

## Apparo Fast Edit

System architecture

Stand-alone version



Content

<b>1</b>	<b><i>Overview about the Apparo Fast Edit architecture</i></b>	<b>3</b>
1.1	Web server	3
1.2	Apparo Gateway	3
1.3	Apparo Application Server	3
1.4	Apparo Repository	4
<b>2</b>	<b><i>Security</i></b>	<b>5</b>
<b>3</b>	<b><i>Examples of system architectures</i></b>	<b>6</b>
3.1	Example for a Single Instance	6
3.2	Example for a n-tier multi instance	7

## 1 Overview about the Apparo Fast Edit architecture

### 1.1 Web server

Following web server can be used:

- Microsoft Internet Information Service (IIS)
- Apache web server 2.4 (Apache is part of the setup for Windows environments)

The web server is enhanced by an ISAPI module/mod\_proxy and a virtual directory "apparo" that takes all Apparo Fast Edit requests and deliver them to the Apparo Application servers.

If single sign on is necessary then this server (and all client computers) must be member of a Windows domain and the IIS need additional configuration to be able to manage the user names.

Apache web server: Using web proxy module.

### 1.2 Apparo Gateway

All requests of the client web browsers are going to the IIS using port 80 or 443 (default).

The Apparo Gateway takes all http/https-requests starting with /apparo/ (that is the default directory) and move them to the Apparo Application servers using the communication port 9800 (default).

With this functionality load balancing and higher availability is possible. If an Apparo Application server is crashing then the Apparo Gateway is ignoring this server. If an application server is running again then this is noticed automatically by the Apparo Gateway.

The Apparo Gateway must be installed on all used web servers.

### 1.3 Apparo Application Server

The Apparo Application server is working with the requests and delivers the answer back to the Apparo Gateway.

An Apparo Application server can be installed on a single host or together with an Apparo Gateway.

It's possible to install many application servers on one host too but then the ports (start port and communication port) must be different for each application server.

The default port of the Apparo application server is 18000 (using Apache Tomcat) and the default communication port with the Apparo Gateway is port 9800.

The Apparo application server is supporting the following operation systems:

- MS Windows
- Linux (Red Hat, SUSE)

#### 1.4 Apparo Repository

The Repository stores all definitions about Business Cases, database connections and so on. It is a database like Oracle, MS SQL Server, IBM DB/2 or an internal database (Derby).

Each Apparo Application server must use a repository. If the application servers are working in a cluster then all servers must use the same repository (in this case the internal database is not useable).

## 2 Security

Following firewall architecture is possible:

----- Firewall 1 ----- open: 80/443 only -----

Web server (Microsoft Internet Information Server (IIS) or Apache web server)  
Apparo Gateway

----- Firewall 2 ----- open: 9800 only -----

Apparo Application server(s)

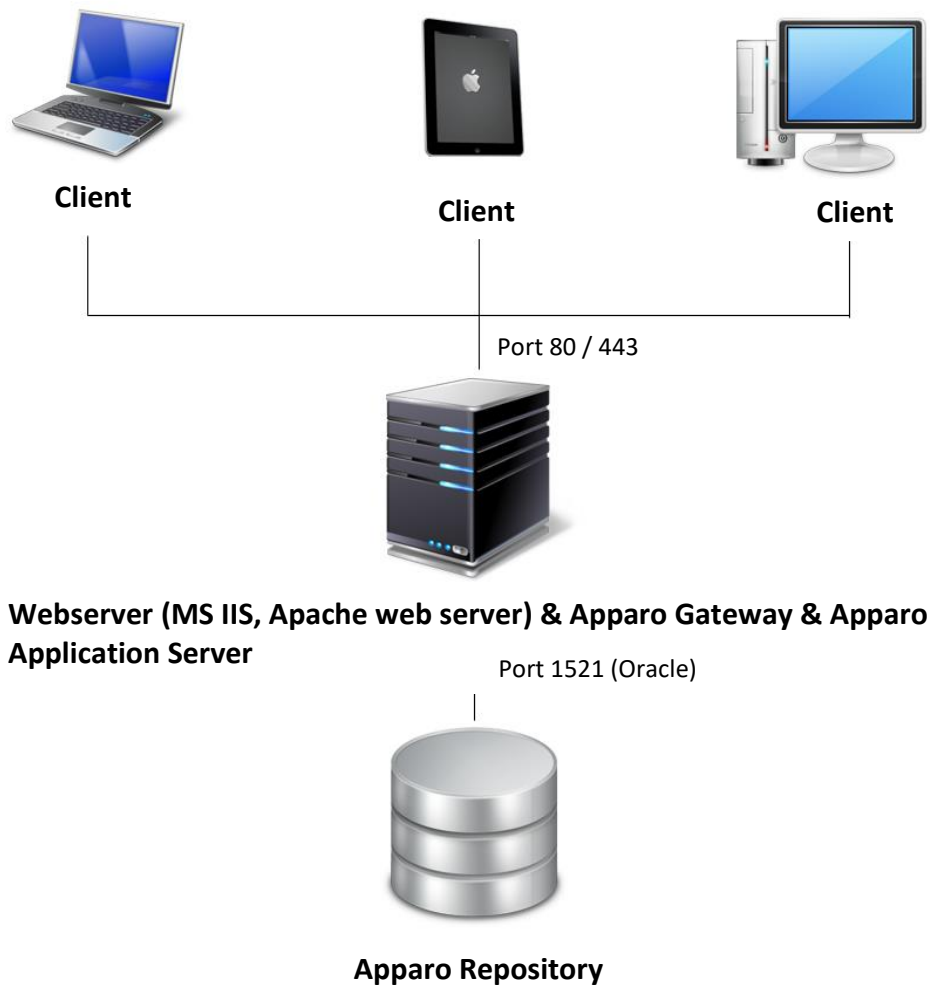
----- Firewall 3 ----- open: 1521 only -----

Databases including Apparo Repository

### 3 Examples of system architectures

#### 3.1 Example for a Single Instance

The complete installation is stored on one host only.



3.2 Example for a n-tier multi instance

