PcVue Solutions

Technical presentation
Certifications & Partners

- ICNet
- Microsoft Certified Partner
- Member of BACnet Interest Group Europe
- SBA Smart Buildings Alliance for Smart Cities
- LonMark
- IEC
- OPC Foundation Member
- BACnet Interest Group - AustralAsia (BIG-AA)
Technologies and Standards
Technical overview

Control
- Secure Command processing
- On-line/off-line Simulation
- 2D/3D graphic libraries
- Handy HMI
- GIS MAP Control
- Ready-to-use graphic animations
- Trends

Monitoring & Control
- Alarms & Event logs
- System & User activity logging
- Sequence Of Events
- Notification by email
- Suppression by dependency
- Alarm flood prevention
- Filtering & masking

Events
- Sequence Of Events
- Notification by email
- Suppression by dependency
- Alarm flood prevention
- Filtering & masking

Alarms
- Alarms & Event logs
- System & User activity logging
- Sequence Of Events
- Notification by email
- Suppression by dependency
- Alarm flood prevention
- Filtering & masking

Configuration
- No Compilation
- On-line Modification
- Objects Oriented
- Configuration & Diagnostic
- Objects Modelization
- Mass Import
- Wizards
- Scriptless configuration
- Multiple views

Deployment
- Stand-alone
- Client-Server
- Distributed
- Mobile apps
- Web access
- Remote access
- Secure HTTP (HTTPS)
- Integrated Windows® authentication

Data processing
- KPI and generic dashboard reporting tools
- Microsoft SQLServer data archives
- Scripts

Data Exchange with external Applications
- Manager toolkit
- Generic Import Toolkit
- Protocols toolkit
- Webservices toolkit

Data Acquisition
- 100+ built-in drivers
PcVue features

- Advanced Configuration Environment – A.C.E.
- Real-time data
- Data acquisition
- Monitoring & control
- Alarms & Events
- Data processing
- Architectures and deployment
Advanced Environment Configuration

Unleash development possibilities
Advanced Configuration Environment – A.C.E.

Application Explorer
- Configuration
- Diagnostics

Application Architect
- Modeling
- Instantiation
- Generation/Synchronization

Smart Generators
- Mass configuration from third-party or in-house configuration tools
- Import/Synchronization wizard

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Design process

• **Application Explorer**
  - Mimics design
  - Global settings
  - Multi stations
  - Libraries

• **Smart Generator**
  - Import 3rd party configuration
  - Reduce risk of configuration errors

• **Application Architect**
  - Modelize useful objects
  - Define or modify template
  - Instantiate/Generate/Synchronize

• **Application Explorer**
  - Scripts
  - Processing
  - Mimics

Definition of global settings

Import of 3rd party configuration

Modeling

Finalization

Synchronization
Application Explorer

Configuration and Diagnostic

‘All in one’ configuration tool
✓ Communication / Network
✓ Variables
✓ Archives
✓ Data processing (Data export, expressions, email/sms,…)
✓ User management
✓ Libraries

User friendly interface
✓ Treeview structure
✓ Multiple Document Interface (MDI)
✓ Configuration wizards
Application Architect

Modelization

Creation of templates
✓ Instantiable
✓ Parametrables
✓ Reusable
✓ Including all usual configuration objects

Generation/synchronization of the configuration

Reduce the development time

Increase the reliability and minimize the risk of error
Application Architect

Modeling in 3 steps

1-Model Differentiation
2-Instantiate Customization
3-Generate Synchronization

Custom needs
New project
Same template Different use

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Smart Generator

3rd party configuration import

Generates elements of PcVue’s configuration from 3rd party applications

Minimize development time

Avoid double configuration and risk of error

10+ Smart Generators available
Smart generator SIEMENS TIA portal

SIEMENS integration

✓ **Import** the elements from a TIA project
  ✓ Variables
  ✓ Communication

✓ **Generate** your PcVue project
  ✓ Filter imported elements
  ✓ Customization

✓ **Synchronise**
  ✓ Update the PcVue project on TIA configuration changes

Save time on mapping
Real-time data

At the heart of PcVue
Structured organization of data corresponding to the supervised physical process.
Real-time data

Generic approach

The same generic symbol can be connected to several variables

Applicable to any PcVue object (mimics, programs, expressions, ...)
Data acquisition

Communication interfaces
Data acquisition

Benefits/Features

A unique communication platform suitable for any vertical market

High performances & reliability

Fast implementation and easy configuration – no script

Wide range of built-in communication drivers – 100+

Built-in advanced features
✓ Redundancy
✓ Time stamped
✓ ...

Software development kits for a better interoperability
Data Acquisition

Data acquisition drivers

Markets oriented drivers

Software Development Kits - S.D.K.
Data acquisition drivers

Hundreds built-in protocols available
✓ OPC
✓ Modbus IP
✓ SNMP Manager/Agent
✓ ...

Most of it from manufacturers

[Logos of various manufacturers]
Markets oriented drivers

**BMS**

**BACnet** – BTL Listed for the highest integration level B-AWS

**KNX**

**LonWorks**

**DALI**

**COMMEND**

**POSM**

**SIEMENS OPC MK8000IP**

...
Markets oriented protocols

Energies

Your system connected seamlessly to heterogeneous environments

Built-in drivers available:

✓ IEC60870-5-104 Client/Server,
✓ IEC61850 Client GL-DNV (former KEMA) certified
✓ DNP3
✓ IEC61400-25, OPC, Modbus TCP/IP,…
Markets oriented protocols

Energies

- DNV-GL certified
- 8.1 client driver
- Direct execute (DE, DEw) and Select before operate (SBo, SBow)
- Pre-defined and extensible data class catalog
- Buffered and unbuffered report control blocks (BRCB, URCB)
- Client/Server
- Can be used as a substation gateway
- Direct execute (DE) and Select before operate (SBO)
- Double points
- Quality descriptors and time tagged values
- Level 2+ implementation
- Support for both polling and spontaneous messages
- Comprehensive handling of objects groups & variations
- Control relay and analog output block (CRoB, AOB)
Markets oriented protocols

*Water & waste water*

**SOFREL:**
- Lacbus RTU
- Lacbus SMS
- Sofbus
- Sofbus SMS

**Wit:**
- TRSII

**Napac:**
- Napbus

**Perax:**
- Perax SMS

...
Markets oriented protocols

Information & Technologies

PcVue implements built-in SNMP

**SNMP Manager**

- Monitoring and troubleshooting any IP devices
- All SNMP versions supported:
  - V1, V2/V2c, V3 – Authentication & encryption
- Optimized for large scale networks

**SNMP Agent**

- Allows a third party system to control various operating parameters of the supervisor
- PcVue is able to expose any variable via SNMP
- Allows PcVue to be a gateway or a converter
Development kits

**Interopérabilité and connectivity**

**Manager toolkit**
- Data exchange between PcVue and 3rd party software

**Protocol toolkit**
- To develop a very specific driver integrated in PcVue
- To interface with another software or hardware

**WebServices toolkit**
- To embed data from PcVue to an external Web portal

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Monitoring and control

HMI
Monitoring and control

- Graphical interface
- Operating features
- Trends
- GEO Map control
Graphical interface

A user friendly interface yet powerful

Windows environment

More than 60 pre defined animations

Design helper tools

Mimic templates

Real time design display
Custom animations settings with no scripts
Support for DirectX objects

Support for pre defined animations for 3D objects

3D advanced built-in features (camera management, …)
Libraries

A modular approach

- Consistent and modular objects
- Infinite combinations
- Custom templates of complex objects

A market approach

- Predefined objects for an adapted usage for most projects
- Libraries of standard objects and for specific businesses

8000 Images
1000 Symbols
100 Object templates
All these mimics use graphics from the built-in libraries of PcVue only.
Built-in support for multi screens display and wall screen display

Display of simultaneous information on several screens

Up to 4 display area in Windows

Mimics up to 10,000 x 10,000 pixels
12 languages for installation for bilingual menus display

Bilingual mimic with support for any languages

Translation import/export tool that supports both ANSI et Unicode encoding
Run-time features

- Contextual pop up
- Zooms and layers management
- Mimics navigator
- Mimics tab control
- Built-in controls
- Functions keys
Trends viewer

Display interface for real—time and historical trends

Built-in control that can be embedded in any mimic

Up to 16 traces per viewer

Highly customizable interface

Fully customizable legend

Threshold display

Trends comparison

Data export to EXCEL
Types of representations:
- Lines,
- Columns,
- Cylinders,
- Points,…

Graphic features:
- Legend,
- Zoom,
- Cursor,
- Tooltip,
- Print,
- Popup on right click,
- Reference series for comparison
- …
Interactive maps provide enhanced situation awareness for operation

Quickly identify your assets on a map

Visualize the key data at a glance

Application across industries

- Renewable energy generation, pipelines and oil&gas production, substation automation, transportation, water and wastewater...
GEO Map Control

Full integration in PcVue

- Built-in map component
  - Client for GIS mapping service
- Support for more than 50 map providers
- Online & Offline maps both supported
- PcVue symbols as custom markers
- Integrated configuration tools provided to edit markers and create map caches
- Support for runtime animations & scripting
GEO Map Control

**Quickly identify your assets on the map**
- Turn any PcVue symbol into a marker on a map with an associated position
- Support for basic markers: shapes, images or texts

**Fast access to data**
- Display of variables value or attributes
- Popup and mimic open on markers

**Easy marker management**
- Marker editor – no scripts
- Markers and layers are stored in a standard GPX file loaded
- Direct loading and rendering of GPX files – No import/export necessary
GEO Map Control

**Easy configuration – no scripts**

- Basic configuration
  - Sources of the map (online/offline) and markers
  - Execution
  - Initialization
  - Map center, zoom, panning
  - Visual editor

- Advanced configuration
  - Control graphical behavior and performance

- Map cache creator
  - Retrieves map data online
  - Prepare the map cache for offline map usage
Alarms et Events

Real-time and historical alarms and events management
Alarms

Built-in alarms systems

32 alarm levels

Operator acknowledgment depending on user profiles

Avalanche management, masking, inhibition, maintenance mode

Built-in thresholds system

Alarms synthesis
Alarms

Customizable alarm display viewer

- Timestamp
- Name, description
- Status
- Priority level
- Dynamic and customizable text attributes
- ...

Run-time features:

- Acknowledgment,
- Associated actions,
- Filtering and sorting,
- Contextual popup
- ...

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Event logs

Event display

Event logs viewer
✓ Display of recorded events
✓ Event or alarms status
✓ Operator actions

Run-time features:
✓ Filtering and sorting,
✓ Operator comment,
✓ Contextual pop-up,
✓ …
Quickstart project

A **predefined project including**…

...a configuration wizard to

- select different designs and styles
- create your menus in different resolutions

...standard mimics and configuration preconfigured:
- Trends
- Logs and archiving parameters ready
- Alarms viewer and system alarms ready
- User profiles
- Scripts...

**Supplied with PcVue**
Data processing

From data to information
Data processing

- Data connection
- Data archiving
- Data export and reporting
- On-call management
- Scheduler
- Recipes
- Scripts editor
Universal Connector

A new way to exchange data

- Request handler for 3rd party on-premise/cloud-based RDBMS
- Link to ERP, MES, CMMS, Facility Management
- Communication to Social Networks
- Connexion to REST Services
Universal Connector
A new way to exchange data

New connection engine
✓ Based on ADO.Net
Universal Connector

Features

✓ Built-in - No need for VBA scripting
✓ Error handling and asynchronous calls
✓ Centralize connection strings
✓ Control which PcVue server is in charge of the RDBMS interface
✓ And avoid the need to open holes in your network(s)
✓ WebVue-compliant SCADA Basic scripting
✓ SV Manager Toolkit API
Data archiving

Several archive mechanisms and formats

- Database SQLServer via built-in Historical Data Server (H.D.S.)
- Databases via ODBC connector
- Proprietary text files
- ‘VCR’ specific

Redundancy management

Built-in archive to SQLServer via HDS

- Records in an industry standard database
- Easy access to data by 3rd party applications
- Qualified with Access and SQL server
- Includes a scheduler to run database maintenance tasks

Cloud access to SQL Azure
Data archiving

Several archive mechanisms and formats
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Cloud access to SQL Azure
Data export and reporting

*From data to information*

**PcVue mimics**
- Need for real time data & short term history
- Logged events and alarms
- Trends

**Data Export**
- Need for comparisons, statistics and regulatory compliance
- PcVue viewers
- Detailed Excel reports

**Dream Report**
- Need for graphic reports, or a more interactive tool
- Excel or Pdf reports
- Web Portal

**SQL Server Reporting Services**
- Advanced needs
- Drill-down analysis
- Domain specific data processing
DataExport

Archive extract and export to EXCEL

Built-in data statistics export from PcVue to EXCEL
✓ Data export to Excel or CSV file

Statistics
✓ Raw data, sampling, with or without synchronization
✓ Number of alarms/bits occurrences
✓ Alarms/Bits changes duration
✓ Sum
✓ Average/weighted average
✓ Minimum/Maximum
✓ Standard deviation
✓ Counter
✓ …

Manual or automatic generation
✓ Export can be sent by email

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DataExport

Samples
Data collection and logging
✓ Multiple data sources connections
✓ SGBD (SQL Server, Oracle, MySQL, MS Access, …)
✓ HMI, PcVue, PLC…

Data extraction and analysis
✓ Statistics with predefined functions
✓ Reports templates for several markets
✓ User friendly and script free design
✓ Object libraries
DreamReport
Advanced reporting solution

Reports and distribution
✓ Automatic or manual generation
✓ PDF, Excel
✓ Web portal, FTP, Email, …

Security
✓ Support for Active Directory
✓ Report version management
✓ Support for FDA CFR 21 Part 11
SQL Server Report Services

Advanced reporting solution

Creation, generation and deployment of reports from SQLServer database

Full integration in PcVue

Reports available in webbrowser
On-call management

Email and SMS

Built-in SMS/Email system

No script configuration

Advanced features

✓ Priority levels definition

✓ Messages templates with predefined or customizable parameters and substitution characters (real-time variables values,…)

✓ Automatic send of messages on alarm or event or on any others actions
On-call management

**ALERT software**

Automatic transmission of alarms from PcVue to mobile devices

Operator acknowledgment

On-call team planning management
Scheduler

WEBSCHEDULER

Display and control PcVue scheduler

Automatic command and recipes send depending on time slots

Available via Webbrowser or embedded in PcVue

Includes BACnet calendar management

User friendly interface for non expert users
Recipes

List of variable’s predefined or real time values sent to a device

Recipes can be sent automatically or manually

Groups of recipes can be created

User right can be applied for recipes
Scripts

SCADA Basic

Script editor for managing all the PcVue features

Powerful editor interface

VBA for PcVue

Known standard script editor

To implement specific needs
Architectures and deployment

Scalable architectures
Architectures and deployment

- Supported platforms
- Architectures building blocks
- Examples of architectures
- Mobility solutions
- Cybersecurity
Supported platforms

Take advantage of the latest technologies

Server stations
- Data acquisition & Historical Servers
- Web Server
- Remote Desktop Services

Client stations
- Windows® 7
- 8
- 8.1
- 10

Virtual Environments
- VMware®
- Hyper-V™
## Architecture building blocks

<table>
<thead>
<tr>
<th>Building blocks</th>
<th>Role</th>
<th>Typical deployment</th>
</tr>
</thead>
</table>
| **Standalone station**| - Data acquisition  
                        - Historical data  
                        - HMI  
                        - Does not have the capability to exchange data with other stations | - As a Desktop Application  
                                                        - Under a desktop OS |
| **SCADA Station**     | - Data acquisition  
                        - Historical data  
                        - HMI  
                        Or  
                        - As a Windows Service if an HMI is not required  
                        - Under a server OS | - As a Desktop Application if it requires an HMI  
                                                        - Under a desktop OS  
                                                        Or  
                                                        - As a Windows Service if an HMI is not required  
                                                        - Under a server OS |
| **Data Acquisition Server** | - Data acquisition  
                        - Historical data  
                        - HMI | - As a Windows Service  
                                                        - Under a server OS |
# Architecture Building Blocks

<table>
<thead>
<tr>
<th>Building blocks</th>
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<th>Typical deployment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client station</td>
<td>- HMI</td>
<td>As a Desktop Application Under a desktop OS Or with a server OS hosting Remote Desktop Services combined with lightweight terminals used as operator workstations</td>
</tr>
</tbody>
</table>
| Historical Data Server | - Historical data                  | - As a Windows Service  
|                     |                                     | - Under a server OS                                                                                                                                  |
| WEB Server          | - WEB server  
|                     | - For WebVue/TouchVue clients       | - As a Windows Service  
|                     |                                     | - Under a server OS                                                                                                                                  |
## Architecture building blocks

<table>
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</tr>
</thead>
</table>
| **Mobiles clients** | - Remote monitoring and control over the Internet or Intranet via desktop or mobile devices  
- WebVue clients and TouchVue clients or RDS clients | - Using a Web browser or a Web App On a desktop PC or a mobile device |
| **Engineering station** | - Depending on the architecture and project design, an engineering station can have very different roles, ranging from those of a data acquisition server (for testing communication with field devices), to archive server or just an HMI workstation (to design mimics). Project development and maintenance. Project and libraries version management. Interoperability with third-party generation tools. | - As a Desktop Application  
- Under a desktop OS |
Architectures examples

**Standalone station**

- The simplest architecture
- To monitor and control your process from a single “all-in-one” station
- All performances of a PcVue station for a stand-alone architecture
Multi station

- The simplest multi stations architecture
- The process is monitored from several remote user stations
- Data processing network load optimized
Architectures examples

**Distributed architecture**

- **PcVue Clients**
- **PcVue Servers**
- **Devices**
- **Data acquisition networks**
- **IT network**
Architectures examples

High availability

- Very high level of security and system/data availability
- Secure Client-Server setup with dual networks
- Several user stations
- Data processing and field networks data load optimized
Architectures examples

Mutualized servers

Association #1

Association #2

Association #3

- Optimized redundant architecture to monitor and control multiple processes
- Reduce deployment and maintenance effort

Optimized redundant architecture to monitor and control multiple processes
Reduce deployment and maintenance effort
Architectures examples

**Multi-Levels Implementation #1**

- **Level III – The dispatch center**
- **Level II – The operation center**
  - OPC
  - PcVue Clients level II
  - PcVue Server
  - Association of redundant PcVue Servers
  - PcVue Gateway Servers
  - Association of redundant PcVue servers
  - PcVue Historical data server
  - Data processing network – PcVue TCP/IP messaging
- **Level I – Local sites**
  - PcVue Clients level I
  - Association of redundant PcVue servers
  - Data acquisition networks
  - Field devices

- For very large scale applications and geographically widely distributed system
- Several levels of control
- Very flexible
Architectures examples

- Multi-levels Implementation #2

- For geographically widely distributed system
- Several levels of control
- For very large amount of data/high growth rate projects
- Very flexible

Level III – The dispatch center
Level II – The operation center
Level I – Local sites

- FrontVue Clients level II
- PcVue Server
- Association of redundant PcVue servers
- PcVue Gateway Servers
- Association of redundant PcVue servers
- PcVue Historical data server
- Data processing network - OPC
- Data acquisition networks
- WAN

- PcVue Clients level I
- PcVue Gateway Servers
- Association of redundant PcVue servers
- Data processing network - PcVue TCP/IP messaging

- Field devices
- Association of redundant PcVue servers
- Data processing network - PcVue TCP/IP messaging

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Architectures examples

Multi-station with a Remote Desktop Server for deploying client stations

- To reduce the administration effort and costs
- Low cost thin hardware clients
- Installation free on thin clients
Architectures examples

Engineering station with version management

- Easy maintenance and deployment of a project and/or libraries
- Unlimited number of versions
- Modifications tracking
- Reduce the risk of errors and loss
Architectures examples

To monitor and control your application from anywhere.
Architectures examples

Virtual environments

1. Application virtualization

• The host computer can run different versions of PcVue or FrontVue in isolated environments
• Setting up a working environment for one-off operations becomes easy
• Setting up an ancient operating system is possible
• Runs under Windows 7, Windows 8, Windows 8.1, Windows 2008 SP2 and 2008 R2 SP1, 2012 and 2012 R2 Server and VMWare

✓ To reduce the number of physical stations
✓ To reduce the administration effort and cost
✓ Low-cost thin clients
✓ Installation free on thin clients
✓ Comply with IT requirements

2. Resources virtualization

• Virtualized environments can run various PcVue servers under different operating systems on a single physical machine
• PcVue licenses can be of different types
• Dynamic assignment of virtual machines to physical hosts according to resources optimization rules
Architectures examples

- Light clients
- PcVue client stations
- IT network
- Wifi router
- Web Vue
- RDS server
- Mobile server
- Development station
- Data acquisition network
- Switch
- Pcvue messaging
- Redundant association
- Firewall
- DMZ
- HTTPS
- Web client
- Remote client
- Mobile app
- WAN
- IP router

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Comprehensive Mobility Offer

A Solution for all Mobility Requirements - Solutions can be used individually or Can be combined together

Context-aware mobile solutions

Navigation-based solution
- Remote HMI
- Context given by user navigation
- Mobile app
- WEB-based HMI
- Remote client

Situational awareness-based solution
- On-call/on-duty app
- Context given by notification

Location-based solution
- Geo-contextual app*
  Context given by user’s role and environment

* >= v12

Icons made by Freepik from www.flaticon.com
The mobile solutions are based on the exclusive **EasyMobile Technology** which ensures a fast, easy and secure configuration & deployment:

- No gateway, no extra plugin
- No installation on client side
- Easy settings – no scripts – Wizard only
- Open to third-party application
- Adapted to any users: end-user, SI, IT
- Secure scalable architectures and communication
- Easy Diagnostic
- Affordable solutions
Architectures

**Regular**
- Web Server IIS
- Registry services
- Web Deployment Console
- PcVue Web & Mobile Backend

**Secured (recommended)**
- Secure zone (DMZ)
- Industrial network

**Advanced**
- Clients
- Registry services
- Server
- PcVue Web & Mobile Backend
- Web Deployment Console
- Web Server IIS

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The web deployment console: Features

- Deployment of web services and web apps on IIS
- PcVue Web Back-end endpoint management
- Data protection management
- Certificate management
- User access logging & OAuth Server management
- IIS auditing / diagnosis
Deployment and configuration

Web & Mobile ready in few clicks!
Deployment and configuration

Name
Bindings
Certificate
Back ends
Roles
Summary

Name
Bindings
Certificate
Back ends
Roles
Summary

Please give a name for the website that will be deployed.

MyWeb

You must securely bind your site to a specific port and host. Web clients can then access the web server using either the IP address, hostname or URL.

Bind using hostname
On

Hostname
Port

USER-MACHINE-1D
443
Deployment and configuration

MyWeb

Name

Bindings

Certificate

Back ends

Roles

Summary

You must have a certificate to use HTTPS. You can either select an existing certificate or create a new one.

New certificate

In this view, you can manage certificate enrollment. Proceed according to the requirements and constraints.

import a certificate

self-signed

create request

let's encrypt®

MyWeb

Name

Bindings

Certificate

Back ends

Roles

Summary

You must have a certificate to use HTTPS. You can either select an existing certificate or create a new one.

Certificate

USER-MACHINE-ID issued by CN=USER-MACHINE-ID on 01/08/2018

CN=USER-MACHINE-ID

01/08/2018 02:00:00
Deployment and configuration

Back end configuration

- Name: MyWeb
- Bindings
- Certificate
- Back ends: PcVue back end
- Roles
- Summary

If you change the back end after you have configured a site, the site configuration will be automatically updated.
Deployment and configuration

MyWeb

Name
Bindings
Certificate
Back ends
Roles
Summary

WebScheduler
WebVue
TouchVue
Web Services Toolkit

Select None All

MyWeb

Name
Bindings
Certificate
Back ends
Roles
Summary

You have completed the wizard. You can now check the parameters you selected and click deploy to set up your site.

Please wait while we install the services and configure the server

- Roles & Services (Completed)
- Install Apps & Services (Completed)
- Bindings & Certificates (Completed)
- Configure website bindings (Completed)
- Configuring back ends (Completed)
- Machine key configuration (Completed)
- Log level configuration (Completed)
- Registry service configuration (Completed)
- WebClient configuration (Completed)
- WebScheduler configuration (Completed)
- Authentication configuration (Completed)
- Update Authorization Server configuration (Completed)
Deployment and configuration

MyWeb

Name: MyWeb
Bindings: USER\MACHINE-ID:441
Certificate: USER\MACHINE-ID
Back end: MyVue (local)
Registry service: https://ES12-MACHINE-ID:441
Roles:
- WebScheduler
- WebVue
- TouchVue
- Web Services Toolkit

Select: None | All

Services:
- OAuth
- Registry
- ScheduleData
- WebScheduler
- WebVue
- Windows
- RemoteData
- R4xRemote
- RemoteUser
- SessionContext

Logging:
- Minimum
- Maximum

Summary

Roles & Services: Completed
Install Apps & Services: Completed
Bindings & Certificates: Completed
Configure website bindings: Completed
Configuring back ends: Completed
Machine key configuration: Completed
Log level configuration: Completed
Registry service configuration: Completed
WebClient configuration: Completed
WebScheduler configuration: Completed
Authentication configuration: Completed
Update Authorization Server configuration: Completed

Designed by Kreativkolors / Freepik
Deployment and configuration

Run Diagnostics

The diagnostic check for missing features in the Microsoft® Internet Information Services web server and verifies the configuration of the deployed sites.

- IIS Settings: Diagnosis detected no errors.
- Application Pools: Diagnosis detected no errors.
- Authentication: Diagnosis detected no errors.
The web deployment console: Benefits

- Make the deployment process as simple as possible for system integrators
- A tool designed for any users from beginners to IT experts
- Can be used as part of the documentation and auditing of web servers
- Facilitate diagnostics
WebVue 12

Full built-in **HTML5-based** client

- No gateway – embedded HTML5
- Better graphics rendering
- Better user experience
- IT friendly - secured

**Cross-browser compatibility**

- Scalable & open
- Mobile friendly
- Less resource intensive

**SUPPORTED PLATFORMS**

- Chrome 43
- Android WebView 5
- Firefox 45
- Chrome for Android 46
- Edge 38.14393
- Safari for iOS 10/MacOS 10.1.2
WebVue 12

Benefits for the end user

- No extra cost/issues due to gateway
- Zero installation, zero configuration on client side
- Better performance, better responsiveness
- Ability to monitor mimics on any device with a web browser
- Ability to monitor multiple mimics concurrently in multiple web browser tabs
Benefits for the **IT department**

- Easy to deploy via WDC
- No browser plugin or runtime components required
- Improved security thanks to sandboxing in web browser environment
- Allows secure architectures by installing web server components in a DMZ
- Secure communication - HTTPS only
WebVue 12

Benefits for the SI

- Full web-based HMI
- Transparent license model
- Open API: Can integrate symbols and mimics in its own apps or web-portals

- User context: True multi-user capacity, even for internal variables
- Cross-platform: runs on almost every device regardless of the operating system
- A new RESTful/Json Web Services Toolkit
WebVue 12
Monitor and control PcVue remotely via the Windows Remote Desktop Services (RDS) feature

Use of a regular web browser on any device – no installation needed

Use of HTTPS communication

No specific development for mimics
Remote thin client – Demo

http://html5.pcvuesolutions.com

User1/demo
User2/demo
User3/demo
User4/demo
TouchVue 12 – Key features

The mobile app for immediate action

- New ergonomics
- New back end
- On-call/on-duty mobile app for PcVue
- New access the data from several sites
- Real time information and notifications (Alarms, values, trends) for immediate action (acknowledgment or control values)
- Archived data (events logs, historical trends)
- New contextual mimic display
- Data filter depending on user profiles
- Watchlist for favorite variables to watch
- New multi pens trends
TouchVue 12 - benefits

✓ The easy notification solution

✓ Fill the gap where remote access and light clients are not enough

✓ Help both sub-contractors and end-users in increasing productivity

✓ Give managers an eye on their site

✓ Cost effective solution
TouchVue 12 – At a glance

Notifications

Notifications inbox

List of variables to follow

Multi site connexion

Variables access

Real time alarms list

Recorded event logs
TouchVue 12 – Connection

Server access

Server

Credentials
TouchVue 12– Real time data access

✓ Access real time information of your process
✓ Monitor, control

Variable tree

Favorite variable
TouchVue 12 – Monitor & control

Notifications based Solution

Analog value

Bit
SnapVue* – Localisation

Geo-contextual mobile solution

Provides control and monitoring information of devices that surrounding the mobile device user


Allows actions depending on the user role and position

Records mobile devices locations and actions

*≥ v12
Elements of Mobility Infrastructure
- Mobility Server
- Android/IOS Apps
- Available Proximity Services

Input
- User’s credentials
- User’s current location

Output
- Contextual information and controls
- Archive of location by device and asset
Location devices

**MICRO GEO-LOCATION**
Indoor Positioning System

- **QR CODE**
  Matrix 2D Barcode
  - Scan QR Code

- **NFC TAG**
  Unpowered passive microchip
  - Touch NFC Tag or bring to immediate proximity

- **BLE BEACON**
  Self-powered Bluetooth transmitter
  - BLE Beacon is detected via Bluetooth device

- **WiFi ROUTER**
  Wireless Communication Network
  - Detection of WiFi router ID connected to mobile device

**GEO-LOCATION**
Global Positioning System

- **GPS**
  - GPS Coordinates detected via mobile device
Safety devices

Safety uTag
- Belt-wearable device
- Outdoor/indoor location data collection
  - via Cell, GPS, WiFi and beaconing
- Communication with the server
  - via GPRS/3G modem and WiFi
- Environmental & Biometrical parameters collection
- Man-down event monitoring
- User interfaces
  - Buzzer, vibracall
  - LEDs, buttons (e.g. SOS, call request), display
- Scanning and connection with Wearable uBeacons

Wearable uBeacon
- PPE (Personal Protective Equipment) correct usage verification
- Biometrical parameters collection
- BLE or ANT+ communication to the safety uTag
Leverage IT-Style deployment

- Improved protection of server components
- Deploy PcVue server components as Windows services
- And PcVue clients components as desktop applications

Launch & connect diagnostic tools

- Comprehensive client tools for configuration & diagnostic
- From a local user session or a remote desktop session

Secured deliverables

- Installation package signature
- Binary files signature
PcVue running mode

2 running modes
- Desktop application bureau
- Windows service
Production & Installation

Signed installation package
✓ Confidence in our deliverable

Authentication & Integrity
✓ The package you are installing was created
✓ by ARC Informatique
✓ The package was not tampered since
✓ its production

Download options
✓ .zip - Single compressed archive
✓ .iso file
✓ Cumulative patches for update

Signed binary files
Licenses control management

- Support for Software license
- USB dongle
Thank you for your attention!