Modeling/etsicatalog Overview
- Catalog & Generic parser service

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CMCC
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Modeling/etsicatalog

• Overview:
  - Modeling/etsicatalog project provides package management service by Micro Service. It can be used to store packages distributed by SDC, which then can be consumed by other projects or components, such as UUI, VF-C, SO, etc. It also includes a TOSCA parser which provides generic parser service.
  - Wiki page: https://wiki.onap.org/display/DW/Etsicatalog+Documentation

• Language:
  - Python3

• Repo:
  - https://gerrit.onap.org/r/#/admin/projects/modeling/etsicatalog

• Usage:
  - as Micro Service
Etsicatalog is a standalone web application based on python3 and Django framework.
Package Management Service

• Provide basic package management function.
  - Package synchronization with SDC Catalog
  - Package Storage for NS/VNF/PNF/Service
  - NSD/VNFD management API align with SOL003/005

• Advantage
  - Unified Storage
  - Unified Management
  - Micro Service
Parser Service

• Fetch package from SDC

```bash
curl -X POST 'http://192.168.235.44:30280/api/catalog/v1/service_packages' \
   -H 'Content-Type: application/json' \
   --data-binary '{
   "csarId": "c4f909f3-b8f3-45eb-bd8d-249934ce300"
}':
```

• Parse package

```bash
curl -X POST 'http://192.168.235.44:30280/api/parser/v1/parser' \
   -H 'Content-Type: application/json' \
   --data-binary '{
   "csarId": "c4f909f3-b8f3-45eb-bd8d-249934ce300",
   "packageType": "Service"
}':
```

Parser result in JSON format
<table>
<thead>
<tr>
<th>Interface Name</th>
<th>Interface Definition</th>
<th>Interface Capabilities</th>
</tr>
</thead>
</table>
| etsicatalogAPIE-1| Catalog API          | Provides catalog management interface:  
|                  | /api/catalog/v1/      | • fetch VNF package from SDC  
|                  |                      | • fetch NS package from SDC  
|                  |                      | • fetch Service package from SDC  
|                  |                      | • search VNF/NS/Service package |
| etsicatalogAPIE-2| NSD Management API   | Provides NSD management interface (Align with ETSI SOL-005)  
|                  | /api/nsd/v1          | • Create NSD Info  
|                  |                      | • Upload NSD  
|                  |                      | • Query NSD Info  
|                  |                      | • Fetch NSD  
|                  |                      | • Delete NSD  
|                  |                      | • Create PNFD Info  
|                  |                      | • Upload PNFD  
|                  |                      | • Query PNFD Info  
|                  |                      | • Fetch PNFD  
|                  |                      | • Delete PNFD  
|                  |                      | • Subscribe & Notify |
## Provided APIs

<table>
<thead>
<tr>
<th>Interface Name</th>
<th>Interface Definition</th>
<th>Interface Capabilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>etsicatalogAPIE-3</td>
<td>VNF Management API /api/vnfpkgm/v1</td>
<td>Provides VNF management interface (Align with ETSI SOL-003)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Create VNF Package Info</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Upload VNF Package</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Query VNF Package Info, include obtaining the VNFD</td>
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<tr>
<td></td>
<td></td>
<td>• Fetch VNF Package</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Fetch VNF Package Artifacts</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Delete VNF Package</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Subscribe &amp; Notify</td>
</tr>
<tr>
<td>etsicatalogAPIE-4</td>
<td>Parser API /api/parser/v1/</td>
<td>Provides Parse interface:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Parse VNF package</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Parse PNF package</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Parse NS package</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Parse Service package</td>
</tr>
<tr>
<td>etsicatalogAPIE-5</td>
<td>Health Check API</td>
<td>Provides Health Check interface.</td>
</tr>
<tr>
<td>Interface Name</td>
<td>Interface Definition</td>
<td>Interface Capabilities</td>
</tr>
<tr>
<td>----------------</td>
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<td>------------------------</td>
</tr>
<tr>
<td>SDCE-6</td>
<td>SDC Interface</td>
<td>An interface to receive resource Templates from SDC design catalog</td>
</tr>
<tr>
<td></td>
<td>api/sdc/v1/catalog</td>
<td>• Get services</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Get single service</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Get resources</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Get single resource</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Fetch CSAR package</td>
</tr>
<tr>
<td>MSBE-1</td>
<td>Micro Service Bus Interface</td>
<td>An interface for registration and discovery with the ONAP Micro Service Bus</td>
</tr>
<tr>
<td></td>
<td>/api/microservices/v1/services</td>
<td>• Register service to MSB</td>
</tr>
</tbody>
</table>
Update in Frankfurt release

- Support SO ETSI Catalog requirements
  - Provides APIs for SO to store ETSI packages
  - Supports the ONBOARDED_PACKAGE directory for the original vendor ETSI package extraction
  - Provides APIs for the SOL003/SOL005 Adapter to retrieve the original vendor VNF packages
  - Provides APIs for the SOL005 Adapter to retrieve the original vendor NS/PNF packages

Wiki page: https://wiki.onap.org/display/DW/ETSI+Alignment+Support
Update in Frankfurt release

• Subscribe and Notify on VNF package
  - Category:
    • VNF Package Onboarding
    • VNF Package Change
  - Limitation:
    • Authentication parameters to configure the use of Authorization when sending notifications corresponding to this subscription is provided in the payload, however is not supported by now.
    • There are 3 filters provided in subscription request: VnfPackage's vnfId / vnfPkgId / vnfProductsFromProviders
VNF Package Onboarding

curl -X POST
http://{(baseUrl}}/api/vnfpkgm/v1/subscriptions
-H 'Content-Type: application/json'
-d '{
  "filters": {
    "notificationTypes": [
      "VnfPackageOnboardingNotification"
    ],
    "vnfdId": [
      "uuid_vnfd_id"
    ],
    "callbackUri": "http://www.vnfl.com/notification",
    "authenticate": "BASIC",
    "paramsBasic": {
      "username": "admin",
      "password": "admin123"
    }
  }
}

Upload VNF package content

Test notification endpoint

Create a new subscription

Filter Subscriptions

Upload VNF package content

Put /VNF Package Onboarding

Get /VNF Package Onboarding

Post /VNF Package Onboarding

PUT /VNF Package Onboarding
VNF Package Change

curl -X POST
http://{{baseUrl}}/api/vnfpkgm/v1/subscriptions
-H 'Content-Type: application/json'
-d '{
    "filters": {
        "notificationTypes": [
            "VnfPackageChangeNotification"
        ],
        "vnfdId": [
            "uuid_vnfId"
        ]
    },
    "callbackUri": "http://www.vnfl.com/notification",
    "authentication": {
        "authType": [
            "BASIC"
        ],
        "paramsBasic": {
            "userName": "string",
            "password": "string"
        }
    },
    "subscriptionId": "subscription_id",
    "changeType": "OPER_STATE_CHANGE",
    "operationalState": "ENABLED",
    "_links":{
        "subscription":{
            "href": "http://subscriptionuri",
        },
        "vnfPackage":{
            "href": "http://vnfPackageuri"
        }" 
    }
}'}
Update in Frankfurt release

• Update Python
  • Python2 -> Python3
  • Update other depended third-party Libraries to corresponding version

• Resolve Vulnerability Issue
  • Update Django version
  • Update djangorestframework

• Support HTTPS
THANK YOU