**Prerequisites:**

Python 3.6+

PostgreSQL 10+

**Database model:**

id SERIAL PRIMARY KEY,

connection INTEGER,

name VARCHAR(255) NOT NULL,

description VARCHAR(255),

config json,

type VARCHAR(50),

infra\_type VARCHAR(50),

port\_channel\_id INTEGER,

max\_frame\_size INTEGER

**Description:**

You need to extract device interface configuration from config.json file and store relevant data to database. There are 10 BDI, 1 Loopback, 2 Port-channel, 4 TenGigabitEthernet and 3 GigabitEthernet interfaces.

We are interested only in Port-channels and Ethernet interfaces. BDI and Loopback can be ignored for now, but your solution should be able to handle BDI and Loopback in future.

In database we want to fill this fields, other can be null:

***id***

***name***

* interface group name + interface name, for example "TenGigabitEthernet0/0/5"

***description***

* optional, interface description, for example "member of Portchannel20"

***max\_frame\_size***

* optional, mtu from interface configuration

***config***

* whole interface configuration

**p*ort\_channel\_id***

* link Ethernet interfaces to Port-channel. This is defined in configuration by:

"Cisco-IOS-XE-ethernet:channel-group": {

"number": 20,

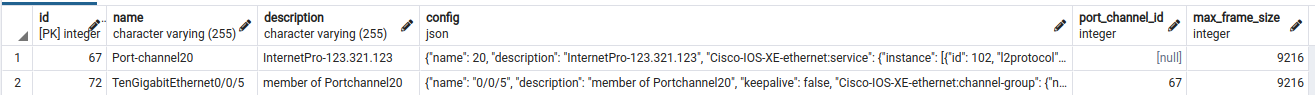
"mode": "active"

}

Upload your solution to git and send a link to tech-review@elisapolystar.com. It should not take you more than two evenings. If you have any questions related to this task, please contact nikoleta.rigova@elisapolystar.com

**Sample result:**

At the end, there should be 9 rows in interface table. For example, Portchannel20 and TenGigabitEthernet0/0/5 should look like:

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