Supply Shield Architecture Document

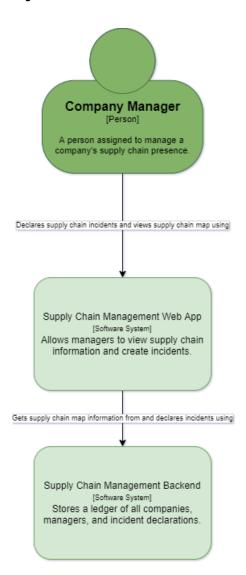
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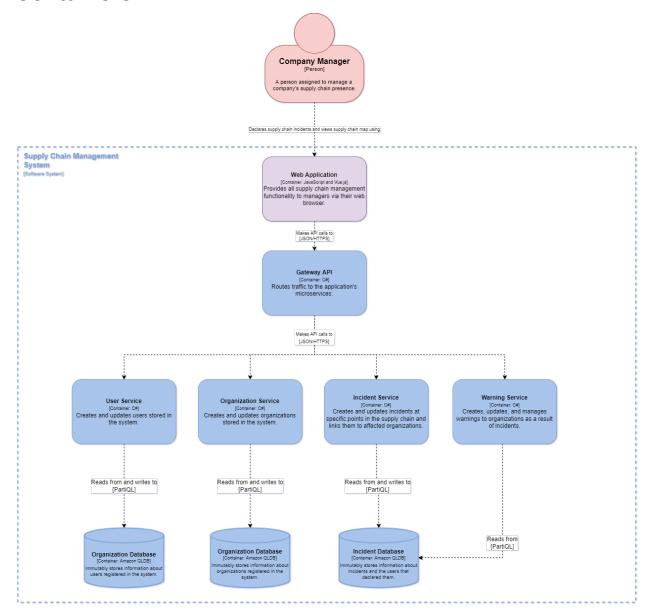
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Diagrams	3
System Context	3
Containers	4
Technologies	4
Security	4
Secret Manager	4
Database	5
Ledger	5
CI/CD	5

Diagrams

System Context



Containers



Technologies

Security

Secret Manager

Google Secret Manager was chosen as it was a part of the existing cloud service ecosystem used by the system thus far and as such offered easier integration. It is currently used to store service account authentication information for AWS in order to access the ledger database.

Github secrets are used to store Google Cloud service account authentication information for the CI/CD pipeline.

Database

Ledger

After researching various storage methods and creating two prototypes, Amazon Quantum Ledger Database was chosen for its automatic scaling, immutability, traceable database transactions, and the quality of its tooling and documentation.

CI/CD

The current CI/CD pipeline is implemented through Github Actions and makes use of Google Cloud to deploy the container. The current implementation goes as far as building a docker image from new pushes to 'main' and storing that image in Google Container Registry.

