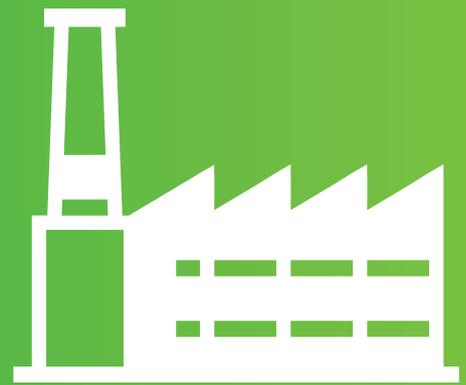# Upgrading from 2016 to 2020

Manufacturing Operations Management | Training Guide

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SYSPRO™ LearnIt

Contents

What's In This Guide

This guide explains how to upgrade your software from LYNQ 2016 and earlier versions to LYNQ 2020. For compatibility reasons you must upgrade all components of the application at the same time.

Components of LYNQ 2020:

Feature	Description
LYNQ mom Web Site	Web based application for Detailed Scheduling, Dispatching, Data Collection, Tracking, Continuous Improvements and Performance Analysis.
LYNQ aps	Desktop application for Scheduling and Dispatching.
LYNQ api Web Site	Web based application used for managing the integration to your ERP application and configuring the Document Library.

The upgrade is managed through the **Product Updater**. The Product Updater must be run manually on the web server to install the web components and from all desktop computers where the Visual APS component is installed. Unattended installs and deployment of the Visual APS component via group policy is not currently supported in this version.

LYNQ 2020 consists of the following builds.

Feature	Description
LYNQ mom	5.0.0.0 and above
LYNQ aps	11.0.0.0 and above
LYNQ api	7.0.0.0 and above

LYNQ 2020 includes new component names for the LYNQ websites.

- Smart Manager renamed to LYNQ mom
- Smart LYNQ renamed to LYNQ api

Note: Product Updater: Periodically, improvements are made to the Product Updater and you may be requested to download a new version of this file.

Important Pre-Upgrade Information

It is recommended that an upgrade of a test environment is performed before upgrading your live production environment. This will allow you to estimate the actual time the upgrade will take to complete and whether the live upgrade should be scheduled outside of business hours. The time the upgrade will take to perform depends on:

- The version you are upgrading from.
- How much historical data there is within MOM.
- Whether you have customization that will need to be re-applied after the upgrade.
- The number of **Visual APS Desktop** installations that need to be upgraded.

If you are using MOM for manual or automated data collection, it's likely that you will have accumulated large volumes of transactional data. It is recommended before commencing the upgrade to MOM 2020 that a new empty logic database is created, if the logic database appears to be exceptionally large in size. The LYNQ mom/Smart Manager instance can be mapped to the new Logic database during the upgrade process.

DO NOT re-map the LYNQ mom/Smart Manager instance to the new logic database until everyone has clocked out of the Workbench and all transactions have been generated.

The upgrade process will create new versions of LYNQ SQL Views:

- All Views in the LYNQ databases will be updated.
- Views listed below in the ERP database will be updated.

Lynq_VP_SourceDepartmentView	Lynq_VP_SourceProductionMaterialsView
Lynq_VP_SourceForecastOrderLinesView	Lynq_VP_SourceProductionOperationsView
Lynq_VP_SourceInventoryItemView	Lynq_VP_SourceProductionOrdersView
Lynq_VP_SourceInventoryLocationView	Lynq_VP_SourcePurchaseOrderLinesView
Lynq_VP_SourceInventoryView	Lynq_VP_SourceRoutingMaterialView
Lynq_VP_SourceMRPMaterialsView	Lynq_VP_SourceRoutingOperationView
Lynq_VP_SourceMRPOperationsView	Lynq_VP_SourceRoutingView
Lynq_VP_SourceMRPOrdersView	Lynq_VP_SourceSalesOrderLinesView
Lynq_VP_SourceMRPPurchaseOrderLinesView	Lynq_VP_SourceWorkCentreView

Prior to completing the upgrade, ensure that a full backup of your ERP and LYNQ databases have been taken.

Before starting the update you MUST clock all employees and equipment out of the Workbench by selecting End Day/Turn Off. Allow 5 to 30 minutes for transactions to be generated and posted to the ERP application before commencing with the upgrade. Whilst the applications are being upgraded, please do not allow any users to logon
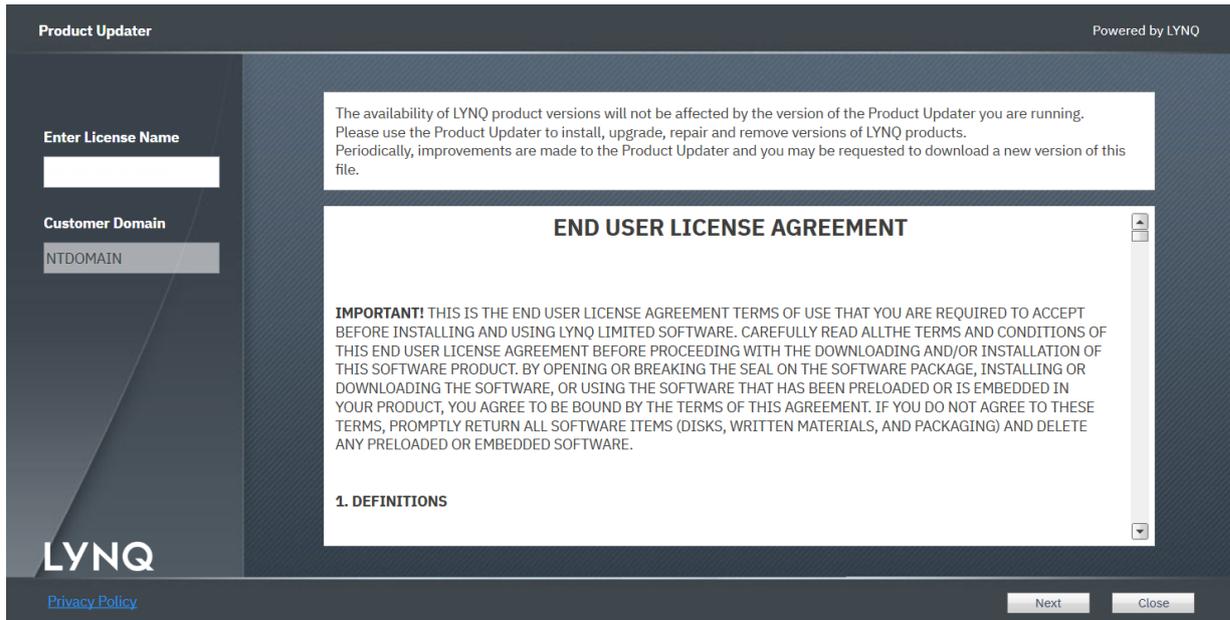
Updating the Product Updater

The latest version of the **Product Updater** can be downloaded from

`https://support.lynqmes.com/Download.`

You must first unzip the downloaded file and then right click on the **Product Updater** executable and select **Run As Administrator**.

The **Product Updater** window will be displayed.

You must know your **License Name** to install and upgrade to LYNQ 2020. Contact your Support Team if you are unsure of these details.

1. Enter your **License Name** and scroll down to the bottom of the **License Agreement** to accept the terms and conditions.
2. Select **Next** to continue.

The **Product Updater** displays the software that you are licensed for and will detect the last installed versions of the software. If you have multiple instances installed you must change the folder path before upgrading.

> **Note: Copy to Network Share**: Copy the Product Updater to a network share. You will need to use this program to upgrade Visual APS Desktop Clients.

Changes to System Requirements

Microsoft .NET Framework

LYNQ mom and LYNQ api require Microsoft.Net Framework 4.8 to be installed on the Internet Information Services Server. The **Product Updater** will check whether the correct version of .Net Framework 4.8 is installed by querying the registry.

SOFTWARE\Microsoft\NET Framework Setup\NDP\v4\Full

Key: Release

If the release value is less than 528040, the **Product Updater** will prompt you to download the correct version before continuing.

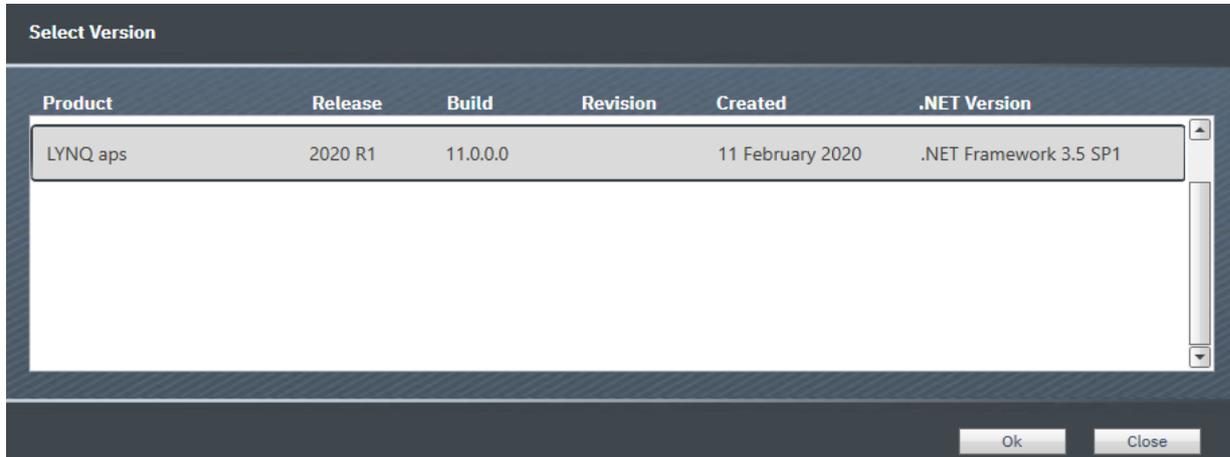Alternatively, **Microsoft .Net Framework 4.8** can be downloaded from

https://dotnet.microsoft.com/download/dotnet-framework

Note: Server Reboot: You will be requested to restart the server after installing Microsoft .NET Framework 4.8.

Upgrading Visual APS

From the **Product Updater**, select to update **LYNQ aps**.

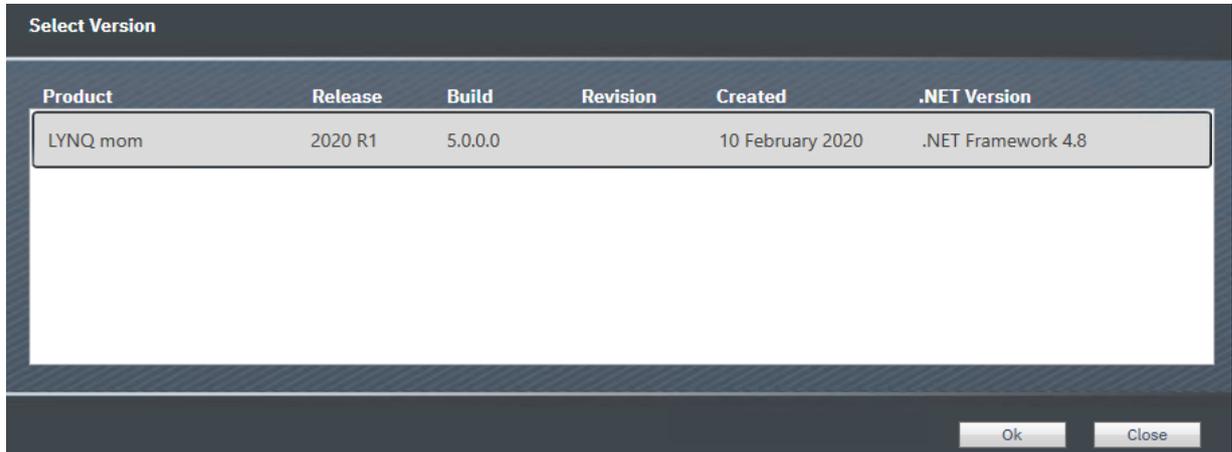The **Select Version** window is displayed.

1. Select the most recent **2020 Release** and select **OK**.
2. Once the update is complete **Launch Visual APS**.
3. The **DB Version Update** window is displayed.
4. Select **Yes** to **Update the Database**.

> **Note: SQL Rights**: You must be logged in as a user that has rights to update table data and the database schema in SQL. This can be a user that is a member of either the sysadmin or db_owner role or a user with equivalent rights. LYNQ aps stores it's database objects in the ERP database.
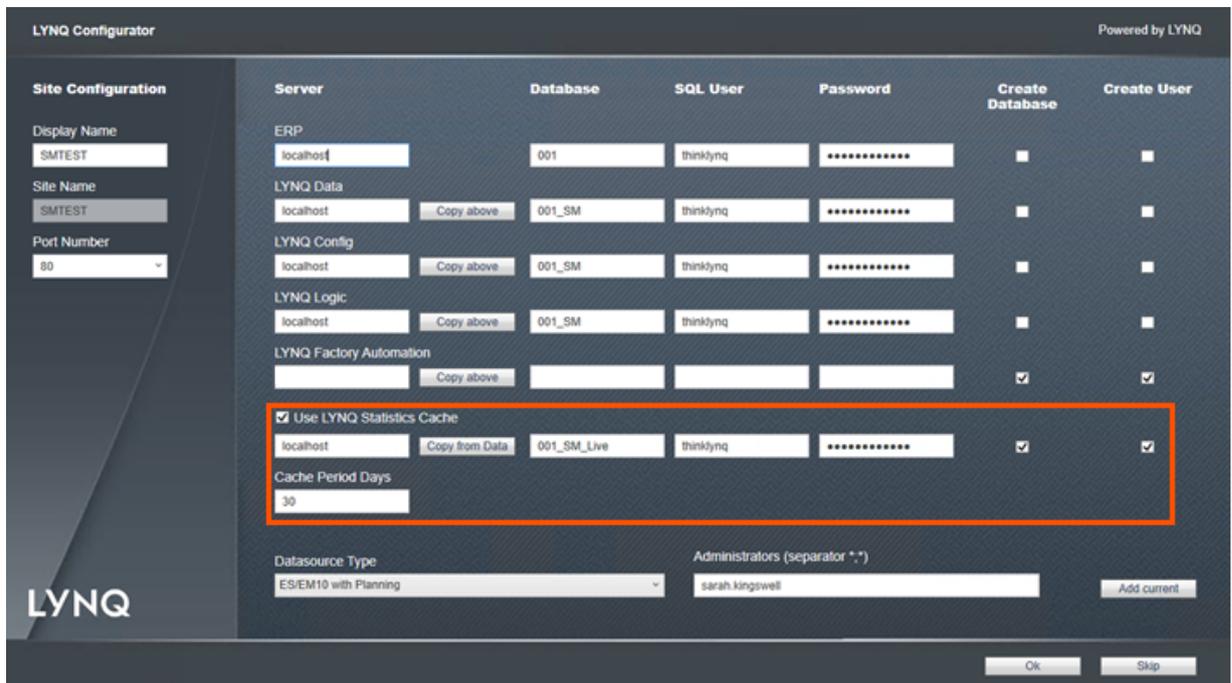
Upgrading LYNQ mom/Sart Manager

From the **Product Updater**, select to update **LYNQ mom**.

The **Select Version** window is displayed.
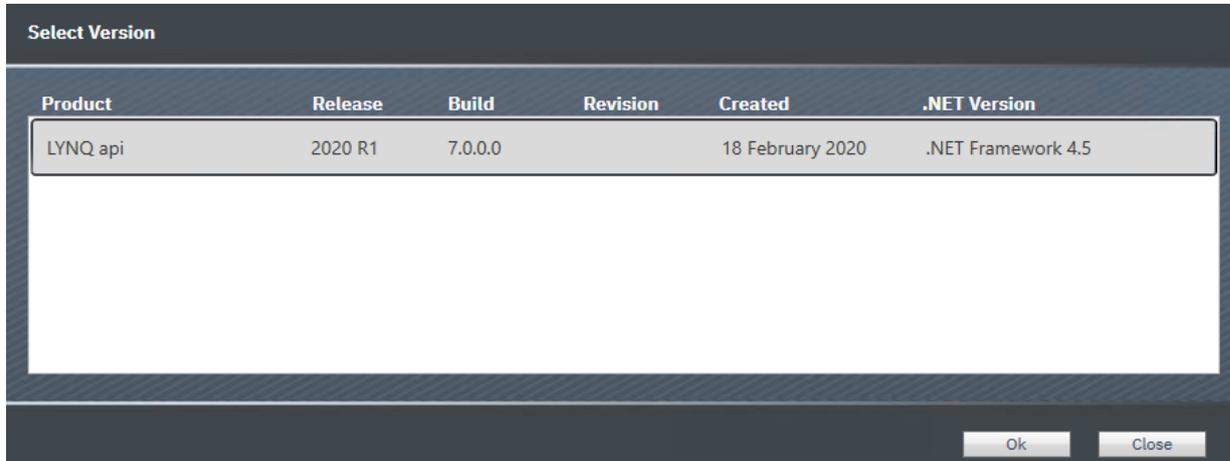

Configurator Window

1. Select the most recent **2020 Release** and select **OK**.
2. The **Configurator** window is displayed.
3. Select the option to **Use LYNQ Statistics Cache** if the row does not show any settings.
4. Select **Copy** from **Data**.
5. Select **Create Database** and **Create User**.
6. Select **OK**.
7. Once the update is complete open the **MOM Website**.

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8.   The first time the site is run you will be prompted to update the database.

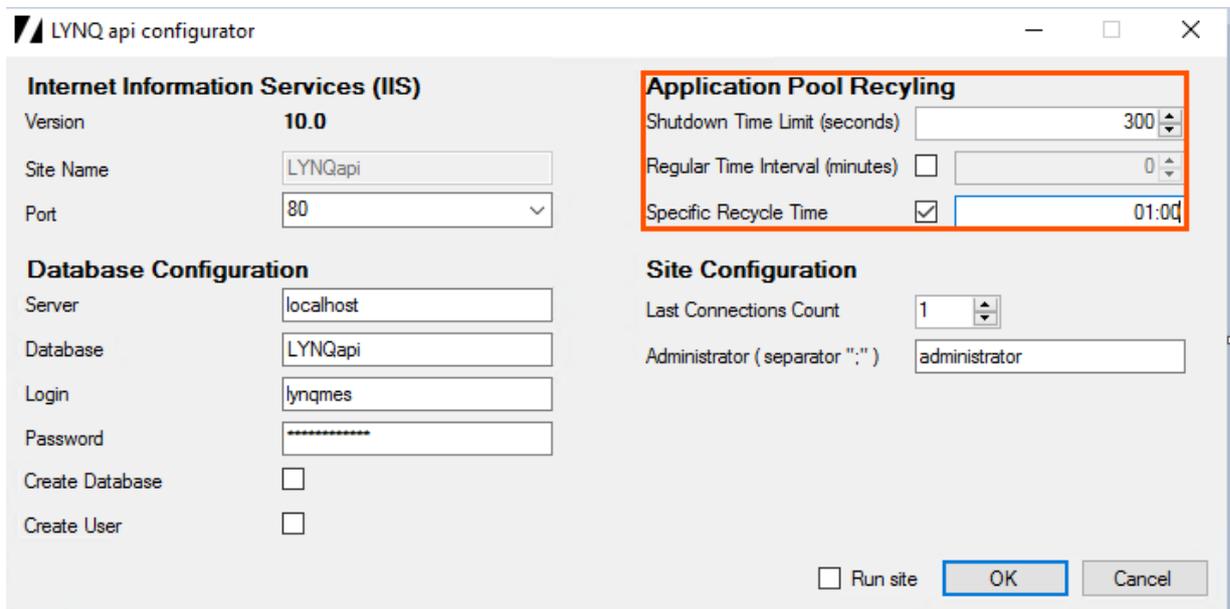9.   Select **OK** to update the **Database**.

Upgrading LYNQ api/Smart LYNQ

From the **Product Updater**, select to update **LYNQ api**.

The **Select Version** window is displayed.

Configurator Window

1. Select the most recent **2020 Release** and select **OK**.
2. The **Configurator** window is displayed.
3. It is recommended the **Application Pool Recycling** settings are set to:

    a. Shutdown Time Limit (seconds) **300**.
    b. Regular Time Interval (minutes) **Off**.
    c. Specific Recycle Time **On 01:00.**

4. Click **OK**.
5. Once the update is complete open the **LYNQ api Website**.

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6.   The first time the site is run, you will be prompted to update the database.
7.   Select **OK** to update the Database.

Post Upgrade Steps

Complete the following post upgrade steps for the **MOM Website** depending on the build version of **Smart Manager** you have upgraded from.

Use the table below as a guide:

Step	Version 2.8x	Version 3.8x	Version 3.x/4.x
Update Analytical Statistics	Yes	Yes	Yes
Import Equipment OSE	Yes	N/A	N/A
Update Production Issues	Yes	Yes	No
Apply Customizations	Yes	Yes	Yes

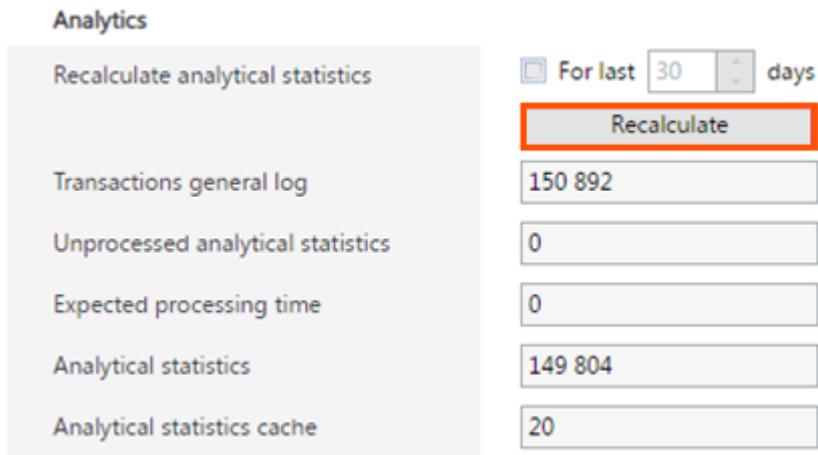|			

The following topics will explain how to complete each step.

> **Note: Important Steps**: Don't forget to run these steps after the upgrade. Your software may not function correctly if these steps are not completed.

Update Analytical Statistics

1. From the **MOM Home** page select **Settings and System Insights**.
2. Click **Recalculate** (Do NOT refresh the page once the recalculate has started, the page will automatically refresh every 30 seconds)

3. Once the recalculate has completed and there are zero unprocessed analytical statistics, close the page.

> **Note: New Statistics Layer** : For increased performance of the application, a new statistics layer has been introduced. This allows the application to perform much faster than earlier releases of MOM. You only need to run this once post upgrade.

Update Custom Production Issues

1. Your current profile has now been updated with 2020 functions.
2. Select **Issues** from **Advanced Settings**.
3. All default **Production Issues** that were shipping with the 2.8 and 3.8 profile will be converted to the 2020 format as explained in the table below. If any custom Production Issues were created since applying the 2.8 or 3.8 profile, the Production Issues should be edited and set to the relevant type and category.

Type	Category	Classification	Description
Availability	Breakdowns	Breakdowns	Breakdowns
	Setup and Adjustments	Setup and Adjustments	Setup and Adjustments
Custom	Health & Safety	Accident	Accident
		Near Miss	Near Miss
Performance	Minor Stops	Cleaning/Checking	Cleaning/Checking
		Component Jams	Component Jams
		Delivery Blocked	Delivery Blocked
		Equipment Wear	Equipment Wear
		Obstructed Product Flow	Obstructed Product Flow
		Sensor Blocked	Sensor Blocked
	Reduced Speed	Operator Inefficiency	Operator Inefficiency
		Rough Running	Rough Running
		Under Design Capacity	Under Design Capacity
Quality	Rejects	Production Rejects	Production Rejects
		Startup Rejects	Startup Rejects
Type	Category	Classification	Description
Availability	Breakdowns	Breakdowns	Breakdowns
	Setup and Adjustments	Setup and Adjustments	Setup and Adjustments
Custom	Health and Safety	Accident	Accident

Import Equipment Based OSE's

If you want to track **Overall Equipment Effectiveness** (OEE) you must import the **Equipment Based On Screen Elements** (OSE's) from the 2019 R1 Profile. Once Imported you will be able to associate terminals to Linked Equipment. Doing so changes the behavior of the **Workbench**.

1. Open the **MOM Website**.
2. Select **Settings**.
3. Select **Advanced Settings**.
4. Select **Profiles**.
5. Select **Save Current** to provide a backup of existing profile.
6. Enter a **name** for the **Profile** (i.e. Post upgrade - Date).
7. Select the **2020 profile**.
8. Select **Append** from **Selected**.
9. This provides a complete list of On-screen elements available in the 2019 R1 profile and shows which of these are already within your existing profile (ticked).
10. It is recommended all new OSE's be appended to your existing profile.
11. To do this, use the filter option under the **Exists** column to only show **Unchecked**.
12. On the top left of the report, tick the box to select all new OSE's.
13. Select **Append Selected**.
14. You must now assign the correct OSE's to the **Equipment** terminal and link the new equipment terminal to the relevant terminals.

> **Note: Appending from Profile** : LYNQ ship a new profile with each major release of the software. You can use the append profile option to merge new profile settings with your existing profile settings. It's recommended that you run the append profile function after each major and service pack release of LYNQ.

Reapply SQL Customization

If you have customization to your installation of MOM these will need to be re-applied after the upgrade. Your **Support Team** will be able to assist you with this activity.

LYNQ maintains a record on customizations made to your installation. These records can be viewed by logging into the customer support portal.www.support.lynqmes.com