

Create NetBox API Token for Airflow

Introduction

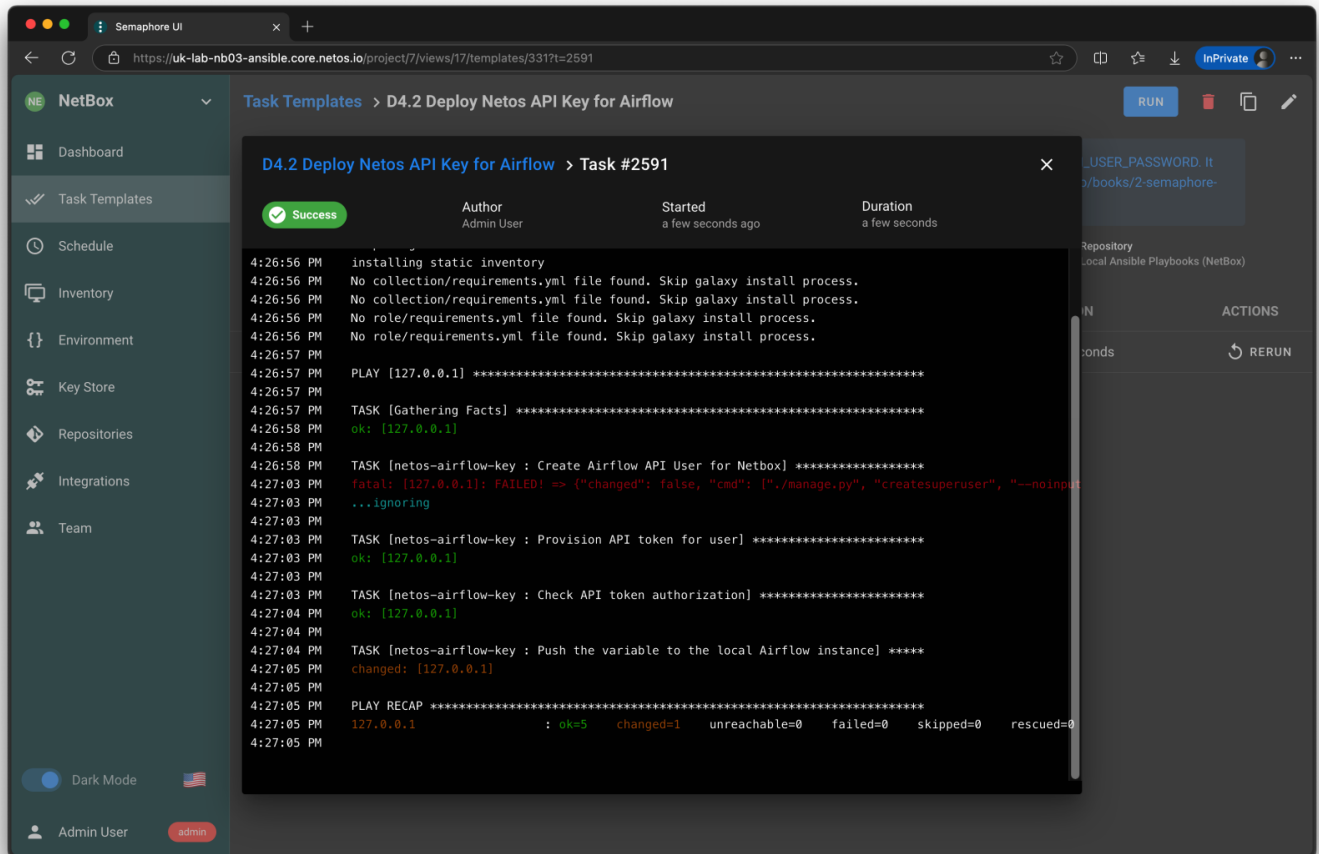
This task will provision an API key in NetBox to allow Netos Pod (Airflow) to pull and push data into NetBox. The playbook will perform the following steps:

1. Create a NetBox user called `airflow_api` with a `superuser` role.
2. Generate an API key for the `airflow_api` user (meaning that any updates from Airflow are clearly attributed to Airflow, i.e. Netos Pod).
3. Configure the `NETBOX_API_KEY` variable in Airflow.

This solution assumes that Airflow is running on the local server. For remotely connected **NetBox <> Netos Pod** configurations, please set the API manually in Airflow.

The Playbook

The "Create API User" task failed because the user exists. In this case it will refresh the token used by Airflow.



Airflow

The NetBox API key is created. If the key is wrong, the Global Orchestration DAG will not start and will show an authentication error in the logs.

A screenshot of the Airflow web interface showing the 'List Variable' page. The browser address bar displays 'https://uk-lab-nb03-airflow.core.netos.io/variable/list/'. The top navigation bar includes 'DAGs', 'Cluster Activity', 'Datasets', 'Security', 'Browse', 'Admin', and 'Docs'. The 'Admin' menu is open, showing options like 'Variables', 'Configurations', 'Connections', 'Plugins', 'Providers', 'Pools', and 'XComs'. The 'Variables' option is highlighted with a red box. The main table lists various variables, with 'NETBOX_API_KEY' highlighted by a red rectangle. The table columns include a checkbox, search, edit, and delete icons, the variable name, its value, and a boolean flag.

| <input type="checkbox"/> | Q E D | ANSIBLE_SERVER_IP_ADDRESS | localhost |
|--------------------------|-------|----------------------------------|---|
| <input type="checkbox"/> | Q E D | ANSIBLE_SERVER_SSH_KEY | /opt/airflow/dag |
| <input type="checkbox"/> | Q E D | ANSIBLE_SERVER_USER | svc_ansible |
| <input type="checkbox"/> | Q E D | API_DEBUG | enabled |
| <input type="checkbox"/> | Q E D | DEFAULT_MAX_DB_ENTRY_AGE_IN_DAYS | 14 |
| <input type="checkbox"/> | Q E D | ELASTIC_API_BASE_URL | http://127.0.0.1:9200/ |
| <input type="checkbox"/> | Q E D | ELASTIC_API_KEY | ***** |
| <input type="checkbox"/> | Q E D | FILE_PATH_GET_JOB_OUTPUT | /opt/airflow/dags/includes/scripts/get-job-output.sh |
| <input type="checkbox"/> | Q E D | FILE_PATH_SIMULATE_JOB_OUTPUT | /opt/airflow/dags/includes/scripts/simulate-job-output.sh |
| <input type="checkbox"/> | Q E D | FILE_PATH_TEST_JOB_OUTPUT | /opt/airflow/dags/includes/scripts/test-job-output.sh |
| <input type="checkbox"/> | Q E D | NETBOX_API_BASE_URL | http://127.0.0.1:8001/ |
| <input type="checkbox"/> | Q E D | NETBOX_API_KEY | ***** |
| <input type="checkbox"/> | Q E D | POD_AIRFLOW_NAME | uk-lab-nb03-airflow |
| <input type="checkbox"/> | Q E D | POD_COMMON_DOMAIN | core.netos.io |
| <input type="checkbox"/> | Q E D | POD_ELASTIC_NAME | uk-lab-nb03-elastic |
| <input type="checkbox"/> | Q E D | POD_IP_AIRFLOW | 127.0.0.1 |
| <input type="checkbox"/> | Q E D | POD_IP_ELASTIC | 127.0.0.1 |
| <input type="checkbox"/> | Q E D | POD_IP_KIBANA | 127.0.0.1 |
| <input type="checkbox"/> | Q E D | POD_IP_NETBOX | 127.0.0.1 |
| <input type="checkbox"/> | Q E D | POD_KIBANA_NAME | uk-lab-nb03-kibana |
| <input type="checkbox"/> | Q E D | SCROLL_PAGE_SIZE | 1500 |
| <input type="checkbox"/> | Q E D | WORKING_DIR | /opt/airflow/dags/ |

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