Designer into an existing system without upgrading or modifying existing equipment, or you can design an entirely new automation and control system from scratch.

The Integrated Offer

Compliant with Schneider Electric standards, and extensively tested and validated with Schneider Electric devices, Vijeo Designer is a vital component of Schneider Electric’s best-in-class HMI line of products.

In line with Schneider Electric’s commitment to providing a one-stop shopping solution, Vijeo Designer ensures full support of all Schneider protocols as well as providing key data sharing features between the terminal and its PLC.

With Vijeo Designer, you can directly import and manipulate symbols and variables generated by PLC control software, such as Unity Pro, TwidoSuite, PL7, Concept, ProWORX32, and Modsoft in your HMI application. You also have direct access to the diagnostic buffer of Schneider PLCs, allowing you the option of monitoring alarms and alarm states from several sources, including multiple terminals and PLCs, on a single screen.
Third-Party Support

Vijeo Designer provides full support for several major protocols available on the market for maximum flexibility in designing your system.

Connect equipment from Siemens, Rockwell, Omron, GE Fanuc, Panasonic, and Mitsubishi without any complex programming.

Vijeo Designer provides direct support for Siemens’s symbolic files.

Network Bridging

Unique in the market, Vijeo Designer allows your HMI terminal to act as a network bridge, thanks to its powerful communication system.

The sheer range of products that Vijeo Designer can communicate with ensures easy communication between networks using equipment from many different manufacturers.

Peripherals

Vijeo Designer supports a wide range of peripherals connected to any of the communication ports available on Magelis HMI terminals. The ports can include Ethernet ports, serial links with RS-232C, RS-422, or RS-485 interfaces, USB ports, and communication cards or modules.

Périphériques pris en charge

- **Printers:** Supports Epson ESC/P printers, HP PCL3/PLC5 Host based, any text (ASCII) based printer, and up to 80% of Hewlett Packard’s printer Portfolio.
- **Web Cameras:** Employ remote surveillance, video capture and video playback for diagnostics and security.
- **Barcode readers:** For quick and error-free barcode inputs.
- **USB keyboard and mouse:** Alternative input device support.
- **CF Cards and USB Memory Sticks:** Mass storage device support to transfer, upload, and store data, and for application updates.

Illustration may differ depending on the terminal.
**PLC Features**

Vijeo Designer provides several features that allow greater integration between your HMI terminal and connected PLCs.

- **Demand Scan:** System command word to force an immediate scan of a PLC's variables.
- **Direct I/O Access:** Direct I/O address referencing using IEC 61131-3 specifications.
- **String Encoding:** ASCII, Unicode, and the ANSI extension of ASCII character codes supported in Vijeo Designer.

**Diagnostic Statistics**

Vijeo Designer can track communication flow between terminal and PLCs by viewing diagnostic statistics on information such as the number of requests received, the number of responses sent, and the number of invalid messages received.

Diagnostic statistics can be viewed in the terminal's runtime configuration menu, or by assigning a statistic command word, @stat or @prevstat, to a variable and viewing the variable value on a screen.

**Multiple Connections**

Vijeo Designer's multi-protocol architecture lets you take full advantage of your Magelis HMI terminal's communication ports by allowing you to connect equipment to all open ports at once.

For example, on a Magelis XBT GT with two serial ports and one Ethernet port, you can attach a Modbus RTU to one serial port, a UniTelway driver to the second serial port, and a Modbus TCP/IP driver to the Ethernet port and have Vijeo Designer communicate with them all at the same time. Ethernet ports can also manage up to 48 sockets.
Network Connectivity

Share data, access the Internet, and allow remote PC access using Vijeo Designer’s Networking features.

Network connectivity is essential for developing a robust, scalable system. It ensures instant communication between terminals, PLCs, and control systems.

Vijeo Designer offers easy plug-in network configuration using Dynamic Host Configuration Protocol (DHCP) and Domain Name System (DNS) support.

DHCP

To simplify network configuration, Vijeo Designer provides DHCP support.

By enabling DHCP, you allow Vijeo Designer to automatically obtain an IP address and other parameters such as the subnet mask and default gateway.

For more control over your network settings, you can manually assign your own IP address and network parameters.

Enable DHCP in the editor during application design, or at runtime through the terminal’s configuration menu.

DNS

By enabling DNS, web browsers on Ethernet-capable Magelis terminals can open hyperlinks to web sites, embedded within local HTML documents.

Equipment connection:
Up to 48 items of equipment connected to a terminal. Each item of equipment can support 20 Scan groups.
Remote Monitoring

Use Vijeo Designer’s Remote Monitoring capabilities to share data and synchronize processes between the HMIos on your network. Now you can control and monitor your HMIs from anywhere in the world.

Data Sharing

Data sharing enables the Panels on your network to read and write data to one another. With this feature, you can synchronize the data and processes between multiple panels.

Data Sharing is especially useful in plant operations, where there are multiple access points for terminals and users need all control system information synchronized and available throughout the plant. Data sharing can share up to 300 variables between eight terminals.

Data sharing is advantageous in environments where a large machine is being controlled by multiple operators who need a clear view of the machine’s ongoing processes. This is very useful in the Steel Casting Industry where machines can be the size of the plant floor and operators are controlling the machine through multiple panels.
Another major Data Sharing benefit is that you can expose a PLC's register values to other PLCs. For example, by sharing data from HMI 2 with HMI 1, HMI 1 can read values from PLC B and write values to PLC A. This allows for smoother synchronization in communications.

To ensure that synchronization between Data Sharing HMIs operates consistently and predictably, the Exclusive Input feature is provided. If multiple HMIs attempt to modify the same data at the same time, errors and unpredictable behavior would occur. **Exclusive Input will only allow one HMI, the HMI with Exclusive Input, to modify the data.** For example, Panels A, B, and C (Web Gate client) are all Data Sharing data that resides on Panel A. Exclusive Input prevents all the other HMIs and clients from modifying the data on Panel A while Panel B is modifying the data.
Web Gate

Web Gate allows you to connect from a remote computer to your HMI through an Internet browser. This connection enables Panel operators to control and monitor HMIs from anywhere in the world.

Web Gate is frequently used to decrease HMI maintenance costs by enabling a Panel operator to perform a level one diagnostic on the HMI without having to be on-site.

Web Gate is the optimum solution for monitoring and controlling huge automated systems (Airports, Greenhouses, Steel Casting, etc).

Web Gate provides a number of unique features:

- **Robust Security**
  - IP Verification: Only specific IP addresses can connect to a Panel through Web Gate.
  - Encrypted Password Protection: Access to Web Gate can be controlled and denied through encrypted user names and passwords.
  - Read-Only Access: Applications can be configured so that Web Gate clients can only view and read data from the HMI and not affect the HMI operations.
Remote Monitoring

- Web Server Capability
  With Web Gate enabled on the Panel, the Panel acts as a web server allowing the Panel to share its data with a remote PC across a corporate LAN or the Internet.

- Data Sharing
  Data Sharing enables you to share data between a Panel and a remote PC across a network or LAN.

- Exclusive Input
  When you are editing data values from a remote PC, Exclusive Input prevents other Web Gate clients and other Panels from changing the data values you are working on.

- Synchronization
  When a Panel and remote PC are synchronized, changing the Panel display on the Panel also changes the display on the remote PC. Synchronization is enabled from Web Gate on the remote PC.
Features

Ease of Use
> Create applications using a WYSIWYG editor
> Use an icon driven, drag-and-drop interface
> Quickly view and access information, define settings, track errors, and select precreated graphical objects using easy-to-read Tool Windows
> Navigator
> Property Inspector
> Graphic List
> Feedback Zone
> InfoViewer
> Toolchest

Graphical Objects
> Draw basic shapes such as rectangle, line, dot, arc, ellipse, pie, polyline, polygon, text object and image object
> Import JPEG, Bitmap, and WMF image files
> Animate graphical objects and image files
> Drag and drop HMI objects such as switches, lamps, data displays, meters, graphs, and alarm summaries
> Choose from over 4000 ready-made graphical images from the toolchest and image library

Multiple Platforms
> Create applications for the full line of Magelis graphical terminals
> XBT G Series
> XBT GT Series
> XBT GK Series
> XBT GTW Series
> iPC Series
> Easily convert applications from one platform to another
> Connect devices and equipment to more than one physical port at once, which include Ethernet, Serial, and USB Ports

Alarms
> Display alarms in Alarm Summaries or Alarm Banners
> Display both diagnostic and variable alarms
> Monitor bit and word addresses
> Group alarms in Alarm Categories
> Trigger alarms by Limit, Deviation by Percent, or Deviation by Fixed
> View three types of Alarm Summary displays: Active, History, and Log
> Acknowledge individually or as a group
> Runtime language swapping for alarm messages
> Print and save alarm logs
## Data Logging

- Analyze, audit, and track performance
- Display logged data in a Trend Graph:
  - Historical Trend Graph
  - Real-Time Trend Graph
  - Toolchest Trend Graph item
- Collect data at regular intervals or when a trigger is activated
- Store data in DRAM, SRAM, USB storage, CF card, or network storage
- Convert data logging files into .CSV files
- Display logged data from multiple terminals

## Security

- Based on individual users as well as groups of users
- Control access to:
  - Panels
  - Popup windows
  - Objects such as switches and data displays
  - Function Keys
  - Parts
  - Downloading
  - Data Manager
  - Web Gate
- Lock an object by graying out the object, displaying a locked-out icon on the object, or making the object invisible
- Automatically log out inactive operators

## Reports

- Create WYSIWYG panel reports
- Display object information in panel reports
- Create variable reports with cross references

## Recipes

- Maintain a consistent production process
- Edit Recipes using an easy-to-use spreadsheet editor
- Use ready-made Recipe parts or a Recipe Manager
- Retrieve, send, and edit recipe files using Data Manager
- Convert Recipe files to .TXT or .CSV files
- Create or modify Recipes at Runtime
Simulation
- Simulate applications in WYSIWYG, simulation tool
- Simulate devices and PLCs
- Simulate variable data

Master Panels
- Apply common panel designs to multiple panels to reduce design time
- Maintain consistent look and feel across panels
- Set up expressions or variables to show or hide the panel layer dynamically at Runtime

Multiple Languages
- Use up to 15 different languages in an application
- Choose from 40 character sets including English, Chinese, Arabic, and others

Downloads
- Update applications and the Vijeo Designer Runtime with a single download
- Download over Ethernet port, Serial port, or USB port
- Download to a CF card or USB memory drive

Actions
- Create and run operations effortlessly using Actions
- Create global and panel actions using an Action Wizard for the following operations:
  - Bit, word, or string
  - Panel
  - Popup window
  - Sound
  - Language
  - Web browser
  - Video
  - Script
  - System information
  - Copy data
  - Runtime

Resource Library
- Easily apply Resource libraries to parts
- Maintain color schemes, text strings, fonts, and images in a single location

Master Panels
- Apply common panel designs to multiple panels to reduce design time
- Maintain consistent look and feel across panels
- Set up expressions or variables to show or hide the panel layer dynamically at Runtime
### Features

#### Time Zone
- Configure Time Zone and Daylight Saving Time for embedded terminals

#### Multimedia
- View or record live video
- Supports PAL and NTSC video signals
- Play recorded video files as well as MP4 video files
- Take snapshots of video display and save as JPEG file
- View images and snapshots using the Image Capture Viewer
- Take screen shots of a panel and save as a JPEG file
- Use a browser object, Internet Explorer Browser or Multi-Platform Browser, to access help and link to reference materials stored on the terminal
- Using supported plug-ins, use Internet Explorer Browser to view Word®, Excel®, Powerpoint® and PDF documents

#### Networking
- Use DHCP for easy plug-in network configuration, or configure IP settings manually
- Use the terminal as a communication bridge between networks
- Open hyperlinks to web sites embedded in local documents using DNS

#### Remote Monitoring
- Monitor a terminal remotely using Web Gate
- Share data across a network between a terminal and a remote PC

#### Data Sharing
- Synchronize data and processes between multiple terminals
- Share up to 300 variables between 8 terminals
- Expose a PLC’s register values to other PLCs

#### Communications
- Connect to any Schneider Protocol
- Connect to most of the major protocols on the market from Siemens, Rockwell, Omron, GE Fanuc, Panasonic, and Mitsubishi
- Use multiple protocols at once
- Directly access symbols from Unity Pro, TwidoSuite, PL7, Concept, ProWORX32, and Modsoft
- Connect a wide range of peripherals including, printers, web cameras, barcode readers, USB keyboard and mouse, and external storage devices

#### Online Help System
- Comprehensive multi-language online help system
Make the most of your energy