

Service Migration and High Availability Using Dynamic DNS Service

Viet Tran

Dynamic DNS: basic usage

- Dynamic DNS service enables
 - Registering preferred hostnames
 - Associating the hostnames with servers

- With Dynamic DNS
 - Convenient access to services via hostnames instead of IPs
 - Secure access with SSL certificates

Dynamic DNS: advanced usage

- Service migration
- High availability

Demo: Service migration

Dynamic DNS



fedcloud.eu

High availability via Dynamic DNS

Pseudocode:

```
if current_server is faulty
    hostname => backup_server
```

See the real script for Secret management service at

<https://github.com/tdviet/vault-ha-check-public/blob/main/vault-ha-check.py#L58>

More usages of Dynamic DNS

Existing features

- Wildcards support (for kubernetes)
- Private IP addresses

In development

- API/CLI for registering hostnames
- Issuing certificates for the registered hostnames