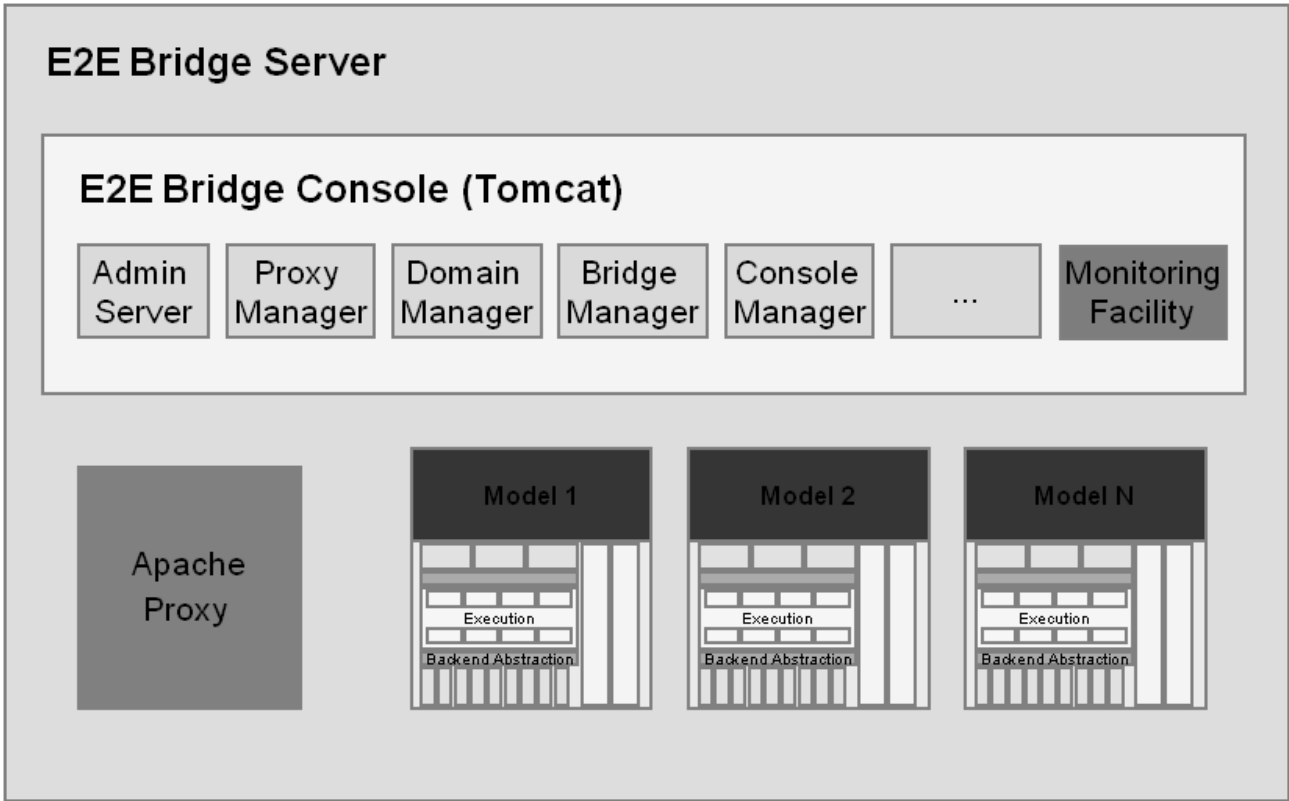# Bridge Architecture

A Bridge comprises all components required to manage and execute services and is running as native service(s). Supported platforms are:

- Linux
- Windows
- Solaris

Figure: Bridge Server Architecture

The administration console of the Bridge runs as an OS service (Windows service or Unix daemon) and contains the following managers:

Admin Server	The Admin Server is the administration UI of the managers.
Proxy Manager	The Proxy Manager manages proxy services.
Domain Manager	The Domain Manager controls the E2E Domain. Via this manager domain members are added or removed. Users, groups and roles are managed.
Bridge Manager	The Bridge Manager controls model execution (e.g. start, stop, deployment and licensing of models).
Console Manager	The Console Manager performs the firmware updates

The Console service should be monitored externally as it is crucial.

Second part of the Bridge server is an **Apache Reverse Proxy**. The proxy configuration is generated from the model definitions at deployment time, but can be enhanced by the customer. The proxy is used for HTTPS and authentication (using the corresponding Apache modules).

In addition, executed models are part of the E2E Bridge. Each model service is running on its own **xUML Runtime** instance. The xUML Runtime is a native executable that facilitates low level monitoring of the executed models and isolates model execution as well.