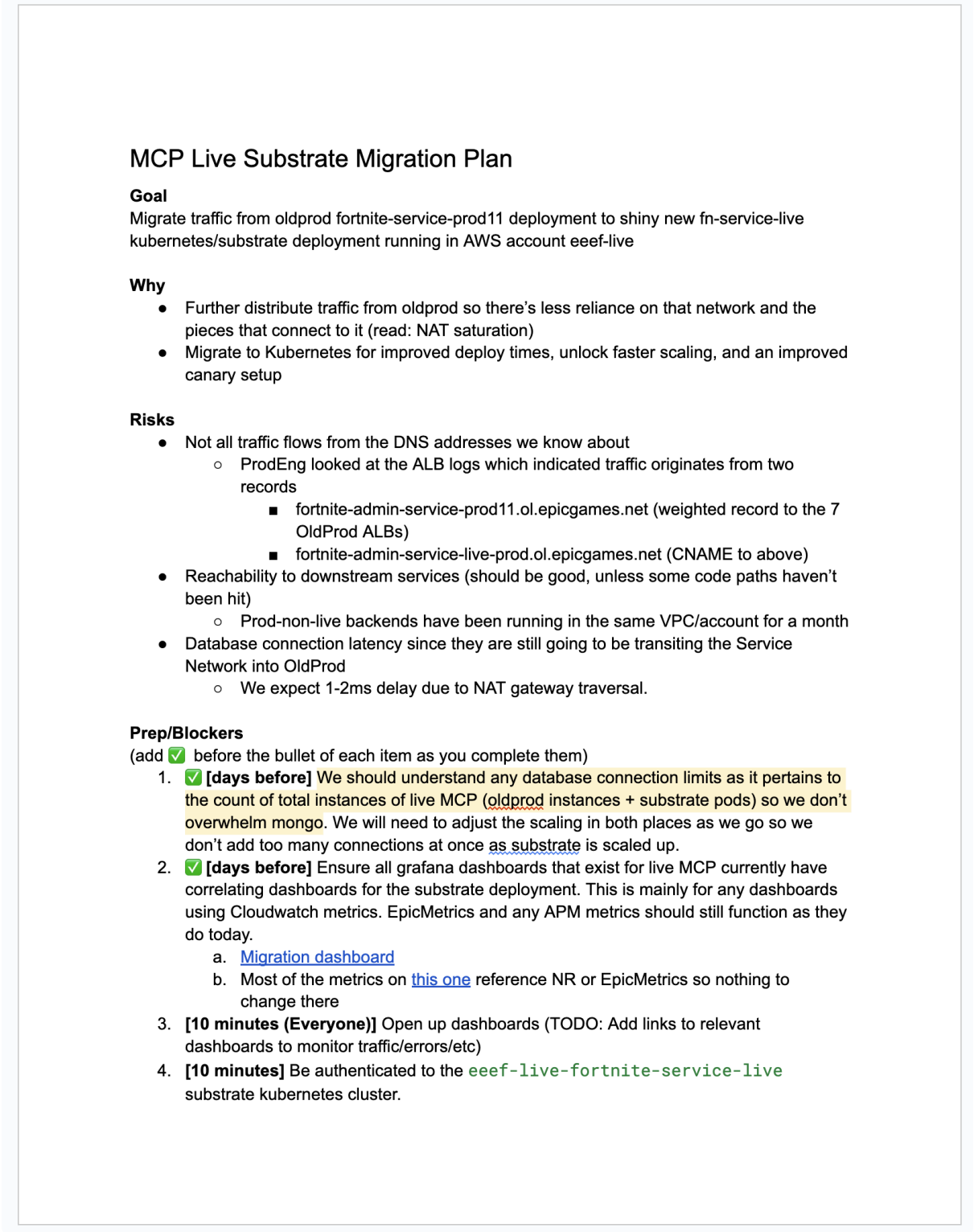
Cut-Over

Document Level Classification

200

Mosaic macros cannot be exported to this format.

Although this guide focuses on prod/live traffic, the same approach can be applied to all environments. We recommend you use a lower environment to familiarize yourself with this approach.



MCP Live Substrate Migration Plan

Goal

Migrate traffic from oldprod fortnite-service-prod11 deployment to shiny new fn-service-live kubernetes/substrate deployment running in AWS account eeef-live

Why

- Further distribute traffic from oldprod so there's less reliance on that network and the pieces that connect to it (read: NAT saturation)
- Migrate to Kubernetes for improved deploy times, unlock faster scaling, and an improved canary setup

Risks

- Not all traffic flows from the DNS addresses we know about
  - ProdEng looked at the ALB logs which indicated traffic originates from two records
    - fortnite-admin-service-prod11.ol.epicgames.net (weighted record to the 7 OldProd ALBs)
    - fortnite-admin-service-live-prod.ol.epicgames.net (CNAME to above)
- Reachability to downstream services (should be good, unless some code paths haven't been hit)
  - Prod-non-live backends have been running in the same VPC/account for a month
- Database connection latency since they are still going to be transiting the Service Network into OldProd
  - We expect 1-2ms delay due to NAT gateway traversal.

Prep/Blockers

(add ✅ before the bullet of each item as you complete them)

1. ✅ **[days before]** We should understand any database connection limits as it pertains to the count of total instances of live MCP (oldprod instances + substrate pods) so we don't overwhelm mongo. We will need to adjust the scaling in both places as we go so we don't add too many connections at once as substrate is scaled up.
2. ✅ **[days before]** Ensure all grafana dashboards that exist for live MCP currently have correlating dashboards for the substrate deployment. This is mainly for any dashboards using Cloudwatch metrics. EpicMetrics and any APM metrics should still function as they do today.
   a. Migration dashboard
   b. Most of the metrics on this one reference NR or EpicMetrics so nothing to change there
3. **[10 minutes (Everyone)]** Open up dashboards (TODO: Add links to relevant dashboards to monitor traffic/errors/etc)
4. **[10 minutes]** Be authenticated to the `eeef-live-fortnite-service-live` substrate kubernetes cluster.

When you're ready to cut over traffic to substrate, you should produce a cut-over Google Doc outlining the steps to be taken. A template is provided to do this, and examples from previous migrations are also included. We use a Google Doc to allow collaboration as multiple people may be involved in the work, with others to observe.

Timelines of when the tasks should be completed, who is doing the task, and using a checkbox to mark when it is complete allows for visibility into the progress of the migration. The doc also allows for feedback or notes to be added.

[TEMPLATE]

📝 You can prepare this document closer to the cut-over time and submit it for review.

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