



Deployment Overview

Planon Software Suite
Version: L105

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About this Document

Intended Audience

This document is intended for *Planon Software Suite* users.

Contacting us

If you have any comments or questions regarding this document, please send them to: support@planonsoftware.com.

Document Conventions

Bold

Names of menus, options, tabs, fields and buttons are displayed in bold type.

Italic text

Application names are displayed in italics.

CAPITALS

Names of keys are displayed in upper case.

Special symbols

	Text preceded by this symbol references additional information or a tip.
	Text preceded by this symbol is intended to alert users about consequences if they carry out a particular action in Planon.

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Planon Software Suite

Planon is a three-tier application consisting of the following components.

- **Data tier:** containing the database server and file server.
- **Server tier:** containing the application server and the web server.
- **Client tier:** the Planon application , Planon Apps or Kiosk client.

The Planon software runs on the application server. The application server communicates with the database server for storing and retrieving data. The data itself is presented to the client computers through the Client tier.

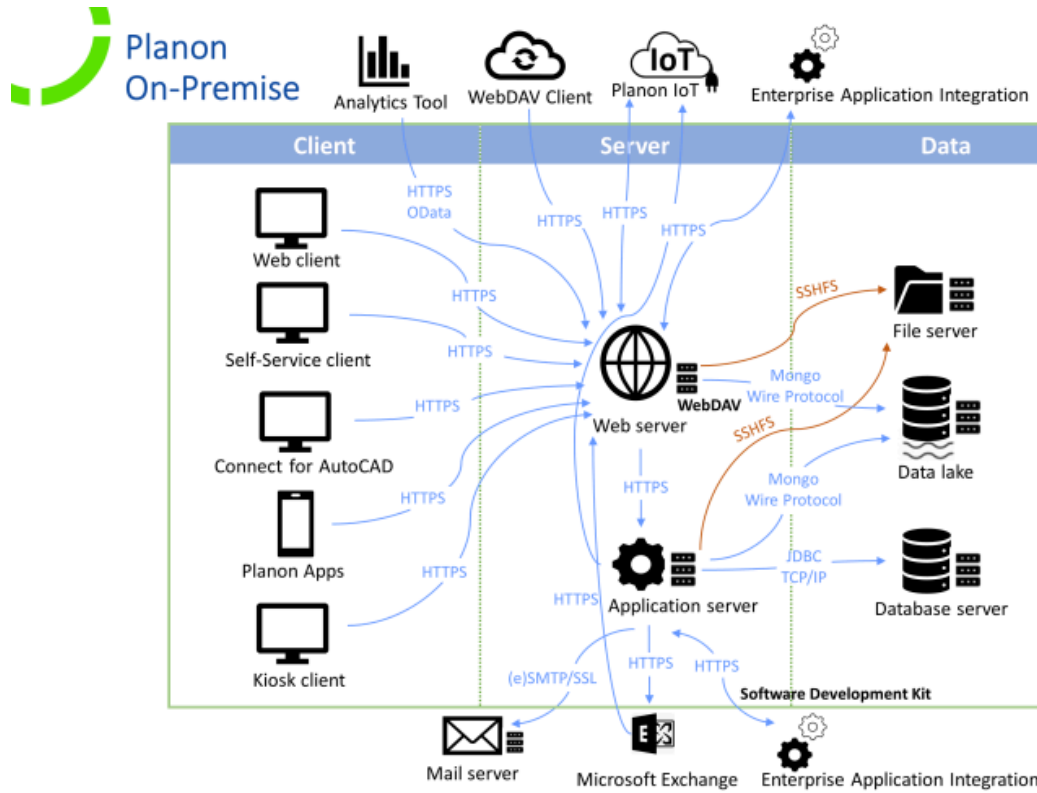
These topics provide a graphical overview of the setup with all the components.



- Although physically separated, these three-tier architecture components can reside on one single server.
- For an overview of supported component versions, see [Supported Configurations](#)
- For information on the installation, see [Planon ProCenter – Suite Installer](#).

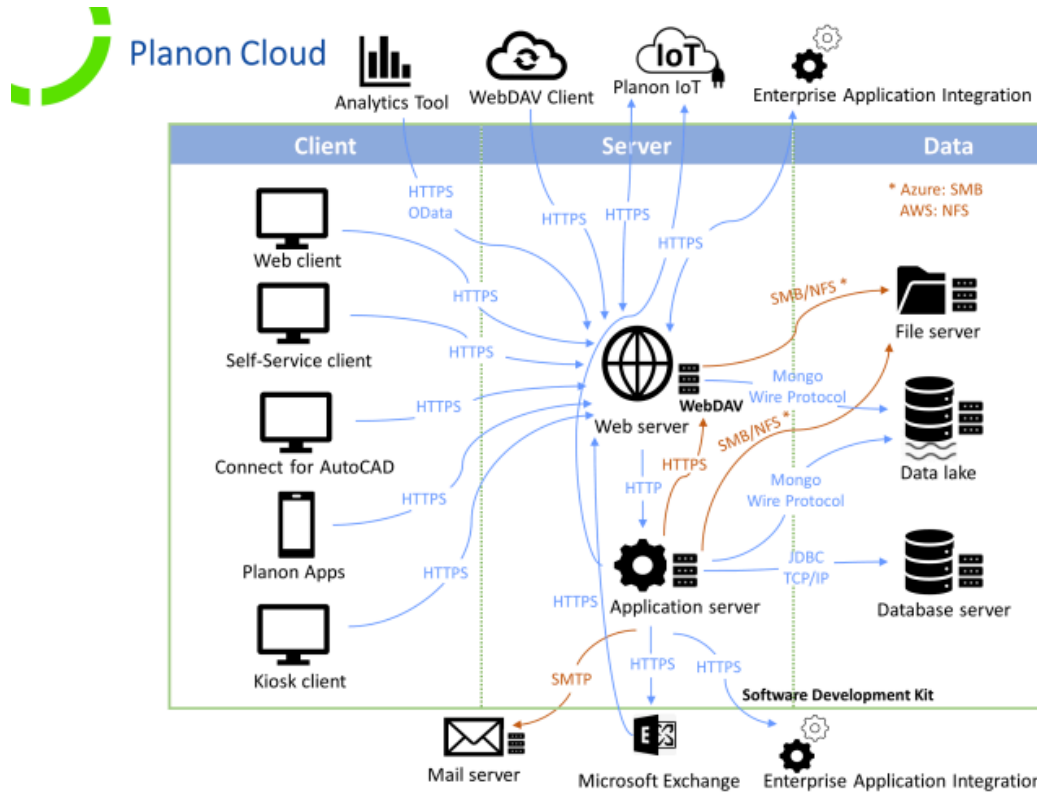
Deployment overview - On Premise Installation

The following overview depicts the deployment and protocols of **Planon on-premise**.



Deployment overview - Planon Cloud

The following overview depicts the deployment and protocols of **Planon Cloud**.



Cloud connections

Supported protocols for connecting to Planon Cloud

- HTTPS - using TLS 1.2

Supported ports

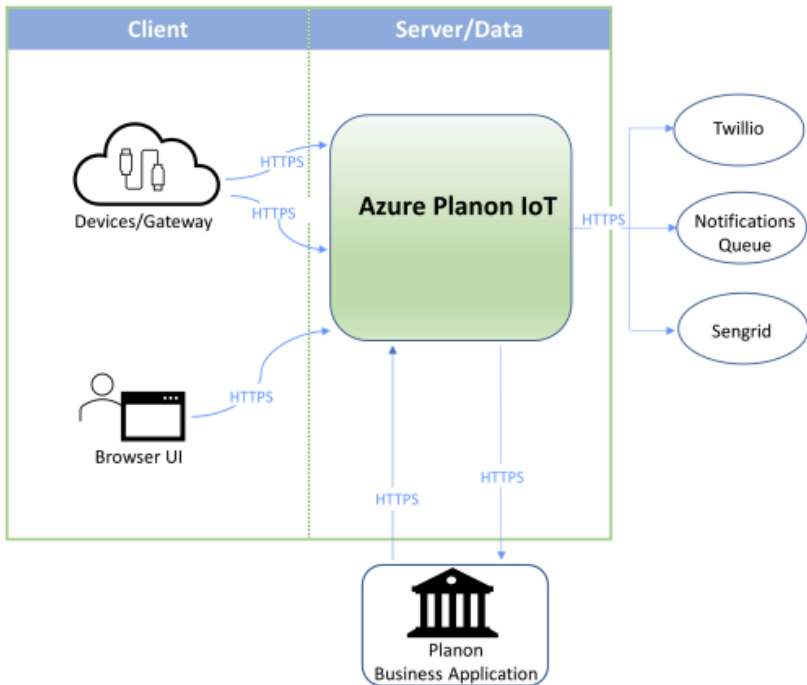
- 80 - redirect to port 443
- 443 - HTTPS
- 2303 - HTTPS for web services

Deployment overview - Planon IoT

The following overview depicts the deployment and protocols of **Planon IoT**.



Planon IoT

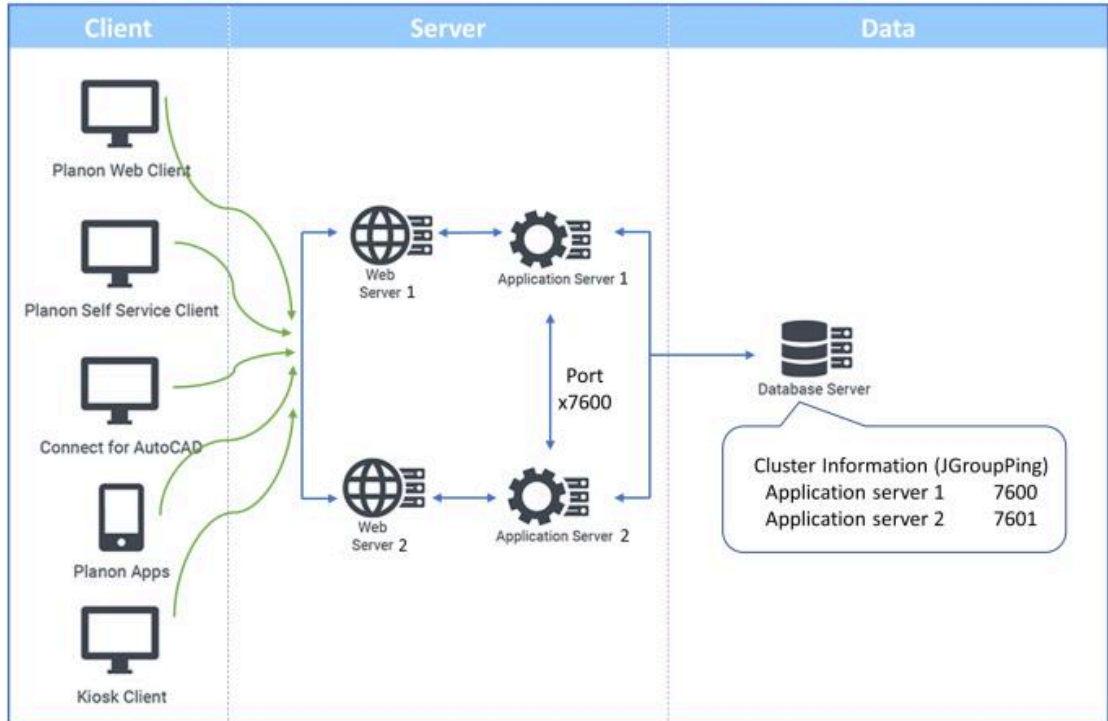


Application server clustering

Planon supports clustering, enabling application servers to communicate with each other.

Using this feature enables you to:

- Have a flexible setup.
- Improve the availability of the application.
- Balance the number of web servers and applications servers based on usage (the number of users).



By default, WildFly uses port 7600 to communicate between the WildFly servers.

i If you are using the same machine for installing the application server, you need to offset the ports (for example: 7600 and 7601). If you install the application servers on separate machines, you can use the default port number 7600.

The information about the application servers that are part of the cluster is saved in the Planon database.

When starting up an application server with the same database, the *cluster information* will automatically be registered.

Data tier

The data tier contains the following components.

- Database server
- File server


Database server

The database server contains the following components.

- Database server software
 - Microsoft SQL server
 - Oracle

 It is assumed that the database server software is already installed and available for use.

- Planon database

 For more information about the data structure of the database, see [Planon Database Dictionary](#), an HTML page that contains detailed information of the Planon database and which is updated each time the data structure is changed.

File server

For file references, Planon uses a file server/WebDAV server. WebDAV enables communication through HTTP/HTTPS.

Server tier

The server tier contains the following components:

- Application server
- Web server
- AWM Web server

Application server

Planon uses WildFly as application server platform.

Software

- The application server runs:
- The Planon server business logic.
- Optional software components:
 - CAD Import
 - Connect for Outlook - Part that pushes the information to the Exchange server.
 - Task Scheduler

Connection to the database server

The application server communicates with the database server through JDBC. The install set contains a set of JDBC drivers for the various database platforms.

The JDBC drivers are not dependent on locally installed software. Consequently, for example, for Oracle you do not require any native client software on the application server.

Multiple connections to the database are used.

Web server

Planon uses Tomcat as Web server platform.

Software

The web server runs:

- Planon Web Client software
- Optional software:
 - Planon SOA Web Services and Planon Software Development Kit - Used for communication between Planon and a third party applications.

- Connect for Outlook - (Web part) Part that receives the information from Exchange.

Communication with application server

The web server communicates with the application server through HTTP(s).

WebDAV

WebDAV is used for file handling. It is running on a web server. Clients will retrieve and upload files via the web server through HTTP(s). The file server location is configurable.

WebDAV will be installed secure, with a login name and password. The login name and password can be defined per property set.

It is possible to install a separate web server for WebDAV.

Planon WebDAV is not mandatory, own WebDAV installation are also supported.

Windows service wrapper

Planon uses Tanuki service wrapper to install the application server and the web server as a Windows service.

This Java Service Wrapper uses a configuration file **-wrapper-default.conf* to control various wrapper settings. The file contains all the information necessary to launch a JVM instance with the correct command line required by Planon.

Authentication

Planon users are authenticated at application server level. By default, during log on, users are verified against the database's account table.

If so desired, and compliant with the Java Authentication and Authorization Service (JAAS) specifications, customers may use a different authentication method.



For more information on JAAS, refer to: [https:// docs.oracle.com/javase/8/docs/technotes/guides/security/jaas/ JAASRefGuide.html](https://docs.oracle.com/javase/8/docs/technotes/guides/security/jaas/JAASRefGuide.html)

Most authentication methods can be downloaded free of charge, or can be custom-made. Planon supports for example [LDAPS](#) and [Single Sign-On](#) (Administrator's Guide).



Whichever authentication method is used, a corresponding user account must exist in Planon.

Client tier

Planon can be accessed by the following clients:

- Planon Web Client
- Planon Apps
- Kiosk client
- Connect for AutoCAD

Planon Web Client

The Planon Web Client uses the web server. For using the application on the client only an Internet browser is required. Communication with the web server is through HTTP(s).

The Planon Web Client can be used for:

- Back-office users.
- Self-Service users.

Planon Apps

The Planon Apps provide several time-saving, convenient solutions on a mobile device; e.g. check the availability of rooms, book a room, submit incidents, give field personnel real-time access to information available in enterprise systems.

The communication is through HTTP(s) via the web server.

Kiosk client

The Kiosk solution supplies possibilities to view, add, change and delete reservations on touch screens. The reservations are stored in Planon. The Kiosk client software must be installed.

The Kiosk client communicates through HTTP(s) with the web server.

Connect for AutoCAD

Connect for AutoCAD is a plug-in that is installed into AutoCAD® and enables AutoCAD users to maintain Planon data in their CAD drawings.

The communication is through HTTP(s) via the web server.

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