

# Dynamic DNS Service for EGI Federated Cloud

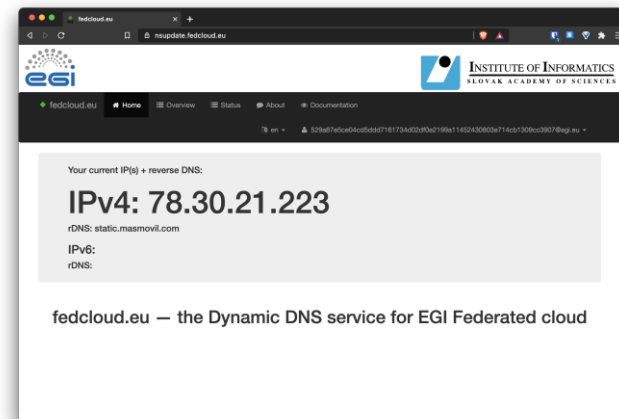
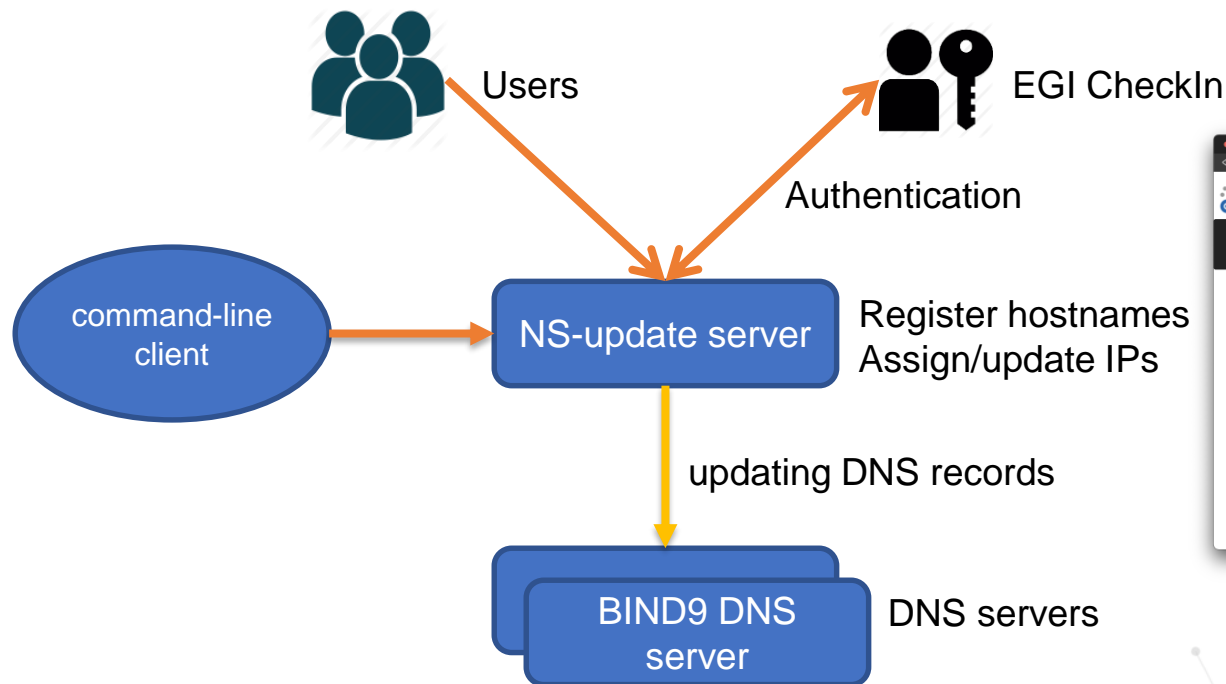
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# Introduction to Dynamic DNS service

- Services deployed on VMs in EGI Federated Cloud are usually accessed via IP addresses
- With Dynamic DNS service, users can:
  - Register sensible, memorable hostnames for their services and assign them to hosts/VMs dynamically
  - After that, users can
    - Access services deployed on VMs via memorable hostnames
    - Get SSL host certificates for services
    - Migrate services from local host to Cloud or site to site without changing configuration
- The service is being used by other production services, e.g. EGI Jupyter notebooks



- Dynamic DNS server (nsupdate) and primary DNS server are located at IISAS
- Secondary DNS server located at LIP for HA
- Hostnames registered in subdomains of fedcloud.eu domain (and others)

- Service in operation from 2017
- Integrated with GOCDB, GGUS
- Probe test developed
- The last step: to integrated with ARGO-SAM

- Simple bash script, no additional installation required
- Test operations of all service endpoints:
  - IP update for Dynamic DNS service endpoint
  - IP resolution for DNS service endpoints
- Known results of tests are clearly classified and displayed in output messages

- Probe of Dynamic DNS service (IP update)

```
$ ./ddns_probe.sh --endpoint-name nsupdate --hostname nsupdate.fedcloud.eu
OK - IP address successfully updated
```

- Probe of DNS service (IP resolution)

```
$ ./ddns_probe.sh --endpoint-name primary --hostname dns1.cloud.egi.eu
OK - DNS server responded. Return value: 147.213.65.175
```

- Service URL: <https://nsupdate.fedcloud.eu/>
- Documentation: <https://docs.egi.eu/users/cloud-compute/dynamic-dns/>
- Service endpoints in GOCDB:  
[https://goc.egi.eu/portal/index.php?Page\\_Type=Service&id=12837](https://goc.egi.eu/portal/index.php?Page_Type=Service&id=12837)
- GGUS ticket for integration with ARGO-SAM:  
[https://ggus.eu/index.php?mode=ticket\\_info&ticket\\_id=150370](https://ggus.eu/index.php?mode=ticket_info&ticket_id=150370)
- Probe test: <https://github.com/tdviet/DDNS-probe>



# Thank you!