

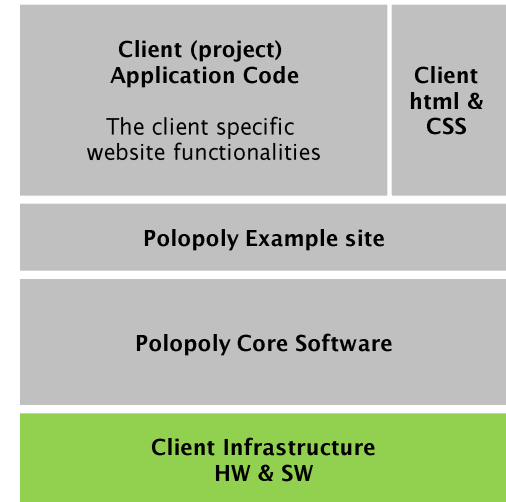


Polopoly Infrastructure

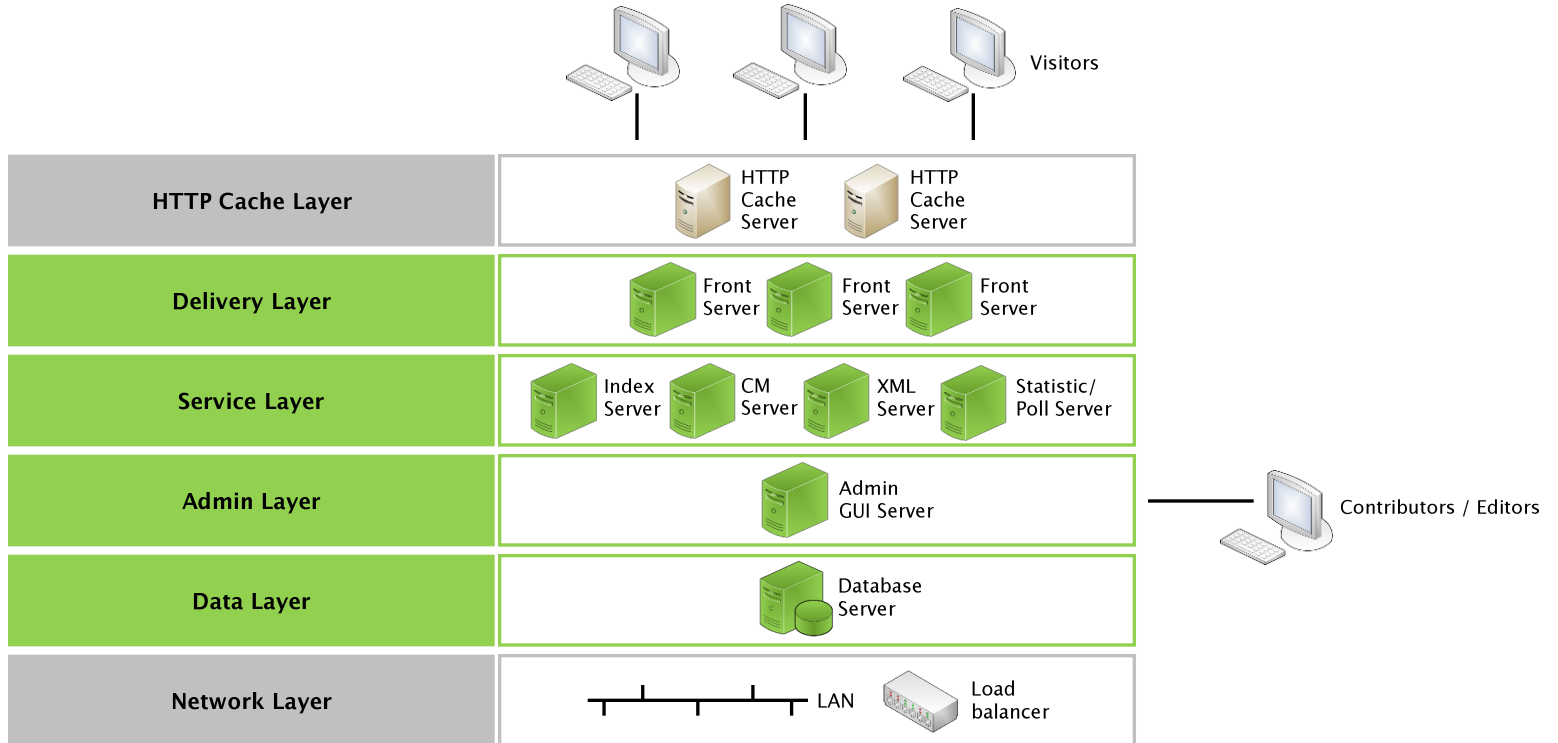
“Recommendation for Infrastructure and Example Environments”

The Polopoly Web CMS consists of:

- Infrastructure for Polopoly Web CMS
 - Hardware
 - Servers (for Polopoly SW, Client application and Database)
 - Software (excl. OS etc.)
 - Java
 - EJB Container
 - Web Application Container
 - Database
 - Other components:
 - Network (incl. firewall, router etc.)
 - Load Balancer
- Polopoly Core Software
- Polopoly Example Site
- The Client Application
 - Client specific functionalities
 - Client Design
 - HTML and CSS



Polopoly Infrastructure – Logical Layers



Polopoly Small Environment

- Service Layer**

- CM Server (application server)
 - HW (2–8 CPU, 6–16 GB RAM*, ~250 GB disk)
 - OS (64-bit Linux)
 - Java (64-bit Java version 1.5 or higher)
 - EJB Container** (JBoss 4.0.5GA)
 - also included: JDBC Connector (mysql-connector-java-5.0.5-bin.jar)
 - Web Application Container** (Tomcat 5.5.20)

*) Depends on “multi-machine set up”

- Data Layer**

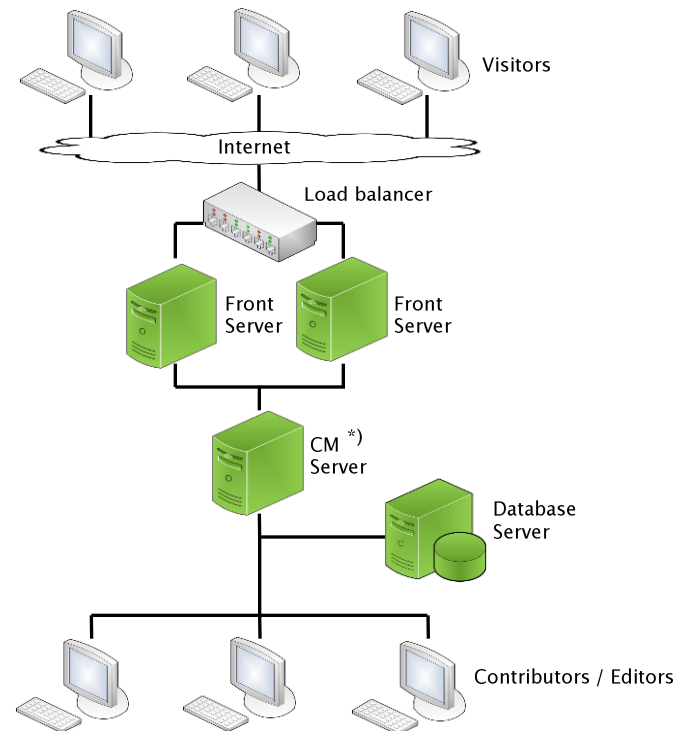
- Database Server
 - HW (2–8 CPU, 6–16 GB RAM, ~500 GB disk)
 - SW (MySQL-standard 5.0.24)

- Delivery Layer**

- Front Server
 - HW (2–6 CPU, 4–16 GB RAM, ~250 GB disk)
 - OS (64-bit Linux)
 - Java (64-bit Java version 1.5 or higher)
 - Web Application Container** (Tomcat 5.5.20)

- Network Layer**

- LAN (1 GBit/s or higher)



*) This server is included all different Polopoly servers and/or modules; CM server, Admin GUI server, Index server, XML server and Statistic/Poll server.

Polopoly Large Environment

Service Layer

- CM Server (application server)
 - HW (2–8 CPU, 6–16 GB RAM*, ~250 GB disk)
 - OS (64-bit Linux)
 - Java (64-bit Java version 1.5 or higher)
 - EJB Container (JBoss 4.0.5GA)
 - also includes: JDBC Connector (mysql-connector-java-5.0.5-bin.jar)
 - Web Application Container (Tomcat 5.5.20)

*) Depends on “multi-machine set-up”

Data Layer

- Database Server
 - HW (2–8 CPU, 6–16 GB RAM, ~500 GB disk)
 - SW (MySQL-standard 5.0.24)

Delivery Layer

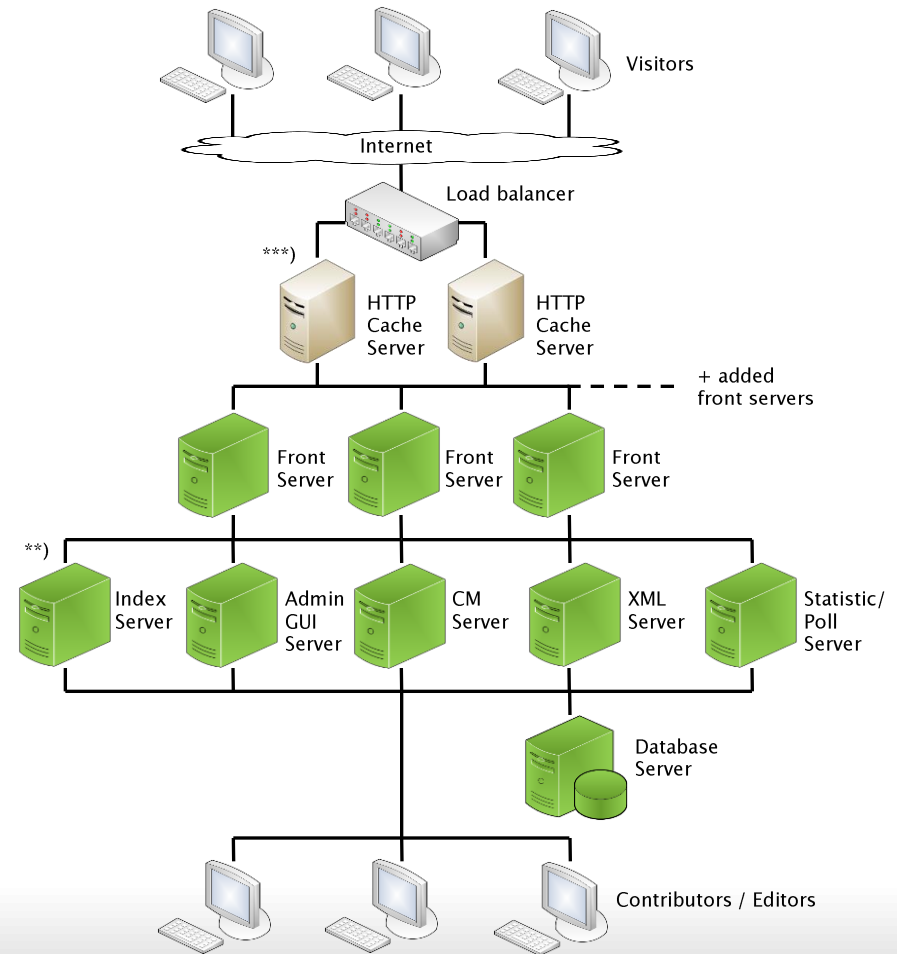
- Front Server
 - HW (2–6 CPU, 4–16 GB RAM, ~250 GB disk)
 - OS (64-bit Linux)
 - Java (64-bit Java version 1.5 or higher)
 - Web Application Container (Tomcat 5.5.20)

Network Layer

- LAN (1 GBit/s or higher)

**) The different Polopoly Servers can be handled by one server (as the basic environment) or by several separate servers depending on the client system design.

***) It is possible to increase performance by using an HTTP accelerator.



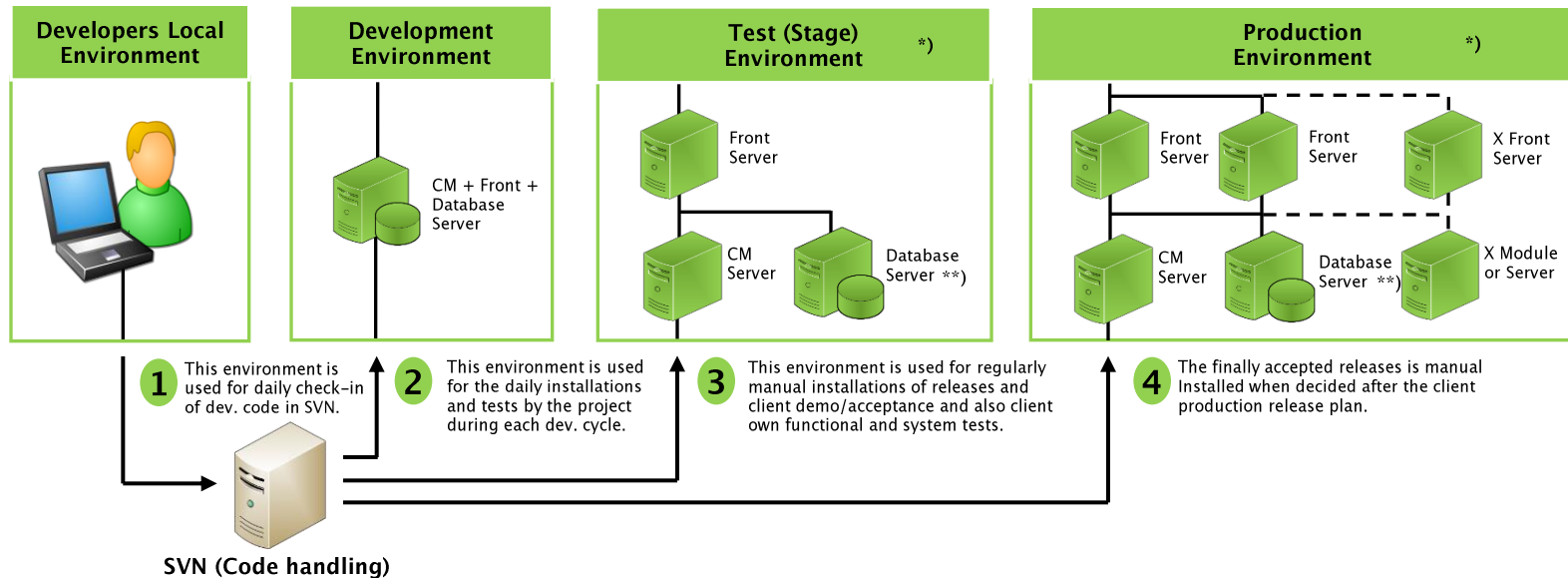
Polopoly Large Environment, cont.

- **Service Layer, cont.**

- Admin GUI Server
 - **HW** (2–4 CPU, 4–8 GB RAM, ~100 GB disk)
 - **OS** (64-bit Linux)
 - **Java** (64-bit Java version 1.5 or higher)
 - **Web Application Container** (Tomcat 5.5.20)
- Index Server
 - **HW** (4 CPU, 8 GB RAM, ~200 GB disk)
 - **OS** (64-bit Linux)
 - **Java** (64-bit Java version 1.5 or higher)
- XML Server
 - **HW** (2–4 CPU, 4–8 GB RAM, ~100 GB disk)
 - **OS** (64-bit Linux)
 - **Java** (64-bit Java version 1.5 or higher)
- Statistic/Poll Server
 - **HW** (4 CPU, 8 GB RAM, ~200 GB disk)
 - **OS** (64-bit Linux)
 - **Java** (64-bit Java version 1.5 or higher)

Different types of Polopoly Environments

- Example of needed infrastructure for handling of developed components



*) We recommend for having the same software versions in Dev, Test and Prod (Java, EJB Container, Web Application Container and Database).

***) We strongly recommend that the content in the database at Test and Prod are of equal content and size for best testing possibilities.

Monitoring of the Polopoly Infrastructure

The trick is to monitor all systems from one place, so it is possible to visually get a feeling of how the components interact. A sudden drop in the number of served requests might be traced right away to a malfunctioning router, provided the graphs for requests and dropped Ethernet packages are in the same system view.

- On a high level, be sure to have monitoring for:
 - IO
 - Memory
 - Network
 - Database

More detailed information about monitoring is found in the documents [Performance and tuning.pdf](#) and [JMX attributes recommended for monitoring.pdf](#).

If you haven't received these documents please ask us for it!

