Customer Configuration

Configure Network Device List

A Network Device List (NDL) is a list of network devices that are assigned to a Site. An NDL can contain one instance each of Cisco HCM-F, Cisco Unified Communications Manager, Cisco Unity Connection, and Cisco WebEx. Only Cisco HCM-F is required.

NDLs can be defined only at the Customer hierarchy level. A customer can have multiple NDLs defined.

NDLs can be defined only by a Provider or Reseller admin.

The HCM-F device is pre-populated in the NDL and should not be changed.

Shared UC Applications (that is, UC Applications that are defined above the Customer hierarchy level) can be included in an NDL. However, to use that NDL, the customer must be defined as allowing Shared UC Applications.

Once an NDL is assigned to any Site, the **only** supported modifications are:

- Network Device List Name can be changed.
- Network Device List Description can be changed.
- New devices can be added.

An NDL cannot be deleted if it is assigned to any Site.

Note
- Unified Communications application clusters are not linked to the customer until the Network Device list has been created.
- Only publisher nodes are shown in the dropdown list for Cisco Unified Communications Manager and Cisco Unity Connection.

Procedure

Step 1 Log in to as a provider admin or reseller admin.

Step 2 Click **Customer Management** > **Network Device Lists**. Select a customer on the hierarchy tree where the Network Device List (NDL) is to be created.

Step 3 Click **Add**.

Step 4 Enter a name for the NDL and optionally a description.

Step 5 Click the **+** next to Cisco Unified CM.

Step 6 Select the Cisco Unified Communications Manager instance from the dropdown menu.

Step 7 (Optional) Add Cisco Unity Connection and Cisco WebEx instances to the NDL.

Step 8 Click **Save**.

Network Device List Selection Rules

If an administrator at a hierarchy has access to more than one Network Device List (NDL), the option to choose a specific hardware group or list may be needed in order to provision a set of devices. The Network Device List Reference (NDLR) does not offer such a choice.

The Rule Model Device Selection Type model provides a solution to this problem and instances of it are a set of rules for views and relations at a hierarchy level. A particular NDL can then be selected from a pop-up form before the Add form of these model types are shown. In this way the administrator can then select the specific required NDL.

When an instance of the Rule Model Device Selection Type model is added, the target relation or view is specified and more than one a set rules can be added for it - one for each relevant Hierarchy Node Type.

In addition, a Default GUI Rule that is applied to the Relation or View is reflected as the Default value for the Permitted Hierarchy Node Type.

In addition to this behavior, the following rules apply:

- The NDL popup is only available for Relations and Views.

- Device form fields will be filtered according to the device listed in the selected NDL.

- More than one type of device is supported for the selected NDL.

- Any Provisioning Workflow Network Device Filters (NDF) override a selected NDL device choice.

- Only the Add operation supported.

- NDL popups are controlled by GUI Rules at hierarchy levels for model types. The device selection given GUI Rules, NDLs, NDLRs and Device Selection Rules are shown in the table below.

GUI Rule	NDL(s)	NDLR	Use Popup	Use NDLR	Expected Result
N	N	N	*	*	Normal Device selection

GUI Rule	NDL(s)	NDLR	Use Popup	Use NDLR	Expected Result
N	Y	N	*	*	Normal Device selection
N	Y	Y	*	*	NDLR is used as target device
Y	Y	N	N	N	Normal Device selection and overrie with NDF in work-flows
Y	Y	Y	Y	N	Pop up list of NDLs
Y	Y	Y	Y	Y	Pop up list with NDLR as only option
Y	Y	N	Y	Y	Pop up an empty list with NDLR missing message
Y	N	N	N	N	Normal Device selection and override with NDF in work-flows
Y	Y	Y	N	N	NDLR is used as target device
Y	Y	Y	N	Y	NDLR is used as target device
Y	Y	N	Y	N	Pop up list of NDLs (Most popular option)

The Rule Model Device Selection Type model also provides the following functionality:

- The NDL device meta is available to the context in Provisioning Workflows. For example:

```
"device_meta": {
"ndl": {
"name": "NDL1",
"pkid": "54dc76c82afa4327de0d218e",
"data/CallManager": {
"pkid": "54dc76c72afa4327de0d217f",
"bkey": "[\"10.120.2.175\", \"8443\", \"P.C\"]"
},
```

```
"bkey": "[\"NDL1\", \"P.C\"]",
"data/UnityConnection": {
"pkid": "54dc76be2afa4327de0d210b",
"bkey": "[\"172.29.41.72\", \"443\", \"P.C\"]"
}
}
}
```

- NDL device meta namespace device_meta is available in macros as: {{ device_meta.???}}, for example:

```
device_meta.ndl.name
device_meta.ndl.data/CallManager.pkid
```

- The [ndl] macro is available for use in GUI Rules - similar to [hierarchy].

- An API parameter is available for the selected NDL when a GET request is sent for the Add form of a Relation. The value of [ndl] in the example below will be a valid PKID for the NDL. For example:

```
GET /api/v0/relation/UswerCucmCucRel/add/?
hierarchy=[hierarchy]&
ndl=[ndl]&
schema=true&
schema_rules=true
```

This parameter will be transformed in the subsequent Add calls to devices to a device parameter.