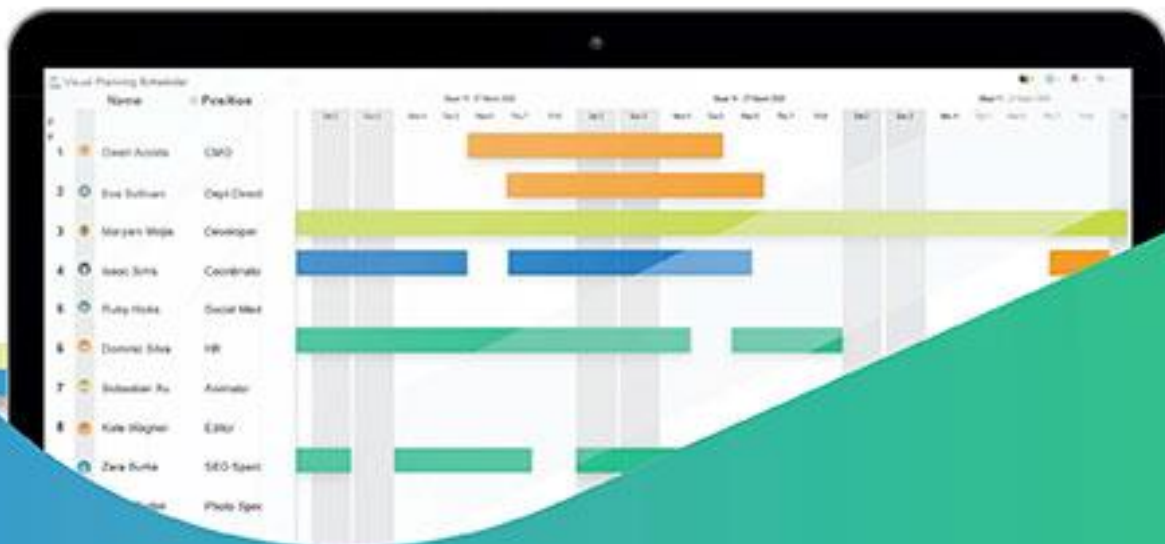




VISUAL PLANNING V8

System requirements & architecture

VP Enterprise

INSTALLING AND UPDATING VP ENTERPRISE

This document describes the minimum configurations required to install and use VISUAL PLANNING.

VISUAL PLANNING is a Java application that works in standalone or network modes and uses a database.

There are several versions of the software available:

- VISUAL PLANNING for use by multiple users on an Internet or Intranet network,
- The VPportal module for thin full web or smartphone clients,
- The VPGO module for thin full smartphone clients.

VISUAL PLANNING

This version of VISUAL PLANNING is for client / server networks. It requires a server machine and client workstations.

The Workstations

Hardware

- CPU: 2GHz Intel / AMD processor
- RAM: 4GB (Windows 10), 4GB (MacOS leopard or higher)
- Hard drive: 500MB of free disk space

The Server

The server machine configuration shown below is for reference only. It must be adapted to the type of use and the planned number of simultaneous users.

Please contact VISUAL PLANNING support for more information

- Hardware
 - CPU: 2GHz Intel / AMD processor
 - OS: 2012, 2016, 2019 64-bit Windows, LINUX, Unix
 - Hard drive: 500MB of free disk space
- Software
 - Data base systems : MySQL 5.x, Microsoft SQL Server 2008 to 2019 (essential, enterprise and express), Oracle 9i/10g/11g/12g, MariaDB 10.2, PostgreSQL 9.3.

- Application server J2EE necessary for all installations on a non-Windows server or one that does not use the package VPServer : Tomcat 8.x et 9.x, JONAS, JBoss, WebSphere, Weblogic.

The Network

All points of access to the Internet can access VISUAL PLANNING.

The bandwidth required for comfortable use depends on the number of users working on the same connection simultaneously, the way the schedules are used (frequency, etc.), the volumes of data, etc.

The minimum bandwidth required per user is 256kbit/s.

Maximum latency of 100ms.

At least, ADSL access to the schedules is recommended.

VPPORTAL

The **VPPORTAL** module allows the use of the fullweb client of **VISUAL PLANNING**.

It requires a terminal connected to the Internet with an **HTML 5**-compatible browser (Edge, Chrome, Mozilla – latest versions, Opera).

CAUTION

VPPORTAL does not work with Internet Explorer.

Depending on the type of use, VPPORTAL may require an installation of VISUAL PLANNING with access from outside (public IP).

It is important to validate this with your Network Administrator.

VPGO

The VPGO module is an add-on that requires the installation of VISUAL PLANNING.

It requires a smartphone or tablet type terminal (Google Android v7.1 minimum, Apple iOS 8.0 minimum).

CAUTION

VPGO requires an installation of VISUAL PLANNING with access from outside (public IP).

It is important to validate this with your Network Administrator.

VISUAL PLANNING ARCHITECTURE

This document describes the architecture of the VPServer application. It is valid for VISUAL PLANNING ENTERPRISE V8. This document does not describe the installation procedure for VPserver. For this, please refer to the installation guide available at [the knowledge base](#).

VPServer is the name of a package containing a J2EE application server, limited to the web container, JSP container and Servlet container, with the pre-deployed VPlanning client/server application. The J2EE server used by VPServer is based on the "Jakarta Tomcat version 9.0.52 Embedded" engine and is packaged for easier administration. The Java Virtual Machine used by VPServer is included directly in the package. The actual version is OpenJDK JRE 8U302 Zulu. There is no interaction with any other existing JVM on the server.

VPlanning is the name of Visual Planning solution's client/server application. The VPServer package was designed to ease the deployment of Visual Planning on Microsoft servers that have no available instance of a J2EE application server. As a JAVA Web Application, VPlanning is also deployable on any J2EE application server using a version of Oracle JAVA or Open JDK 8 such as TOMCAT, JBoss, JONAS, Weblogic or Websphere.

ARCHITECTURE

The VPlanning application is a n-tier architecture web application. The VPlanning server consists of a set of "servlets".

The VPlanning client uses Java's reference implementation, "Java Web Start" (www.java.com). This implementation can be used to run a client application outside the Web browser by mimicking an applet using the JNLP protocol (Java Network Launching Protocol).

As such, it can be considered as a rich client.

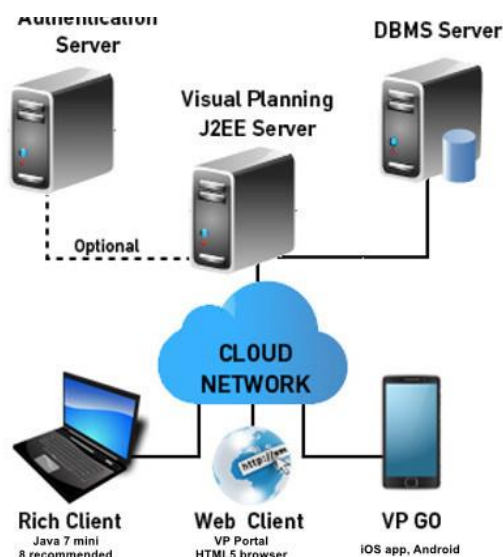
(<https://docs.oracle.com/javase/tutorial/deployment/deploymentInDepth/jnlp.html>)

It is now possible to use client environments with JAVA Azul (ZuluFX8 + Iced Tea8)

(<https://www.azul.com/products/components/icedtea-web/>).

Please contact our technical department for more details.

BASE IMPLEMENTATION



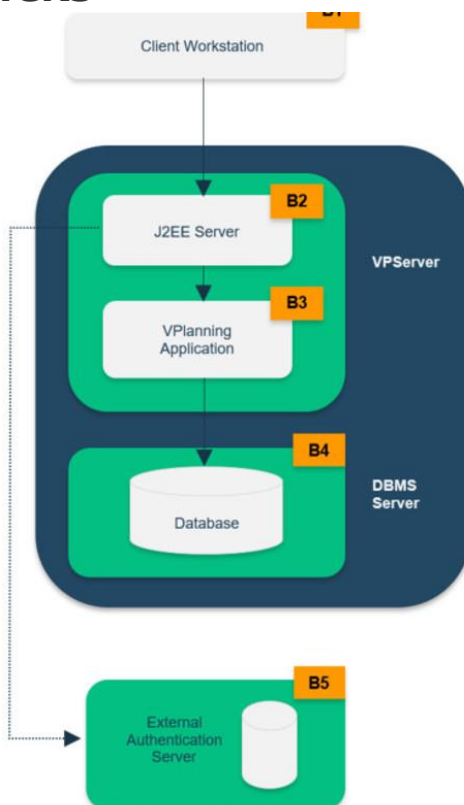
Communication between the VPServer server and client workstations uses the HTTP protocol.

The port used by default is port 80. It is possible to use any other port of your choice if needed. The data flow between clients and the server is encrypted (proprietary Blowfish encryption).

VPServer communicates with the database management system via the TCP/IP protocol using the applicable port. (1433 for SQL Server, 1521 for ORACLE, 3306 for MySQL and 5432 for PostgreSQL). Those parameters can be modified as well.

VPServer uses its own built-in authentication system. This system can be interfaced with a centralized external authentication system such as LDAP, SSO or any other, in case Visual Planning is integrated in an enterprise-scale IT environment.

APPLICATION BRICKS



B1 Brick

a: "VISUAL PLANNING" rich client

The user connects from his workstation to the VPServer server using a W3C browser (IE Explorer, Mozilla Firefox, Opera, Safari ...). The client application starts using JavaWebStart JAVA 1.8 ou JAVA Azul module (ZuluFX8 + IcedTea8)

b: "VP Portal" web client

The user connects from his workstation to the VPServer server using a W3C browser interpreting HTML5 (IE Explorer, Mozilla Firefox, Opera, Safari ...).

c: Mobile client: "VP GO"

The user connects from a smartphone using the VPGO mobile application, available on Apple & Google app stores (Android 7 minimum, iOS 8.0 minimum).

B2 Brick: J2EE Server

The J2EE server is based on the TOMCAT 9.0.52 engine with OpenJDK 8e. It is pre-set to receive the VPlanning application.

B3 Brick: VPlanning Application

The VPlanning application is the server part of Visual Planning. It is pre-deployed on the J2EE server.

B4 Brick: DBMS

(MySQL 5.6-5.7, SQLServer 2008-2016, Oracle 9i or higher, PostgreSQL 9.3, MariaDB 10.1) The DBMS server stores data of the schedules created and managed by VPlanning. The database is solely used for storage. The application does not use any type of trigger routine or stored procedure. Only the application server connects to the DBMS server.

B5 Brick: External Authentication Server (optional)

The Visual Planning Application uses its own management system to authenticate users. However, it is possible to shift the SSO authentication system via the SAML2 protocol or an LDAP connection (OpenLdap, Lotus, Active Directory...).

In Germany, Switzerland, Austria kindly contact for more information:
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