



Syndication 3.0.0

Major Update
for CKAN Extension

LINKDIGITAL



Introduction

The **ckanext-syndicate** extension has been updated to version 3.0.0. This major release brings a complete overhaul, from internal code and tests to an entirely new user interface.

Syndicate's primary goal is to push datasets to remote portals, enabling a single data provider to distribute data across multiple open-data portals. Portal maintainers specify profiles that represent remote portals. Each profile contains information about the remote CKAN instance, authentication credentials, and other configuration settings.

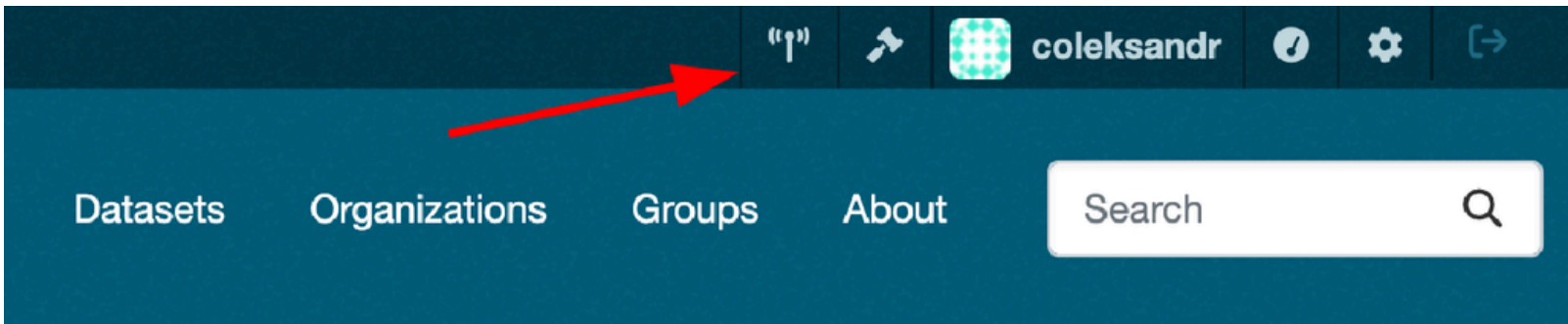
The main issue we aimed to solve was the lack of observability. Previously, syndication happened in background jobs with output written only to log files. Users initiating the sync process from the web UI were often unaware of the outcome.

The process complexity stems from several factors, primarily remote portal availability and dataset schema differences. Changes to a schema on a remote portal can break syndication. Similarly, modifying data on the source portal may trigger incompatibility with the remote portal's schema.

These issues need to be obvious and easily resolvable. To track every syndication record, we've created a web UI (available only to sysadmins) that helps you monitor all enabled profiles and their records.

Syndication Profiles Dashboard

You can access the syndication profile dashboard by clicking the button in the header next to your profile name.



Syndication Profiles Dashboard Button

Clicking the button opens the dashboard with all profiles listed. On this page, you can see the profile name, remote portal URL, and all other profile-related data. The dashboard table is powered by the ckanext-tables extension, which allows us to build complex tables with sorting, filtering, and pagination quickly and easily.

A screenshot of the Syndication Profiles List table. The table has a light blue header and a white body. The header contains columns for 'Profile', 'CKAN URL', 'API Key', 'Organization', and 'Details'. The body contains three rows of data. The first row is for 'master' with CKAN URL 'http://127.0.0.1:7777', API Key 'eyJh*****MVMw', and Organization 'test-org-1'. The second row is for 'mlcommons' with CKAN URL 'http://127.0.0.1:7776', API Key 'eyJh*****C4ho', and Organization 'test-org-1'. The third row is for 'fake' with CKAN URL 'https://www.lipsum.c', API Key 'xxxx*****xxxx', and Organization 'some-org'. Each row has a 'Details' column with a link icon and a vertical ellipsis icon. The table is part of a larger interface with 'Filters' and 'Table Actions' buttons at the top and pagination controls at the bottom.

Syndication Profiles List

Because each profile contains extensive information, we've added a button in the Details column that opens a modal window showing all profile information. Here you can verify whether the API key is set, view the remote portal URL, check the profile queue name, and review other settings.

Details

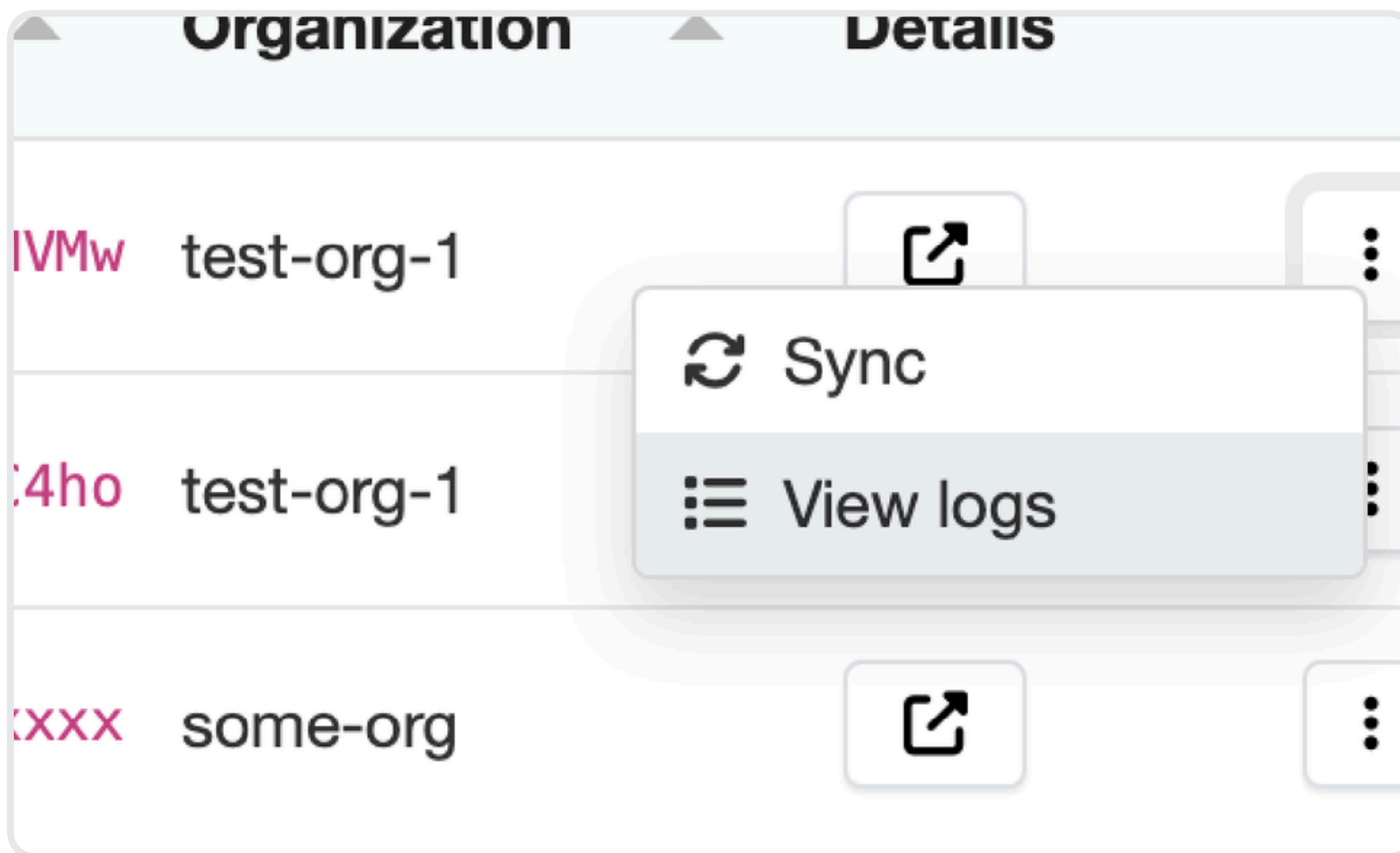
Key	Description	Value
api_key	The API key used for authentication on the remote portal	****MVMw
ckan_url	The URL of the remote CKAN portal	http://127.0.0.1:7777
field_id Deprecated	The custom field ID where the remote dataset ID is stored	syndicate_master_id
name_prefix	The prefix added to the dataset name when creating it on the remote portal	
organization	The organization on the remote portal where datasets will be created	test-org-1
refresh_package_name	Whether to refresh the dataset name on the remote portal	False
replicate_organization	Whether to replicate the organization on the remote portal	False
update_organization	Whether to update the organization details on the remote portal	False
upload_organization_image	Whether to upload the organization image to the remote portal	True
user_agent	The User-Agent header to use for requests to the remote portal	None
queue	The queue to use for syndication tasks	default

Close

Syndication Profile Details Modal

Syndication Records Dashboard

From the syndication dashboard, you can access the records dashboard by clicking the button with three dots and selecting View logs. This opens a new page displaying all records related to the profile.



Syndication Records Dashboard Button

The records dashboard contains all records associated with the profile. Each record represents a dataset that was or wasn't successfully syndicated to the remote portal. You can see the dataset title, local and remote IDs (if syndicated successfully), state (synced, failed, stopped), error message (if any), and timestamp.

<input type="checkbox"/>	Title	ID	Target Package ID	State	Error	Timestamp	
<input type="checkbox"/>	Brother type something necessai	ace40d4f-6779-45f0-8e0f-d01	b92eb494-1095-4ab4-aac7-f4	SYNCED		17/11/2025 - 14:06	⋮
<input type="checkbox"/>	Rich feel sell wrong how.	c05dd0c8-a92f-4f53-b59f-3b6	-	STOPPED		17/11/2025 - 13:41	⋮
<input type="checkbox"/>	International power share.	63b8feeb-117b-4b2c-b775-7c	-	STOPPED		17/11/2025 - 13:41	⋮
<input type="checkbox"/>	Doctor per large.	cc004c83-f67e-4930-b292-29	-	STOPPED		17/11/2025 - 13:41	⋮
<input type="checkbox"/>	Choice paper sometimes.	8053b352-0106-4d3f-952b-4e	-	STOPPED		17/11/2025 - 13:41	⋮
<input type="checkbox"/>	National wide may.	4cbb78c3-422e-4c07-9a03-df	4c43f949-6b6b-47c7-9cf6-26	SYNCED		17/11/2025 - 13:16	⋮
<input type="checkbox"/>	Meeting once response.	7f08c2c7-f73b-4fc6-b035-7b9	7d90b8d9-78d7-4da5-9bed-4	SYNCED		17/11/2025 - 13:16	⋮
<input type="checkbox"/>	Thing guy movement red north.	1f5f349a-ead7-448d-8cb9-13f	30d0dd33-5aab-467c-b42e-2f	SYNCED		17/11/2025 - 13:16	⋮
<input type="checkbox"/>	my lovely dataset #1	4d93bcf0-4e17-4ec9-a186-4d	e9b97694-bbaa-448d-9555-1f	SYNCED		17/11/2025 - 13:16	⋮
<input type="checkbox"/>	Make million old cost hotel avail	5900ffa9-a17b-4a49-9a11-79f	68ad4f79-d44c-4374-a100-58	SYNCED		17/11/2025 - 13:16	⋮

Filters

×

Row Actions

⌵

Export

⌵

↺

⌵

Page Size:

10

⌵

First

Prev

1

2

Next

Last

Syndication Records Dashboard

The **ckanext-tables** extension enables you to

- filter records,
- apply actions to selected records (such as resyndicating selected packages)
- export records in different formats: CSV, JSON, Excel, TSV, YAML, NDJSON, HTML, and PDF.

You can also resyndicate a single record by clicking the respective button in the three-dots menu.

Syndication States

A syndication record can have several states:

Synced

the dataset was successfully syndicated to the remote portal.

Failed

the syndication process failed due to an error. The error message is displayed in the respective column.

Stopped

the syndication process was stopped by the **skip_syndication** hook. This can occur when a dataset shouldn't be syndicated based on certain conditions.

Syndication States

The new UI makes resyndication much easier. You can resyndicate a single record, selected records, or an entire profile.

When you resyndicate a record, a new task is created in the background queue. To ensure resyndication isn't blocked by other tasks, we've added a queue setting to each profile. This allows multiple profiles to work in parallel without blocking each other. By default, the default queue is used.

Migration Guide

Here are the steps to migrate to **ckanext-syndicate 3.0.0**:

1. Update Plugin Configuration


The ckan.plugins setting now requires adding tables alongside syndicate, as the extension relies on ckanext-tables for the dashboards.

```
ckan.plugins = ... syndicate tables ...
```

2. Run Database Migration

Run the database migration command to create the new table for syndication records:

```
ckan -c /path/to/your/ckan.ini db upgrade
```

 Note: Previously, we stored the remote dataset ID in the field_id field in dataset extras. Now, all syndication records are stored in a separate table, so this setting is no longer needed for new syndications. However, you must keep it for existing datasets during the migration period, as it will be used to backfill the records table.

3. Update Configuration Settings

Update your **ckan.ini** configuration file to include the new settings for **ckanext-syndicate**. Refer to the documentation for the complete list of settings.

4. Configuration Option Changes

Removed settings:

- **ckanext.syndicate.queue.name** - replaced by per-profile queue settings
- **ckanext.syndicate.profile.<PROFILE>.author**

Added settings:

- **ckanext.syndicate.profile.<PROFILE>.queue** - the name of the queue to use for syndication tasks (default: default)

Deprecated settings:

- **ckanext.syndicate.profile.<PROFILE>.field_id** - deprecated but must remain during the database migration period. This setting will be removed in future releases.

5. Removed Helpers

The following helpers have been removed:

- **organization_owns_dataset**
- **organization_not_owns_dataset**

6. Removed Interface Methods

The following interface method has been removed:

- **ISyndication.reattach_on_syndication_error**

7. Removed Utility Functions

The following utility functions have been removed:

- **try_sync**
- **get_target**
- **trigger_sync**

8. Deprecated Actions Removed

Previously deprecated actions have been removed. Use signals instead:

- **before_syndication_action**
- **after_syndication_action**
- **update_dataset_for_syndication**

9. Requirements Updates

- **Python >= 3.10**
- **CKAN >= 2.10**

Conclusion

Syndication 3.0.0 represents a significant step forward in making dataset syndication more transparent, manageable, and reliable. The new dashboards provide unprecedented visibility into syndication operations, while the improved architecture ensures better performance and maintainability.

We encourage all users to migrate to this new version and explore the enhanced features. For questions or issues during migration, please visit our [**GitHub repository**](#) or reach out to the [**community**](#).

CKAN extension

Ckanext-syndicate

Visibility into syndication operations,
better performance and maintainability

GitHub

Datashades

Community brand for Link Digital, one of
the co-stewards of the CKAN open
source project.

LINKDIGITAL

Let's talk about
CKAN extensions

Contact Us