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Ansible – ora2know

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Ansible – Oldie but Goldie

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Configuration Management



Configuration Management?

Wir müssen unsere Infrastruktur
automatisiert konfigurieren können



Lass uns ein Skript entwickeln



Ich mache das in Bash
Ich in Python
Ich in Ruby
→ Fine!



```
sudo apt-get update  
sudo apt-get install -y php apache2  
sudo service apache start  
...
```

Wer kann Ruby?
Ach, hat uns verlassen...

Configuration Management?

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Configuration Management?

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Ad-Hoc Skripte sind toll !!

- Lohnen sich bei kleinen Skripten
- Sind sehr allgemein
- Können in vielen Sprachen sein



```
sqlplus / as sysdba <<EOF
SELECT instance_name, status FROM v$instance;
SHOW pdbs;
SELECT username, account_status FROM dba_users;
EXIT;
EOF
```

Configuration Management – Ansible

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Ansible + Oracle – Was geht da?

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Ansible + Oracle – Was geht da?

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```
drop user ordix;  
create user ordix identified by ordix;  
grant create session to ordix;  
grant dba to ordix;
```



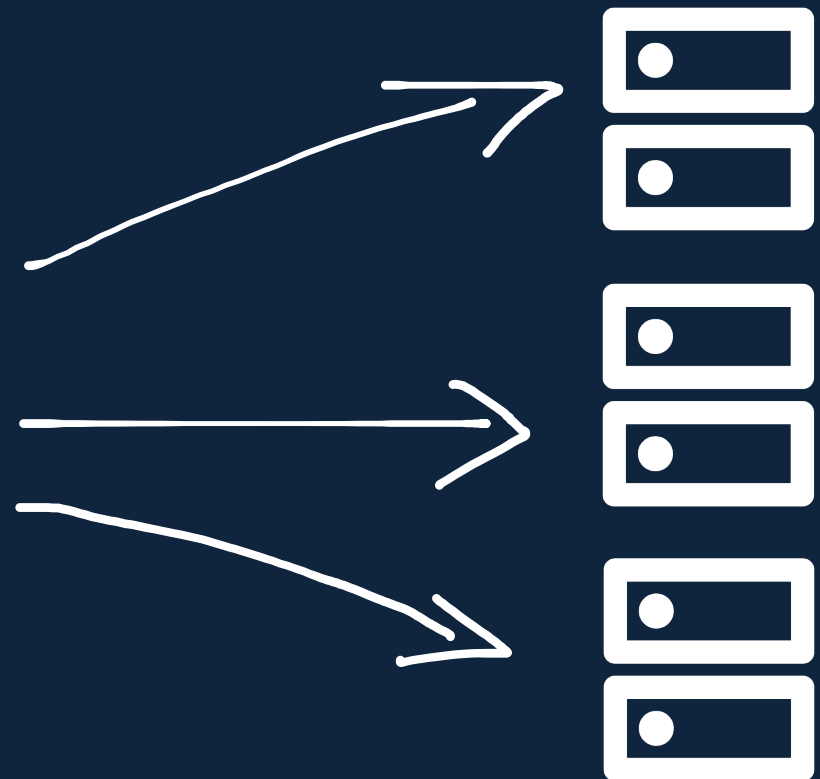
```
- name: Grants für User ordix  
opitzconsulting.ansible_oracle.oracle_grants:  
  hostname: "{{ hostname }}"  
  service_name: pdb1  
  user: sys  
  state: present  
  grants: 'create session, dba'  
  password: ordix  
  schema: ordix  
  mode: sysdb
```

Configuration Management! – Ansible

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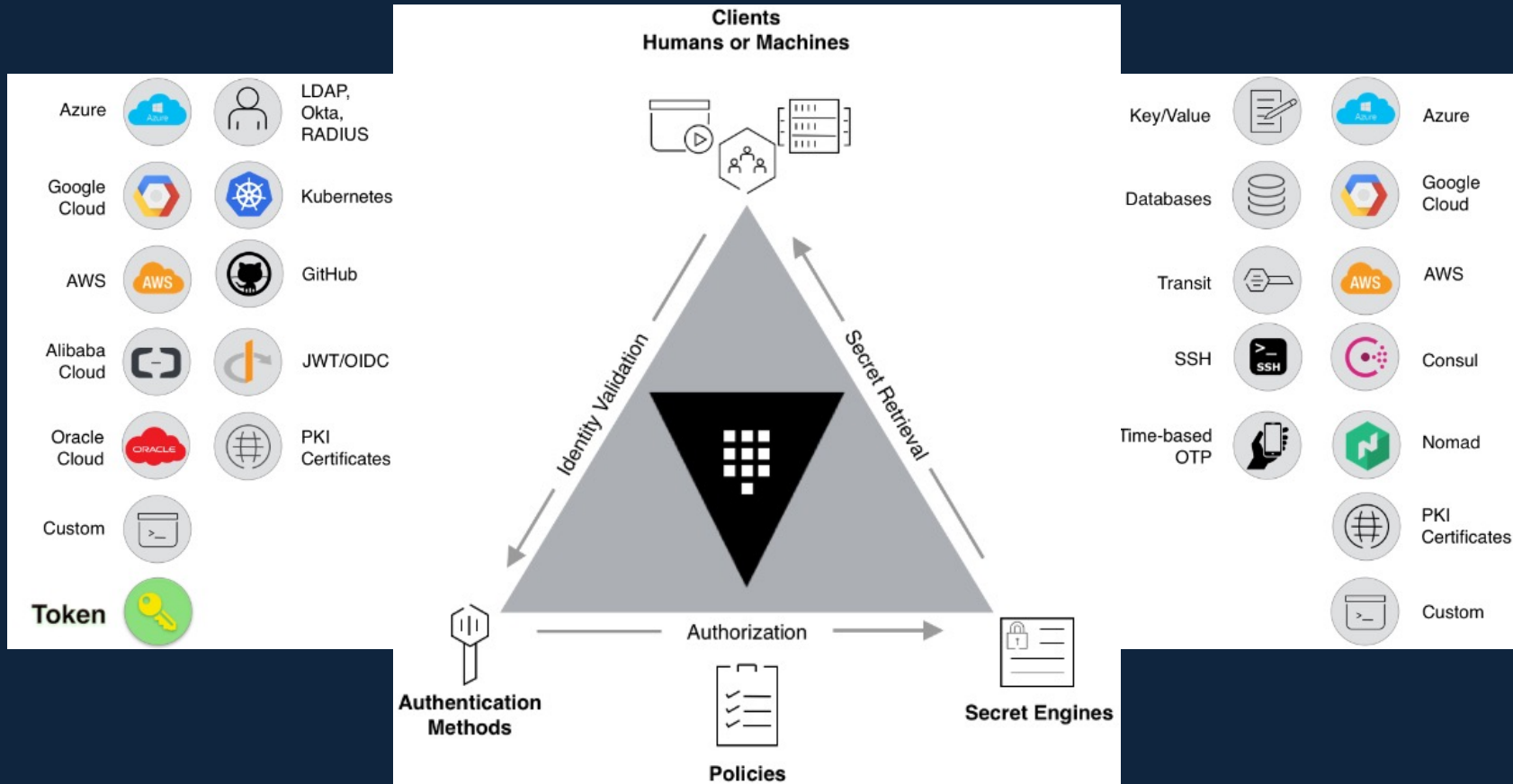
Distribution

```
[ora-21-databases]  
11.11.11.11  
11.11.11.12  
11.11.11.13  
11.11.11.14  
11.11.11.15
```



```
• • •  
- name: Erstelle User ordix  
  opitzconsulting.ansible_oracle.oracle_user:  
    hostname: "{{ hostname }}"  
    service_name: pdb1  
    user: sys  
    state: present  
    password: ordix  
    schema: ordix  
    schema_password: ordix  
    mode: sysdba
```

Exkurs Hashicorp Vault



```
● ● ●  
  
- name: Erstelle User ordix  
  opitzconsulting.ansible_oracle.oracle_user:  
    hostname: "{{ hostname }}"  
    service_name: pdb1  
    user: sys  
    state: present  
    password: ordix  
    schema: ordix  
    schema_password: "{{ lookup('hashi_vault', 'secret=oraclekv/data/engineer token=' + vault_token + ' url=' + vault_url)  
    ['password'] }}"  
    mode: sysdb
```

Was hat uns noch geholfen?

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```
- name: Skripte ausführen
  opitzconsulting.ansible_oracle.oracle_sql:
    hostname: "{{ hostname }}"
    service_name: pdb1
    username: sys
    password: ordix
    script: /home/oracle/scripts/02_prepare.sql
    mode: sysdb
```



Was hat uns noch geholfen?

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```
• • •  
- name: Erstelle Tablespace  
  opitzconsulting.ansible_oracle.oracle_tablespace:  
    hostname: "{{ hostname }}"  
    service_name: pdb1  
    user: sys  
    password: ordix  
    mode: sysdba  
    tablespace: ora2know  
    size: 100M  
    state: present
```

Was hat uns noch geholfen?

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```
• • •  
- name: Oracle DB Facts  
  opitzconsulting.ansible_oracle.oracle_facts:  
    hostname: "{{ hostname }}"  
    service_name: pdb1  
    user: sys  
    password: ordix  
    mode: sysdba  
    register: dbfacts  
  
- debug:  
  var: dbfacts.ansible_facts.database["DB_UNIQUE_NAME"]
```


Ab hier beginnt der Spaß ;)

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```
● ● ●  
  
- name: Erstelle User ordix  
  opitzconsulting.ansible_oracle.oracle_user:  
    hostname: "{{ hostname }}"  
    service_name: pdb1  
    user: sys  
    state: present  
    password: ordix  
    schema: "{{ item.name }}"  
    schema_password: "{{ item.password }}"  
    mode: sysdb  
  loop:  
    - { name: 'ordix', password: 'ordix' }  
    - { name: 'testuser2', password: 'testuser2' }  
    - { name: 'ora2know', password: 'ora2know' }  
    - { name: 'janis', password: 'ax' }  
    - { name: 'oci', password: 'iloveit' }
```

Ab hier beginnt der Spaß ;)

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```
- name: Erstelle User ordix
opitzconsulting.ansible_oracle.oracle_user:
  hostname: "{{ hostname }}"
  service_name: pdb1
  user: sys
  state: present
  password: ordix
  schema: "{{ item.name }}"
  schema_password: "{{ item.password }}"
  mode: sysdb
loop:
- { name: 'ordix', password: 'ordix' }
- { name: 'testuser2', password: 'testuser2' }
- { name: 'ora2know', password: 'ora2know' }
- { name: 'janis', password: 'ax' }
- { name: 'oci', password: 'iloveit' }
```

Idempotence



```
drop user ordix;  
create user ordix identified by ordix;
```



```
- name: Erstelle User ordix  
opitzconsulting.ansible_oracle.oracle_user:  
  hostname: "{{ hostname }}"  
  service_name: pdb1  
  user: sys  
  state: present  
  password: ordix  
  schema: ordix  
  schema_password: ordix  
  mode: sysdba
```

Wo seht ihr Potential?

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Wichtige Links

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GitHub - oravirt



ORDIX Blog zu Oracle



**Vielen Dank für
Ihre Aufmerksamkeit**

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Aktiengesellschaft für
Softwareentwicklung, Schulung,
Beratung und Systemintegration

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bump version v2024.26.1014 -> v2024.27.1015

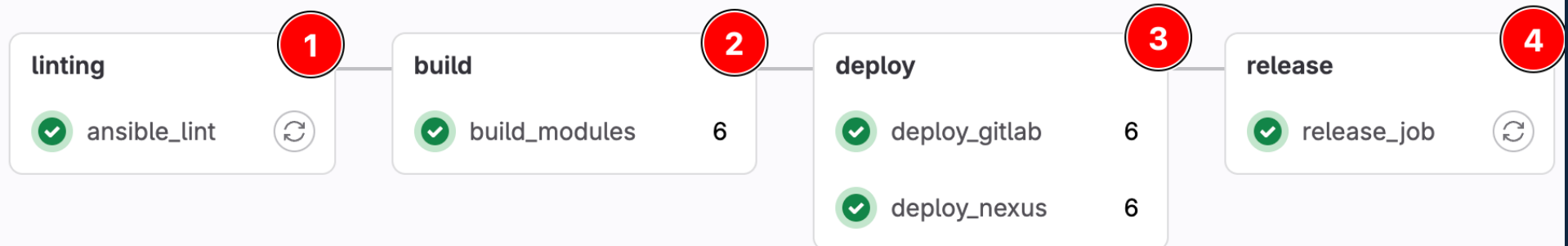
✓ Passed Janis Ax created pipeline for commit `09c95b5b` 2 days ago, finished 2 days ago

For `v2024.27.1015`

latest 20 jobs 2 minutes 16 seconds, queued for 47 seconds

Pipeline Needs Jobs 20 Tests 0

Group jobs by Stage Job dependencies



CI-Pipeline

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