

Architecture Overview

Overview

本页面提供Tomcat服务器体系结构的概述

This page provides an overview of the Tomcat server architecture.

Terms

Server

服务器

一个Server表示整个容器。

In the Tomcat world, a **Server** represents the whole container. Tomcat provides a default implementation of the **Server interface** which is rarely customized by users.

Service

服务

一个Service是存活在一个Server内的中间组件，并精确地将多个连接器绑定到一台引擎上。

A **Service** is an intermediate component which lives inside a **Server** and ties one or more **Connectors** to exactly one **Engine**. The Service element is rarely customized by users, as the default implementation is simple and sufficient: **Service interface**.

Engine

引擎

一个Engine表示一个特定服务的请求处理管道。

当一个服务可能包含多个连接器时，引擎会接收并处理来自这些连接器的所有请求，并返回响应信息给相应的连接器。

An **Engine** represents request processing **pipeline** for a specific **Service**. As a **Service** may have multiple **Connectors**, the **Engine** receives and processes all requests from these connectors, handing the response back to the appropriate connector for transmission to the client. The **Engine interface** may be implemented to supply custom Engines, though this is uncommon.

Note that the Engine may be used for Tomcat server clustering via the `jvmRoute` parameter. Read the Clustering documentation for more information.

Host

主机

一个Host是一个网络名称到Tomcat服务器的组合。一个引擎可能包含多个主机

A **Host** is an association of a network name, e.g. `www.yourcompany.com`, to the Tomcat server. An **Engine** may contain multiple **hosts**, and the Host element also supports network aliases such as `yourcompany.com` and `abc.yourcompany.com`. Users rarely create custom **Hosts** because the **StandardHost implementation** provides significant additional functionality.

Connector

连接器

一个连接器负责处理与客户端的通信。

A **Connector** handles communications with the client. There are multiple connectors available with Tomcat. These include the HTTP connector which is used for most HTTP traffic, especially when running Tomcat as a standalone server, and the AJP connector which implements the AJP protocol used when connecting Tomcat to a web server such as Apache HTTPD server. Creating a customized connector is a significant effort.

Context

上下文 一个上下文表示一个web应用。 一个主机可能包含多个上下文（即部署多个应用），
每一个使用一条唯一的路径。

A **Context** represents a web application. A **Host** may contain multiple contexts, each with a unique path. The Context interface may be implemented to create custom Contexts, but this is rarely the case because the StandardContext provides significant additional functionality.

Comments

Tomcat被设计为一个快速、高效的Servlet规范实现。

Tomcat is designed to be a fast and efficient implementation of the Servlet Specification. Tomcat came about as the reference implementation of this specification, and has remained rigorous in adhering to the specification. At the same time, significant attention has been paid to Tomcat's performance and it is now on par with other servlet containers, including commercial ones. 显著受到人们重视的是Tomcat的性能

In recent releases of Tomcat, mostly starting with Tomcat 5, we have begun efforts to make more aspects of Tomcat manageable via JMX. In addition, the Manager and Admin webapps have been greatly enhanced and improved. Manageability is a primary area of concern for us as the product matures and the specification becomes more stable.