

Migration tooling

Camunda currently invests in tooling to help support and ease your migration from Camunda 7 to Camunda 8.

Migration tools

Camunda provides the following migration tools:

Migration tool	Description	GitHub link
Migration Analyzer & Diagram Converter	Gain a first understanding of migration tasks. Available for local installation (Java or Docker) or hosted as a free SaaS offering .	camunda-7-to-8-migration-analyzer
Data Migrator	Copies active Camunda 7 runtime instances to Camunda 8. History (audit) migration is available as experimental.	camunda-7-to-8-data-migrator
Code Conversion Utilities	Mixture of code <i>mapping tables</i> , code conversion <i>patterns</i> , and automatable <i>refactoring recipes</i> .	camunda-7-to-8-code-conversion

Examples

Example	Description	GitHub link
Simple end-to-end example	Showing all tools in action for a simple Spring Boot Java solution	camunda-7-to-8-migration-example

Migration Analyzer & Diagram Converter

The Migration Analyzer & Diagram Converter helps you get a first understanding of migration tasks when moving from Camunda 7 to Camunda 8. It analyzes Camunda 7 model files (BPMN or DMN) and generates a list of tasks required for the migration.

In a second step, it can also convert these files from the Camunda 7 format to the Camunda 8 format. For example, it updates namespaces or renames XML properties if needed.

You can use the Migration Analyzer & Diagram Converter in the following ways:

- Web Interface: A wizard-like UI built with Java (Spring Boot) and React.
Available:
 - locally as a Java JAR,
 - via Docker, or
 - as a free hosted SaaS version.
- CLI: A command-line interface implemented in Java.

The results are available as:

- XLSX: A Microsoft Excel file, including pre-built pivot tables for data exploration.
- CSV: A plain-text comma-separated file, compatible with any spreadsheet tool.

Let's go through this step-by-step:

- [How to install?](#)
- [How to analyze your models?](#)
- [How to convert your models?](#)

Installation

Please refer to the [Installation Guide](#) for local setup instructions.

To get started right away, try the free SaaS version:

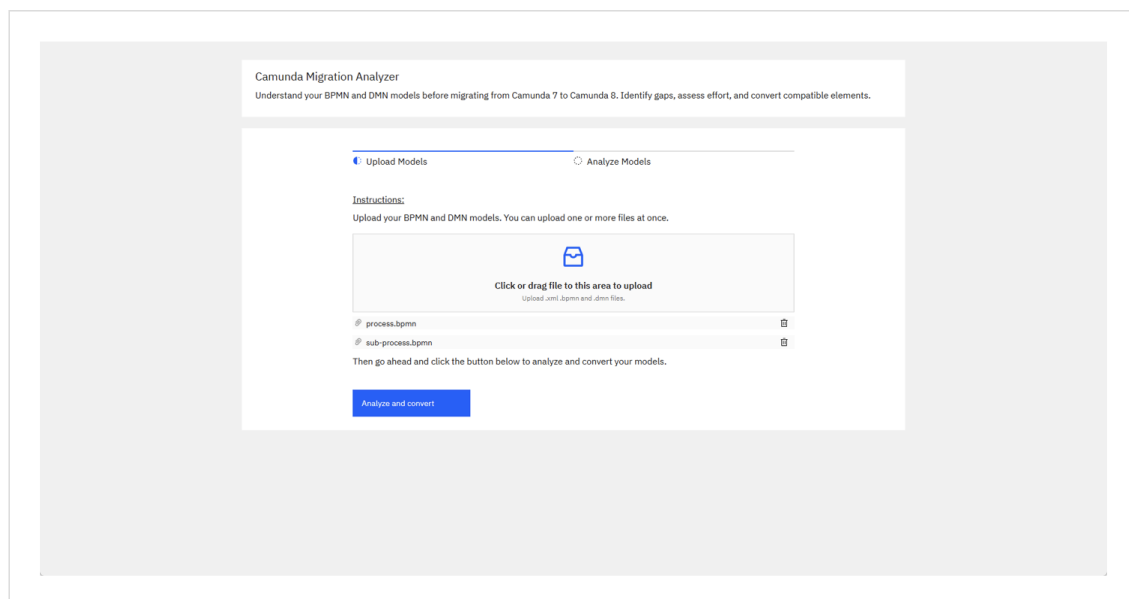
<https://migration-analyzer.consulting-sandbox.camunda.cloud/>

Analyzing your models using the Web Interface

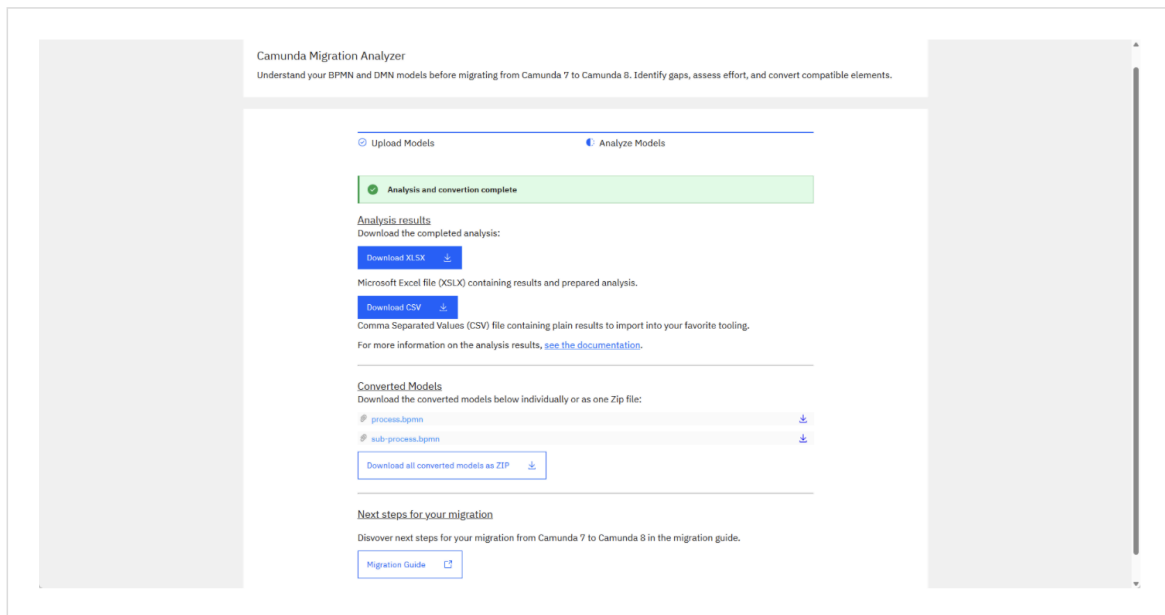
After [local installation](#), open <http://localhost:8080/>.

Or use the [SaaS deployment](#) (no local setup required).

The wizard is straightforward. Upload one or more models:



Click Analyze and convert:



On this screen you can now:

- Download the analyzer results as Microsoft Excel file (XLSX)
- Download the analyzer results as CSV file
- Download the converted models (individually or as ZIP)

Analysis results contain a list of items, where each row represents an action item required for migrating your solution to Camunda 8. Those items are grouped by severity:

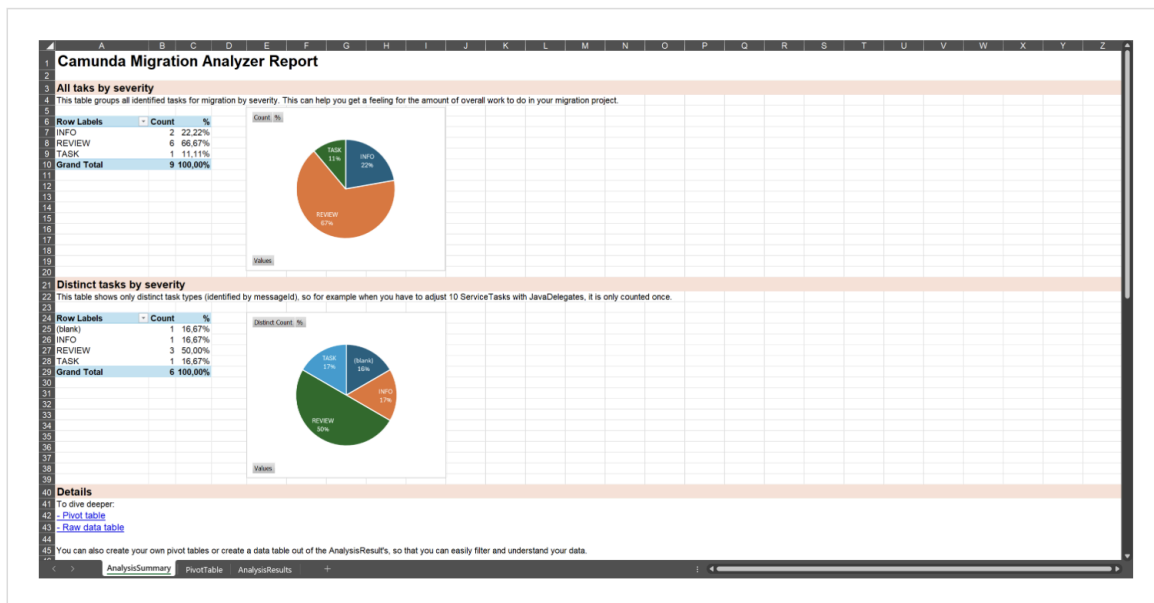
- INFO: No action needed. Diagram conversion can successfully map attributes to the Camunda 8 implementation.
- REVIEW: The conversion will modify some expressions or attributes. Please verify that the intended functionality remains unchanged.
- WARNING: A Camunda 7 concept can not be directly mapped to a Camunda 8 equivalent. Consider reviewing the Camunda 8 roadmap or exploring possible workarounds.
- TASK: Manual changes are required to make the model work in Camunda 8.

This allows you to focus on the most important findings. Tasks can also be grouped by type. For example, changing a `JavaDelegate` to a `JobWorker` might appear 100 times in your codebase, but still represents just one recurring pattern.

Pivot tables can help you identify tasks that appear multiple times across different files, providing a comprehensive overview of migration efforts.

Let's take a closer look at how to use those results.

Understanding analyzer results using Microsoft Excel



The XLSX file includes three tabs:

- AnalysisSummary: Pivot tables and charts that summarize typical migration tasks.
- PivotTable: A large pivot table for dynamic data exploration.
- AnalysisResults: The raw data from the analysis, which you can copy, import, or further process.

You can open the file using Microsoft Excel (desktop or Office 365).

Understanding analyzer results using Google Sheets or LibreOffice

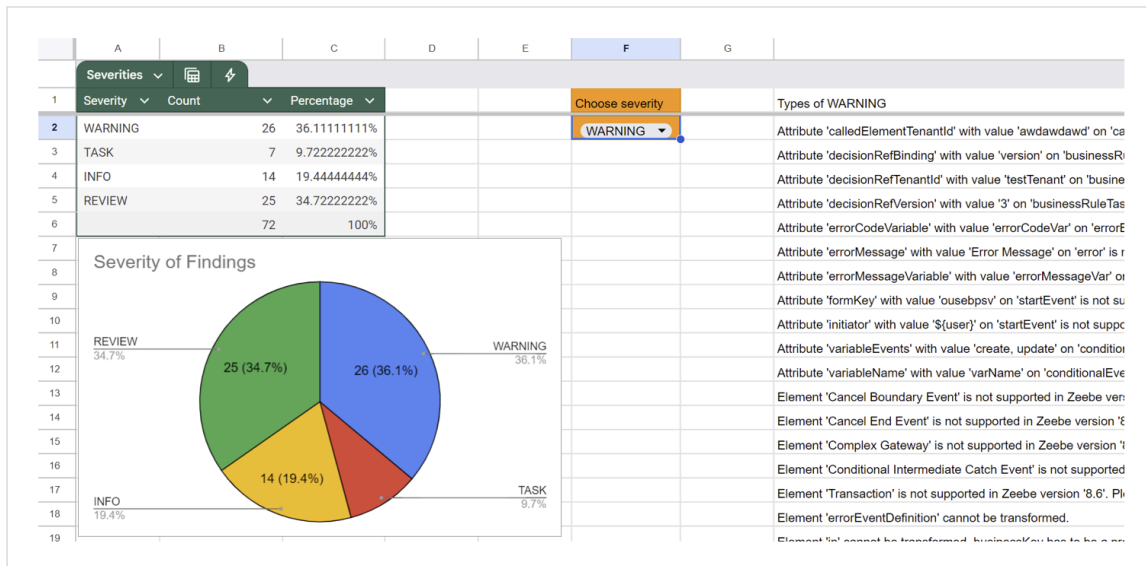
You can also open the XLSX file in Google Sheets, LibreOffice, OpenOffice, or similar tools. The raw data will be imported correctly, but pivot tables will not be preserved.

Alternatively, download the results as a CSV file and import them directly into your preferred tool.

In this case:

1. Create your own pivot table in the tool.
2. Or copy the contents of the AnalysisResults tab into your own spreadsheet.

For Google Sheets, consider using this [Google Spreadsheet template](#) created by Camunda consultants.



Analyzing your models using the CLI

If you prefer the command line over a web interface, the CLI tool is for you. It is ideal for batch conversions or automation.

After [installation](#), run the CLI:

```
java -jar camunda-7-to-8-migration-analyzer-cli.jar local myDiagram.bpmn --xlsx
```

You can also prompt a help message that will guide you through all parameters:

```
java -jar camunda-7-to-8-migration-analyzer-cli.jar local
```

Missing required parameter: '<file>'

Usage: camunda-7-to-8-migration-analyzer-cli local [-dhOV] [--check] [--csv]

[--delegate-execution-as-job-type] [--disable-append-elements]

[--disable-default-job-type] [--md] [--nr]

[--default-job-type=<defaultJobType>]

`[--platform-version=<platformVersion>] [--prefix=<prefix>] <file>`
Converts the diagram from the given directory or `file`

Execute as:

`java -Dfile.encoding=UTF-8 -jar camunda-7-to-8-migration-analyzer-cli.jar local`

Parameter:

`<file>` The `file` to convert or directory to search *in*

Options:

`--check` If enabled, no converted diagrams are exported

`--csv` If enabled, a CSV `file` will be created containing
the conversions results

`--xlsx` If enabled, a XSLX `file` will be created containing
the analysis results

`-d, --documentation` If enabled, messages are also appended to
documentation

`--default-job-type=<defaultJobType>`
If set, the default value from the
'`converter-properties.properties`' for the job
`type` is overridden

`--delegate-execution-as-job-type, --delegate-expression-as-job-type`
If enabled, sets the delegate expression as the
job `type`

`--disable-append-elements`
Disables adding conversion messages to the bpmn xml

`--disable-default-job-type`
Disables the default job `type`

`-h, --help` Show this `help` message and exit.

`--md, --markdown` If enabled, a markdown `file` will be created
containing the results for all conversions

`-nr, --not-recursive` If enabled, recursive search *in* subfolders will be
omitted

`-o, --override` If enabled, existing files are overridden
`--platform-version=<platformVersion>`
Semantic version of the target platform, defaults
to latest version

`--prefix=<prefix>` Prefix for the name of the generated `file`
Default: converted-c8-

`-V, --version` Print version information and exit.

Converting your models

As mentioned, the Migration Analyzer & Diagram Converter can also convert BPMN and DMN models for use with Camunda 8.

This includes:

- Updating namespaces
- Adjusting XML structure and properties
- Transforming expressions

Converted files can be downloaded via the web interface or generated via the CLI.

Extending the conversion logic

You can also extend the conversion logic. See [Extending the Migration Analyzer & Diagram Converter](#) for details.

Expression conversion

JUEL expressions used in Camunda 7 are not supported in Camunda 8. The Migration Analyzer & Diagram Converter tries to convert simple expressions automatically (see [ExpressionTransformer](#)). For an overview of what's supported, see the [ExpressionTransformer test case](#).

More complex expressions may require manual rewriting. The [FEEL Copilot](#) can help with this.

You can also customize or extend the transformer logic as needed.