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Temporal

Reviews, tips, and advice from real users






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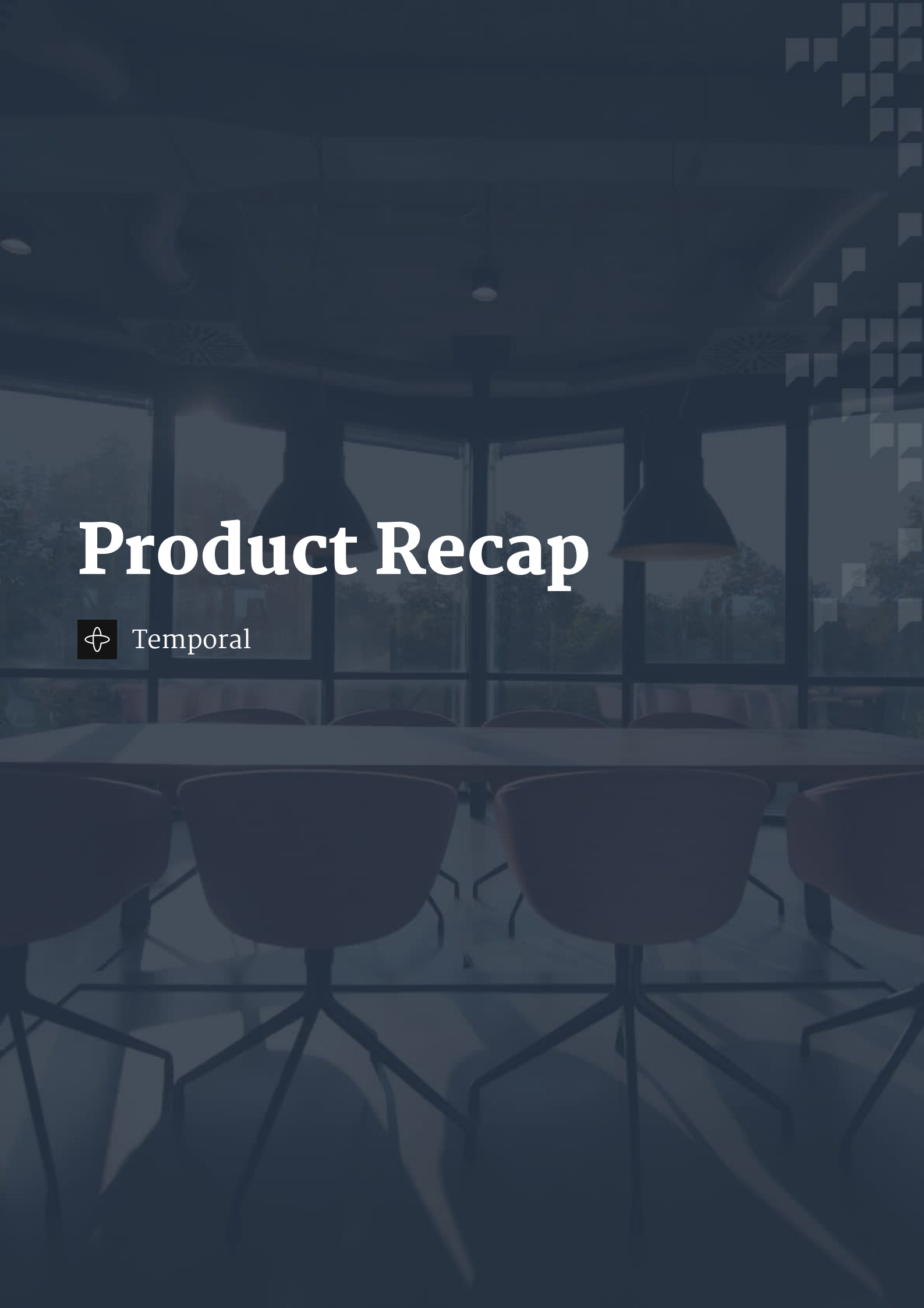

Product Recap

Temporal

Temporal Recap

Temporal automates and manages workflows efficiently, offering resilience in distributed systems with features like retry and fault tolerance. Its capabilities in handling complex workflows and integrating with programming languages make it a valuable tool for managing diverse business logic.

Temporal excels in workflow orchestration, automating tasks across multiple platforms, and ensuring durability in asynchronous operations. It supports long-running workflows and simplifies handling distributed transactions, reducing boilerplate code. Temporal is noted for its durable execution and built-in retry policies, enhancing resilience. Despite its complexity and steep learning curve, it is valued for its integration with popular programming languages and relatively easy setup process, though it requires improvements in user-friendly features, documentation, community support, and security.

What are Temporal's key features?

- Automation and Efficient Management: Automatically handles workflows without manual intervention.
- Resilience and Fault Tolerance: Features built-in retry policies for increased reliability.
- Integration: Supports various programming languages, easing development.
- Distributed Transactions: Simplifies complex transaction handling with reduced boilerplate code.
- Durable Execution: Ensures long-running workflows are reliably managed.

What benefits or ROI should users evaluate?

- Scalability and Reliability: Enhances IT environments through robust workflow management.
- Ease of Integration: Supports seamless multi-platform automation.
- Improved Operational Efficiency: Reduces need for extensive coding, streamlining processes.
- Durability and Fault Tolerance: Provides reliable asynchronous operations.

Temporal is implemented in sectors requiring robust workflow orchestration, such as managing data pipelines, API integration, and scheduling tasks. Organizations in a Kubernetes environment leverage it for its scalability and infrastructure management capabilities, securing integrations and enhancing reliability across IT operations.

Valuable Features

Excerpts from real customer reviews on PeerSpot:

- “Temporal focus on developers rather than business users.”

AbhishekDash

Senior Software Engineer at A.P. Moller - Maersk

- “Temporal allows retryability for different workflows whenever they fail. It helps ensure idempotence and that things get done.”

Durbek Gafurov

Software Engineer at Anchorage Digital

- “The initial setup is easy.”

Gustavo Carneiro

Backend Software Engineer at Fortics

"What I like best about Temporal is its durable execution, which means you don't need to write many boilerplate code for critical pieces, especially for retries. It also has great observability and a nice dashboard to see issues without digging into logs. The interface for viewing activities is excellent, with good tracing that shows how long activities took and what ran, making it almost perfect for debugging."

Simon Novak

Software Engineer at KONSTANTA PLUS, d.o.o

"The tool is easy for a beginner to learn. The documentation covers activities, workflows, workers, servers, and more. While more examples could be beneficial, the existing resources are good enough to help you get started. There are also YouTube videos available that can provide additional context. The Slack community for Temporal is very active and helpful, similar to Stack Overflow, where you can find answers to a wide range of questions from basic to advanced levels. If you have a unique question, the community is responsive and provides knowledgeable support."

HarshitGupta

Software Engineer (Backend) at One

"It is very useful for long-running workflows."

Alok Prakash

Software Developer at Groww

"We like the fact that the whole process is durable, which is very useful to us."

Alex Bledea

Software Engineer at Snyk

What users had to say about valuable features:

"What I like best about the tool is that it's easy to install, especially since it uses JavaScript. It's also easy to set up with Docker, and the documentation is easy to understand.."

Luis Gerardo Meneses Hernandez

Software developer at Apps2Go TECH

Read full review

"It is fairly easy, though it has some undefined aspects if you're unfamiliar with it. For instance, you need to properly define your functions and handle various small issues that can arise. It's easy to get started and user-friendly. There are some internal challenges. For example, I initially missed some error handling and connectivity issues, which led to problems because I implemented things incorrectly. ."

Verified user

Software Engineer at a tech vendor with 5,001-10,000 employees

Read full review

"Temporal solved a major problem for us. Implementing a saga pattern or a workflow management system traditionally requires handling many aspects beyond business logic. These include retry mechanisms, rollback mechanisms, logging, monitoring execution status, and features for pausing or resuming workflow execution. Temporal provides all these features by default, allowing us to focus solely on our business logic while Temporal manages the rest.."

Pranbir Sarkar
Senior Software Engineer at Dell Technologies

Read full review

"I like the inner retry system that it has, as a developer. The availability it provides to our products is great. When a micro service crash, Temporal handles the retry by itself. It helps a lot in our company and is by far the best thing Temporal has created.

I think people need to have some experience, at least with event-driven design. When someone tries to understand the signals, queries, and updates, it becomes a little challenging if they haven't worked with webhooks or event sockets. But if someone already knows about event-driven designs, it's pretty simple.."

Gustavo Carneiro
Backend Software Engineer at Fortics

Read full review

"In terms of scalability, it is the best feature. I did use Camunda in the past for almost three years, and resource constraints-wise, Temporal is much more prudent in doing the work. While Camunda comes with an exceptional UI and more forms, for our use case, pace is more important than actually the UI. Hence, I would say Temporal is working in the right way.

"The deployment process is quite straightforward as it provides both Kubernetes and Docker Compose versions, allowing us to run it in ECS containers, and I find it simple for both Camunda and Temporal.."

Manibabu Pippalla
Founder & CEO at Lanzar

Read full review

"It's essentially an orchestrator. So, we get all those properties we want from an orchestrator. Particularly, we like the fact that the whole process is durable, which is very useful to us. The fact that you can split it up into multiple smaller steps, called activities, and store state at every single activity is something we have made a lot of use of. For example, this allows us, in case of any failures down the road, to stop the process midway and resume it later. That's another feature that's been really useful.

We like the fact that it integrates very well with the programming language. It's not completely transparent; you know you're using Temporal because you have to import the SDK into the programming language itself. But it's done in such a way that it's really easy to write and fits well within the language. Personally, I like that the main abstraction, workflows, allows you to follow domain-driven designs super easily. In your workflow, you can essentially speak your business language and not have to worry too much about Temporal because it's abstracted away so nicely.

One last feature that's super useful is that retry policies are built into the Temporal system. For example, if one of your activities fails for multiple reasons, you can configure how you want to handle your failure cases in the activity itself with a retry policy. You can say, "Okay, I want to retry this later," and configure the cadence. This step is really configurable, it's built into the system, and it's something we have made a lot of use of. So, that's pretty much a big picture summary.."

Alex Bledea
Software Engineer at Snyk

Read full review

Other Solutions Considered

"I am tight on schedule today. We can discuss Camunda sometime later, but I can only provide insights on Camunda 7, as I chose Temporal over Camunda 7 for production use.."

Manibabu Pippalla
Founder & CEO at Lanzar

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"Some of my colleagues might have used Amazon Workflows, but I haven't. From what I can gather, they're fairly similar products, but Temporal turned out cheaper, which was one of the criteria they used to select it. ."

Alex Bledea
Software Engineer at Snyk

Read full review

"Before implementing Temporal, we struggled with Azure Functions, which was hard to understand and manage. Temporal made it clearer how the workflow would function from start to finish.."

Luis Gerardo Meneses Hernandez
Software developer at Apps2Go TECH

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ROI

Real user quotes about their ROI:

"The ROI is apparent in terms of business case automation; previously, a bunch of people filled in data in NetSuite or managed stocks between warehouses and Amazon, but now everything is automated, saving time. We have streamlined processes and saved roughly 300 to 400k in chargebacks, considering our revenue is around 0.5 billion a year.."

Manibabu Pippalla
Founder & CEO at Lanzar

Read full review

"For us, it ends up being quite costly. But it's still probably more cost-effective for us to do it using Temporal. So, it's a bit expensive, and it would be nice if the cost didn't scale linearly because, at the moment, they have something like $25 per million actions, and then that keeps decreasing given the amount of actions you have, which is okay. But in the end, it's still linear.

If you build a solution yourself, you will have a lot of maintenance costs, a lot of costs for the engineers involved in doing that. And, specialized resources. That's the product they're building, and they're investing a lot of time with it. So you might not get away with something as reliable.

Now, unless you need an orchestrator, unless you need durability, for example, if you're a payment service provider, then you absolutely need that durability. But if you're just an early startup doing some basic CRUD operations, so you're at the very beginning, then you probably don't need the durability. So you definitely have to take into account whether or not you actually need that durability when you decide on the solution.

If this business logic can fail and if that's a use case we can tolerate, then you probably don't have to go and purchase Temporal. But if you have a business operation that absolutely cannot fail, we absolutely cannot tolerate the failure; this operation has to run to completion, then you should definitely consider an orchestrator like Temporal.."

Alex Bledea
Software Engineer at Snyk

Read full review

Use Case

"We [my company] use it to run a large workload. We have a set of security scans we want to perform, and we distribute them over a full day, that's over 24 hours. We use it to orchestrate all the steps necessary to perform those tests.."

Alex Bledea
Software Engineer at Snyk

Read full review

"We use Temporal to manage workflows for a client project involving interactions with MongoDB. We needed a framework to manage workflows and set the correct order and timing. We chose Temporal over Azure Functions because it worked better for our needs.."

Luis Gerardo Meneses Hernandez
Software developer at Apps2Go TECH

Read full review

"I use it to handle messages from the WhatsApp API. There is a product in my company that uses that API, and Temporal helps us debug and handle retries about the messages we receive, persisting the delivery of the message to the final client.."

Gustavo Carneiro
Backend Software Engineer at Fortics

Read full review

"We needed to implement different workflows for various processes, each involving distinct steps. We used these workflows to handle large data flows or complex operations within our system. We employed them to limit rates, as it was the simplest solution. Furthermore, we implemented some cron jobs, not because they were required but because we wanted to avoid excessive zooming.."

Verified user
Software Engineer at a tech vendor with 5,001-10,000 employees

Read full review

"We have multiple products and wanted to use Temporal because different business logic was better suited to different programming languages, such as Java and Python. We needed a unified solution to handle this diversity. Netflix, one of our clients, introduced us to Temporal.

We set up an on-premise Temporal server, with Temporal handling the initial setup in our Kubernetes cluster. Another team implemented additional security measures on top of Temporal to enhance security. We developed our authentication system and library to integrate with multiple role-based access control systems.

We use Temporal primarily for orchestration. We deploy products across AWS Cloud, Azure, and on-premise data centers. Temporal helps us centralize the orchestration process. We use the Temporal SDK to implement our workflows and workers in our Kubernetes cluster. Based on user requests from a centralized portal, we trigger workflows, which drive multiple tasks sequentially or concurrently to deliver the desired outcomes.."

Pranbir Sarkar
Senior Software Engineer at Dell Technologies

Read full review

“The main purposes for using Temporal are automation flows, especially financial automations and supply chain automations. Our company name is SR, we are a digital-first CPG brand making company, managing over 70 brands, and managing the supply chain in terms of POs, transfer orders, and moving stock between 3PL to Amazon and vice versa involves a workflow process that could include manual or automated steps, and for everything, we use Temporal.

“We are just a customer; we directly use it for our internal use cases, building software for our company, and we are not a reseller or any of those modes.

“Our workflows are pretty straightforward, not involving multi-step or multi-stage workflows. It's more about making sure it is an automated workflow, not big complex workflows. Therefore, the basic retry mechanisms are solving our needs, and we haven't explored the advanced capabilities yet, as our problems are already resolved..”

Manibabu Pippalla
Founder & CEO at Lanzar

Read full review

Setup

The setup process involves configuring and preparing the product or service for use, which may include tasks such as installation, account creation, initial configuration, and troubleshooting any issues that may arise. Below you can find real user quotes about the setup process.

"The solution's initial setup was straightforward, but setting up the tokens on Temporal Cloud was difficult. You had to create this token, and they have docs on it. You can install a Docker container that will create a token for you, but it's not production-ready. We had a couple of issues getting that going. However, it was fine after we learned it.."

Giuliano Falcaro

Software Engineer at Document Crunch

Read full review

"The setup complexity is context-dependent. For our proprietary system, we integrated Temporal, which required managing multiple integration points, such as Docker servers, endpoints, distributed databases, and configuration management systems like NGINX or Caddy. While the installation was straightforward, the testing process was more complex due to using workflows as daemon processes.."

Tural Mahmudov

Senior Software Engineer at LuftBlick OG

Read full review

"The initial setup is easy. I didn't have any problems deploying it in production or on the devs' local host. It was pretty great for the devs in general. I think it's pretty great.

Our project was designed in Temporal. It started with Temporal, so we didn't have any problems before.

We handle on-premises, and we participate in Temporal community. ."

Gustavo Carneiro

Backend Software Engineer at Fortics

Read full review

"Deployment is easy, especially if you're familiar with Kubernetes. We used Helm for the deployment, and it was straightforward to set up the web service, UI service, front end, and everything else. It didn't take much time, and the documentation was helpful, though it could be improved. The documentation sometimes only covers the basics, which might not be sufficient for someone new to Kubernetes. However, for those with experience, the deployment process is smooth. I also created a document to guide others through the deployment process.."

HarshitGupta

Software Engineer (Backend) at One

Read full review

"Setting up Temporal is easy for development —you just run one command. However, depending on your requirements, it can be more challenging for test or development environments. The solution isn't a one-size-fits-all solution. For smaller-scale deployments, it's not too hard. You can use Helm charts for Kubernetes, which only needs a Postgres database. My friend deployed it without much trouble. For larger-scale operations, with millions of operations, you need to use Cassandra DB with Elasticsearch, which requires a lot of resources.."

Simon Novak

Software Engineer at KONSTANTA PLUS, d.o.o

Read full review

"There have definitely been some problems we've had with it. For us, it wasn't just take it out of the box and it worked right away. We had to do a lot of configuration to get it working in the state we wanted. It was a lot of back and forth with Temporal.

First, we used the self-hosted version, so you can self-host it yourself. But that didn't scale too well for us. But we migrated to the cloud at some point.

We mostly worked with it on the cloud, but it wasn't all good right out of the box, even after we migrated to the cloud. We had certain issues, and some of those issues were because we didn't know all the features it had to provide. Some of those issues, even Temporal, we didn't know how to fix because we think they were due to the very large volume of work we were scheduling in a very short amount of time.

In our use case, because we do a lot of work with it every single day, we had to spend quite some time configuring it and getting it to work how we wanted. But that's not necessarily the case for other user flows that use Temporal and have a very different traffic pattern. Those were much easier to get working well with minimal configuration.

I was not involved in the initial step. I was involved in subsequent steps, which did the transitioning between the self-hosted and the cloud setup, but the cloud setup was already there when I came. I took part in provisioning some new namespaces, but it was mostly ClickOps. From my perspective, getting started with Temporal Cloud was probably more work on the business and product side rather than on the engineering side. I think that on the engineering side, the amount of work you have to do to get your cloud account running is really minimal.

Three resources were involved in the migration process and the setup of the cloud environment.

From maintenance point of view, we have to maintain the workers. But from a maintenance point of view, it's alright. It's a SaaS solution, so Temporal do most of

the hard work. One maintenance aspect is the certificate rotation. That's really annoying to do.

The maintenance for the self-hosted cluster is much more complicated and one of the reasons we've migrated. But, that's also due to the fact that, being a security company, we have to respect strict security guidelines, which means that we have to modify some of the images that they provided because they didn't respect those guidelines yet. For example, Temporal images aren't FIPS compliant, and we have to be FIPS compliant.."

Alex Bledea

Software Engineer at Snyk

Read full review

Customer Service and Support

"I've contacted the support team through the Slack channel for development questions. Their response time is usually within an hour, but it can depend on the time difference as they're based in Washington.."

Simon Novak
Software Engineer at KONSTANTA PLUS, d.o.o

Read full review

"I have met some core teams of Temporal. They have been to India and Bangalore, and there was an event for the same. I have been there.

From there, I realized that this issue that I get is due to the versions and all.."

Alok Prakash
Software Developer at Groww

Read full review

"I have had positive experiences with Temporal's support, particularly through their Slack workspace, where original developers are highly responsive and engaged in user support. They typically respond within a minute and remain involved until the issue is resolved.."

Tural Mahmudov
Senior Software Engineer at LuftBlick OG

Read full review

"I have talked to Temporal's support team before. They have a Slack channel and community, which I joined. We faced an issue with the scheduling of EventBuild in some time zones. I asked a question there, and they quickly responded to my query and solved my problem. The support team is very active and generally provides the best solutions possible. The community is great and very helpful.."

HarshitGupta
Software Engineer (Backend) at One

Read full review

"We did not find any dedicated support. We had to either raise concerns in their forum or connect to the Slack channel of Temporal and raise concerns in the appropriate channel, such as the Python SDK channel, for Python-related issues.

They operate in US time zones, and since I am in the Indian time zone, I have to wait until they are online to receive assistance. The support is text-based only, and there is often a delay.."

Pranbir Sarkar
Senior Software Engineer at Dell Technologies

Read full review

"All tech support has the way we interact with them is via Slack. We have a Slack channel in which we talk with them. They're pretty quick.

They were helpful. There's nothing really to complain about there. They've always helped us whenever we asked them, and they regularly check in to see how we're doing. If they see issues or weird traffic patterns on their side that they consider not necessarily best practices, they reach out to us. I've only had good times with tech support.

I've really nothing to complain about the technical support. I just go for it and I've only had good experiences with the tech support.."

Alex Bledea
Software Engineer at Snyk

Read full review

Other Advice

"Suppose you have multiple technologies across your portfolio and want to implement business logic. In that case, it's better to use technologies like Temporal instead of converting all the business logic to a single language. If you're starting from scratch and the business logic is simple without complex scenarios, using Temporal from the beginning might not make sense because it can be complex and requires heavy infrastructure, which increases costs. Temporal may not be recommended for small-scale projects, but it could be a good fit for larger scales where you've already implemented many things in different languages.

Overall, I rate the solution an eight out of ten.."

Pranbir Sarkar
Senior Software Engineer at Dell Technologies

Read full review

"In most cases, you don't need extensive prior knowledge to use this technology; the documentation is usually sufficient. It was likely my mistake for not understanding the problem correctly, even though it was logically straightforward. Fortunately, we had an experienced developer on our team who helped me identify some best practices.

I recommend this technology even to large tech companies. It's pretty substantial and impactful. I suggest reading the documentation more carefully, as it affected my experience.

Overall, I rate the solution an eight out of ten.."

Verified user
Software Engineer at a tech vendor with 5,001-10,000 employees

Read full review

"You need to know Node.js, Express, and Docker to use the tool effectively. Docker is particularly important for easy setup and image mounting.

Overall, I'd give the tool a solid an eight out of ten. It's easy to use and start up, making it simple to begin a project.

I would recommend Temporal to others. My advice would be to clearly understand Docker, as it goes hand-in-hand with using Temporal for setup and implementation. I'd also recommend reading the documentation about creating plugins for Temporal to understand how to build workflows for any project.."

Luis Gerardo Meneses Hernandez
Software developer at Apps2Go TECH

Read full review

"I might be biased because I really like this technology. I'm not going to go for the ten because of the downsides but Temporal would be a strong eight out of ten, definitely nine. But if they consider improving the weaker points, I would definitely see this as one of the strongest stacks we have currently.

I'd recommend it, but be cautious before going for the tech just because it sounds nice. Users definitely have to lay out their use cases and figure out whether they need an orchestrator in the first place becauses it's not a Swiss army knife. It's not a tool that fits every use case. But for our use cases, for example, I definitely recommend it. It's a really good product.."

Alex Bledea
Software Engineer at Snyk

Read full review

“If you're considering using the tool for the first time, my advice would depend on your specific use cases. If your needs are simple, with no long-running processes, and retrying the same event without issues is acceptable, you might be fine using alternatives. However, if your business logic is complex, especially if you need to ensure that once an event like a transaction is processed, it should not be retried, then Temporal would be a better choice.

Just note that while it's great for these purposes, adding something like a DAG implementation would enhance its usability even more. But overall, Temporal is one of the best options for complex and long-running processes.

Overall, I would rate it around seven to eight out of ten. It solves many problems, like availability, consistency, retry logic, and offers a good dashboard. However, the reason for not rating it higher is due to the documentation and event graph, which could use some improvement. While the documentation is great, it could be more detailed, with more examples, and the server deployment can be tricky for those unfamiliar with it. Additionally, a more advanced monitoring tool, such as a visual graph showing the workflow's progress and where any failures occurred, would be a valuable enhancement..”

HarshitGupta
Software Engineer (Backend) at One

Read full review

“My overall experience with Temporal is rated between 8 to 9, mainly due to a learning curve that only senior developers can navigate effectively, which makes it a bit challenging for junior developers.

“We don't have any instances of on-premise, so I cannot comment on that because we are a first company, with all services deployed on cloud infrastructure.

“Most of the integration is through RPC or APIs, ensuring all our systems are in

cohesion.

“We do state persistence to a Postgres instance, and we have modified it to our use case with better indexing. And for fault tolerance, we built a queue and an alerting mechanism that notifies us if any workflows fail after specific failure points so we can act upon it.

“On a scale of 1-10, I rate Temporal an 8..”

Manibabu Pippalla
Founder & CEO at Lanzar

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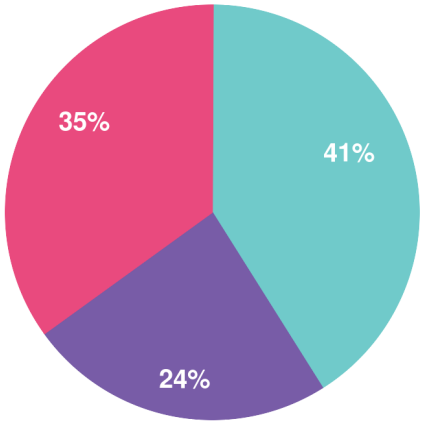

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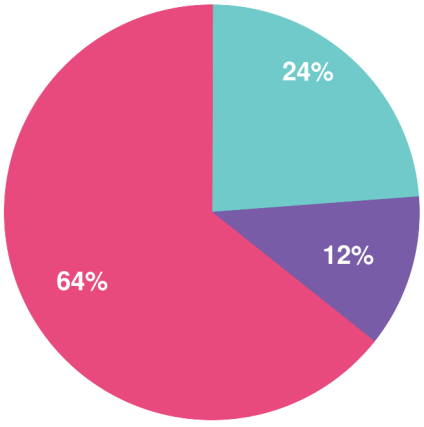

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