

Akamai Global Traffic Management

Business continuity with a cloud-based
intelligent traffic manager



Agenda

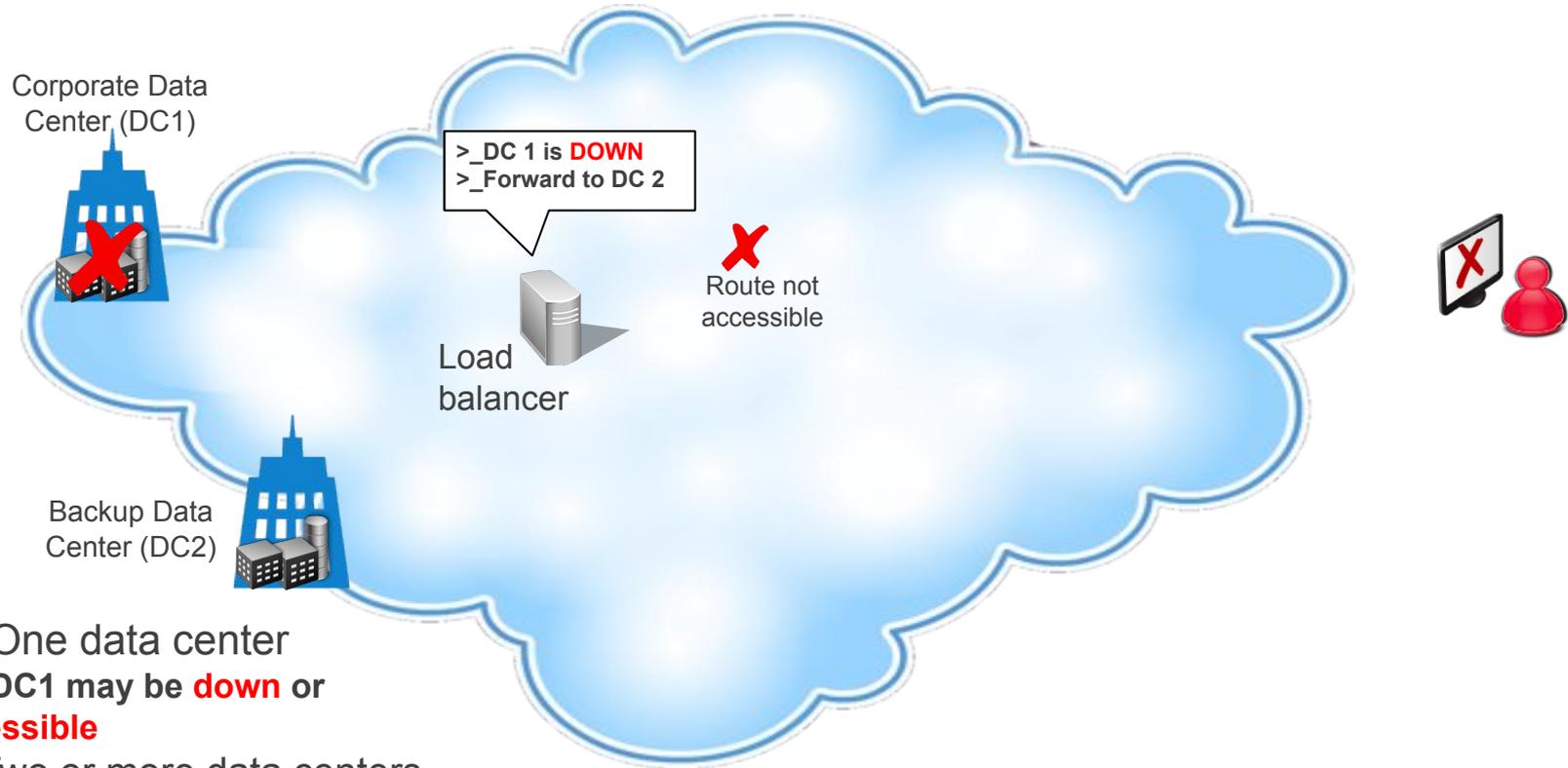
Why do load balancers exist

On premises vs. cloud-based load balancers

Load balancing vs. Intelligent Traffic Management

Akamai GTM Solution

The Original Situation



- Phase 1: One data center
 - Risk: DC1 may be **down** or **inaccessible**
- Phase 2: Two or more data centers
 - Need for load balancing

Why Load Balancing

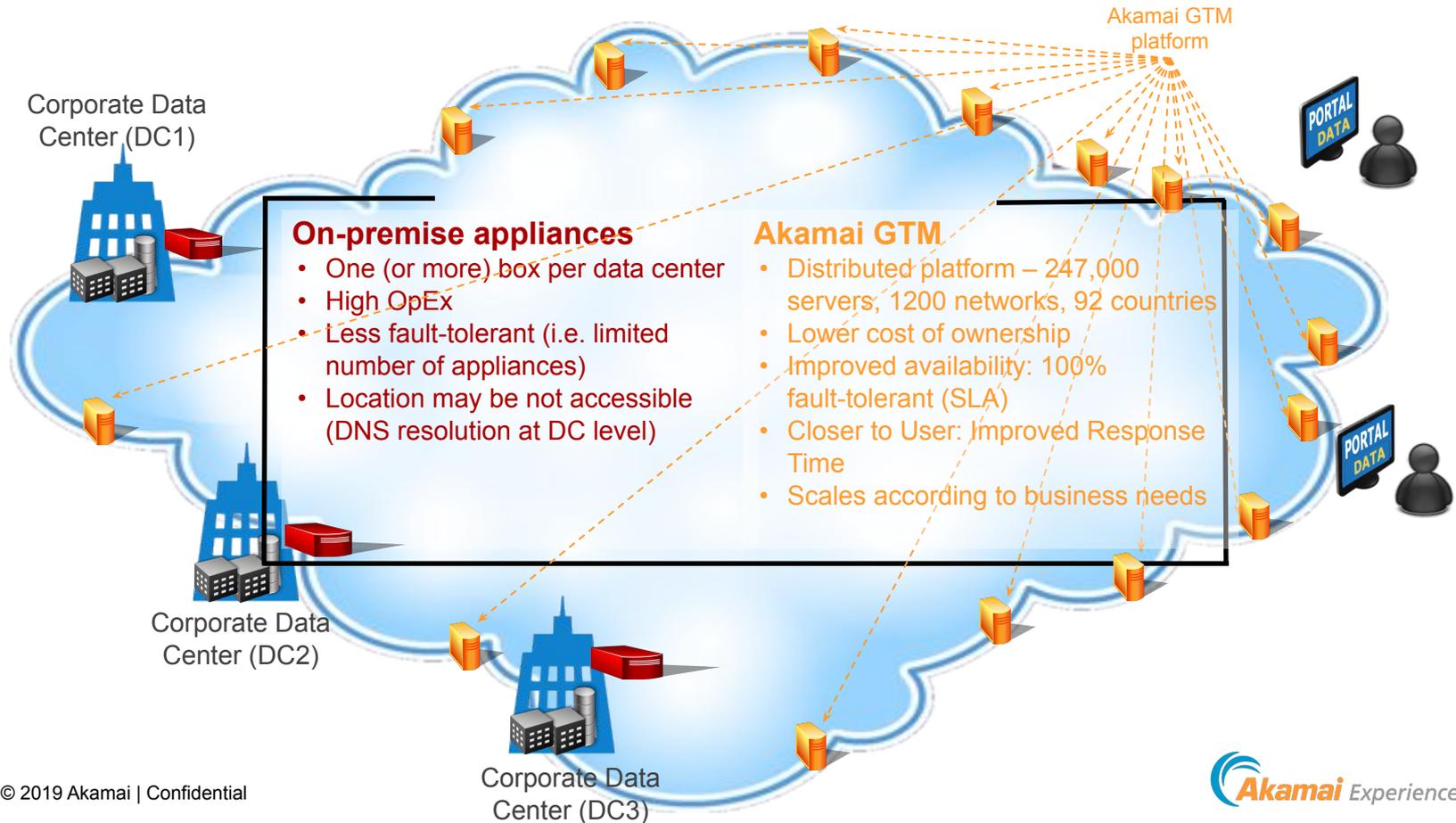
Replication of data centers

- Business critical information is replicated
- Overcomes hardware or network issues
- Need to load balance between DCs

Optimizing web/app performance

- Transparent to end users
- Seamless transition between DCs
- Policy-based selection of the best resource

On-premise vs. Akamai GTM (cloud-based)



Use Cases:

Load Balancing

Balancing between data centers

- Forward load to 2 or more data centers
- Balance the load based:
 - Mirror failover
 - Percentage splits

Traffic Management

Balancing between cloud providers

- Forward load to 2 or more cloud providers
- Balance the load based:
 - Mirror failover
 - Percentage splits

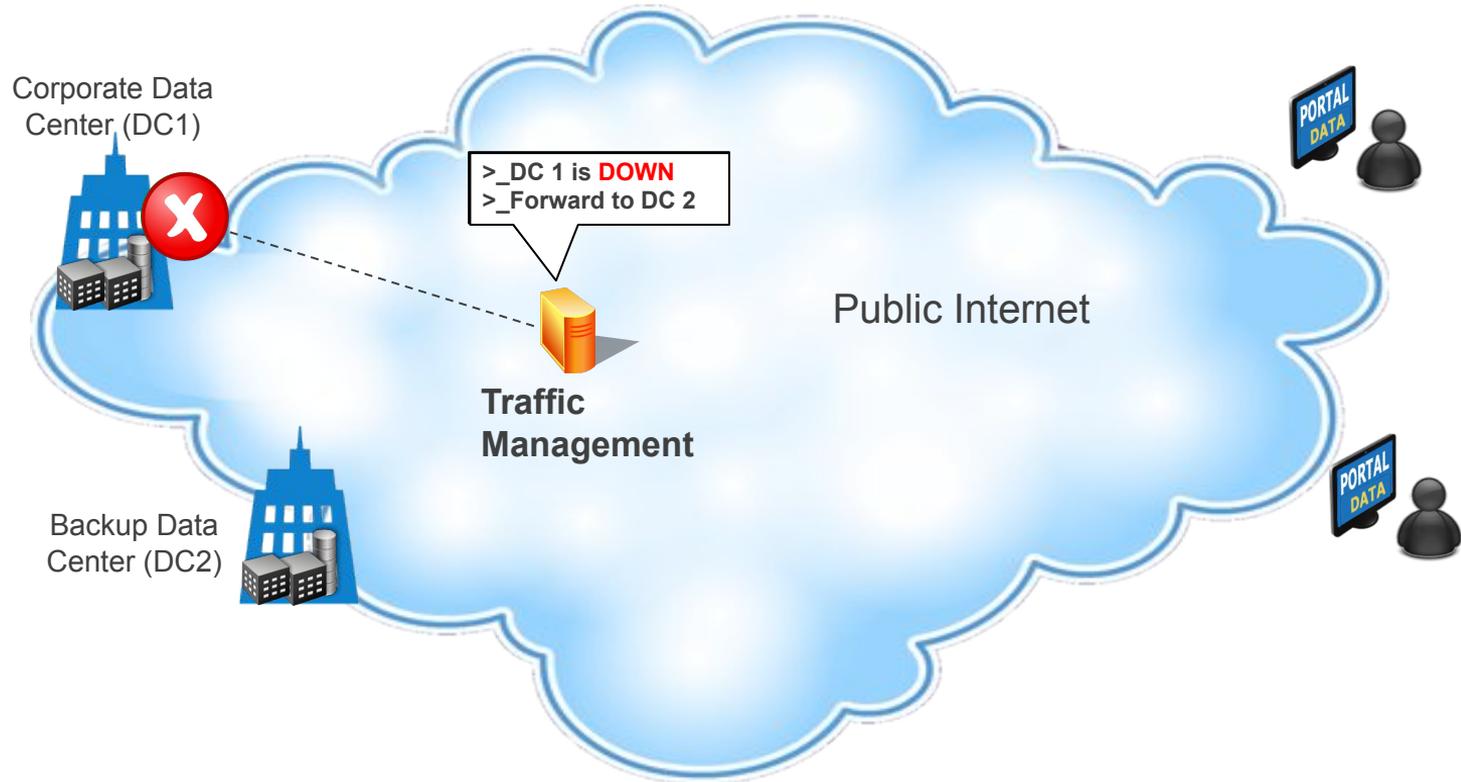
- More sophisticated criteria (*)
- Performance as metric
- Combination of data centers and cloud providers
- Traffic management between non-HTTP applications

A leap from load balancing traffic into different data centers to an Intelligent Traffic Management solution for Business Continuity

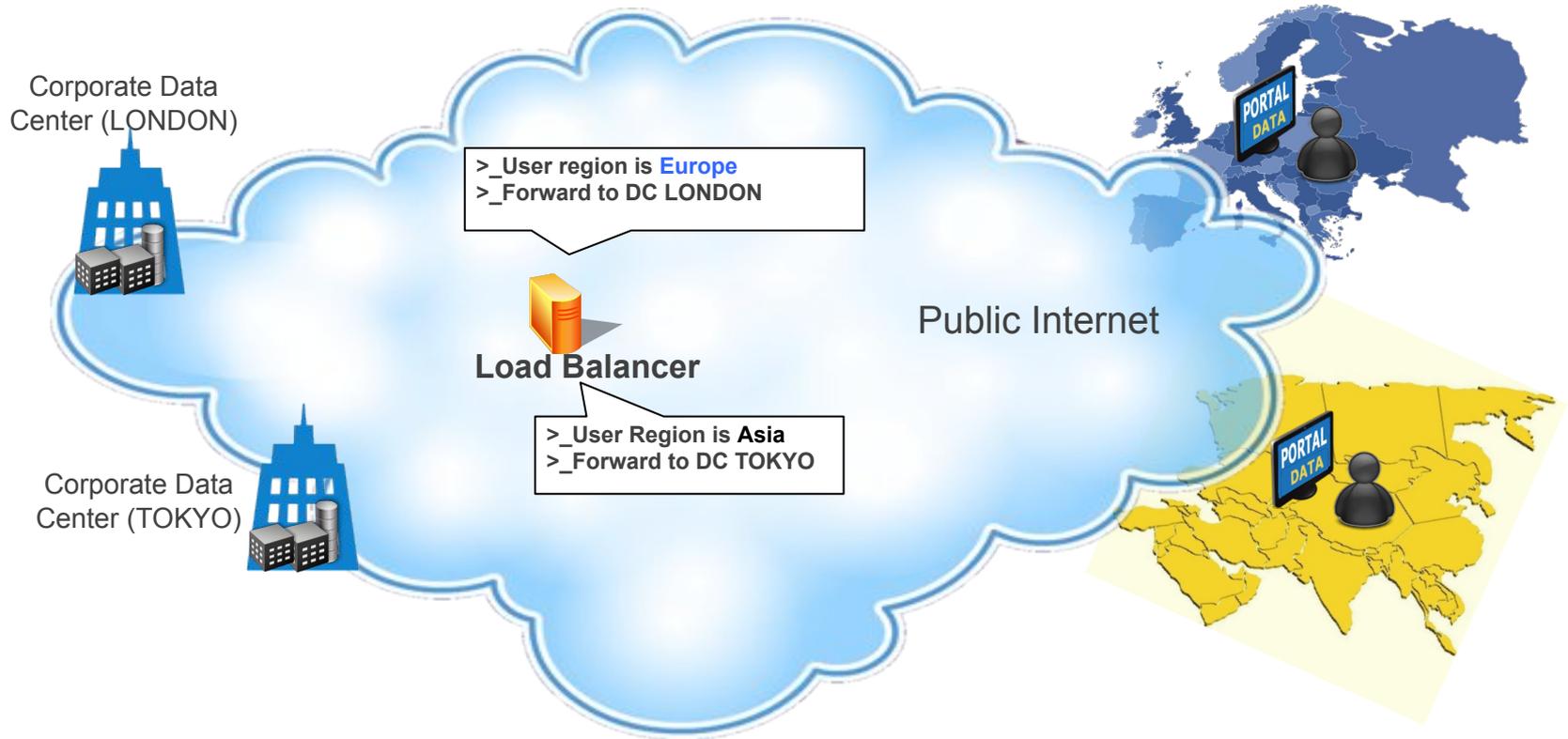
What is GTM?

- Akamai's Global Traffic Management (GTM) is a dynamic DNS-based global server load balancing solution designed to ensure high availability and responsiveness to user requests.
- Real-time data center performance and global Internet conditions are used to ensure user requests are routed to the most appropriate datacenter.

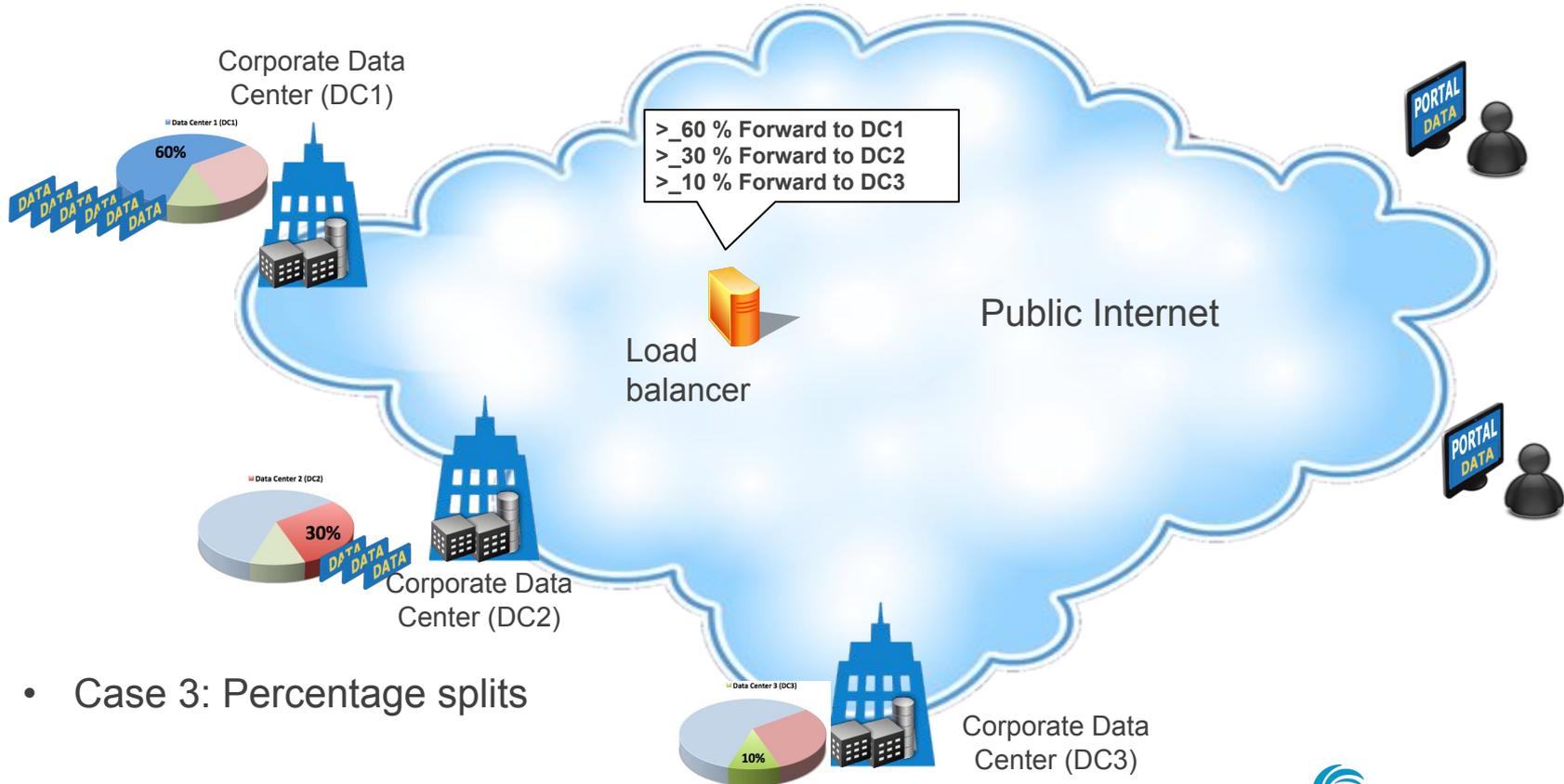
Use Case: Active / Backup with Liveness Testing



Use Case: Geo Targeting



Smarter Cases of Traffic Management: Weighted



- Case 3: Percentage splits

GTM Overview – Key Advantages

- **Scalable** – Cloud-based, Internet-centric
- **Flexible** – Works with data center, cloud, multi-cloud, and hybrid architectures
- **Dynamic** – Ensures that users can reach your site and applications
- **Powerful** – Improves response times by reacting to real-time Internet conditions
- **Cost-effective** – Scales without concern about IT infrastructure
- **Manageable** – Centrally administered via Luna Control Center
- **Intelligent** – Distributes traffic based on:
 - Business requirements
 - Data center conditions
 - Network proximity
 - Network conditions
 - Geo mapping requirements

Akamai GTM Business Benefits

Improved availability

- Monitors data center (or cloud provider) health AND Internet conditions
- Built-in reliability and redundancy based on geographic and global platform

Improved response time

- On going Internet monitoring to find the optimal path to reach DCs (or cloud provider)
- Compromise solution between control and performance
- Closer to user

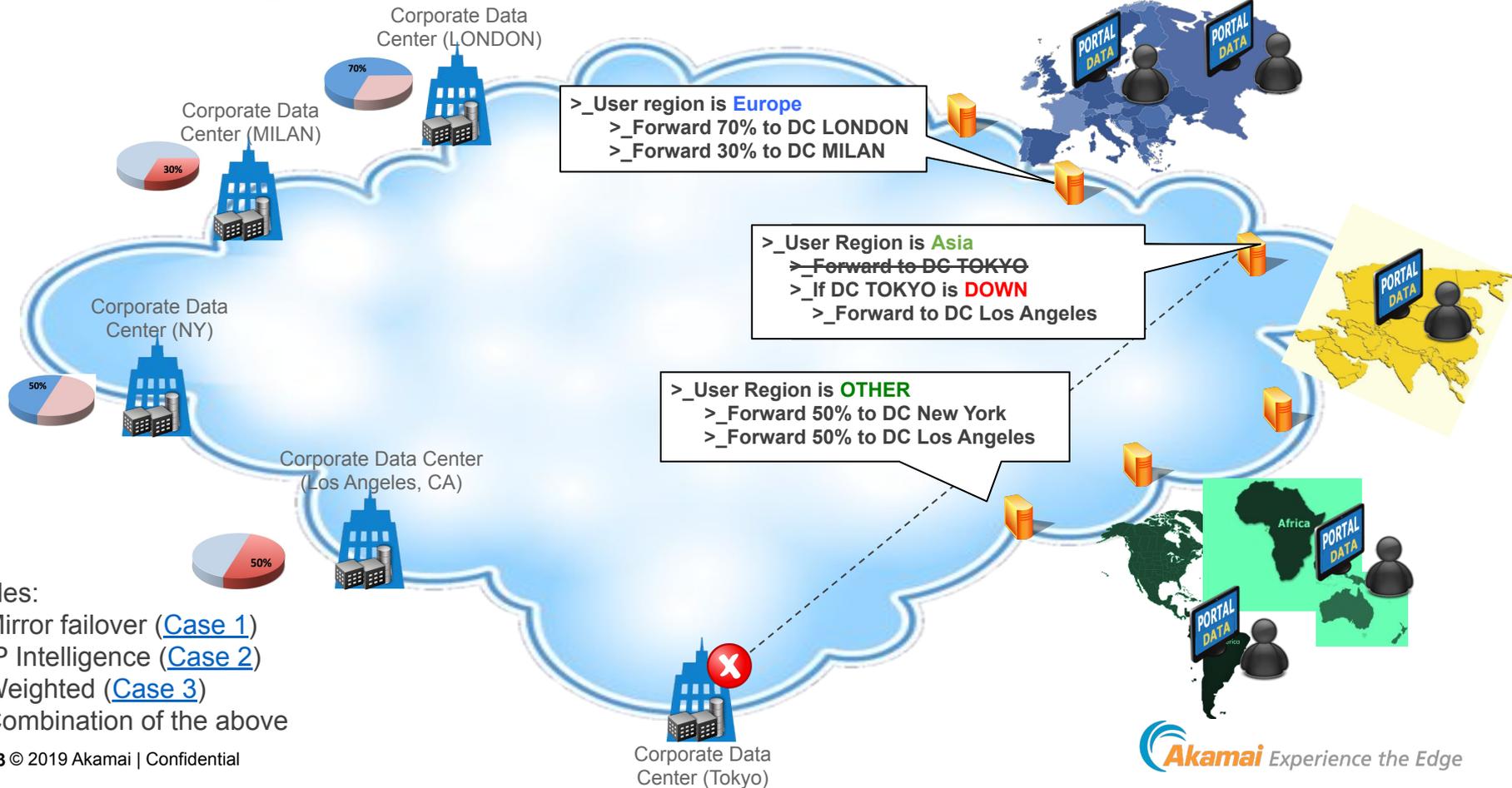
Lower cost of ownership

- Managed service that grows as needed versus exponential CAPEX and OPEX of IT infrastructure

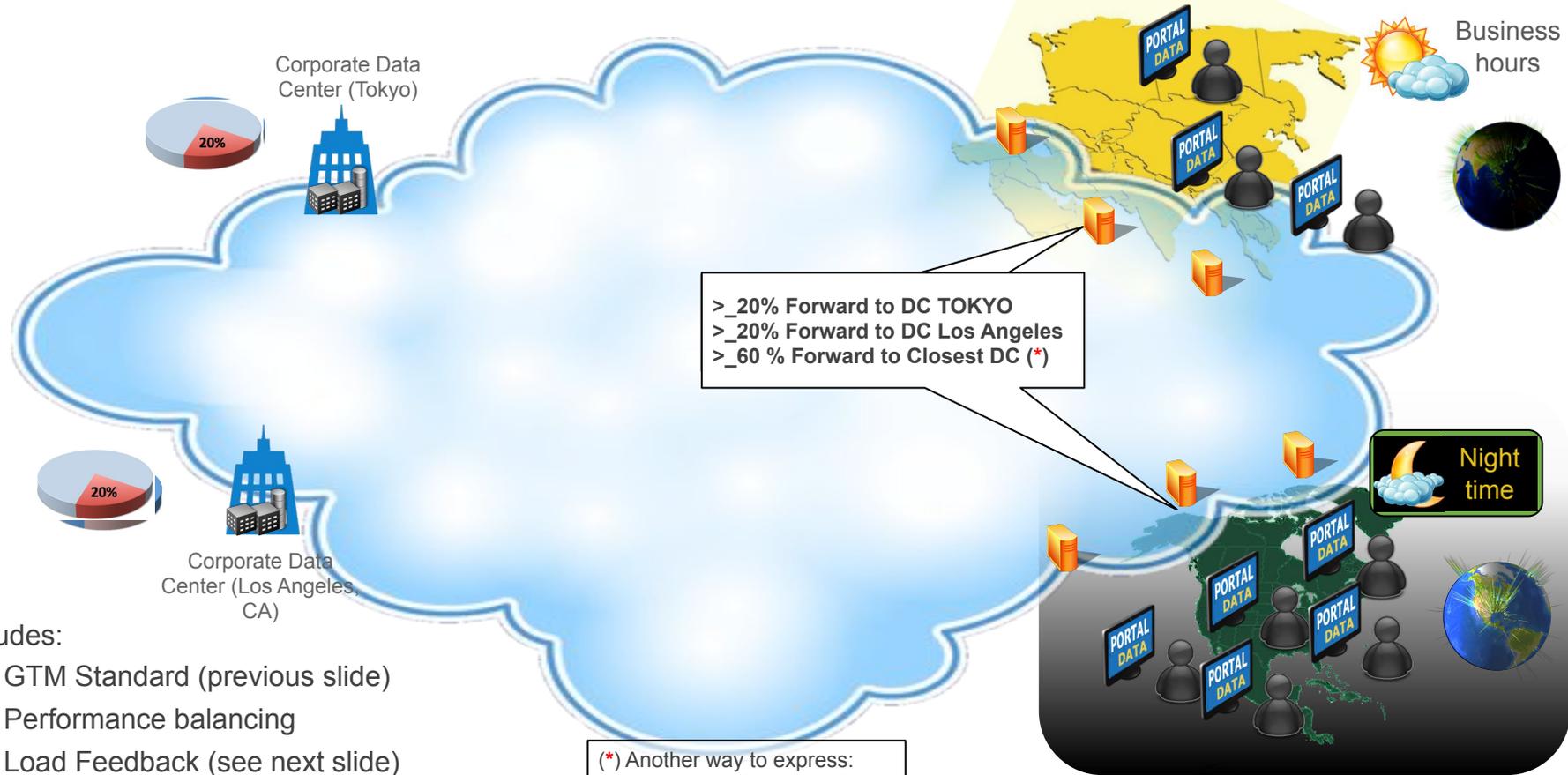
Network visibility and control

- Self-Service
- Easy to set-up new properties
- Real time data, reports and alerts to take fast business decisions

Balancing with Rules



Trade-off Availability and Performance

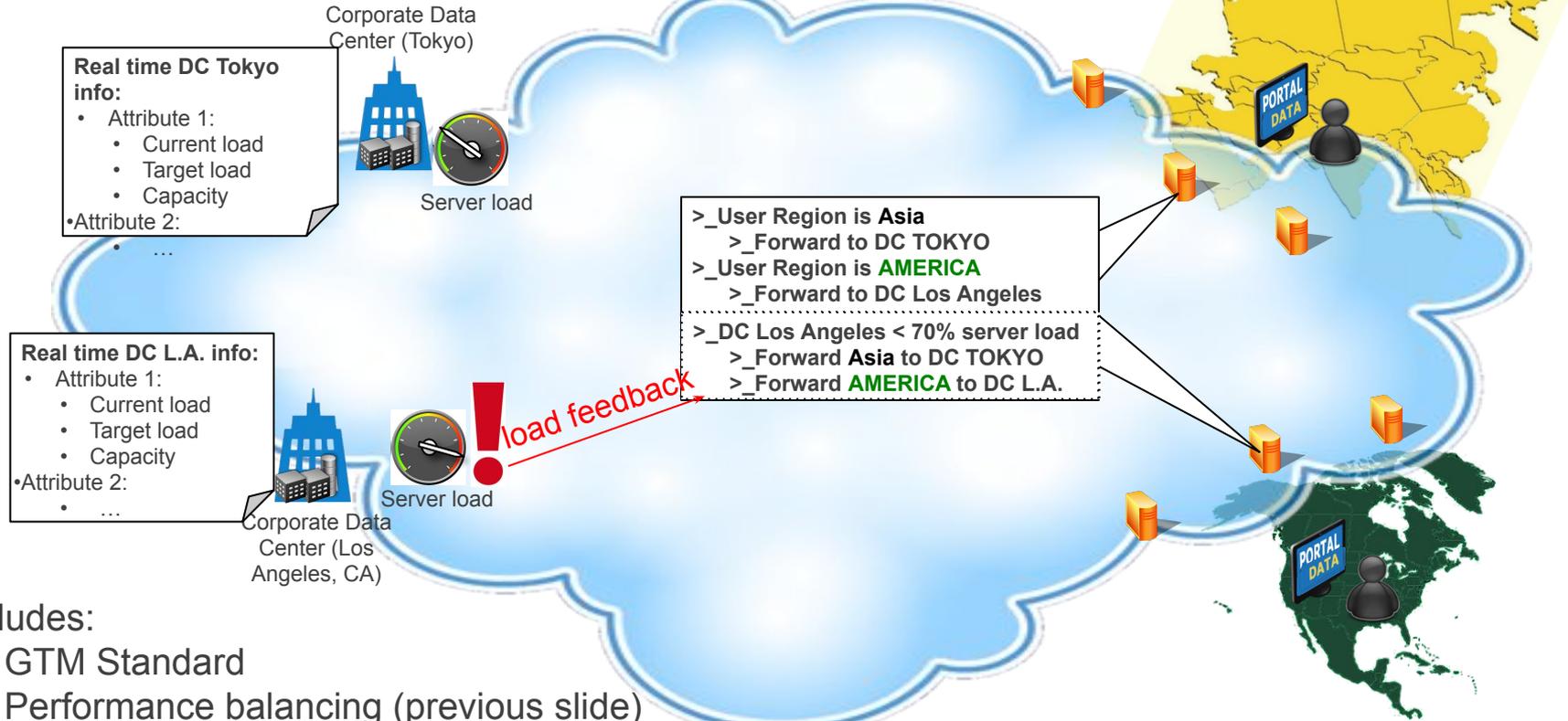


Includes:

- GTM Standard (previous slide)
- Performance balancing
- Load Feedback (see next slide)

(*) Another way to express:
>_Forward to Closest DC
>_max load per DC = 80%

Load Feedback



Includes:

- GTM Standard
- Performance balancing (previous slide)
- Load Feedback: customer reports to GTM actual DCs info to control split decision

Thank You

