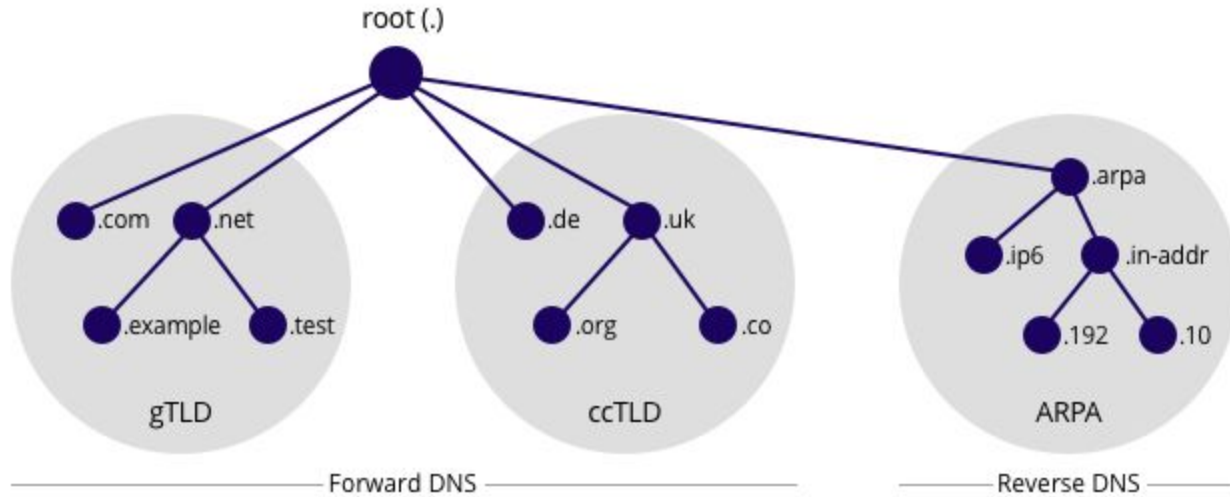# IT Infrastructure services

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DNS

DNS record types

- A
- AAAA
- CNAME
- NS
- SOA
- MX
- TXT
- Many more: https://en.wikipedia.org/wiki/List_of_DNS_record_types

DNS troubleshooting

- https://isitdns.com/
- nslookup <name>
- host <ip or name> [dns-server]
- dig [type] <name> [@dns-server]

Bind9

Docs: https://kb.isc.org/docs/aa-01031
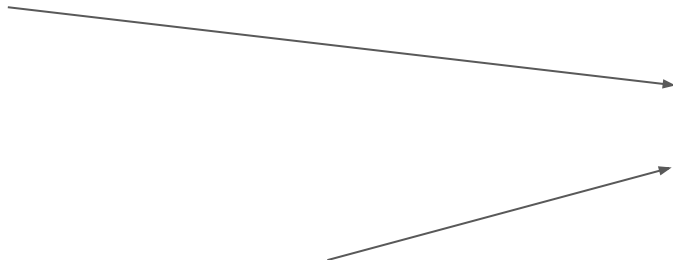
Jinja2 loops

Jinja2 online compiler: https://j2live.ttl255.com/

```
# vars
dns_resolvers:
    -    1.1.1.1
    -    8.8.8.8
    -    9.9.9.9
```
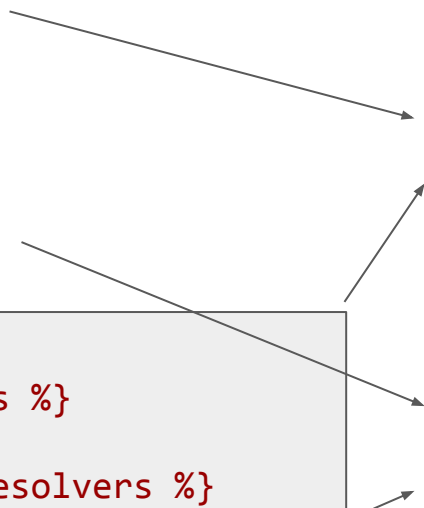
```
forwarders {
   1.1.1.1;
   8.8.8.8;
   9.9.9.9;
};
```

```
# template
forwarders {
 {% for n in dns_resolvers %}
 {{ n }};
 {% endfor %}
};
```

Jinja2 conditions

```
# VM1 vars
dns_resolvers:
   -   1.1.1.1
   -   8.8.8.8
   -   9.9.9.9
use_resolvers: true
```

```
# VM2 vars
use_resolvers: false
```

```
# template
{% if use_resolvers %}
forwarders {
 {% for n in dns_resolvers %}
 {{ n }};
 {% endfor %}
};
{% endif %}
```

```
VM1:
forwarders {
  1.1.1.1;
  8.8.8.8;
  9.9.9.9;
};
```

```
VM2:
```

Ansible facts

```
TASK [Gathering Facts] *************************************************
ok: [my_vm]
```

```
---
 - name: Play 1
   hosts: my_vm
   gather_facts: no   ← default is yes
   roles:
     - init
```

Ansible variables not from /vars folder

```
---
 - name: Show some variables
   hosts: my_vm
   gather_facts: no
   tasks:
     - debug:
         var: groups
     - debug:
         var: hostvars
     - debug:
         msg: This VM IP is {{ hostvars['my_vm']['ansible_default_ipv4']['address'] }}

 - name: Show some variables
   hosts: my_vm
   tasks:
     - debug:
         msg: This VM IP is {{ hostvars['my_vm']['ansible_default_ipv4']['address'] }}
```