

Nxify your Angular App

How Nx Cloud Makes Angular Development and Deployment Faster

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Hello, I'm Katerina! 🎉

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❤️ Loves:

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Angular: A Rich Ecosystem of Tooling

Angular developers are familiar with tooling like code generators, executors, and abstractions.

Existing Angular CLI Features

- `ng update` for dependency management
- `ng generate` for scaffolding
- `ng serve` with HMR support

Natural Nx Integration

- Familiar command structure
- Enhanced CLI capabilities
- Seamless developer experience

Why Nx Feels Organic for Angular

Adding Nx feels like a natural extension to Angular's existing tooling.

Who here is already using Nx?

Key Benefits

- Enhances Angular's built-in abstractions
- No steep learning curve for Angular developers
- Seamless integration with existing workflows

my babies



Briefly: What Nx Brings

Run Tasks

Cache Task Results

Explore Your Workspace

Generate Code

Automate Updates

Enforce Boundaries

Manage Releases

What's New for Angular in Nx

Vitest Support

Unit testing for Angular apps

Angular 19

Full support

Rspack Support

Experimental

Module Federation Generators

Ongoing investment

Taking Your Project to the Next Level: Nx Cloud

Nx Cloud enables scaling, improves speed, and reduces frustrations in your development workflow.

Built for Scale

Nx Cloud is specifically designed to handle large-scale development with optimal performance.

Lightning Fast

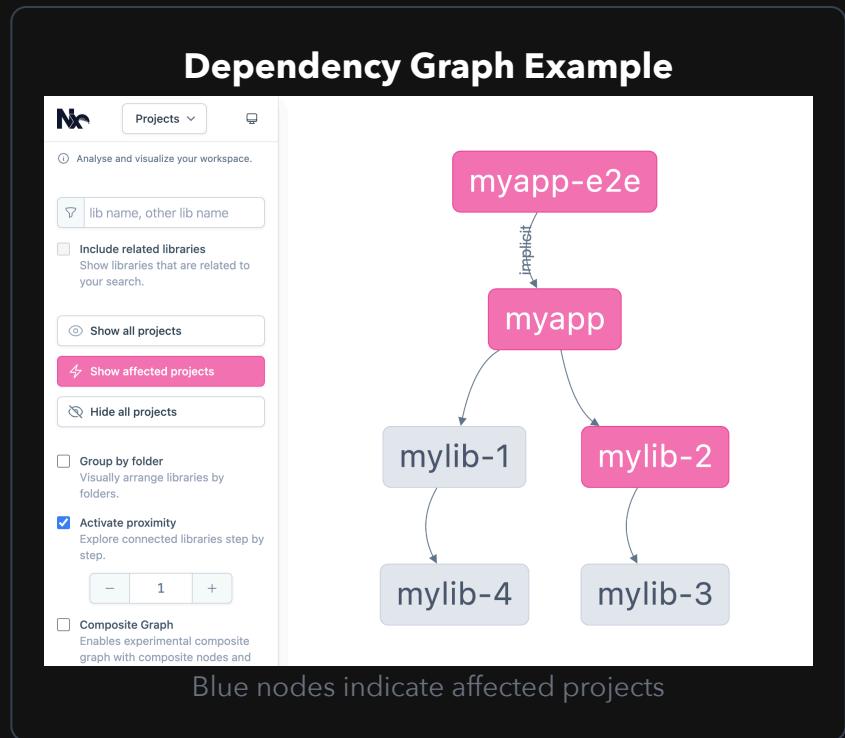
Make your development process and deployments more efficient without major configuration changes.

Run Only Affected Tasks

Optimize builds by running only tasks affected by a PR.

Smart Task Execution

- Analyzes dependency graph
- Identifies affected projects
- Skips unnecessary builds



Remote Caching (Nx Replay)

Share and reuse task results across the team.

Cache Benefits

- Instant task completion
- Team-wide sharing
- CI/CD acceleration



Cache Save & Replay

Distributed Task Execution (Nx Agents)

Speed up CI builds with Nx Agents distributing tasks.

Agent 1

Unit Tests

Agent 2

Build Tasks

Agent 3

E2E Tests

Tasks are intelligently distributed across available agents

my babies #2



Atomizer: E2E Test Optimization

Automatically split and parallelize E2E tests.

Smart Test Distribution

- Automatic test splitting
- Parallel execution
- Optimal resource usage

Original Test Files:

src/e2e/app1.cy.ts

src/e2e/app2.cy.ts

src/e2e/app3.cy.ts

src/e2e/app4.cy.ts

Atomizer Split:

e2e-ci--src/e2e/app1.cy.ts

Atomizer in Action

Auto-Rerun Flaky Tasks

Identify and re-run flaky tasks to ensure build stability.

Automatic Recovery

- Detects flaky tests
- Automatic retries
- Failure analysis



Failed



Retrying



Success

AI Enhancements

Use AI to explain errors, allocate resources efficiently, and save costs.

Error Analysis

Intelligent error explanations and solutions

Resource Optimization

Smart allocation of computing resources

Cost Savings

AI-driven cost optimization

What's New in the Nx Cloud App

Download Task Artifacts

Access task outputs directly

Improved Access Control

Personal Access Tokens, nx-cloud login

CIPE Affected Project Graph

Visualize impacted projects in CI

Download Task Artifacts

Problem and solution, including access restrictions.

Access Control

Access is restricted to members of your organization for security.

Download task artifacts



The screenshot shows a "Task details" interface with a dark header and a light gray body. At the top right are icons for copy, close, and compare. Below the header is a "Task details" section with a timestamp: "Nov 8, 2024 08:57:06 - 08:58:08 (1m 02s)". A green bullet point indicates the command run: "yarn nx sync:check". Below the command is the terminal output:

```
$ nx sync:check
The CJS build of Vite's Node API is deprecated. See https://vitejs.dev/guide/troubleshooting-api-deprecated for more details.

NX The workspace is up to date

The @nx/powerpack-owners:sync-codeowners-file sync generator didn't identify any files in the workspace that are out of sync.
```

A tooltip over the output line about the CJS build is visible. At the bottom right of the interface is a "Download logs from current task." button.

xmas is close

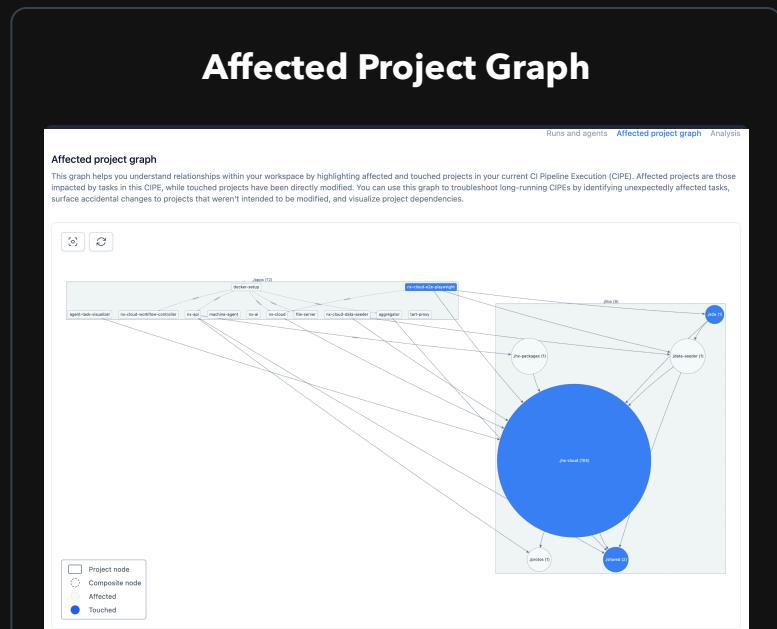


CIPE Affected Project Graph

How it helps visualize project relationships and troubleshoot CI issues.

Project Dependencies

- Visualize project relationships
 - Identify affected projects
 - Troubleshoot CI issues



Blue nodes indicate affected projects
Skroumpelou - AngularDay2024

Getting Started is Super Easy

`npx nx init`

Add Nx to any workspace, lightweight setup

`nx connect`

Connect to Nx Cloud effortlessly

as I like to say...

```
npx nx init
```

to change your life

Some credit

- I created this slides using [Sli.dev](#), antfu's code slides tool
- I shamelessly used [bolt.new](#) to do so - and it was a-ma-zing

So get started with Nx Cloud right MEOW!



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your project