

Onboard xApp



Obsolete Note

We are in the process of moving this xApp writing guide to <https://docs.o-ran-sc.org>.

Please refer to [App Writing Guide](#) for latest guide.

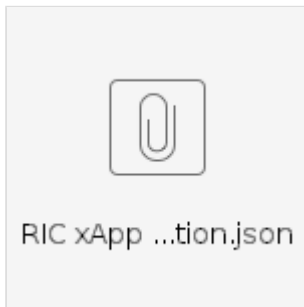
To onboard an xApp, you can utilize either the CLI tool or the REST APIs of xapp onboarder.

Prerequisites

- A working RIC instance. Please refer to "[RIC Installation Guide](#)" for details.
- xApp descriptor JSON file
- Schema JSON file

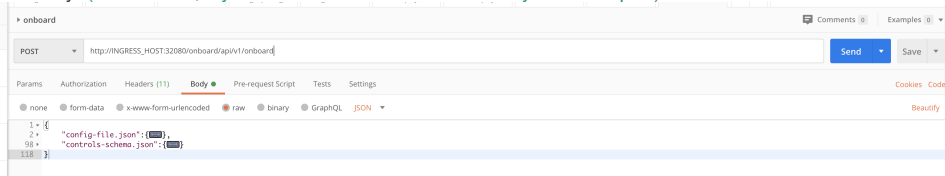
Onboarding using xapp-onboarder REST APIs

1. Find out the ingress IP for your RIC instance. If you deploy RIC using it/dep deployment script, it should be your host(VM)'s IP.
2. We recommend to use postman for rest API calls.
 - Download postman
 - (optional) you can download and import our postman API collection file here. Set ingress_host to the INGRESS IP. ingress_port_http to 32080, xapp_onboard_path to /onboard, and appmgr_path to /appmgr



1. Onboard xApp

- Send a POST request to http://INGRESS_HOST:32080/onboard/api/v1/onboard
- Header Content-Type is application/json
- Body includes two entry:
 - config-file.json: The xapp descriptor JSON. Copy your xapp descriptor file content into the config-file.json section of the body.
 - controls-schema.json: The schema JSON for controls section. Copy the schema file into the controls-schema.json section of the body. (OPTIONAL, if you don't have controls section in your descriptor)



2. (Optional)Download xApp helm chart

- Send a GET request to http://INGRESS_HOST:32080/onboard/api/v1/charts/xapp/<XAPP_NAME>/ver/<XAPP_VERSION>

Onboarding using xapp-onboarder CLI tools

1. Find out the ingress IP for your RIC instance. If you deploy RIC using it/dep deployment script, it should be your host(VM)'s IP.
2. Install xapp-onboarder CLI

```
git clone "https://gerrit.o-ran-sc.org/r/it/dev"
cd dev/xapp_onboarder
pip3 install ./
```

3. Set up the environment variables for CLI connection

```
export CHART_REPO_URL="http://<INGRESS_IP>:32080/helmrepo"

# It should return True if your CLI tool is properly connected to the RIC instance
cli health
```

4. Onboard your xApp. Please refer to [xApp descriptor](#) for preparing for the xApp descriptor

```
# Make sure that you have the xapp descriptor config file and the schema file at your local file system
cli onboard CONFIG_FILE_PATH SHCEMA_FILE_PATH
```

If onboarding fails, the cli will return you messages that indicate where the errors are in the descriptor.

5. (OPTIONAL) Download the xApp helm charts

```
cli download_helm_chart XAPP_CHART_NAME VERSION --output_path=OUTPUT_PATH
```

6. (OPTIONAL) Download the xApp override values.yaml file

```
cli download_values_yaml XAPP_CHART_NAME VERSION --output_path=OUTPUT_PATH
```