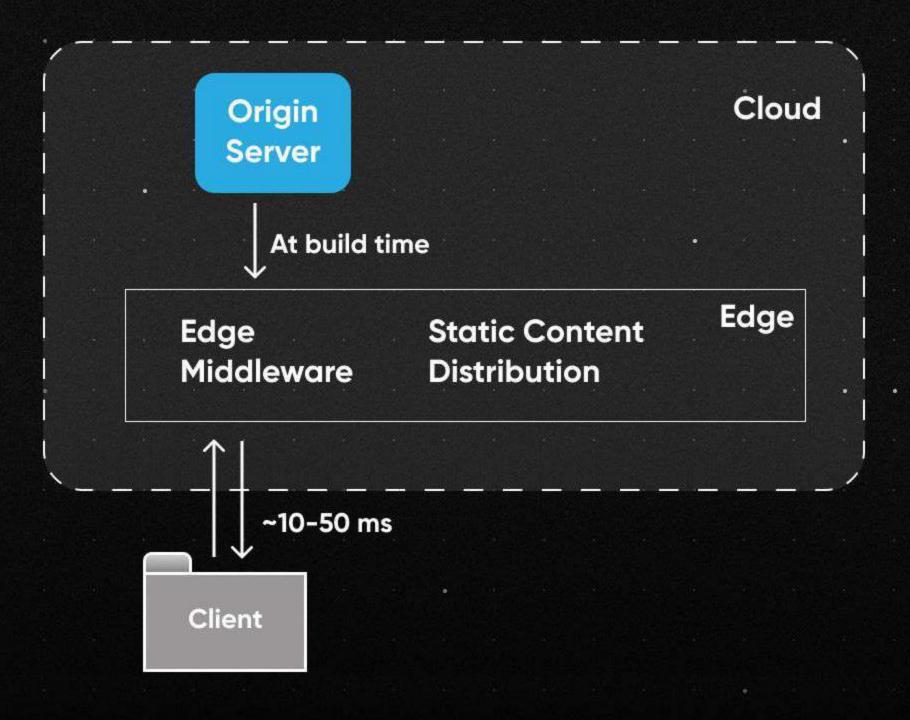


Implementing Middleware in Next.js





What is Middleware in Next.js?

Middleware in Next.js allows you to intercept requests and execute custom logic before routing occurs.

```
import { NextResponse } from 'next/server';

export function middleware(request) {
  const url = request.nextUrl.clone();
  if (!url.pathname.startsWith('/dashboard')) {
    return NextResponse.redirect(new URL('/login', request.url));
  }
  return NextResponse.next();
}
```

Perfect for authentication, logging, or conditional redirection.





Adding Middleware to Specific Routes

You can scope middleware to run only on specific routes using the matcher option in next.config.js.

```
module.exports = {
   experimental: {
     middleware: {
     matcher: ['/dashboard/:path*'],
     },
   },
};
```

Limits middleware logic to designated routes, improving performance.





Handling Custom Headers

Modify request or response headers dynamically using middleware.

```
export function middleware(request) {
  const response = NextResponse.next();
  response.headers.set('X-Custom-Header', 'MyValue');
  return response;
}
```

Ideal for setting security headers or tracking analytics.





Middleware with Dynamic Rewrites

Rewrite URLs dynamically without changing the client-side route.

```
export function middleware(request) {
  const url = request.nextUrl.clone();
  if (url.pathname === '/old-route') {
    url.pathname = '/new-route';

    return NextResponse.rewrite(url);
  }
  return NextResponse.next();
}
```

Useful for SEO or legacy URL management.





Combining Middleware with Edge Functions

Middleware runs at the edge, making it a powerful tool for real-time request handling close to the user.

```
export async function
middleware(request) {
  const geo = request.geo;
  console.log(`Request from ${geo.city},
  ${geo.country}`);
  return NextResponse.next();
}
```

Great for personalization based on location or device.





