Mastering interfaces between #Humans #Systems #Connected things



PcVue evolutions

Continuity & innovation



PcVue milestones

Solution 1985 1st French SCADA for MS-DOS

Power 1992

1st objectoriented SCADA for Windows & OS2

22 bit graphic

32-bit graphic editor

No scripting required

Power 7 Service 7 Service

client

3D graphic editor

 $\sum_{\text{X} \in \mathbb{R}} 2005$

Generators for 3rd party applications

See 3. Active Active

Directory Windows for PcVue

^{*} 2011

Advanced Configuration **Environment**

Power 11 2013

Smart Grid

PCVne 11.2 BACnet BTL

certified

2019 Web &

Mobile platform Connectivity & IoT

PcVue 15 2020

GeoContextua I mobile solutions



Technologies & Platforms

Protects end users investments ... Windows 7 2018/19 Windows xp PcVue 12 2015/16 **PcVue** 2009 11.2 PcVue 9 PcVue 10 Windows 2000 2005 ₩indows Serve PcVue 8 2000 PcVue 7 1998 PcVue 32 1993 PcVue 2 Windows Server 2003 Windows Server ...by maintaining backward Windows 2000 Server compatibility since 30 years



PcVue 8.x

2004

2005

2006







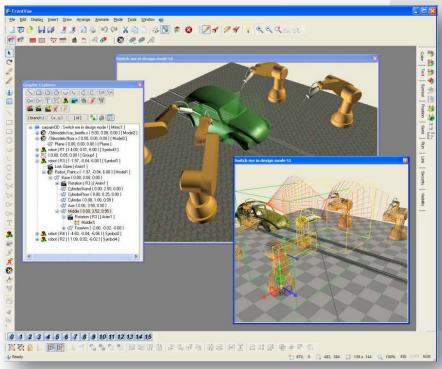


PcVue 8.0

- New 3D interface
- New Smart Generators XML
- Support for WebServices XML/SOAP
 Web Services Toolkit
- Windows XP look and feel
- New language : Italian
- Virtual keyboard
- Drawing properties manager to let the properties of selected objects be displayed and modified directly









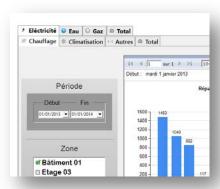
PcVue 8.10

- Built-in archives to SQL Server : HDS (Historical Data Server)
- Smart Generators
- Schneider Unity
- WAGO Codesys
- Client OPC XML
- Built-in driver Siemens S7 ISO TCP/IP
- Emails sent on event
- Multi language project
- Tabs













PcVue 8.2





- New smart generators
 - CAD
 - Isagraph
 - Lns

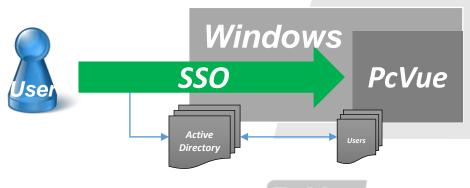




- Webscheduler : scheduled tasks from web interface
- New SCADA BASIC editor
- Users management: support for Windows authentication based on domain controller and Active Directory
- New language : Japanese



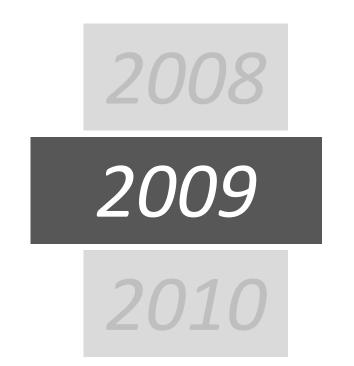












Even more interoperability





New Smart Generators

- SIEMENS Step 7
- WAGO-DALI
- FactoryLink
- New drivers
 - BACnet
 - SOFREL
 - Panasonic FP
 - SRTP Ethernet client for GE Fanuc Series 90 PLCs
 - ..
- OPC Server/Client
- PcVue FTP Client
- New database import for HDS : DBImport













BMS

BMS





New features for end-users

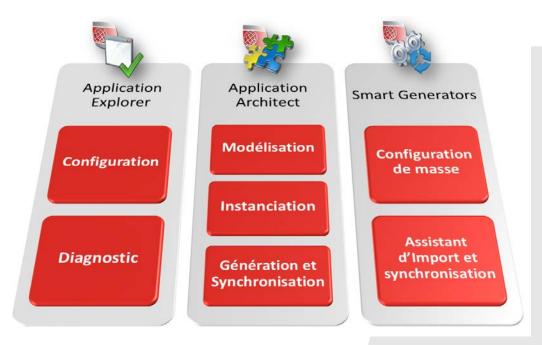




Energy

PcVue 10

- Advanced Configuration Environment
 - Configuration and diagnostic: Application Explorer
 - Modelisation: Application Architect
 - Extension of limits for configuration
- New Smart Generators : YOGOGAWA Stardom
- New built-in drivers
 - IEC 61850 Client
 - IEC 60870-5-104 Client
- In addition to sending emails, it is now possible to send short text messages - SMS
 - from the Supervisor









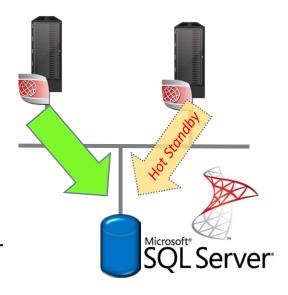


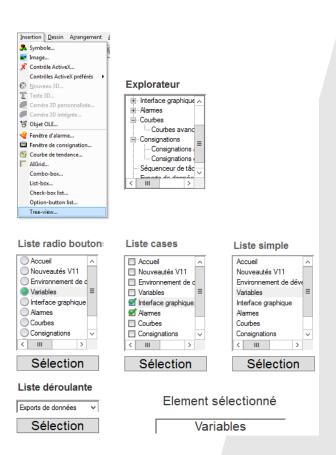






- New built-in form controls
 - List box, check box, tree-view,...
- HDS redundancy optimizations
 - Several PcVue stations with HDS server
 - One SQL Server station







PcVue Version	Environments	32 bits (x86)	64 bits (x64)
PcVue 10.0 SP2	Windows® XP with SP3 - Professional Edition	Yes	No
	Windows® Vista with SP1 - Business, Enterprise and Ultimate Editions	Yes	Yes
	Windows® 7 - Professional, Enterprise and Ultimate Editions	Yes	Yes
	Windows® Server 2003 with SP2 - Standard and Enterprise Editions	Yes	No
	Windows® Server 2003 R2 - Standard and Enterprise Editions	Yes	No
	Windows® Server 2008 - Standard, Enterprise and Datacenter Editions	Yes	Yes
	Windows® Server 2008 R2 - Standard, Enterprise and Datacenter Editions	N/A	Yes
	Microsoft® SQL Server 2005 (1)	Yes	Yes
	Microsoft® SQL Server 2008 (1)	Yes	Yes
	Microsoft® SQL Server 2008 R2 (1)	Yes	Yes
	Microsoft® SQL Server 2012 (1)	Yes	Yes

Nota (1):

For each supported version of Microsoft® SQL Server, the following editions can be used depending on your needs and their specific constraints: Express, Workgroup, Standard and Enterprise.

In particular, please note that Express Editions do not include the SQL Server Agent service. As a consequence, the scheduling of HDS replication tasks has to be done outside the Database Manager (PcVue built-in timetables, HDS maintenance plan, Windows® task scheduler...).

Nota (2):

Microsoft® SQL Server 2014 does not support Windows Vista.

Nota (3):

Regarding Microsoft® SQL Server we deliver the latest corresponding SQL Server Express Edition

Please contact us before using any of these:

- Windows Server for Embedded Systems and all other Embedded systems
- Any operating systems hosted in a system virtual machine such as Microsoft® Windows Virtual PC, Windows XP Mode, Hyper-V,
 VMWare®...

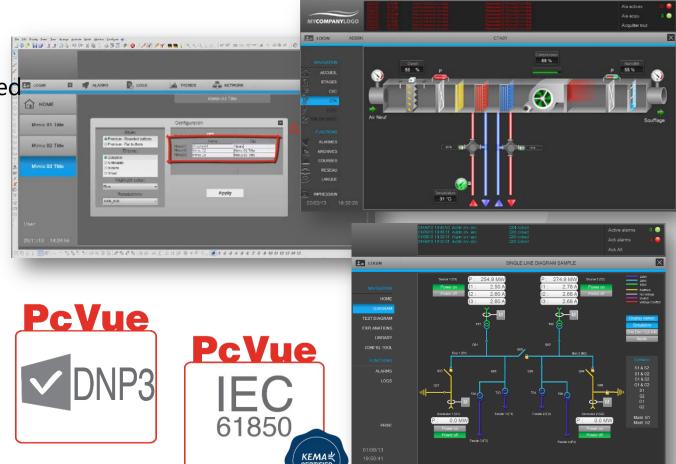




Market oriented, user centric



- New libraries
 - Modulars,market oriented,object oriented
 - Thousands of images and symbols
- Quickstart project
- DNP3 Client
- KEMA Certification for IEC61850
- Built-in busbar coloring feature
- New Smart Generator : SAIA PCD
- New built-in diagnostic tool











DATAEXPORT

New built-in component for data export to

Excel (Replacement of DataVue)

TouchVue

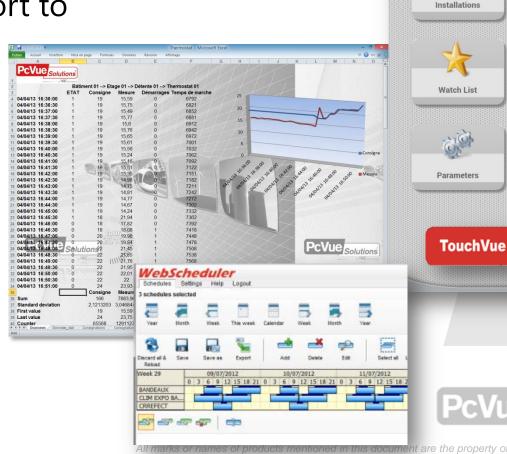
BMS

New mobile app for smartphones and tablets for alarm notifications

Webscheduler 2.0

Support for BACnet objects:

Schedules and calendars



Menu

Alarm list

Mobile App



2014 2015

Enhanced data processing



Solution SNMP

- Built-in SNMP Manager v1, v2 ,v2c & v3
- Built-in libraries (standard, MOXA,..)

New features for data processing

- Trend data export to Excel
- Trend Y=f(x)

New Smart Generators

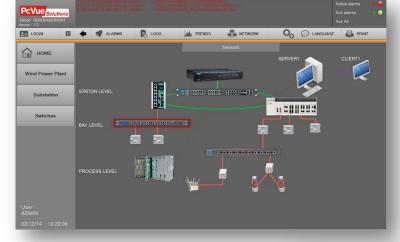


- BACnet
- TwinCAT BECKHOFF

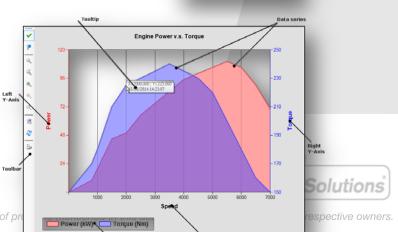








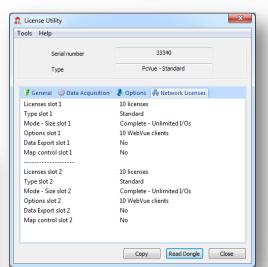


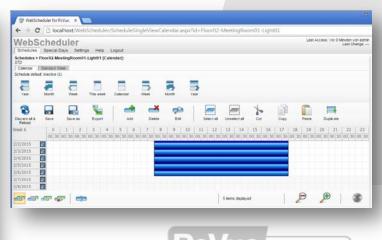


- HMI
- New built-in component GEO MAP CONTROL for interactive map management
- New libraries
- WebScheduler 11.1, new interface
- New tool for license management









PcVue Version	Environments	32 bits (x86)	64 bits (x64)
PcVue 11.1	Windows® Vista with SP2 - Business, Enterprise and Ultimate Editions	Yes	Yes
	Windows® 7 with SP1 - Professional, Enterprise and Ultimate Editions	Yes	Yes
	Windows® 8 – Professional and Enterprise Editions	Yes	Yes
	Windows® 8.1 – Professional and Enterprise Editions	Yes	Yes
	Windows® Server 2008 with SP2 – Web, Standard, Enterprise and Datacenter Editions	Yes	Yes
	Windows® Server 2008 R2 with SP1 – Web, Standard, Enterprise and Datacenter Editions	N/A	Yes
	Windows® Server 2012 - Foundation, Essentials, Standard and Datacenter Editions	N/A	Yes
	Windows® Server 2012 R2 - Foundation, Essentials, Standard and Datacenter Editions	N/A	Yes
	Microsoft® SQL Server 2008 (1)	Yes	Yes
	Microsoft® SQL Server 2008 R2 (1)	Yes	Yes
	Microsoft® SQL Server 2012 (1)	Yes	Yes
	Microsoft® SQL Server 2014 (1)(2)	Yes	Yes

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- Windows Server for Embedded Systems and all other Embedded systems
- Any operating systems hosted in a system virtual machine such as Microsoft® Windows Virtual PC, Windows XP Mode, Hyper-V, VMWare®...

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Nota (2):

Microsoft® SQL Server 2014 does not support Windows Vista.

Nota (3):

Regarding Microsoft® SQL Server we deliver the latest corresponding SQL Server Express Edition





2014 2016

2017

Market oriented, cybersecurity focused







- KNX
- COMMEND SA ICX
- Libraries for automated systems GEZE



• IEC 60870-5-104 Server



Ethernet/IP

• SNMP Agent



• Libraries for WATER







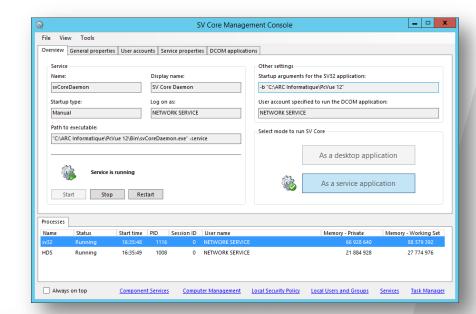


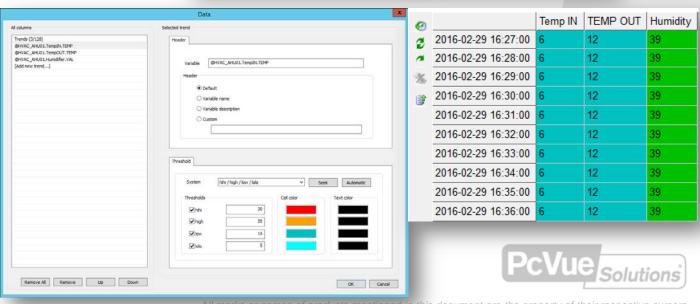






- PcVue runs as Windows service
- Signed installation packages
- New configuration features
- HMI
 - Historical data grid
 - New libraries
 - ...





PcVue Version	Environments	32 bits (x86)	64 bits (x64)
PcVue 11.2	Windows® Vista with SP2 - Business, Enterprise and Ultimate Editions	Yes	Yes
	Windows® 7 with SP1 - Professional, Enterprise and Ultimate Editions	Yes	Yes
	Windows® 8 Professional and Enterprise Editions	Yes	Yes
	Windows® 8.1 Professional and Enterprise Editions	Yes	Yes
	Windows® 10 Professional and Enterprise Editions	Yes	Yes
	Windows® Server 2008 with SP2 - Web, Standard, Enterprise and Datacenter Editions	Yes	Yes
	Windows® Server 2008 R2 with SP1 - Web, Standard, Enterprise and Datacenter Editions	N/A	Yes
	Windows® Server 2012 - Foundation, Essentials, Standard and Datacenter Editions	N/A	Yes
	Windows® Server 2012 R2 - Foundation, Essentials, Standard and Datacenter Editions	N/A	Yes
	Microsoft® SQL Server 2008 (1)	Yes	Yes
	Microsoft® SQL Server 2008 R2 (1)	Yes	Yes
	Microsoft® SQL Server 2012 (1)	Yes	Yes
	Microsoft® SQL Server 2014 (1)(2)	Yes	Yes

Nota (1):

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Nota (2):

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Nota (3):

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Open, secure and mobile platform



Web & mobile plateform



New Web & mobile platform full HTML5

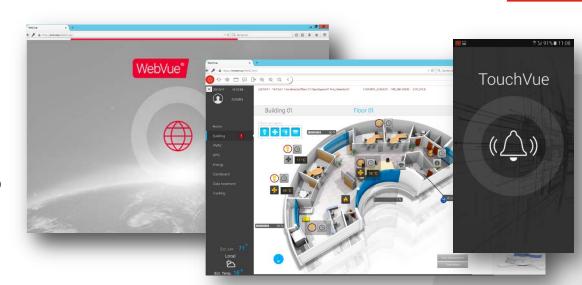
 Renewed notification mobile app TouchVue

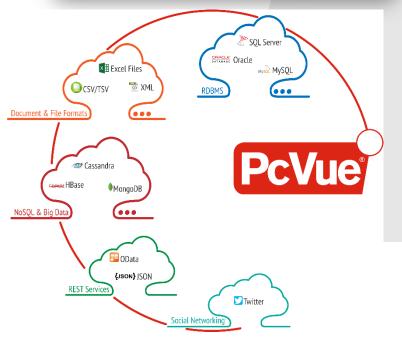
Connectivi ty



- New Universal Connector for multiple links: RDBMS, ERP, MES, CMMS, Social networks,...
- New Driver IoT for LoRa
- Support for OPC UA







Market

- BAS Renewed BACnet based on model New SG BACnet
- Industry Smart Generator TIA SIEMENS
- Energy IEC 61850 new features : SCL,Comtrade, new Smart Generator

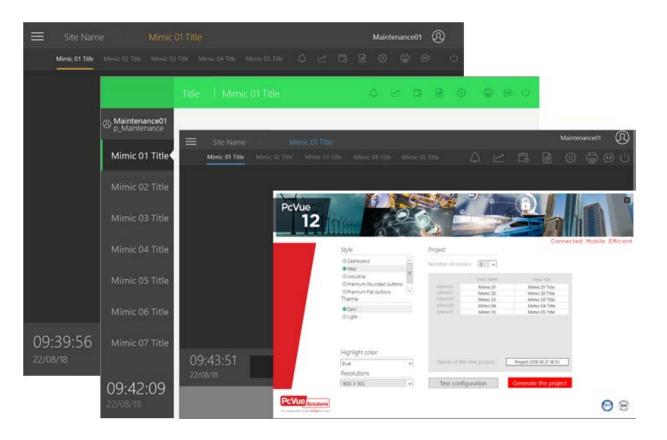
Configuratio n

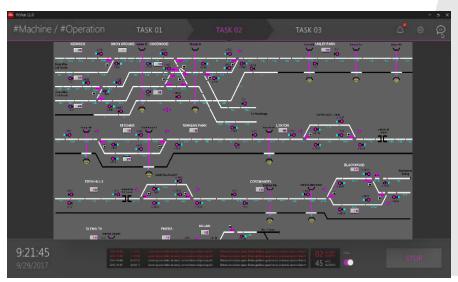
- New file transfer feature for PLCs
- Software license





- New libraries for railways
- New template project for Quickstart







PcVue Version	Environments	32 bits (x86)	64 bits (x64)
PcVue 12	Windows® 7 with SP1 - Professional, Enterprise and Ultimate Editions	No	Yes
	Windows® 8.1 Professional and Enterprise Editions	No	Yes
	Windows® 10 version 16078 or later - Professional and Enterprise Editions	No	Yes
	Windows® Server 2008 R2 with SP1 - Web, Standard, Enterprise and Datacenter Editions	N/A	Yes
	Windows® Server 2012 - Foundation, Essentials, Standard and Datacenter Editions	N/A	Yes
	Windows® Server 2012 R2 - Foundation, Essentials, Standard and Datacenter Editions	N/A	Yes
	Windows® Server 2016 - Essentials, Standard and Datacenter Editions	N/A	Yes
	Windows® Server 2019 - Essentials, Standard and Datacenter Editions	N/A	Yes
	Microsoft® SQL Server 2008 R2 (1)(3)	N/A	N/A
	Microsoft® SQL Server 2012 (1) (3)	N/A	N/A
	Microsoft® SQL Server 2014 (1)(2) (3)	N/A	N/A
	Microsoft® SQL Server 2016 (1) (3)	N/A	N/A
	Microsoft® SQL Server 2017 (1) (3)	N/A	N/A

Nota (1):

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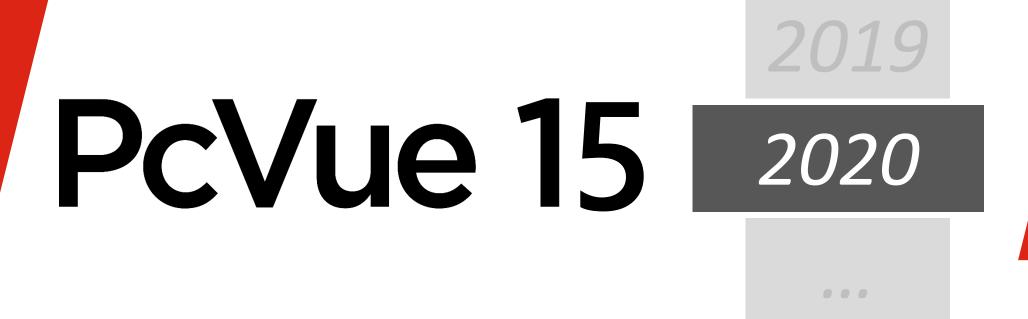
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 VMWare®...





Mobile.Interoperable.Secure.





SnapVue

- New mobile app for contextual supervision
- Real time monitoring & control according to location and user's role
- Smart bots: interactive and intelligent messaging system

Interoperability

- SQL data acquisition
- Mapping of a SQL request to a PcVue variable with no scriptts





Drivers

Energy

- New drivers
 - ICCP (IEC 60870-6)
 - IEC 61850-5-101
- Updated driver
 - IEC 61850-5-104: support for off-line mapping

Others

- BACnet
 - Static Device binding
 - User rights based on calendar
- OPC XML
 - Basic HTTP Authentication



Integration

News central version management system

- •3 digits numbering system
- Product version display
 - Project version created
 - Project version modified
- Status PRE-REF
- •System variable to check if a new version is available
- •New standard action to open the central project management on a function key
- •New command line argument to start a specific version

News Application Architect

- Geolocation objects
- Settings of SCADA Basic programs executed at opening/closing mimics
- Inserting symbols of Application Architect instances from PcVue interface

News Application Explorer

- CIMWAY Status
- Networking Status



Interface

News Replay system

New alarms and events popup customizable

Trend viewer: Extension to 100+ pens

Pie chart : support for real-time



Deployment et security

Support for Syslog for tracing and logging

- •Comply with the ANSSI and IEC 62443 requirements for logging & tracing
- •Support for Windows Event viewer and Syslog over UDP, TCP & TLS RFC 3164 & 5424



PcVue 15 Supported OS

PcVue Version	Environments	32 bits (x86)	64 bits (x64)
PcVue 12	Windows® 7 with SP1 - Professional, Enterprise and Ultimate Editions	No	Yes
	Windows® 8.1 Professional and Enterprise Editions	No	Yes
	Windows® 10 version 16078 or later - Professional and Enterprise Editions	No	Yes
	Windows® Server 2008 R2 with SP1 - Web, Standard, Enterprise and Datacenter Editions	N/A	Yes
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	Windows® Server 2012 R2 - Foundation, Essentials, Standard and Datacenter Editions	N/A	Yes
	Windows® Server 2016 - Essentials, Standard and Datacenter Editions	N/A	Yes
	Windows® Server 2019 - Essentials, Standard and Datacenter Editions	N/A	Yes
	Microsoft® SQL Server 2008 R2 (1)(3)	N/A	N/A
	Microsoft® SQL Server 2012 (1) (3)	N/A	N/A
	Microsoft® SQL Server 2014 (1)(2) (3)	N/A	N/A
	Microsoft® SQL Server 2016 (1) (3)	N/A	N/A
	Microsoft® SQL Server 2017 (1) (3)	N/A	N/A

Veuillez nous contacter pour l'utilisation des environnements suivants:

- Windows Server for Embedded Systems et autres Embedded systems
- Tout OS hébergé dans des environnements virtuels tells que Microsoft® Windows Virtual PC, Windows XP Mode, Hyper-V, VMWare[®]...

Nota (1):

Pour chaque version prise en charge de Microsoft® SQL Server, les éditions suivantes peuvent être utilisées en fonction de vos besoins et de leurs contraintes spécifiques: Express, Workgroup, Standard et Enterprise. En particulier, veuillez noter que Express Editions n'inclut pas le service SQL Server Agent . Par conséquent, la planification des tâches de réplication HDS doit être effectuée en dehors du gestionnaire de base de données (calendriers intégrés PcVue, plan de maintenance HDS, planificateur de tâches Windows® ...).

Nota (2):

Microsoft® SQL Server 2014 ne prend pas en charge Windows Vista.

Nota (3):

En ce qui concerne Microsoft® SQL Server, nous livrons la dernière édition SQL Server Express correspondante



Questions/Answers



Let's talk!



Thank you for your attention

Keep in touch!

