

What's New

This document describes the enhancements that are delivered in Oracle Communications MetaSolv Solution (MSS) 6.3 patches.

See the following for information on each patch:

- [Enhancements in Patch 29940044 \(6.3.0.1003\)](#)
- [Enhancements in Patch 29746493 \(6.3.0.982\)](#)
- [Enhancements in Patch 29336894 \(6.3.0.940\)](#)
- [Enhancements in Patch 28962904 \(6.3.0.904\)](#)
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Enhancements in Patch 29940044 (6.3.0.1003)

The following sections describe the enhancements delivered in this patch.

ASR 60 Support

MSS 6.3.0 patch 29940044 supports ASR 60.

Support for Oracle Fusion Middleware 12.2.1.4

MSS now supports Oracle Fusion Middleware 12.2.1.4, and continues to support Oracle Fusion Middleware 12.2.1.3.

New Reject Task Web Service

In addition to the existing CORBA API which allows you to reject a task, this release provides a new Reject Task Web Service (rejectTaskRequest). See *MSS Web Services Developer's Guide* for more information.

Enhanced ASR Process Supplement API

This release enhances the existing ProcessSupplement Web Service API to provide the capability to process a supplement type 3 – Other for an ASR order.

Employee Network User ID Expanded from 20 to 50 Characters

You are now able to define the Network User ID of an employee using up to fifty characters. This expansion will allow most email addresses to be captured and associated with an employee record within MSS, which may then be leveraged by a custom integration to a directory services database such as Active Directory.

End of Support for Windows 7

With Windows 7 due to reach end-of-life in January, 2020, MetaSolv Solution no longer supports this operating system. Upgrade your client Windows environments to the latest 8.1 or 10 release.

Enhancements in Patch 29746493 (6.3.0.982)

The following sections describe the enhancements delivered in this patch.

Auto-associate Network Element to Equipment when Populating Net Loc (Equipment)

This feature enables the automatic association of a **Network Element** to a piece of equipment whenever a new **Net Loc (Equipment)** is associated within the Equipment maintenance window, and is controlled by the following system preference:

Equipment > Equipment Inventory > Auto-associate Network Element when populating Net Loc (Equipment)

When only one network element is associated to the entered CLLI code, it will be auto-populated within the **Network Element** field. In cases where more than one network element is associated to the entered CLLI code, the application will automatically open and trigger the retrieval of the associated elements within the **Network Element Search** window. To auto-associate the desired network element, double-click or select it from the list and click the **OK** button to close the window.

When modifying the **Net Loc (Equipment)** for a piece of equipment already having an associated network element, you will have the option to keep the existing value, or to auto-associate a new element based on the newly-entered **Net Loc (Equipment)** CLLI code.

Oracle Database 18c Certification

This release certifies MetaSolv Solution to run on Oracle Database 18c, and continues to be certified on Oracle Database 12c.

Reopen Only Completed Tasks via Process Supplement API

When supplementing an order with either a New Due Date or Correction via the API, a new system preference allows you to configure the application to only reopen completed tasks, and will set their statuses to either Ready or Pending based on their interdependencies.

To maintain task dependency, previously Ready tasks will also be set back to Pending when any of their predecessors are re-opened. This capability allows you to retain task dependencies for the order, and is controlled by the following system preference:

API > Re-open only completed tasks via Process Supplement API

Associate Multiple Rate Codes to a Port Address

You can now associate multiple rate codes to an equipment spec port address, as well as define a unique child hierarchy for each associated rate code. For example, you may define a physical port with a DS3 rate code having a child DS1 > DS0 structure, and also associate an STS-1 rate code having a VT1 > DS1 child structure to the same physical port. Equipment instances having multiple rate code definitions for a port may only utilize one of the associated rate codes at any given time.

To enable this capability, two new options are now available in the right-click menu within the **Port Addresses** tab of the **Equipment Spec** window. To associate an additional rate code to a top-level physical port, select the desired port's row and select **Add Additional Rate Code** from the right-click menu to insert a new row representing the same port. Once inserted, you can select the desired rate code within the **Rate Code** drop-down. You may add more than one additional rate code to a port, if desired.

To define a child port hierarchy for the new rate code, you need to select the desired row and click the **Next** button. All rows representing an additional rate code for a port are identified by red text within the **Rate Code** column, and also provide the row of the base port which they extend between parentheses within the **Line** column.

To remove an additional rate code definition from a port address, select the desired row within the **Port Addresses** tab of the **Equipment Spec** window, and select **Remove Additional Rate Code** from the right-click menu. This action will remove the physical port and its entire child hierarchy from the specification.

Once defined for the equipment specification, you may choose which associated rate code to use for each port within each instance of the specification. This is done within

the **Port Addresses** tab of the **Equipment** maintenance window, which now allows you to select the desired rate code from the associated list within the **Rate Code** drop-down. In addition to updating the rate code of the particular port, selecting a different rate code also updates its entire child hierarchy based on the equipment specification port address definition.

When making a port assignment, the existing rate code validation logic still prevents you from assigning a circuit to a port when the rate codes are incompatible, but now notifies you when the port's rate code may be changed to support the circuit assignment.

Quickly Manage Condition Codes for an Equipment Hierarchy

The **Condition Code Range Assignment** window now provides you the capability to quickly and easily manage condition codes for an entire equipment hierarchy. While the window continues to function the same as before, a new **Equipment** drop-down field, which is populated with the entire child hierarchy of the equipment the window was initiated from, allows you to easily transition between each piece of equipment within the hierarchy.

When you are done managing the condition codes for the currently selected equipment, you may select your next piece of equipment within the **Equipment** drop-down. To manage the condition codes for the newly-selected equipment, you must confirm the notification stating that all prior changes will be saved, which will then reload the window with the ports and slots of the selected equipment.

To allow you to easily identify the equipment within the **Equipment** drop-down, it describes each piece of equipment based on the same user preference which builds the equipment description within Equipment Inventory. Each value is also preceded with the slot number, which allows you to distinguish between common sibling equipment.

Remove Port Address Locks

This feature expands upon the existing capability which allows you to remove database locks on locked objects from within the application. In addition to having the existing capability to remove locks for connections, network systems, network templates, and network grooming projects, the **Remove Locks** window now allows you to remove locks for port addresses.

The **Remove Locks** window continues to support standard MSS security features, as well as the existing system preference restricting you from viewing and removing other user's locked objects.

Enhancements in Patch 29336894 (6.3.0.940)

The following sections describe the enhancements delivered in this patch.

ASR 59 Support

MSS 6.3.0 patch 29336894 supports ASR 59.

Configure an Equipment Specification to Display its Slots before its Ports

Previously, the **Equipment Inventory** hierarchical view always displayed a piece of equipment's port addresses first, followed by its defined slots.

With this enhancement, you are now able to configure an **Equipment Specification** to display its slots prior to its port addresses within its hierarchical view.

A new check box **Display Slots Before Ports** within the **Mounting Positions** tab of the **Equipment Spec** maintenance window allows you to configure this. Select the check box on a new or existing specification having installed instances to modify the display. For continuity, the same check box is visible within the **Mounting Positions** tab of the **Equipment** maintenance window, but it is read-only as the setting is controlled by the specification.

In addition to the main hierarchical view within Equipment Inventory, this new setting is also reflected within the hierarchical equipment views throughout the application. Two examples are the **Equipment Spec View**, which may be opened from either the Equipment Spec or Equipment maintenance windows, and the **Network Element Equipment** window opened from the Network Element Properties window.

Ability to Remove a Connection from an Access Service Request (ASR)

Expanding upon the previously-released capability to remove a connection from an Engineering Work Order (EWO), an Internal Service Request (ISR), and a Product Service Request (PSR), you are now also able to remove a connection from Access Service Request (ASR).

For connections on an ASR having a change activity, similar validation now exists which identifies the type(s) of assignment(s) which must be reverted to their previous state before the connection can be removed from the order.

Similar to other order types, once a connection is removed from an ASR, the associated pending design issue is deactivated and marked as Overridden, as well as populated with a design note identifying the order for historical tracking. Additionally, the *Activity* of the connection with the order is updated to *Removed* within the design issue lists of **Connection Design** and **Connection Design Search**.

New Validation Message When Changing the Location of a Shared Element/Component

When changing the location of a component that is shared in one or more networks, you are now presented with a validation message notifying you that the change will be reflected by every instance of the component. The new message is triggered whenever you modify the **Network Location** within the **Managing a Component/Element** window opened within **Network Systems**, and provides you the option to keep or discard the modification. If you choose to discard the change, the **Network Location** will revert to its original value.

Ability to Add Partial Protection for Intra-networking Segments for an Optical Network Assignment

While you have been able to add a partial-protect path to an optical network working path, MSS previously only allowed you to protect inter-networking connections between networks.

With this enhancement, you are now able to partially protect intra-networking segments between components within the same network system, in addition to the already protectable inter-networking segments.

To access this new capability, open the **Provisioning Assistant: Build Partial Protect Path** window by right-clicking on an un-protected *Network* block within **Connection Design** and selecting *Build Partial Protect Path...* from the popup menu. The window will load the same data as before, but you now have the option to append the partially-protectable intra-networking segments to the current list, which you do by clicking the new *Load All Paths* button located under the *Next* button. The list is built from the potential connections between the components of the working path that have additional connectivity that is not part of the working path.

A new “--- INTRANETWORK PATHS ---” delimiter separates the intra-network segments from the existing inter-networking segments so that you may easily identify them. Because some of the segments may overlap one another, the *Complete Protection* check box is now disabled upon clicking the *Load All Paths* button as it is no longer applicable. You may now select the paths to protect, and finish the process the same as you always have.

Ability to Reference In-Progress Bandwidth within the Access Connectivity ID for a Multipoint Ethernet Site Product

This feature extends the supported use cases within the MSS/UIM reference integration for multipoint service orchestration. The previous restriction which allowed you to only designate an *In Service* bandwidth connection within the *Access Connectivity ID* label for a *Multipoint Ethernet Site* service item has been relaxed, which enables you to now order the bandwidth connection on the same Product Service Request as the multipoint service, or a separate in-flight PSR.

As the *CPE Component Name* may not be known until the access bandwidth is designed, it is now no longer required to be populated on the order.

Because the access connectivity is no longer required to be *In Service* to be referenced on the order, the reference integration now provides additional logic to retrieve the port and CPE component information from the design of the referenced bandwidth connection. Because these attributes are required by UIM to design the service, MSS will stop the process and trigger an error when either of these attributes cannot be retrieved.

Additionally, new validation logic when attempting to due date complete the multipoint order ensures that all bandwidth connections referenced within the *Access Connectivity IDs* of all the *Multipoint Ethernet Sites* are either already *In Service*, or will be placed *In Service* as a result of completing the order. When one or more connections block the completion of the order, you are now presented with a list of the

blocking connection(s) and their blocking order(s) when completing the due date task manually, and an error message is logged when the task is processed via the background processor.

Enhancements in Patch 28962904 (6.3.0.904)

The following sections describe the enhancements delivered in this patch.

Display Circuit Priority Codes within Connection Design Search

This feature expands the visibility of **Circuit Priority Codes** to **Connection Design Search** results. Whenever a circuit having a defined priority code is retrieved, its priority level can be easily identified by its corresponding graphic within the first column of the result set. These graphics are easily recognizable as they are the same ones previously available within **Connection Hierarchy** to identify priority circuits. The new column will only be visible when one or more circuits within the result set have an associated priority code.

Open Service Request User Data Directly from Service Request Search Results

This enhancement enables you to quickly view and maintain an order's user data directly from **Service Request Search**, without opening the order. A new **Service Request User Data...** menu option is now available for Access Service Request (ASR), Engineering Work Order (EWO), Internal Service Request (ISR), and Product Service Requests (PSR).

When selecting this new option, the appropriate user data window is displayed depending upon the type of order you have selected.

Ability to Remove a Connection from an Internal Service Request (ISR) and a Product Service Request (PSR)

This feature expands upon the previously-released capability to remove a connection from an Engineering Work Order (EWO). Now, you are also able to remove a connection from both an Internal Service Request (ISR) and a Product Service Request (PSR). Previously, while you were able to remove a connection from a PSR having a new activity, this action was not available for change or disconnect activities, which are both now supported.

Additionally, the process of removing a new activity connection from a PSR which has pending assignments tied to the order, either by selecting **Delete Circuit** or **Delete this Item**, now provides you with informational messages stating the assignment type(s) which must be removed prior to removing the connection.

For connections having a change activity on either an ISR or PSR, similar validation exists which identifies the type(s) of assignment(s) which must be reverted to their previous state prior to removal from the order.

After passing validation, the successful removal of a connection from an ISR or PSR is accompanied by a design note within the issue associated to the order, identifying the order from which the connection was removed.

Similar to an EWO, once a connection is removed from an ISR or PSR, the associated pending design issue is deactivated and marked as Overridden. Additionally, the *Activity* of the connection with the order is updated to *Removed* within the design issue lists of **Connection Design** and **Connection Design Search**.

Automatic Assignment to Child Work Queues Added to Rules and Behaviors

Rules and Behaviors now consider the type of **Assignment** when assigning out tasks. When executing **Rules and Behaviors** that result in tasks being added to a parent **Work Queue** that is configured for **Automatic Assignment**, the tasks are now automatically assigned to a child work queue, which was not previously supported.

Equipment Model Number Expanded to 35 Characters

The Equipment Specification Model Number (ASAP.EQUIPMENT_SPEC.VENDOR_MODEL_NUMBER) now supports up to thirty-five characters, which expands upon the previous column definition of fifteen characters. To accommodate this change, the **Model Number** field within the **Equipment Spec** window has been widened to display as many characters as the window will allow.

Note:

The Equipment CORBA API will only retrieve the first fifteen characters of the model number until the IDL is updated to accommodate the length change; IDL changes are not candidates for delivery within a patch, and must be delivered within a service pack upgrade.

Cascaded Installation of Under Construction Equipment within Equipment Inventory

Improving the usability within the **Equipment Inventory** hierarchy, you are now able to cascade the installation of equipment down an equipment hierarchy. When modifying the Status of a piece of equipment, which has children associated to the same **Equipment Work Order**, within the Equipment maintenance window from *Under Construction* to *Installed*, you now have the following options:

1. Install only the parent equipment.
2. Install the parent equipment and all child equipment associated to the same Equipment Work Order.

This enhanced behavior decreases the time necessary to install the equipment, and provides an easy mechanism to install child equipment.

 **Note:**

This capability is only available for equipment managed via an **Equipment Work Order**. The installation of all equipment tied to a service order, such as an Engineering Work Order or Product Service Request, must be installed from the context of the associated service order.

Capability to Provide a Description for Soft Connections within Virtual Schematic Design

While soft connections within a virtual connection's schematic design do not represent an allocation to a specific parent connection, and therefore cannot be configured with an allocation parameter custom attribute, there are times when these relationships warrant a description. To meet this need, you are now able to enter a description for all soft connections, up to 150 characters.

When right-clicking on a soft connection, a new **Specify Virtual Description** menu option replaces the previous Specify Virtual Channel option which does not support soft connections. Selecting this option opens the new **Specify Virtual Description** window where you may enter the desired alphanumeric description. After closing the window, the entered description displays as a label attached to the associated soft connection.

New Capability to Easily Create Multiple Copies of Equipment

Expanding upon the existing methods to copy equipment within **Equipment Inventory**, you are now able to easily copy and install multiple instances of the same equipment specification into a contiguous range of mounting positions.

To initiate the process, right-click on the source equipment and select **Copy**, then right-click on the target mounting position and select the new **Copy Range To** menu option. This action triggers the application to begin creating and installing new instances of the source equipment into the contiguous mounting positions between the source equipment and target mounting position, regardless of direction.

When installing the new equipment within the designated range, positions which are currently occupied by other equipment, or have a blocking condition code, will be skipped. When one or more Informational condition codes exist within the designated range, you are given the option whether or not to skip over the conditioned slots. When copying equipment that occupies multiple slots, the process creates and installs as many instances of the source equipment that fit within the designated range, which may result in some unoccupied slots.

Because this new copy functionality is performed within a range, the new **Copy Range To** menu option is only enabled when the target slot belongs to the same parent

equipment wherein the source equipment is mounted, and is within the same sibling hierarchy; otherwise, this option is not available.

Enhancements in Patch 28504540 (6.3.0.842)

The following sections describe the enhancements delivered in this patch.

ASR 58 Support

MSS 6.3.0 patch 28504540 supports ASR 58.

Existing MSS/UIM Reference Integration for VLAN Management Expanded to Support MSS Network Grooming

The reference integration for VLAN Management between Oracle Communications Unified Inventory Management (UIM) and Oracle Communications MetaSolv Solution (MSS) now supports the assignment and management of VLANs within the context of an MSS Network Grooming project.

To support this capability, a new **Generate Virtual Channels** menu option is now available within the MSS Network Grooming project, which does the following:

- Packages up the current and pending design changes for every highlighted connection to send to UIM, which will determine, track, and send back the appropriate VLANs, to be stored within MSS
- Creates or updates an existing Business Interaction within UIM to manage the VLANs, which is tied directly to the MSS Network Grooming project
- Tracks all of the connections on the Network Grooming project within this single UIM Business Interaction, thus simplifying the use and maintainability of the VLANs
- Automatically creates and stores a direct link to the UIM Business Interaction within the Network Grooming project for easy navigation and maintenance

Additionally, the reference integration now supports the following activities, which enable it to keep the VLAN data synchronized between MSS and UIM:

- **Validate Groom:** Responsible for validating all VLAN data is synchronized between MSS and UIM prior to generating the Network Grooming order within MSS
- **Remove Connection from Groom:** Responsible for updating the statuses of any VLANs associated to a connection that is removed from a Network Grooming project
- **Delete Groom:** Responsible for deleting the UIM Business Interaction associated to the Network Grooming project, and updating the associated VLANs

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 2472722.1 - *Integrating MetaSolv Solution with Unified Inventory Management for VLAN Management* on the My Oracle Support website:

<https://support.oracle.com>

Enhanced Selection and Filtration of Work Queues

This feature enables you to find a desired work queue more quickly and efficiently within the application, specifically within the Work Queue Manager and the Task Transfer windows.

Within Work Queue Manager, this feature allows you to quickly find the specific work queue you are looking for, and to quickly load the tasks within that queue, without first loading all of the tasks of an undesired work queue. This streamlined behavior enables you to load and navigate between work queues more efficiently, thus improving your overall productivity.

This capability is facilitated by a new behavior within the **Work Queue** drop-down list, which enables you to enter your desired work queue, but not retrieve any tasks until you trigger the retrieval by selecting the desired queue. Previously, the tasks of any matching work queues were automatically loaded into the window while you typed each letter, even though you had not finished typing your selection, which led to the retrieval of unwanted data.

Additionally, the **Work Queue** field now also treats the text you type as filter criteria, which dynamically filters the list of available work queues based upon this criteria, whenever the drop-down list is populated. By default, it behaves like a *begins with* filter, but you have the option to change this behavior to a *contains* or *ends with* filter by typing the % wildcard character anywhere within the field. You can easily reset the filter to display all associated work queues by removing some or all of the entered text.

As you type, you have the option to select from the list of matching work queues, which will trigger the retrieval of the tasks for that queue. After an exact match is found, that work queue is automatically highlighted, and you can retrieve its tasks by pressing the Tab or Enter key, or by clicking the work queue with your mouse.

Now that the **Work Queue** field enables you to type any text, new validation messages notify you of any work queues that do not exist, which you may have entered incorrectly, as well as notify you of any valid work queues that exist, but do not belong within your Personal work queues or Work Group, depending upon which option you have selected.

This feature also enhances the overall usability of the Task Transfer window by adding a new set of filter criteria within an improved layout. Two new fields allow you to filter the list of displayed work queues, one by typing in the owner, and the other by typing in the work queue, which filters on both the **Work Queue** and **Parent Work Queue** columns.

Similar to the enhanced **Work Queue** drop-down list within Work Queue Manager, these two new fields dynamically filter the list of queues as you type each letter within each of the fields. Each field behaves as a *begins with* filter by default, but also supports the % wildcard character, which enables you to perform a *contains* or *ends with* type of filtration. You can generate a more unique filter by providing filtration text within both fields simultaneously.

Search by ICSC within Connection Design Search

This enhancement allows you to search for circuits ordered via Access Service Requests (ASR) using Interexchange Customer Service Center (ICSC) codes within the Connection Design Search window. To enable this capability, the existing Service Request secondary criteria now includes a new **ICSC** drop-down list. You can access the **ICSC** drop-down list by right-clicking in the Connection Design Search window and selecting **Service Request**.

Similar to the **ICSC** drop-down list found within an Access Service Request Search, this new field is represented as a preloaded drop-down list, which allows you to select the desired criteria. The value that you select from the new **ICSC** drop-down list is appended to the other search criteria, and limits the results to only return matching circuits that are associated to an ASR order having the requested ICSC.

Search for Access Service Requests (ASR) by ICSC within Service Request Search

This enhancement allows you to search for Access Service Requests by Interexchange Customer Service Center (ICSC) within Service Request Search. To enable this capability, a new pre-populated **ICSC** drop-down list is now available with the existing criteria when you choose ASR and Service Request within the Search By group box.

The value that you select in the **ICSC** drop-down list is included in the search criteria, which limits the search to return only the ASR orders having the requested ICSC in the Administrative section or listed within the Multi-EC form.

Require Task Reject Reason Code

When rejecting a task using the Task Reject window, you are now required to populate the **Task Reject Reason** drop-down list whenever the **Enable Task Reject Reason Codes** preference is enabled under Preferences - Work Management - Work Queue Management. While this preference still controls whether or not the drop-down list is enabled within the window, the field is now always required whenever it is editable.

Previously, with the **Enable Task Reject Reason Codes** preference enabled, you had the option of either populating the **Task Reject Reason** drop-down list or providing a reason in the **Service Request Note - Reject Reason** field to close the window. While this new behavior still enables you to enter a reject reason in the **Service Request Note - Reject Reason** field, you must always do this in conjunction with selecting a task reject reason within the **Task Reject Reason** drop-down list.

You must continue to provide a reason in the **Service Request Note - Reject Reason** field when the **Enable Task Reject Reason Codes** preference is disabled, because it is the only field in which you can provide a reason.

Display Address Information for CLI Locations within Connection Design

Previously, for design issues associated to either an Access Service Request (ASR) or Internal Service Request (ISR) within Connection Design, the **Locations** tab of the

Additional Details page displayed the address information for the primary and secondary locations when they were defined as end user locations, but not when these locations were identified with CLLI locations.

The address information is now displayed for both the primary and secondary locations for special and facility circuits, as well as bandwidth connections, regardless of whether either location is defined as a CLLI or an end user location.

Ability to Remove a Connection from an Engineering Work Order

Previously, after you created a design issue for a connection by opening it from an Engineering Work Order (EWO), you were no longer able to remove that connection from the order, regardless of whether or not you had performed any design or assignment changes.

This behavior had the potential to require a substantial amount of rework if you chose the incorrect connection to bring onto the order, or if it was no longer required for the order. Without the ability to remove the connection from the order, you were required to cancel the existing order and submit a new one.

Although you still cannot remove connections from an EWO having associated assignments, you can now remove connections from an EWO after you have reverted the assignment changes. This capability enables you to complete the order more quickly, because you are no longer required to cancel and resubmit the order.

To enable this capability, the existing validation logic (which previously prevented you from removing any connection having a design issue associated to the order) now determines whether or not any pending assignment changes are linked to the order; when none exist, you can remove the connection from the EWO.

When you try to remove one or more connections from an EWO that has one or more pending assignments for that order, the application displays a list of the assignment types that are blocking the removal for each connection. Additionally, when you try to remove a connection that has a new activity for the order, the application validates that no child circuits are assigned to that connection, and notifies you accordingly.

The following list describes the various assignment types:

- **Allocation:** Indicates that the connection has one or more pending bandwidth assignments
- **Cable Pair:** Indicates that the connection has one or more pending fiber/pair assignments
- **Channel:** Indicates that the connection has one or more pending channel assignments, which may belong to a facility, or Optical or SONET/SDH network
- **Child circuits:** Indicates that the connection has one or more child circuits assigned to it
- **Equipment:** Indicates that the connection has one or more pending port assignments

After passing validation, the successful removal of a connection from an EWO is accompanied by a design note within the issue associated to the order, which states the Work Order Number that the connection was removed from.

After a connection is removed from an EWO, the pending design issue representing that order is deactivated and marked as Overridden, and all other active design issues for that connection are bumped up, if necessary. Additionally, the Activity of the connection with that order is updated to Removed within the design issue lists of both the Connection Design and Connection Design Search windows.

To differentiate between design issues for connections that have been removed from an order and those that were created as part of the DLR reconciliation process (neither of which are directly associated to the displayed order), all design issues created via the DLR reconcile process are now identified by the Activity of Reconciled within the design issue lists of both the Connection Design and Connection Design Search windows.

To remove a connection from an EWO:

1. On the navigation bar, click **Inventory Management**, and then click **Engineering Work Orders**.

The Engineering Work Order Search window is displayed.

2. Enter your search criteria and click **Search**.

3. Click the appropriate Work Order Number link from the search results.

The EWO is opened in the Engineering Work Order - Summary window.

4. Under **Related Pages**, click the **Manage Connections** link.

The Manage Connections window is displayed.

5. Select the check box beside the connection that you want to remove from the order and click **Remove**.

Optical/TDM and SONET/SDH Network Hierarchical Views Now Display the Non-channelized Child Hierarchies of Provisioned Bandwidth Connections

Although the Optical/TDM and SONET/SDH network systems have always displayed the bandwidth connections assigned within the channelized hierarchies of these networks, the non-channelized child hierarchies of these provisioned bandwidth connections were not previously visible within these network systems.

With this enhancement, the child hierarchies of all bandwidth connections provisioned to a channelized network system are now displayed within the hierarchical views of both the Optical/TDM and SONET/SDH network systems.

To view the non-channelized child hierarchies of a bandwidth connection provisioned to either an Optical/TDM or a SONET/SDH network system, select **Network Systems** within the **Inventory Management** navigation panel, and open the desired network system.

After you open the network system, select the **Hierarchical View** right-click option and navigate to the parent facility (containing the provisioned bandwidth) for which you can now continue to drill down the non-channelized hierarchy of the bandwidth connection.

Additionally, for Optical/TDM network systems, you can now view the non-channelized child hierarchies of provisioned bandwidth connections within the Managing a Connection window.

This enhancement also extends the capability of all network systems built from a template within the UNCLASS categorization by enabling you to view the child hierarchies (channelized or non-channelized) of all connections associated to the network.

Enhancements in Patch 27753924 (6.3.0.772)

The following sections describe the enhancements delivered in this patch.

Integration with Oracle Communications Unified Inventory Management to Support VLAN Life-Cycle Management

This enhancement includes a reference implementation that enables you to integrate Oracle Communications MetaSolv Solution (MSS) with Oracle Communications Unified Inventory Management (UIM) to enhance the existing capabilities of MSS to support VLAN life-cycle management.

This integration of MSS' functionality for VLAN assignment with UIM's robust service orchestration and resource management capabilities offers a highly adaptable and scalable enterprise solution for ordering and designing services requiring VLANs, in a fully-orchestrated, flow-through environment.

This reference implementation offers the following advantages:

- Reduces delivery time by automating the VLAN selection
- Improves service quality and reduces problem resolution time by tracking the VLAN life cycle
- Increases the accuracy of the connection design
- Provides a short delivery cycle without requiring any conversions
- Maps the VLANs to the network component, port, or domain setup on the network
- Integrates directly into MSS workflows, thus requiring limited additional training
- Provides an automation framework for MSS
- Provides a Federation Framework for integration to other systems

The reference implementation uses a cooperative inventory design approach that shares UIM data with MSS data, and displays the data within the MSS application. The physical connectivity, virtual connectivity, equipment, port assignments, and networks continue to reside within the MSS inventory. UIM manages the additional entities for service, VLAN IDs, and VLAN domains, thus allowing you to extend MSS connection design to include additional capabilities.

The Virtual Connection Design process integrates the cooperative inventory design approach using the **Generate Virtual Channels** option, which is available on the **Options** menu within the schematic design of a virtual connection.

Using the **Manage Allocation Parameters** action type, which is available within the custom extension process point for Connection Design, you can automate the integration between MSS and UIM. The extension point sends the design information to UIM using the UIM Service Order Fulfillment Web Service (SFWS). Additionally, the reference implementation provides the **UimVLANRequestAdapter**, which retrieves the MSS data, formats the request, processes the response, and provides a flexible and customizable design solution to meet your specific business requirements.

For detailed instructions about installing the required software, setting up MSS and UIM, and integrating MSS with UIM for the reference implementation, see Knowledge Article 2472722.1 - *Integrating MetaSolv Solution with Unified Inventory Management for VLAN Management* on the My Oracle Support website:

<https://support.oracle.com>

New READ-ONLY Security Group

A new READ-ONLY security group is now delivered as base data, which limits all associated users to read-only user access throughout the application. Additionally, a new system preference labeled **Default Security Group** is now available, which allows you to specify the security group with which all the new users are associated when the users are created within the application. The **Default Security Group** preference is located under Preferences - Security.

You can combine these two features to effectively limit all newly created users within the application to have read-only access throughout the application, by default. You are no longer required to associate new users to your own security group, in which you have defined your own read-only access, to limit their access to the application.

The new preference defaults to the DEFAULT security group, which mimics the product functionality prior to this enhancement. However, you can modify the value by selecting the new READ-ONLY security group from the list within the preference, which automatically associates new users with this group, thus limiting them to have read-only access throughout the application.

Setting the New Preference

To set the new preference:

1. On the navigation bar, select **Home**, and then **My Preferences**.
2. Within the **Preferences** window, double-click the **Security** folder to expand it.
3. Double-click **Default Security Group**.

The Default Security Group System Preference window is displayed, which has a list that contains all of the security groups defined within the application.

4. From the list, select a value to define the default group which all new users will be associated. For example, select the newly available READ-ONLY security group to create all the new users with system-wide, read-only access.

Display Label/Value Pairs within Virtual Connection Design

This enhancement expands the availability of information within Virtual Connection Design by displaying the Label/Value pairs, which have been defined for the product within the Product Service Request.

To display these values, a new **Product Catalog** tab is now available next to the existing **ISI-DLR** tab within the Additional Detail page of Connection Design for a virtual connection. Similar to how this information is displayed within Connection Design for a physical connection, each label/value pair has its Data Label, Value, and Activity displayed.

Each label/value pair is displayed on its own row within the page, and is read-only. If desired, you can modify the values from within the service request.

Easily Transfer SONET Node Ownership

While SONET nodes can be shared into multiple SONET networks, each node can only be updated from within its owning network, and is therefore read-only within all of the other networks in which it is shared. As a result, a SONET node shared into other networks cannot be removed from the owning network.

To remove the node from the owning network, its ownership must be transferred to one of the networks in which it is currently shared. This new feature facilitates this process via a new **Transfer Ownership** right-click menu option within the Network Assoc. page of the Node Properties window. This option is available for every instance of the node, and can therefore be performed from within any SONET network containing the node.

To transfer ownership of the node, open the Node Properties window for any instance of the node from within its SONET network, and navigate to the Network Assoc. page, which displays all of the networks which contain the node. The Associated Networks column identifies the name of the SONET network, while the ownership status is displayed within the **Type** column. To transfer ownership to a different network, right-click within the row representing your desired network, and select the **Transfer Ownership** right-click menu option.

The network list will be updated to reflect the change, as will the capability to update or remove the node from the network.

Note:

To transfer ownership of a SONET node, ensure that only one network containing the node is open and all the other networks containing the node are closed. If you receive an error, close all the other networks containing the node and try again.

Easily Mark and Identify Important Circuits

This new feature allows you to define your own circuit priority codes, associate them to all circuit types, and easily identify circuits having a priority code within Connection Hierarchy.

Defining Circuit Priority Codes

You can create new circuit priority codes and manage existing ones from the new Circuit Priority Codes window. You can open this window from any of the following locations:

- From Application Setup:
 1. From the navigation bar, click **Application Setup**, and then click **Inventory Management Setup**.
 2. Under **Connection Design**, click **Circuit Priority Codes**.
- From Find Links:
 1. At the top of the navigation bar, click **Find Links**.
The Find Links page is displayed.
 2. In the **Link** field, enter **circuit priority codes**.

You can create a new code by selecting **New...** from the **File** menu or by selecting the **Add New** link. You can also create a new code based upon an existing code by selecting **New From....** from the **File** menu. All three options will open the new Circuit Priority Code window, where you define the code by entering the Priority Code and specifying its Priority Level, which you will select from the pre-defined list. You can also optionally provide a description for the code. You can define as many codes as necessary; however, a circuit can have only one priority code associated at any given time.

Associating a Circuit Priority Code to a Circuit

After you have defined the codes, you may associate them to a circuit from within the Connection Design window by populating the new **Priority** drop-down list, which is located at the bottom of the **General** tab within the Properties page.

You can open the Connection Design window by clicking **Inventory Management** on the navigation bar, and then clicking **Connection Design**.

While each type of circuit has slightly different attributes within this tab, the new **Priority** drop-down list is generally located in the same location for all circuit types.

Identifying Circuits Having Circuit Priority Codes

Within Connection Hierarchy, circuits having an associated priority code are easily identified by new graphics, which not only alert you of their association without the need to open Connection Design, but also indicate the priority level as one, two, or three. Additionally, parent circuits containing an assigned child circuit having a priority code (anywhere within its hierarchy) are also easily identified by a new graphic, which immediately notifies you of its existence without requiring you to expand the full hierarchy to find the prioritized circuits.

You can open the Connection Hierarchy window by clicking **Inventory Management** on the navigation bar, and then clicking **Connection Hierarchy**.

The following types of hierarchies support this capability:

- Channelized circuits
- Optical network hierarchies
- Non-channelized bandwidth connections
- SONET/SDH routes
- User-defined network routes
- Protected network routes

Enhancements in Patch 27538212 (6.3.0.733)

The following sections describe the enhancements delivered in this patch.

ASR 57 Support

MSS 6.3.0 patch 27538212 supports ASR 57.

Component Addresses Displayed within Virtual Connection Design

This enhancement improves the usability within Virtual Connection Design by displaying the address next to the **Location Name** and **Network Name** columns within both the Network System/Element Search and Select Terminating Element windows, respectively.

Displaying the address information enables you to more easily select the proper component when using an end user location for a network component, because the name of the location may not always be unique.

You can view the newly added **Address** columns when designing a new virtual connection or when redesigning an existing virtual connection.

Click the **Originating Network** link to open the Network System/Element Search window. A new **Address** column is now available (after the existing **Location Name** column), which displays the concatenated address information for each returned element.

After you have chosen the terminating network, select the **Terminating Element** link to open the Select Terminating Element window, which now also displays a new **Address** column (after the existing **Network Name** column).

In addition, the Network System/Element Search window has also been enhanced to display the results in a more visually appealing manner, which improves its usability.

Capability to Copy Read-Only User Data

This enhancement provides the capability to copy the data from read-only user data fields, which you can paste into another window within MSS, an email, or another application.

This enhancement improves the usability of the application and enhances your productivity by enabling you to copy data easily and more efficiently.

After you have highlighted the data within the read-only user data field, copy the data by using Ctrl+C, or from the **Edit** menu, select **Copy**, which copies the data to the clipboard.

This enhancement supports copying data from numeric, character, and date fields, but does not support copying data from user data fields defined as dropdowns.

Searching for Service Requests by User Data

This enhancement adds the capability to search for service requests by the user data defined for each type of request.

To search for service requests by user data, a new **User Data** option is now available within the secondary list beside the **Search By** list in the Service Request Search window.

The **User Data** option is available only when you select **ASR**, **EWO**, **ISR**, or **PSR** from the **Search By** list, because these are the only service request types for which you can define user data.

When you select the new **User Data** option, the search criteria is updated to display all of the defined user data for the type of order you have selected.

Searching for Circuits by Telecom Service Priority

This enhancement enables you to search for circuits by Telecom Service Priority (TSP) within the Connection Design Search and Connection Hierarchy Search windows.

To enable this capability, a new **Telecom Service Priority (TSP)** right-click option is now available within the Connection Design Search and Connection Hierarchy Search windows.

Selecting the new right-click option displays the following newly added options below the existing criteria within both the Connection Design Search and Connection Hierarchy Search windows:

- **Telecom Service Priority** field: Enables you to search for circuits by specifying the TSP code for the circuits.
- **Include 'Previous' Design Issues** check box: Enables you to search through historical, non-active design issues.

Because each connection design issue can have its own TSP value, searching for circuits by TSP code retrieves all connections with a matching TSP within any of its active design issues, which are in either Current or Pending status. To expand the search to also include all previous design issues, select the **Include 'Previous' Design Issues** check box.

In the Search Results window, you may open a connection that does not have a matching TSP, which means that this connection was retrieved because another design issue for that connection does have a matching TSP. Overridden design issues

are not retrieved in the search, because those issues were overridden prior to going into InService status.

UIM-specific Links Now Opened within MSS

Prior to this enhancement, some of the URLs specific to Oracle Communications Unified Inventory Management (UIM) opened within the MSS application, while other UIM-specific URLs opened within an external web browser.

With this enhancement, all the UIM-specific URLs now open within the MSS application.

The UIM-specific URLs are opened within the UIM application whose URL you specified in the **UIM URL** preference under Preferences - Unified Inventory Management, as follows:

```
http://hostname:port/Inventory
```

where *hostname* is the application server used by UIM and *port* is the port used by UIM.

You can access the UIM-specific URLs by:

- Clicking the **Links** tab in the Product Service Request window
- Selecting the **Add Link** right-click option in the Work Queue Manager window
- Clicking **Maintain Order Links** under Actions in the Connection Design window - Connection Summary View for ordered connections

Ability to View Task Gateway Event Details from the Service Request Search Results Window

This enhancement provides direct access to gateway event notes and error information from the Service Request Search results window.

Previously, when orders were held up due to a gateway event error, you were required to have access to the work queue containing the task to view and understand what was preventing the task from completing.

With this enhancement, you can now access the gateway event error information and populate gateway event notes directly from the Service Request Search results window. Therefore, you are no longer required to figure out which work queue the task belongs to. This capability enables you to resolve the issues more quickly, thus improving your service delivery performance.

You can access this new capability from the **Tasks** tab of the Service Request Search results window. Right-click a task and a new context menu displays up to five gateway events associated to that task, if applicable. The context menu displays the name of each gateway event, followed by its status in parentheses.

For each gateway event listed, there is a secondary right-click menu that contains the **Error Status** and **Gateway Event Notes** options. The **Error Status** option is enabled only when the gateway event has an error, and selecting this option opens the

Gateway Event Error List window, which enables you to view the error information for that gateway event.

Selecting the **Gateway Event Notes** option opens the Gateway Event Notes List window, which enables you to view and maintain the notes for that gateway event.

Enhanced Process to Replace Installed Equipment

This enhancement extends the existing capability to replace installed equipment by supporting more user scenarios, and improving the usability of the process. You can now replace equipment having child equipment occupying one or more of its slots, which was not previously supported.

The previous logic validated whether or not the replacement equipment fit into the existing slots occupied by, and adjacent to, the current equipment.

The new logic includes the previous validation logic and, in addition, validates whether the replacement equipment has enough available slots to support all of the child equipment currently mounted within the existing equipment you have chosen to replace.

Additionally, you can now also trigger the replacement process whenever the equipment inventory is opened from the perspective of the Equipment Spec Usage Report. While the functionality is the same, you now have multiple ways to initiate the process.

The replacement process now includes support for Dedicated Plant. When replacing equipment that belongs to one or more defined dedicated plants, the validation logic ensures that the replacement equipment has been configured to support all of the existing services currently assigned to the equipment being replaced, and does not allow the replacement unless the validation is successful. When the equipment is replaced, all equipment belonging to a dedicated plant is updated to the replacement equipment within the dedicated plant definition, as well as all affected dedicated plant DLR blocks.

Initiating the Equipment Replacement Process

To initiate the equipment replacement process:

1. To find the equipment to replace, do one of the following:
 - To find the equipment to replace directly from Equipment Inventory:
 - a. On the navigation bar, select **Inventory Management**, and then select **Equipment Inventory**.
The Equipment Inventory Search window is displayed.
 - b. Populate the **Network Location** field with the location of the equipment to be replaced, select the **Installed Status** option, and click **Search**.
 - To find the equipment to replace within the Equipment Spec Usage Report:
 - a. On the navigation bar, select **Inventory Management Setup**, and then select **Equipment Specifications**.
The Equipment Spec Search window is displayed.

- b. Enter the required search criteria and click **Search**.
The Equipment Spec Search results window is displayed.
 - c. Select an equipment specification, and then either right-click and select **Usage Report...**, or from the **Options** menu, select **Usage Report...**
 - d. Open the Equipment Inventory window by double-clicking the required equipment specification.
2. Locate and right-click the equipment that you want to replace within the hierarchy and do one of the following:
- Select the **Replace...** option to initiate the replacement with a new piece of equipment based on your required equipment specification
 - Select the **Replace From Spare...** option to initiate the replacement with an existing piece of equipment from spare inventory

The **Replace From Spare...** option opens the Equipment Replacement - Find Spare window, which enables you to search for the spare equipment to be used for the replacement. You can choose the required equipment and close the window to continue.

Both the right-click options allow you to enter and review the required attributes of the replacement equipment in the Equipment - [New/Spare] Replacement maintenance window. The replacement equipment inherits the Net Loc (Equipment), Network Element, Status, and Work Order information from the current equipment, when applicable. Additionally, all of the current equipment user data and common custom attribute values are copied to the new replacement equipment, and you can choose to either keep any values already defined for the spare replacement equipment, or to replace these values with those from the current equipment.

After you have reviewed the replacement equipment's attributes, you automatically launch the Equipment Replacement Assistant (ERA) by closing the Equipment - [New/Spare] Replacement window, which guides you through the remainder of the equipment replacement process. In addition to the previously supported mappings between the port addresses of the current and replacement equipment, the ERA now automatically generates slot mappings, which are used to position all of the child equipment within the replacement equipment's hierarchy.

While the slot mappings default to 1:1 whenever possible, the application may move the child equipment mounted within the current hierarchy to an available slot whenever a 1:1 slot mapping is not possible. For example, if the current equipment has children installed on slots seven and eight, the application may map them to slots five and six when the replacement equipment has only six defined slots, as long as there is enough capacity to mount all of the child equipment. While you cannot modify the auto-generated slot mappings, you can view the results within the Review Proposed Changes page, where you can review the proposed positioning for all child equipment.

The Select Condition Code(s) page displays all of the condition codes associated to the ports and slots of the current equipment as before, when applicable, and the new auto-generated slot mappings control where the selected slot condition codes are transferred.

As before, you can review your proposed changes in the Before and After equipment hierarchical views on the Review Proposed Changes page. However, a new top-and-

bottom orientation is now provided by default, and you have the option to select the previously supported side-by-side orientation, as well as a new layered option if you need additional space to view the content.

After reviewing the proposed changes, you can trigger the completion of the replacement process by clicking the **Finish** button in the ERA. You can subsequently choose to process the resulting DLR Reconciliation in the foreground, send it to the Background Processor, or cancel the entire equipment replacement process. After the replacement process is completed, the Equipment Inventory view is refreshed to display the newly installed equipment, which has inherited the resources of the previously installed equipment.

Current Restriction of the Equipment Replacement Process

You cannot replace equipment having one or more defined virtual ports with associated connections, IP addresses, cross-connects, or reservations. Virtual ports are identified by the checked **Virtual** column on the **Port Address** tab within the Equipment maintenance window.

Ability to Maintain Connection Links

This feature expands upon the existing Maintain Links capability, which enables you to maintain the links defined for an order from within Connection Design, by now enabling you to define and maintain links for the connection itself. A new **Maintain Connection Links** link is now available under Actions in the Connection Summary view of the Connection Design window. However, to more easily differentiate between these two features, the previous Maintain Links feature is now accessed via the renamed **Maintain Order Links** link.

Similar to the existing Maintain Order Links capability, the new Maintain Connection Links feature is available for all connection and order types, but is visible only for design issues associated to an order. All connection links added to a design issue are only in scope for that issue, along with all other design issues for that connection associated to the same order, and are copied to the new issue whenever a new design issue is created. Therefore, it is possible to have unique connection links per design issue for the same connection.

Maintain Links Renamed To Maintain Order Links Within Connection Design

The existing **Maintain Links** link has been renamed to **Maintain Order Links** under Actions in the Connection Summary view of the Connection Design window.

New Custom Extension for Generating and Maintaining Allocation Parameters

A new **Manage Allocation Parameters** action type is now available within the custom extension process point for Connection Design, which allows you to bypass the default auto-generation of allocation parameters in favor of your own custom workflow. This

feature enables you to augment the design capabilities of MSS with another application, such as Oracle Communications Unified Inventory Management (UIM), which provides a full logical resource life cycle.

Leveraging this new feature allows you to continue using MSS to design your services, and to maintain a more robust logical resource inventory. While the values are still displayed and stored within MSS, the resource pools may be defined and maintained elsewhere.

While you are only required to configure one extension to enable this capability, it can be triggered while performing the following activities:

- Selecting the new **Generate Virtual Channels** option from the **Options** menu within the schematic design of a virtual connection. The **Generate Virtual Channels** option is enabled only for ordered virtuals when an extension is defined for the new **Manage Allocation Parameters** action type.
- Selecting the **Remove Connection** right-click option within the schematic design of a virtual connection.
- Clicking the **Redesign Connection** link within the schematic design of a virtual connection.
- Selecting the **Group Disconnect** option from the **Options** menu within the Service Request Connections window while working the DLRD task of a Disconnect order.
- Selecting the **Assignment Cancel** option from the **Options** menu within the Service Request Connections window while working the DLRD task for a canceled New order.
- Selecting the **Change Cancel** option from the **Options** menu within the Service Request Connections window while working the DLRD task for a canceled Change order.
- Selecting the **Disconnect Cancel** option from the **Options** menu within the Service Request Connections window while working the DLRD task for a canceled Disconnect order.

The new Generate Virtual Channels feature is designed to enable you to finish your design work prior to generating any allocation parameters. After you have completed your design, selecting this option collects every design segment and passes them to the custom extension, which may then be coded to leverage the entire end-to-end path of the connection in order to properly determine the allocation parameters for each hop of the design.

Enhancements in Patch 27474657 (6.3.0.679)

The following sections describe the enhancements delivered in this patch.

Platform Upgrade

The application platform now supports upgraded software versions.

Certified Software Versions for the Application Server

- Oracle Enterprise Linux Server 6.6 (or later) and 7.1 (or later)
- Red Hat Enterprise Linux Server 6.6 (or later) and 7.1 (or later)
- Oracle Solaris 11.2 or later
- Windows Server 2016

Certified Software Versions for the Workstation Client

- Windows 10 Professional
- Windows Server 2016
- Oracle Database 12cR2 Client (32-bit)
- Microsoft Edge 40 or later

See *MSS Planning Guide* for a full list of compatible software versions.

The following documents have been updated to reflect the Oracle Database 12cR2 and Oracle Fusion Middleware 12.2.1.3 support introduced in MSS 6.3.0.639 and MSS 6.3.0.643.3 respectively:

- *MSS Planning Guide*
- *MSS Installation Guide*
- *MSS System Administrator's Guide*

MSS Now Supports Both JDBC Connect String and Oracle Host, Port, and SID Options for Running an MSS Database Instance as a PDB

Previously, for running an MSS database instance as a pluggable database (PDB), you were required to install the MSS application only by specifying the JDBC connect string in the **JDBC URL** field on the **Oracle Database** tab in the MSS installer.

With this patch, for running an MSS database instance as a PDB, you can now install MSS by specifying the Oracle Host, Port, and SID in the **Oracle Server Name**, **Oracle Port#**, and the **Oracle Service Name** fields respectively or by specifying your own free-form JDBC connect string in the **JDBC URL** field.

See *MSS Installation Guide* for more information.

Enhanced MSS EJB APIs

This release of MSS introduces new and improved features related to MSS EJB APIs.

Enhanced createWorkOrder EJB API to Create EWO With User Data

Prior to this enhancement, to add user data to an Engineering Work Order (EWO), you were required to first create an EWO using the createWorkOrder EJB API, and then add user data to the EWO using the updateWorkOrder API.

In this release, the createWorkOrder EJB API has been enhanced to support the addition of EWO user data as part of the EWO creation process.

Field Length Validations When Calling createWorkOrder EJB API

When calling the createWorkOrder EJB API, validations have been added for the **referenceId** and **responsiblePerson** fields. The createWorkOrder EJB API now displays an error message in the following situations:

- When the length of the **referenceId** field exceeds 16 characters
- When the length of the **responsiblePerson** field exceeds 60 characters

EJB API Now Generates the documentNumber When Creating an EWO

Earlier, when creating an EWO through API, a non-sequence number was allowed as primary key value (documentNumber), which caused data corruption.

In this release, when creating an EWO through API, the API generates the sequence number for the document number.

See *MSS EJB API Developer's Reference* for more information about the MSS EJB APIs.

MSS Web Service Updates

MSS now includes the Engineering Work Order Web Service, which enables an external system to create and manage engineering work orders.

The Engineering Work Order Web Service includes the following operations:

- createWorkOrder
- updateWorkOrder
- getWorkOrder
- createWorkOrderNote
- updateWorkOrderNote
- processDDChangeSupplement
- associateEquipmentToWorkOrder
- associateConnectionToWorkOrder

In addition, the existing MSS Order Web Service now includes a new operation, addTask, which enables an external system to add a task to an order that is not completed and that has a provisioning plan assigned to it.

See *MSS Web Services Developer's Guide* for more information.

Simplified Process to Reinitiate Gateway Events from Work Queue Manager

This enhancement simplifies the process to reinitiate gateway events from the Work Queue Manager window.

Previously, to reinitiate a gateway event associated with a task, you were required to select the **Reactivate** right-click option first, and then select the **Initiate** right-click option in the **Gateway Events** tab of the Work Queue Manager window.

In this enhancement, a new right-click option, **Re-Initiate**, has been added in the **Gateway Events** tab of the Work Queue Manager window. The **Re-Initiate** right-click option combines the functions of the **Reactivate** and **Initiate** right-click options; therefore, selecting the **Re-Initiate** option reactivates and initiates the gateway event associated with a task.

Reinitiating a Gateway Event

To reinitiate a gateway event:

1. On the navigation bar, select **Home**, and then click **My Work Queue**.
The Work Queue Manager window is displayed.
2. Select the task with the associated gateway event.
3. Click the **Gateway Events** tab.
4. Select the gateway event you want to reinitiate.
Ensure that the gateway event is in any status except **Bypassed**.
5. Right-click and select **Re-Initiate**, one of the following occurs:
 - If you selected the **Force Reopen** check box for the gateway event in the Gateway Events window, the Reactivate Gateway Events window is displayed. Select the gateway event that you want to reinitiate and click **OK**, which reinitiates the gateway event.
 - If you did not select the **Force Reopen** check box for the gateway event in the Gateway Events window, the gateway event is reinitiated directly.

MetaSolv Solution 6.3 Database Change Reference Introduced

The MetaSolv Solution 6.3 documentation set includes a new guide entitled *MSS Database Change Reference*, which provides information about the database changes that have been made in the MSS 6.3 patches.

Enhancements in Patch 27555375 (6.3.0.643.3)

The following sections describe the enhancements delivered in this patch.

Support for Oracle Database 12c Multitenant Architecture

MSS now supports the Oracle Database 12c multitenant architecture, which enables you to run the MSS database instance as a pluggable database (PDB) within a container database (CDB).

When running an MSS database instance as a PDB, ensure that you install the MSS application only by specifying the JDBC connect string. To do this, in the **JDBC URL** field on the **Oracle Database** tab, enter your own free-form JDBC connect string.

Support for Oracle Fusion Middleware 12.2.1.3

MSS now supports Oracle Fusion Middleware 12.2.1.3 and continues to support Oracle Fusion Middleware 12.2.1.2.

Enhancements in Patch 26557511 (6.3.0.639)

The following sections describe the enhancements delivered in this patch.

ASR 56 Support

MSS 6.3.0 patch 26557511 supports ASR 56.

Support for Oracle Database 12c R2

MSS now supports Oracle Database 12c Release 2 (12.2.0.1.0).

The following table lists the recommended initialization parameter settings for Oracle Database 12c R2.

Parameter	Value
_enable_secure_sub_role	TRUE
_grant_secure_role	TRUE
O7_DICTIONARY_ACCESSIBILITY	TRUE

Increased the Length of the Expedited Work Interval Bus. Day and Work Interval Bus. Day Fields

Prior to this enhancement, in the **Expedited Work Interval Bus. Day** and **Work Interval Bus. Day** fields on the **Task Assignment** tab of the Provisioning Plan window, you could specify only a two-digit number; that is, you could specify a number only up to 99.

In this enhancement, the length of both the **Expedited Work Interval Bus. Day** and **Work Interval Bus. Day** fields has been increased to accept a three-digit number so that you can now specify any number up to 999.

Enhancements in Patch 26336562 (6.3.0.621)

The following sections describe the enhancements delivered in this patch.

Streamlined Process to Replace Installed Equipment

This enhancement provides a new, simplified method for replacing an installed piece of equipment. Two new right-click options have been added within Equipment Inventory that enable you to replace the current equipment with a compatible part from spare inventory, or to create a new instance from your preferred equipment specification.

Validation logic that considers N/A rate codes and the **Allow Lower Rates** indicator guarantees that the replacement equipment has enough compatible ports to support the provisioned traffic, as well as confirming that it fits into the existing slots occupied by, and adjacent to, the current equipment.

Initiating the New Equipment Replacement Process

To initiate the new equipment replacement process:

1. On the navigation bar, select **Inventory Management**, and then **Equipment Inventory**.
2. Populate the **Network Location** field with the location of the equipment to be replaced, select the **Installed Status** option, and click **Search**.
3. Locate and right-click the equipment that you want to replace within the hierarchy and do one of the following:
 - Select the **Replace** option to initiate the replacement with a new piece of equipment based on your required equipment specification
 - Select the **Replace From Spare** option to initiate the replacement with an existing piece of equipment from spare inventory

The **Replace From Spare** option opens the Equipment Replacement - Find Spare window, which enables you to search for the spare equipment to be used for the replacement. You can choose the required equipment and close the window to continue.

Both the right-click options allow you to enter and review the required attributes of the replacement equipment in the Equipment - [New/Spare] Replacement maintenance window. The replacement equipment inherits the Net Loc (Equipment), Network Element, Status, and Work Order information from the current equipment, when applicable. Additionally, all of the current equipment user data and common custom attribute values are copied to the new replacement equipment, and you can choose to either keep any values already defined for the spare replacement equipment, or to replace these values with those from the current equipment.

After you have reviewed the replacement equipment's attributes, you automatically launch the Equipment Replacement Assistant (ERA) by closing the Equipment - [New/Spare] Replacement window, which guides you through the remainder of the equipment replacement process. The ERA uses mappings between the port addresses of the current and replacement equipment to control the transition of resources to the replacement equipment. For example, if the first port on the current equipment is mapped to the third port on the replacement equipment, then the connections, cross-connects, IP addresses, condition codes, and reservation currently associated to port one, are moved to the third port of the replacement equipment.

The ERA autogenerates default mappings based on the compatibility of the replacement ports with the current ports. You can choose to keep or modify these

mappings as necessary, but you can make modifications only to the top-level physical ports. The enabled port hierarchies of each physical port are mapped 1:1 with the enabled port hierarchies of the mapped physical port when they have compatible rate codes, and are not editable. When you manually override the default mappings, the validation logic ensures that each mapped port is compatible, supports any existing traffic, and that all current ports with provisioned traffic have been mapped to a replacement port.

The Select Condition Code(s) page displays all of the condition codes associated to the ports and slots of the current equipment, and allows you to choose which codes to copy to the replacement equipment. All values are selected by default; therefore, you must deselect the condition codes that you do not want to retain after the equipment is replaced. This page is not displayed when there are no condition codes associated to the current equipment.

Before finishing the ERA, review your proposed changes in the Before and After equipment hierarchical views on the Review Proposed Changes page, where you can validate that all of the connections, cross-connects, IP addresses, condition codes, and reservations associated to the current equipment have been moved to the proper replacement ports. If you want to make any changes, you can go back to the previous page and modify the mappings to achieve the required results. You can also indicate to either delete or uninstall the current equipment, as well as choose to clear the equipment name if you choose to uninstall the equipment.

After reviewing the proposed changes, you can trigger the completion of the replacement process by clicking the **Finish** button in the ERA. You can subsequently choose to process the resulting DLR Reconciliation in the foreground, send it to the Background Processor, or cancel the entire equipment replacement process. After the replacement process is completed, the Equipment Inventory view is refreshed to display the newly installed equipment, which has inherited the resources of the previously installed equipment.

Limitations:

The equipment replacement process has the following limitations:

- You can replace only the lowest-level piece of equipment within the hierarchy.
- You cannot replace equipment having one or more defined virtual ports with associated connections, IP addresses, cross-connects, or reservations. Virtual ports are identified by the **Virtual** column on the **Port Address** tab of the Equipment window.

Improved Usability of Cable and Cable Pair Search Windows

This enhancement improves the usability of the Cable and Cable Pair Search windows by enabling you to easily identify pairs/fibers with condition codes.

Similar to the Connection Hierarchy and Equipment Inventory views, either [BLOCKED] or [INFORMATION] is displayed for each pair/fiber with one or more condition codes, depending on the warning type.

A new column, **Warning Type** has been added in the Cable Pair Search results, which displays the type of condition codes to help you select a pair/fiber to assign to.

Existing Cross-Connects Can Now Be Deleted With the Equipment

Prior to this enhancement, you received an error within Equipment Inventory when attempting to delete or uninstall equipment having defined cross-connects, which prevented you from performing this action. To successfully delete or uninstall the equipment, you first had to navigate to the existing cross-connects and manually remove them.

This enhancement streamlines the deletion and uninstallation tasks by providing an option to remove any existing cross-connects as part of the deletion and un-installation processes.

Instead of displaying an error that prevents you from proceeding with the deletion process, the application now displays a message that informs you that one or more defined cross-connects exist for the equipment. You can choose to either continue with the deletion/uninstallation of the equipment (which will also remove the cross-connects) or cancel the process altogether.

Associated Network Area Now Displayed in Telephone Number Search Results and Maintenance Windows

This enhancement improves the usability of the Telephone Number search and maintenance windows by displaying the associated network area in each window.

A new **Network Area** column is now displayed after the existing **Network Location** column in the Telephone Number search results and in the Telephone Number Properties section of the maintenance window.

Maintain Order Links in Connection Design

This enhancement enables you to maintain the links defined for an order in the Connection Design window. For ordered connections, a new **Maintain Links** link has been added under Actions in the Connection Summary view of the Connection Design window. Clicking this link opens the Related Links page for the order associated to the active design issue, which lets you edit or remove an existing link, or add a new one.

The **Maintain Links** link has been added for all connections and order types; however, this link is visible only for the design issues that are associated to an order.

ASR Billing and Additional Circuit Details Added to Work Queue Manager

This enhancement adds two new ASR billing-related tabs, **Billing** and **EVC Billing**, in the Work Queue Manager window. New columns are also available on the existing **Circuits** tab. The new tabs are enabled only for ASR EVC orders, and they display the information from the order. The **Circuits** tab is always enabled, but the new fields are populated only for ASR orders.

The following fields are available on the newly added **Billing** tab:

- SPEC (Admin)
- PNUM (Billing)
- VTA (Billing)
- ICSC (MEC)
- OECVTA
- OECPNUM

The following fields are available on the newly added **EVC Billing** tab:

- UREF
- UACT
- LREF
- LOSACT
- LOS
- SPEC
- BDW

The following fields are now available on the **Circuits** tab:

- Jurisdiction code
- PLU
- PIU

Open Connection Design Directly from Cable Inventory

This enhancement enables you to open the Connection Design window directly from within Cable inventory.

In this enhancement, a new right-click option, **Connection Design**, has been added in the following windows:

- Cable inventory
- Cable Pair Hierarchy within a Reservation
- Cable hierarchy within Dedicated Plant

From the windows listed previously, you can now open the Connection Design window by right-clicking and selecting **Open**, and then selecting **Connection Design**.

The new **Connection Design** right-click option is available only for pairs/fibers that have an assigned connection.

Enhancements in Patch 25541947 (6.3.0.555)

The following sections describe the enhancements delivered in this patch.

ASR 55 Support

MSS 6.3.0 patch 25541947 supports ASR 55.

MSS Database Changes

The following database change has been made in this release:

- **Release:** 6.3.0.555
- **Prodfixsql file:** 25940130.sql
- **Change:** Modify columns
- **SQL:** alter table asap.equipment_spec modify (equipment_acronym varchar2(25))

Increased the Length of the Acronym Field for Equipment

In this enhancement, the length of the **Acronym** field has been increased from 10 to 25 characters at the following MSS GUI locations:

- Equipment Spec Search window
- Equipment Spec window
- Equipment Cross-Connect Report

Ability to Add Links on Orders From Work Queue Manager

In this enhancement, a new option, **Add a Link**, has been added to the **Options** menu of the Work Queue Manager window. You can also access the **Add a Link** option by right-clicking in the Work Queue Manager window.

Selecting an order and then selecting the **Add a Link** option displays the Related Links window, which enables you to add links to useful resources (web pages, spreadsheets, documents, and so on) on the selected order.

Adding New Links on Orders

To add new links on orders:

1. On the navigation bar, click **Home**, and then click **My Work Queue**.
The Work Queue Manager window is displayed.
2. Select an order and do one of the following:
 - Right-click and select **Add a Link**.
 - From the **Options** menu, select **Add a Link**.
The Related Links window is displayed.
3. Under the **New Link** section, do the following:
 - a. In the **URL** field, enter the URL for the web page or click **Browse** to navigate to the resource to which you want to add a link.
 - b. In the **Name** field, enter a name for the resource.

- c. Click **Test Link** to verify whether the link is working or not.
- d. Click **Add**.

The newly added link is displayed under the **Link** section.

Editing Existing Links on Orders

To edit existing links on orders:

1. On the navigation bar, click **Home**, and then click **My Work Queue**.
The Work Queue Manager window is displayed.
2. Select an order and do one of the following:
 - Right-click and select **Add a Link**.
 - From the **Options** menu, select **Add a Link**.
The Related Links window is displayed.
3. Under the **Link** section, click **Edit** beside the link that you want to edit.
4. Under the **Edit Link** section, do the following:
 - a. In the **URL** field, update the URL for the web page or click **Browse** to navigate to the resource to which you want to add a link.
 - b. In the **Name** field, enter a name for the resource.
 - c. Click **Test Link** to verify whether the link is working or not.
 - d. Click **Save**.

Removing Existing Links on Orders

To remove existing links on orders:

1. On the navigation bar, click **Home**, and then click **My Work Queue**.
The Work Queue Manager window is displayed.
2. Select an order and do one of the following:
 - Right-click and select **Add a Link**.
 - From the **Options** menu, select **Add a Link**.
The Related Links window is displayed.
3. Under the **Link** section, select the check box beside the link that you want to remove.
4. Click **Remove**.

ISI-DLR Information Now Displayed for Virtual Connections

In this enhancement, a new **ISI-DLR** tab has been added in the Additional Details view of the Connection Design window for virtual connections. The **ISI-DLR** tab displays the following information:

- Interexchange Carrier
- IC Circuit Reference
- PON
- Due Date
- ACTL
- APOT
- NCI
- NC
- SEC NCI

In addition, the ISI-DLR section has been added in the GLR report for virtual connections. The ISI-DLR section displays the following information:

- IC CIRCUIT REFERENCE
- ACTL
- APOT
- NC
- NCI
- SECNCI

You view the GLR report by selecting **GLR** from the **Outputs** menu in the Connection Design window for virtual connections.

Additional Fields in Service Request Search Window When Searching for ASRs

This enhancement improves the process of searching for ASRs in the Service Request Search window by providing additional fields for use in your search criteria.

In the Service Request Search window, the following new lists and fields have been added, which are displayed after you select **ASR** and **Service Request** from the **Search By** lists:

- **PROJECT**: This field enables you to search for ASRs by specifying the project number.
- **CNO**: This field enables you to search for ASR orders by specifying the case number of the ASR order.
- **SPEC**: This field enables you to search for ASRs by specifying the service and product enhancement code.
- **PNUM**: This field enables you to search for ASRs by specifying the promotion number.
- **OECPNUM**: This field enables you to search for ASRs by specifying the other exchange company promotion number.

- **NC:** These lists enable you to search for ASRs by selecting the network channel code.

Operating Company Column Added in Network Location Search Results Window

In this enhancement, a new **Operating Company** column has been added in the Network Location Search Results window. The Operating Company column displays the name of the operating company that owns the CLLI code associated with the network location.

Assigning Contiguous Telephone Numbers

You can now assign contiguous telephone numbers that fall within the specified line range. In this enhancement, a new **Contiguous** check box has been added in the **Search** tab of the Telephone Numbers window. To search for contiguous telephone numbers, select the **Contiguous** check box, select a value from the **NPA** list, and then click **Search**.

For example, suppose that in a telephone number block containing 50 telephone numbers in the line range of 0000 through 0050, the line 0015 has already been assigned and is in InService status. Within this 50-number line range, if you search for 20 contiguous telephone numbers for assignment, the application ignores the lines from 0000 to 0015 (because 0015 is already assigned), and considers the lines that fall within the range from 0016. In this situation, the application retrieves 20 contiguous telephone numbers in the line range of 0016 through 0035.

Additionally, you can now select multiple statuses of telephone numbers in the **Status** field on the **Search** tab of the Telephone Number window. To select multiple telephone number statuses, click the down arrow beside the **Status** field, select the statuses that you want to search for, and then click the down arrow again, which displays the statuses that you selected in the **Status** field. After you click **Search**, the application retrieves the telephone numbers having the various statuses based on your search criteria.

Newly Installed Equipment That Are Removed from Engineering Work Orders Are Now Permanently Deleted from the Application

Previously, when you removed newly installed equipment from an Engineering Work Order (EWO), the removed equipment was moved to the spare inventory at that location rather than being deleted.

In this enhancement, when you remove an equipment from an EWO, the following occurs:

- If the equipment was newly created and then installed, it is removed from the EWO and permanently deleted from the application.
- If the equipment was installed from spares storage, the equipment is removed from the EWO and moved back to spare storage.

Updated Confirmation Message When Removing Equipment from an EWO

The existing confirmation message that appears when removing equipment from an EWO has been updated as follows:

```
This action will permanently delete newly installed equipment and move equipment that was installed from spare back to spare status. Would you like to continue?
```

After you click **Yes** on this confirmation message, the following occurs:

- If the equipment was newly created and then installed, it is removed from the EWO and permanently deleted from the application.
- If the equipment was installed from spares storage, the equipment is removed from the EWO and moved back to spare storage.

Removing Equipment Having Child Equipment on a Different EWO

If the equipment you are removing has child equipment on a different EWO, the application now displays the following confirmation message:

```
The following equipments are open in Engineering Work Orders  
EQUIP-1234-CARD    EWO1234  
Continue with the delete?
```

Clicking **Yes** on this confirmation message deletes both the parent and child equipment from their respective EWOs.

Removing Equipment Having Child Equipment on the Same EWO

If the equipment you are removing has unselected child equipment on the same EWO, the application now displays the following confirmation message:

```
The equipment EQUIP-1234 has the below child(ren) unselected in the order. Please  
select the child(ren) also for removal.  
EQUIP-ABC,1 NEW CARD
```

Click **OK** on this confirmation message, select the child equipment, and then click **Remove**.

Updated Confirmation Message When Removing Equipment from Equipment Inventory

In addition, the existing confirmation message that appears when removing equipment from the Equipment Inventory window has been updated to display additional information if the equipment you are removing is open on an EWO. The confirmation message now displays information such as vendor name, vendor part number, equipment name, and order number:

This delete affects the following equipment tied to an Engineering Work Order:
EXAMPLE CORP,1 NEW CARD Order 1234567
Continue with the delete?

Clicking **Yes** on this confirmation message deletes the equipment from both the equipment inventory and the EWO.

Ability to Search for Connections by Project ID

In this enhancement, in the Connection Design Search and Connection Hierarchy Search windows, a new **Project** field has been added that enables you to search for connections by specifying the project ID as a search criterion.

The newly added **Project** field is displayed when you right-click and select **Service Request** in the Connection Design Search or Connection Hierarchy Search windows.

Network Location Code of Equipment Now Displayed in Equipment Description

In this enhancement, in the Equipment Inventory window, the equipment description now displays both the network element (associated with the equipment) and the network location code (CLLI code) of the equipment, provided that you have specified both the values; otherwise, only the value that you have specified is displayed. You specify the network element in the **Network Element** field and the network location code in the **Net Loc (Equipment)** field in the **Equipment** tab of the Equipment window.

Similarly, the Equipment Inventory for Connection Design window has been enhanced to display both the network element and network location code in the equipment description. The Equipment Inventory for Connection Design window is displayed when you open the Equipment Inventory window from within Connection Design.

All information (except network element and network location code) displayed in the equipment description depends on the setting of the **Equipment Description** preference under Preferences - Equipment - Equipment Inventory. For example, suppose that you configure the **Equipment Description** preference as follows:

- Position 1 = manufacturer (for example, EXAMPLE CORP)
- Position 2 = part number (for example, PART567#1)
- Position 3 = acronym (for example, ABCEQUIP)

If you specified only the network element (for example, DLLSTX01#4) for the equipment, the equipment description displays the following:

```
EXAMPLE CORP PART567#1 ABCEQUIP (DLLSTX01#4)
```

If you specified only the network location code (for example, DLLSTX01B01) for the equipment, the equipment description displays the following:

```
EXAMPLE CORP PART567#1 ABCEQUIP (DLLSTX01B01)
```

If you specified both the network element and the network location code (for example, DLLSTX01#4 and DLLSTX01B01) for the equipment, the equipment description displays the following:

```
EXAMPLE CORP PART567#1 ABCEQUIP (DLLSTX01#4 / DLLSTX01B01)
```

Increased the Length of a Few Fields in the Equipment Spec Window

In this enhancement, in the **Equipment Spec** tab of the Equipment Spec window, the length of the following fields has been increased to display all of the data without truncating it:

- Manufacturer
- Part Number
- Mounting Type
- Description
- Notes
- Material Code

Usage Column Added in Equipment Spec Search Results Window

In this enhancement, a new **Usage** column has been added in the Equipment Spec Search Results window. The **Usage** column displays the number of installed instances of each equipment specification.

You can open the Equipment Spec Search Results window from the following MSS GUI locations:

- Inventory Management Setup - Equipment Specifications
- Product Specifications Window - Equipment Spec Tab

New Preference to Choose Whether Child Virtuals Should Inherit the IP Address of the Parent Physical Connection

In MSS, if a parent physical connection already has an IP address assigned to it, you cannot assign an IP address to its child virtual connection because the child virtual connection inherits the IP address of the parent physical connection; consequently, the **Assign IP Address** right-click option is grayed out in the Schematic Design view of the Connection Design window for the child virtual, which prevents you from assigning an IP address to the child virtual.

In this enhancement, a new preference, **Inherit Parent Physical Connection IP Address for Child Virtual**, has been added that enables you to choose whether you want the child virtual to inherit the parent physical connection's IP address.

Treeview Location: Preferences - Inventory Management - Connection Design

The **Inherit Parent Physical Connection IP Address for Child Virtual** preference has the following options:

- **Y** (the default): The child virtual inherits the IP address of the parent physical connection.
- **N**: The child virtual does not inherit the IP address of the parent physical connection. You can assign an IP address to the child virtual connection using the **Assign IP Address** right-click option in the Schematic Design view of the Connection Design window.

The IP address assignment rules are applicable when assigning an IP address to the child virtual. For example, when assigning an IP address to the child virtual's originating element, the application checks whether the terminating element has an IP address assigned; if yes, the Number Inventory Search window retrieves IP addresses from the same subnet as that of the terminating element's IP address.

Enhancements in Patch 25385094 (6.3.0.516)

The following sections describe the enhancements delivered in this patch.

Integration with Oracle Communications Unified Inventory Management to Support Multipoint Carrier Ethernet Services

This enhancement includes a reference implementation that enables you to integrate Oracle Communications MetaSolv Solution (MSS) with Oracle Communications Unified Inventory Management (UIM) 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.

The reference implementation leverages the Product Service Request (PSR) and Work Management capabilities of MSS. Within the MSS application, you can manually enter your requirements for the Carrier Ethernet service via the PSR order or through the PSR API.

A new UIMDSGN task has been added that automates the process of submitting the Carrier Ethernet service requirements (via the PSR order) to UIM. The UIMDSGN task sends the PSR order information to UIM using the UIM Service Order Fulfillment Web Service (SFWS), which is formatted and submitted via a new custom extension UIMServiceDesignAdapter added within the MSS custom extension framework. You can also configure the UIMDSGN task as a system task.

A new UIMVIEW task has been added that enables you to navigate directly from the MSS work queue to the EVC Service Summary page in UIM. Adding the UIMVIEW task is optional. If you choose to add the UIMVIEW task, you must add it after the UIMDSGN task in the provisioning plan.

After you complete the UIMDSGN task, MSS creates the service designs for the EVC service and EVC sites within the PSR order, which is controlled and integrated with UIM using a UIM Business Interaction. The **Order Information - Links** tab contains links that enable you to navigate directly to the EVC service and EVC site designs within UIM, so that you can modify the designs if necessary.

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

<https://support.oracle.com>

MSS EJB API Developer's Guide Introduced

The MetaSolv Solution 6.3 documentation set includes a new guide entitled *MSS EJB API Developer's Guide*. This guide describes the various MSS Enterprise JavaBeans (EJB) APIs that are available, explains how you can use the MSS EJB APIs to perform specific tasks, and provides information about the required input parameters for each MSS EJB API, including sample data values for the input parameters. Specifically, the *MSS EJB API Developer's Guide* provides information about the following MSS EJB APIs:

- **Connection EJB APIs:** You use the connection EJB APIs to create, update, and auto-build connections, and to assign and unassign ports for connections.

- **Engineering Work Order (EWO) EJB APIs:** You use the EWO EJB APIs to create and update work orders (including work order notes), to associate connections and equipment to work orders, and to process due date supplements.

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Oracle® Communications MetaSolv Solution What's New, Release 6.3
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