

# **Recursor and catalog zones**

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# The problem

- Forwarding of specific names to specific DNS servers needed in recursor
- These forwards often need to be in sync with authoritative server config
- Old ways to do it:
  - Manually
  - Using script(s) to generate config file from auth config and load it into recursor
  - Use API to create, delete and modify forwards, also requires custom scripting
  - Auth sometimes managed by different admin than recursor

# Catalog zones

- Vendor independent way for authoritative servers to share the names of some of the zones they serve together with some meta data
- Since DNS people only know the zone format, a catalog zone is itself a zone, intended to be passed to secondaries (or other servers like recursors!)
- Recursor gets the catalog zone using (A/I)XFR and transforms that to updates on it's forwarding "DB".

# Example

## Available in PowerDNS Recursor 5.2 (released Jan 2025)

```
forwarding_catalog_zones:
- zone: 'forward.example'
  xfr:
    addresses: [128.66.1.2]
  groups:
    - forwarders: [192.168.178.1] # default forwarder
    - name: mygroup
      forwarders: [192.168.179.2] # forwarder for catalog zone members in mygroup
      recurse: true
      notify_allowed: true
- zone: 'forward2.example'
  xfr:
    addresses: [128.66.1.3]
  groups:
    - forwarders: [192.168.178.3] # only default forwarder for 2nd catalog zone
```