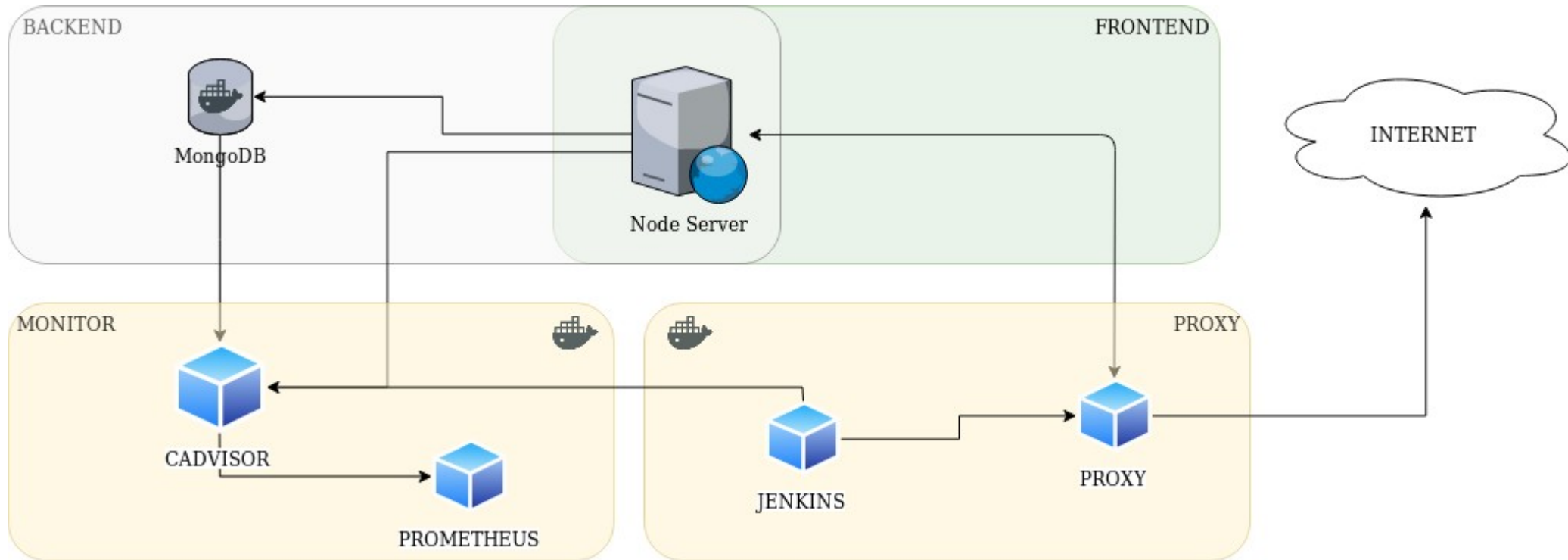


Architecture TO-BE

New cloud architecture proposition for customer Answer42

Alessandro Affinito

Swarm stacks by network



Simplified design of dockerized, scalable and centrally monitored architecture

Swarm stacks by network

- **Monitor**

- Cadvisor:

Analyzes resource usage and performance characteristics of running containers. Tells swarm-listener that it should notify monitor when this service is created, updated, or removed. Another label specifies that Prometheus should scrape data from this service running on port 8080.

<https://github.com/google/cadvisor>

- Alert-manager: using Docker Flow Monitor instead of directly Prometheus, the configuration options and startups can be specified as environment variables thus removing the need for configuration files and their persistence.
 - Swarm Listener: The swarm-listener service will listen to Swarm events and notify the monitor whenever a service is created, updated, or removed.

Swarm stacks by network

- **Proxy**

- Proxy: convenient way to get a single access point to the cluster instead opening a different port for each publicly accessible service.
The proxy will be notified whenever a service is deployed or updated as long as it has the *com.df.notify* label set to true.
- Jenkins: engine and children node manager
- Jenkins Agent: executes Jenkins jobs through ad-hoc docker images

- **Backend / Phoenix**

- Node app: this is the container of the web server exposed to internet.
This is also linked to a MongoDB image.
- Mongo DB: official MongoDB image, it is also configured as a replicable and load-balanced node by Swarm



Thanks