

Oracle® Communications Unified Inventory Management

What's New

Release 7.3.5

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This document describes the new features that are delivered in Oracle Communications Unified Inventory Management (UIM) 7.3.5.1.

The document includes information about the following topics:

- [UIM 7.3.5.1 New Features](#)
- [Network Service Orchestration 7.3.5.1 New Features](#)

UIM 7.3.5.1 New Features

This section provides information about the new features introduced in UIM 7.3.5.1.

Integration with Oracle Communications MetaSolv Solution to Support Multipoint Carrier Ethernet Services

This enhancement includes a reference implementation that enables you to integrate Oracle Communications Unified Inventory Management (UIM) with Oracle Communications MetaSolv Solution (MSS) to enhance the existing capabilities of MSS to order and design multipoint services, specifically Carrier Ethernet services.

In this reference implementation, UIM enhances the existing capabilities of MSS by providing the following features:

- Support for Carrier Ethernet services, such as E-LAN, E-Tree, E-Access, and E-Line
- A data model that conforms to Metro Ethernet Forum (MEF) Carrier Ethernet 2.0 standards
- VLAN ID lifecycle management
- Logical device management
- Support for designing virtual networks (service networks and multipoint EVCs)
- Design-and-assign logic for service orchestration
- Federation framework to integrate external systems

The reference implementation uses a cooperative design approach that facilitates rapid creation of the Carrier Ethernet service. The provisioning flow of the service order is as follows:

- MSS captures the order information for the Carrier Ethernet (multipoint EVC) service and creates a provisioning plan.
- MSS shares the order information and service fulfillment data with UIM using web services submitted via MSS custom extensions.

- UIM creates a service and designs the service configuration with the resource assignments and displays this information within MSS. You can modify the service design by navigating directly to UIM from within the MSS application.

In this reference implementation, the physical connectivity, equipment, port assignments, and resource network continue to reside within the MSS inventory. Additional entities for service, service and packet virtual networks, service connectivity, logical devices, and VLAN IDs are managed within UIM, and are used in the service design process. The network entities, such as end user locations (service locations) and network locations are shared between UIM and MSS.

For detailed instructions about installing the required software, setting up UIM and MSS, and integrating UIM with MSS for the reference implementation, see Knowledge Article 2243408.1 on the My Oracle Support website:

<https://support.oracle.com>

Network Service Orchestration 7.3.5.1 New Features

This section provides information about the following new features introduced in Network Service Orchestration 7.3.5.1:

- [Forwarding Graphs Visualization](#)
- [Importing TOSCA Descriptor Templates from an External Repository into Design Studio](#)
- [New RESTful API Requests](#)

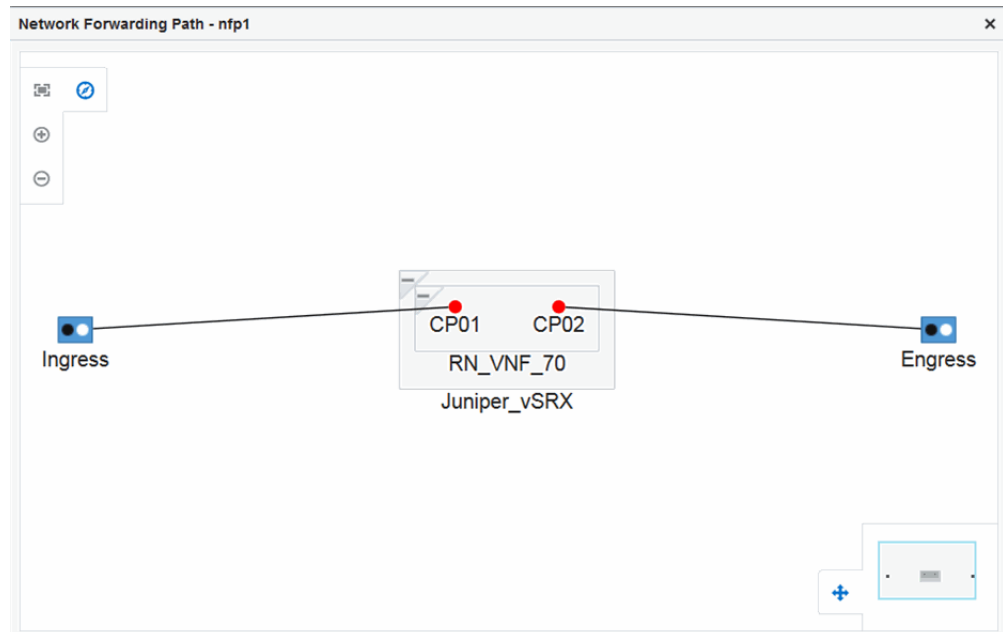
Forwarding Graphs Visualization

The Network Service Summary page now includes the new **Forwarding Graphs** tab. This tab contains the Forwarding Graph Hierarchy section that displays a list of all the VNF forwarding graphs (VNFFGs) in a network service. Click the triangle icon beside a VNFFG to view a list of network forwarding paths (NFPs) included in that VNFFG. The NFPs are shown as links. Clicking the link of an NFP opens the new Network Forwarding Path page that displays a read-only visualization (schematic view) of that NFP.

In the Network Forwarding Path page, click the plus sign (+) to expand the VNF and its connection points. After the VNF and its connection points are expanded, click the minus sign (-) to collapse them.

[Figure 1](#) shows a network forwarding path visualization that includes ingress, egress, a VNF, and the VNF connection points.

Figure 1 Network Forwarding Path Visualization



Importing TOSCA Descriptor Templates from an External Repository into Design Studio

You can now import the TOSCA VNF descriptor templates and TOSCA network service descriptor templates from an external repository into Design Studio. The external repository must be publicly accessible, which allows you to access it without authentication.

To import the TOSCA VNF descriptor templates and TOSCA network service descriptor templates from an external repository into Design Studio:

1. In Design Studio, from the **Studio** menu, select **Show Design Perspective**.
2. Click the **Studio Projects** tab.
The Studio Projects view appears.
3. In the Studio Projects view, right-click and select **Import**, and then select **Import TOSCA Template**.
The Import TOSCA Template dialog box appears.
4. Enter the URL of the external repository where the TOSCA VNF descriptor templates and TOSCA network service descriptor templates in YAML format are located, and click **OK**.

Design Studio creates the VNF cartridge project or the network service cartridge project with the required specifications.

New RESTful API Requests

Network Service Orchestration 7.3.5.1 includes the following new RESTful API requests:

- [Get NFP](#)
- [Create Classifier](#)
- [Delete Classifier](#)

Get NFP

Retrieves the details of network forwarding paths (NFPs) in a network service.

Method

GET

URL

`http://nso_host:port/ocnso/1.1/ns/networkServiceId/nfps`

where:

- *nso_host* is the name of the host on which Oracle Communications Unified Inventory Management (UIM) is installed
- *port* is the port number of the machine on which UIM is installed
- *networkServiceId* is the identifier of the network service

Sample Request

This API does not require any request parameters.

Sample Response

```
{
  "status": "SUCCESS",
  "code": "202",
  "data": [
    {
      "name": "nfp1",
      "id": "7f8a6e43-b99b-4b55-8d57-c6024abc07ba",
      "vnffgName": "vnffg1",
      "forwrdingPolicy": "SYMMETRIC",
      "ingressEP": {
        "name": "Service_EP1",
        "ingress": {
          "id": "bca938af-4a5f-4d6f-a74e-38f52d1f1f81",
          "name": "CP112"
        }
      }
    },
    "vnfs": [
      {
        "name": "INGRESS_Cirros_A_VNF_150113",
        "type": "Cirros_A_VNF",
        "ingress": {
          "id": "bca938af-4a5f-4d6f-a74e-38f52d1f1f81",
          "name": "CP112"
        },
        "egress": {
          "id": "174c480d-c36a-450b-b18d-ac4c085d4875",
          "name": "CP113"
        }
      }
    ],
  ]
}
```

```

    "name": "INGRESS_Cirros_C_VNF_150119",
    "type": "Cirros_C_VNF",
    "ingress": {
      "id": "34925c8d-c5e6-4394-b40f-01c18d710a62",
      "name": "CP312"
    },
    "egress": {
      "id": "0ead4a65-30dd-42f2-ae9e-00ff7e6688b2",
      "name": "CP313"
    }
  },
  {
    "name": "INGRESS_Cirros_D_VNF_150115",
    "type": "Cirros_D_VNF",
    "ingress": {
      "id": "0332a2a0-b35a-468c-b2bf-e60971362da7",
      "name": "CP412"
    },
    "egress": {
      "id": "8b01a300-768d-480d-8726-2af41d1d2839",
      "name": "CP413"
    }
  }
],
"egressEP": {
  "name": "Service_EP3",
  "egress": {
    "id": "8b01a300-768d-480d-8726-2af41d1d2839",
    "name": "CP413"
  }
}
},
{
  "name": "nfp2",
  "id": "d3d6a2b8-4afe-4626-8608-d8d223d4324e",
  "vnffgName": "vnffg1",
  "forwrdingPolicy": "SYMMETRIC",
  "ingressEP": {
    "name": "Service_EP1",
    "ingress": {
      "id": "bca938af-4a5f-4d6f-a74e-38f52d1f1f81",
      "name": "CP112"
    }
  }
},
"vnfs": [
  {
    "name": "INGRESS_Cirros_A_VNF_150113",
    "type": "Cirros_A_VNF",
    "ingress": {
      "id": "bca938af-4a5f-4d6f-a74e-38f52d1f1f81",
      "name": "CP112"
    },
    "egress": {
      "id": "174c480d-c36a-450b-b18d-ac4c085d4875",
      "name": "CP113"
    }
  }
],
{
  "name": "INGRESS_Cirros_D_VNF_150115",

```

```

        "type": "Cirros_D_VNF",
        "ingress": {
            "id": "0332a2a0-b35a-468c-b2bf-e60971362da7",
            "name": "CP412"
        },
        "egress": {
            "id": "8b01a300-768d-480d-8726-2af41d1d2839",
            "name": "CP413"
        }
    },
    "egressEP": {
        "name": "Service_EP3",
        "egress": {
            "id": "8b01a300-768d-480d-8726-2af41d1d2839",
            "name": "CP413"
        }
    }
},
{
    "name": "nfp3",
    "id": "37b2b755-e22a-4d2c-b392-7ae9c0bce21e",
    "vnffgName": "vnffg2",
    "forwrdingPolicy": "SYMMETRIC",
    "ingressEP": {
        "name": "Service_EP2",
        "ingress": {
            "id": "67e864e8-b38d-4686-ac92-90359174273c",
            "name": "CP212"
        }
    }
},
"vnfs": [
    {
        "name": "INGRESS_Cirros_B_VNF_150111",
        "type": "Cirros_B_VNF",
        "ingress": {
            "id": "67e864e8-b38d-4686-ac92-90359174273c",
            "name": "CP212"
        },
        "egress": {
            "id": "14df75b6-2f63-49dc-84d4-3e0efea44c0e",
            "name": "CP213"
        }
    },
    {
        "name": "INGRESS_Cirros_C_VNF_150119",
        "type": "Cirros_C_VNF",
        "ingress": {
            "id": "34925c8d-c5e6-4394-b40f-01c18d710a62",
            "name": "CP312"
        },
        "egress": {
            "id": "0ead4a65-30dd-42f2-ae9e-00ff7e6688b2",
            "name": "CP313"
        }
    },
    {
        "name": "INGRESS_Cirros_E_VNF_150117",
        "type": "Cirros_E_VNF",

```

```

    "ingress": {
      "id": "28ef2fcd-081c-454e-acb6-e3cefd629d63",
      "name": "CP512"
    },
    "egress": {
      "id": "6f1efd8d-6e5a-42e6-91d3-89b83841369e",
      "name": "CP513"
    }
  },
  "egressEP": {
    "name": "Service_EP4",
    "egress": {
      "id": "6f1efd8d-6e5a-42e6-91d3-89b83841369e",
      "name": "CP513"
    }
  }
},
{
  "name": "nfp4",
  "id": "79d726fe-e68f-4fce-bd9b-5f445cad9dff",
  "vnffgName": "vnffg2",
  "forwrdingPolicy": "SYMMETRIC",
  "ingressEP": {
    "name": "Service_EP2",
    "ingress": {
      "id": "67e864e8-b38d-4686-ac92-90359174273c",
      "name": "CP212"
    }
  },
  "vnfs": [
    {
      "name": "INGRESS_Cirros_B_VNF_150111",
      "type": "Cirros_B_VNF",
      "ingress": {
        "id": "67e864e8-b38d-4686-ac92-90359174273c",
        "name": "CP212"
      },
      "egress": {
        "id": "14df75b6-2f63-49dc-84d4-3e0efea44c0e",
        "name": "CP213"
      }
    },
    {
      "name": "INGRESS_Cirros_E_VNF_150117",
      "type": "Cirros_E_VNF",
      "ingress": {
        "id": "28ef2fcd-081c-454e-acb6-e3cefd629d63",
        "name": "CP512"
      },
      "egress": {
        "id": "6f1efd8d-6e5a-42e6-91d3-89b83841369e",
        "name": "CP513"
      }
    }
  ]
},
"egressEP": {
  "name": "Service_EP4",
  "egress": {

```

```

        "id": "6f1efd8d-6e5a-42e6-91d3-89b83841369e",
        "name": "CP513"
    }
}
]
}

```

Create Classifier

Creates a classifier for a specific policy in the network service.

Method

POST

URL

`http://nso_host:port/ocnso/1.1/ns/networkServiceId/flow-classifier`

where:

- *nso_host* is the name of the host on which UIM is installed
- *port* is the port number of the machine on which UIM is installed
- *networkServiceId* is the identifier of the network service

Sample Request

```

{
  "policyName": "standard"
}

```

Sample Response

```

{
  "status": "SUCCESS",
  "code": "200",
  "message": "[INV-432008] Classifier(s) created successfully for the policy standard.",
  "data": "[INV-432008] Classifier(s) created successfully for the policy standard."
}

```

Delete Classifier

Deletes an existing classifier for a specific policy in the network service.

Method

DELETE

URL

`http://nso_host:port/ocnso/1.1/ns/networkServiceId/flow-classifier`

where:

- *nso_host* is the name of the host on which UIM is installed
- *port* is the port number of the machine on which UIM is installed
- *networkServiceId* is the identifier of the network service

Sample Request

```
{
  "policyName": "standard"
}
```

Sample Response

```
{
  "status": "SUCCESS",
  "code": "200",
  "message": "[INV-432008] Classifier(s) deleted successfully for the policy standard.",
  "data": "[INV-432008] Classifier(s) deleted successfully for the policy standard."
}
```

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