IBM Tivoli Directory Server Version 5.2
Client Readme
Note
Before using this information and the product it supports, read the general information under “Notices”, on page 7.
Preface

This Readme contains a description of the IBM® Tivoli® Directory Server Version 5.2 Client SDK. This Software Developer Kit (SDK) provides LDAP application development support for the following operating systems:

- Windows NT® 4.0 with Service Pack 6 or higher, Windows® 2000, Windows XP, or Windows Server 2003 Standard or Enterprise
- AIX® 4.3.3, 5.1, or 5.2
- On xSeries® Linux: Red Hat Enterprise Linux 3.0, UnitedLinux 1.0, SuSE Linux Enterprise Server 8
- On Linux for S/390®: Red Hat Advanced Server 3.0, UnitedLinux 1.0, SuSE Linux Enterprise Server 8
- On iSeries™ and pSeries™ Linux: Red Hat Advanced Server 3.0, UnitedLinux 1.0, SuSE Linux Enterprise Server 8
- Solaris 7, 8, or 9
- HP-UX 11 or 11i
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Product description

The IBM Tivoli Directory Server Client SDK provides the tools required to develop LDAP applications. The following are provided:

- Client libraries that provide a set of C-language APIs
- C header files for building and compiling LDAP applications
- Documentation that describes the programming interface and the sample programs
- Sample programs in source form
- Executable versions of the sample programs:
  - ldapmodrdn.exe: LDAP modify relative distinguished name
  - ldapdelete.exe: LDAP delete
  - ldapmodify.exe: LDAP modify
  - ldapsearch.exe: LDAP search
  - ldapadd.exe: LDAP add (a renamed version of ldapmodify)
  - ldapchangepwd.exe: LDAP change password
  - ldapexop.exe: LDAP extended operations

The sample programs are provided in the following locations:

- AIX: /usr/ldap/examples
- HP-UX: /usr/IBMldap/examples
- Solaris: /opt/IBMldapc/examples
- Linux: /usr/ldap/examples
- Windows: ldaphome\examples

Included with the samples is a makefile for use with the sample programs, as well as a sample LDIF file.

The LDAP C libraries enable the programmer to develop applications that can access an LDAP-compliant directory server, including, but not limited to the following:

- IBM Tivoli Directory Server V5.2
- IBM Directory Server V4.1, V5.1
- IBM SecureWay® Directory Server V3.2.2
- eNetwork LDAP Directory Server V2.1
- eNetwork X.500 Directory Server for AIX
- Sun ONE Directory Server

The LDAP API provides typical directory server functions such as read, write and search. The client can authenticate itself to the directory server by way of simple LDAP Authentication, which uses a password and Distinguished Name (DN). The client can also authenticate using one of the Simple Authentication and Security Layer (SASL) mechanisms (CRAM-MD5, DIGEST-MD5, GSSAPI or EXTERNAL).
C applications

The client SDK includes tools to build your own LDAP application (LDAP Version 2 or LDAP Version 3). Note that the client SDK for C also provides support for Secure Sockets Layer (SSL) and Transport Layer Security (TLS), which provides data confidentiality (encryption) on connections protected by SSL and TLS. SSL support is enabled when the IBM Global Security Kit, Version 7a (GSKit) is installed. GSKit is optional software that is included with the IBM Tivoli Directory Server package.

Note: See “Considerations for secure LDAP (using SSL and TLS)” on page 5 for important details regarding the use of SSL with Version 5.2 of the IBM Tivoli Directory Server Client SDK.
Online documentation

In addition to the Readme file, online documents including the Administration Guide and the Programming Reference are provided in PDF and HTML format.

IBM Tivoli Directory Server Version 5.2 supports the use of the Java™ Naming and Directory Interface (JNDI) client from Sun Microsystems. For information about the JNDI client, go to the Sun Microsystems Web site at http://java.sun.com/products/jndi/1.2/index.html

Note: To view or print the PDF documentation you can download a free copy of the Adobe Acrobat Reader from the Adobe Web site at http://adobe.com

For Windows systems:

Administration Guide
file:\installation path\doc\language\admin_gd.pdf or admin_gd.htm

C-Client SDK Programming Reference
file:\installation path\doc\language\progref.pdf or progref.htm

For AIX systems:

Administration Guide
file:/usr/ldap/doc/language/admin_gd.pdf or admin_gd.htm

C-Client SDK Programming Reference
file:/usr/ldap/doc/language/progref.pdf or progref.htm

For Linux systems:

Administration Guide
file:/usr/ldap/doc/language/admin_gd.pdf or admin_gd.htm

C-Client SDK Programming Reference
file:/usr/ldap/doc/language/progref.pdf or progref.htm

For Solaris systems:

Administration Guide
file:/opt/IBMldaps/doc/language/admin_gd.pdf or admin_gd.htm

C-Client SDK Programming Reference
file:/opt/IBMldaps/doc/language/progref.pdf or progref.htm

For HP-UX systems:

Administration Guide
file:/usr/IBMldap/doc/language/admin_gd.pdf or admin_gd.htm

C-Client SDK Programming Reference
file:/usr/IBMldap/doc/language/progref.pdf or progref.htm

All of the publications for this product are available online in Portable Document Format (PDF) or Hypertext Markup Language (HTML) format, or both in the Tivoli software library: http://www.ibm.com/software/tivoli/library
Considerations for secure LDAP (using SSL and TLS)

Version 5.2 of the Client SDK requires that GSKit 7a be installed for SSL support. The LDAP libraries and utilities provided with the client SDK use the SSL libraries, if present. The SSL libraries are provided as part of the IBM GSKit 7a. If GSKit has been installed, the LDAP library dynamically loads the SSL libraries and uses them to enable support for secure connections. If GSKit has not been installed and the SSL libraries are not available, the LDAP library is fully functional with the exception of SSL support.

By using SSL with server authentication, an LDAP application can use simple LDAP authentication (user ID and password) over a secure, encrypted communication connection. SSL thus provides for the establishment of a secure connection between the LDAP client application and the LDAP server. In addition, SSL provides data confidentiality (encryption) on connections protected by SSL. Authentication of servers to the clients is accomplished with X.509 certificates.

Note: The IBM Tivoli Directory Server server component also uses GSKit to enable support for SSL.

See the IBM Tivoli Directory Server Version 5.2 C-Client SDK Programming Reference and the IBM Tivoli Directory Server 5.2 Installation and Configuration Guide for information about GSKit.
Appendix. Notices

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