

CSV Connector

- CSV Connector
- Customizable CSV file (CSV Connector type)

CSV Connector

Introduction

Description

The CSV Connector provides a way to load authoritative data from fixed record size files.

Managed System

This connector has been performed to charge authoritative data from files with CSV format or other format in other extension files.

For more information to check if your system may be synchronized with this connector you do not hesitate to contact us through our [Contact form](#)

Prerequisites

The file must be placed in the same Synchronization Server host.

The file must has the correct permissions to be readed for the Synchronization Server.

Download and Install

This addon is located in the Connectors section and its name is **Flat file plugin**.

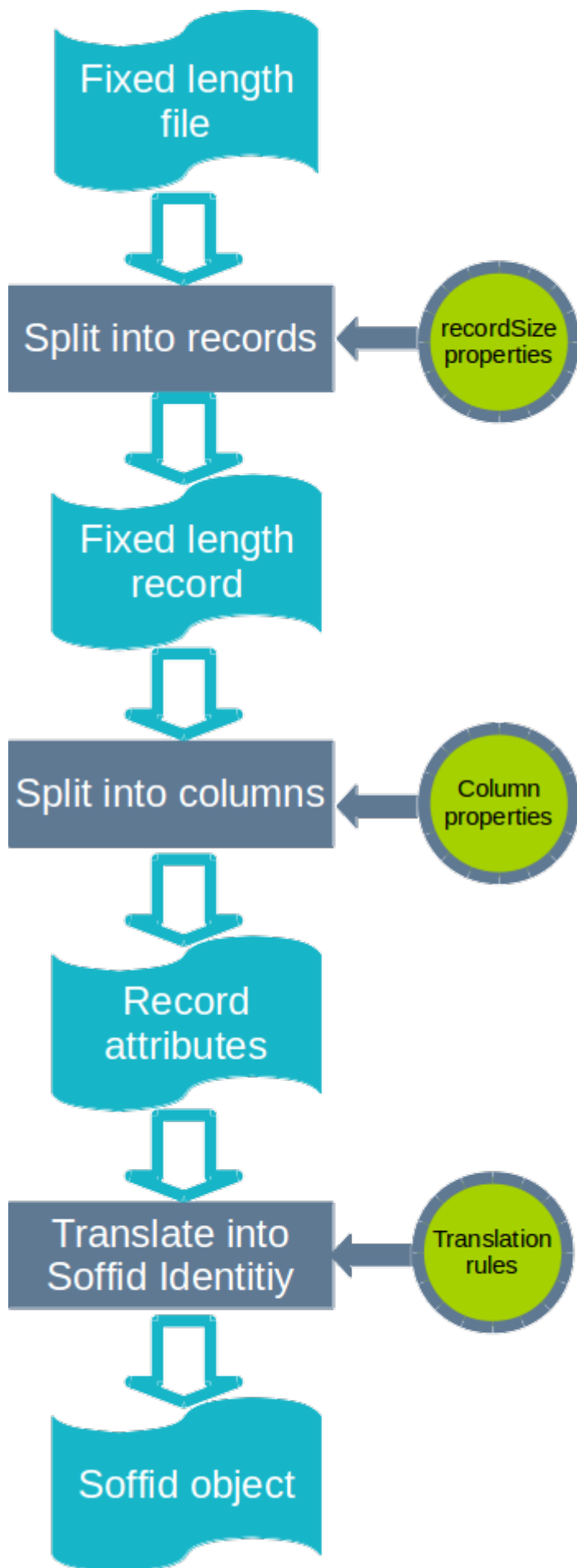
For more information about the installation process you can visit the [Addons Getting started](#) page.

Agent Configuration

This connector could only be used as an identity source, no output file could be generated yet.

Usually, this connector is used the first time to charge manually the user information of the identities from the HR applications o database.

As example, this is the flow to shows how the "[Customizable fixed-columns file v2.0](#)" works.



Basic

Generic parameters

After the installation of the addon, you may create and configure agent instances.

This addon has 5 available types:

- Customizable fixed-columns file v2.0: it is used to charge a table where each column has a fixed number of characters.
- Customizable CSV file: it is used to charge a standard CSV file (comma-separated values), where all the columns are separated by a comma.
- CSV file test agent.
- Dummy password agent.
- Test.

To configure this CSV plugin, you could select one of the previous agent in the attribute "Type" of the generic parameters section in the agents page configuration.

For more information about how you may configure the generic parameters of the agent, see the following link: [Agents configuration](#)

Custom parameters

The main parameters for this connectors are:

Customizable fixed-columns file v2.0

Parameter	Description
Enable debug	Two options: [Yes / No]. When it is enabled more log traces are printed in the Synchronization Server log
Character set (utf-8)	Charset used to load files. Despite it is uncommon, multi-byte character sets, as UTF-8, are allowed. Nevertheless, single byte character sets as ISO-8859-1 are recommended

Customizable CSV file

Parameter	Description
Enable debug	Two options: [Yes / No]. When it is enabled more log traces are printed in the Synchronization Server log

CSV file test agent

Parameter	Description
User's file	Directory where the CSV file is placed

Dummy password agent

Parameter	Description
Dummy Password	Dummy Password

Test

Parameter	Description
CSV file	Path of the CSV file

Attribute mapping

Only the "[Customizable fixed-columns file v2.0](#)" and the "[Customizable CSV file](#)" agents have this functionality implemented.

Properties

Customizable fixed-columns file v2.0

This agent requires two properties:

Property	Description
file	Path where the file is placed in the directory system
recordSize	Total number of characters of the rows. This property must have a number value. The file will be split into records of this size in bytes. Mind the record size must include any line terminator character as "carriage return" or "line feed".

And after that you must specify the number of rows of every row as follow:

Property	Description
N-M	Where N is the position of the first character and M the position of the last character, both included. Column numbers start with 1 (not 0). And for instance, if the property is defined as "1-10" with the value "NAME", Soffid will extract characters from columns 1 to 10 (both inclusive) into a field named NAME in Soffid.

For instance for this file:

abernal	Antonio	Bernal	world	YES
jwayne2	John	Wayne	world	YES

These are its properties:

The screenshot shows a software interface with a top bar containing 'Create default mapping', 'Export', and 'Import' buttons. Below this is a 'System objects' section. A dropdown menu shows 'USERS' selected, with a 'based on' dropdown set to 'user' and a 'Condition:' field. Below this is a table with two columns: 'Property' and 'Value'. The table contains the following rows:

Property	Value
1-10	USER
11-25	FIRSTNAME
26-40	LASTNAME
41-51	GROUPNAME
52-54	ACTIVE
file	/tmp/users.txt
recordSize	55

Customizable CSV file

This agent only needs the next properties:

Property	Description
file	<u>Mandatory</u> : Path where the file is placed in the directory system
key	<u>Mandatory</u> : The field to be used as key

Attributes

Customizable fixed-columns file v2.0

The mapping is only available for USER object.

Now we could map the system attribute defined as property values against Soffid attributes, for instance:

System attribute	Soffid attribute
USER	userName
FIRSTNAME	firstName
LASTNAME	lastName
GROUPNAME	primaryGroup
ACTIVE.equals("YES")	active

For instance:

System objects

USERS based on user

Property

Value

file

/tmp/users.csv

key

userName

System attribute

Direction

Soffid attribute

firstName

↔

firstName

lastName

↔

lastName

accountName

↔

accountName

userName

↔

userName

EMAIL

←

shortName==null || shortName.length() == 0? attri
butes("EMAIL") : shortName + "@" + emailDomain

group

↔

primaryGroup

Test

For more information about how you may configure attribute mapping, see the following link: [Soffid Attribute Mapping Reference](#)

Customizable CSV file

The mapping in only available for USER object.

The first row of the file must include the name of the attribute.

```
USER,FIRSTNAME,LASTNAME,GROUPNAME,ACTIVE
abernal,Antonio,Bernal,world,YES
jwayne2,John,Wayne, world,YES
```

Now we could map the system attribute (file) with the Soffid attributes, for instance:

System attribute	Soffid attribute
USER	userName
FIRSTNAME	firstName
LASTNAME	lastName
GROUPNAME	primaryGroup
ACTIVE.equals("YES")	active

Load Triggers

You can define BeanShell scripts that will be triggered when data is loaded into Soffid (incoming triggers). The trigger result will be a boolean value, true to continue or false to stop.

Triggers can be used to validate or perform a specific action just before performing an operation or just after performing an operation into Soffid objects.

To view some examples, visit the [Incoming triggers examples page](#).

Account metadata

Accounts are default objects in Soffid. Agents allow you to create additional custom data, on the "Account metadata" tab, to customize the accounts created only for that agent.

The attributes which you define here, will be shown when you click on the proper account, on the Accounts Tabs at user page.

At this tab you could add or delete custom attributes. You can visit the [Metadata page](#) for more information about the standard attributes.

Operational

Monitoring

After the agent configuration you could check in the monitoring page if the service is running in the Synchronization Server, please go to:

Start Menu > Administration > Monitoring and reporting > Syscserver monitoring

Tasks

Authoritative

If you are checked "Authorized identity source", an automatic task to load identities from the managed system to Soffid is available, please go to

Start Menu > Administration > Monitoring and reporting > Scheduled tasks

And you will something like "Import authoritative data from <AGENT_NAME>".

Reconcile

If your are configured the "Attribute Mapping" tab with some of our objects: "user", an automatic task to synchronize these objects from the managed system to Soffid is available, please go to:

Start Menu > Administration > Monitoring and reporting > Scheduled tasks

And you will do something like "Reconcile all accounts from <AGENT_NAME>".

Synchronization

Regarding the synchronization of the objects, there are two possible options:

- If you are checked the generic attribute "Read Only" in the "Basics" tab, only the changes in the managed systems will be updated in Soffid. We recommend these options until the global configuration of Soffid will be tested.
- If you are not checked the generic attribute "Read Only" in the "Basics" tab, all the changes in Soffid or the managed system will be updated in the other. Note that this synchronization must be configured in the "Attribute mapping" tab correctly.

For more information about how you may configure the generic parameters of the agent, see the following link: [Agents configuration](#)

Customizable CSV file (CSV Connector type)

Introduction

Description

The CSV connector type allows users to load a collection of data stored into a plain CSV file.

In the following page, the process to complete the CSV connector setup will be explained.

To begin with, address to the quick start section.

Quick start

The core of Customizable CSV file connector is located under the 'Attribute Mapping' tab.

There are two important sections:

Property

File information related configuration.

Property	Description
file	<u>Mandatory</u> : Path where the file is placed in the directory system
key	<u>Mandatory</u> : The field to be used as key

System attribute

Mapping between CSV fields and Soffid objects.

Create default mapping
Export
Import

System objects

USERS

based on user

Property	Value
file	/home/user/Desktop/file.csv
key	userName

System attribute	Direction	Soffid attribute
USERNAME	=>	userName
NAME	=>	firstName
LASTNAME	=>	lastName
NDI	=>	attributes("ndi")
"I"	=>	userType

Test

Taking a look to the configuration used, we can see that:

- System objects is the entity to load (user, account, group, role).
- System attributes fields match the columns defined into the 'file.csv'.

To demonstrate Soffid flexibility in terms of agent customization, notice that:

USERNAME, NAME, LASTNAME fields, correspond to default fields from User object.

NDI is a custom field defined into the User object.

"I" is a 'char' literal that indicates the UserType.

- Soffid attributes match Soffid specification model object.

Example

Type	File
data (file used in this configuration guide)	file.csv
attribute-mapping (file used in this configuration guide)	csv-agent-config.xml

Useful information

System objects
User
Account
Group
Role