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An internal service written in Python has been running without issues on the secure network not exposed to the Internet. It serves a read-only HTTP API to some data stores hosted in the cloud. Data is public domain. There is an emerging need to expose this service on the Internet to an audience of researchers and data scientists from other institutions, or anyone with interest. The original author of the service is no longer available to perform this transition. Describe potential risks and steps you would take to reduce them.

Risks:

- 1- Security preaches → Reputational risks
- 2- Workload on the service might cause a delay or failure.

Consideration Points:

- We understand the WHY then we move to the how.
- Design the new system architecture to check how we will expose the service.
- Add/Create an orchestration layer to the service, which can be built quickly to manage the secure connection. (HTTPS)
- Check available corporate cloud services to manage the access (IAM for AWS).
- Load balancing.
- Redundant DB.
- Ensure we only expose the minimum required data.
- Keep a log and backup.