Lookups

Agenda

- Lookup Plugins
- Enhance Loops

Lookups Plugins

Lookup

- Lookups in Ansible are a way to query data from outside sources, allowing you to access and use this data within your playbooks
- Lookup plugins facilitate these queries
- Lookups allow you to pull in data from external sources into your Ansible playbooks
- This can be from a file, a database, a key-value store, an environment variable, and more.
- Usual format:

```
{{ lookup('plugin_name', 'parameter') }}
```

Lookup Plugins

- Lookup plugins are the backend mechanisms that power the lookup functionality.
- Ansible comes with a variety of built-in lookup plugins, and you can also create custom ones if needed
- You may get a list of available plugins

```
ansible-doc -t lookup --list
```

And you may get more detail about each plugin

```
ansible-doc -t lookup file
```

Common Lookup Plugins

• file: Reads the contents of a file.

```
content: "{{ lookup('file', '/path/to/file.txt') }}"
```

• env: Reads the value of an environment variable

```
path: "{{ lookup('env', 'HOME') }}"
```

 password: Generates random passwords, often used for creating user accounts.

```
user_password: "{{ lookup('password', '/dev/null length=15 chars=ascii_letters') }}"
```

Common Lookup Plugins

pipe: Executes a command and returns its output.

```
system_uptime: "{{ lookup('pipe', 'uptime') }}"
```

• ini: Fetches a specific key's value from an INI file.

```
db_user: "{{ lookup('ini', 'user section=database file=/path/to/config.ini') }}"
```

redis_kv: Fetches values from a Redis database.

```
cache_value: "{{ lookup('redis_kv', 'my_key') }}"
```

Enhance Loops

Enhance Loops

- Lookups can be combined with loops to iterate over returned data
- For instance, using the **fileglob** lookup to loop over files:

```
- name: Copy all .conf files
copy:
    src: "{{ item }}"
    dest: "/etc/config/"
loop: "{{ lookup('fileglob', '/path/to/files/*.conf') }}"
```

Demo: Lookups

