DO00069-W-2000 FlowOne Catalog-driven Fulfillment In Action

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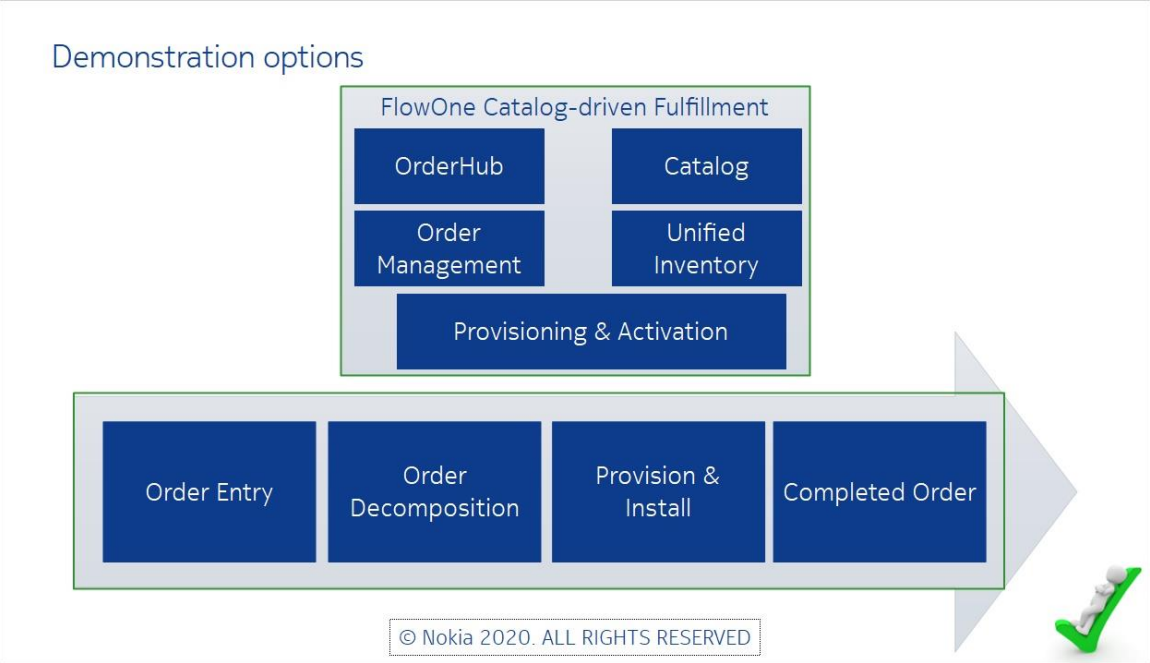
Contents

1 Introduction

Welcome to the FlowOne Catalog-driven Fulfillment in Action eLearning module

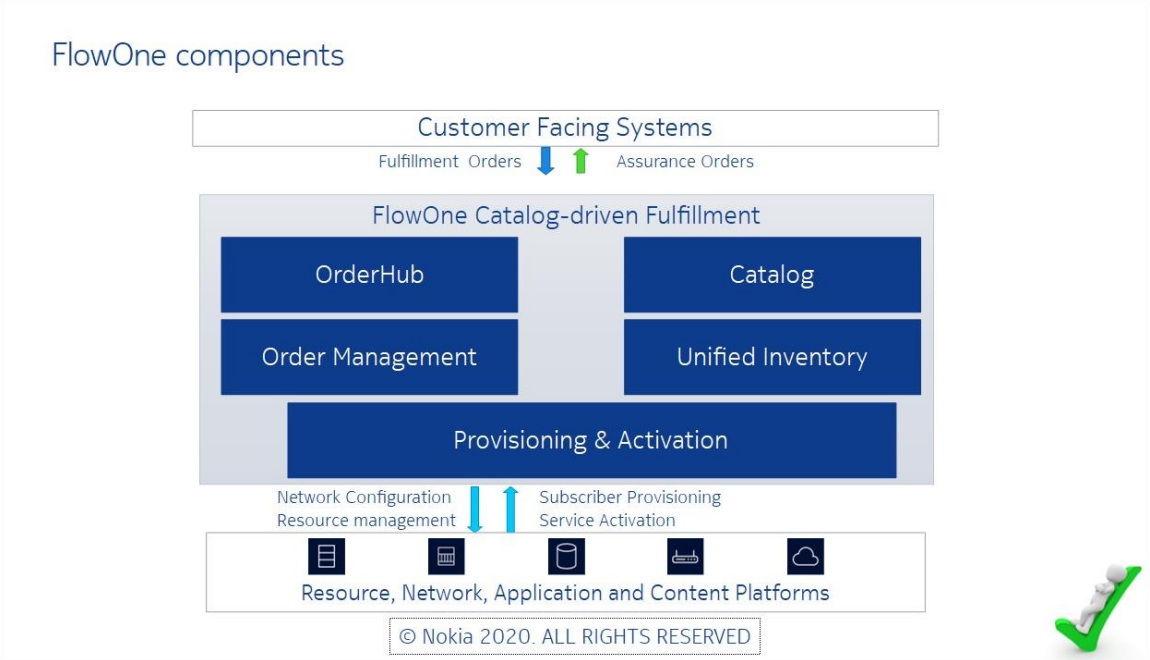
1.1 Options



In this demonstration, you have two sections to complete. In one section, we will go through a summary of the components in FlowOne Fulfillment and see a brief description of their roles and functions. In the other section, we will follow an example service delivery order from start to finish. We will create and send the order from OrderHub. We will see how we can monitor the progress of the order in Order Management or OrderHub and how we can jump from there to see the underlying request in Provisioning and Activation. In Catalog, we will see how the service model is built and how that model gets decomposed to the phases and activities of the order process. We will see how Order Management generates manual tasks that a user can manage in OrderHub. Once the order completes, we will see the new customer and how their ONT device is connected to the network in Unified Inventory.

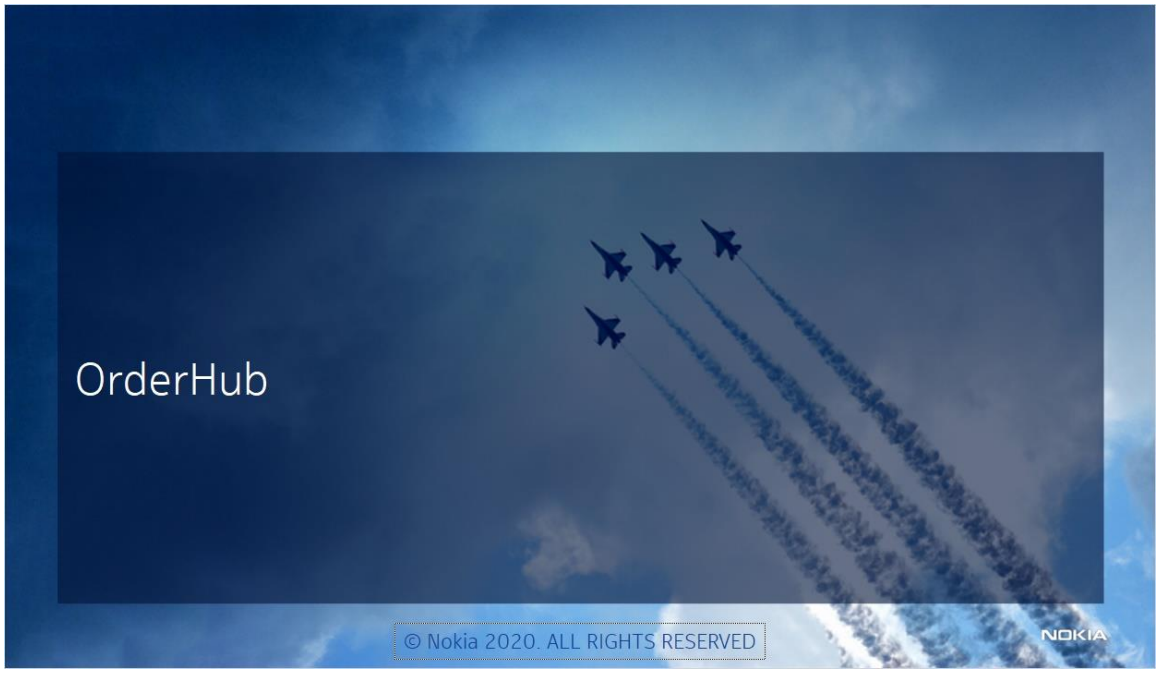
You need to complete both sections to be able to continue to the summary and quiz.

2 By component

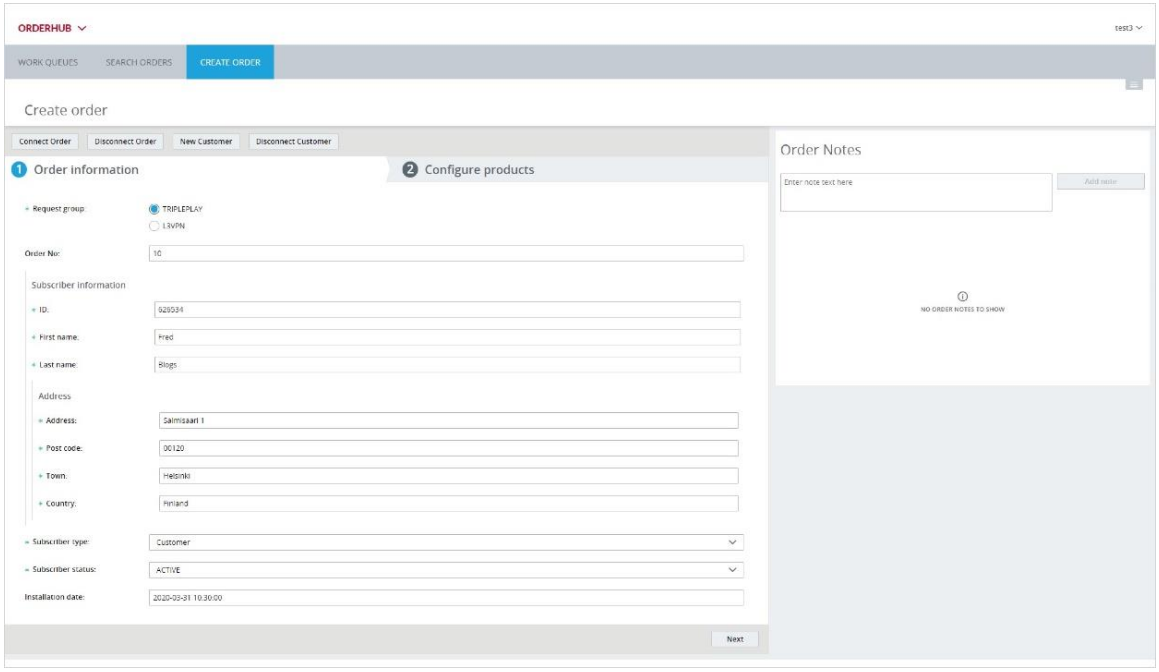


FlowOne has five components, each with a specific role to play, as you saw in the first module of this course. Click on each component to get a short description and summary of the roles and functions of that component in service order delivery. You can view the components in any order and revisit a component at any time.

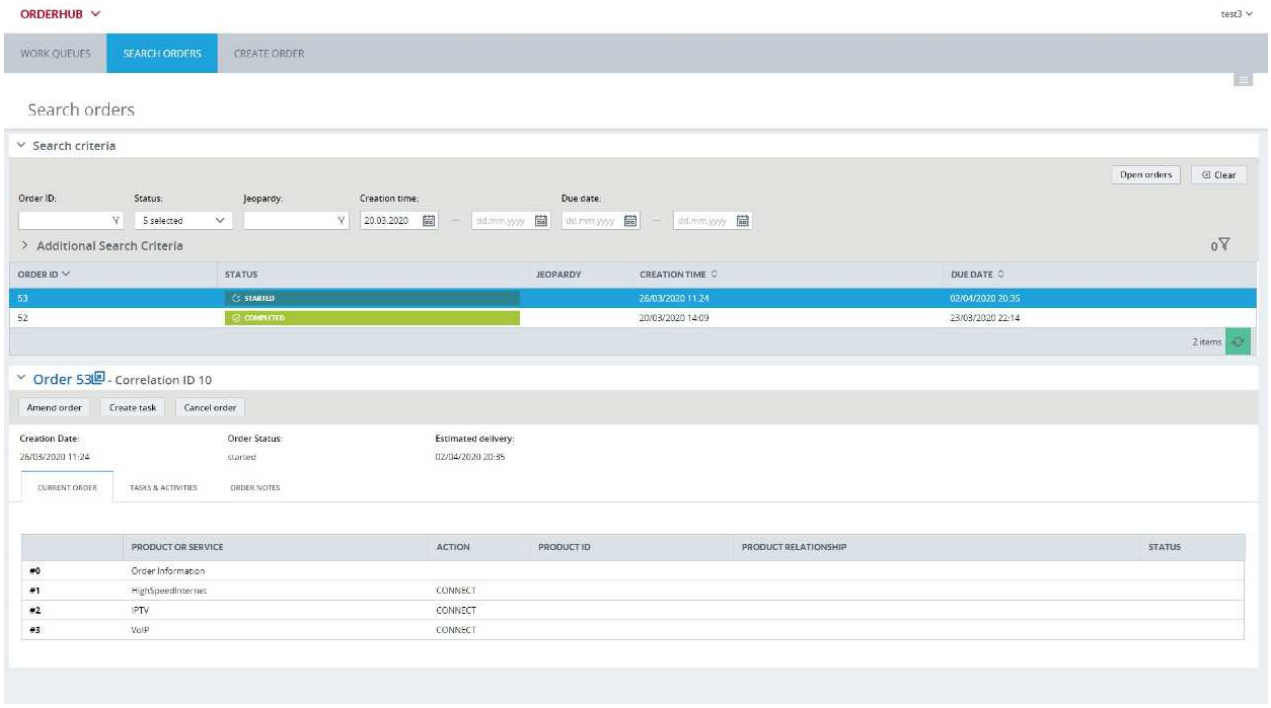
2.1 OrderHub



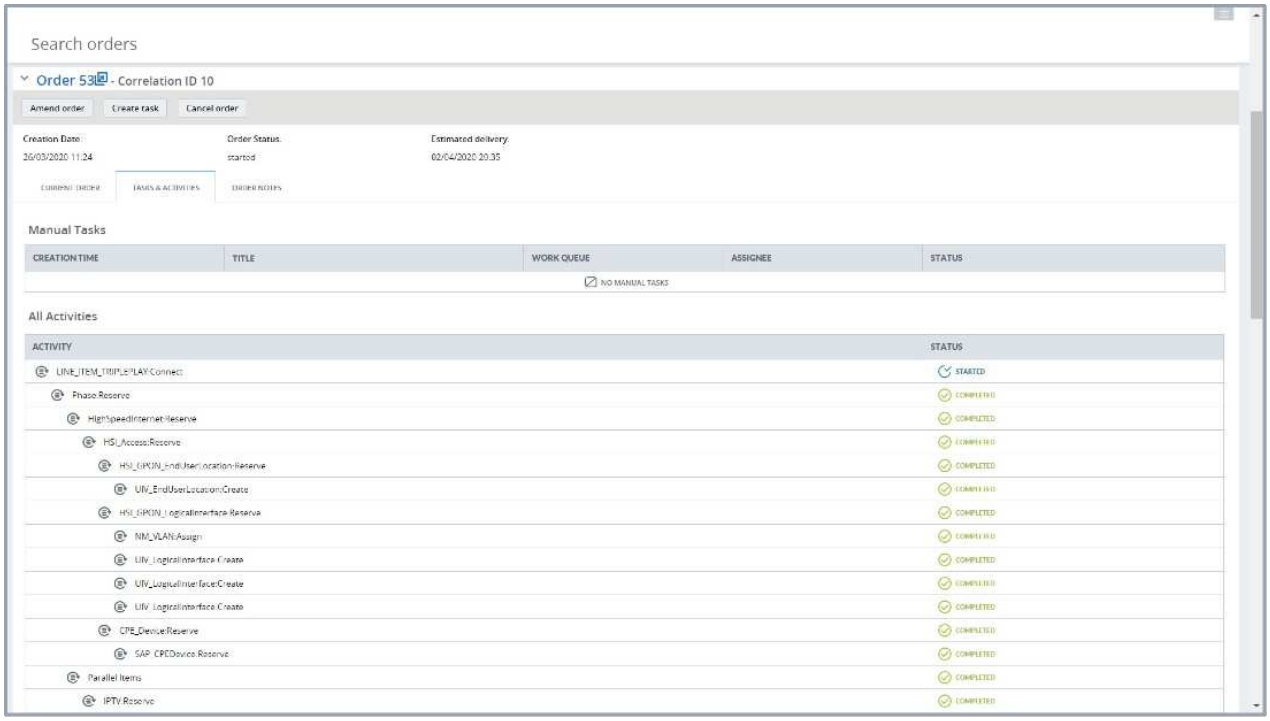
OrderHub is a multifunction component, in which you can create and send orders, monitor order processing and manage manual tasks.



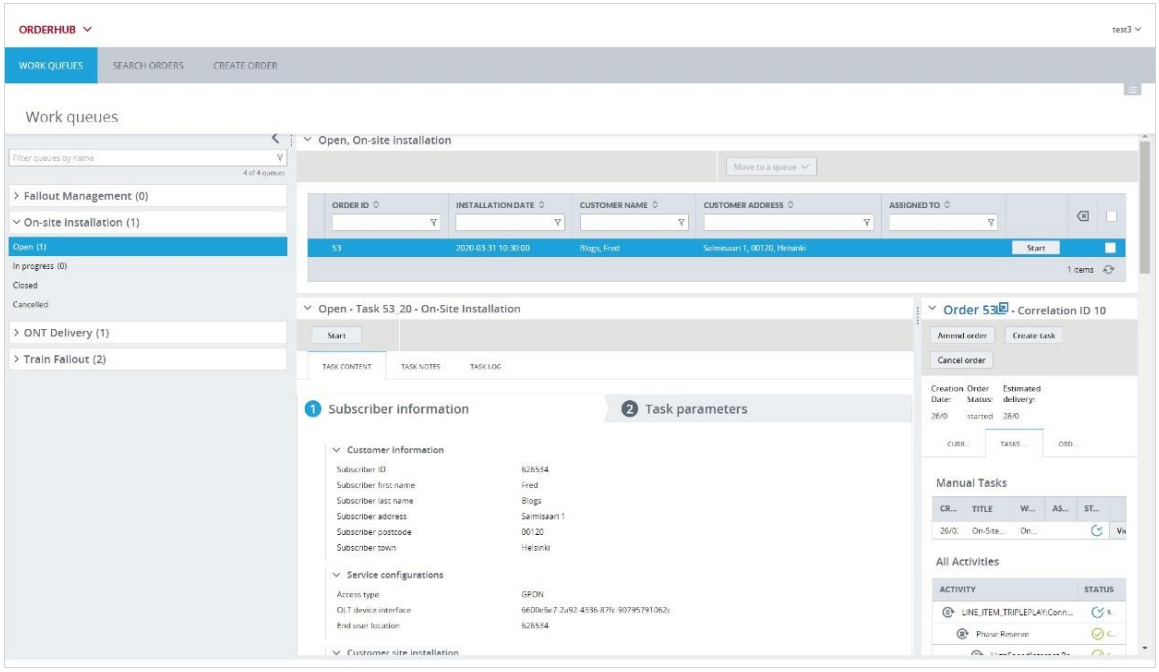
You can create and send orders from pre-configured forms in OrderHub. The form can be configured to read products from Catalog. When you press the send button the order goes to Order Management.



In search orders you can see all orders in Order Management. Using the search criteria, you can adjust what orders are shown in the order list. When you select an order, you can see its details, such as the products it will deliver and its activities

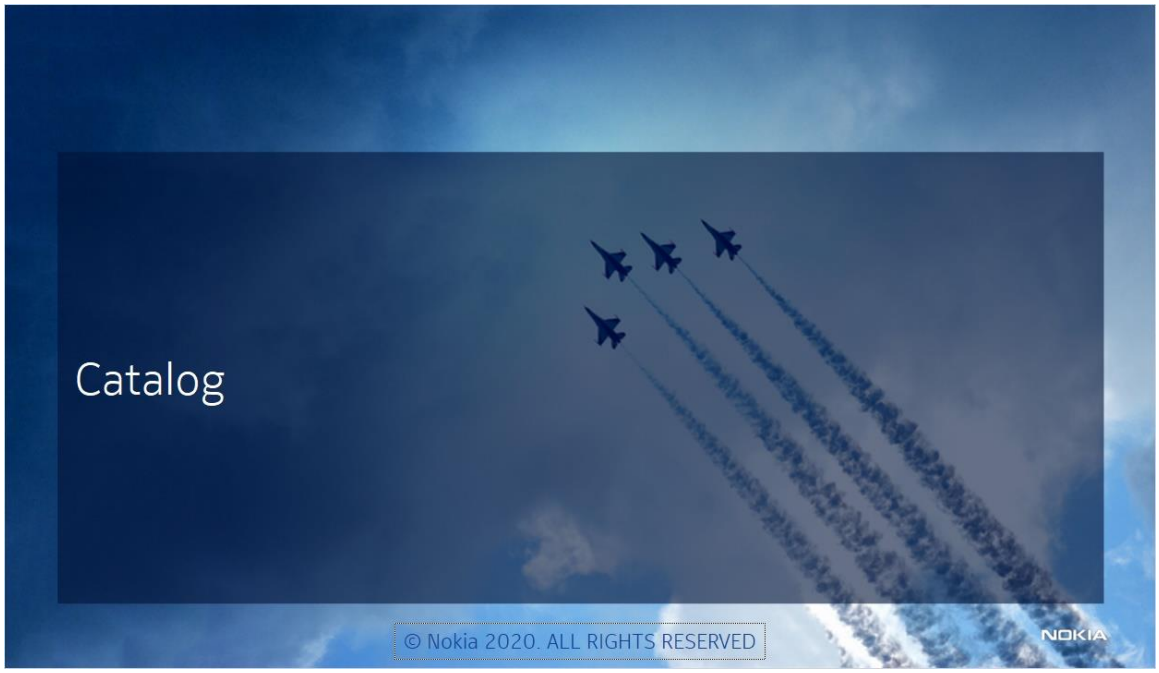


From the Tasks and activities tab you can see the breakdown of the order into phases, activities and tasks. On this tab it is easy to follow the progress of the order.

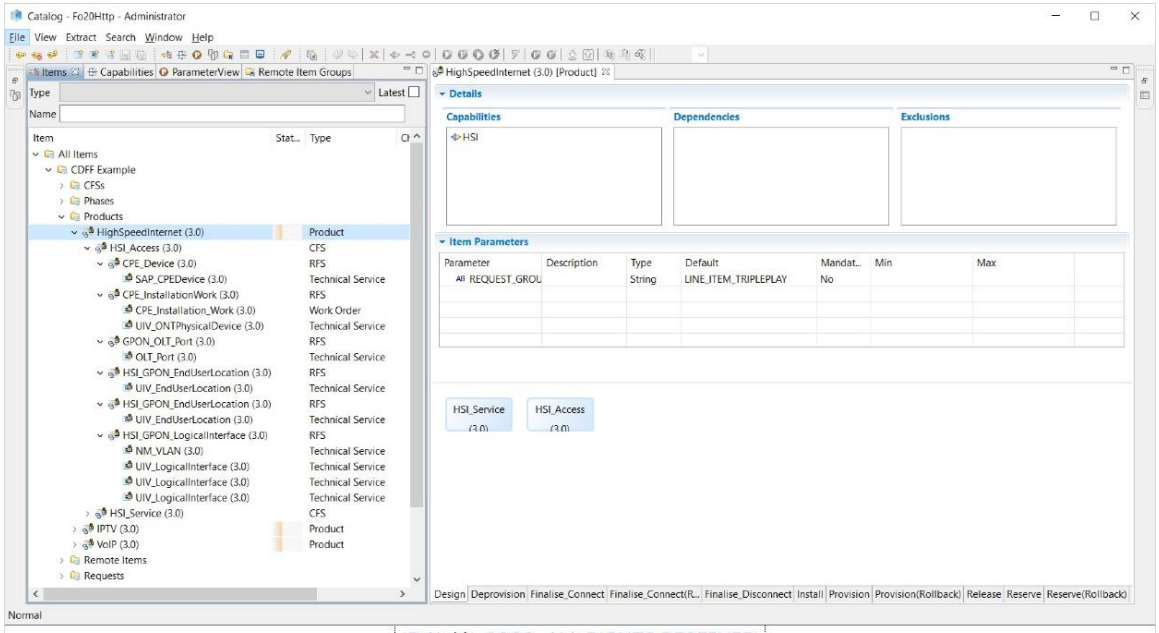


Work queues contain tasks that require input from a user before the order can continue. They are also called manual tasks. Access to work queues is controlled through access authorisation, so a user only sees tasks that are relevant to their role. OrderHub displays a task in a pre-configured form. A task, for example, can instruct a technician to install and test customer premise equipment (CPE). Once they have done this the order can continue. You can also see the details and activities of the associated order from a task.

2.2 Catalog



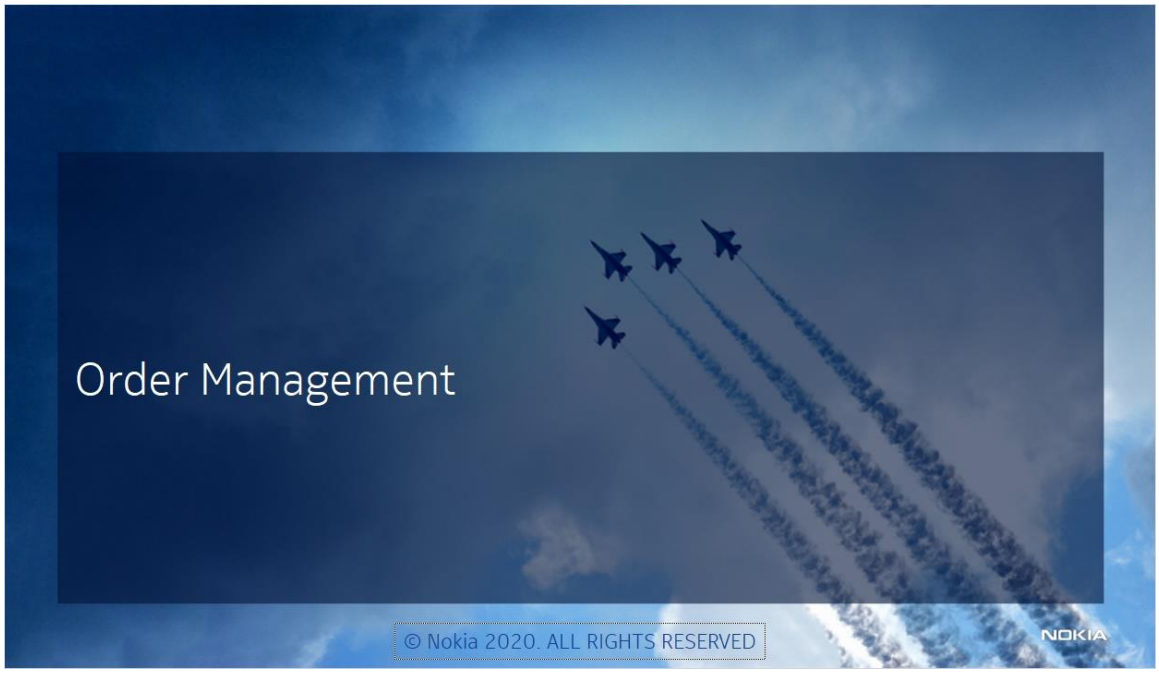
In this section, we will take a brief look at the service model in Catalog.



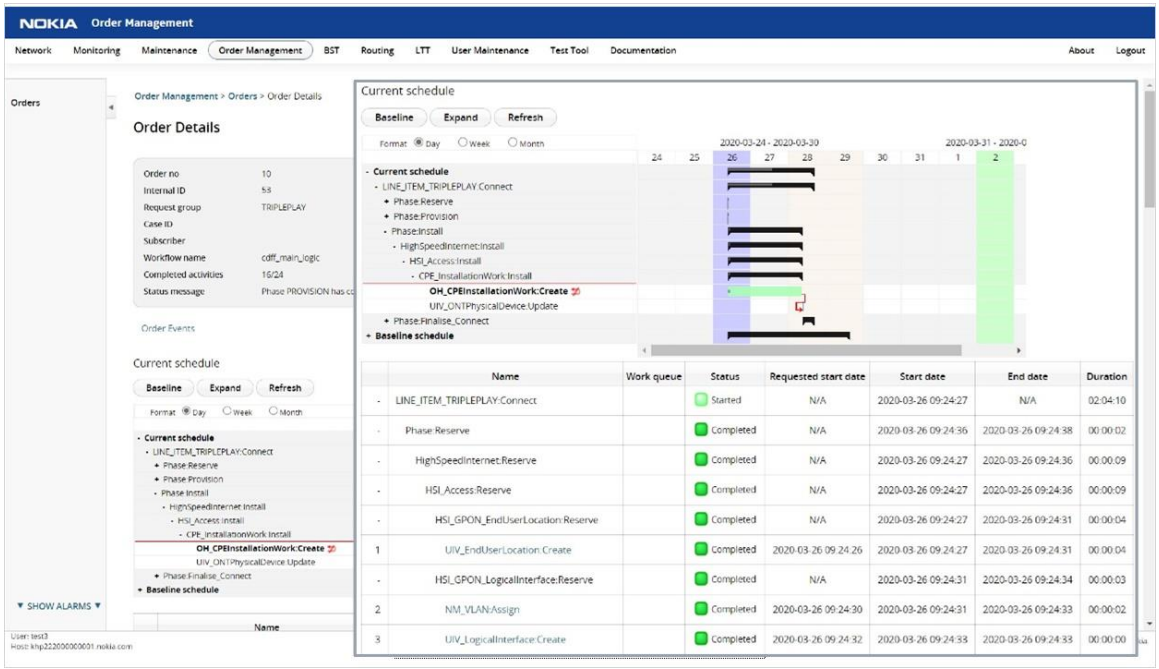
In Catalog we can see the items and remote items that a designer can use and reuse to create product and service models. These models are broken down or decomposed by Order Management into the phases, activities and tasks of the service order delivery process. In this example, the service model has items of product, CFS, RFS, technical service, work order and technical library. Technical services are the functions required to activate services, a work order is a manual task that is sent to OrderHub, and a technical library defines a custom workflow that is executed as part of order processing.

In Catalog you can also see the process phases and the types of request that FlowOne has been configured to process.

2.3 Order Management



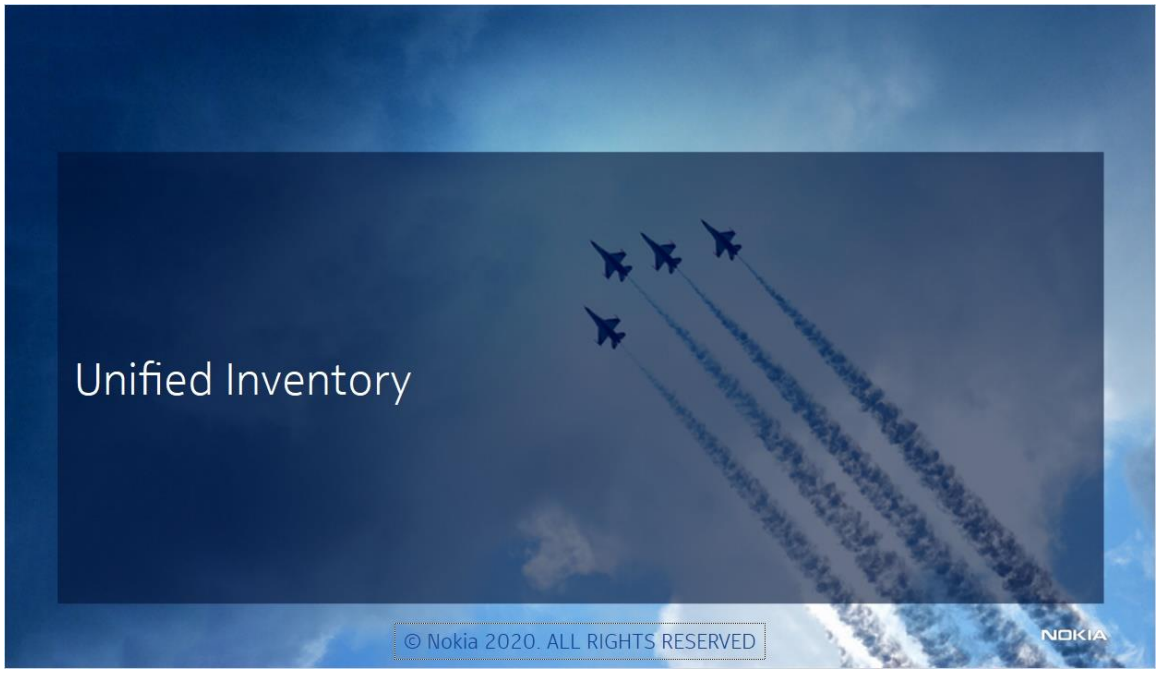
Order Management allows us to follow the progress of an order through the service delivery process.



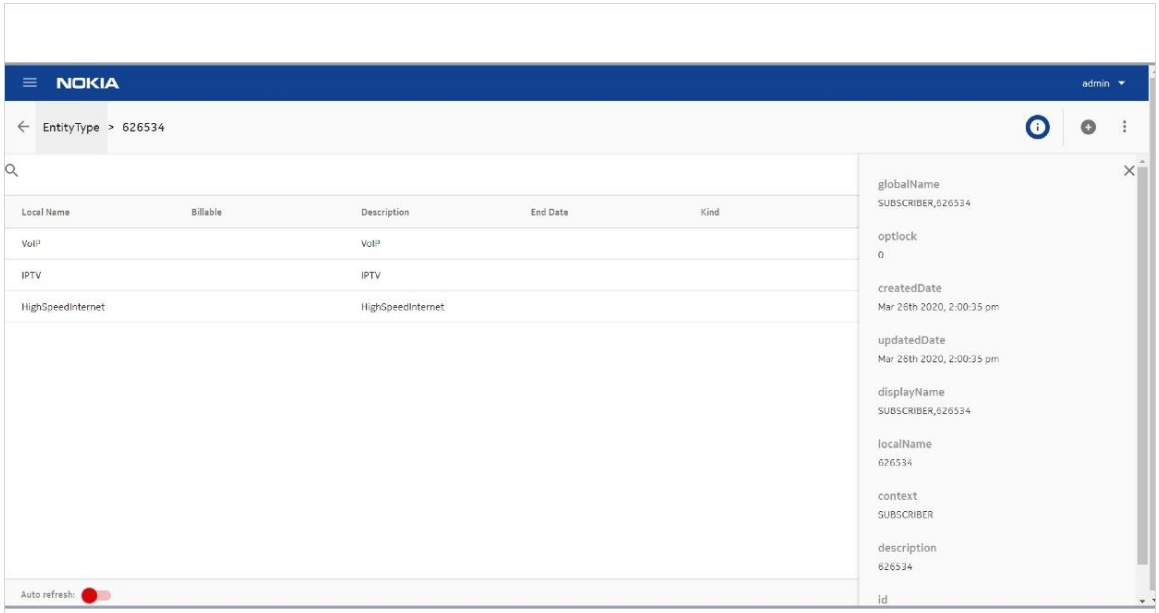
In Order Management we can display the details of the order. At the top of the page we can see the order's basic information such as the start date, the expected end date (estimated delivery date) and the date by which the customer expects the order to complete by (customer required date). We can also see the status of the order.

Lower down the page we can see the current schedule in the Gantt chart that shows the time dimension of the order. Below the Gantt chart we can see the table of activities with details for each activity. Clicking on an activity takes you to the activity view.

2.4 UIV



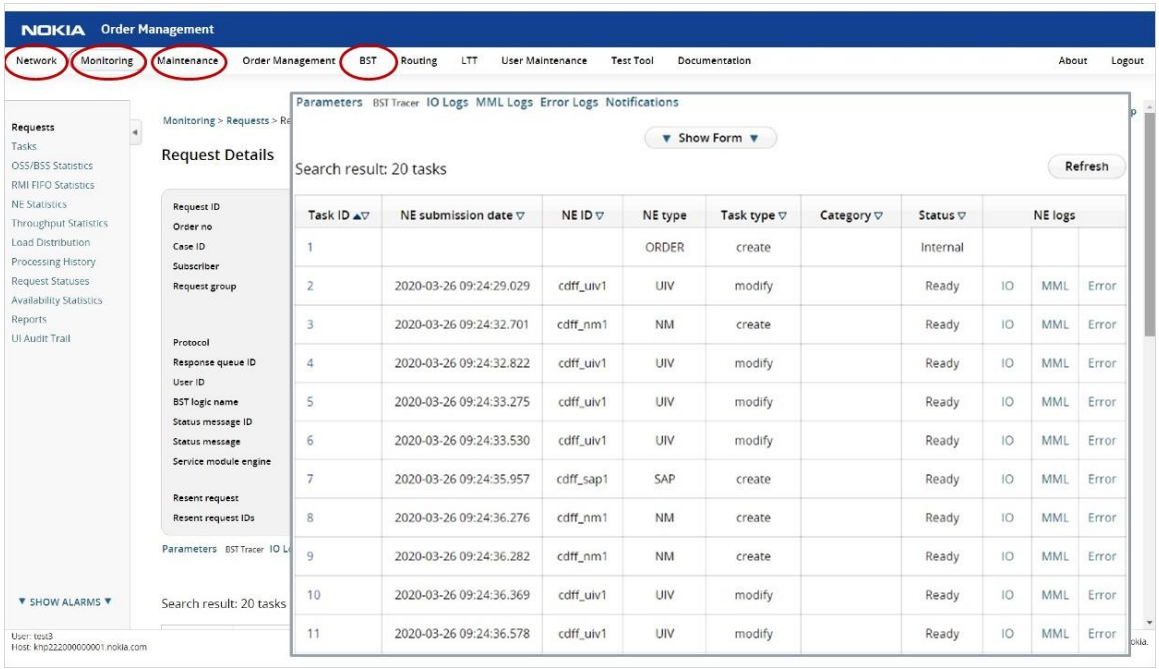
In Unified inventory, we will see the customer, their services, and the network inventory.



In UIV, we can see the customer and their services. We can, if required make changes to the data in UIV, but the preferred way is to leave any changes to the automatic process. In UIV you can navigate from one item to its related items, for example navigate from a customer to their products and from a product to its customer facing services. We can also see physical and logical inventory from the UIV UI.

2.5 Provisioning and Activation

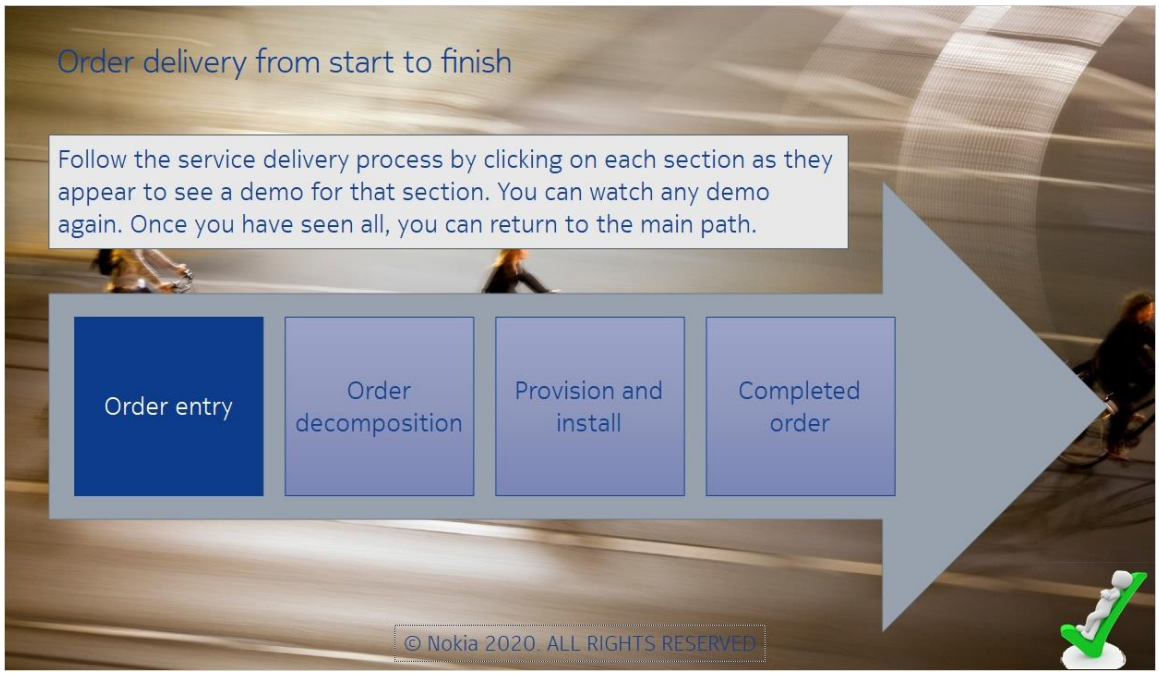
Provisioning and Activation is the component that processes orders as requests and provides the mechanisms and tools to process requests efficiently.



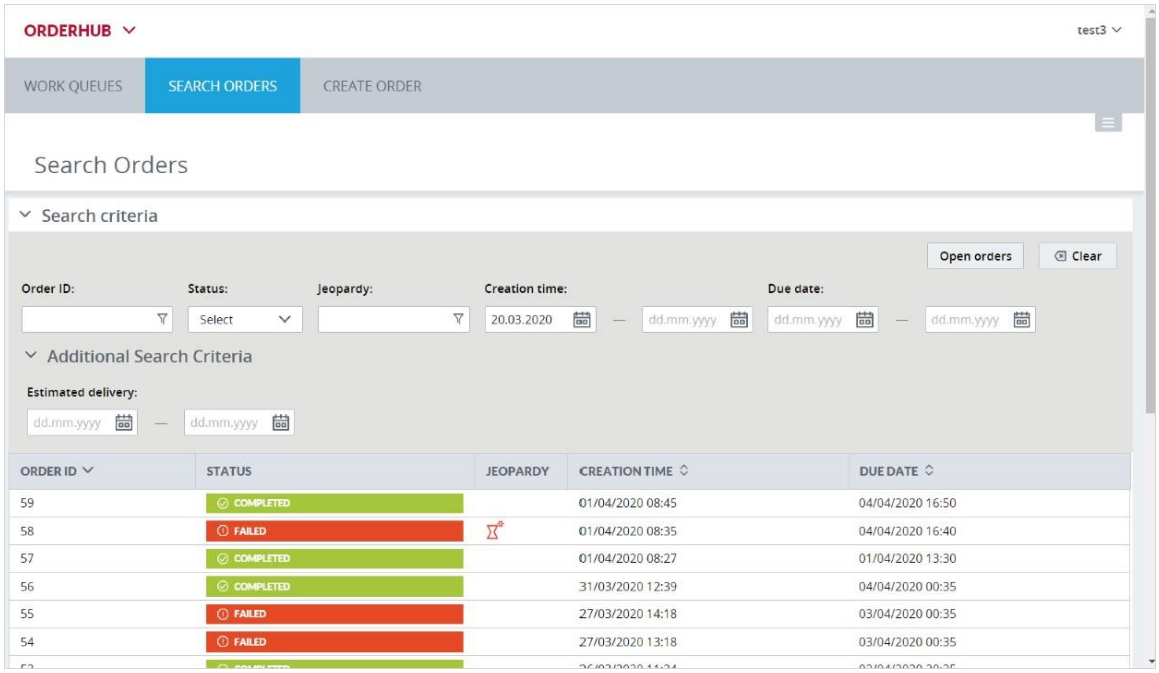
Provisioning and Activation has many useful features to ensure that requests and orders are processed correctly. Some useful sections of the Provisioning and Activation UI are: Network to see connections to external systems, BST to view and manage workflows, and Maintenance to make changes to the configuration. The most used section is Monitoring where we can monitor the activity of the system, such as the requests it is processing. Requests allows you to view the technical details of an order, such as its status, the workflow in which it is being processed and any errors.

The second half of the request details screen shows the tasks of the request and from here you can get to see the details of any task including its parameters and log files.

3 By process



3.1 Order entry

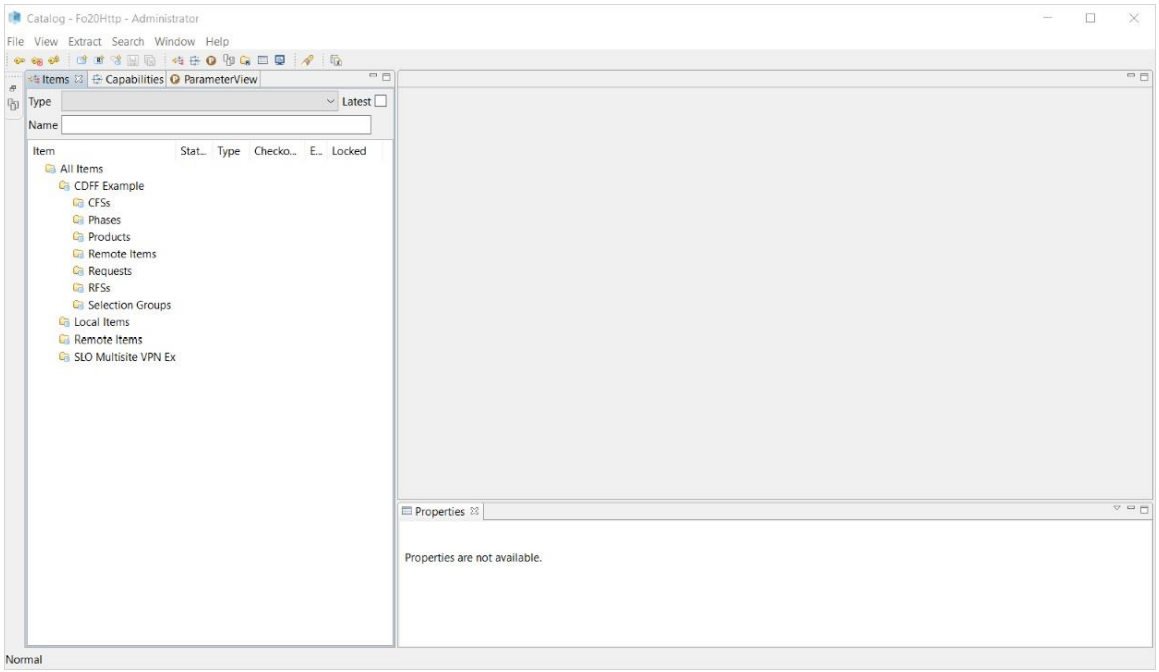


We will start the demonstration by creating a new order in OrderHub and sending it to Order Management. After logging into OrderHub, we go to the Create Order section. From here we select Connect Order to get the wizard for creating a service delivery order for a subscriber. The type of order we will create is Tripleplay and we fill-in the required information for the order, such as the subscriber's details. The service provider has arranged a date and time for the installation of the ONT modem, so we enter that date to the installation date field. By pressing the Next button OrderHub saves the information and takes us to the Configure Products form. We can now add the products or services that the subscriber has requested. To do this we click on Add order item, which opens a pop-up showing the products and CFSs available from Catalog. We first select HighSpeedInternet from the list under Product offering, select the action to be connect and press the Add product button to add the product to our order. We repeat this for IPTV and VoIP. After we added these two products, we select each one in turn on the configure products form and enter their respective account number. Now the order is ready, and we can press the Send order button. OrderHub informs us that the order was submitted.

To find our freshly submitted order we go to Search Orders. Our order is the newest one in the list. Before we look at the order in detail in OrderHub, we will go and see the order decomposition in Catalog.

3.2 Order decomposition

3.2.1 Catalog



In Catalog, we have a folder called CDFF Example where we see sub-folders for Products, CFSs, RFSs, Remote Items, Selection Groups, Phases and Requests. In the Products folder we see three published product items. One of them is HighSpeedInternet, another is IPTV and the third is VoIP. Double-clicking HighSpeedInternet opens it up in the design window of Catalog. In the window we can see transactions whose names will become the phase names for the processing of our order. We can also see a box at the top called Capabilities. A capability is like a group or keyword for an item in Catalog and is used to indicate what the item contains or can do. For example, HSI indicates that this item can activate a high-speed internet service. Capabilities are also used in matching dependencies and exclusions between items.

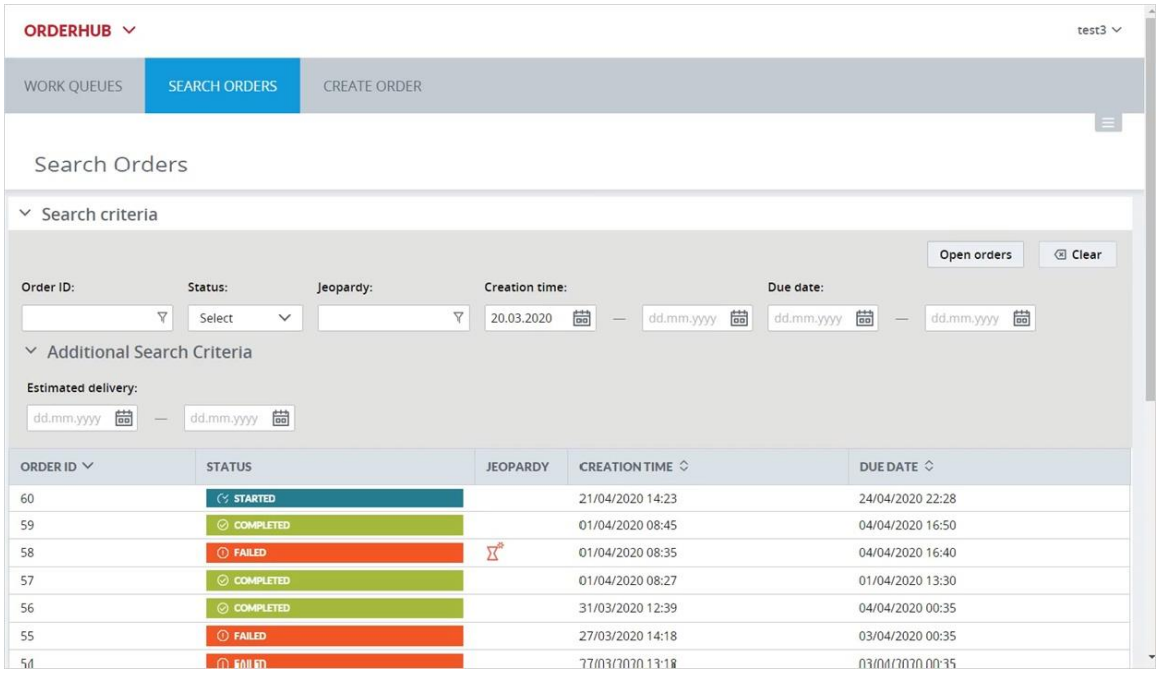
If we open IPTV, we can see at the top of the Design tab that it has a dependency to HSI, which is the capability of HighSpeedInternet. This means that a subscriber cannot order IPTV without ordering HighSpeedInternet as well.

How do the transactions on a product relate to the phases of an order process? Well, here we can see a folder Requests, and if we expand that we can see an item called LINE_ITEM_TRIPLEPLAY. This defines the type of order we selected in OrderHub. On the Design tab we see that this item contains the names of the phases as embedded items. On the Connect tab we can see the phases used in a connect order and the order of those phases. So, based on this, we would expect to see the phase order Reserve, Provision, Install and Finalise_Connect for a connect order.

To see how those phases link to the processing of a product, we can right-click the name of a product and select Show Processing Order from the pop-up menu. Here we see a tab for each transaction or phase and under each transaction, we see the activities that belong to that transaction. The reserve transaction has six activities. Provision has one activity. From install, we can see the manual activity to install the CPE and from Finalise_Connect, we see the two activities for updating UIV and the billing system.

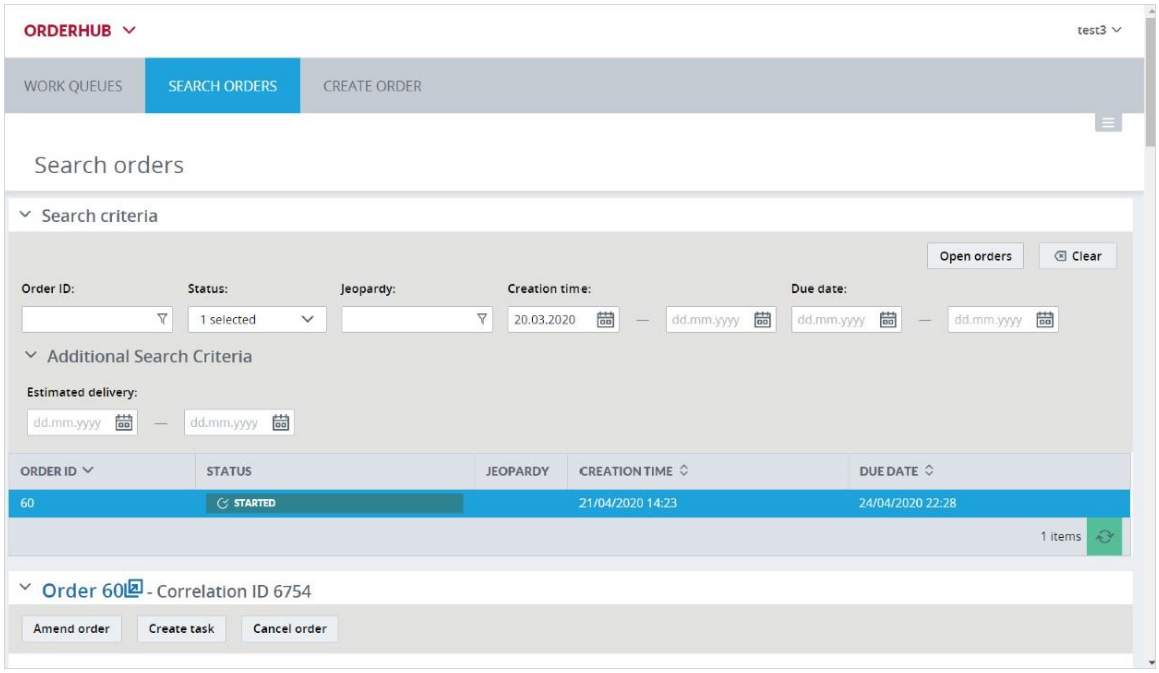
When we click on the small arrow of the product, it expands to show the contained CFSs. When we click on the CFS, we see the RFSs and underneath those the technical services, work orders and technical libraries for the item. We can open the work order CPE_Installation_Work, to see, for example, the duration of two days for the activity that Order Management will create for this remote item.

3.2.2 OrderHub



Now we go back to the Search orders section in OrderHub to look in more detail at the order. OrderHub has pre-configured search criteria that we can use to search for orders. For example, we can search for orders with the status started or those that are in jeopardy. OrderHub performs the search automatically. We select our order from the list and OrderHub displays the details of that order below. There are 3 tabs for each order. The first one is called current order and shows the products in the order. The second one, tasks and activities, is the most interesting as it is here that we can see the phases and activities of the order. To follow the progress of the order we scroll down the order activity. We can see the phases and the activities within each phase. Reserve is the first phase, where the order reserves the required network inventory for the order to succeed. It has the activities to create the end user location, reserve logical interfaces and order a CPE device. In Catalog we saw from the processing order tool that the phase reserve has 6 items and those items have become the activities we see for the order in OrderHub. So now we see that the order process or schedule built for our order has come directly from the service model in Catalog. In other words, the Catalog service model has been decomposed into phases and activities with a time dimension.

3.3 Order processing



When we scroll down the schedule in OrderHub we see that the phase Installed has started and its single activity, CPE installation work is scheduled. The order is currently paused until the CPE installation work activity is completed. The rest of the activities are planned, as they are waiting for the scheduled activity to complete, but at least we can see what will be done after that activity completes.

Now we will go and see the order in Order Management. We can go directly from OrderHub to the order in Order Management by clicking on the order number of the displayed order. This link takes us to the request details of the order from where we can go to the order by clicking order details. We will cover the request details in another section. Now we see the order in Order Management in more detail. For example, we can see when the order and each activity have started. When we scroll down, we see first a Gantt chart showing the order process, followed by a table with details of each activity. The Reserve phase we covered in the previous section. Provision is the second phase in the order. This phase shows the dependency between IPTV and VoIP and HighSpeedInternet, because the OLT Port Create activity has been executed in its own group first, followed by the provisioning of IPTV and VoIP in parallel after the provisioning of the port.

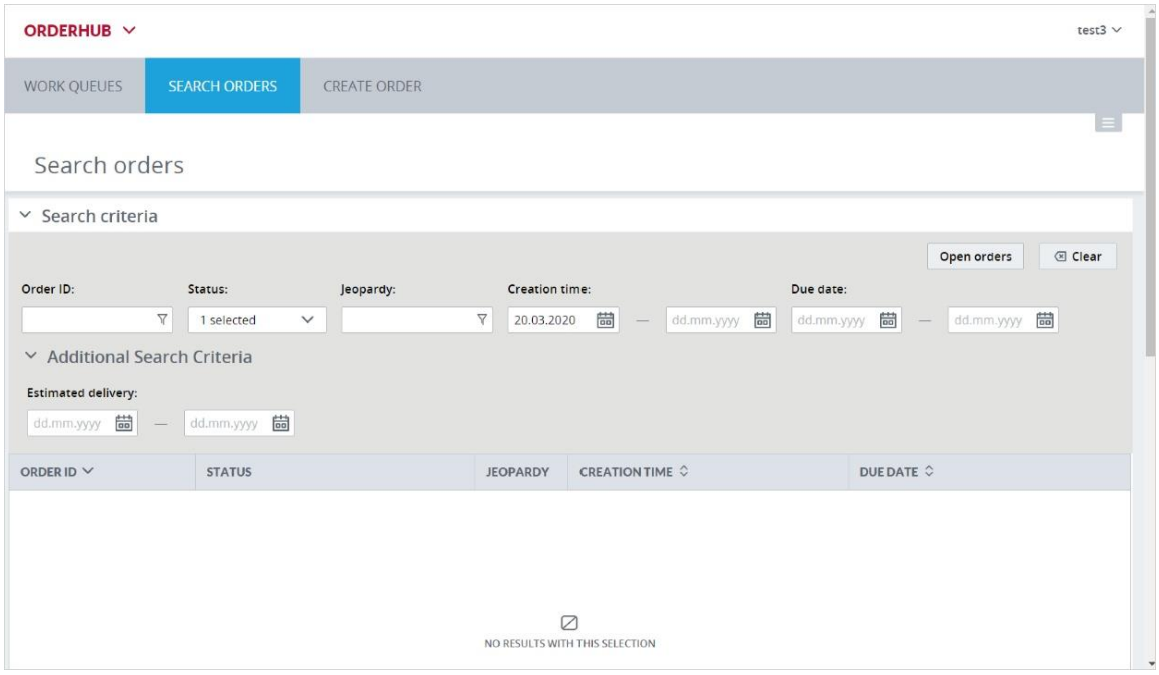
We see that the order has paused at CPE installation work and here we can see the scheduled start time of the activity. When we click on the activity name, we get to see the details of the activity, for example its status, Timed, and its expected end date.

Next, we go to Work Queues section in OrderHub. The work queue, On-site installation, contains the task for our order. Clicking on the name of the work queue opens it to show the sub queues, if it is not already opened. Click on the Open sub-queue to show the tasks that are waiting for processing. In the table on the right we can see one task for our order. We select this item to see the details of the task. The page below the table has two parts, the first shows the task details and forms for processing the task, and the other shows the order details.

To process the task, we click the start button. OrderHub assigns the task to our user ID and now we can check the information displayed on the subscriber information form, before clicking next to go to the task parameters. At this point we install the CPE and check that it functions correctly. When this is successful, we enter the date and time of installation and the serial number of the installed CPE. Finally, we press submit to send the task response and parameters back to Order management, so the order can continue.

3.4 Completed order

3.4.1 Request details



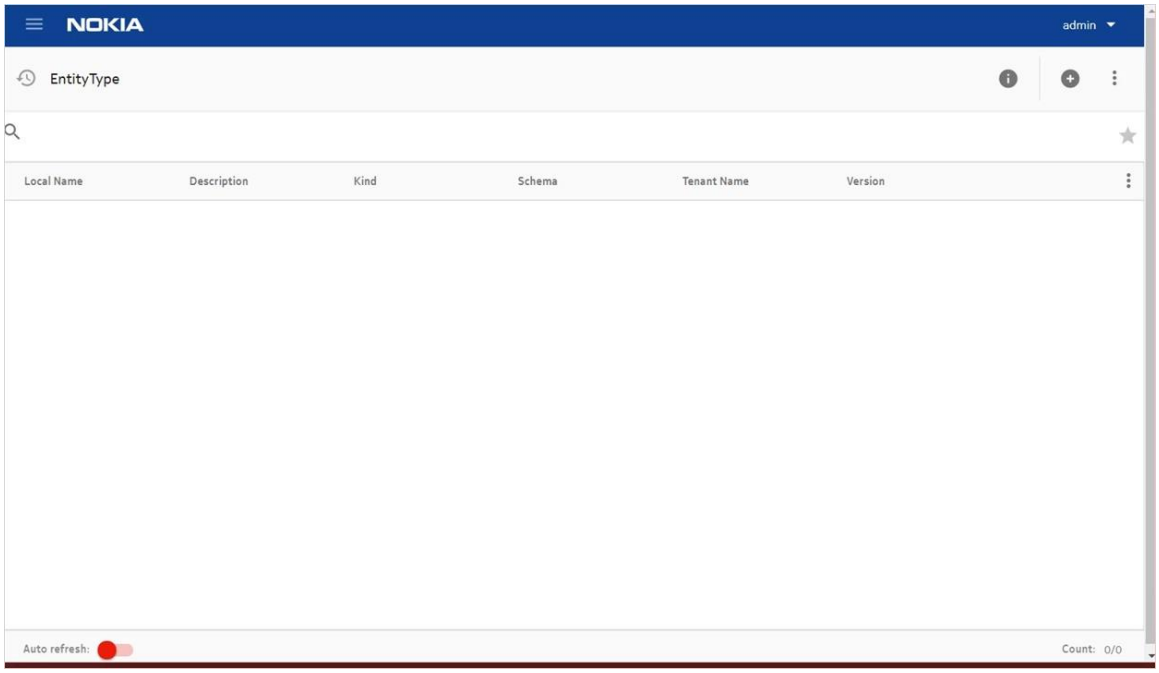
Once we have completed the installation task, the order executes the remaining activities automatically and finishes. We now find the completed order from search orders in OrderHub by searching for completed orders, selecting our order from the list, and displaying its tasks and activities. We see that the on-site installation task has completed, as have all the activities in the order. Our order has completed successfully and on time, as we see from its green status.

Now we go and have a look at the request details of the order in Order Management by clicking the link. Here we see more detailed information, such as when the order started and when it completed, which workflow it was processed in and the status of the response that is sent back to the order sending system.

Below the request details, we see a table of tasks. In this table we can see each task generated by the order and we can see to which network element or system that task was sent. This order produced a total of 28 tasks during its execution. Some of the tasks are linked to activities, such as task 2, which was derived from the activity to create the end user location in UIV. Other tasks, such as task 28 do not belong to activities, but they still perform an important function by updating the customer to UIV. It is good to remember that all activities have at least one task, but not all tasks have an activity. For example, tasks 18 and 19 were created by the technical library under the IPTV Access CFS, but in the order process they show up as one activity called IPTV_AccessConfig:Create.

Let's go and have a closer look at task 28 that was sent to UIV. From the task details page, we can see the execution times for the task, and below the box are links to view the task parameters and log files. If we look at the parameters, we see that the purpose of this task was to finalize the creation of the customer and services to UIV.

3.4.2 Subscriber and inventory



Now we go to UIV to see what information was added. In UIV we search inventory for all end user locations using the Property entity and look for the end user location with the identifier we supplied in the order. From the end user location, we can navigate to the ONT that was installed there. To see the details of the ONT, we click the “i” icon above the list on the right-hand side. Now we can see the serial number that we entered in the OrderHub task form. From the ONT we can navigate to its physical ports and from one of them, UNI port 1, we can find the logical interfaces from which we could follow the trail to the OLT in central office. We could also follow the physical connection from the network port of the ONT to the OLT.

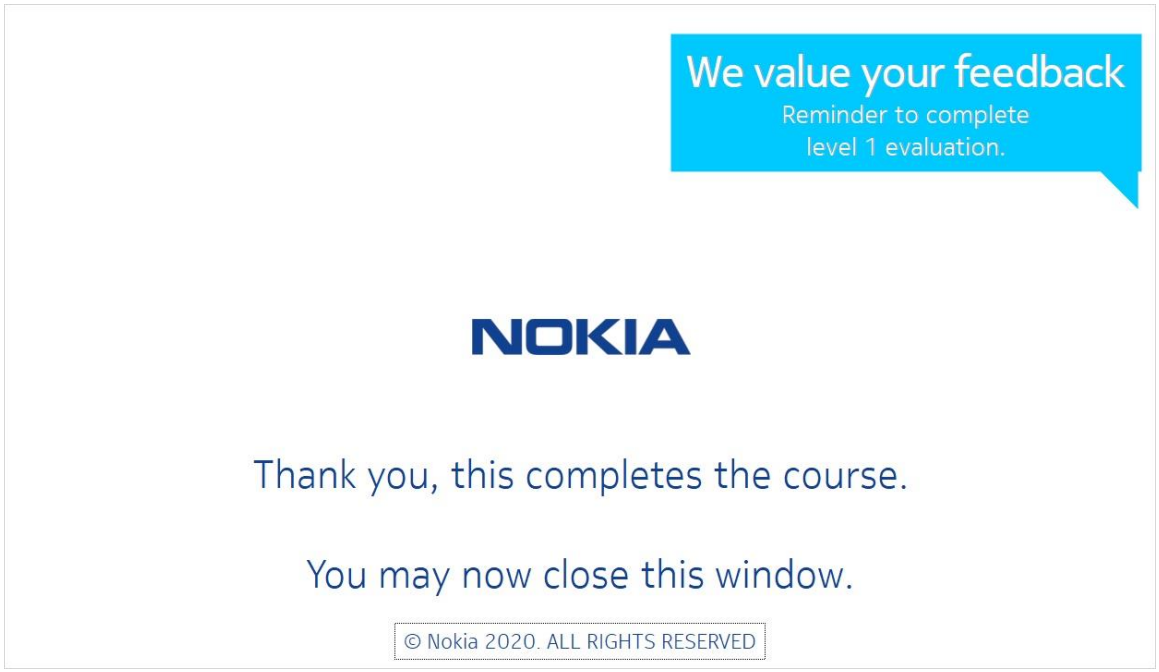
Next we search for Customers to find the customer of our order. From the customer we can navigate to their products and from each product to its customer facing services. You can see that the products and CFSs are the same as we saw in Catalog at the start of this demonstration. From a CFS we can navigate using the service relationship to also find the RFSs for a CFS.

The order we created and sent from OrderHub used the Catalog service model to create a service delivery process in FlowOne. The system executed the order by generating a set of automatic tasks and one manual task. We were able to monitor this processing in both OrderHub and Order Management. At the end of the order, FlowOne created the customer, their services and attached their equipment to the network inventory in UIV.

4 Summary

We saw how to send an order from OrderHub to FlowOne. We saw that the system retrieved the order process from Catalog in the form of the product decomposition that allowed Order Management to build a service delivery process. We used OrderHub to process manual activities. In UIV, we saw the subscriber profile of the customer and how their ONT is connected to the network. Finally, we saw that Provisioning and Activation underpins the order by managing the underlying request and the connections to the external systems and network devices.

4.1 End



This concludes the FlowOne Catalog-driven Fulfillment in Action eLearning module.