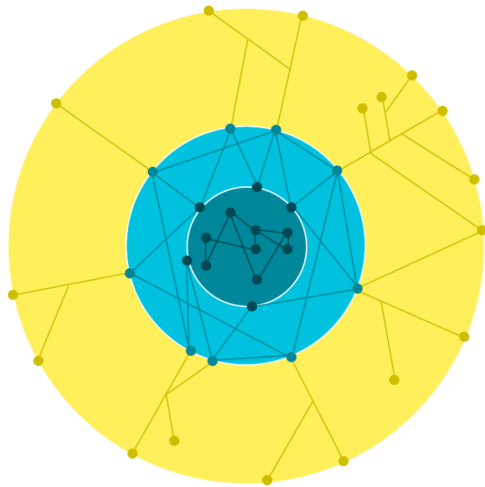




Google Protects their Network Services Workforce with Metro Partition Solution

Vidhya Shankar Govindarajan, James Stavropoulos

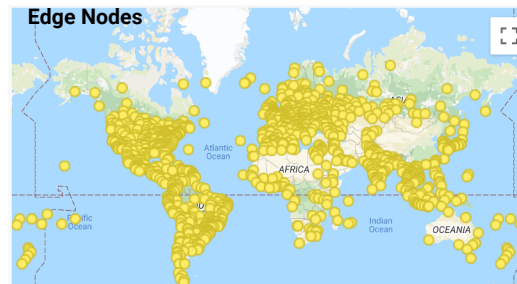
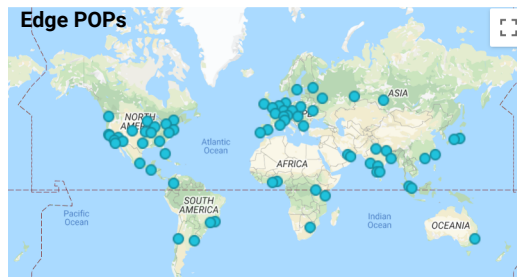
Google Global Network



● Data Centers

● Edge Points of Presence (POPs)

● Edge Nodes (Google Global Cache, or GGC)



Powers these services..

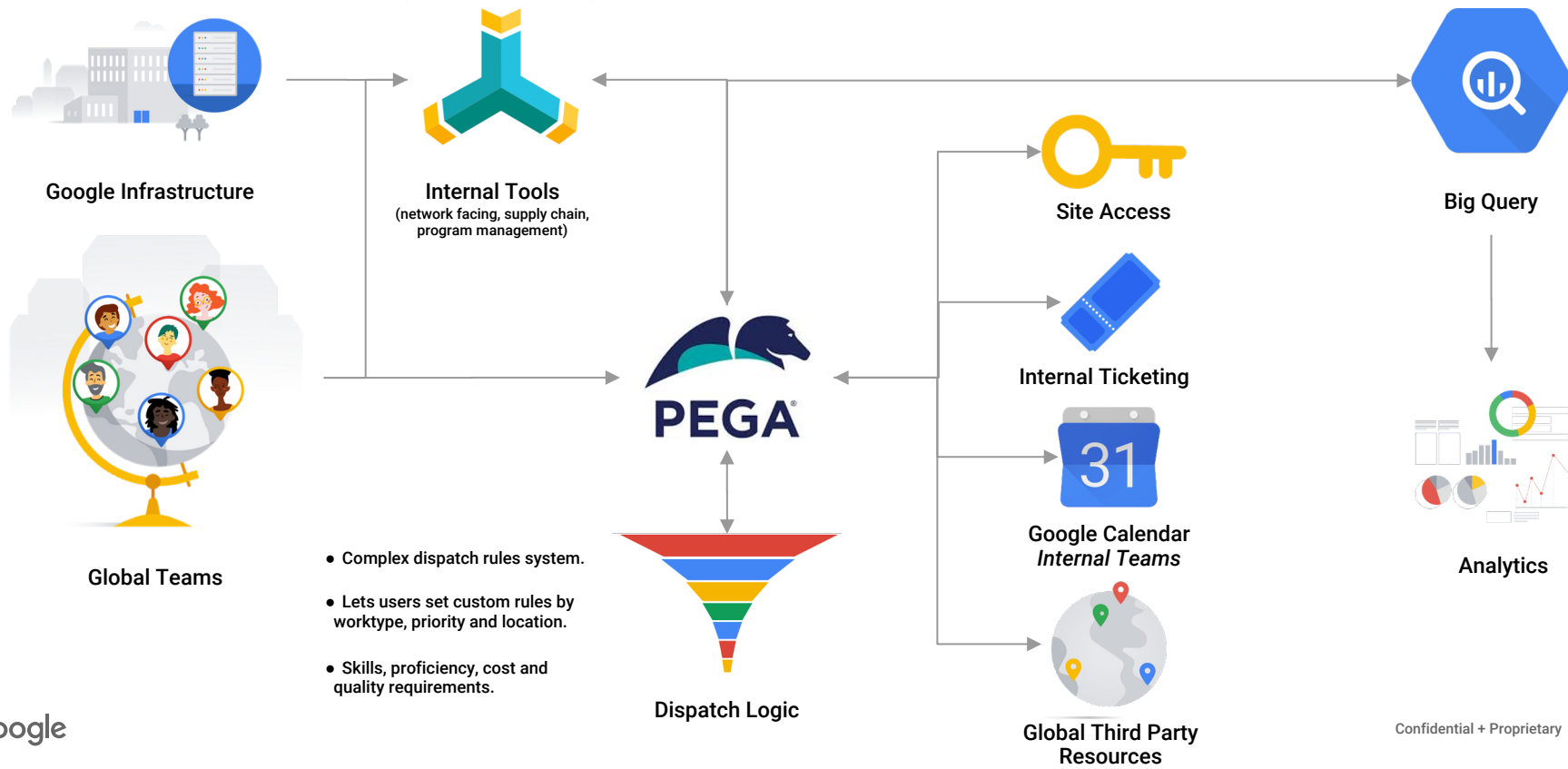


Google Cloud



Confidential + Proprietary

Google Technician Dispatching System



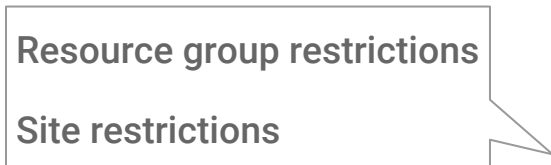
COVID19 - Priorities and Challenges

- **Priorities**

- Keep people safe!!
- Provide high quality services

- **Challenges**

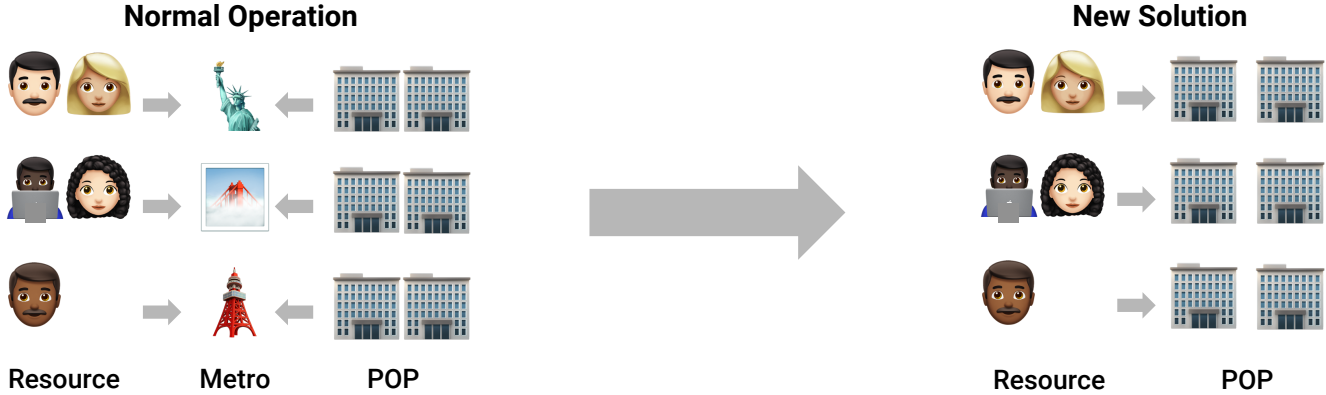
- Enforce social distancing
- Resource group restrictions
- Site restrictions



Dispatch Logic

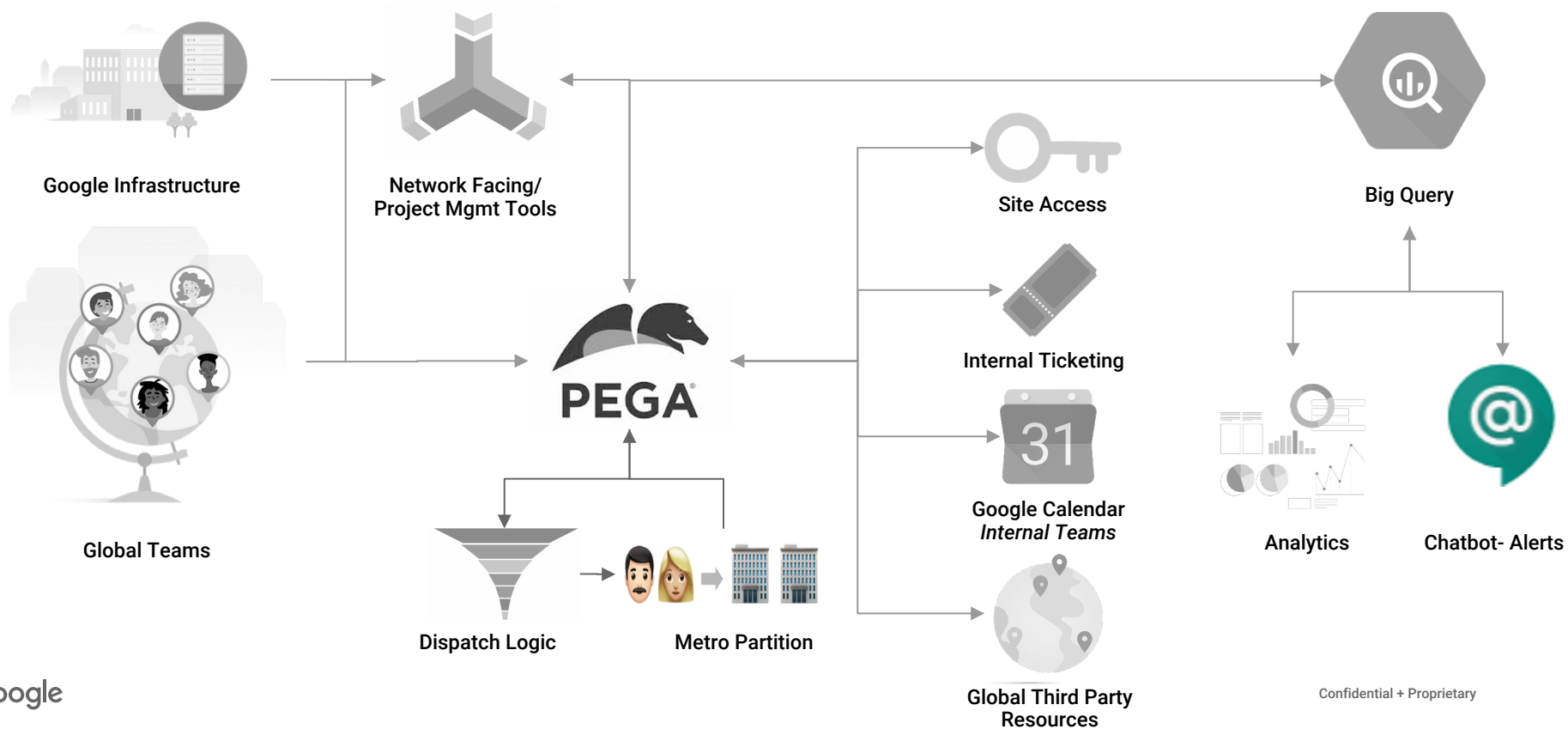
Metro Partition Plan

- Partitioned key Metros into zones of multiple POPs. Assigned resources to specific POPs



- Flexible system: New partition zones and resources can be provisioned quickly.
- Setup alerting and reporting capabilities in case of violation.
- Concept to full solution deployment in 5 business days.

Metro Partition Plan Implementation



So what's next?

- **System road map**
 - Change management
 - Self serve portal
 - Contact tracing

- **Defining and building a response playbook**