TechD·vision

Service Description - Pacemaker Professional Edition (PE) v1.3.0

Technische modul informationen

Hersteller	TechDivision GmbH
Name	**Pacemaker Professional Edition (PE)**
Open Source	Yes
License	proprietary
Pricing	n/a
Magento Version	>= 2.2.0
Magento Edition	Community + Commerce
Compliance	n/a

General

Die **Pacemaker Professional Edition (PE)** is an add-on for the **Pacemaker Professional Edition (PE)**.

The **Pacemaker Professional Edition (PE)** focuses on middle and large projects where import performance will become a significant problem.

As the **Pacemaker Professional Edition (PE)** performance is already on a very competitive level, we're talking about middle projects when 100.000 **SKUS** and above have to be imported regularly.

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Besides the **SKUS**, which are indeed a good benchmark, aspects like the number of websites, attributes, attribute options, or other technical requirements as the infrastructure that should be used can significantly impact performance.

Therefore the decision to use the **Pacemaker Professional Edition (PE)** instead of the **Pacemaker Professional Edition (PE)** always needs to investigate deeper into a project's requirements and general conditions.

The **Pacemaker Professional Edition (PE)** is completely based on the **Pacemaker Professional Edition (PE)** sources but replaces some main components to improve performance.

Additionally, it comes with basic converter functionality and a Redis cache implementation that allows using a **Redis** server for caching.

It will be necessary for multi-process or -threaded environments to share state as well as global data.

Standard Connector

Operations

As the **Pacemaker Professional Edition (PE)** comes with a basic converter library that provides basic functionality to convert files from the source into the expected **CSV** format, an additional operation will be available.

As, in general, it'll be possible to add any custom operation, this operation is virtual and needs to be implemented as needed.

- convert

Entity Types

Products

As product import has the main focus in most cases, the **Import Library** focuses on improving performance, especially in that case.

- **Batch** import functionality (configurable)
- **Redis** cache adapter (configurable)

Pacemaker Professional Edition (PE) v3.7

Hersteller	TechDivision GmbH
Web	**Pacemaker Professional Edition (PE)** v3.7
Open Source	Yes
License	OSL 3.0
Pricing	Free Usage for **Magento Community** and **Commerce Edition**
Magento Version	>= 2.2.0
Magento Edition	Community + Commerce
Compliance	

- Common Format and **MIME-Type** for comma separated values Files **RFC 4180**
- Basic coding standard: **PSR-1**
- Logger interface: **PSR-3**
- Autoloading standard: **PSR-4**
- Caching interface: **PSR-6**
- Container interface: **PSR-11**

General

In general, **Pacemaker Professional Edition (PE)** has been implemented as a set of libraries on top of **Symfony** that can be used to implement custom import solutions for **Magento 2**.

It has been built to match the requirements of any presentable use case.

Besides the framework approach, **Pacemaker Professional Edition (PE)** also provides a real implementation that improves integration, saves costs, and fits the requirements, at least, for many of the known use cases.

Technology

From a technical point of view, **Pacemaker Professional Edition (PE)** can be used in two different ways. Either from within **Magento** or from outside. Using it from within **Magento**, e.g., when the installation has been taken place as **Composer** dependency, simplifies usage.

It will read most of the necessary configuration from the **Magento** installation itself. Using it like a middleware, those configuration has to be specified on the **CLI** or must be part of the configuration file.

- Installation via **Composer** or usage as **PHAR**

- **PSR-3** compatible logger (configurable)

- **PSR-6** compatible caching (configurable)

- Cache warming which is especially useful for slow **DB** connections (configurable)

- Archiving of dedicated import artifacts

- Fine-grained events to easily extend the standard functionality

- Debug mode that ignores nonbreaking data inconsistencies

- Import to multiple **Magento 2** installations/databases from one installation

- Zero-Effort extensibility for new columns that match the **EAV** attribute name for the entity types that are based on **Magento EAV** model, which are

  - Categories

  - Products

  - Customers

  - Customer Addresses

- Easy mapping for columns that don't match the attribute code (by configuration)

- Build-In support for multi-process or -threaded environments

- Guarantee for consistent imports by

  - Supporting .ok files to mark import ready to be processed

  - creating **PID** files for each operation

  - moving files to a temporary directory

  - allowing to run operations within a Single Database Transaction

  - process multiple files (bunches) within one operation

CLI (Command Line Interface)

Pacemaker Professional Edition (PE) comes with a **CLI** application that allows executing the commands to achieve the expected result.

- Completely based on **Symfony** following **PSR-1** and **PSR-4**

- Strictly using **Symfony DI** and supporting **PSR-11**

- Additional options to

  - Pass a custom configuration file

  - Give a specific serial for the import process (mostly useful when using **Pacemaker Professional Edition (PE)** as a white-label solution)

  - Pass a specific **PID** file to avoid import collisions when running multiple import processes in parallel

  - Pass a custom **Magento** edition or version

  - Pass additional parameters or a file with additional parameters that will be used to customize standard functionality

  - Pass a custom **DB** connection

  - Pass custom source and target directory

  - Pass a custom archiving directory

 Change the default log level

 Activate the debug mode

 Activate the single transaction mode

 Deactivate the cache functionality

 Deactivate the archiving functionality

- Import commands for the available entity types
- Additional commands to
   Create the .ok files
   clear ghost **PID** files
   export the configuration

Workflow Engine (fully configurable)

- Uses **JMS** serializer for generic configuration parsing
- Allows fine-grained configuration of every operation
- Each component consists of one or more separate libraries.
- Each component provides it is own configuration.

Operations

An operation defines a set of functionality that will be executed during the import process.

Therefore the operation names reflect the import behavior that can be expected from it.

The following import operations are available.

- delete
- add-update
- replace

Standard Connector

The standard connector is based on the **CSV** format as this is in most cases, this is the least that can be delivered by third-party systems.

Entity Types

The standard connector support Importing the following entity types.

Products

The **CSV** file format of the product import is mostly compatible with the **Magento** standard **CSV** format.

Product Types

The product import with the standard connector supports the following product types.

- Simple products

- Virtual products
- Configurable products
- Bundle products
- Grouped products

Additional Functionality

Besides importing products itself, additionally, the following product-related data can be imported.

- Inventory < 2.3.1
- MSI > 2.3.1 (can also be part of the main product import)
- Tier prices (can also be part of the main product import)
- General Prices (also on Website Level)
- Media Gallery
- URL Rewrites
- Dynamic link types (upsell, cross-sell + related)
- Dynamic image types
- Dynamic creation of option values
- Translations on store view level

Clean-Up functionality (add-update operation only)

Nearly in every case, the add-update operation is the one that fits the requirements best.

One common restriction of this operation is that it only adds new or updates existing data.

As in many cases, it will be necessary to remove data.

The standard connector comes with a clean-up functionality for the most critical data.

The clean-up functionality can easily be activated/deactivated in the configuration.

- Product-category relations
- Product-website relations
- Empty columns (configurable)
- URL Rewrites
- Media gallery

Categories

As **Magento** itself has no category import at all, the **CSV** file format is specific but uses the same approaches whenever possible.

General

- Support for all category **EAV** attributes.
- No entity **ID** is necessary. Instead, it uses the category paths.

Additional Functionality

- Translations on store view level
- Category Images
- URL rewrites

Clean-Up Functionality (add-update operation only)

- URL rewrites

Customers

Magento itself already provides customer import functionality. The **Pacemaker Professional Edition (PE)** functionality supports the same **CSV** format.

General

- Support for all customer EAV attributes

Customer Addresses

Magento itself already provides customer address import functionality.

The **Pacemaker Professional Edition (PE)** functionality supports the same **CSV** format.

- Support for all customer EAV attributes

Attribute Sets + Groups

Pacemaker Professional Edition (PE) provides the possibility to import attribute sets and groups. As **Magento** itself has no attribute set and group import at all, the format for the **CSV** file of the import is specific but uses the same approaches whenever possible.

General

As the attribute import, the attribute set and group import are also not based on the **Magento EAV** model.

- Support for all attribute set and group attributes

Additional Functionality

- Create new attribute sets based on existing ones (configurable)

Attributes

Pacemaker Professional Edition (PE) provides the possibility to import attributes as well as their option values.

As **Magento** itself has no attribute import at all, the format for the **CSV** file of the attribute import is specific but uses the same approaches whenever possible.

General

In contrast to the other entities, the attribute import is not based on the **EAV** model approach, as the different entity types are.

- Support for all attribute fields

- Support for all attribute types
- Sort order when rendering attribute sets and groups in the frontend/backend
- Option values for select and multi-select attributes
- Swatch values for text and visual swatch attributes

Additional Functionality

- Translation of labels and option/swatch values on store view level