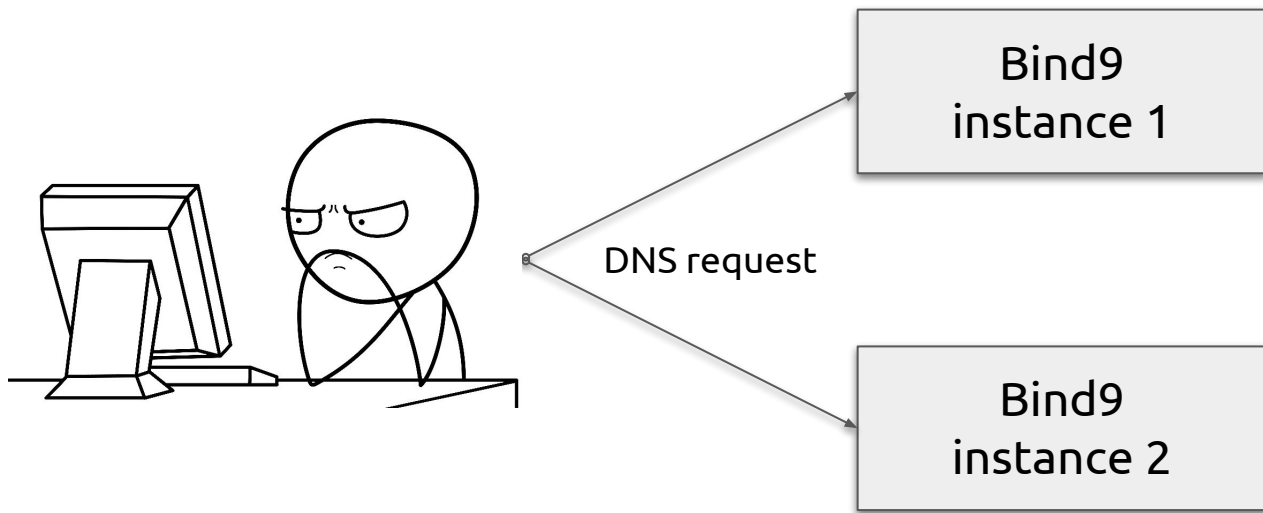# IT Infrastructure services

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2020
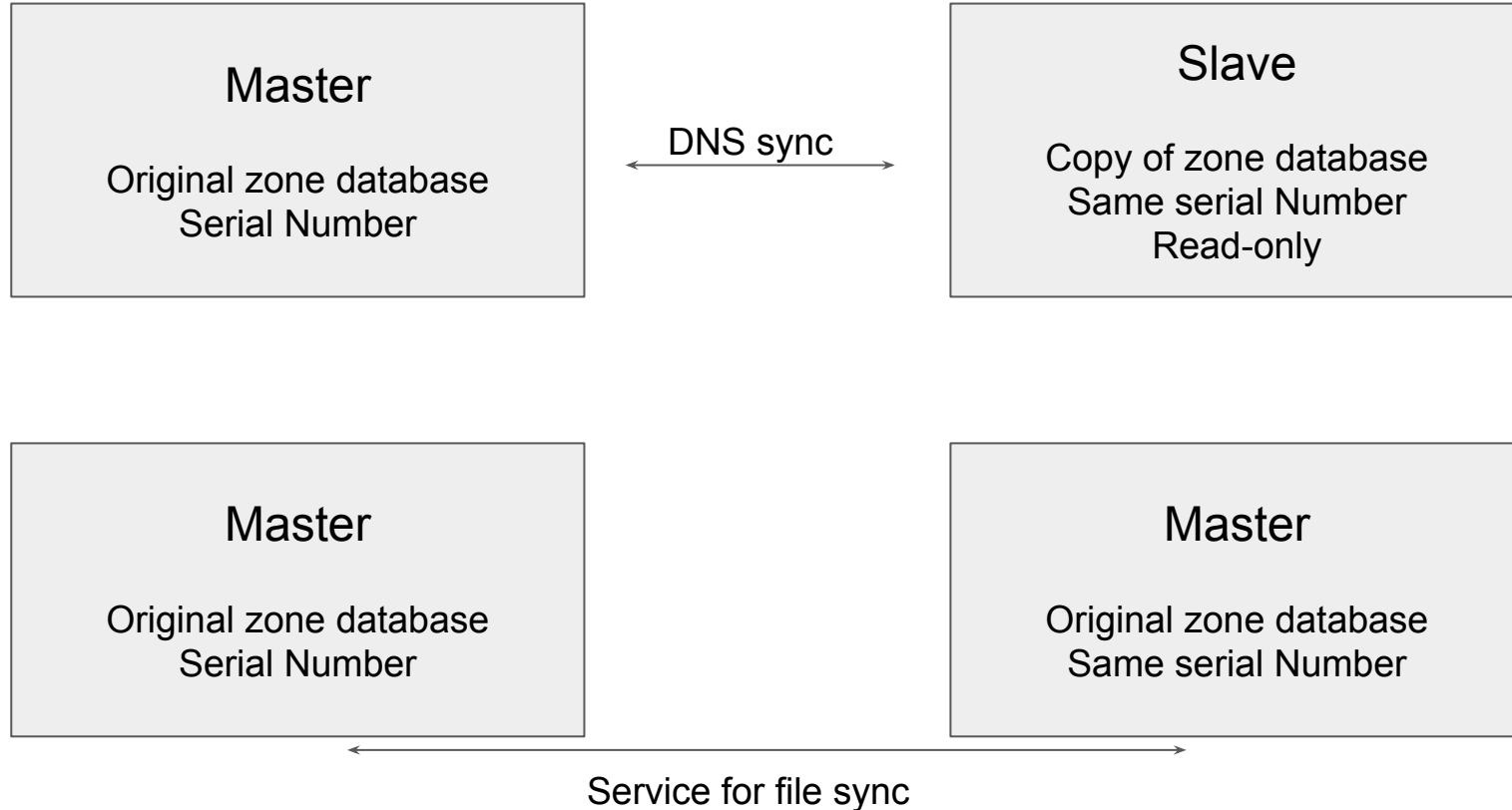
Everything should die!

DNS redundancy: round-robin

Bind9
instance 1

DNS request

Bind9
instance 2

```
$ cat /etc/resolv.conf
nameserver 10.0.0.1
nameserver 10.0.0.2
```

HA setups

Master Original zone database Serial Number	**Slave** Copy of zone database Same serial Number Read-only

← DNS sync →

Master Original zone database Serial Number	**Master** Original zone database Same serial Number

← Service for file sync →

SOA record

Example of zone database:

```
$TTL  604800
example.com.      IN    SOA    vm1.example.com. admin.example.com. (
                    1              ; Serial
                 604800           ; Refresh
                  86400           ; Retry
                2419200           ; Expire
                 604800           ; Negative Cache TTL
);
example.com.      IN    NS     vm1
example.com.      IN    NS     vm2
vm1               IN    A      10.0.0.1
vm2               IN    A      10.0.0.2
```

Example of SOA request:

```
$ dig soa +short google.com
ns1.google.com. dns-admin.google.com. 344600895 900 900 1800 60
```

Our HA setup

nsupdate+key

Master

Original zone database
Serial Number

notify

SOA

AXFR+key

Slave

Copy of zone database
Same serial Number