**Apache Tomcat version 10.1.28**

how to install Apache Tomcat version 10.1.28 with command and example on ubuntu?

Memory updated

To install Apache Tomcat 10.1.28 on Ubuntu 22.04, follow these steps:

**Step 1: Install Java**

Tomcat requires Java to run. Install the default JDK:

bash

Copy code

sudo apt update

sudo apt install openjdk-17-jdk

Verify the installation:

bash

Copy code

java -version

**Step 2: Create a Tomcat User and Group**

For security, it's recommended to run Tomcat as a non-root user:

bash

Copy code

sudo groupadd tomcat

sudo useradd -M -s /bin/false -g tomcat -d /opt/tomcat tomcat

**Step 3: Download Apache Tomcat 10.1.28**

Navigate to the /tmp directory and download Tomcat:

bash

Copy code

cd /tmp

wget https://dlcdn.apache.org/tomcat/tomcat-10/v10.1.28/bin/apache-tomcat-10.1.28.tar.gz

**Step 4: Install Tomcat**

Extract the Tomcat package to the /opt/tomcat directory:

bash

Copy code

sudo mkdir /opt/tomcat

sudo tar -xf apache-tomcat-10.1.28.tar.gz -C /opt/tomcat --strip-components=1

**Step 5: Adjust Permissions**

Set the correct permissions for the Tomcat directories:

bash

Copy code

sudo chown -R tomcat: /opt/tomcat

sudo chmod -R 755 /opt/tomcat

**Step 6: Create a Systemd Service File**

Create a systemd service file to manage the Tomcat service:

bash

Copy code

sudo nano /etc/systemd/system/tomcat.service

Add the following configuration:

ini

Copy code

[Unit]

Description=Apache Tomcat 10.1.28 Web Application Container

After=network.target

[Service]

Type=forking

User=tomcat

Group=tomcat

Environment="JAVA\_HOME=/usr/lib/jvm/java-1.17.0-openjdk-amd64"

Environment="CATALINA\_PID=/opt/tomcat/temp/tomcat.pid"

Environment="CATALINA\_HOME=/opt/tomcat"

Environment="CATALINA\_BASE=/opt/tomcat"

Environment="CATALINA\_OPTS=-Xms512M -Xmx1024M -server -XX:+UseParallelGC"

Environment="JAVA\_OPTS=-Djava.awt.headless=true -Djava.security.egd=file:/dev/./urandom"

ExecStart=/opt/tomcat/bin/startup.sh

ExecStop=/opt/tomcat/bin/shutdown.sh

[Install]

WantedBy=multi-user.target

**Step 7: Reload Systemd and Start Tomcat**

Reload systemd to apply the changes and start the Tomcat service:

bash

Copy code

sudo systemctl daemon-reload

sudo systemctl start tomcat

Enable Tomcat to start on boot:

bash

Copy code

sudo systemctl enable tomcat

**Step 8: Verify Installation**

Check the status of the Tomcat service:

bash

Copy code

sudo systemctl status tomcat

You can now access the Tomcat server at http://your\_server\_ip:8080.

This will complete the installation of Apache Tomcat 10.1.28 on Ubuntu 22.04.

4o