# Apache Directory Studio Apache DS

## User's Guide

# Apache Directory Studio Apache DS: User's Guide

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# Table of Contents

# Chapter I. Getting started

This part of the guide provides you a sum up of the basic concepts of the Apache DS plugin.

# 1. Download and installation

The latest version of Apache Directory Studio can be downloaded from the Apache Directory Studio Downloads page, at this address : https://directory.apache.org/studio/downloads.html [https://directory.apache.org/studio/downloads.html] .

The download page also includes the installation instructions.

# 2. LDAP Servers View

The Servers view allows you to manage the servers. This view displays a list of all your servers. You can use this view to start or stop the servers.

Here is what the Servers view looks like:
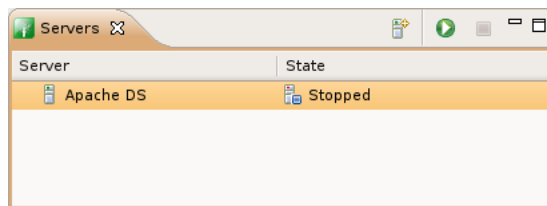


Use the Servers view to perform the following tasks:

• Create a server

• Edit a server

• Delete a server

• Start a server

• Stop a server

The Servers view displays the current status of all the servers. The **Status** column indicates whether or not a server has been started. The following lists the possible server status:

• Starting

• Started

• Stopping

• Stopped

**Toolbar**

The toolbar of the Servers view contains the following actions:

- 📋 - *Create a new server* : Creates a new server.

- ▶ - *Run* : Starts the selected server.

- ■ - *Stop* : Stops the selected server.

**Icons**

The following icons can appear in the Hierarchy view:

| Icon | Description |
|------|-------------|
| 📋 | Server |
| 📋 📋 📋 | Starting server |
| 📋 | Started server |
| 📋 📋 📋 | Stopping server |
| 📋 | Stopped server |

# 3. Apache DS Configuration Editor

The Configuration Editor for Apache DS consists in a six pages Editor:

- The *Overview* page allows you to set general settings about the server such as enabling/disabling protocols, setting protocols ports, limits, etc...

- The *LDAP/LDAPS Servers* page allows you to configure the LDAP server.

- The *LDAP/LDAPS Servers* page allows you to configure the Kerberos server.

- The *Partitions* page allows you to manage your server partitions.

- The *Password Policy* page allows you to manage password policies.

- The *Replication* page allows you to manage replication settings.

## 3.1. General Page

The **General Page** of the Configuration Editor allows you to edit the server settings.

It contains three sections : **Protocols** , **Limits** and **Options** .

Here's what the **General Page** looks like:

# Protocols



This section allows you to enable/disable each of the following protocols and specify the port it is running on:

- LDAP (default port: 10389)

- LDAPS (default port: 636)

- Kerberos (default port: 88)

- NTP (default port: 123)

- DNS (default port: 53)

- Change Password (default port: 464)

# Limits

This section allows you to specify the Limits of the server.



**Max. Time Limit** lets you choose the maximum time that should last a request (in milliseconds).

**Max. Size Limit** lets you choose the maximum number of entries that should be returned.

**Synchronization Period** lets you choose the number of milliseconds between two synchronizations.

**Max. Threads** lets you choose the number of threads that should be used by the server in its execution.

## Options



Check the **Allow Anymous Access** checkbox to allow anymous access on the server.

Check the **Enable Access Control** to enable Access Control on the server.

Check the **Denormalize Operational Attributes** to use a more human readable form ('uid=admin,ou=system' instead of '0.9.2342.19200300.100.1.1=admin,2.5.4.11=system') for Operational Attributes on the server.

# 3.2. LDAP/LDAPS Server Page

The **Authentication Page** of the Configuration Editor allows you to edit the server authentication settings.

It contains four sections : **Supported Authentication Mechanisms** , **SASL Settings** , **SASL Quality Of Protection** and **SASL Realms** .

Here's what the **Authentication Page** looks like:

# Supported Authentication Mechanisms



This section allows you to specify the supported authentication mechanisms. You can choose between the following mechanisms:

- SIMPLE

- CRAM-MD5 (SASL)

- DIGEST-MD5 (SASL)

- GSSAPI (SASL)

- NTML (SASL)

- GSS-SPNEGO (SASL)

# SASL Settings

This section allows you to specify to the SASL setting.



The **SASL Host** field represents the name of the host.

The **SASL Principal** field represents the service principal name that the server-side of the LDAP protocol provider will use to "accept" a GSSAPI context initiated by the LDAP client. The SASL principal MUST follow the name-form "ldap/[fqdn]@[realm]".

The **Search Base DN** field represents the Distinguished Name where a subtree-scoped DIT search will be performed. This is BOTH where the LDAP service principal must reside, as well as where user principals must reside.

# SASL Quality Of Protection



This section allows you to specify the SASL quality of protection. You can choose between the following values:

- auth (Authentication only)

- auth-int (Authentication with integrity protection)

- auth-conf (Authentication with integrity and privacy protection)

## SASL Realms

This section allows you to specify to the SASL realms.



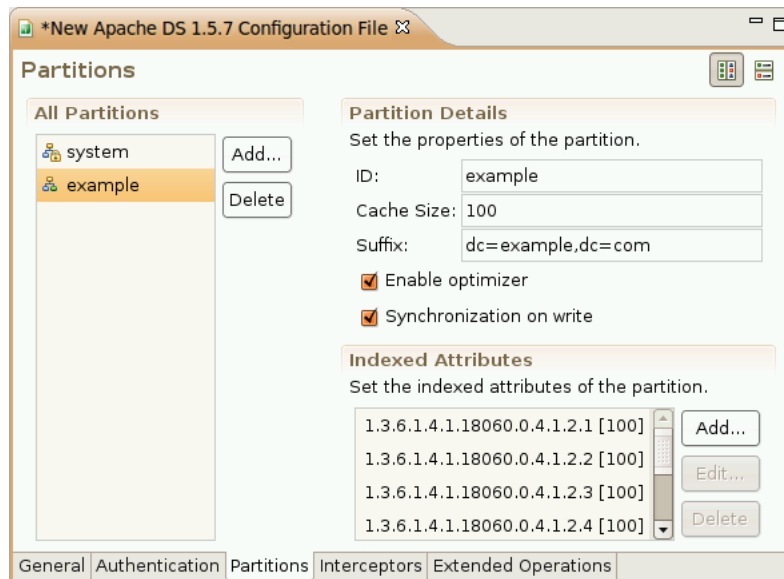Use the **Add...** , **Edit...** and **Delete** buttons to set your SASL Realms.

# 3.3. Kerberos Server Page

The **Authentication Page** of the Configuration Editor allows you to edit the server authentication settings.

# 3.4. Partitions Page

The **Partitions Page** of the Configuration Editor allows you to edit the server partitions.

Here's what the **Partitions Page** looks like:



The page is divided vertically in two parts.

You can choose the orientation of the page by clicking on the appropriate button ("Horizontal Orientation" or "Vertical Orientation" ) at the right of the page.

The left side of the page shows the partitions defined on the server. This is where you can add or delete a partition.

The right side of the page display and lets you edit the details of the selected partition in the left side.

## Partition details



An **ID** is mandatory for the partition.

A **Cache Size** is mandatory for the partition.

A **Suffix** is mandatory for the partition.

Check the **Enable Optimizer** checkbox to enable the optimizer for the partition.

Check the **Synchronization On Write** checkbox to enable the synchronization on write for the partition.

## Indexed Attributes

This section allows you to specify to the server the attributes that should be indexed and their cache size.



Use the **Add...** , **Edit...** and **Delete** buttons to set the indexed attributes.
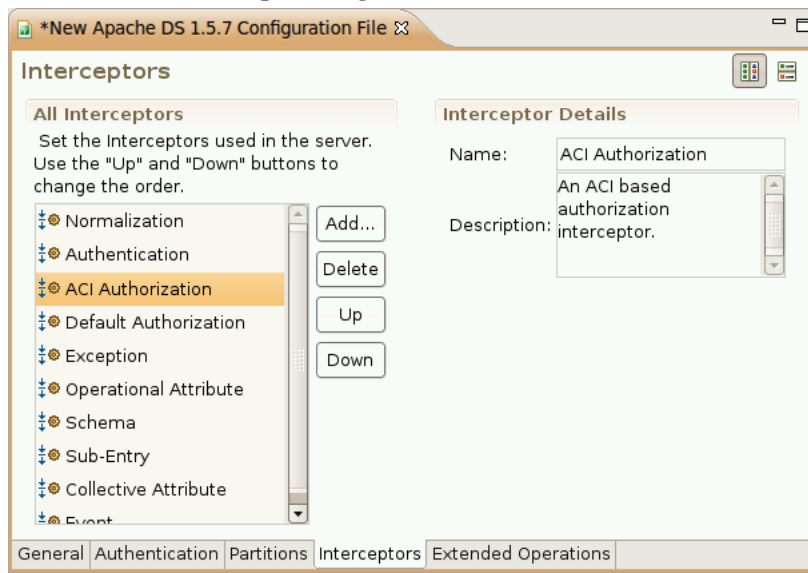
The following icons can appear in the Partitions Page.

| Icon | Description |
|------|-------------|
| | Standard Partition |
| | System Partition |

# 3.5. Password Policy Page

The **Interceptors Page** of the Configuration Editor allows you to edit the server interceptors.

Here's what the **Interceptors Page** looks like:



The page is divided vertically in two parts.

You can choose the orientation of the page by clicking on the appropriate button ("Horizontal Orientation" ▦ or "Vertical Orientation" ▤ ) at the right of the page.
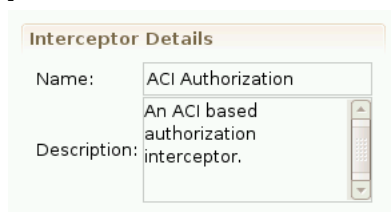
The left side of the page shows the interceptors defined on the server. This is where you can add or delete an interceptor.

You can also choose the order of the interceptors in the interceptors' chain using the "Up" and "Down" buttons.
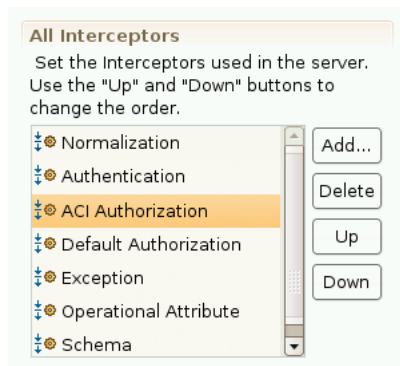


The right side of the page display and lets you see the details of the selected interceptor in the left side.

# Interceptor details



The **Name** field displays the name of the interceptor.

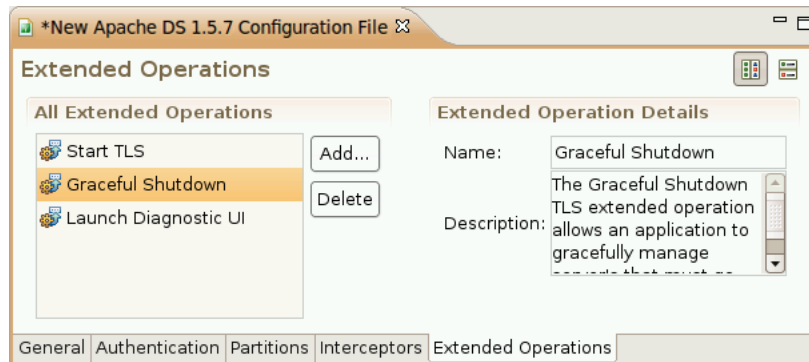The **Description** field displays the description of the interceptor.

The following icons can appear in the Interceptors Page.

| Icon | Description |
|---|---|
| ‡◉ | Interceptor |

# 3.6. Replication Page

The **Extended Operations Page** of the Configuration Editor allows you to edit the server extended operations.

Here's what the **Extended Operations Page** looks like:



The page is divided vertically in two parts.

You can choose the orientation of the page by clicking on the appropriate button ("Horizontal Orientation" ⊞ or "Vertical Orientation" ⊟ ) at the right of the page.

The left side of the page shows the extended operations defined on the server. This is where you can add or delete an extended operation.
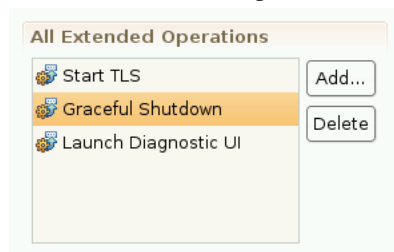


The right side of the page display and lets you see the details of the selected extended operation in the left side.

## Extended Operation details
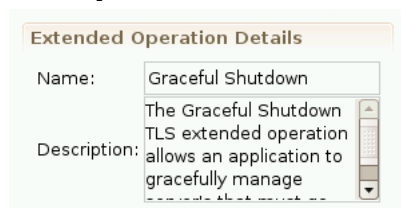
The **Name** field displays the name of the extended operation.

The **Description** field displays the description of the extended operation.

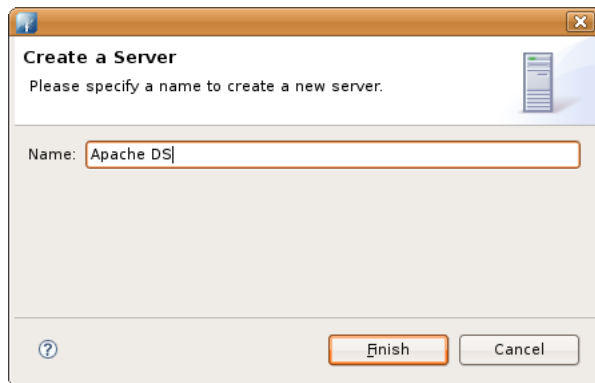The following icons can appear in the Extended Operations Page.

| Icon | Description |
|---|---|
|  | Extended Operation |

# Chapter II. Tasks

## 1. Creating a new server

To create a new server, in the Servers view toolbar, click on the ⬚ **New Server** button, or use the **Strg-E** shortcut.

The following wizard appears:



Give a name to the server.

| Option | Description | Default |
|--------|-------------|---------|
| Name | The name of the server. In the Servers view the server is listed with this name. The name must be unique. | empty |

## 2. Starting a server

To start a server, in the Servers view, select the server you want to start and click the ⬤ **Run** button in the toolbar, or use the **Strg-R** shortcut.

## 3. Stopping a server

To stop a server, in the Servers view, select the server you want to stop and click the ⬛ **Stop** button in the toolbar, or use the **Strg-T** shortcut.

## 4. Editing the configuration

To edit the configuration of a server, in the Servers view, select the server and double-click on it, click the **Open Configuration** action in the context menu, or use the **F3** shortcut.

## 5. Deleting a server

To delete a server, in the Servers view, select the server you want to delete and click the ✖ **Delete** action in the context menu, or use the **Delete** shortcut.

# Chapter III. Reference