

Assessment Submission

High Level Problem Statement:

Must to Include in the Platform Design:

Tools Expected Behaviour:

Task 1: (Secret Owner):

Task 2: (Secret Receiver)

Conditions:

Warning Info:

Architecture Diagram:

CICD FLOW:

High Level Problem Statement:

There is a requirement for an internal secret-sharing tool for a group of 50,000 employees.

The tool should address three main use cases: a web interface, a CLI interface, and an API interface.

Additionally, it should be designed with future enhancements in mind, such as IDE extensions.

Must to Include in the Platform Design:

- The Site/Application/Tool Should be accessible for the Specific Internal IP Range (Assuming it should be accessible for employees within the company)
- The Data at Rest and Data at Transit should be Encrypted at all the Stages.
- The tool should be able to handle a load of up to 1000 active secrets at any given time.
- Recovery Time Objective should be Very high.
- Recovery Point Objective can be Low. ***
- You do not need integrations with any IdP for login, and the tool can provide anonymous access.

Tools Expected Behaviour:

Task 1: (Secret Owner):

- It Should be able to Generate a Secret.
- It Should Return a Unique path and a PIN.
- It should allow generation of multiple distinct urls and corresponding pins.
- **Task Requires PUT OR POST API CALL ** || UPDATE**

Task 2: (Secret Receiver)

- It Should receive Unique path and PIN.
- Validate the PIN.
- It Should Return the Secret.
- **Task Requires GET API CALL ** || SELECT**

Conditions:

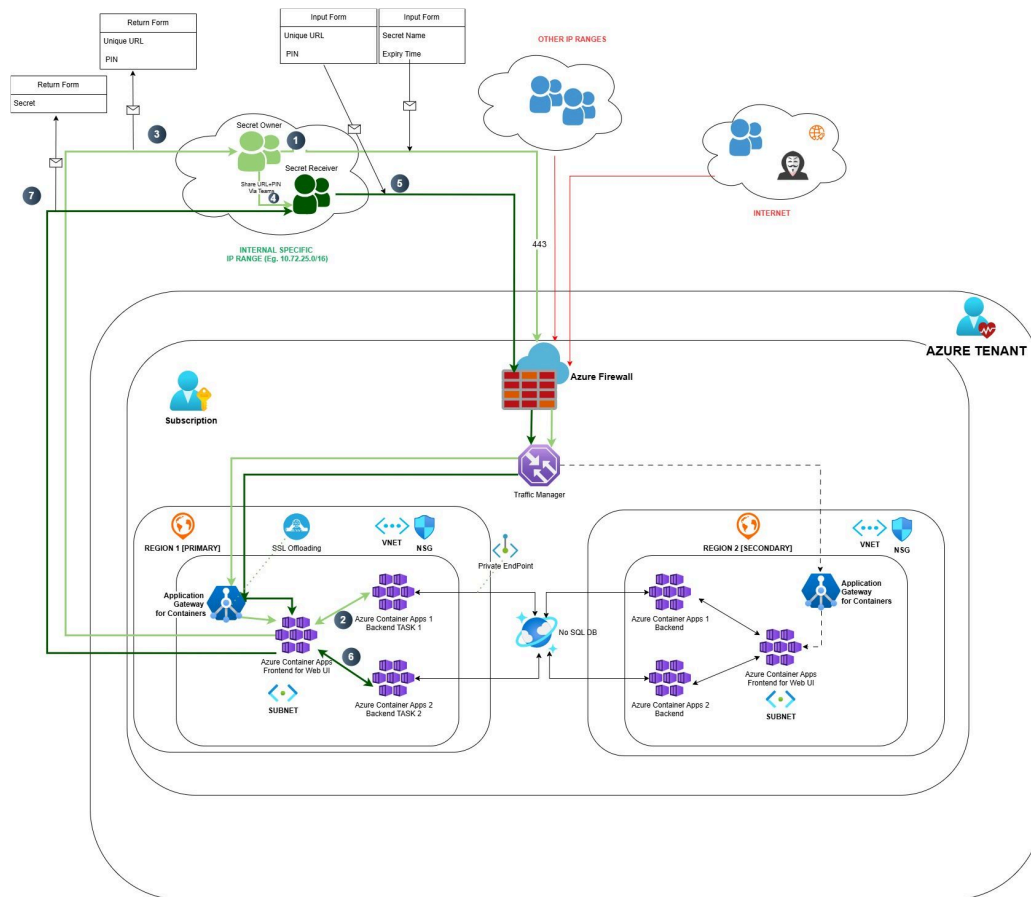
- The URLs should not be easy to guess.

- Secrets should only be one-time accessible and expire.
- Allow 3 attempts for a PIN.
- Secrets should expire after 24 hours.
- The secret can only be text.
- Text length should be of less than 1KB and a maximum length of 100KB.
- Users can be advised to base64-encode other formats for sharing as text, and to be decoded locally by the recipient.

Warning Info:

- User should be advised to share the url and the pin through separate mediums with the intended recipient.
- Users can be advised to use the url/pin to access their own secrets if they wish for it to expire.

Architecture Diagram:



CICD FLOW:

