

OpenLDAP

OpenLDAP Lightweight Directory Access Protocol Server

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1. Overview

OpenLDAP: *OpenLDAP Lightweight Directory Access Protocol Server*

This is a minimal implementation of a service module to support deployment of the OpenLDAP "slapd" process.

The assumption is made that "slapd" will run as the ControlTier framework user on a non-standard, non-privileged port.

Additionally, the OpenLDAP package must be pre-installed on the system and the "slapd.conf" file manually configured. A future version of this module will no doubt generate this configuration file from model data and a template.

2. Design

Super Type Service

Role	Concrete. (Objects can be created.)
Instance Names	Unique
Notification	false
Template Directory	
Data View	Children, proximity: 1
Logger Name	

3. Constraints

3.1. Allowed Child Dependencies

- [OpenLDAPArgsFile](#) 1
- [OpenLDAPConfigFile](#) 1
- [OpenLDAPDirectory](#) 1
- [OpenLDAPPidFile](#) 1
- [OpenLDAPRootDn](#) 1
- [OpenLDAPRootPw](#) 1
- [OpenLDAPSuffix](#) 1
- [OpenLDAPTimeout](#) 1
- [OpenLDAPUrlList](#) 1

1: These types have a *Singleton* constraint. Only one instance may be added as a resource.

3.2. Allowed Parent Dependencies

- Node
- Site

4. Attributes

4.1. Exported Attributes

Name	Property	Description
basedir	deployment-basedir	Base directory location for "etc/openldap/slapd.conf" and other runtime files.
install-root	deployment-install-root	OpenLDAP installation directory locating "libexec/slapd".

4.2. Defaults for Imported Attributes

Name	Default	Description
argsFile	\${entity.attribute.basedir}/var/run/slapd.args	
configFile	\${entity.attribute.basedir}/etc/slapd.conf	
directory	\${entity.attribute.basedir}/var/lib/ldap	
pidFile	\${entity.attribute.basedir}/var/run/slapd.pid	
rootDn	cn=Manager,dc=controltier,dc=com	
rootPw	secret	
suffix	dc=controltier,dc=com	
timeout	10	Start/stop command default timeout in seconds.
urlList	ldap://*:3890/	Default URL list used to start "slapd" on a non-privileged port.

5. Commands

Note:

Commandline options displayed in square brackets "[]" are optional. If an option expects arguments, then angle brackets are shown after the option "<>". Any default value is shown within the brackets.

5.1. assertServiceIsDown

Check whether the OpenLDAP "slapd" process is down

Usage

```
assertServiceIsDown [-basedir <>] [-pidfile <>]
```

Options

Option	Description
basedir	<i>Base directory</i>
pidfile	<i>PID file</i>

5.2. assertServiceIsUp

Check whether the OpenLDAP "slapd" process is up

Usage

```
assertServiceIsUp [-basedir <>] [-pidfile <>]
```

Options

Option	Description
basedir	<i>Base directory</i>
pidfile	<i>PID file</i>

5.3. startService

Start the OpenLDAP "slapd" process

Usage

```
startService [-basedir <>] [-configfile <>] [-installroot  
<>] [-pidfile <>] [-timeout <>] [-urllist <>]
```

Options

Option	Description
--------	-------------

basedir	<i>Base directory</i>
configfile	<i>PID file</i>
installroot	<i>Installation directory</i>
pidfile	<i>PID file</i>
timeout	<i>Timeout in seconds</i>
urllist	<i>List of URLs to serve</i>

5.4. stopService

Stop the OpenLDAP "slapd" process

Usage

```
stopService [-basedir <>] [-pidfile <>] [-timeout <>]
```

Options

Option	Description
basedir	<i>Base directory</i>
pidfile	<i>PID file</i>
timeout	<i>Timeout in seconds</i>

5.5. Docs-Generate

Generate the OpenLDAP "slapd" configuration files

Usage

```
Docs-Generate [-archivedir <${entity.instance.dir}/var>]
[-argsfile <>] [-basedir <>] [-buildstamp <>] [-directory
<>] [-pidfile <>] [-rootdn <>] [-rootpw <>] [-suffix <>]
```

Options

Option	Description
archivedir	<i>dir to store current output docs</i>
argsfile	<i>Arguments file</i>
basedir	<i>Base directory</i>
buildstamp	<i>build identifier. currently ignored</i>

directory	Database directory
pidfile	PID file
rootdn	Root distinguished name
rootpw	Root password
suffix	Directory suffix

6. Related Types

The following types are defined for use with OpenLDAP.

6.1. OpenLDAPSetting

6.1.1. Overview

OpenLDAPSetting: *OpenLDAP configuration setting*

6.1.2. Design

Super Type
Setting

Role	Abstract. (Objects cannot be created.)
Instance Names	Unique

6.2. OpenLDAPConfigFile

6.2.1. Overview

OpenLDAPConfigFile: *OpenLDAP config file*

6.2.2. Design

Super Type
[OpenLDAPSetting](#)

Role	Concrete. (Objects can be created.)
Instance Names	Unique

6.2.3. Constraints

6.2.3.1. Allowed Parent Dependencies

- [OpenLDAP](#)

6.2.4. Attributes**6.2.4.1. Exported Attributes**

Name	Property
configFile	settingValue

6.3. OpenLDAPRootDn**6.3.1. Overview**

OpenLDAPRootDn: *domain suffix for opendlap*

6.3.2. Design**Super Type**

[OpenLDAPSetting](#)

Role	Concrete. (Objects can be created.)
Instance Names	Unique

6.3.3. Constraints**6.3.3.1. Allowed Parent Dependencies**

- [OpenLDAP](#)

6.3.4. Attributes**6.3.4.1. Exported Attributes**

Name	Property
rootDn	settingValue

6.4. OpenLDAPRootPw

6.4.1. Overview

OpenLDAPRootPw: *openldap root password*

6.4.2. Design

Super Type

[OpenLDAPSetting](#)

Role	Concrete. (Objects can be created.)
Instance Names	Unique

6.4.3. Constraints

6.4.3.1. Allowed Parent Dependencies

- [OpenLDAP](#)

6.4.4. Attributes

6.4.4.1. Exported Attributes

Name	Property
rootPw	settingValue

6.5. OpenLDAPDirectory

6.5.1. Overview

OpenLDAPDirectory: *openldap root password*

6.5.2. Design

Super Type

[OpenLDAPSetting](#)

Role	Concrete. (Objects can be created.)
Instance Names	Unique

6.5.3. Constraints

6.5.3.1. Allowed Parent Dependencies

- [OpenLDAP](#)

6.5.4. Attributes**6.5.4.1. Exported Attributes**

Name	Property
directory	settingValue

6.6. OpenLDAPSuffix**6.6.1. Overview**

OpenLDAPSuffix: *domain suffix for opendlap*

6.6.2. Design**Super Type**

[OpenLDAPSetting](#)

Role	Concrete. (Objects can be created.)
Instance Names	Unique

6.6.3. Constraints**6.6.3.1. Allowed Parent Dependencies**

- [OpenLDAP](#)

6.6.4. Attributes**6.6.4.1. Exported Attributes**

Name	Property
suffix	settingValue

6.7. OpenLDAPArgsFile

6.7.1. Overview

OpenLDAPArgsFile: *argsfile for opendlap*

6.7.2. Design

Super Type

[OpenLDAPSetting](#)

Role	Concrete. (Objects can be created.)
Instance Names	Unique

6.7.3. Constraints

6.7.3.1. Allowed Parent Dependencies

- [OpenLDAP](#)

6.7.4. Attributes

6.7.4.1. Exported Attributes

Name	Property
argsFile	settingValue

6.8. OpenLDAPPidFile

6.8.1. Overview

OpenLDAPPidFile: *pidfile for opendlap*

6.8.2. Design

Super Type

[OpenLDAPSetting](#)

Role	Concrete. (Objects can be created.)
Instance Names	Unique

6.8.3. Constraints

6.8.3.1. Allowed Parent Dependencies

- [OpenLDAP](#)

6.8.4. Attributes**6.8.4.1. Exported Attributes**

Name	Property
pidFile	settingValue

6.9. OpenLDAPTimeout**6.9.1. Overview**

OpenLDAPTimeout: *Startup and shutdown timeout period in seconds*

6.9.2. Design**Super Type**

[OpenLDAPSetting](#)

Role	Concrete. (Objects can be created.)
Instance Names	Unique

6.9.3. Constraints**6.9.3.1. Allowed Parent Dependencies**

- [OpenLDAP](#)

6.9.4. Attributes**6.9.4.1. Exported Attributes**

Name	Property
timeout	settingValue

6.10. OpenLDAPUrlList

6.10.1. Overview

OpenLDAPUrlList: *Startup and shutdown timeout period in seconds*

6.10.2. Design

Super Type

[OpenLDAPSetting](#)

Role	Concrete. (Objects can be created.)
Instance Names	Unique

6.10.3. Constraints

6.10.3.1. Allowed Parent Dependencies

- [OpenLDAP](#)

6.10.4. Attributes

6.10.4.1. Exported Attributes

Name	Property
urlList	settingValue