

# Documentation

Welcome to the Apache Geronimo v2.2 documentation. This is a work in progress and this documentation is to be updated frequently. Look into [here](#) to find out which topics are being updated and which ones are completed.

To help you find the content you are looking for we are separating the documentation into different chapters. In a nutshell, you can play with Geronimo by building, deploying and administering, and you can also learn how to develop applications and to get the most of them (and your time) when deploying to Geronimo.

So, how are we doing this? [Check this out!](#)

## User's Guide

- Quick start - Apache Geronimo for the impatient
  - Getting the software
  - Starting the server
  - Creating and deploying a sample application
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  - New features and enhancements
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- Installing and running
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      - Administering plugins
      - Converting applications into plugins using the Administration Console
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    - Configuring JAX-WS engine
    - Configuring a remote Apache HTTP server
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      - Farming using Deployment
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      - WADI clustering
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    - Configuring JavaEE App Client Security
    - Configuring login modules
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- Replacing default realm in Geronimo
- Configuring run-as and Default Subjects, and principal-role mapping
- Configuring HTTP header-based authentication
- Using SPNEGO in Geronimo
- Administering certificates
- Administering users and groups
- Certification authority
- Administering security realms
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  - Database (SQL) realm
  - LDAP realm
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- OpenID
- Configuring the transaction manager identity
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- Monitoring the health of the Apache Geronimo server
  - Configuring log level
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- Extensible Administration Console
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  - Planning and installing the Extensible Administration Console
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    - The Extensible Administration Console architecture
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    - geronimo-ra.xml
    - geronimo-application.xml
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  - Creating deployment plans for applications
    - Annotations
    - Creating deployment plans for Web applications
    - Creating deployment plans for EJB applications
    - Creating deployment plans for enterprise applications
    - Creating deployment plans for Java EE application clients
    - Creating deployment plans for Java Persistence API
    - Configuring resources in the application scope
    - Naming (JNDI)
  - Creating deployment plans using the deployment plan wizard
- Migrating
  - General considerations for migrating applications from other application servers
  - Migrating from JBoss to Geronimo
    - Using the J2G migration tool
    - EJB-BMP migration
    - EJB-session beans migration
    - Hibernate migration
    - JDBC migration
    - Servlets and JSPs migration
    - Building J2G from source
  - Migrating from Tomcat to Geronimo
  - Migrating from G 1.x to G 2.x
- Developing
  - Fast and easy development
  - Setting up your development environment
    - Selecting tools and options
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      - Web Tools Platform (WTP)
      - Geronimo Eclipse Plugin
      - Migration tools

- JBoss to Geronimo Migration Tool (J2G)
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  - Installing Eclipse IDE for Java EE Developers
  - Downloading and installing Eclipse and WTP separately
  - Installing Eclipse using Ant script from GEP build
- **Installing Geronimo Eclipse Plugin**
  - Installing GEP from within WTP
  - Installing GEP using Eclipse Update Manager
  - Installing GEP manually
- **Defining Geronimo server runtimes and servers**
  - Defining a Geronimo Server Runtime
    - Creating a project with a target runtime
  - Defining a Geronimo server
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- **Configuring your development environment**
  - Editing a server configuration in Eclipse
  - Using Eclipse XML tools in Apache Geronimo
  - Assembling a server using GEP
  - Making other configuration changes in Eclipse
- **Apache Geronimo Development Tools Project**
  - Developing GEP and Geronimo
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    - Preparing to run SQL statements at Deployment Time
    - Locating your application specific configuration files
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    - Getting familiar with Geronimo Eclipse Plugin (GEP)
      - Deploying and debugging applications using GEP
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      - Importing applications built with car-maven-plugin into GEP
      - Making deployment plan changes with Geronimo Deployment Plan Editor
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    - Developing a Hello World Web application
    - Accessing EJB in Web applications
    - Accessing JDBC in Web applications
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    - Developing JavaServer faces applications
      - Basics of JavaServer Faces
      - Developing a Simple JavaServer Faces application
      - Developing user interface with JSF
      - Developing applications with AJAX and JSF
      - Using JSF immediate expressions to access JSP
  - Developing EJB applications
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    - Developing EJB applications with Stateless Session Bean

- Developing EJB applications with Stateful Session Bean
  - Developing JMS applications with Message-Driven Bean
- Developing JPA applications
  - Developing container managed persistence with JPA
  - Developing bean managed persistence with JPA
  - Developing persistence for JSF applications with JPA
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  - Deploying and running EJB application clients
  - Deploying and running Java EE application client
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    - Developing a JAX-WS EJB Stateless Session Bean Web Service
    - Developing Clients for a JAX-WS Web Service
    - Developing SAAJ Messaging Web Services
    - Developing MTOM Web Services
    - Developing a simple RESTful Service
    - Developing Client for RESTful Web Service
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