How to participate in Tomcat community

Han Li (李晗)
Introductions

- Han Li (李晗)
- Senior Engineer @ Netease Youdao
- Tomcat committer since 2022
- Tomcat PMC member since 2023
Translation

https://poeditor.com/join/project/NUTljDWzrl
### Translation

Join link: [https://poeditor.com/join/project/NUTIjDWzrl](https://poeditor.com/join/project/NUTIjDWzrl)

<table>
<thead>
<tr>
<th>Message</th>
<th>Translation</th>
</tr>
</thead>
<tbody>
<tr>
<td>The executor has not been started</td>
<td>Java.org.apache.catalina.core.泓standardVirtualThreadExecutor.泓notStarted</td>
</tr>
<tr>
<td>RateLimitFilter (0) initialized with (1) requests per (2) seconds. Actual is (3) per (4) milliseconds. (5).</td>
<td>Java.org.apache.catalina.filters.泓rateLimitFilter_initialized</td>
</tr>
<tr>
<td>Access to the specified resource (0) has been forbidden.</td>
<td>禁止访问指定资源 (0).</td>
</tr>
<tr>
<td>Invalid start level, valid levels are: SND_RX_SEQ, SND_TX_SEQ, MBR_TX_SEQ, MBR_RX_SEQ</td>
<td>启动级别无效，有效级别为：SND_RX_SEQ，SND_TX_SEQ，MBR_TX_SEQ，MBR_RX_SEQ</td>
</tr>
<tr>
<td>The absolute url: (0) cannot be resolved in either web.xml or the jar files deployed with this application</td>
<td>无法在web.xml或使用此应用程序部署的jar文件中解析绝对url: (0).</td>
</tr>
<tr>
<td>XML parsing error on file (0)</td>
<td>无法解析XML文件 (0).</td>
</tr>
</tbody>
</table>

*Need to be consistent!!!!*
Mailing Lists
Mailing Lists

• tomcat-users
  - Subscription: Send a blank email to users-subscribe@tomcat.apache.org
  - Ask question: (please state following information)
    1. your exact Tomcat version
    2. your operating system
    3. your configuration
    4. your full stack trace

• tomcat-dev (Not a user support list!)
  - Subscription: Send a blank email to dev-subscribe@tomcat.apache.org
  - Receive commit messages
  - Receive Bugzilla notifications
  - Discussions about the actual development of the Tomcat

https://tomcat.apache.org/lists.html
BUG & PR
Bugzilla

Please don't use this as a forum!

https://bz.apache.org/bugzilla/
### Github

The Github page for the Apache Tomcat project can be accessed at:

https://github.com/apache/tomcat

This page provides an overview of the project, including branches, tags, and recent commits. The project is public and has a large number of commits.

**About Apache Tomcat**

- **Java**, **http**, **tomcat**, **javaee**
- **network-server**
- **Readme**
- **Apache-2.0 license**
- **Code of conduct**
- **Security policy**
- **Activity**
- **6.8k stars**
- **482 watching**
- **4.6k forks**

**Recent Commits**

- **.github/workflows**: Try not using multiple values in exclude
- **bin**: Improve messages if JAVA_HOME / JRE_HOME not set correctly
- **conf**: Improved regexp performance: "a-zA-Z0-9_" -> "\w" (#582)
- **java**: Update comment
- **modules**: Simplify code for allocation of blank arrays
- **res**: Increment version for next development cycle
- **test**: Additional debug logging after CI test failure
- **webapps**: Refactor to reduce pinning in HTTP/2 code when using virtual threads
- **.editorconfig**: Add ALv2 header (reported by RAT)
- **.gitignore**: Fix wrong path

**Commit Details**

- **Sccdida7 14 hours ago** 25,340 commits
- **2 months ago**
- **3 months ago**
- **4 months ago**
- **19 hours ago**
- **last week**
- **3 weeks ago**
- **14 hours ago**
- **2 days ago**
- **2 years ago**
- **6 months ago**
Configure IDE

1. Checkout source code
   - > git clone https://github.com/apache/tomcat.git
   - > git checkout $target-version

2. Build Apache Tomcat
   - > ant

3. Configure your favorite IDE
   - IDEA ( > ant ide-intellij )
   - Eclipse ( > ant ide-eclipse )
   - NetBeans ( > ant ide-netbeans )

4. Learn how to create and submit patches from the Apache Contributors Teach Guide
Configure IDE

Build failed: https://asciinema.org/a/602717
Build success & Config IDE: https://asciinema.org/a/602718
Release Voting
Pre-preparation work

1. Subscribe to the dev@ mailing list. (require)
   • Send a blank email to dev-subscribe@tomcat.apache.org

1. Install a Java Development Kit (require)
   • 11.0.x requires 21 and later.
   • 10.1.x requires 11 and later.
   • 9.0.x requires 8 and later.
   • 8.5.x requires 7 and later.

Reference: https://tomcat.apache.org/whichversion.html
Pre-preparation work

3. Install Apache Ant (require)
   • Download a binary distribution of Ant from [https://ant.apache.org/bindownload.cgi](https://ant.apache.org/bindownload.cgi)
   • Use your package manager (Homebrew, APT, etc.) (e.g. brew install ant / apt-get install ant)

4. Install Revision-Control tool (optional)
   • Git
     - Use your package manager (e.g. brew install git / apt-get install git)
   • Subversion
     - Use your package manager (e.g. brew install subversion / apt-get install subversion)
Step 1. Look for [VOTE] threads on dev@ mailing list

1. [VOTE] is a pre-release sign.

2. Version number to be released.

3. Some important changes compared to the previous version.

Step 2. Checkout the source code

- Download the source code manually from [1]

- Clone the source using git, then checkout a specific tag from [2]

> git clone https://github.com/apache/tomcat

> git fetch --tags

> git checkout $target-version
Step 3. Build & Test

> ant test

Be patient for a while. (~ 30 minutes)

> ant test-status

Success!
Buildfile: /Users/lihan/IdeaProjects/tomcat/build.xml
test-status:
[concat] Testsuites with skipped tests:
[concat] TEST-org.apache.catalina.connector.TestRequest.NIO.txt
[concat] TEST-org.apache.catalina.connector.TestRequest.NIO2.txt
.....
[concat] Testsuites with failed tests: < content is empty

Failed!
Buildfile: /Users/lihan/IdeaProjects/tomcat/build.xml
test-status:
[concat] Testsuites with skipped tests:
[concat] TEST-org.apache.catalina.connector.TestRequest.NIO.txt
[concat] TEST-org.apache.catalina.connector.TestRequest.NIO2.txt
.....
[concat] Testsuites with failed tests: < Listed failed tests
[concat] TEST-org.apache.tomcat.util.net.TestSsl.NIO.txt
[concat] TEST-org.apache.tomcat.util.net.TestSsl.NIO2.txt

Path: ${working}/output/build/logs/TEST-[Class].[IOType].txt
Demonstration - SUCESS

Running a set of tests

> ant -Dtest.name="**/TestCookie*.java" test

https://asciinema.org/a/602731

Running a single test

> ant -Dtest.entry=org.apache.catalina.util.TestServerInfo test
Demonstration - FAIL

https://asciinema.org/a/603000
Step 4. Reply [VOTE] thread on dev@

Tests pass:
check +1

Test failed:
check -1 & provide the following information
- your full stack trace
- your JDK version
- your OS information

Note: your vote will be termed “non-binding”, but will appear in the vote results. Your negative vote may block the release!
Some settings

# Default base path for dependent packages
basePath=${user.home}/tomcat-build-libs

# Number of parallel threads to use for testing.
test.threads=12 (default 1)

# IO type to use for testing
execute.test.nio=true
execute.test.nio2=true
classpath=*:lib/native:/lib/native

execute.test.apr=true  <- Tomcat 10.1.x and 11.0.x do not require APR/native library, so no need to configure

# Stop testing if a failure occurs
test.haltonfailure=false

....

See build.properties.default for more
Thanks

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