Migration step types

Every step type of YAML migrations with its modes, keys, reference values and an example.

Source file: doc/eng-us/examples/migration-steps/README.md Last changed 2026-11-04
https://doc.exponential.earth/learninminutes/exphelp/viewer/examples/migration-steps/README.md

Every step type of YAML migrations the kernel registers in `settings/migration.ini [StepSettings] StepTypeList`, one page each, made from the type's schema: its modes, keys, the values `references:` can take, whether it undoes itself, the caches it touches and an example. An extension registers its own types the same way (how).

Step type	Modes	What it does
reference		Sets references (${ref.<name>}) for the steps and migrations after it in the run
assert		Fails the migration when a condition is false
content	create, update, ensure, delete	Creates, updates, ensures or deletes a content object, with its fields in one or more languages
location	create, update, delete, move, copy, hide, unhide	Adds, changes, removes, moves, copies, hides or shows a location (node) of a content object
content_version	restore, cleanup	Restores an earlier version of a content object or removes its old versions
content_class	create, update, ensure, delete	Creates, updates, ensures or deletes a content class with its attributes, their datatype settings and the translations of their names
content_class_group	create, update, ensure, delete	Creates, renames, ensures or deletes a group of content classes
user	create, update, ensure, delete	Creates, updates, ensures or deletes a user account with its groups, password and fields
user_group	create, update, ensure, delete	Creates, updates, ensures or deletes a user group, with its name and description in one or more languages
role	create, update, ensure, delete, assign, unassign	Creates, updates, ensures or deletes a role with its policies and limitations, or assigns it to users and user groups or takes it from them
section	create, update, ensure, delete, assign	Creates, updates, ensures or deletes a section, or assigns a section to a part of the content tree
language	create, update, ensure, delete	Adds, renames, ensures or removes a language of content
object_state_group	create, update, ensure, delete	Creates, updates, ensures or deletes an object state group with its states and the translations of their names
tag	create, update, ensure, delete, move, merge	Creates, updates, ensures, deletes, moves or merges a tag of eztags, with its translations and synonyms
url_alias	create, ensure, delete	Creates, ensures or deletes a custom URL alias of a node, a global URL alias or a URL wildcard

Step type	Modes	What it does
trash	move, restore, purge	Moves content to the trash, restores it from the trash, or purges it for good
file		Attaches a file of the migrations folder to a file attribute (ezbinaryfile, ezmedia) of an object
image		Puts an image of the migrations folder into an image attribute of an object, with its alternative text, focal point and crop rectangle
cache		Clears caches of ezcache by id or tag and the view caches of single objects, at once or after the run
search	reindex, full	Reindexes objects in the search engine (the ones named or the ones the run changed), or every object
autoload		Regenerates the autoload array of the extensions or of the kernel classes extensions replace
layout	create, update, ensure, delete	Creates, updates, ensures or deletes a layout of Exponential Layouts with its zones and their links to shared layouts
layout_block	create, update, ensure, delete	Creates, updates, ensures or deletes a block in a zone of a layout of Exponential Layouts, with its parameters
layout_rule	create, update, ensure, delete	Creates, updates, ensures or deletes a rule of Exponential Layouts that maps pages to a layout
http		Sends one HTTP request to another system, with secrets by name and an optional signature, and keeps the answer for references
mail		Sends one e-mail through the mail transport of the installation
command		Runs one exp:* console command of the installation that migration.ini allows, without a shell
schema	create_table, drop_table, add_column, drop_column, add_index, drop_index	Makes or drops a table, a column or an index on every engine through the kernel's schema handlers
data	insert, ensure, update, delete	Inserts, updates or deletes rows of a table on every engine, the values quoted by the connection
sql		Runs statements of the engine the installation runs on, written in the step or in files next to the migration
settings		Changes one INI file of settings/override or settings/siteaccess/<name> through the INI editor, with a backup
graphql		Runs a query or mutation of the GraphQL API in process as the run's user, and keeps its answer for references
code_file	create, update, ensure, delete	Writes, replaces or removes one code or design file below the allowed folders, with a backup and checksums

- All examples

Generated by `./console exp:help:examples` from `settings/migration.ini`. Do not edit this

page: change the source and generate again (how). Free documentation: GFDL 1.3 or later.

Exponential Copyright © 1998-2026 Exponential Foundation and 7x
Permission is granted to copy, distribute and/or modify this document under the terms of the GNU Free Documentation License, Version 1.3 or any later version published by the Free Software Foundation; with no Invariant Sections, no Front-Cover Texts, and no Back-Cover Texts. A copy of the license is included in the section entitled "GNU Free Documentation License".
This documentation is free documentation, licensed under the GNU Free Documentation License 1.3 or later:
https://www.gnu.org/licenses/fdl-1.3.html.