

Import and Export of Entities

General information

- Uses AkeneoBatchBundle
- Works asynchronously (via consumer)
- Executed in parallel
- Used by integrations with data sync

<https://docs.spring.io/spring-batch/trunk/reference/html/domain.html>

Jobs

- Used to trigger import and export
- Consist of three parts:
 - Reader
 - Processor
 - Writer
- Resources/config/batch_jobs.yml

https://github.com/oro-inc/platform/blob/3.1/src/Oro/Bundle/ImportExportBundle/Resources/config/batch_jobs.yml

Reader > Processor > Writer

Reader

- reads data rows from data source
- returns one data row at a time



Processor

- processes one data row
- returns one processed data row at a time



Writer

- receives batch of data rows
- saves data rows to data source

Processors

- Accept, process and return one data row
- DIC tag `oro_importexport.processor`
- Consist of following parts:
 - Data converter
 - Serializer
 - Strategy (optional)

<https://github.com/oroinc/crm/blob/3.1/src/Oro/Bundle/ContactBundle/Resources/config/importexport.yml>

Processor types

- import_validation
- import
- export_template
- export

<https://github.com/oro-inc/crm/blob/3.1/src/Oro/Bundle/ContactBundle/Resources/config/importexport.yml>

Import Validation

CSV File Reader



Import Processor

- Data converter
- Serializer
- Strategy



Null Writer

Import

CSV File Reader



Import Processor

- Data converter
- Serializer
- Strategy



Entity Writer

Export template

Template Fixture Reader



Export Processor

- Data converter
- Serializer



CSV File Writer

Export

Entity Reader



Export Processor

- Data converter
- Serializer



CSV File Writer

Entity field configuration

- @ConfigField annotation
- Section/scope: importexport
- Fields:
 - header
 - order
 - identity
 - excluded
 - short
- UI

Entity field configuration: Example

<https://github.com/oroinc/crm/blob/3.1/src/Oro/Bundle/SalesBundle/Entity/Lead.php>

<https://github.com/oroinc/crm/blob/3.1/src/Oro/Bundle/SalesBundle/Resources/config/importexport.yml>

Import and Export buttons

- OroImportExportBundle:ImportExport:
 - buttons.html.twig
 - buttons_from_configuration.html.twig
- Pass entity class and processor aliases
- Usually placed at index page

<https://github.com/oro-inc/crm/blob/3.1/src/Oro/Bundle/SalesBundle/Resources/views/Lead/index.html.twig#L7-L9>

<https://github.com/oro-inc/platform/blob/3.1/src/Oro/Bundle/ImportExportBundle/Resources/doc/reference/how-to-use.md#import-and-export-ui-setup>

Potential issues

- Configuration:
 - Problem: Need to use custom data format
 - Solution: Implement custom data converter, serializer, strategy or whole processor
- Performance:
 - Problem: Too slow (because of ORM)
 - Solution: Work directly with DBAL