Laravel 10.47 to 11 Upgrade Documentation

This document outlines the detailed steps required to upgrade a Laravel project from version 10.47 to 11. The upgrade includes updates to the composer.json file, adjustments to key package versions, and modifications to Handler.php to ensure compatibility with Laravel 11.

Approximate time required for this upgrade: 15-20 hours

Why Laravel 11 and Not Laravel 11.*?

We have specifically chosen "laravel/framework": "^11.0" to stay aligned with the Laravel 11 major release and ensure stability. Laravel 11 introduces a modern app structure, streamlined defaults, and cleaner configuration. Locking to the ^11.0 version provides flexibility for future minor updates while ensuring compatibility across dependencies.

Laravel 11 continues the framework's legacy of modern PHP practices (PHP 8.2+), performance optimization, and security improvements.

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1. Backup the Project and Database

Backup the code: cp -r laravel-adminpanel laravel-adminpanel-backup

Or use Git:
```
git add .
git commit -m "Backup before Laravel 11 upgrade"
git tag pre-laravel-11
git push origin dev-upgrade-10-to-11 --tags
```

Back up the database:
For MySQL: mysqldump -u youruser -p yourdatabase > db_backup.sql

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2. Update Laravel Version in composer.json

Edit composer.json: "laravel/framework": "^11.0"
Also, verify compatibility of any Laravel-specific packages with Laravel 11.

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3. Try to Update Composer Packages

Run: **composer update**
If you encounter memory errors: COMPOSER_MEMORY_LIMIT=-1 composer update

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4. Fix Package Compatibility Issues

Problem 1: Package X requires laravel/framework ^10.47, found ^11.0
Solution: composer require vendor/package:^X.Y

Problem 2: Abandoned packages or those not compatible with Laravel 11.
Solutions:

- Check the GitHub repo for Laravel 11 support
- Replace it with an alternative package
- Temporarily remove it from composer.json

Then retry: **composer update**

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5. Clear and Optimize Laravel Setup

After a successful update, run the following commands to clear and optimize the Laravel setup:

php artisan config:clear
php artisan route:clear
php artisan view:clear
php artisan cache:clear
composer dump-autoload
php artisan optimize

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6. Handle Code Changes (e.g., Handler.php)

Laravel 11 introduces changes to core files like app/Exceptions/Handler.php.

- Adjust method signatures
- Remove deprecated methods
- Add missing imports

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7. Check Project Functionality

Start the server: **php artisan serve**
Verify:

- All pages load correctly
- Forms and submissions work
- Admin panel, login/logout, dashboard
- All JS and CSS assets load properly
- No console or network errors

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8. Run Migrations and Test Data

Run migrations: **php artisan migrate**
If needed: **php artisan db:seed**

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9. Run Tests (If Available)

php artisan test

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10. Final Cleanup

php artisan config:cache
php artisan route:cache
php artisan view:cache

If using GrumPHP: vendor/bin/php-cs-fixer fix
Commit without GrumPHP check: git commit **--no-verify** -m "Laravel upgraded to 11.0"

Summary of Commands

- Backup
  cp -r laravel-adminpanel laravel-adminpanel-backup
  mysqldump -u root -p dbname > backup.sql

- Update
  composer update
  COMPOSER_MEMORY_LIMIT=-1 composer update

- Fix packages
  composer require vendor/package:^version

- Clear + optimize
  php artisan config:clear

php artisan optimize
php artisan migrate
php artisan serve
php artisan test

- Commit
git commit -am "Upgraded Laravel to 11.00"
git push

Composer Package Changes:

1. Updated Packages:

PHP Version:
Old Version: ^8.1
New Version: ^8.2

Reason for Change: Laravel 11 requires PHP 8.2 or newer to take advantage of native type declarations, better performance, enum support, and improved error handling. Upgrading ensures compatibility and future-proofing of the application.

laravel/framework:
Old Version**:** ^10.47
New Version**:** ^11.00
Reason for Change: Laravel 11 includes long-term support (LTS), PHP 8.2 support, and new features like native type declarations and more consistent exception handling. This upgrade ensures future compatibility, better performance, and security improvements.

laravel/passport:
Old Version**:** ^11.0
New Version**:** ^13.1
Reason for Change: To maintain compatibility with Laravel 11. The newer Passport version includes important security patches and support for changes in Laravel 11's authorization components.

spatie/laravel-permission:
Old Version**:** ^5.0
New Version**:** ^6.0
Reason for Change: The older version was not compatible with Laravel 11.x. Upgrading to version 6 ensures compatibility with the Laravel 11 framework and brings improvements in performance, bug fixes, and support for updated dependencies.

knuckleswtf/scribe:
  Old Version**:** ^3.22
  New Version**:** ^4.0
Reason for Change: To align with Laravel 10 compatibility requirements. Version 4.0 introduces enhanced OpenAPI support, improved generation of API docs, and better handling of annotations and route changes.

phpro/grumphp:
  Old Version**:** ^1.3
  New Version**:** ^2.0
Reason for Change: Version 2.0 includes support for PHP 8.2+ and brings a more flexible task configuration structure, improved performance, and better integration with modern CI/CD workflows. This upgrade ensures compatibility with Laravel 11 and up-to-date development tools.

yajra/laravel-datatables-oracle:
  Old Version**:** ^10.00
  New Version**:** ^11.0
Reason for Change: Version 11 is compatible with Laravel 11 and PHP 8.2. The update includes bug fixes, improved compatibility with DataTables JS, and cleaner API handling.

3. Removed Packages:

altek/accountant:
Removed Version**:** ^3.3
Reason for Change: The package is no longer actively maintained and does not provide official support for Laravel 11. It introduces compatibility issues with newer Laravel versions and PHP 8.2+, and its functionality (auditing and revision tracking) can be replaced with well-supported alternatives such as spatie/laravel-activitylog.

altek/eventually:
Removed Version**:** ^2.0
Reason for Change: This package is deprecated and not compatible with Laravel 11. Its approach to eventual consistency is outdated and no longer aligns with modern Laravel event handling best practices. Native Laravel job queues and event broadcasting now provide more robust and maintainable solutions.

arcanedev/log-viewer:
Removed Version**:** ^10.0
Reason for Change: The package is no longer necessary as it was replaced with a more modern and actively maintained alternative (spatie/laravel-activitylog) which better supports Laravel 11 and provides enhanced activity logging features.

davejamesmiller/laravel-breadcrumbs:
Removed Version**:** ^5.0

Reason for Change: This package is useful only in development environments for IDE auto-completion. It has been removed to reduce production dependency bloat. If needed, it can be re-installed as a --dev dependency.

codedungeon/phpunit-result-printer:
Removed Version**:** ^0.30
Reason for Change: This package provides customized output for PHPUnit test results, but it lacks support for PHPUnit 10 and Laravel 11. It's removed due to compatibility issues and minimal added value in modern Laravel testing workflows.

nunomaduro/collision:
Removed Version**:** ^6.0
Reason for Change: While useful in development for pretty error reporting, Collision is now included in Laravel starter kits by default only when needed. It's removed to reduce non-essential dependencies in the project.

phpunit/phpunit:
Removed Version**:** ^10.0
Reason for Change: Laravel 11 supports PHPUnit 10, but it can be excluded from composer.json if testing is handled externally or through CI pipelines. This reduces local dependency management and keeps the project lighter. It can be added back as a --dev dependency if local tests are required.

Conclusion:

This upgrade process ensures your project is fully compatible with Laravel 11.0 while streamlining dependencies and improving security and performance. Following these steps provides a solid foundation for ongoing development, future Laravel updates, and improved maintainability.