

How Figma orchestrates infrastructure at scale with Spacelift

spacelift

Figma

1,800

Company size

600 approx.

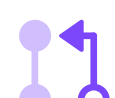
Engineering team size

AWS,
Terraform,
OpenTofu

Stack

Summary

Figma uses Spacelift to orchestrate hundreds of infrastructure stacks across AWS, bringing structure, visibility, and order to Terraform and OpenTofu workflows at scale. By centralizing infrastructure deployments and integrating them tightly with CI, Spacelift enables Figma's platform teams to support hundreds of engineers without becoming a bottleneck and also buying the time needed to refactor deeply coupled infrastructure code.



S3 bucket provisioning used to require up to 6 pull requests applied across multiple modules in a specific order over days; with Spacelift, it takes a single pull request.



Figma developers and platform teams now have visibility into what's happening, where a change is in the rollout process, and where failures may occur.



Spacelift orchestration buys Figma the time required to refactor deeply coupled infrastructure code while prioritizing higher-impact work.

Figma builds collaborative design and product development software used by teams around the world. As the company has grown, so has the scale and complexity of its cloud infrastructure.

Today, Figma has more than 1,800 employees, with an engineering organization approaching a third of that. The company runs almost entirely on AWS and manages infrastructure using Terraform and OpenTofu. With hundreds of services and teams shipping changes every day, infrastructure changes are constant, and they need to move through environments safely, predictably, and with clear visibility.

Spacelift plays a central role in how Figma orchestrates that infrastructure.

The challenge for Figma

Before Spacelift, Figma faced a familiar scaling problem: Local Terraform applies and ad hoc workflows could not keep up with a fast-growing organization.

As Owais Ahmed, Engineering Manager at Figma, explains, the company reached a point where it needed "some kind of tool, some kind of system to manage and orchestrate all of this."

Over time, additional challenges emerged, not just because of the tooling, but also due to the realities of large-scale infrastructure as code:

- Hundreds of stacks owned by different service teams and central platform teams
- Large, tightly coupled Terraform and OpenTofu modules
- Massive state files that caused unrelated changes to trigger hundreds of runs
- Long queues that slowed developer feedback loops from minutes to hours — or even days



When people make changes, they should only affect the stack they care about, but instead they have to wait hours, sometimes days, because there are hundreds of stacks in the queue.

Owais Ahmed
Engineering Manager at Figma

These delays weren't just frustrating; they were a developer experience problem. Even when the changes engineers needed to make were small and targeted, the system treated them like major, cross-cutting deployments.

Things needed to change, but Figma didn't want to increase the operational burden on its platform teams.

Figma's Spacelift experience

Following positive reports from a team member, Figma investigated Spacelift as a solution for its scaling challenges, adopting the platform in the summer of 2022. It now relies on Spacelift as its infrastructure orchestration layer, with hundreds of stacks managed through the platform.

Some stacks are owned by individual service teams. Others are owned by central teams, including platform and security. Although a small number of foundational stacks still rely on local applies, most critical infrastructure is now orchestrated through Spacelift.

"We rely on Spacelift to orchestrate all of this," Owais explains.

Spacelift is deeply integrated into Figma's CI workflows. Every pull request triggers a proposed run, and merges automatically trigger applies that roll changes through environments in order, from development through staging, production, and government environments.

"That structure matters," Owais says. "These are infrastructure changes. They're code changes. And code changes need a deployment system and orchestration system that rolls things out in a structured manner."

For Owais, orchestration is the single biggest value Spacelift provides.



I came from a larger tech company that had a lot more tooling, but they didn't have a system like Spacelift. One of the challenges over there was no good orchestration mechanism.

Owais Ahmed
Engineering Manager at Figma

Spacelift gives Figma developers and platform teams visibility into what is happening, where a change is in the rollout process, and where it failed if something goes wrong. If an error occurs in staging, deployments stop automatically instead of rolling blindly into production.

That visibility and control allow Figma to move forward safely, even as they work through deeper architectural improvements in their Terraform and OpenTofu codebase.

Spacelift's impact on Figma

One of the most tangible benefits Spacelift delivers for Figma is one that can also be the most elusive: time.

Because of large, tightly coupled state files, many infrastructure changes still trigger unnecessary plans and applies. Rather than forcing engineers to immediately refactor everything, Spacelift's scalability, delivered via an unlimited worker model, lets Figma absorb that complexity while prioritizing higher-impact work.

As Owais says, "If we didn't have that unlimited plan, we would either be paying through the nose or we'd have to pull engineers off more important problems."

That tradeoff matters. At one point, Figma redirected engineering capacity away from infrastructure refactoring to tackle urgent observability cost issues. Once those were under control, the team returned to improving their OpenTofu architecture, but they did not have to endure being blocked in the meantime.

Spacelift also enables gradual, meaningful improvements to developer experience. One concrete example involved S3 bucket provisioning. What once required up to six pull requests that had to be applied across multiple modules in a specific order over several days has been reduced to a single pull request.

"It's now fire-and-forget," Owais says. "You can just push it and forget about it. It will get applied."

More broadly, Spacelift gives Figma a stable foundation to keep improving. That structure allows Figma to support hundreds of engineers, evolve its infrastructure practices over time, and continue investing in better developer experience, without sacrificing control or visibility.



We recommend Spacelift as a product for anyone who's using Terraform heavily.

Owais Ahmed
Engineering Manager at Figma

As Owais puts it, Spacelift provides "a path to improvement," which is often the hardest thing to find at scale.

This could be your story

Empower your platform team with Spacelift.

Liftoff with Spacelift!

