OpenDJ LDAP SDK Release Notes

Version 2.6.9

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Abstract

Notes covering OpenDJ LDAP SDK software requirements, fixes, known issues. The OpenDJ project offers open source LDAP directory services in Java.

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Table of Contents

Preface

OpenDJ LDAP SDK provides a set of modern, developer-friendly Java APIs as part of the OpenDJ product suite. The product suite includes the client SDK alongside command-line tools and sample code, a 100% pure Java directory server, and more. You can use OpenDJ LDAP SDK to create client applications for use with any server that complies with the *Lightweight Directory Access Protocol (LDAP): Technical Specification Road Map*, RFC 4510.

OpenDJ LDAP SDK brings you easy-to-use connection management, connection pooling, load balancing, and all the standard LDAP operations to read and write directory entries. OpenDJ LDAP SDK also lets you build applications with capabilities defined in additional draft and experimental RFCs that are supported by modern LDAP servers.

Chapter 1
Getting OpenDJ LDAP SDK

OpenDJ LDAP SDK is available from the ForgeRock repository, http://maven.forgerock.org/repo/.

To include OpenDJ LDAP SDK as a Maven dependency, include the ForgeRock repository in your list, and include the SDK as a dependency.

```
<repositories>
  <repository>
    <id>forgerock-staging-repository</id>
    <name>ForgeRock Release Repository</name>
    <url>http://maven.forgerock.org/repo/releases</url>
    <snapshots>
      <enabled>false</enabled>
    </snapshots>
  </repository>
  <repository>
    <id>forgerock-snapshots-repository</id>
    <name>ForgeRock Snapshot Repository</name>
    <url>http://maven.forgerock.org/repo/snapshots</url>
    <releases>
      <enabled>false</enabled>
    </releases>
  </repository>
</repositories>

<dependencies>
  <dependency>
    <groupId>org.forgerock.opendj</groupId>
    <artifactId>opendj-ldap-sdk</artifactId>
    <version>2.6.9</version>
  </dependency>
</dependencies>
```

Chapter 2
What's New in OpenDJ LDAP SDK 2.6.9

This release provides the following new features and enhancements.

- OPENDJ-1508: Allow "=" in malformed attribute options

- OPENDJ-1466: Improve initialization of InetSocketAddress in SDK to prevent cached DNS data.

- OPENDJ-1152: Provide the ability to debug leaked pooled connections

- OPENDJ-1124: Connection.search() return value not mockable

- OPENDJ-1112: LoadBalancing connection factories need better diagnostic messages

- OPENDJ-1091: Implement a cached connection pool

- OPENDJ-1033: The Rest2LDAP servlet does not support SSL

Chapter 3

Before You Install OpenDJ LDAP SDK Software

This chapter covers requirements to consider before you run OpenDJ LDAP SDK.

3.1   Java Environment

OpenDJ LDAP SDK is a pure Java library. OpenDJ LDAP SDK therefore should run on any system with full Java support. OpenDJ software runs on a variety of operating systems, including but not limited to Solaris SPARC and x86, various Linux distributions, Microsoft Windows, and Apple Mac OS X.

OpenDJ software requires Java 6 or 7, specifically at least the Java Standard Edition runtime environment. To build applications with OpenDJ LDAP SDK, you need the corresponding Java SDK.

ForgeRock recommends that you keep your Java installation up to date with the latest security fixes.

Chapter 4
Compatibility

This chapter covers major changes to existing APIs, and deprecated and removed APIs.

4.1   Major Changes

This maintenance release is binary-compatible with OpenDJ LDAP SDK 2.6.0. It does not introduce major changes.

4.2   Deprecation

Deprecated APIs are listed in the API Specification, on the Deprecated list page.

Deprecated APIs are likely to be removed in a future release.

4.3   Removals

Nothing has been removed from the public APIs in this release.

OpenDJ LDAP SDK Fixes, Limitations, & Known Issues

This chapter covers the status of key issues and limitations for this version of OpenDJ LDAP SDK. For detailed information regarding a particular issue, see the OpenDJ issue tracker.

5.1   Key Fixes

The following bugs were fixed in this release.

- OPENDJ-1491: NPE can occur during connection failover

- OPENDJ-1396: newHeartBeatConnectionFactory uses wrong units for DEFAULT_TIMEOUT_IN_SECONDS

- OPENDJ-1348: Various connection pool implementations do not recover if the target server is powered off and restarted

- OPENDJ-1320: Fix ABI compatibility breaks between 2.6.6 and 2.6.0 SDK

- OPENDJ-1270: Avoid unnecessary DNS lookups when performing bind requests

- OPENDJ-1258: Default heartbeat timeout of 500ms is too aggressive

- OPENDJ-1249: ConnectionFactory timeout setting is applied for Active Directory persistent search requests

- OPENDJ-1247: Client side timeouts do not cancel bind or startTLS requests properly

- OPENDJ-1209: Impossible to use OpenDJ SDK 2.6.4 with OpenDJ server 2.6.0

- OPENDJ-1203: MemoryBackend does not raise an error when trying to delete non-existent attribute

- OPENDJ-1197: API is lacking functionality to specify TCP connect timeout as well as various TCP socket options (e.g. TcpNoDelay).

- OPENDJ-1168: Warning message displayed when heartbeat check fails with a bind connection pool

- OPENDJ-1156: NPE in ReferenceCountedObject after shutting down directory

- OPENDJ-1137: ConnectionEntryReader does not provide a means for accessing controls in the search result

- OPENDJ-1121: Closing a connection after closing the connectionfactory causes NPE

- OPENDJ-1105: Rest2LDAP never returns a response when invalid parameters or content are provided on Jetty 8

- OPENDJ-1058: HeartbeatConnectionFactory does not actively shutdown dead connections

- OPENDJ-1049: ReferenceCountedObject can be released twice in some circumstances

- OPENDJ-1044: Doing a PUT with JSON data identical to what is on the server results in 400 status code

- OPENDJ-973: Create resource using PUT results in 500 Internal Server Error

- OPENDJ-734: NPE when attempting SSL connect with client certs

- OPENDJ-672: LDAP SDK SSL connect attempts fail with horrible stack trace when handshake fails

- OPENDJ-661: TimeoutChecker throws NullPointerException on application shutdown

5.2   Limitations

No limitations are noted for this release.

5.3 Known Issues

The following important issues remained open at the time this release became available.

- OPENDJ-1477: Constant re-allocation of DN per-schema caches

- OPENDJ-1475: Allow checking for alternative DNS names in server certificates when setting up secure connections

- OPENDJ-1024: modrate/searchrate: provide --warmUpDuration parameter

- OPENDJ-1023: modrate/searchrate: provide --duration parameter

- OPENDJ-1022: modrate/searchrate: provide --numOperations parameter

- OPENDJ-860: Returning false from SearchResultHandler.handleXXX should prevent subsequent notifications.

- OPENDJ-674: OpenDJ LDAP SDK should not leave app threads indefinitely waiting on futures when unexpected internal errors occur.

- OPENDJ-607: RoundRobinLoadBalancingAlgorithm balancing is not optimum after failure of a connection factory

- OPENDJ-514: OpenDJ SDK SASL integrity/confidentiality violates protocol

- OPENDJ-442: ldapsearch asking for password with GSSAPI when it should not need to

- OPENDJ-174: Investigate and fix performance regression introduced in fix for OPENDJ-127

- OPENDJ-155: Add support for OpenDJ extended matching rules and syntaxes

Chapter 6
How to Report Problems & Provide Feedback

If you have questions regarding OpenDJ LDAP SDK that are not answered by the documentation, there is a mailing list which can be found at https://lists.forgerock.org/mailman/listinfo/opendj where you are likely to find an answer.

If you have found issues or reproducible bugs within this release of OpenDJ LDAP SDK, report them in the OpenDJ issue tracker.

When requesting help with a problem, please include the following information:

• Description of the problem, including when the problem occurs and its impact on your operation

• Description of the environment, including the following information:

  • Machine type

  • Operating system & version

  • Storage type & version

  • Java version

  • OpenDJ LDAP SDK release version

  • Any patches or other software that might be affecting the problem

- Steps to reproduce the problem

- Any relevant access and error logs, and stack traces

Chapter 7
Support

You can purchase OpenDJ LDAP SDK support subscriptions from ForgeRock and from consulting partners around the world and in your area.

To contact ForgeRock, send mail to info@forgerock.com.

To find a partner in your area, see http://forgerock.com/partners/find-a-partner/.