Sync Configurations
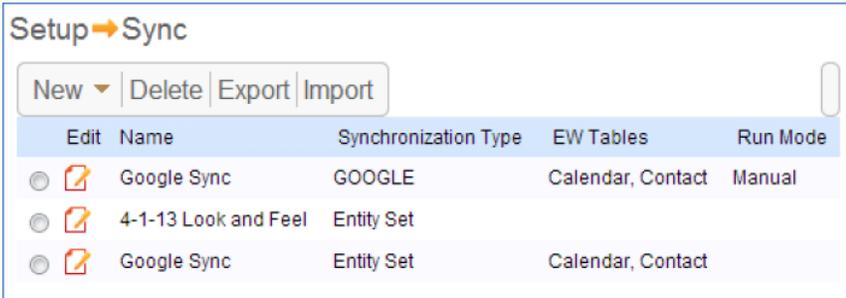
The Sync Configuration wizard enables you to setup and manage synchronizations. Select **Setup > Sync** to view a list of existing Sync Configurations in your knowledgebase. You may create a new configuration, or edit or delete existing ones.

To create a new configuration, click **New > External Sync or Entity Set**. To delete a configuration, select it in the list and click Delete. To edit an existing configuration, click the Edit icon next to the configuration.

the Sync Configuration Wizard creates a record in Agiloft holding:

- The external system to sync with
- The tables to be synchronized and their corresponding structures
- The fields to be synchronized within a Table-Structure pair
- The relations to be synchronized
- The direction for the update to happen between Agiloft and the external system
- The command that launches the ESA
- The identifier fields sync will use to identify matching records

If a Sync Configuration is modified after it has been run, all previous peering of Agiloft records with external system records is lost, and the next run will be an entirely new synchronization.

General Tab

Setup➡Sync➡External Sync

General

| Next | Cancel |

Please enter a name for this Sync Configuration that is based on the system with which it synchronizes.

Configuration Name

MySync

The command line that the proxy uses to start a command line ESA is always Start_ESA.sh on Linux or Start_ESA.bat on Windows.
If multiple ESA's are installed on the same machine, you may choose which to start by installing a single script with this name and having it start the appropriate ESA based on the numeric parameter chosen here.

You can download the ESA developer documentation and sample code by clicking on the link at the right. After downloading, unpack the file and follow the instructions in the ESA_Developer_Guide.docx file.

External System Type

* Third-party Adapter ▼

○ Third-party ESA (HTTP)

● Third-party ESA (Command Line)

  Command Line Parameters<1...20> | 1 ▼ |

To download the ESA developer bundle, click here

You can temporary Enable or Disable Synchronization Configurations

Status

☑ Enabled

You may specify one-way transfer in either direction or full bi-directional synchronization.

Directions

○ Two-way sync

● Update Agiloft only

○ Update External System only

A conflict can arise in two way synchronization if a record is edited on both systems before the changes from one are synced with the other.
For example if the systems are synced at 1:00pm and 1:05pm and the records are edited at 1:01pm and 1:02pm

This option allows you to specify how such conflicts are resolved.

Conflicts

○ This system should take precedence

● External System should take precedence

○ Take the most recent record

○ Duplicate records

An ESA can be run remotely and connect to the the Agiloft server through a firewall. To setup a remote connection, download the ESA Remote Proxy package and run it on the target machine using java -jar esa.jar.

Notes:
You should save Sync Configuration before running ESA Remote Proxy.

You will also need latest Java Runtime environment, obtainable from www.java.com.

The downloaded package includes all the current settings and parameters such as the External System ID. If you change these settings, you will need to re-download the package.

You may also specify a specific IP address to only allow connections from that IP. If you are using NAT, you should specify the external IP address as "seen" by AL, rather than the internal address.

Remoting

☑ External System Adapter runs remotely

Download ESA Remote Proxy

Polling Period (secs) 30

IP Filter (optional) [   ]

If you set this option, synchronization data are stored on a per-user basis. This is useful when synchronizing with a PIM (Personal Information Manager) software, like MS Outlook. As an admin, you can set mappings, options, etc at once, and your users will be able to synchronize with their own PIM installations, sharing the data.

Personal synchronization

☐ Personal data

The system has automatically generated a globally unique "External System ID" for this configuration. This name is used internally to manage communications between external systems and Agiloft KB's. You may need this name if you are debugging a third party ESA.
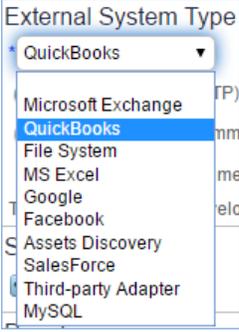
*External System ID Prefix

[   ]

Full External System ID:

[   ]Demo

| Next | Cancel |

Configuration Name	Identifies the Sync Configuration name.

External System Type	Contains the options to define the type of external system for the current synchronization further options that open in the wizard. In addition you can select whether to use an HTTPS or Command Line (CL) ESA type, when Adapter, and to download the esa.jar Remote Proxy. For more information, see HTTPS an
Status	Determines whether the current sync configuration is enabled or disabled.

Directions	Specifies whether the synchronization data updates happen in both directions, or on the system. The direction chosen here will determine which sync operations are available for Allowed Operations and Update in Agiloft/Update in External options will be disabled if th them. For more information, see Directional Synchronization.
Conflicts	Specifies how the system should handle conflicts during a two-way synchronization when See Conflict Resolution for more information.
Remoting	If the ESA is located on a remote server, this section enables you to download the Remote items: ■ Polling Period - When an ESA is run remotely, it is presumed that it is behind the firew to Agiloft and ask whether there are synchronizations pending. The Polling period set will wait between such requests, in seconds. ■ IP Filter (optional) - If an IP Address is entered here, ESA or Remote Proxy connections Configuration concerned only from that IP. In the case of NAT, this must be the outern by Agiloft.
Personal Synchronization	Enables you to store synchronization data on a per-user basis, which can allow your users installations.
External System ID	An ID which uniquely identifies the Sync Configuration being produced is generated by th field. At this point, before the configuration is created, you can edit it to make it more eas remains unique. A remote HTTPs ESA needs this ID as a parameter, and its developer must ensure that thi
Next	Click this to create the Sync Configuration which will handle all synchronizations on the se Agiloft will wait for an incoming connection from the ESA. For more information, see Usin

Reset Records Pairing	Once the synchronization has been established, it is possible to reset the record pairing b the next synchronization operate on every field as a first sync.

ESA Settings Tab

Once the connection has been established with the ESA, the ESA Settings tab opens and allows you to set the directory path and other relevant ESA configuration options.

The tab is completely ESA-specific. For a File-Directory ESA it looks like this:

For the Exchange ESA it looks like this:

The parameter set is specific to the ESA type, but usually you will be at least prompted to enter the external system connection attributes here.

After you press Next, the ESA will usually have enough information to connect to the external system. In cases when it does connect to the external system, it may open database connections, make some queries, verify, and /or provide additional parameters to manage, based on what it finds.

For example, a basic set of parameters may have host and login/password, and an advanced set may include selected tables to synchronize. If names of tables are extracted from the remote system, the ESA will have to connect to it first.

Clicking Next opens the Table Mapping tab.

Table Mapping Tab

The Table Mapping tab contains a list of the tables in the current knowledgebase, which can be mapped to structures such as tables or databases in the external system. Select a structure from the drop-down and click the Map button. This will establish the mapping relationship and open the Field Mapping wizard where you can map the individual fields between the tables for synchronization.

Some ESAs may ask for additional parameters after connecting to the external system. To set them, press Back to return to the ESA Settings tab.

Field Mapping Wizard

In the Field Mapping wizard you can define the relations between fields in the Agiloft table and the external structure to which it was mapped. Whenever synchronization happens, these fields will be synchronized in the direction specified in the General tab and the behavior specified in this wizard. For more information see Synchronization Record Matching

Modification Time Field	Usually an Agiloft table has a Date Updated Datetime field. It may have several Datetime fields, and the user can select one of them to hold the modification timestamp.
Table Update Type	Fields can be either synchronized or simply replaced in either system depending on this setting.
Allowed Operations	Any of the sync operations can be prevented or enabled by selecting the check box in this section.
ID Generation	Sets whether the ID is set by the external system or Agiloft, and how the ID should be stored.
Field Mapping	Sets whether fields should be strictly matched during sync and provides a list of all table fields with the related mapping options. Field names in the external structure, provided by the ESA, should be matched with their corresponding field names in the Agiloft table.

Filters Tab

The Filters tab enables you to use saved searches to filter the Agiloft or external system records when matching fields, as well as selecting the filtering method to apply. An Agiloft filter will prevent filtered records in Agiloft from being synced to the external system, and an External filter will prevent filtered records in the external system from being synced to Agiloft.

Relation Mapping Tab

The Relation Mapping tab enables you to set linked field relations with mapped fields.

Fields from key linked sets in the Relation Mapping tab cannot be used in the Mapping tab as these will define primary relationships between the key tables. For example, Phone Number or Email fields in the Company mapping are part of the linked set between Company and Contact, and will make it impossible to set up a relationships between Company and Contact in the Relation Mapping tab.

It is also possible to use linked fields as normal mapped fields in the Field Mapping Wizard. However this is less strict and just updates the values of the field from the linked field set directly. The Relation Mapping tab takes the entire set of fields as a unit, with the link-holding fields and the connected fields set as relations in the ESA. In this case, if the linked set is required, and a child field cannot be found in one of the systems, the record will not be updated and an error will appear.

ⓘ Example

Take a Salesforce ESA sync with the following required linked field relations between Salesforce and Agiloft:

- Accounts in Salesforce mapped to Company with the linked set Account ID > ID, Account Name > Company Name, Account Number > Company Number, Website URL > Website URL.
- Opportunity in Salesforce mapped to Opportunity with the linked set Amount > Sale Value, Closed Date > Estimated Close Date Created Date > Date Created, Name > Opportunity Name, Probability(%) > Probability of sale, Stage > Status.
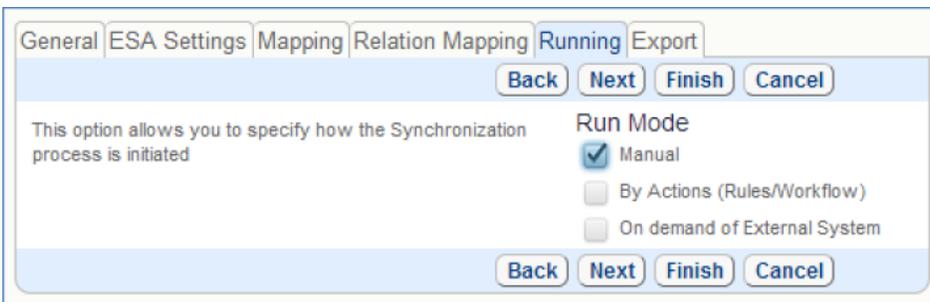
In the Relational Mapping tab, you can set the Account ID mapped to the Company linked field set: Company(Company, Currency, Fax, Company ID, Industry, Main Location ID, Parent Company, Region, Telephone, Website URL). In Salesforce, if you create an Opportunity record without linking it to any Account name, this will result in that record not being updated during sync and will end with an error, due to the required linked field between Agiloft and Salesforce.

Running Tab

The Running tab defines whether the synchronization process is initiated...

- manually, through the Sync option in a Table view.
- as actions - among background Agiloft activities, including running sync upon a record change or by a schedule.
- at the request of the ESA.

By default, all three triggers are allowed.