

OMT Bootcamp

Catalog Versioning

Time: 15 minutes

ServiceNow Telecom, Media, and Technology (TMT)

Table of contents

Lab instance credentials 3

Lab objectives 3

Scenario 3

Personas 3

Section 1 Product Offering version management..... 4

 Section 1.1 Create a new Offering version 4

 Section 1.2 Place a Product Order for the new Offering version 7

 Section 1.3 Retire an Offering Version 8

Section 2 Service Specifications version management & Working with Order APIs 10

 Section 2.1 Create a new Service Specification 10

 Section 2.2 Create a new Service Specification 11

 Section 2.3 Submit TMF641 Service Orders for different versions 13

Section 3 Catalog Open APIs 17

 Section 3.1 Query Specification 17

Lab instance credentials

Field	Value
Username	admin
Password	As provided with your lab instance / Magic link

Lab objectives

You will achieve the following objectives:

- Understand the Catalog Versioning feature.

Scenario

In this lab, students will configure the Catalog entities to create new versions and submit orders to validate the Catalog Versioning behavior.

Personas

- James Smithson, Product Catalog Manager
- Mike Davis, Order Fulfilment Manager
- System Admin

Section 1 Product Offering version management

Section 1.1 Create a new Offering version.

1. Impersonate **James Smithson**, the *Product Catalog Manager*.
 - Select the **System Administrator profile photo** to open the user menu.
 - Select **Impersonate User**.
 - In the impersonate user dialogue box, search for, and select **James Smithson**.
 - Select **Impersonate user**.
2. Navigate to **Workspaces > CSM/FSM Configurable Workspace**.
3. Click on the **List** view icon and **navigate** to '**Product Offerings**' from under the Offerings List group.
4. Click to open the Product Offering '**Premium Home Internet starting from \$29**' by clicking on the PRDOFxxx number.

All				
▼ Specifications	<input type="checkbox"/>	PRDOF00002	All in one mobile plan starting from \$39/month	1 Mobile Plan
Specification Category	<input type="checkbox"/>	PRDOF00003	All in one mobile plan starting from \$49/month	1 Mobile Plan
Product Specifications	<input type="checkbox"/>	PRDOF00004	Premium SD-WAN Offering	1 SD-WAN Service Package
Service Specifications	<input type="checkbox"/>	PRDOF00005	SD-WAN Gold Plan	1 SD-WAN Service Package
Resource Specificatio...	<input type="checkbox"/>	PRDOF00006	SD-WAN Bronze Plan	1 SD-WAN Service Package
▼ Offerings	<input type="checkbox"/>	PRDOF00007	Premium SD-WAN Offering v2	2 SD-WAN Service Package v2
Product Offering Cat...	<input type="checkbox"/>	PRDOF00100	Premium Home Internet starting from \$29	1 Home Internet
Product Offerings	<input type="checkbox"/>	PRDOF00201	Premium Connected Navigation - Single Tenant	1 Connected Vehicle
▼ Compatibility Rule	<input type="checkbox"/>	PRDOF00402	Business Broadband Gold Plan	1 Ethernet Edge Device
Compatibility Rule				
▼ Customer				
Accounts				
Contacts				

5. Notice the current **version** and **state** of the Offering.
 - a. Is the version = 1?
 - b. Is the State = Published?

≡ List Premium Home I... x

Premium Home Internet starting from \$29

Details Catalog Hierarchy Product Offering Charac... (2) Product Visuals Versions (1) Related Contracts

Product Offering

Number PRDOF00100 State Published

Name * Premium Home Internet starting from \$29 Distribution channel * Web Mobile

Version 1 Start date * 2022-10-07

6. Click on the **Create New Version** action button in the top right of the canvas.

≡ List Premium Home I... x

Premium Home Internet starting from \$29

Details Catalog Hierarchy Product Offering Charac... (2) Product Visuals Versions (1) Related Contracts

Product Offering

Number PRDOF00100 State Published

Attachments

7. Notice the State and Version

- c. Has the version incremented to 2?
- d. Is the State = Draft?

8. Update the following fields –

- e. **Name = Demo Internet Offer**
- f. **Display Name = Demo Internet Offer**

9. Navigate to the **Product Offering Characteristics** list sub-tab.

- g. For the characteristics **Usage Type** and value **Email and Browsing**, under the **'Customer Input Required'** column double click in the white space next to the value of **false**.
- h. Change the value to **true** and click OK.

HomePremium Home I... x

DetailsDemo Internet ... xDemo Internet ... x

Demo Internet Offer v3

DetailsCatalog HierarchyProduct Offering Charac... (2)Product VisualsVersions (3)Related Contracts

Product Offering Characteristics 2

last refreshed 39m ago

Characteristic	Characteristic option	Specification	Customer input required	Monthly
Usage Type	Email and Browsing	Home Internet	false	
Usage Type	Gaming and Streaming	Home Internet	<div><div>false</div><div>✓ false</div><div>true</div></div>	

- i. Repeat the same for the value 'Gaming and Streaming'.
- j. Similarly, change the value under Default from false to **true** for one of the Characteristic options.

HomePremium Home I... x

DetailsDemo Internet ... xDemo Internet ... x

Demo Internet Offer v3

DetailsCatalog HierarchyProduct Offering Charac... (2)Product VisualsVersions (3)Related Contracts

Product Offering Characteristics 2

last refreshed 42m ago

RefreshResetNew

PublishCopySave

Characteristic	Characteristic option	Specification	Customer input required	Monthly recurring charges	Non recurring charges	Order	Mandatory	Default
Usage Type	Email and Browsing	Home Internet	true	\$0.00	\$0.00		false	true
Usage Type	Gaming and Streaming	Home Internet	true	\$0.00	\$0.00		false	false

10. Click on **Publish**.
- k. Observe the **state** changes to 'Published'.

Section 1.2 Place a Product Order for the new Offering version

1. Impersonate another user as **Mike Davis**, the fulfilment manager.
2. Navigate to **Workspaces > CSM/FSM Configurable Workspace**.
3. Click on **Lists** and navigate to **Customer Orders > All**.
 - a. Click on the Number column to make the view descending (optional)
4. Click on the **New** action button and select '**Order a new product**' and click **Create**.
5. Select **Account** and **Contact**, followed by **Location** via the guided steps.
6. On the Select Products step, select the newly created '**Demo Internet Offer**' and click on **Configure Items**.
7. Under the **Characteristic** tab, observe the **Usage Type** characteristic with the default value set in the previous section.
8. Click on **Review** and **Submit** the Order.
9. **Approve** the Order.
10. Open the Order and **navigate** to the **Order Line-Item** sub-tab and click open the record.
 - a. Observe the Product Specification made available via the Offer is **Home Internet**.

The screenshot displays the 'Order Line Item' form for record ORD0001018. The form is organized into a grid with various fields. The 'Product offering' field is set to 'Demo Internet Offer' and the 'Product specification' field is set to 'Home Internet'. Both fields are highlighted with green dashed boxes. Other visible fields include 'Number' (ORD0001018), 'Account' (Omega Communications), 'Order *' (ORD0001019), 'Order type *' (Product), 'Parent line item' (—), 'State' (New), 'Location' (Fidelity Investments), 'Priority' (4 - Low), and 'Ordered quantity'.

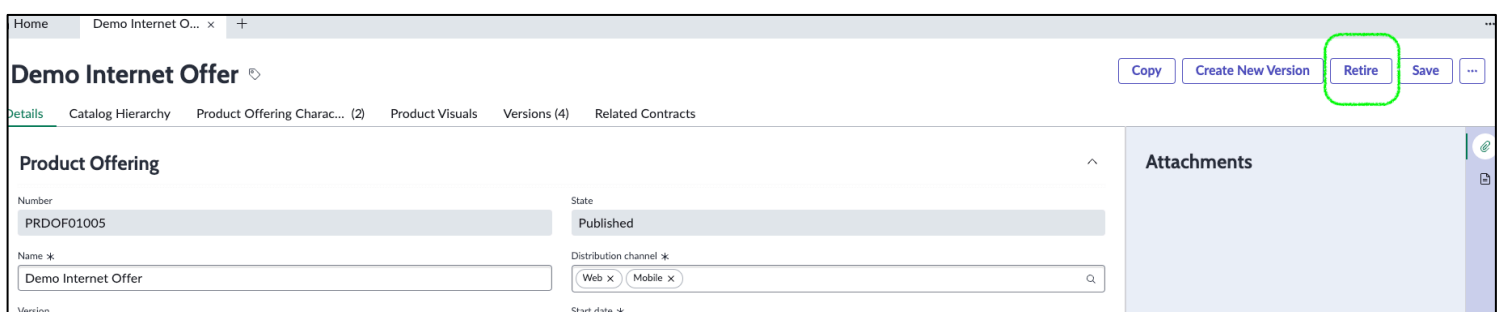
11. Navigate to **Order Line Item > Order Tasks** and close each of the Domain Orders in the following sequence by clicking open them and using the **Close** button.

- a. Resource Order for DSL Modem
- b. Service Order for DSL Access Service
- c. Service Order for Broadband Service
- d. Product Order for Home Internet

12. The Order Line Item and Order moves to **Completed** state.

Section 1.3 Retire an Offering Version

1. **End Impersonation** and continue as **System Admin**.
2. Navigate to **Workspaces > CSM/FSM Configurable Workspace**.
3. Click on the **List** view icon and **navigate** to '**Product Offerings**' from under the Offerings List group.
4. Click to open the Product Offering '**Demo Internet Offer**' that was created in the last sections.
5. Click on **Retire** to transition the Offering from Published to Retired state.



6. Observe the State gets updated to '**Retired**' state.
7. Continue as System Admin and navigate to **Lists > Customer Order > All**
8. Create a **new Product Order**.
 - a. Notice you do not get the Offering that was retired in the selection list on the Select Products step.

-
- b. Abandon the order at this step.
9. Create a **new Product Order** but select the type as '**Change a Product**'.
 10. Select the same Account/Contact.
 11. **Observe**, the Product Inventory shows the record for the Product Offering that has been retired.
 12. **Validate** you can submit an order for the inventory record, by changing the Usage Type characteristic value.

Section 2 Service Specifications version management & Working with Order APIs

In this section, we will create a Service Specification by copying an existing specification and create one or more versions of it. Using this, we will submit orders via the TMF641 Service Order API.

Section 2.1 Create a new Service Specification

1. Impersonate **James Smithson**, the *Product Catalog Manager*.
2. Navigate to **Workspaces > CSM/FSM Configurable Workspace**.
3. Click on the **List** view icon and **navigate** to '**Service Specifications**' from under the Specifications List group.
4. Click to open the '**Broadband Service**' by clicking on the **Serspxxxx** number.
5. Observe the **Version = 1**, and **State = Published**.

The screenshot shows the 'Broadband Service' details page in ServiceNow. The page has a header with 'List' and 'Details' tabs, and a breadcrumb 'Broadband Service x'. Below the header, there are tabs for 'Details', 'Catalog Hierarchy', 'Specification Characteris... (2)', 'Specification Relationshi... (3)', and 'Versions (1)'. The 'Details' tab is selected. The main content area is titled 'Service Specification' and contains a form with the following fields:

Number	Sersp00100	State	Published
Name *	Broadband Service	Code	—
Version	1	Line	—

6. Also Observe the **Specifications Characteristic** and **Specifications Relationships**.
7. Use the **Copy** action button from top right to a create a copy of the Spec.

8. With the Copy, notice the following:
 - Version = 1, since a new version was not created.
 - Also, the State = Draft.
 - The Spec Characteristics and Specification Relationships are also copied over.
9. Set the following fields,
 - **Name = Lab Test Broadband Service**
 - **Display Name = Lab Test Broadband Service**
 - **Category = Default**
10. Click on **Publish** and validate the **State** changes to **Published**.
11. Click on the **Create New Version** action button.
12. Notice the following –
 - **Display Name** automatically gets populated with v2 at the end, such as '**Lab Test Broadband Service v2**'.
 - **Version** is incremented to **2**.
13. Click on **Publish** and validate the **State** changes to **Published**.
14. Repeat the process from **Step 11 to 13** to create **v3** of the same Service Specification

Section 2.2 Create a new Service Specification

1. **End Impersonation** and continue as System Admin.
2. Navigate to **Workspaces > CSM/FSM Configurable Workspace**.
3. Navigate to **Lists > Specifications > Service Specifications**.
4. Click on the Number column title to get a descending list.

Service Specifications 37

Last refreshed just now

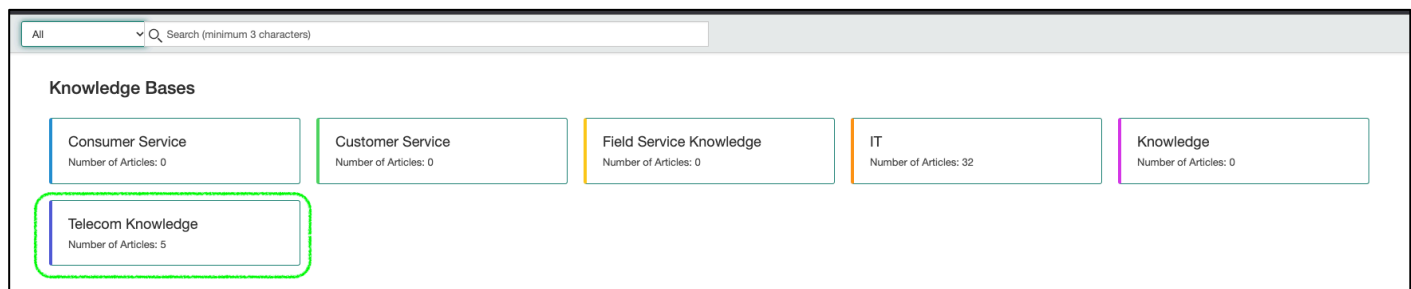
<input type="checkbox"/> Number ▾	Type	Display name	Version	Category
<input type="checkbox"/> SERSP01009	Customer Facing	Lab Test Broadband Service v3	3	Default
<input type="checkbox"/> SERSP01008	Customer Facing	Lab Test Broadband Service v2	2	Default
<input type="checkbox"/> SERSP01007	Customer Facing	Lab Test Broadband Service	1	Default

- Click to open the base version (v1) of the Service specification created – **Lab Test Broadband Service**.
- Click** on the three dots next to Service Specification as shown below and **copy the sys_id**. Make a note of the sys_id somewhere.

The screenshot shows the ServiceNow user interface. At the top, there's a navigation bar with 'servicenow' logo and tabs for 'All', 'Favorites', 'History', 'Workspaces', and 'Admin'. Below this, a breadcrumb trail shows 'List' and 'Lab Test Broadba...'. The main header is 'Lab Test Broadband Service'. Underneath, there are tabs for 'Details', 'Catalog Hierarchy', 'Specification Characteris... (2)', and 'Speci...'. The 'Details' tab is active, showing a 'Service Specification' section. A dropdown menu is open next to the 'Service Specification' header, listing options: 'More form options', 'Personalize Form', 'Toggle Annotations Off/On', 'Reload form', 'Export', 'Copy URL', 'Copy sys_id' (highlighted), and 'Show XML'. The background shows a form with fields for 'State' (Published), 'Code', 'Line' (1), and 'Cost to compa'.

Section 2.3 Submit TMF641 Service Orders for different versions

1. Continue as **System Admin**.
2. Duplicate the browser window and navigate to **All > Self Service > Knowledge > Telecom Knowledge**



3. Under Telecom Knowledge, click on the article '**TMF641 Service Order for Catalog Versioning**'.



4. This downloads the TMF641 payload json file in your default downloads folder.
5. Open the json file in a text editor.
6. Observe the contents of the payload
 - There is a single Order Line Item
 - The Line Item is of type Service

- Under Specification, the name = 'Lab Test Broadband Service'.
 - Id = xxxx
 - internalVersion = yyyy
7. Set the **Id** = **<Sys Id of the base version noted in previous section>**
 8. Set the **internalVersion** = "" (i.e. blank)
 9. Save the json file.
 10. Back to the ServiceNow instance, **navigate** to **All > REST API Explorer**.
 - Click on **Explore**.
 11. For the Service Order submission, set the following –
 - **Namespace** = **sn_ind_tmt_orm**
 - **API Name** = **Service Order Open API**
 - **API version** = **latest**
 - Click on the **Create Order (POST)** API

The screenshot shows the 'REST API Explorer' interface. It has three dropdown menus for configuration: 'Namespace' set to 'sn_ind_tmt_orm', 'API Name' set to 'Service Order Open API', and 'API Version' set to 'latest'. Below these, a list of API endpoints is displayed: 'List Service Order (GET)', 'Create Order (POST)' (highlighted with a blue triangle), 'Update Service Domain Order (POST)', 'Get Service Order (GET)', and 'Patch Order (PATCH)'.

12. On the right canvas, scroll until the **Request Body** section and click on the **Raw** tab.
 - Copy and paste the JSON payload here.
 - Click on **Send** to submit the Order.
 - Click on **OK** on the confirmation pop-up.

Request Body

Builder Raw

```

{
  "serviceOrderItem": [
    {
      "id": "LAB_OLI_001",
      "ponr": "false",
      "quantity": 1,
      "priority": 4,
      "action": "add",
      "service": {
        "@type": "Service",
        "state": "",
        "serviceType": "cfs",
        "serviceSpecification": {
          "id": "922139c529f531107f442f75a16f4938",
          "name": "Lab Test Broadband Service",
          "internalVersion": "",
          "@type": "ServiceSpecificationRef"
        }
      }
    }
  ],
  "place": {
    "id": "a11af4a848cb6110f877e46974c6e3f8",
    "@type": "Place"
  }
}

```

13. Continue as System Admin and navigate to **Workspaces > CSM/FSM Configurable Workspace**.

14. Navigate to Lists, **Customer Orders > All**, **Refresh** the list or page and click open the latest order submitted.

15. For the Order, **Navigate** to the **Order Line Items** tab.

16. Validate the Service Specification mapped against the Order Line Item.

- Is it **'Lab Test Broadband Service v3'**?

ORD0001025

Details Order Orchestration **Order Line Items (1)**

Order Line Items 1

Last refreshed 1m ago

Number	Service specification	Location	Ordered quantity	Order line action
ORDL0001023	Lab Test Broadband Service v3	Fidelity Investments	1	Add

Note: When no version is passed, Order Management picks the latest Active version of the Specifications from all the Active versions

17. Update the payload to set the **internalVersion** as **2** without changing the **'id'**, submit the Order and validate the Service Speciation version mapped against the Order Line Item in the Order.
18. Repeat the process for **internalVersion as 1** and do the same validation.

Section 3 Catalog Open APIs

In this section, we will query the Catalog using Catalog API to query the Specifications created.

Section 3.1 Query Specification

1. Continue as **System Admin**.
2. Navigate to **All > REST API Explorer**.
3. For the Catalog Query, set the following –
 - **Namespace = sn_prd_pm_adv**
 - **API Name = Product Catalog Open API**
 - **API version = latest**
 - Click on the **List Service Specifications** API

The screenshot shows the 'REST API Explorer' interface. At the top, there are three dropdown menus for configuration: 'Namespace' set to 'sn_prd_pm_adv', 'API Name' set to 'Product Catalog Open API', and 'API Version' set to 'latest'. Below these, a list of API endpoints is displayed. The endpoint 'List Service Specifications (GET)' is highlighted with a blue triangle icon to its left. Other endpoints include 'List Product Offering Catalog (GET)', 'Create Product Offering Catalog (POST)', 'Get Product Offering Catalog (GET)', 'List Product Offerings (GET)', 'Create Product Offering (POST)', 'Get Product Offering (GET)', 'List Product Specifications (GET)', 'Create Product Specification (POST)', 'Get Product Specification (GET)', 'Export OpenAPI Specification (YAML)', and 'Export OpenAPI Specification (JSON)'.

4. On the right canvas, under **Prepare Request > Query parameters**
 - Click on Add query parameter

Prepare request

Query parameters

Add query parameter

Request headers

5. Type in the left space '**initial_version**' and in the right space copy paste the sys_id of the base version of the Service Specification.

Prepare request

Query parameters

initial_version922139c529f531107f442f75a16f4938

Request headers

6. Click on **Send**.
7. On getting a HTTP 200 OK response, copy the response payload in your text editor (or online json viewer) and validate if there are 3 versions of the specifications returned.

Congratulations! You have completed this lab.

