

# OMT Bootcamp

## Staggered Decomposition

Time: 15 Minutes

ServiceNow Telecom, Media, and Technology (TMT)

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## Lab instance credentials

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

## Lab objectives

You will achieve the following objectives:

- Understand Staggered Decomposition feature.

## Scenario

In this lab, students will review existing Catalog Model decomposition rules set up, submit an order, enrich it, and validate the staggered decomposition behaviour.

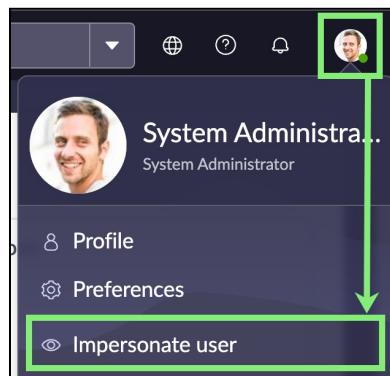
## Personas

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

## Section 1 Product Catalog Set up

### Section 1.1 Browse the Product Catalog Model

- Impersonate **James Smithson**, the *Product Catalog Manager*.
  - Select the **System Administrator profile photo** to open the user menu.
  - Select **Impersonate User**.

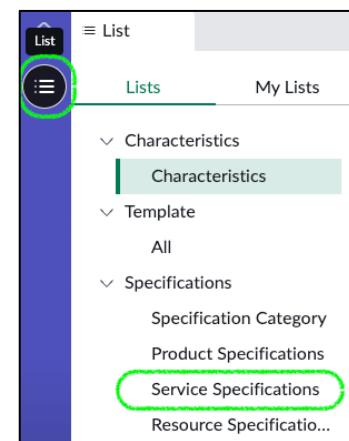


*Caption: Image of the user menu with the Impersonate user highlighted.*

- In the impersonate user dialogue box, search for and select **James Smithson**.
- Select **Impersonate user**.

**Note:** Future lab instructions will simply state, "Impersonate <User Name>."

- Navigate to **Workspaces > CSM/FSM Configurable Workspace**.
- Click on the List view icon and select '**Service Specifications**'.



- From the list, select the SERSP (Service Spec) Number next to '**Broadband Service**' (Display Name column)

<input type="checkbox"/> SERSP00100	Broadband Service	1	Broadband Service	Published
<input type="checkbox"/> SERSP00101	Fiber Access Service	1	Access Service	Published

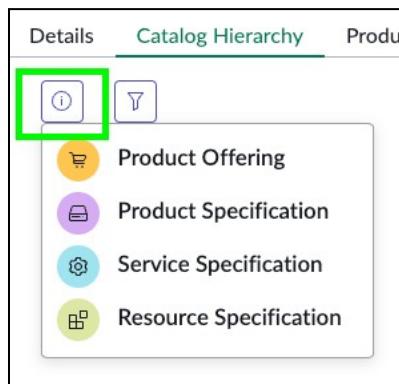
7. On the **Details** sub-tab, observe the Service Specification configuration set up –

- a. State (Is it Draft, Published or Retired?)
- b. Version
- c. Type = Customer Facing

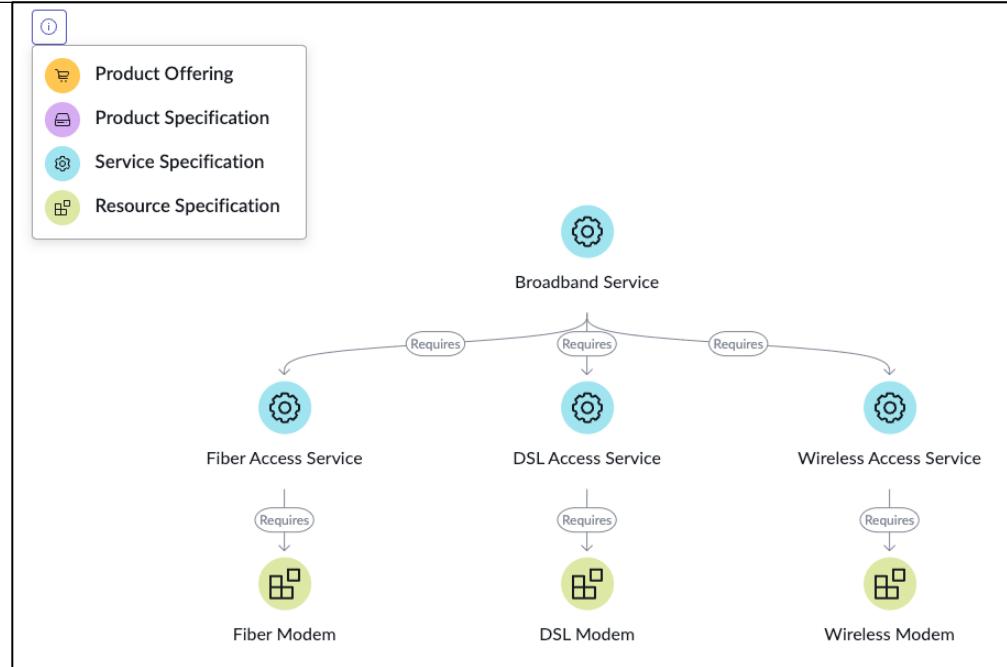
8. Click on the **Catalog Hierarchy** sub-tab.

The screenshot shows a service catalog entry for "Broadband Service". Below the title, there are four tabs: "Details", "Catalog Hierarchy" (which is highlighted with a green oval), "Specification Characteris... (2)", and "Specification Relationshi... (3)".

- a. Click on the **Information icon** on the left to display the legend.



- b. Use the **+/-** and **fit to screen** buttons to adjust the view of the Catalog Hierarchy.
- c. Observe the Catalog Structure and the relationships between different entities.



9. On the **Specification Characteristics** sub-Tab, observe there is only one characteristic 'Speed' with two possible values – Medium & High.
- Also note that the Characteristic is mandatory = false.
10. On the Specification Relationships sub-Tab, observe the parent CFSS 'Broadband Service' has relationships with three other Service Specifications as shown below –

Broadband Service															
Details	Catalog Hierarchy	Specification Characteris... (2)	Specification Relationship... (3) <span style="color: green;">V</span>												
<h3>Specification Relationships <span style="color: green;">3</span></h3> <p>Last refreshed 1m ago</p> <table border="1"> <thead> <tr> <th>Target type</th> <th>Target specification</th> <th>Relationship type</th> </tr> </thead> <tbody> <tr> <td>Service Specification</td> <td>Fiber Access Service</td> <td>Requires</td> </tr> <tr> <td>Service Specification</td> <td>DSL Access Service</td> <td>Requires</td> </tr> <tr> <td>Service Specification</td> <td>Wireless Access Service</td> <td>Requires</td> </tr> </tbody> </table>				Target type	Target specification	Relationship type	Service Specification	Fiber Access Service	Requires	Service Specification	DSL Access Service	Requires	Service Specification	Wireless Access Service	Requires
Target type	Target specification	Relationship type													
Service Specification	Fiber Access Service	Requires													
Service Specification	DSL Access Service	Requires													
Service Specification	Wireless Access Service	Requires													

11. Click on the Service Specification relationship record for '**Fiber Access Service**' by clicking on the entry in the first column 'Target type'.
- Once the record is open in a tab, click on the 'Decomposition Rules' sub-Tab and observe the configured rule.

- b. The rule is to be read as – the specification relationship ‘Broadband Service – Requires – Fiber Access Service’ is to be instantiated (i.e., decomposed) only if the characteristic ‘Speed’ has a value of ‘High’.

Broadband Service				
Details	Catalog Hierarchy	Specification Characteris... (2)	Specification Relationshi... (3)	V
<b>Specification Relationships</b> 3				
Last refreshed 1m ago				
Target type	Target specification	Relationship type		
Service Specification	Fiber Access Service	Requires		
Service Specification	DSL Access Service	Requires		
Service Specification	Wireless Access Service	Requires		

12. Check the Decomposition rules for the other two Specification relationships.

Source Spec	Target Spec	Decomposition Rule	Interpretation
<b>Broadband Service</b>	Fiber Access Service	Speed = High	Only decompose to the Target Spec, if the char Speed = High
<b>Broadband Service</b>	DSL Access Service	None	Always decompose unconditionally
<b>Broadband Service</b>	Wireless Access Service	Speed = Medium	Only decompose to the Target Spec, if the char Speed = Medium

## Section 2 Submit an Order

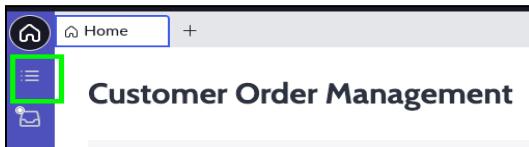
### Section 2.1 Submit an Order from Workspace

1. **Impersonate** another user, **Mike Davis**, the *Fulfilment Manager*

**Note:** As a *Fulfilment Manager*, *Mike* is responsible for reviewing, approving, and processing Orders and their related Order Tasks.

2. Navigate to **Workspaces > CSM/FSM Configurable Workspace**.

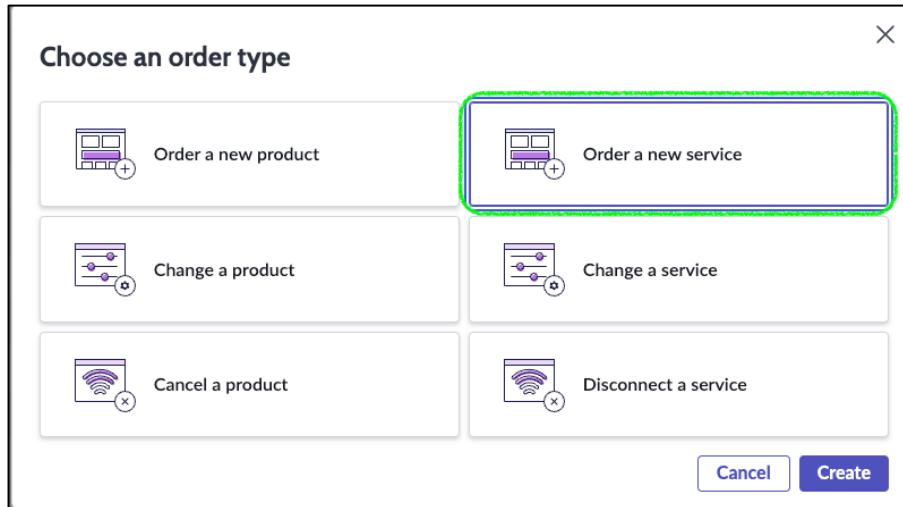
3. Click on the **List menu icon** on the top left.



4. From under **Customer Orders** List, click **All** (if not already open) and click on **New** action button from the top right.

Number	Account	Contact	Order type	State	Monthly Recurring Charges	Non Recurring Charges	Order date
ORD00000001	Funco Intl	Sarah Johnson	Product	Completed	\$59.00	\$0.00	2023-04-25 23:40:29
ORD00000002	Funco Intl	Sally Thomas	Product	Completed	\$50.00	\$15.00	2023-04-25 23:40:29

5. A pop-up window with option to choose Order Type appears. Select '**Order a new service**' and click on **Create** action button.



6. Clicking **Create** loads a guided ordering flow. Fill in the details as follows –

a. **Enter Account information** –

- i. Account = <**Funco Intl**> &
- ii. Contact = <**Sally Thomas**>.

Click on **Continue**.

- b. A pop-up to select a **location** appears (if it does not, refresh the browser)
- i. Click in the **Locations** box and select one of the locations from the list that appears.
  - ii. Once Location is added, click on **Add**.
  - iii. Notice the location getting added to the Order in the left pane.

**C. Select Specifications –**

- i. Under Specifications, select <**Broadband Service**>
- ii. Quantity = 1, remains unchanged.
- iii. Click on Configure Items

New service order

Create order      Select service      Configure service      Review order

Add services

Locations

Location Contact

Specifications

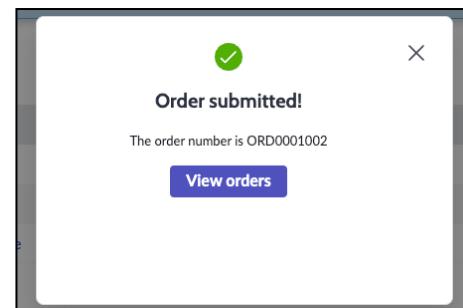
Broadband Service      Quantity: 1

**d. Configure Items** – Observe under the 'Characteristics' tab, the 'Speed' char is not present.

This is because it has been set up as optional under Broadband Service and will be enriched after the order has been submitted.

**e. Click on Review and finally Submit the Order.**

1. A pop-up returns the Order Number.
2. Click on **View Orders** to continue.



## Section 2.2 Approve Order

1. Continue as **Mike Davis**, the *Fulfilment Manager*.
2. In the **Workspace > All Customer Orders** list, identify the order submitted in the previous section and **click** on its number to open it.
3. The **Order Line Items** tab shows the line items submitted as part of this Order.
  - a. Notice there is a single Order Line Item for **Broadband Service**.
4. On the Order Details tab, **click** on the **Approve** button to kick start the order decomposition process.

**Note:** Orders can be auto-approved as well.

Approving the Order triggers the Order Management Application to refer to the Product Catalog model to determine the decomposition logic of the Order Line Items.

5. Click on the **Order Line**-Item record, **Reload/Refresh** the page and navigate to the **Service Order** sub-tab.
  - a. Click on the Service Order that was created corresponding to the Broadband Service. **Make a note of the Service Order Number.**

Number	Short description	Priority	State	Assigned to	Task type
SO0001030	Service Order for Broadband Service	4 - Low	Draft	(empty)	Service Order

6. On the '**Service Order for Broadband Service'** record page, navigate to the **Order Orchestration** sub-tab and expand the group by clicking on the  icon.

Observe that the Broadband Service has decomposed to DSL Access Service. This is because there the decomposition was unconditional as no specific decomposition rule was defined.

**But there is no decomposition instantiated for the Wireless or Fiber Access Services.**

**Note:** The Order Orchestration tab shows visualization of how an Order & Order Line Items are decomposed into Product/Service/Resource Domain Orders & Order Tasks.

### Section 3.3 Staggered Decomposition

1. **End Impersonation** and login as **System Admin**.
2. Navigate to **All** and search for **sn\_ind\_tmt\_orm\_decomposition\_trigger\_list.DO**

This will open a new browser tab and will show a list of all the records in the 'Decomposition Trigger' table.

**Note:** If there is a decomposition rule defined against a Specification Relationship and a characteristic value is required to decide further decomposition, until the characteristic value is provided the decomposition is paused and an entry is made in the Decomposition Trigger table. Once the value is provided, the decomposition re-triggers and the entry from this table is removed.

3. Observe that there are two entries in the table for the Service Order corresponding to the Broadband Service. Cross-check this with the value noted in step 5.a
  - a. The two entries correspond to the two possible Specification relationships –
    - i. Broadband Service – Requires – Wireless Access
    - ii. Broadband Service – Requires – Fiber Access

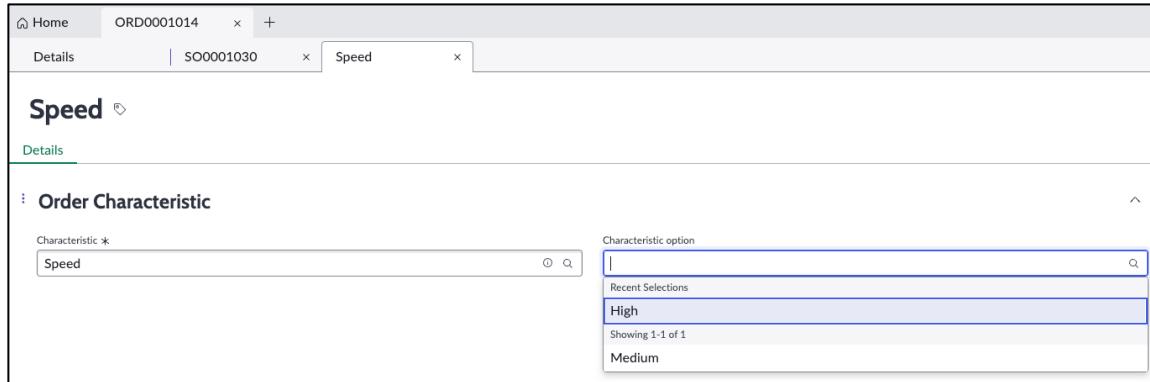
Subject to the value of the characteristic '**Speed**'

**Do not Close this window, the lab exercise will revisit this table again.**

4. Continue as System Admin.
5. **Navigate to Workspaces > CSM/FSM Configurable Workspace.**
6. **Navigate back to the Service Order for Broadband Service > Service Order Characteristics.**

Number	Specification	Characteristic	Previous characteristic value	Characteristic value	Characteristic option	Order line item
ORC000001115	Broadband Service	Speed	(empty)	(empty)	(empty)	ORDL0001030

7. Click on the Order Characteristic value record and set the value of '**Speed**' to '**High**' and **Save**.



8. Navigate back to the '**Decomposition Trigger**' table and refresh the list and observe that the two entries previously created are not present anymore.

This is because, as soon as the value for 'Speed' was provided – the paused decomposition process resumed.

9. Navigate back to the '**Service Order for Broadband Service**' Details page in the **Configurable Workspace**.
- Refresh the page/form and navigate to the '**Service Orders**' sub-tab.
10. Observe that there is now a decomposed '**Service Order**' created for **Fiber Access Service**.
- The same can be observed by navigating to the Order Orchestration tab and expanding the hierarchy.

Service Order for Broadband Service						
Service Orders [2]		Actions				
Number		Short description	Priority	State	Assigned to	Task type
SO0001031		Service Order for DSL Access Service	4 - Low	Draft	(empty)	Service Order
SO0001032		Service Order for Fiber Access Service	4 - Low	Draft	(empty)	Service Order

**Congratulations! You have completed this lab.**