

Ruby on Rails 7.0 Release Notes

Highlights in Rails 7.0:

- 🟢 **Ruby 2.7.0+ required, Ruby 3.0+ preferred**

1 Upgrading to Rails 7.0

If you're upgrading an existing application, it's a great idea to have good test coverage before going in. You should also first upgrade to Rails 6.1 in case you haven't and make sure your application still runs as expected before attempting an update to Rails 7.0. A list of things to watch out for when upgrading is available in the [Upgrading Ruby on Rails](#) guide.

2 Major Features

3 Railties

Please refer to the [Changelog](#) for detailed changes.

3.1 Removals

- Remove deprecated `config` in `dbconsole`.

3.2 Deprecations

3.3 Notable changes

- Sprockets is now an optional dependency

The gem `rails` doesn't depend on `sprockets-rails` anymore. If your application still needs to use Sprockets, make sure to add `sprockets-rails` to your Gemfile.

```
gem "sprockets-rails"
```

4 Action Cable

Please refer to the [Changelog](#) for detailed changes.

4.1 Removals

4.2 Deprecations

4.3 Notable changes

5 Action Pack

Please refer to the [Changelog](#) for detailed changes.

5.1 Removals

- Remove deprecated `ActionDispatch::Response.return_only_media_type_on_content_type`.
- Remove deprecated `Rails.config.action_dispatch.hosts_response_app`.
- Remove deprecated `ActionDispatch::SystemTestCase#host!`.

- Remove deprecated support to passing a path to `fixture_file_upload` relative to `fixture_path`.

5.2 Deprecations

5.3 Notable changes

6 Action View

Please refer to the [Changelog](#) for detailed changes.

6.1 Removals

- Remove deprecated `Rails.config.action_view.raise_on_missing_translations`.

6.2 Deprecations

6.3 Notable changes

- `button_to` infers HTTP verb [method] from an Active Record object if object is used to build URL

```
button_to("Do a POST", [:do_post_action, Workshop.find(1)])  
# Before  
#=> <input type="hidden" name="_method" value="post"  
autocomplete="off" />  
# After  
#=> <input type="hidden" name="_method" value="patch"  
autocomplete="off" />
```

7 Action Mailer

Please refer to the [Changelog](#) for detailed changes.

7.1 Removals

- Remove deprecated `ActionMailer::DeliveryJob` and `ActionMailer::Parameterized::DeliveryJob` in favor of `ActionMailer::MailDeliveryJob`.

7.2 Deprecations

7.3 Notable changes

8 Active Record

Please refer to the [Changelog](#) for detailed changes.

8.1 Removals

- Remove deprecated `database` kwarg from `connected_to`.
- Remove deprecated `ActiveRecord::Base.allowUnsafeRawSql`.
- Remove deprecated option `:spec_name` in the `configs_for` method.
- Remove deprecated support to YAML load `ActiveRecord::Base` instance in the Rails 4.2 and 4.1 formats.
- Remove deprecation warning when `:interval` column is used in PostgreSQL database.

Now, interval columns will return `ActiveSupport::Duration` objects instead of strings.

To keep the old behavior, you can add this line to your model:

```
attribute :column, :string
```

- Remove deprecated support to resolve connection using "primary" as connection specification name.
- Remove deprecated support to quote `ActiveRecord::Base` objects.
- Remove deprecated support to type cast to database values `ActiveRecord::Base` objects.
- Remove deprecated support to pass a column to `type_cast`.
- Remove deprecated `DatabaseConfig#config` method.
- Remove deprecated rake tasks:
 - `db:schema:load_if_ruby`
 - `db:structure:dump`
 - `db:structure:load`
 - `db:structure:load_if_sql`
 - `db:structure:dump:#(name)`
 - `db:structure:load:#(name)`
 - `db:test:load_structure`
 - `db:test:load_structure:#(name)`
- Remove deprecated support to `Model.reorder(nil).first` to search using non-deterministic order.
- Remove deprecated `environment` and `name` arguments from `Tasks::DatabaseTasks.schema_up_to_date?`.
- Remove deprecated `Tasks::DatabaseTasks.dump_filename`.
- Remove deprecated `Tasks::DatabaseTasks.schema_file`.
- Remove deprecated `Tasks::DatabaseTasks.spec`.
- Remove deprecated `Tasks::DatabaseTasks.current_config`.
- Remove deprecated `ActiveRecord::Connection#allowed_index_name_length`.
- Remove deprecated `ActiveRecord::Connection#in_clause_length`.
- Remove deprecated `ActiveRecord::DatabaseConfigurations::DatabaseConfig#spec_name`.
- Remove deprecated `ActiveRecord::Base.connection_config`.
- Remove deprecated `ActiveRecord::Base.are_attributes`.
- Remove deprecated `ActiveRecord::Base.configurations.default_hash`.
- Remove deprecated `ActiveRecord::Base.configurations.to_h`.
- Remove deprecated `ActiveRecord::Result#map!` and `ActiveRecord::Result#collect!`.
- Remove deprecated `ActiveRecord::Base#remove_connection`.

8.2 Deprecations

- Deprecated `Tasks::DatabaseTasks.schema_file_type`.

8.3 Notable changes

- Rollback transactions when the block returns earlier than expected.

Before this change, when a transaction block returned early, the transaction would be committed.

The problem is that timeouts triggered inside the transaction block was also making the incomplete transaction to be committed, so in order to avoid this mistake, the transaction block is rolled back.

- Merging conditions on the same column no longer maintain both conditions, and will be consistently replaced by the latter condition.

```
# Rails 6.1 (IN clause is replaced by merger side equality condition)  
Author.where(id: [david.id, mary.id]).merge(Author.where(id: bob)) # => [bob]  
# Rails 6.1 (both conflict conditions exists, deprecated)  
Author.where(id: david.id, mary.id).merge(Author.where(id: bob)) # => []  
# Rails 6.1 with rewhere to migrate to Rails 7.0's behavior  
Author.where(id: david.id, mary.id).merge(Author.where(id: bob), rewhere: true) # => [bob]  
# Rails 7.0 (same behavior with IN clause, mergee side condition is consistently replaced)  
Author.where(id: [david.id, mary.id]).merge(Author.where(id: bob)) # => [bob]  
Author.where(id: david.id, mary.id).merge(Author.where(id: bob)) # => [bob]
```

9 Active Storage

Please refer to the [Changelog](#) for detailed changes.

9.1 Removals

9.2 Deprecations

9.3 Notable changes

10 Active Model

Please refer to the [Changelog](#) for detailed changes.

10.1 Removals

- Remove deprecated enumeration of `ActiveModel::Errors` instances as a Hash.
- Remove deprecated `ActiveModel::Errors#to_h`.
- Remove deprecated `ActiveModel::Errors#slice!`.
- Remove deprecated `ActiveModel::Errors#values`.
- Remove deprecated `ActiveModel::Errors#keys`.
- Remove deprecated `ActiveModel::Errors#to_xml`.
- Remove deprecated support concat errors to `ActiveModel::Errors#messages`.
- Remove deprecated support to `clear` errors from `ActiveModel::Errors#messages`.
- Remove deprecated support to `delete` errors from `ActiveModel::Errors#messages`.
- Remove deprecated support to use `[]=` in `ActiveModel::Errors#messages`.
- Remove support to Marshal and YAML load Rails 5.x error format.
- Remove support to Marshal load Rails 5.x `ActiveModel::AttributeSet` format.

10.2 Deprecations

10.3 Notable changes

11 Active Support

Please refer to the [Changelog](#) for detailed changes.

11.1 Removals

- Remove deprecated `config.active_support.use_sha1_digests`.
- Remove deprecated `URI.parser`.
- Remove deprecated support to use `Range#include?` to check the inclusion of a value in a date time range is deprecated.
- Remove deprecated `ActiveSupport::Multibyte::Unicode.default_normalization_form`.

11.2 Deprecations

- Deprecate passing a format to `#to_s` in favor of `#to_fs` in `Array`, `Range`, `Date`, `DateTime`, `Time`, `BigDecimal`, `Float` and, `Integer`.

This deprecation is to allow Rails application to take advantage of a Ruby 3.1 [optimization](#) that makes interpolation of some types of objects faster.

New applications can use not have the `#to_s` method overridden on those classes, existing applications can use `config.active_support.disable_to_s_conversion`.

11.3 Notable changes

12 Active Job

Please refer to the [Changelog](#) for detailed changes.

12.1 Removals

- Removed deprecated behavior that was not halting `after_enqueue/after_perform` callbacks when a previous callback was halted with `throw :abort`.
- Remove deprecated `:return_false_on_aborted_enqueue` option.

12.2 Deprecations

- Deprecated `Rails.config.active_job.skip_after_callbacks_if_terminated`.

12.3 Notable changes

13 Action Text

Please refer to the [Changelog](#) for detailed changes.

13.1 Removals

13.2 Deprecations

13.3 Notable changes

14 Action Mailbox

Please refer to the [Changelog](#) for detailed changes.

14.1 Removals

- Removed deprecated `Rails.application.credentials.action_mailbox.mailgun_api_key`.
- Removed deprecated environment variable `MAILGUN_INGRESS_API_KEY`.

14.2 Deprecations

14.3 Notable changes

15 Ruby on Rails Guides

Please refer to the [Changelog](#) for detailed changes.

15.1 Notable changes

16 Credits

See the [full list of contributors to Rails](#) for the many people who spent many hours making Rails, the stable and robust framework it is. Kudos to all of them.

Feedback

You're encouraged to help improve the quality of this guide.

Please contribute if you see any typos or factual errors. To get started, you can read our [documentation contributions](#) section.

You may also find incomplete content or stuff that is not up to date. Please do add any missing documentation for main. Make sure to check [Edge Guides](#) first to verify if the issues are already fixed or not on the main branch. Check the [Ruby on Rails Guides Guidelines](#) for style and conventions.

If for whatever reason you spot something to fix but cannot patch it yourself, please [open an issue](#).

And last but not least, any kind of discussion regarding Ruby on Rails documentation is very welcome on the [official Ruby on Rails Forum](#).

Chapters

- [Upgrading to Rails 7.0](#)
- [Major Features](#)
- [Railties](#)
 - [Removals](#)
 - [Deprecations](#)
 - [Notable changes](#)
- [Action Cable](#)
 - [Removals](#)
 - [Deprecations](#)
 - [Notable changes](#)
- [Action Pack](#)
 - [Removals](#)
 - [Deprecations](#)
 - [Notable changes](#)
- [Action View](#)
 - [Removals](#)
 - [Deprecations](#)
 - [Notable changes](#)
- [Action Mailer](#)
 - [Removals](#)
 - [Deprecations](#)
 - [Notable changes](#)
- [Active Record](#)
 - [Removals](#)
 - [Deprecations](#)
 - [Notable changes](#)
- [Active Storage](#)
 - [Removals](#)
 - [Deprecations](#)
 - [Notable changes](#)
- [Active Model](#)
 - [Removals](#)
 - [Deprecations](#)
 - [Notable changes](#)
- [Active Support](#)
 - [Removals](#)
 - [Deprecations](#)
 - [Notable changes](#)
- [Active Job](#)
 - [Removals](#)
 - [Deprecations](#)
 - [Notable changes](#)
- [Action Text](#)
 - [Removals](#)
 - [Deprecations](#)
 - [Notable changes](#)
- [Action Mailbox](#)
 - [Removals](#)
 - [Deprecations](#)
 - [Notable changes](#)
- [Ruby on Rails Guides](#)
 - [Notable changes](#)
- [Credits](#)

