Twitter Thread by Daniele Polencic

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THREAD

Nginx has a service mesh too. Is it any good?

Let's find out.



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Most service meshes use Envoy as a proxy and for good reasons:

1. It's fully open-source
2. It can be customised on-the-fly via an API
3. It can be extended



1

Why not Nginx or HAProxy or `<insert proxy here>` as a proxy? Well, you could. But if you want to expose metrics (num of reqs, latency, etc.) you have to subscribe to the enterprise version.

2/

Is there a service mesh without Envoy? Of course!

The best example is @Linkerd that uses a custom proxy written in Rust.

Linkerd is smaller and more focussed but it is also slower to add features.

And now there's a new entry: @nginx

3/

But isn't Nginx one of those products not fully open-source proxies?

Yes it is, but they made an exception.

When you run the Nginx Service Mesh you can use Nginx Plus (the paid product) as a proxy for free.

Great isn't it?

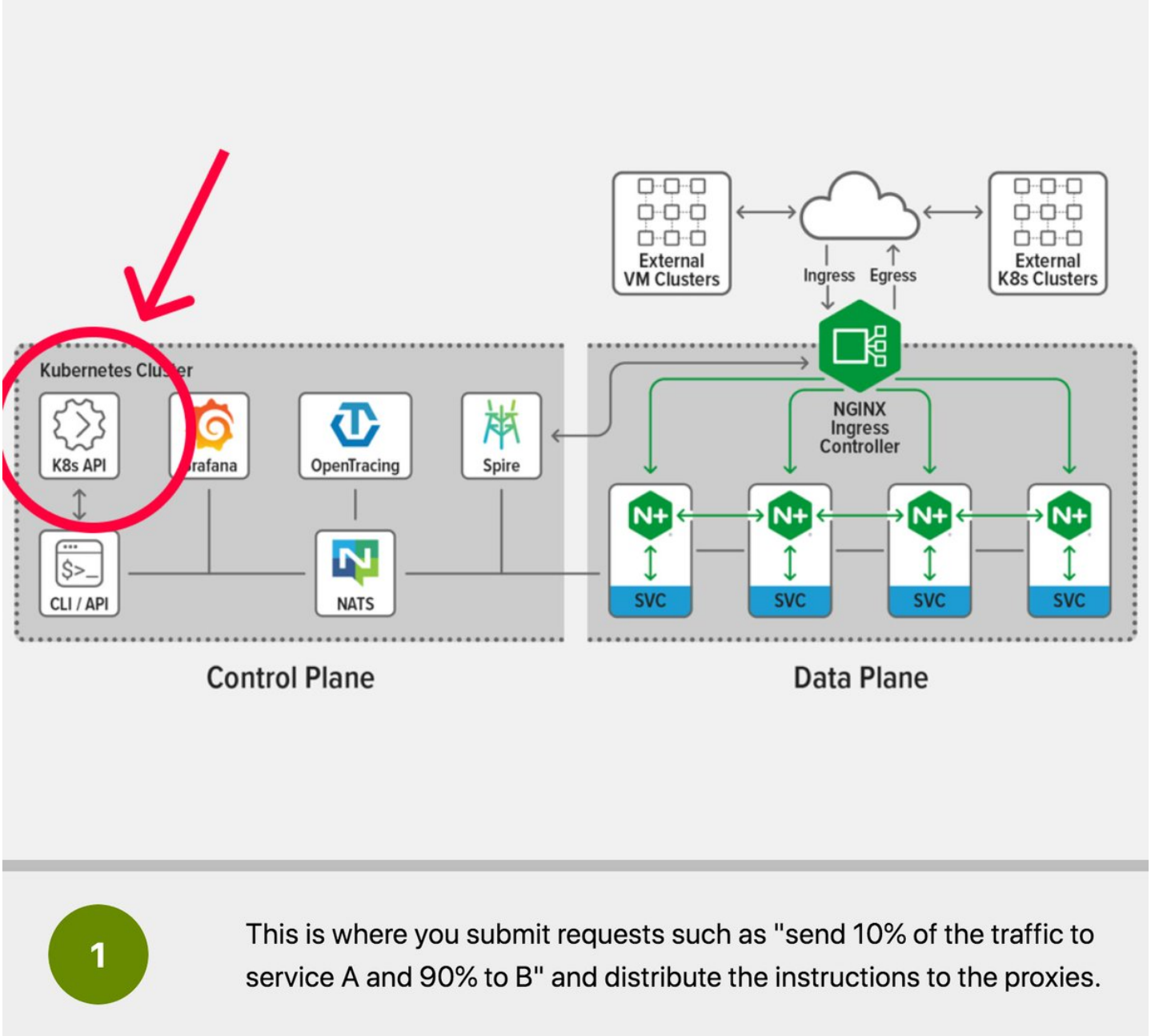
4/

How does the meshwork?

There are four main components:

- The API
- SPIRE (cert authority)
- NATS (message broker)
- Nginx Plus as a proxy

Grafana, Prometheus and Zipkin are automatically installed too.



1 This is where you submit requests such as "send 10% of the traffic to service A and 90% to B" and distribute the instructions to the proxies.

5/

Ok, but how do you run it?

You can find my step-by-step instructions on how to get the mesh running locally on minikube.

https://t.co/xIlSn2Uy1e

If you install the bookshop demo apps, you can inspect the mesh metrics in grafana, Prometheus, and jaeger.

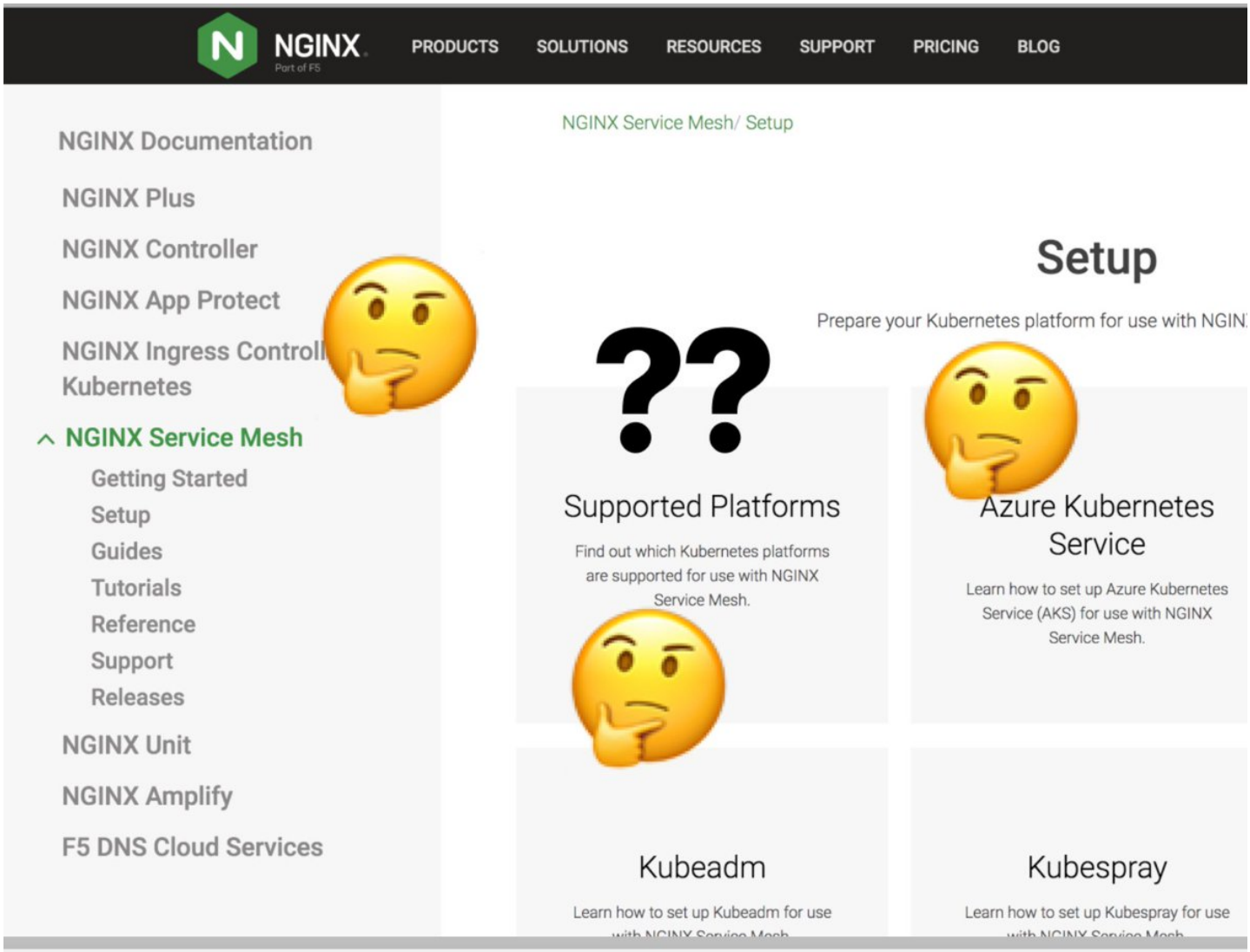
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Now the real question, is it good?

Short answer: I don't know. More testing is required.

However, I collected some pros and cons.

Let's start with the "not so good" parts.

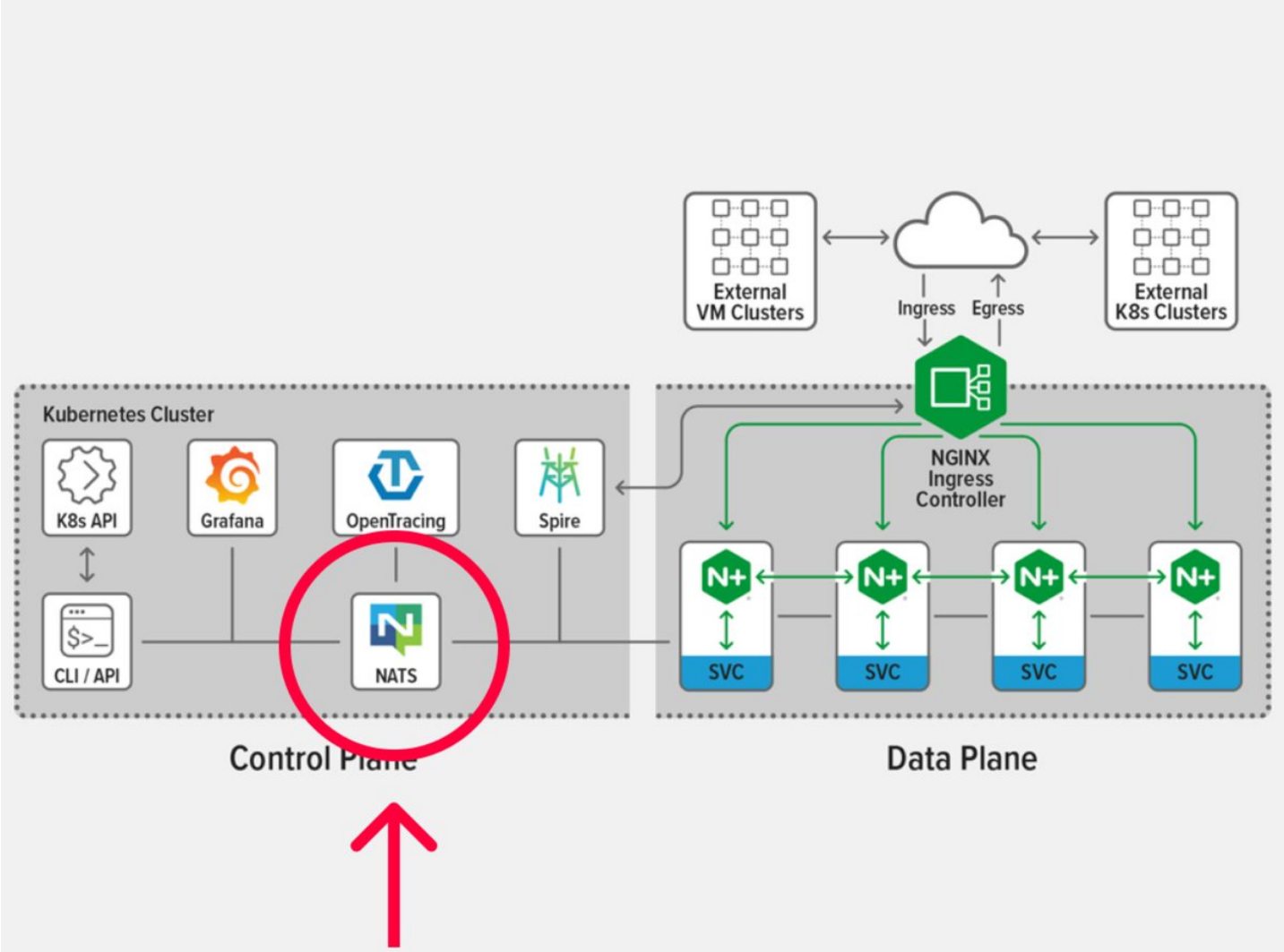


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The documentation is lacking. The docs are disconnected and hard to navigate. Docs are missing such as a deep dive in the technical choice and architecture.

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And now the PROs.



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NSM is the first mesh that I've encountered that uses a message bus instead of the gRPC protocol. This is an interesting choice. I wonder what advantages it has. More reliable? Quicker? Nonetheless, an interesting choice.

8/

Here are some links that might be useful:

- https://t.co/OYwNPabcea
- https://t.co/Pv93RTtpkh
- https://t.co/xIlSn2Uy1e

9/

How does Nginx Service Mesh compare with the other meshes?

F5 reached us @Learnk8s to help you answer that question.

You can find the comparison here https://t.co/o3mSjdQica

10/

That's it!

Did you like this thread?

You might want to check out my mega thread on Kubernetes → https://t.co/ru6oWe5KKn

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> I regularly add more, so you can follow me or @learnk8s for more updates! pic.twitter.com/0ingxHn9vx
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> — Daniele Polencic (@danielepolencic) August 26, 2020