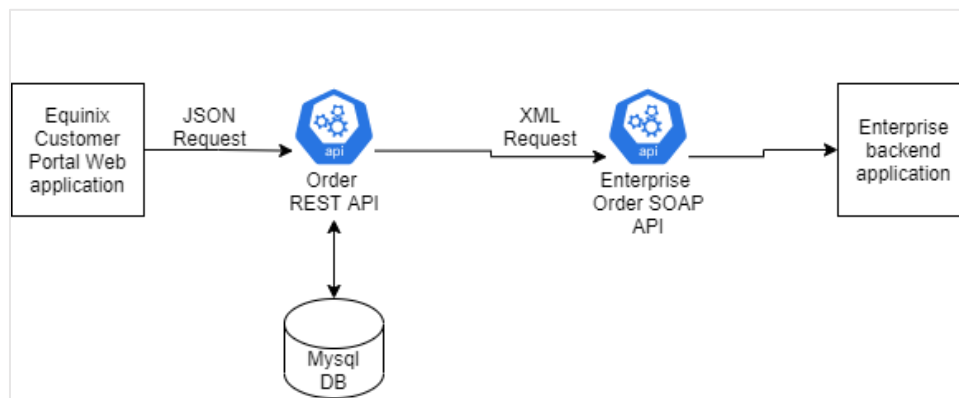# Problem Statement

Equinix Customer Portal is a web application that helps our customers to place order for products and services offered by Equinix and raise trouble tickets to get issues resolved and various other services. The web application needs to integrate with many backend enterprise applications to fulfil these requests placed by our customers. Could you please

1. Build REST API that receives the order submitted (JSON) by customer via the web application and send it to the backend after transforming it to the target systems schema (XML).
   a) The API should return the order number or a reference number to the customer.
   b) The API should be highly available and resilient enough to handle downtimes of the target application.
   c) Deploy the components on docker container

Request Payload:

```
{
    "Orders": {
        "Products": [
            {
                "productType": "troubleticket",
                "productSubType": "troubleTicket",
                "accountName": "COC",
                "accountUCID": "8F94",
                "accountNumber": "123456",
                "quantityRequested": 1,
                "customerFollowUpRequired": false,
                "contacts": {
                    "modifiedContacts": [],
                    "resellerOrderingContacts": [],
                    "orderingContacts": [
                        {
```

```
            "email": "clx@aa.com",
            "firstName": "C COC",
            "lastName": "",
            "workPhone": "+00 123456789",
            "mobilePhone": " ",
            "name": "C COC",
            "userName": "C COC",
            "contactUCID": "11"
        }
    ],
    "technicalContacts": [
        {
            "email": "clx@aa.com",
            "firstName": "C COC",
            "lastName": "",
            "workPhone": "+00 123456789",
            "workPhonePrefToCall": "Yes, anytime.",
            "mobilePhone": " ",
            "mobilePhonePrefToCall": "No.",
            "mobilePhoneTimeZone": "",
            "name": "C COC",
            "userName": "C COC",
            "contactUCID": "11"
        }
    ],
    "notificationContacts": [
        {
            "email": "clx@aa.com",
            "firstName": "C COC",
            "lastName": "",
            "workPhone": " 123456788",
            "mobilePhone": " ",
            "name": "C COC",
            "userName": "C COC",
            "contactUCID": "11"
        }
    ]
},
"attachments": [
    {
        "id": "41b0",
        "name": "底录.png"
    },
    {
        "id": "455a",
```

```json
            "name": "访址.png"
        },
        {
            "id": "bac8",
            "name": "与EQ交换机.png"
        },
        {
            "id": "cf5f",
            "name": "BGP息.png"
        },
        {
            "id": "971a",
            "name": "微软邻.png"
        }
    ],
    "headerAttachments": [],
    "productDetails": {
        "code": "net01",
        "severity": "S1",
        "incidentDateTime": "",
        "callMeFromCage": false,
        "networkTrouble": true,
        "customerTroubleType": "Equinix Fabric",
        "needSupportFromASubmarineCableStationEngineer": false,
        "assetNumber": "1-124235123",
        "productCategory": "Equinix Fabric"
    },
    "ibxTime": "8",
    "ibxLocation": {
        "ibxTime": "8",
        "timezone": "Asia/Hong_Kong",
        "ibx": "HK1",
        "region": "APAC",
        "address1": "HK.",
        "city": "",
        "state": "",
        "country": "Hong Kong",
        "accessRestricted": false,
        "specialPrivilege": false,
        "metro": "HK",
        "cageDetails": []
    },
    "contactUCID": "11",
    "userName": "C COC",
```

```
                "userKey": "22",
                "notes": [
                    {
                        "noteDescription": "您记录，下面是我微软云侧的。",
                        "noteType": "Problem Description"
                    },
                    {
                        "noteDescription": "{L2CONNECTION_UUID=-afb2---}",
                        "noteType": "Problem Description"
                    }
                ]
            }
        ]
    }
}
```

Enterprise App Request XML:

```xml
<?xml version="1.0" encoding="UTF-8"?>
<ShellOrderRequest>
    <productType>troubleticket</productType>
    <productSubType>troubleTicket</productSubType>
    <accountNumber>123456</accountNumber>
    <accountName>COC</accountName>
    <accountUCID>8F94</accountUCID>
    <contactUCID>11</contactUCID>
    <firstName>C COC</firstName>
    <lastName />
    <workPhone>+00 123456789</workPhone>
    <email>clx@aa.com</email>
    <ibx>HK1</ibx>
    <assetNumber>1-124235123</assetNumber>
    <country>Hong Kong</country>
    <region>APAC</region>
    <metro>HK</metro>
    <severity>S1</severity>
    <productCategory>Equinix Fabric</productCategory>
    <networkTrouble>true</networkTrouble>
    <callMeFromCage>false</callMeFromCage>
</ShellOrderRequest>
```

REST API Response:

```xml
<?xml version="1.0" encoding="UTF-8"?>
<tns3:Element xmlns:tns3="http://www.example.com/namespaces/tns/1510862202122">
    <tns3:OrderReferenceId>U-AMER-1992943</tns3:OrderReferenceId>
    <tns3:OrderNumber>1-6598545658</tns3:OrderNumber>
    <tns3:SRNumber />
</tns3:Element>
```