

NC with Tungsten Fabric Documentation

Blueprint Description

The Network Cloud integration with TungstenFabric blueprint is based on the original code provided by Juniper Networks for the Akraino Network Cloud Blueprint Family. The NC TungstenFabric blueprint supports only a single server deployment (Unicycle) at the moment

The blueprint uses the Network Cloud family tools. It can be deployed from Regional Controller and creates a single server edge site running Openstack with TungstenFabric.

Use Case

The TungstenFabric blueprint is primarily intended to demonstrate the automation and software components used by the Network Cloud family with the minimal hardware or network requirements. This blueprint provide SDN capability provided by TungstenFabric.

Where on the Edge

The TungstenFabric blueprint can be deployed at any location in a network where a single server Openstack service is required to support applications.

Workflow Steps

User clones gerrit repos `nv/tf` and `api-server`, generates `ssh-keypair` and put public key on EdgeSite (it will be used for authorization from Regional Controller).

Then user put private key and deployment script (`deploy.sh`) on web-server. (*web server is not a good way for sharing ssh private key, we use this only for testing and we should use another*

way in future). Then user changes file `setup-env.sh` with appropriate data and generate `yaml` files for edgewiseite, blueprint and load them to Regional Controller `api-server` using `rc_cli` tool.

When edgewiseite and blueprint are created user put their UUIDs to environment variables and generates `POD.yaml` and load to Regional Controller `api-server` using `rc_cli` tool.

API server creates Airflow DAG which goes to the Edgesite host using `ssh-authorization` and run script `deploy.sh` on it. The script runs `airship-ib-the-bottle` deployment.

For more detail information please see:

- [Starting the Regional Controller](#)
- [Object Model / Flow of Operation](#)
- [How to write Blueprints and Workflows](#)
- [How to load objects into the Regional Controller](#)

Workflow Diagram

