

# Understanding the Sync Process

KatanaPIM for Magento 2

Understanding how synchronization works in [KatanaPIM Connect](#). Learn the difference between Full and Incremental sync, and when to use each.

## Overview

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KatanaPIM Connect synchronizes data in two stages:

1. **Import from PIM** - Fetch data from KatanaPIM API into intermediate tables
2. **Create in Magento** - Process intermediate data to create/update Magento entities

This two-stage approach allows you to review imported data before creating Magento products.

## Sync Types

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### Full Update

A complete synchronization of all entities from KatanaPIM.

#### What it does:

- Fetches ALL products, categories, attributes, and assets from PIM
- Compares with existing data using hash comparison
- Marks items as "Needs Update" when changes are detected
- Can optionally trigger Magento reindex after completion

#### When to use:

- Initial setup and first import
- After major changes in PIM
- Weekly/daily scheduled maintenance
- When incremental sync has gaps

#### Run via CLI:

```
# Full sync of everything
bin/magento katana:import:full

# Sync specific entity types only
bin/magento katana:import:full --attributes
bin/magento katana:import:full --categories
bin/magento katana:import:full --products
```

```
bin/magento katana:import:full --assets
```

## Incremental Update

A delta synchronization that only processes changed items.

### What it does:

- Fetches only items modified since last sync
- Much faster than full update
- Lower server load
- Ideal for frequent updates

### When to use:

- Regular scheduled updates (every few hours)
- After individual product changes in PIM
- To keep Magento in sync throughout the day

### Run via CLI:

```
bin/magento katana:import:incremental
```

## Sync Order

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Entities should be synchronized in this order:

1. **Attributes** - Required first for product data mapping
2. **Categories** - Optional, needed if using PIM categories
3. **Products** - Main product data
4. **Assets** - Product images and videos (requires products)

The Full Update command handles this order automatically.

## What Gets Synced

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### Products

PIM Data	Magento Field
Product name	name (mapped attribute)

PIM Data	Magento Field
Description	description (mapped attribute)
SKU	sku
GTIN	gtin (mapped attribute)
Price data	price, special_price, cost
Category assignments	category_ids
Attribute values	Custom attributes

## Categories

PIM Data	Magento Field
Category name	name
URL key	url_key
Parent/child hierarchy	path, level
Position	position

## Attributes

PIM Data	Magento Field
Attribute code	attribute_code (katanapim_ prefix)
Attribute label	frontend_label
Attribute type	frontend_input
Options	attribute options

## Assets

PIM Data	Magento Field
Image URL	Product gallery
Image order	position

PIM Data	Magento Field
Video URL	Product video
Alt text	label

## Hash Comparison

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The module uses hash comparison to detect changes:

1. When data is imported from PIM, a hash is calculated
2. When Magento entity is created/updated, another hash is calculated
3. If hashes differ, the item is marked "Needs Update"
4. Matching hashes mean no update is required

This prevents unnecessary Magento saves and improves performance.

## The "Needs Update" Flag

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In all grids, you'll see a "Needs Update" column:

Value	Meaning
Yes	PIM data differs from Magento - update recommended
No	Data is in sync - no action needed

Items marked "Needs Update" will be processed during the next sync if automation is enabled.

## The "Skipped" Flag

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Mark items as "Skipped" to exclude them from synchronization:

- Skipped items are ignored during auto-sync
- Useful for products you don't want in Magento
- Can be set/unset via mass action

## Automation Flow

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When automation is enabled:

1. **Cron triggers** based on configured frequency
2. **Incremental/Full Update** fetches data from PIM
3. **Auto-create** (if enabled) creates new Magento entities
4. **Existing items** with "Needs Update" are updated
5. **Sync Log** records the results

## Manual vs Automatic Creation

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### Automatic (via cron):

- Enable "Auto create new products" in Automation settings
- New products are created automatically during sync
- Less control, more convenience

### Manual (via grid):

- Leave auto-create disabled
- Review imported products in grid first
- Select items and use "Update/Create Magento Products" mass action
- More control over what gets created

## Performance Tips

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1. **Use Incremental** for frequent updates (hourly)
2. **Use Full** for periodic maintenance (daily/weekly)
3. **Adjust batch sizes** if experiencing timeouts
4. **Disable reindex** in production - run manually after sync
5. **Use CLI** for large imports - avoids browser timeouts

## Need More Help?

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### Documentation:

- [All Help Articles](#) - Complete documentation overview

### Support:

- [Contact Support](#) - Get help from our team

For a complete overview of features and configuration options, see the KatanaPIM extension on [magmodules.eu](http://magmodules.eu)

# All articles for KatanaPIM

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## Installation

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1	<a href="#">Installation using Composer (recommended)</a>
2	<a href="#">Install through FTP and SSH</a>

## Configuration

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1	<a href="#">Quick Start Guide</a>
2	<a href="#">Configuration</a>
3	<a href="#">Categories Grid</a>
4	<a href="#">Attribute Mapping</a>
5	<a href="#">Configurable Products Setup</a>

## Troubleshooting

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1	<a href="#">Troubleshooting</a>
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## Grids

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1	<a href="#">Products Grid</a>
2	<a href="#">Attributes Grid</a>
3	<a href="#">Assets Grid</a>
4	<a href="#">Sync Log Grid</a>

## Background

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1	<a href="#">CLI Commands</a>
2	<a href="#">Cron Jobs</a>

3	Product to Website Matching
4	<b>Understanding the Sync Process (current)</b>

