

Working with database fields in ConfiForms



If you are new to ConfiForms please take a look at less complicated tutorials first to get yourself familiar with ConfiForms

[Creating a simple form in Confluence with ConfiForms](#)

[Multiple ways to show your form data in Confluence with ConfiForms](#)

[Basic concepts](#)

Since version 1.20 of ConfiForms you are now able to source the data for your fields in ConfiForms directly from your databases. This requires your database to be accessible from your Confluence server and you need to provide the connection configuration, before you can use those fields. More on this below.

We have 4 type of fields which can be backed by a database:

- DB Dropdown
- DB Multi-select
- DB Checkbox
- DB Radio group
- **UPDATED** DB Smart Classifier (since version 1.24)
- **UPDATED** DB Dynamic dropdown (auto-suggest) (since version 1.39)

First and last are single choice field types and 2 in the middle support multiple choices.

Fields behave exactly as their "normal" and "smart" field counterparts, but the choices are loaded from the database and the query you configure.



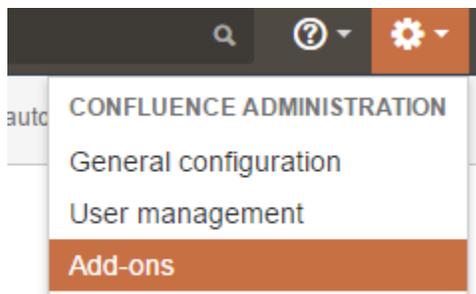
Important!

Your query should return a list of data with **AT LEAST** 2 columns, where first column will be used as an ID and second column will be used as a label (other columns can be then used later in filtering, if necessary).

We strongly advice you to have a unique value for column ID

Let's start with Database connection configuration, so ConfiForms will be able to use it. This configuration can be done only by Confluence administrators and usage can be restricted (you can setup which user group / user can use which connection)

You can navigate to Database Connection Configuration for ConfiForms using the "Configure" button in Add-on configuration



Then navigating to ConfiForms add-on

Manage add-ons

You can install, update, enable, and disable add-ons here. [Find new add-ons.](#)

[↑ Upload add-on](#) [+ Build a new add-on](#)

User-installed add-ons

> Atlassian Hipchat Integration Plugin		
> Atlassian Hipchat Integration Plugin Core		
> Atlassian Universal Plugin Manager Plugin		
> ConfiDoc plugin for Confluence to include data from any sources, including JSON, SQL, XML, CVS		
▼ ConfiForms, forms and workflows plugin for Confluence		
<p>ConfiForms plugin helps you to create custom data entry forms for your business needs, in Confluence. The possibilities for creating powerfully effective data entry forms are endless! Voting, enrollment, inventory, surveys, bulletin boards, employee checklists, and other type of forms that are easy to create and manage</p>		
<p><input type="button" value="Configure"/> <input type="button" value="Uninstall"/> <input type="button" value="Disable"/></p>		
 <p>Screenshots (7)</p>	<p>Version: 1.20</p> <p>Vendor: Vertuna LLC</p> <p>Add-on key: com.vertuna.confluence.plugin.s.confiforms</p>	<p>Stop watching</p> <p>Marketplace listing</p> <p>Full pricing details</p> <p> 51 of 51 modules enabled</p>

And clicking on "Configure" button. You will be routed to the following URL: https://YOUR_SERVER/admin/vertuna/confiforms/config.action

i Alternatively, you can just start configuring your new form, adding new field definition of one of those DB types and clicking the "Configure NEW connection"

Insert 'ConfiForms Field Definition' Macro

db

Required *

Field type

Database multi-select

Database connection

Configure NEW connection

SQL Query

Type SQL query, where first column will be taken as ID and second column will be taken

Preview

Select macro

Insert Cancel

Configuration UI will be looking something like this:

ConfiForms plugin configuration

ConfiForms database connections configurations

To be used together with *DB* field types in ConfiForms

Connection name	Connection url	
testing-db	jdbc:postgresql://localhost:5432/confluencedb	Edit Delete

Add new database connection configuration

Initially you will not have any connections defined, so the table will be empty.

Click on "Add new database connection configuration" button and you will be presented with a dialog to configure new connection

DB Connection Configuration

Name:

The name for your configuration, will be visible to users

Connection URL

Username

Password

Driver class name

Your database driver must be located in Confluence WEB-INF/lib or in server lib directory in order for this to work

Restrictions

Comma separated user groups and/or users who should have access to this configuration. Blank, means no

Give your connection a name, then compile a Connection URL, we use JDBC to connect to the database and you will need to provide correct JDBC connection string, class name for your database driver and you need to make sure the database driver is placed in the **<install-dir>/lib** directory of your Confluence server (restart will be needed). Confluence has PostgreSQL drive bundled together with the server, nothing additional is needed. For MySQL, Oracle, Microsoft SQL databases you will need to place the driver into the correct place.

JDBC Driver Location

Put the driver jar in **<install-dir>/lib** - this is the directory that has other tomcat jars. If you have a **much older version of Confluence** that does not have this directory, look for **<install-dir>/common/lib** instead.

Here is the table of drivers and their connection strings we have compiled for our other plugin, ConfiDoc, but which is completely valid for ConfiForms

List of connection strings for various drivers and databases

Driver	Connection string
MySql/ com.mysql.jdbc.Driver	<code>jdbc:mysql:////?user=&password=</code> <div style="border: 1px solid red; padding: 5px; margin-top: 10px;"> For mySQL driver you will need to enable "generateSimpleParameterMetadata" parameter <pre>jdbc:mysql://localhost:3306/mydb?generateSimpleParameterMetadata=true</pre></div>
PostgreSQL/ org.postgresql.Driver	<code>jdbc:postgresql:////?user=&password=</code>
IBMDB2/ COM.ibm.db2.jdbc.app. DB2Driver	<code>jdbc:db2:////?user=&password=</code>

MSSQL(MicrosoftDriver)/ com.microsoft.jdbc.sqlserver. SQLServerDriver	jdbc:microsoft:sqlserver://:;databaseName=?user=&password=
MSSQL(Weblogic)/ weblogic.jdbc.mssqlserver4. Driver	jdbc:weblogic:mssqlserver4:@:
MSSQL(SprintaDriver)/ com.inet.tds.TdsDriver	jdbc:inetdae::?database=?user=&password=
MicrosoftSQLServer (JTurboDriver)/ com.ashna.jturbo.driver.Driver	jdbc:JTurbo://://user=/password=
Microsoft SQL Server/ com.microsoft.sqlserver.jdbc. SQLServerDriver	jdbc:sqlserver://yourserver.database.windows.net:1433;database=YourDatabase; user=yourusername@yourserver;password=yourpassword;encrypt=true; trustServerCertificate=false;hostNameInCertificate=*.database.windows.net; loginTimeout=30; https://docs.microsoft.com/en-us/sql/connect/jdbc/building-the-connection-url?view=sql-server-2017
Microsoft SQL Server (alternative, newer) / com. microsoft.jdbc.sqlserver.SQLS erverDriver	jdbc:sqlserver://YourServer:Port;databaseName=YourDatabase More details on https://docs.microsoft.com/en-us/sql/connect/jdbc/using-the-jdbc-driver https://docs.microsoft.com/en-us/sql/connect/jdbc/building-the-connection-url?view=sql-server-2017
OracleThin/ oracle.jdbc.driver. OracleDriver	jdbc:oracle:thin:@::
Oracle(OranhoDriver)/ com.inet.pool.PoolDriver	jdbc:inetpool:inetora:?database=&user=&password=&sid=
Sybase(jConnect5.2)/ ncom.sybase.jdbc2.jdbc. SybDriver	jdbc:sybase:Tds::?user=&password=
PointBaseEmbeddedServer/ com.pointbase.jdbc. jdbcUniversalDriver	jdbc:pointbase://embedded:/?user=&password=
Cloudscape/ COM.cloudscape.core. JDBCdriver	jdbc:cloudscape:?user=&password=
CloudscapeRMI/ RmiJdbc.RJDriver	jdbc:rmi://:/jdbc:cloudscape:?user=&password=
Firebird(JCA-JDBCdriver)/ org.firebirdsql.jdbc.FBDriver	jdbc:firebirdsql://:/?user=&password=
IDSServer/ ids.sql.IDSDriver	jdbc:ids://:/conn?dsn=' '
InformixDynamicServer/ com.informix.jdbc.IfxDriver	jdbc:informix-sqli://:/: INFORMIXSERVER=
InstantDB/ org.enhydra.instantdb.jdbc. idbDriver	jdbc:idb:
Interbase(InterClientDriver)/ interbase.interclient.Driver	jdbc:interbase://
HypersonicSQL/ org.hsql.jdbcDriver	jdbc:HypersonicSQL:?user=&password=

You configuration for connecting to PostgreSQL will look something like this:

DB Connection Configuration

Name:

The name for your configuration, will be visible to users

Connection URL

Username

Password

Driver class name

Your database driver must be located in Confluence WEB-INF/lib or in server lib directory in order for this to work

Restrictions

When it is saved, you will be able to use it in one of the DB fields:

Insert 'ConfiForms Field Definition' Macro

Field type

Database connection

SQL Query

```
select id, name from  
my_demo_table
```

Type SQL query, where first column will be taken as ID and second column will be taken as LABEL. All other columns will be ignored

Field description (optional)

That's it - you field is ready!

Of course you can re-use your database connections, have multiple DB fields on the same form, etc. Fields behave and act as normal ConfiForms fields.

In exports to Excel and CSV their labels will be used, for exports as JSON/XML we will export their internal ID's



Take a look at one demo configuration which shows you how to create "**dependent**" database dropdown fields [Working with Dependent DB dropdowns](#)