

Laravel Middleware for Role-Based Route Protection

In every web application, certain routes should only be accessible by specific users. For example, an **admin dashboard** should be restricted to admins, while editors may only manage content. In **Laravel 12**, this is best achieved using **middleware** — small classes that filter requests before they reach controllers.

In this guide, you'll learn how to use middleware to **protect routes by role and permission**. We'll cover Spatie's built-in middleware, how to create your own custom middleware, and how to apply them effectively in your application.

1 - Why Middleware for Roles?

Middleware acts like a security checkpoint. When a request enters your app, middleware decides if it should continue. With **role-based middleware**, you can make sure that only users with the right roles/permissions can access sensitive pages.

2 - Spatie's Role & Permission Middleware

When you install **Spatie Permissions**, it registers two middleware out of the box:

- role:<role> restricts access to a role
- permission:<permission> restricts access to a permission

Example usage:

1 VO Ship v1.0 Faster

```
// routes/web.php

Route::middleware(['auth','role:admin'])->group(function () {
    Route::get('/admin/dashboard', function () {
        return 'Welcome Admin';
    });

});

Route::middleware(['auth','permission:publish posts'])->group(function () {
    Route::get('/editor/posts', function () {
        return 'Editor Post Management';
    });

});Code language: PHP (php)
```

Now only admins can access /admin/dashboard, and only users with the publish posts permission can access /editor/posts.

3 - Multiple Roles & Permissions

You can also allow multiple roles or permissions in a single middleware declaration by separating them with a pipe (|):

```
// routes/web.php

Route::middleware(['auth','role:admin|manager'])->group(function () {
    Route::get('/reports', function () {
        return 'Reports Page';
    });
});Code language: PHP (php)
```

In this example, both admin and manager roles can access the /reports route.

4 - Creating Custom Middleware

Sometimes, Spatie's built-in middleware isn't enough. For example, maybe you want to restrict access based on **both a role and a specific condition**. In that case, you can create your own middleware.

```
php artisan make:middleware CheckEditorApprovalCode language: CSS (css)
// app/Http/Middleware/CheckEditorApproval.php
namespace App\Http\Middleware;
use Closure;
use Illuminate\Http\Request;
class CheckEditorApproval
{
    public function handle(Request $request, Closure $next)
        if (! $request->user()->hasRole('editor') || !
$request->user()->approved) {
            abort(403, 'Access denied.');
        }
        return $next($request);
}Code language: PHP (php)
Register your middleware in app/Http/Kernel.php under $routeMiddleware and apply
it like this:
Route::middleware(['auth','check.editor'])->group(function () {
    Route::get('/editor/dashboard', function () {
        return 'Editor Dashboard';
```

1 v0 Ship v1.0 Faster

```
});
});Code language: PHP (php)
```

This ensures that only approved editors can access the dashboard.

5 - Applying Middleware in Controllers

You don't have to declare middleware only in routes. You can also apply them directly inside controllers:

```
// app/Http/Controllers/Admin/DashboardController.php

class DashboardController extends Controller
{
    public function __construct()
    {
          $this->middleware(['auth','role:admin']);
    }

    public function index()
    {
          return view('admin.dashboard');
    }
}Code language: PHP (php)
```

This way, any route pointing to DashboardController will automatically be protected by the admin role requirement.



6 - Using HasMiddleware in Laravel 12

Laravel 12 introduces a modern way to assign middleware directly in controllers using the HasMiddleware interface and a static middleware() method. This is cleaner than the old \$this->middleware() approach and doesn't require constructors.

```
☐ Important: In older Laravel versions, your base controller extended
Illuminate\Routing\Controller (aliased as BaseController). That class contains an
instance middleware() method, which conflicts with the new static middleware()
method. In Laravel 12, controllers no longer need to extend
Illuminate\Routing\Controller. You should update your
App\Http\Controllers\Controller to remove the inheritance.
// Before (default older style)
use Illuminate\Routing\Controller as BaseController;
class Controller extends BaseController
{
    use AuthorizesRequests, ValidatesRequests;
}
// After (Laravel 12 style - no BaseController needed)
class Controller
{
    use AuthorizesRequests, ValidatesRequests;
}Code language: PHP (php)
Now, you can safely implement HasMiddleware in your controllers without conflicts:
// app/Http/Controllers/Admin/DashboardController.php
namespace App\Http\Controllers\Admin;
use App\Http\Controllers\Controller;
use Illuminate\Routing\Controllers\HasMiddleware;
use Illuminate\Routing\Controllers\Middleware;
class DashboardController extends Controller implements HasMiddleware
```

1 v0 Ship v1.0 Faster

```
public static function middleware(): array
{
    return [
        new Middleware('auth'),
        new Middleware('role:admin'),
        ];
}

public function index()
{
    return view('admin.dashboard');
}
}Code language: PHP (php)
```

With this setup, all actions in the DashboardController are automatically protected by the auth and role:admin middleware. You can also restrict specific actions using only or except options.

Wrapping Up

Middleware is the most effective way to enforce role-based security in Laravel 12. With Spatie's built-in middleware, you can restrict routes by role or permission in seconds. For advanced scenarios, you can write custom middleware to check additional conditions. By combining these approaches, you can secure every part of your app's routes with precision.



What's Next

- <u>Building a Role-Based Admin Panel in Laravel 12</u> complete role & permission management.
- Creating a Role-Specific Dashboard in Laravel 12 tailor dashboards by role.
- <u>How to Create a Multi-Level Role & Permission System in Laravel</u> learn advanced role hierarchies.