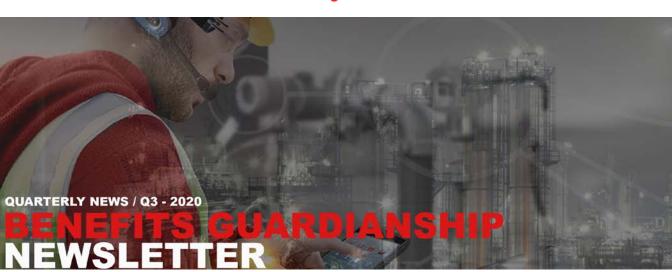
# **Honeywell**



Welcome to the new quarterly BG e-Newsletter. Here you will find the latest product updates, new release information, industry news and Honeywell Forge for Industrial solution articles.

In this issue,

- Honeywell Connected Plant is offering Virtual Instructor Lead Trainings.
- Deploying the UniSim Competency Suite Server.
- Discover Useful Features of UniSim Design with "How Do I..." Series.
- Find out about the UniSim Design 'How do I ...' video series.
- Learn about Profit Blending's Parameter Reference Tool Utility.
- Learn how to use the PBC Parameter Reference Tool.
- Find out what's new in Profit Suite R510 now and CPM R603 in September.
- Learn about DynAMo Metrics & Reporting R210 and Process Safety Analyzer R201 enhancements.

And don't forget to watch our latest video on the new Honeywell Forge for Industrial offering to see how it can transform your business today.

If you have any questions or comments, don't hesitate to contact us.

# GlobalBGPDeliveryCentre@honeywell.com



# **AUTOMATION COLLEGE**

Virtual Instructor Lead Trainings

# READ **TRAINING** ARTICLE



# **UNISIM® DESIGN SUITE**

• UniSim Design How Do I ... videos series announced

# READ **UNISIM DESIGN** ARTICLES



# **PROFIT™ SUITE**

- Honeywell Forge APC (Profit Suite™ R510.1) & Control Performance Analytics (CPA) R110.1 (Profit Performance Monitor - PPM) are now available. • CPM R603.1 is releasing in
- September 2020.)

READ **PROFIT SUITE** ARTICLES



# **UNISIM® COMPETENCY SUITE**

UniSim Competency Suite Server

# READ **UNISIM COMPETENCY** ARTICLES



# PROFIT™ BLENDING AND MOVEMENT

 Profit Blend Controller – **Parameter Reference Tools** 

# READ **PBM** ARTICLES



# **DYNAMO® ALARM AND OPERATIONS**

- DynAMo Metrics & Reporting R210.1
- Process Safety Analyzer R201.1

READ **DYNAMO** ARTICLES



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**WEBINARS** 

# **Automation College**

# **Virtual Instructor Lead Trainings**

**Did you know** ... that Honeywell Connected Plant is offering a full set of virtual training which are the remote virtual variant of the in-center experience, participants are taught the course content through real-time instruction by an Automation College instructor using Microsoft Teams.

Students have connections to the VM based lab environments, and the instructor can access each student's environment to guide and support the same way as they would in the class.

The pole Automation College centers can be contacted on the bellow Email addresses:

- EMEA: HPS-Training-Belgium@Honeywell.com
- APAC: HPS-Training-India@honeywell.com
- AMER: HPSTrainingUSCANLAR@Honeywell.com

In case of custom training requests please contact the following email address: <a href="ISBD\_EMEA@honeywell.com">ISBD\_EMEA@honeywell.com</a>

- Automation College Honeywell Connected Plant EMEA Training Calendar: <a href="https://ac.emea.honeywell.com/EMEA.asp">https://ac.emea.honeywell.com/EMEA.asp</a>
- Automation College Honeywell Connected Plant APAC Training Calendar: https://ac.ap.honeywell.com/AP.asp
- Automation College Honeywell Connected Plant AMER Training Calendar: <a href="https://www.honeywellprocess.com/en-US/training/Pages/course-schedule.aspx">https://www.honeywellprocess.com/en-US/training/Pages/course-schedule.aspx</a>

# **UniSim® Competency Suite**



# **UniSim Competency Suite Server**

This month's article seeks to remind installed base customers with R450 or later releases installed, about the UniSim Competency Suite Server.

To access other information about UniSim Competency Suite, customers are invited to register to use the Knowledge Base. Please follow this link for full details.

#### Overview

UniSim Competency Suite (UCS) R450 has introduced the UCS Server. This is a service that connects to a SQL database on the back end. When a user runs any of the UCS applications, the application will retrieve the user's role from the UCS Server. When the application exits, any reports that are generated will be stored in the UCS Server. Curriculum competencies are also stored in the UCS Server and are tied to the users and reports. When the user runs Tutor, it will request model data from UCS Server.

When installing a UniSim Competency Suite Patch it is required and best practice to install the patch on all the nodes/computers where UniSim Competency Suite component is installed, including the UCS Server hosting node.

Starting with the R470 release, the R470 version of the UCS Server is capable to communicate with R460 and R461 versions of UniSim Operation "clients".

# UCS Server - OTS Engineer Setup

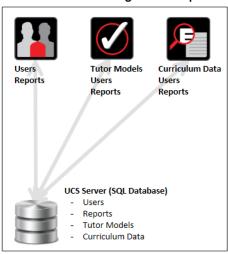


Fig 1: UCS Server interacts with UCS applications

The UCS Server is essentially an interface between UCS applications and an SQL database shown in figure 1 above. The database operates in the background, it provides the following services to UniSim Competency Suite products and utilities:

- Data services for the UniSim Tutor Models and the UniSim Curriculum data
  - o UCS Server works in the middle to push and pull data between applications and the SQL database.
- UniSim Role Management (Engineer, Instructor, Trainee etc...)
  - o Role management is executed using the User Manager application
- Usage and reporting for UniSim Operations, UniSim Tutor and UniSim Curriculum
  - o Application usage data is stored in the UCS server database, it is viewed using the Usage Log application
  - Reports from UniSim Operations and UniSim Tutor are stored in the UCS server database and can be viewed using he
     Usage Log application

# **Implementation Examples**

Honeywell envisions two different uses of UniSim Competency Suite. The first is the "traditional" approach where the UCS applications and UCS Server are installed on the local machine. This would be the approach for a stand-alone OTS system or on an Engineer's laptop. The second approach is a "network" setup (typically on a domain) where multiple clients are running the UCS applications, but the administration of users, reports, and competencies is handled by a single computer.

#### Example 1: Local Install

The OTS Engineer has the UCS Server installed on the local computer. This is the set-up used by most engineers during system development using their own computing resources. The user logs onto this machine with an administrator account which has UniSim Engineering privileges assigned.

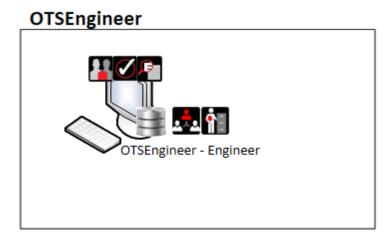


Fig. 2 Example of an OTS Engineer.

# Example 2: Distributed Install 1

This is an example of a set-up used for a delivered project. PlantA is set up as a UniSim Operations OTS with multiple computers. The UCS Server and ULM licensing have been installed on a separate single computer called PlantAUcsServer. Other computers in the network have been installed as a "client" and do not have the UCS server installed, they are configured to use the UCS Server from PlantAUcsServer during the installation process. In this example the IT administrator has given the OTSEngineer account Engineer role.

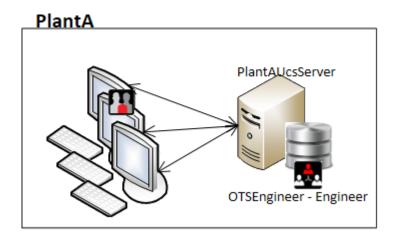
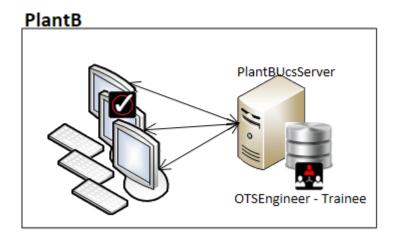


Fig. 3 Multi-computer set up with a single UCS Server installed on dedicated host.

# Example 3: Distributed Install 2

This is an example of a set-up used for a delivered project. PlantB is set up for UniSim Tutor training. The UCS Server and ULM licensing have been installed on a separate computer called PlantBUcsServer. The remaining client computers have been installed with Tutor only and are using the UCS Server from PlantBUcsServer. The IT administrator has used role management to restrict all the client users including the OTSEngineer to be UniSim Trainee only access to limit the scope of OTSEngineer activity. This role information and any subsequent usage data and user reports are all stored in the SQL database located on PlantBUcsServer. None of this information is held locally.



 $Fig.\ 4\ Multi-computer\ set\ up\ for\ UniSim\ Tutor\ with\ a\ single\ UCS\ Server\ installed\ on\ dedicated\ host.$ 

# Example 4: Switching Servers 1

OTSEngineer is currently using a UCS server on the local machine but can switch UCS Servers to work on a different system or project. If OTSEngineer were to change to the UCS Server on PlantAUcsServer, the UniSim Competency Suite applications would pick up their User Manager and Usage Log data from the PlantAUcsServer. In this case, it doesn't make too much difference because OTSEngineer is already assigned with UniSim Engineer access, just like on the local OTSEngineer computer. However, when Tutor is launched, the Tutor models from PlantAUcsServer will be used.

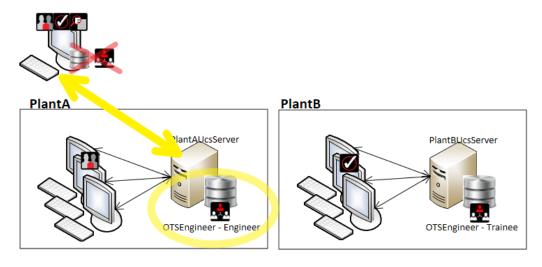


Fig. 5 Switch UCS Server to PlantAUcsServer

# **Example 5: Switching Servers 2**

OTSEngineer can also switch to the UCS Server of PlantBUcsServer. But for PlantB, the OTSEngineer has been assigned UniSim Trainee access. So, when UniSim Operations is launched on the OTSEngineer machine, it will be launched with UniSim Trainee access privileges. Similarly, when Tutor is launched, it will launch with UniSim Trainee access and will be able to train on the models that have been created for PlantB.

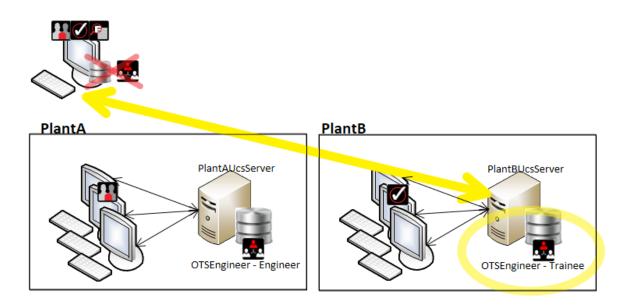


Fig. 6 Switch UCS Server to PlantBUcsServer

# **Specifying the UCS Server**

For most installations, where the OTS system is a standalone system with its own network, one and only one UCS Server needs to be installed. There is no need to install the UCS Server with every UniSim Operations base installation. As an example, when installing UniSim Operations on an FOD machine, if UCS Server has already been installed on the Instructor station, it is recommended <u>not</u> to install a second instance of the UCS server on the FOD station. Instead just point to the existing UCS installation on the network. (See below under Method 1 how to.)

# Method 1: During Installation

During installation specify the computer where the UCS Server is installed. Enter or browse for the computer where UCS Server is (or will be) installed. To use (or install) the USC Server on the local computer, enter a value of localhost. To connect to an existing UCS Server installation, use the Browse button to specify the computer name where the UCS Server is hosted.

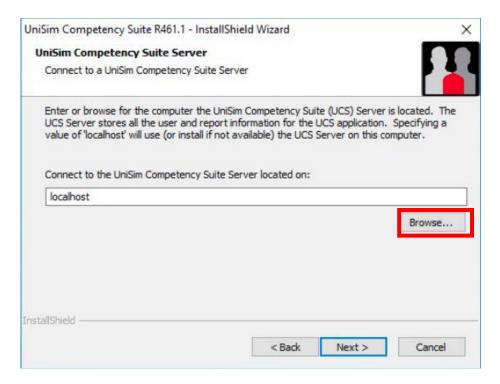
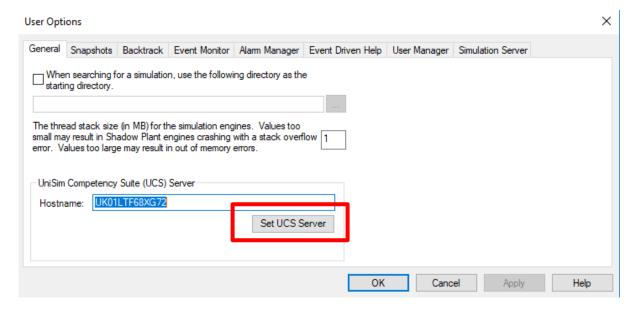


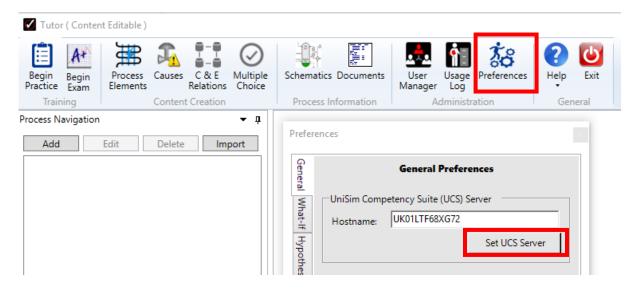
Fig. 7 Specify UCS location during installation.

# Method 2: From an application

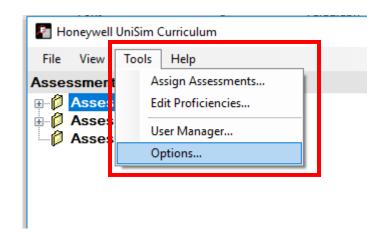
The UCS server can be specified from UniSim Operations User Options.



The UCS server can be specified from UniSim Tutor preferences.



The UCS server can be specified from UniSim Curriculum Tools>Options.





## **Summary**

The UCS server/SQL database provides data services, role management and usage and reporting information to UniSim Competency Suite applications. For engineers working on individual physical or virtual machines the UCS server and SQL database will typically be installed locally (refer to UniSim Competency Suite application installation guides for more data). For systems of multiple machines, a single UCS server and SQL install is recommended to serve a community of clients with individual applications set to use a single instance. IT administrators can use role management to specify the facilities available to users of a specific UCS Server/SQL database.

# **UniSim Competency Suite Training**

The UniSim courses provided at the Honeywell's Automation Colleges are:

# **UniSim Design:**

- PDS-4526: Fundamentals Process Modeling Using UniSim Design
- PDS-4527: Advanced Process Modeling Using UniSim Design
- PDS-4528: Fundamentals Dynamic Modeling Using UniSim Design Suite

#### **UniSim Operations:**

- OTS-0001: Fundamentals UniSim Instructor Operation
- OTS-0002: Fundamentals UniSim Configuration Implementation
- OTS-0003: Fundamentals UniSim Run Time Graphics Using HMIWeb Implementation
- OTS-0004: Fundamentals UniSim System Manager Administration
- OTS-0006: Fundamentals UniSim Experion Implementation

# **Console Operator Training:**

- OTS-0007-AT: Operator Training & Simulation: Fundamentals Distillation Operation
- OTS-0008-AT: Operator Training & Simulation: Fundamentals Hydrotreating Unit Operation
- OTS-0009-AT: Operator Training & Simulation: Fundamentals Fired Heater Operation
- OTS-0010-AT: Operator Training & Simulation: Fundamentals Centrifugal Compressor Operation

To get the schedules and more details about these training courses on simulation or other Honeywell products, go to https://www.honeywellprocess.com/en-US/training/Pages/default.aspx.

Under some conditions, those courses can also be provided at the customer's site as appropriate.

# **Operator Competency Software Updates available**

Operator Competency Software Updates are now available for currently supported versions of UniSim Competency Suite

# UniSim Competency Suite R470 has been released in January 2020

The latest patch for UniSim® Competency Suite R470 is Patch 1 (released on June 1, 2020). The main correction is for USD Snapshots are not being saved in some situations. There is no other correction in this Patch and Honeywell strongly encourages all customers to install Patch 1.

For details please visit (don't forget to login first, then paste the link into the browser):

 $https://honeywellprocess-community.force.com/hpsservice/Search\_Knowledge\_Base\#KNOWN-ISSUE-UniSim-Operations-R470-fails-to-make-snapshot$ 

# UniSim Competency Suite R461 patch releases...

The latest patch for UniSim® Competency Suite R461 is Patch 1 (released on January 13, 2020). The main corrections include:

- Support for customer logo in evaluation reports
- Bug fixing for Yokogawa emulation
- Bug fixing for Tristation structured text translation
- Bug fix to Safety Manager Translation toolkit.

# UniSim Competency Suite R460 patch release...

The latest patch for UniSim® Competency Suite R460 is Patch 5 (released on March 20, 2019). The main corrections are described in the previous quarter newsletter.

UniSim Competency Suite R452 is now in Phased Out Status. Patch Releases...

The latest patch for UniSim® Competency Suite R452 is Patch 4 (released on March 27, 2019).

UniSim Competency Suite R451 is now in Phased Out Status. Patch Releases...

The latest patch for UniSim® Competency Suite R451 is Patch 2 (released on April 11, 2018).

UniSim Competency Suite R450 is now in Phased Out Status. Patch Releases...

The latest patch for UniSim® Competency Suite R450 is Patch 8 (released on April 12, 2019).

Article submitted by - Eszter Schay for UniSim Competency Suite Global Support Team

# **UniSim® Design Suite**



# UniSim Design How Do I ... videos series announced, commuting & Further usability features in UniSim Design

This article announces the creation of a new series of UniSim Design videos in the Knowledge Base at Honeywellprocess.com and, following customer demand, describes some more of the usability features in UniSim Design that customers may not know about.

- Object Navigator Wildcard searching and renaming
- Notes Manager including automatic logging of all specification changes

Additionally, the process of commuting a license, for use away from the company network, is described as this can be useful when working away from the office.

All customers, who have not yet done so, will need to register and then login to use the Knowledge Base links in this article (unless noted otherwise). Please follow this link for full registration instructions. Having registered please visit https://www.honeywellprocess.com/support and login before following the links in this article.

An archive of all the UniSim Design Newsletter articles can be found here.

How do I ... video series

# HOW DO I ... VIDEO SERIES



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HOW DO I ...

COMMUTE A LICEN >??

UniSim Design – How do I ... videos

Knowledge Base Article #108885

The UniSim Design technical support team have started a new series of videos covering common usage questions and useful features. Follow the links below to see some of the videos. (No login required)

UniSim Design - How do I - Commute a license? video

UniSim Design - How do I - Search for a named object? video

UniSim Design - How do I - Rename multiple objects at once? video

<u>UniSim Design - How do I - Make a stream copy using a virtual stream? video</u>

For a full list of videos visit: UniSim Design - How do I - Index of videos KB: 108681

New videos are being created frequently so keep an eye on the index! If you have a suggestion for a 'How do I' video topic then please <u>Contactus</u>, we value your input! (No login required).

# Commuting

More information about commuting may be found in Knowledge Base article <u>107218</u>. Also watch the video: <u>UniSim Design - How do I - Commute a license? video</u>

Commuting a network license allows the user to borrow a license from the license server temporarily for up to ninety days. The user can then use the license away from the network. This could be particularly useful when homeworking with intermittent VPN (Virtual Private Network) capability. Access to the company network is only required at the point the license is commuted (and if it is to be returned early).

In summary the user may commute and return licenses from the **Tools > Licensing**... menu option in UniSim Design or the **ULM Commute Wizard**. For more information read the detail below.

Note that commuted licenses are, by definition, taken from the license server so that they may work locally; hence they become unavailable to any other user until they expire or are returned.

The ability to commute, which licenses may be commuted and for how long may all be configured by the license Administrator – see further articles about the <u>Admin Console</u> and <u>Access Control</u> - login required.

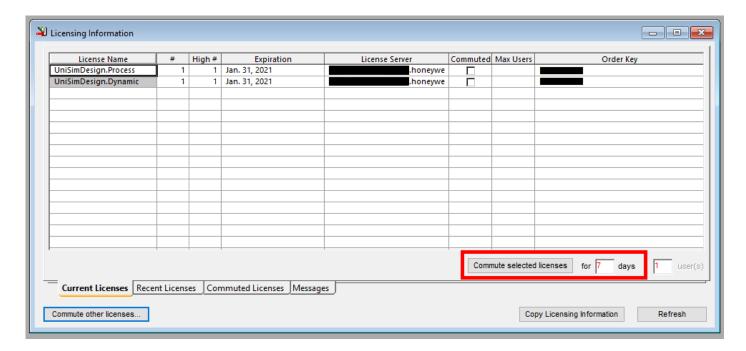
When the license commute time expires the server automatically puts the license back into its pool and the commuted license is no longer valid. Commuted licenses expire at local midnight on the client and local midnight on the server (which may not be the same time). If required, the user may return the commuted license to the server at any time before it expires.

The user may commute a license in two ways:

- Directly from the Licensing Information window in UniSim Design
- With the dedicated ULM Commute Wizard

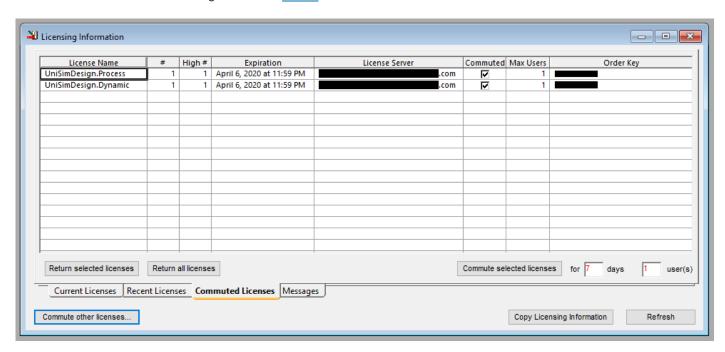
Commuting from within UniSim Design is described here, see Knowledge Base article 107218 for details of the ULM Config Wizard. If only UniSim Design licenses are needed, commuting from within UniSim Design is the easiest way:

- 1. When connected to the license server (in the office or via a VPN), open UniSim Design
- 2. Open all the case files that will be worked on whilst away from the network
- 3. Use the **Tools > Licensing...** menu option
- 4. The Current Licenses tab shows all the licenses that are currently in use (to open the set of case files)
- 5. Review the number of days required at the bottom right
- 6. Click and drag in the License Name column to select all the licenses listed
- 7. Press the Commute selected licenses button



Commuting using the Licensing Information window in UniSim Design

Use the **Commuted Licenses** tab to review which licenses are currently commuted and to return them early if required. The **Commute other licenses button** is described in Knowledge Base article 107218.



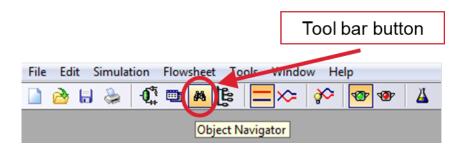
Currently commuted licenses shown on the Commuted Licenses tab

# Usability Feature - Object Navigator - Wildcard searching and renaming

This feature is also described in Knowledge Base article 107031. Also watch the videos:

<u>UniSim Design - How do I - Search for a named object? video</u> <u>UniSim Design - How do I - Rename multiple objects at once? video</u>

The **Object Navigator** allows the user to quickly locate and view any object within any flowsheet in a simulation. It is accessible from the **Flowsheet** > **Find Object** menu item, via the F3 key or Ctrl + F shortcut and via a Tool bar button.



Object Navigator Tool bar button

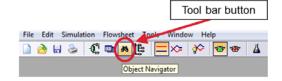
By typing filter text (including leading and trailing \* wildcards) the **Object Navigator** locates named objects within any flowsheet or the entire simulation (if the top-level flowsheet is selected and the **Include Sub-FS** option is selected.)

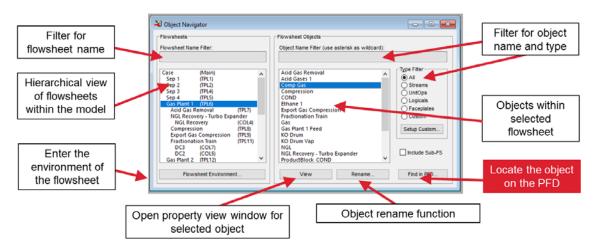
# **OBJECT NAVIGATOR – WILDCARD SEARCHING**

# Locate and view any object within any flowsheet

# Access:

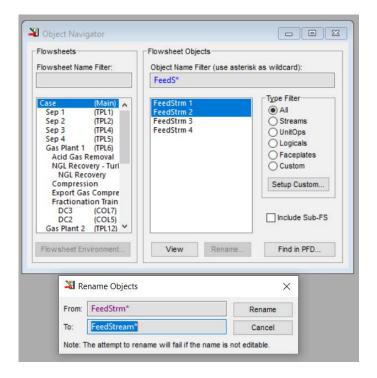
- Tool bar button
- Flowsheet > Find Object menu item
- F3 key or Ctrl + F shortcut



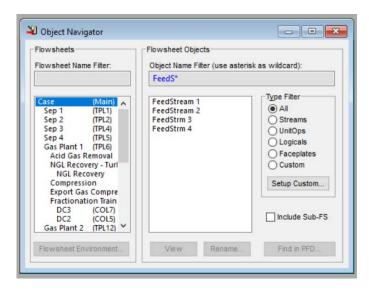


Object Navigator with features annotated

When objects are showing in the right-hand list they may be selected. Multiple selection is possible using the Shift or Ctrl keys. The **Rename...** button opens a further dialogue box. Here leading or trailing \* wildcards can be used to set a pattern to rename all of the selected objects simultaneously. In the simple example below the pattern 'FeedStrm' is renamed to 'FeedStream' in both of the selected objects.



Object Navigator bulk rename – showing Rename Objects window settings

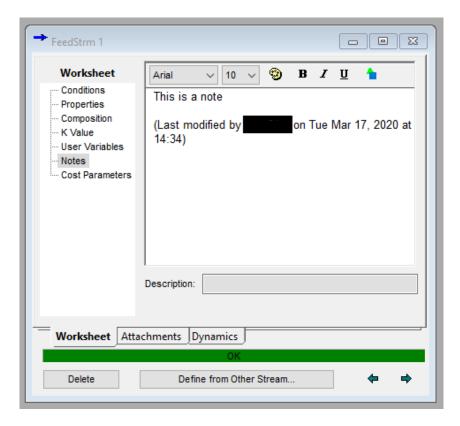


Object Navigator bulk rename – after pressing Rename

# Usability Feature - Notes Manager - including automatic logging of all specification changes

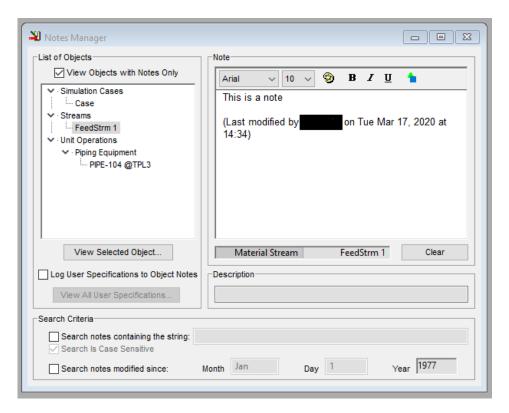
This feature is also described in Knowledge Base article <u>107030</u>. Find a video covering the Notes Manager in the: <u>UniSim Design - How do I - Index of videos</u>

Most objects within UniSim Design (e.g. material streams, unit operations, fluid packages, flowsheets) allow the user to write a note. This is via the **Notes** tab or page on that object.



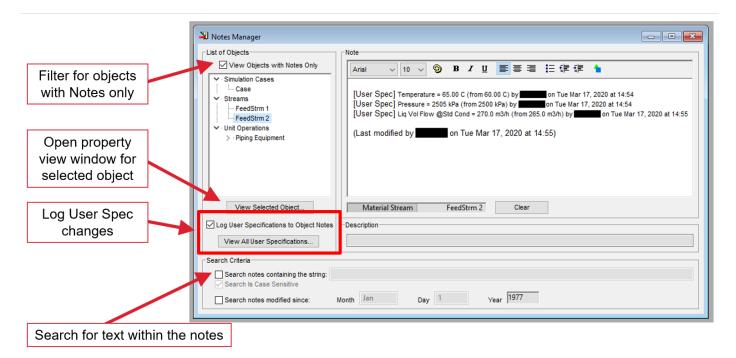
Worksheet tab, Notes page of a material stream

UniSim Design includes a **Notes Manager** (accessible via the **Flowsheet** menu or with the Ctrl+G shortcut key) that allows all the notes within a case to be quickly viewed in one place. It is helpful to activate the **View Objects with Notes Only** option to filter the view to show only objects where a note is entered.



Notes Manager with 'View Objects with Notes Only' option activated

A useful feature, which may be activated on the Notes Manager, is the **Log User Specifications to Object Notes** option. When switched on, any specification changes to an object are logged as notes on that object.



Notes Manager, with annotations, showing automatic notes recorded for user specification changes

The Notes Manager also gives the facility to search for a given text string anywhere within the case.

# **Newsletter Articles**

We aim to provide articles of interest to the UniSim Design user community. If you have any feedback or have suggestions for topics to cover here please feel free to contact us; we value your input.

Article submitted by – James Martin, Team Lead, UniSim Design Global Support Team.

# **Profit® Blending and Movement Suite**

# **PBC Parameter Reference Tool**

**Did you know** ... that Profit Blend Controller (PBC) includes the Parameter Reference Tool utility. This tool provides engineers with a mechanism to browse offline, the data structures of the control strategies that make up PBC without using Experion PKS Control Builder?

Introduced in PBM 431.x, the PBC Parameter Reference Tool provides an offline mechanism to browse the data structures of the PBM control strategies, without needing to use Experion PKS Control Builder.

# It allows the engineer to:

- Explore a specific set of PBC control strategies.
- Identify configured PERIOD/PHASE/ORDERINCEE values in CMs and SCMs.
- Identify configured ORDERINCM values of function blocks in CMs.
- Examine the definition of CAB/CDB parameters/variables.
- Identify the configured values of CAB Parameter References (PREFs).
- Examine the native function blocks used in CMs and SCMs.
- Identify references to a specified parameter.
- Search for references to a specified string.
- Browse CAB source code (if available).

The tool extracts information from the XML files generated by Control Builder when the PBC control strategies are exported. The Parameter Reference Tool is not restricted to control strategies provided by PBC; it can be used to browse custom control strategies, and CDB/CAB types created by PBM project teams.

It does <u>not</u> reference information in the ERDB, nor real-time data from the Controllers and so does not require a connection to the Experion PKS Server.

The Parameter Reference Tool (ParamRefTool.exe) is installed on the Experion PKS Server as part of the Profit Blend Controller installation. As long as the exported PBC control strategies are available, the tool may also be used on a non-Experion PKS Server machine.

Information associated with PBC SCADA points is not shown in this tool.

Figure 1 below shows a screen capture of the PBC Parameter Reference Tool.

The PBC Parameter Reference Tool window consists of a pair of Tree Views stacked vertically and a pair of stacked List Views.

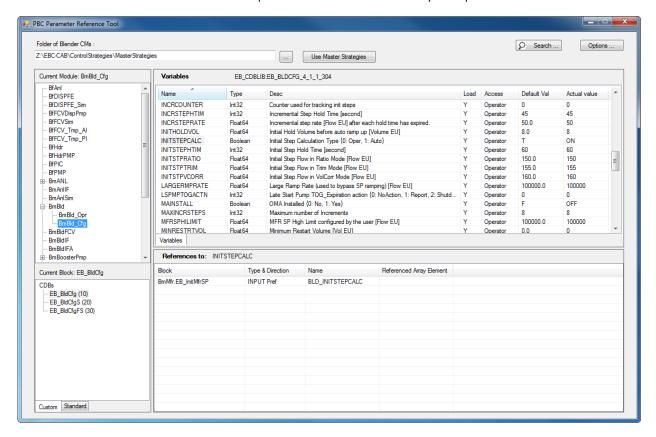


Figure 1: PBC Parameter Reference Tool

The engineer may specify the default folder location, to search the PBC master control strategies, or browse to a specific folder.

The upper Tree view - Current Module - shows the list of control strategies (CMs and SCMs) found in the specified folder. Select an item to view its contained blocks.

The lower Tree view – Current Block - shows the blocks associated with the item selected in the Current Module view. The blocks are categorized as Custom (i.e. CDB and CAB blocks) and Standard (i.e. native function blocks). Select an item to view its associated parameters.

The upper List view – Variables tab – shows the parameters associated with the block selected in the Current Block view.

For CDP blocks, the variables information includes the CDP variable name and description. The default value is shown, as well as the actual instance value that is found in the exported control strategy.

For CAB blocks, similar CDP information is shown. In addition, a second tab is provided which shows PREFs. This tab shows the PREF name and description, data flow (input or output) and the associated parameter reference.

The lower List view is used to display references to the block variable selected from the Variables tab. This includes block pin connections and PREFs.

The **Search...** button launches the Search For Blocks and Variables dialog box, as shown in Figure 2 below. This window allows the user to specify a sequence of characters for which to search in the control strategies. After clicking the **Search** button, any found occurrences of the character sequence will appear in the Search Results pane. The "Match Whole Word" checkbox limits the search to the exact string.

The search may be further filtered to:

- Names: Block names, Parameter names, PREF names
- Descriptions: Descriptions in CDBs (CDPs) and CABs (CDPs and PREFs)
- Values: Block configured values, PREF values
- Pin Connections: Block pin connections.

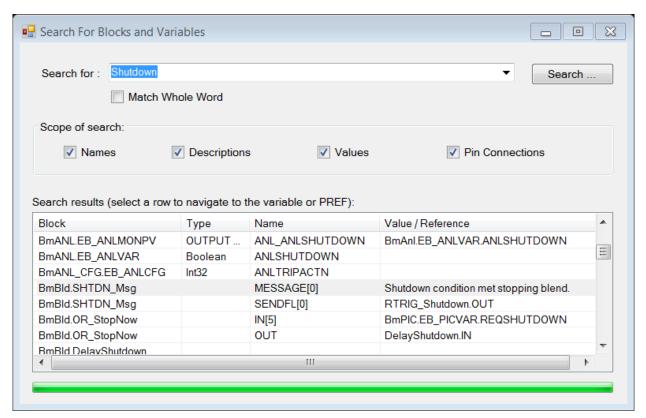


Figure 2: Search dialog box

For more information about the PBC Parameter Reference Tool, or any of the Profit Blending and Movement (PBM) or Blending and Movement Automation (BMA) applications, please contact your Honeywell Account Manager or your local Application Support office.

# **Application Support Contact Information:**

- The Americas: <a href="mailto:rac.support@honeywell.com">rac.support@honeywell.com</a>
- Europe, Middle East and Africa: <a href="mailto:bma.support.emea@honeywell.com">bma.support.emea@honeywell.com</a>
- Asia Pacific: <a href="mailto:bma.support.ap@honeywell.com">bma.support.ap@honeywell.com</a>

# Honeywell Forge Advanced Process Control (Profit Suite™)

# Honeywell Forge APC is Profit Suite™ R510.1 now available for ordering

Honeywell Forge APC is not just the new brand name for Profit Suite™ R510, but it introduces a major product portfolio simplification (34 legacy products into 8 rebranded features). The key list of new sub-product names is shown below for cross referencing throughout this article.. The features and functions of Profit Executive (PEx) have been further expanded to cater for up to 250 CVs, better displays for all limits and more calculation flexibility. Profit Optimizer now supports transformations to be consistent with PEx. Profit Web Viewer (PWV) has improved limit visualization, column pagination for gain/delay pages and trend improvements. PSES sees 3<sup>rd</sup> Party model conversion improvements for both SMOC and DMC models. Profit Sensor Pro now supports a Python toolkit and language localization support. Profit Stepper now has a pause ID option and gain+bias are added to the signal conditioning block. Of course, R510 includes all of the innovations/fixes added/resolved in R500/R501/R502 together with a further 30+ defect PARs resolved.

# Summary of the New Features in R510

Honeywell Forge APC is Profit Suite – the main sub-product name changes are shown in the table below:

R510 Honeywell Forge APC Name (new acronym)	Equivalent R500 Profit Suite Name (historical acronym)	
Process Controller (PC)	Profit Controller (PC)	
Multi-Unit Optimizer	Profit Optimizer	
Site Wide Optimizer	Profit Executive (PEx)	
Inferentials	Profit Sensor Pro (PSP)	
Toolbox e.g. Lab Update, UniSim Socket etc.	Toolkit e.g. Lab Update, UniSim Socket etc.	
Online Modeler	Profit Stepper	
APC Design Studio (APCDS)	Profit Design Studio (PDS)	
APC Engineering Studio (APCES)	Profit Suite Engineering Studio (PSES)	
APC Runtime Studio (APCRS)	Profit Suite Runtime Studio (PSRS)	
APC Operator Station (APCOS)	Profit Suite Operator Station (PSOS)	
APC Web Viewer (APCWV)	Profit Web Viewer (PWV)	
Control Performance Analytics (CPA)	Profit Performance Monitor (PPM)	

**Flexera** - The initial 14-day grace period still applies, but due to a known memory issue it is encouraged to license R510 as soon as is practicably possible. In addition, as the product names have changed a R500 Activation ID will not work on R510 systems, so a new R510 Activation ID must be obtained before embarking on an upgrade and the R500 ID returned. These latter two issues will be detailed in a future Flexera KSM."

Site Wide Optimizer – can now accommodate up to 250 CVs (as can now Process Controller), MV-DV proxy limits and better Web Viewer displays for operator, conjoined secondary operator and proxy high/low limits respectively. The Primary Controller is now easier to configure supporting Base Level Controls (BLCs). The general usability of PEx is improved allowing: proxy limits calculations to continue even when secondary is in 'handling constraints', handling of pinched proxy limits and better messaging of proxy limit calculations. The ability of PEx to incorporate external 3<sup>rd</sup> Party APC optimization targets is provided by external optimal option in shadow controllers. Finally, CV and MV transformations supported.

Multi-Unit Optimizer – to be consistent with Site Wide Optimizer transformations are now provided, also for bridge variables. The sanity check for Process Controller versions has been increased from 1 to 10 allowing a R510 Optimizer to control down to R500 Controllers for more flexibility.

# **APC Web Viewer –** The following improvements have been made:

- o Region and Language differences between Server and Client machines are now handled and also significant digits implementation
- o Trends: User Limit changes, improved limit visualization and the ability to trend variables from any OPC server is added
- o PC and PEx gain/delay pages now support column pagination making it easier to scroll through large matrices
- o Integration work has begun within Experion Station under Safe view

# **APC Engineering Studio** – the following improvements have been made:

- o SMOC Conversion: 1. Support Additional blocks like Sum, Delay, Gain etc.; 2. Support PWLN transform of CVs in SMOC converted models; 3. Improved Messaging
- DMC Conversion: automatically handle MV transformations
- o Online Modeler: Pause ID functionality and various usability improvements, see SCN for more details

### **Inferentials** – The following additional features are added:

- o Python Toolbox see Knowledge Article Quarter Q2 below, specifically APC:510:0466/20 and APC:510:0467/20 KAs on the portal
- Language localization

**Infrastructure Improvements –** The following improvements have been made:

- URT: standard signal conditioning function block now includes gain and bias to support lab updates from outside Inferentials
- o SQL Express: has been upgraded to 2017
- o O/S: Windows Server 2019 is now qualified together with supporting the existing 2016, 2012 R2 and Windows 10. Please Note Windows Server 2008 R2 and Windows 7 are no longer supported and R510 cannot be installed on hardened VMs with any operating system.

**Embedded PHD** – has been upgraded to R400 and UPS to Uniformance Insight (UI) R210 respectively with both still using the old licensing infrastructure, so an ULM license is provided for the APC Server. UI R210 may be installed on other systems but requires additional licensing. Please Note the 32 character PHD tagname limitation is now removed with embedded PHD R400.

For more information on Honeywell Forge APC (Profit Suite™) or to place a software order, please contact your account manager or email:

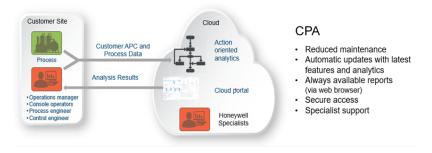
# **HPS Technical Support Contact Information:**

- apc.apptech@honeywell.com for North and South America regions;
- apc.support.emea@honeywell.com for Europe, Middle East, Africa and Asia Pacific regions;

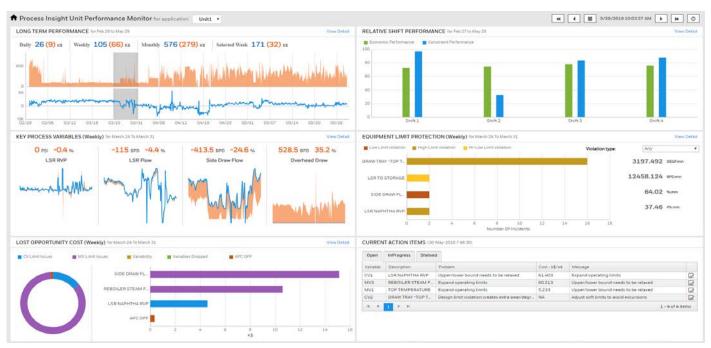
# Control Performance Analytics (CPA) R110.1 is Profit Performance Monitor (PPM) now released

In a coordinated release with R510.1, see above, the latest R110.1 version of Honeywell Forge APC's fully connected offering is released as Control Performance Analytics (CPA), which in this version is Profit Performance Monitor (PPM) rebranded. A brief overview of CPA is provided below as a recap and then followed by the main changes and improvements in the R110.1 version.

Control Performance Analytics (CPA) – is a Cloud based solution that enables the Operations, Process Engineering and APC teams to understand what is limiting APC from driving the process unit in question to its best potential. CPA does this by using a twofold approach: first by prioritizing issues by financial impact e.g. over clamped MVs and CVs, MVs dropped by operators or worse of all Controller Off and secondly: by identifying and tracking constraint violations for main CVs, with analysis of probable causes. The ultimate goal is to engage All the APC/Unit Stakeholders.



# **CPA Application Dashboard**— a typical example is shown below:



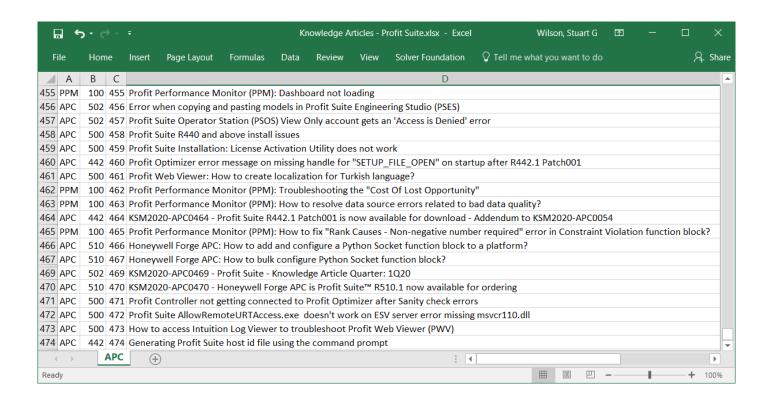
CPA R110.1 Improvements – most of these are transparent to the end user as they have taken place behind the scenes in the Cloud: For more static data, which doesn't change every execution 50% cloud data confidence will be treated as valid data, Include Bounds parameter adjusted to ensure at the start or end of time periods data is fully complete without any missing data, data writing output is aligned to the correct hour offset irrespective of whether the normal run, playback or demand mode of CPA, when there is a problem with cloud data communication a 'bell' warning indicator is provided on the dashboard above, a couple of DAS parameters now configurable e.g. Include Bounds and members of a domain group will be able to access CPA applications if associated to a role, previously each Domain user had to be added to each role.

**CPA Future Direction** – up until now CPA has been primarily aimed at Operations Shift personnel, supported by APC/Process engineers, but the future intention is to move into adding the personas of APC engineers, by adding new and the best of both CPM.MPC/Profit Expert worlds and finally instrument engineers with CPM.PID functionality. All with a similar corporate look and feel of Honeywell's other connected products.

For more information on Control Performance Analytics (CPA) Customer Onboarding please contact the product and/or your account manager.

# APC Knowledge Article Quarter: Summary of Articles - 2Q20

Please refer to the August 2018 BG Newsletter for all the details regarding this APC Knowledge Article Quarter series and this quarter we publish the Summary of Articles for 2Q20 on the portal below and welcome the first Profit Performance Monitor (PPM) articles:



Final note on KAs is the above table shows only the public published articles, however on rare occasions there is a need to share internal/confidential KAs within Honeywell and these are not published publicly, although they also have Article ID numbers, which might account for gaps and apparent missing article numbers.

For more information on Profit® Suite please contact your Honeywell account manager or email:

# **HPS Technical Support Contact Information:**

apc.apptech@honeywell.com for North and South America regions;

apc.support.emea@honeywell.com for Europe, Middle East, Africa and Asia Pacific regions;

# Profit Suite PS R442.1 Patch001 - Addendum to KSM2020-APC0054 (and Q1 2020 BG Newsletter)

Since Profit Suite™ PS R442.1 Patch001 has been released, see KSM2020-APC0054 and Q1 2020 BG Newsletter, issues have arisen with respect to its interaction with the previously selectively released PS R442.1 Profit Optimizer Patch001 as described below.

The following three issues are related to **R442 Profit Optimizer** only and the affect to normal operation and/or PS R442.1 Profit Optimizer Patch001 new functionality is indicated below:

- 1. The PS R442.1 Profit Optimizer Patch001 enhanced Gain Matrix display is not functional;
- On launching a Profit Optimizer application, it gives an error message on missing handle for "SETUP\_FILE\_OPEN", see Knowledge
  Article APC:442:0460/20 'Profit Optimizer error message on missing handle for "SETUP\_FILE\_OPEN" on start-up after R442.1
  Patch001';
- 3. Profit Optimizer abnormal termination after PS R442.1 Patch001 has been installed;

Items 1 and 2 are simply resolved by rolling back PS R442.1 Patch001, then installing PS R442.1 Profit Optimizer Patch001 and then re-installing PS R442.1 Patch001 again, thus ensuring all the Profit Optimizer dlls are the most up to date R442 versions.

For the rare item 3, a modified CoOpcDAClientFB.dll is available on request should customers see this issue, so please contact HPS Technical Support if required at the usual support email addresses below.

In conclusion, if Profit Optimizer is being used and the enhanced PS R442.1 Profit Optimizer Patch001 functionality is required then install this patch first and then install PS R442.1 Patch001 to obtain all the benefits of both patches. Please contact HPS-TS in the unlikely event item 3 is observed. However, if Profit Optimizer is not used at site, then PS R442.1 Patch001 can be installed without any further issues.

For more information on Profit Suite™ or to place a software order, please contact your Honeywell account manager or email:

# **HPS Technical Support Contact Information:**

apc.apptech@honeywell.com for North and South America regions;

apc.support.emea@honeywell.com for Europe, Middle East, Africa and Asia Pacific regions.

# **Control Performance Monitor**

# Control Performance Monitor (CPM) R603.1 releasing in September 2020

CPM™ R603.1 builds on the JAVA free functionality and improvements which were introduced in R600.x, R601.x and R602.x respectively. A summary of the new features in R603.1 over and above the functionality provided in the previous R60x.x releases is provided below. R603.1 also includes almost 80 new and all software fixes for all previous R60x.x releases.

Finally, as R603.1 is a full media release it can obviously be freshly installed on a clean server, but if upgrading an existing installation then it can ONLY be installed over the top of R602.5, so older releases need to be brought up to this minimum level before upgrading to R603.1 and please don't forget to implement the post install steps detailed in the SCN.

#### Summary of the New Features in R603.1 (since R602.5)

**Support for Embedded PHD R400** – In case of a clean fresh CPM R603.1 installation embedded PHD R400 will be installed and if upgrading from R602.5 embedded PHD R321 will be upgraded to R400. One particular advantage of embedded PHD R400 is that the 32-character tagname limitation no longer applies.

**Windows Server 2019 Support** – CPM can now be installed on Windows Server 2019, together with existing Windows Server 2016 and Windows Server 2012 R2 supported operating systems.

**SQL Express Support** – CPM now provides an option to install SQL Express 2017 (or SQL Express 2019 if sourced separately) or SQL Standard 2017 (or any standard SQL version above 2012) depending on the following installation scenarios.

- In the case of a fresh R603.1 CPM installation, SQL Express 2017 will be installed automatically with named instance "CPM"
- If an older version of SQL Express is already installed, then an option will be given to upgrade to the above 2017 version
- CPM R603.1 installation will detect whether SQL Express or Standard is already installed and will continue with that SQL type
- If CPM system is installed with a remote Data Base (DB) server, SQL Express will be installed locally for use by embedded PHD

Latest Intuition Components Upgrade - The following versions will be installed: Core System R292.1, CAM R132.1 and DAS E261.1

**Custom Template Support for Instruments and Analyzers –** The procedure to implement these custom templates for instruments and analyzers remains the same as that for custom PID templates, please refer to the Custom\_Template\_Procedure.pdf part of the documentation.

**Support for global column order** – Only a CPM Admin User can define global column configuration for other roles. However, any User can alter existing column order and save it, but its only applicable for that User.

**Ability to copy actual settling times to desired settling time in settings page** – Again, as with the above new feature, only the CPM Admin User can copy the actual to desired settling time and it will be View only for other Users.

**Estimator template support** – The reports provided are the same as CPM R570 and the configuration import needs to be done from the Configurator>Other template tab.

**Common Web Server (CWS) integration** – Allows for multiple standalone CPM servers, typically spread across different sites, web reports to be viewed via a single hierarchy view on CWS, negating requirement for Corporate (Enterprise) Users to logon to each CPM Server separately.

**CPM PID Dashboard** – is an information management view that visually tracks (e.g. different trends) and displays (e.g. pie charts) the overall performance and key issues relevant to a hierarchy and KPIs both per server and via a CWS for multiple sites. By using the dashboard view the user can drill down and get the complete list of control loops that need attention.

For more information on CPM™ or to place a software order, please contact your Honeywell account manager or email:

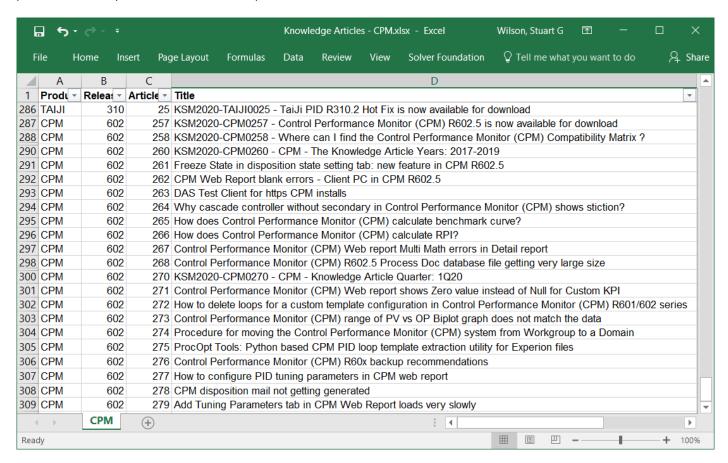
# **HPS Technical Support Contact Information:**

cpm.support.emea@honeywell.com for all global queries.

**Back Home** 

# Control Performance Monitor (CPM) Knowledge Article Quarter: Summary of Articles – 2Q20

Please refer to the September 2018 BG Newsletter for all the details regarding this CPM Knowledge Article Quarter series and this quarter we publish the Summary of Articles for 2Q20 on the portal below:



Final note on KAs is the above tables show only the public published articles, however on rare occasions there is a need to share internal/confidential KAs within Honeywell and these are not published publicly, although they also have Article ID numbers, which might account for gaps and apparent missing article numbers.

For more information on CPM™ or to place a software order, please contact your Honeywell account manager or email:

# **HPS Technical Support Contact Information:**

cpm.support.emea@honeywell.com for all global queries.

# **DynAMo Alarm Management**

# **DynAMo Metrics & Reporting R210.1**

DynAMo Metrics & Reporting R210 released in May 2020 is now available for upgrades as well as new installation. DynAMo Metrics & Reporting is an award winning alarm management software that seamlessly collects and stores alarm and event data from multiple data sources, and automatically generates web-based, standards-compliant (EEMUA 191, ISA 18.2, IEC 62682 and more) key performance indicator (KPI) reports that give an accurate snapshot of a site's current alarm system performance.

Following key features are available in this release. For the complete list of enhancements and new features, please refer the Software Change Notice:

- Backward Compatibility- R210+ releases will support older versions of collectors (R200+)
- Light Weight Collector only media
- Maintenance and Diagnostics
  - o M&R Processing Notification (Failure to Insert or Process event queues)
  - o M&R Archiver Will Retry for runtime scripting errors to potentially minimize manual intervention.
  - o Notification for issues generating the report- E.g. Timeouts.
- Reporting Enhancements
  - New KPI's (Shelved & Suppressed Alarms count)
  - o Customizing reports visibility by role/profile; i.e. the list of reports to be shown to a user, based on their profile.
  - Refer Interlock definitions easily from Interlock Report
- Collector Enhancements
  - ODBC (Others) Option to Exclude applying Order by in query ODBC
  - (PHD CEJ) Collect based on Event ID's
- This release is supported on the following browsers also:
  - Microsoft Edge browser based on Chromium
  - o Google Chrome browser
- Several Quality Fixes & other enhancements
  - Improved Documentation- System Guide
  - o Aggregates all Hotfixes from R202.1 release (HF1 to 5)
  - o Includes 16 defect fixes.

# **Process Safety Analyzer R201.1**

Process Safety Analyzer R201, released in July 2020, is now available for new installs and upgrades. Process Safety Analyzer (PSA) is a an advanced web based software that automates tracking, analysis and reporting on the operation of shutdown systems and safety elements, to promptly detect issues and continuously ensure process safety.

Following key features are available in this release. For the complete list of enhancements and new features, please refer the Software Change Notice:

Following Key Features available for On-Prem as well as Cloud:

- Multisite plant Support for PSA
- Scope based Security for PSA Online Views.
- Safety Overview- Configuration & Publishing Bypass data to PSW
- Condition based SES (Safety Element Scout) handling
- Exposing of the bypass analysis data from PSA to Safety Life Cycle Management Software
- Enhanced History Report Generation

Additionally, this release is addressing 21 earlier reported anomalies.

# **Honeywell Connected Industrial**

# **Upcoming Webinars**

- August 20 | Have We Been Going About APC Monitoring All Wrong? Register
- August 26 | Learn How to Build Refinery Models Quickly and Easily to Support Your LP Model (Digital Refining) Register
- August 27 | How to Detect and Solve Problems in Mining Mobile Heavy Equipment Earlier? APAC | EMEA/Americas
- August 31 | Plant of the Future: How Production Accounting and Reconciliation will take you Forward. APAC | EMEA/Americas
- September 3 | The Rise of the Connected Worker: Redefining Remote Productivity. Register
- September 24 | Internal Corrosion Direct Assessment for Oil and Gas Pipelines. Register

# **Current Product Releases**

# **Advanced Applications:**

#### DynAMo Alarm Suite

- Metrics & Reporting R210.1
- Documentation & Enforcement (ACM R321.12)
- Alerts & Notifications (UA R321.2)
- Process Safety Analyzer R201.1

#### **DynAMo Operations Suite R230**

- · Operations Management
- Operations Logbook
- Limit Repository

#### UniSim

- UniSim Design R461.1
- UniSim Competency R461

# **Business FLEX R242**

 Ongoing support for Uniformance PHD 215, PHD 300, PHD 310 and PHD 320 as well as PI and other OPC HDA-compliant historians

# Profit Blending and Movement (PBM) Solution

Profit Blending and Movement (PBM) R500.1

- Blend Performance Monitor (BPM)
- Experion Blend Controller (EBC)
- Experion Tank Monitor (ETM)
- Profit Inventory Monitor (PIM)
- Profit Blend Controller (PBC)
- Profit Blend Optimizer (PBO)
- LIMS Viewer (LV)
- Profit Movement Management:
  - > Movement Monitor (MM)
  - Movement Control (MC)

# **Energy Dashboard R241**

 Integrated suite to calculate and monitor actual and target energy use. May include Operations Monitoring, Profit Sensor Pro, UniSim Design, and Workcenter.

#### Workcenter

Web-Based Visualization Analysis Solutions

• Workcenter Release 242

# Matrikon OPC

- Matrikon FLEX OPC UA SDK R400.2
- Matrikon OPC UA Tunneller

#### **Profit Suite**

Release R442

#### Uniformance

- Uniformance PHD 400
- Uniformance Process Studio R322
- Uniformance Asset Sentinel R511
- Uniformance Insight R110
- Uniformance Cloud Historian R100
- Uniformance Executive R310
- Uniformance KPI R121

#### **Symphonite Supply Chain and Production Management**

- Production Manager Release 9.0
- Production Accounting and Reconciliation R210
- OptiVision R541

#### Digital Suites for Oil and Gas

- DSOG R100 including Process Safety Suite, Production Surveillance Suite, Equipment Effectiveness Suite
- Production Surveillance Well Test R110

# **Control Performance Monitor**

- CPM CX R110
- CPM Standard R60
- TaiJi PID R310

### Honeywell Pulse

Release R110

# **Contact Information**

All GTAC support should be directed through <a href="https://www.honeywellprocess.com/en-US/contact-us/customer-support-contacts/Pages/default.aspx">https://www.honeywellprocess.com/en-US/contact-us/customer-support-contacts/Pages/default.aspx</a> Portal.

# **Americas Support Centre Contact Information**

Advanced Planning and Scheduling (APS)	support@honeywell.com	+403-216-2870
Blending & Movements (PBM/OM&S) Support	rac.support@honeywell.com	+1-289-333-1500
OptiVision Help Desk	optihelpgroup@honeywell.com	+1-513-595-8944
Profit Suite Support	apc.apptech@honeywell.com	1-800-822-7673
Technical Assistance Centre (TAC) – Americas		1-800-822-7673
Uniformance Help Desk	support@honeywell.com	+1-403-216-2870
UniSim Design Suite Support	UniSim.Support@honeywell.com	1-800-822-7673
UniSim Competency Suite Support	hpscustomersupport@honeywell.com	1-800-822-7673

# Asia Pacific (AP) Technical Assistance Centre (TAC) for Advanced Solutions contacts

Advanced Process Control Support	apc.support.ap@honeywell.com	
Manufacturing Execution Solutions (Includes APS, BMA, MES, OMPro and Uniformance PHD)	bflex.support.ap@honeywell.com	
OptiVision Help Desk	p3its_oncall@honeywell.com	+ 358 20752 2300
Profit Blending and Movement (PBM) Solutions Support	bma.support.ap@honeywell.com	
UniSim Support	unisim.support@honeywell.com	
UniSim Competency Suite Support	hpscustomersupport@honeywell.com	

# Honeywell Asia Pacific regional GCCC hotlines:

Control Performance Monitor (CPM)

**Automation College** 

Australia	GCCC.Pacific.HPS@Honeywell.com	1 300 301 135
China:	400-820-0386	800-820-0237
India:		1-800 2335051
Indonesia:		0018-03-440-212
Malaysia:		1 800-812-674
New Zealand:		0800 855 663
Pacific (outside Australia and New Zealand):		+65 6787 1788
Philippines:		1-800-1441-0223
Singapore:		6823-2215
Taiwan:		0800-666-051
Thailand:		0018-004-415-283

# Europe and Middle East and Africa, (EMEA) Technical Assistance Centre (TAC) for Advanced Solutions contacts

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EMEA Advanced Solutions Helpline		+32 (0)2 728 2200
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Production Control Centre	kunde@honeywell.com	+47 6676 2180
Profit Blending and Movement (PBM)	bma.support.emea@honeywell.com	
UniSim Competency Suite Support	hpscustomersupport@honeywell.com	
UniSim Support	unisim.support@honeywell.com	

www.automationcollege.com

CPM.support.emea@honeywell.com

For questions, comments or archived copies of the Guardian newsletter, please contact Sandhya Karnam at

<u>Sandhya.karnam@honeywell.com.</u>

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