

IT environment

Valab® Server

Hardware configuration

For optimum use we recommend the installation of the Valab® server on a dedicated physical or virtual workstation, with the following minimum hardware configuration:

Hardware requirements

4-core processor - 32 or 64 bits - 2 Ghz

2 Gbytes of RAM (4 Gbyte recommended, in particular for Windows Server 2008®)

free space on the hard drive - recommendations given as examples for 18 months of online backup of data exchanged with the LIS (see the calculation formula provided below) :

- for a Valab of 100 reports / day : capacity 23 Gbytes
- for a Valab of 15 000 reports / day : capacity 335 Gbytes

Calculation formula of the free disk space required in Gbytes:

$$20 \text{ Gbytes} + [\text{Valab licence level in terms of number of reports / day} \\ \times \text{size of a cluster in Gbytes (typically 4096 bytes = 3.815e-6 Gbytes)} \\ \times \text{number of sends to Valab of the same report by the LIS per day (typically 10)} \\ \times \text{number of days for the archiving of reports by Valab (typically 18 months = 550 days)}]$$

1 network card

1 graphics card (1024 x 768 minimum)

Requirements for specific configurations

installation on virtual machine: the physical parameters of the virtual machine must be locked (network card MAC address, ...)

configurations with previous Valab licence system (USB hardware protection key or parallel protection key): 1 USB port or parallel port. These old licence systems are not used for operating systems more recent than Windows 7® and Windows Server 2008®

LIS-Valab connection through serial link: 1 free serial port or USB-serial port adaptor

Operating system

The Valab server comprises applications and Windows® 32 bit services which operate under the following operating systems :

Windows Server 2012® R2 x64

Windows Server 2008® R2 x64

Windows Server 2003® x86 and x64

Windows 10® x64

Windows 7® x86 and x64

Windows XP® SP3 x86 (caution, this operating system is no longer maintained by Microsoft)

We recommend that you install the latest Service Packs and critical updates for the Windows® version that you use.

Other required software resources

The following software resources (generally installed by default with the operating system) are necessary for the operation of the Valab server:

Windows Installer 3.0 minimum

Microsoft Internet Explorer 5.01 minimum

Microsoft .NET Framework 3.5

Other requirements

Infrastructure and security

The physical workstation hosting the Valab server must be located in a computer room with secure and protected physical access and that is only accessible by authorised personnel.

The physical machine on which the Valab server is installed must be protected by a UPS.

An automatic backup in conformity with your Quality Management System (frequency, length of conservation) must be set up.

Only authorised personnel have logins / passwords providing access to the workstation on which the Valab server[®] is installed.

Setup of the operating system

a Windows[®] administrator account to install / update the Valab server

VALAB_Node and Valab Server are Windows services, we recommend that you create a specific Windows account for these services with the necessary rights for their operation (Write rights in their own directory, "C:\valab\" by default)

ValabServerMonitor is an application for the monitoring of the Valab services and must be started with rights allowing the starting and stopping of the Valab services

a Windows[®] user account allowing the local Valab client to write in its own directory ("C:\Valab\" by default)

deactivation of entry into prolonged sleep mode

deactivation of entry into sleep mode of the network card

We strongly recommend that you restrict the access rights and rights to modify the installation directory of the Valab server in order to protect it against any unwanted modification from outside the software.

Network access

the network must be configured so as to allow:

- incoming connections of the TCP protocol on the port(s) used to communicate with the LIS (by default 7200)
- incoming connections of the TCP and UDP protocols on the ports used to communicate with the Valab services of the Valab server and with the Valab clients (by default 8089 and 2110)

we strongly recommend that you use a fixed IP address and a DNS name

External access

access to the following web sites:

- <http://www.valab.com>
- <https://pydio.valab.com>
- access in general to *.valab.com web sites

access to the FTP server: <ftp.valab.com>

a secure access for telemaintenance, with the possibility of transferring files (we recommend a VPN solution, with a VNC or RDP client for remote control)

Valab[®] Client(s)

Hardware configuration

For a comfortable use, we recommend the installation of the Valab client on a dedicated physical or virtual workstation, with the following minimum hardware configuration:

Hardware requirements

dual core processor - 32 or 64 bits - 2 Ghz

2 Gbytes of RAM (4 Gbytes recommended)

20 Gbytes free on the hard drive

1 network card

1 graphics card (1024 x 768 minimum)

requirements for specific configurations :

configurations with previous Valab licence system (USB hardware protection key or parallel protection key): 1 USB port or parallel port. These old licence systems are not used for operating systems more recent than Windows 7[®] and Windows Server 2008[®]

Operating system

The Valab client is a Windows[®] 32 bit application which operates under the following operating systems:

Windows 10[®] x64

Windows 7[®] x86 et x64

Windows Server 2012[®] R2 x64

Windows Server 2008® R2 x64

Windows Server 2003® x86 et x64

Windows XP® SP3 x86 (caution, this operating system is no longer maintained by Microsoft)

We recommend that you install the latest Service Packs and critical updates for the Windows® version that you use.

Other required software resources

The following software resources (generally installed by default with the operating system) are necessary for the operation of the Valab client:

Windows Installer 3.0 minimum

Microsoft Internet Explorer 5.01 minimum

Microsoft .NET Framework 3.5

Other requirements

Setup of the operating system

a Windows administrator account to install / update the Valab client

a Windows user account allowing the Valab client to write in its own directory ("C:\valab\" by default)

We strongly recommend that you restrict the access rights and rights to modify the installation directory of the Valab client in order to protect it against any unwanted modification from outside the software.

External access

an access to the web site:

- <http://www.valab.com>