JupyterHub at temple.2i2c.cloud unreachable

Status: Draft

Overview

A DNS wildcard entry (*.temple.2i2c.cloud) negated a different DNS wildcard entry (*.2i2c.cloud), causing temple.2i2c.cloud to not resolve. This happened just before the community was about to do a demo.

What Happened

No comments added

Resolution

Explicitly adding an A record fixed the issue.

Where we got lucky

1. The outage happened *before* the community's demo rather than right during.
2. Someone with access to namechap to be able to fix DNS was around during the outage

What Went Well?

1. Our automated alerts caught this issue just before the community reported it to us

What Didn't Go So Well?

1. The original DNS entry itself was a game of telephone because the initial engineer setting up the new temple cluster did not have access to Namecheap, where our DNS is set up.
2. The default TTL on DNS records in namecheap is 30minutes, which means any fixes we do may take that long to propagate.

Action Items

1. Fix access to namecheap so everyone in the team can access it. If not, move DNS providers https://github.com/2i2c-org/infrastructure/issues/6487
2. Set our TTL to be 5min instead of 30min for all new DNS entries https://github.com/2i2c-org/infrastructure/issues/6646
3. Document that if we add a *.X.2i2c.cloud DNS entry, we *must* also add a X.2i2c.cloud DNS entry https://github.com/2i2c-org/infrastructure/issues/6646

Timeline

Aug 20, 2025

OWNER OF REVIEW PROCESS

Yuvi Panda

IMPACT TIME

Aug 20 at 10:02 to Aug 20 at 10:15

DURATION

13m 46s

*All times listed in this report are in Pacific Time (US & Canada).

9:21 AM — During setup of new cluster for Temple, a DNS entry is made for *.temple.2i2c.cloud to point to the new cluster's Ingress IP. Existing DNS entries are not touched, so no change is expected

10:02 AM

Triggered through the API.
Description: An uptime check on two-eye-two-see Uptime Check URL labels {project_id=two-eye-two-see, host=temple.2i2c.cloud} is failing. | Violation started: Aug 20, 2025 at 5:02PM UTC (less than 1 sec ago) | Policy: temple.2i2c.cloud on 2i2c | Condition: Simple Health Check Endpoint | View incident: https://console.cloud.google.com/monitoring/alerting/alerts/0.nw6sesu4z4zz?channelType=pagerduty&project=two-eye-two-see (View Message)

INCIDENT #1194

An uptime check on two-eye-two-see Uptime Check URL labels {project_id=two-eye-two-see, host=temple.2i2c.cloud} is failing. | Violation started: Aug 20, 2025 at 5:02PM UTC (less than 1 sec ago) | Policy: temple.2i2c.cloud on 2i2c | Condition: Simple Health Check Endpoint | View incident: https://console.cloud.google.com/monitoring/alerting/alerts/0.nw6sesu4z4zz?channelType=pagerduty&project=two-eye-two-see

10:02 AM — A `dig temple.2i2c.cloud` returned a NOERROR but no entries. An explicit temple.2i2c.cloud A record is added via NameCheap DNS. The hypothesis is that adding *.temple.2i2c.cloud negated the *.2i2c.cloud (that temple.2i2c.cloud) was resolving to, thus resulting in the outage. The effect was delayed due to DNS caching

10:09 AM — https://2i2c.freshdesk.com/a/tickets/3770 comes in

10:15 AM

Resolved through the integration API.

INCIDENT #1194

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10:32 AM — DNS TTL was changed to 5min, as the default was 30min. It's unclear if this actually had any real effects in propagation, but we tried it because the community had a demo coming up quickly.

10:47 AM — DNS fully resolves properly for engineer working on the issue. An `/etc/hosts` entry workaround is offered to the community member trying to do the demo.

10:55 AM — Community reports it works well for them.