



Valoptia.PSA

Prerequisites and installation guide

Table of Contents

Installing and configuring the Valoptia.PSA	3
<i>Prerequisites for installation</i>	3
Architecture	3
Overview diagram	3
Access control.....	4
HTTPS secured configuration	4
Installation.....	4
Information to Supply During Installation.....	4
IIS installation	5
SQL Database creation	5
Starting the Valoptia “Server” edition	6
Logs	6

Installing and configuring the Valoptia.PSA

Valoptia.PSA can be installed on virtual or physical servers.

Prerequisites for installation

Valoptia.PSA require the following technical elements to operate:

- Physical or virtual machine with at least 24 Gb RAM
- Microsoft Windows 64 bits (Windows Server 2016 or higher).
- Microsoft .NET Framework 4.5 or higher.
- Microsoft IIS server.
- MySQL or MariaDB SQL server (installed on the same machine [32 Gb RAM] on a different machine [16Gb Ram])
- MySQL or MariaDB ODBC Driver (v3.1 preferred)

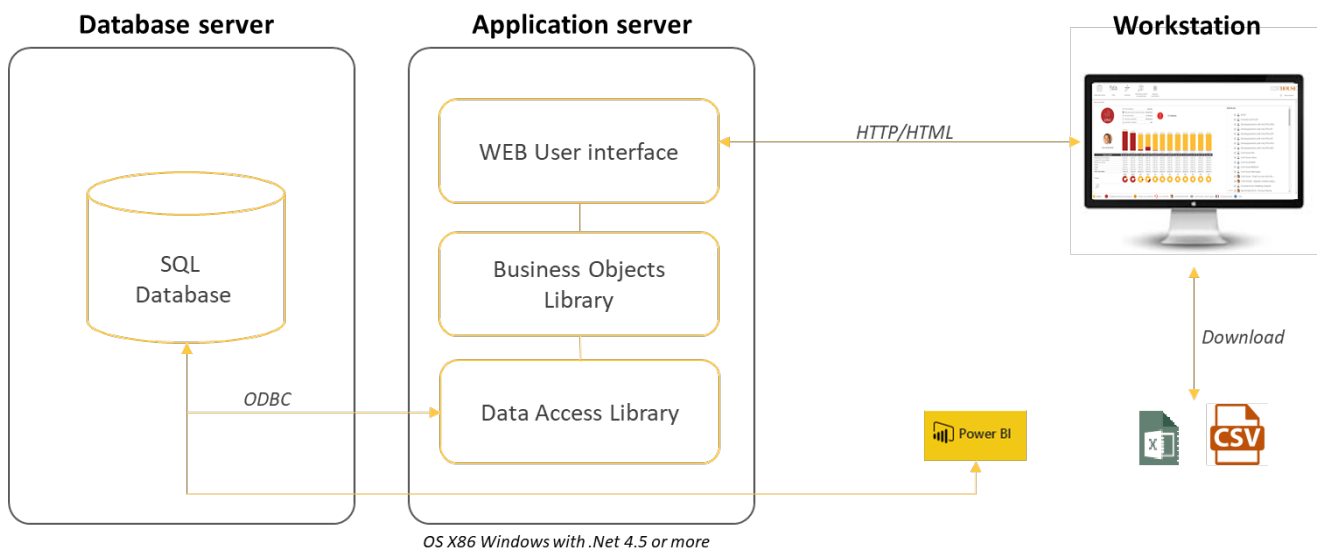
Valoptia.PSA Web presentation engine has been tested with the following browsers: Chrome, Edge and FireFox.

Running the Valoptia.PSA requires administrative rights.

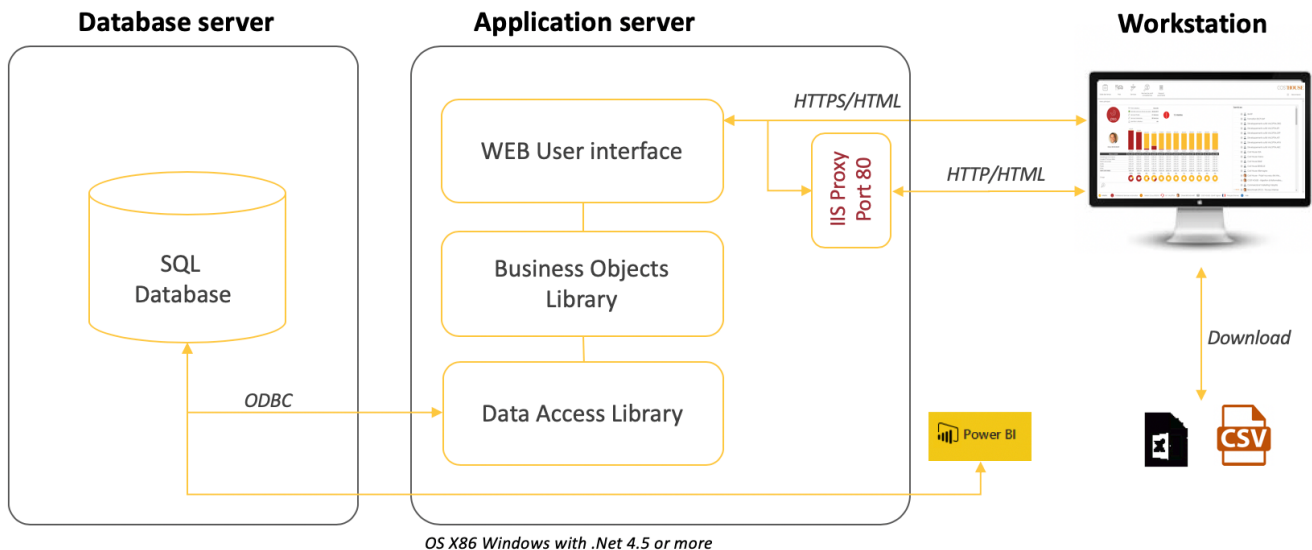
Architecture

Overview diagram

The architecture is represented on the following diagram:



The following diagram represents this architecture for a configuration, which is secured through HTTPS managed by IIS:



Access control

Access to the Valoptia.PSA is controlled by an authentication mechanism (user / password). The following rules are implemented in the Valoptia Solutions:

- For standard users:
 - At least 10 characters
 - At least 1 character in 3 of 4 categories: lowercase, uppercase, number, special character
- For administrator users:
 - At least 14 characters
 - At least 1 character in 3 of 4 categories: lowercase, uppercase, number, special character
- Expiration: the password is valid at most X days, X being configurable at the level of the application instance.
 - Re-use: The last 13 passwords used cannot be re-used
 - Blocking: the user account must be blocked after 5 unsuccessful attempts

HTTPS secured configuration

HTTPS configuration can be done with IIS or with Customer's router or proxy.

In the case of an IIS installation and a configuration secured through HTTPS, it is necessary to deploy the IIS corresponding to the presentation engine with a SSL certificate associated to the server in which the site is installed.

HTTP to HTTPS forwarding can be done using IIS "reverse proxy » functionality with "URL Rewrite" and "Application Request Routing" modules. The forwarding configuration requires an other IIS site for reverse proxy configuration.

Installation

A "classic" Installation of the Valoptia.PSA "Server" edition relies on one setup:

- setupValoptiaPSAServerEdition

Information to Supply During Installation

The following information is requested during the installation:

- Valoptia Web interface URL: URL corresponding to the IIS site associated to the Valoptia Web interface , like [http\(s\)://server:port](http(s)://server:port).
- SQL Database:

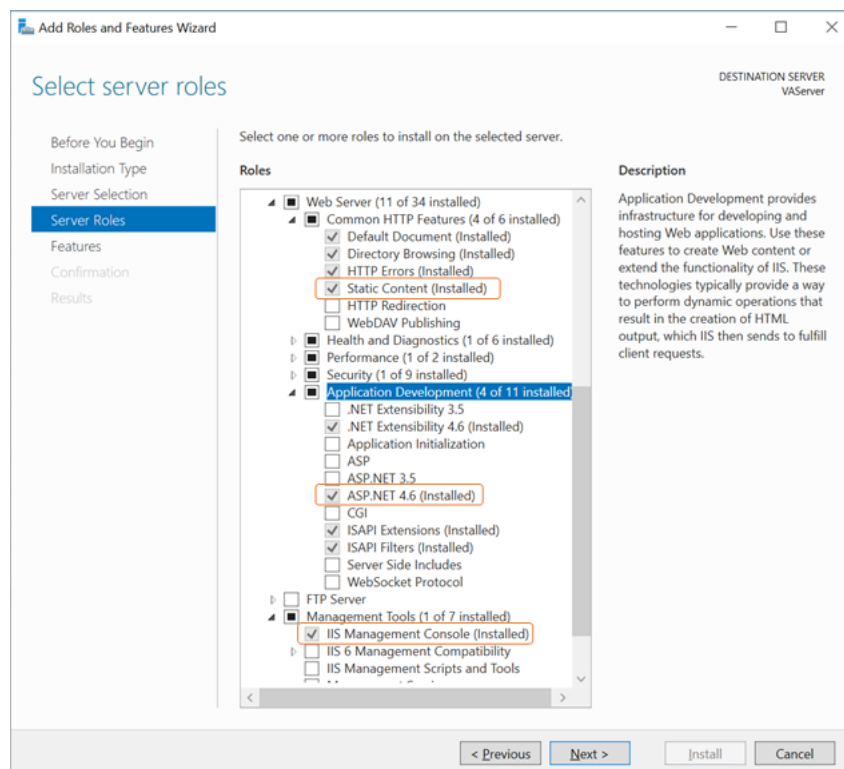
- Displayed name of the database (only used for user interface)
- ODBC Driver name (ex: “MariaDB ODBC 3.1 Driver”, “MySQL ODBC 5.3 Unicode Driver”)
- SQL Server URL (ex: “192.168.1.21”, “localhost”)
- SQL Database Name (technical name of SQL database)
- SQL Database user ID
- SQL Database user Password (this password is encrypted)
- License file.
 - Set the complete path to a license file. The corresponding file will be copied into the “license” subdirectory of the installation directory.

The Web presentation engine requires a Microsoft IIS instance to be installed.

IIS installation

Before installing the Valoptia Web interface, a proper IIS installation must be available. The following IIS installation items must be checked:

- Run “Server Manager”
- Add Roles and features



SQL Database creation

- The access to the SQL database is done with a unique SQL user (do not use root user).
- The ID and encrypted password of this user is given during installation and written in `./sql/MySQL.xml` file.
- This user must be granted for Database creation, table creation and alter, data insert and delete:
 - `GRANT ALL PRIVILEGES ON *.* TO 'username'@'localhost' IDENTIFIED BY 'password' ;`
- Then run SQL script `./sql/create_database.sql`
- Then run SQL script `./sql/update_database.sql`

Starting the Valoptia “Server” edition

The following Windows services must be running on the server(s):

- Valoptia WEB Service

The Microsoft IIS Server must also be running, and Application’s web site must be started.

Logs

Log messages written in ./log/valoptia.log file.