

# Activated Licensing Improvements

## 2017 Updates 1, 2, 3 and

### AVEVA Licensing v3.5.1

This document covers license updates in 2017 Update 1, 2, and 3 (released January 11, 2019) and in AVEVA Licensing v3.5.1. AVEVA Licensing v3.5 is included in 2017 Update 3 DVD. AVEVA Licensing v3.51 is available separately as a standalone install for download from GCS website.

**This document updated April 2, 2019** – to reflect 2017 Updates 1, 2, **3** and AVEVA Licensing v3.5.1

#### NOTICE

We strongly encourage all customers to upgrade their AVEVA Licensing to the latest version, v3.5.1. Several important fixes and enhancements are included. See the end of this document for details.

#### INTRODUCTION

With the launch of System Platform and InTouch 2017, a new licensing system was introduced to allow centralized license management, remove the need for dongles, and increase license security by use of Activated licenses. Since the original release, several field scenarios were brought to our attention that required changes in the licensing system. The below improvements affect licensing for InTouch, InTouch Web Client, Application Server, Historian Server, Historian Clients, OI Server, Alarm Adviser, and Recipe Manager Plus.

This document provides a summary of the [licensing process](#) to help you form a good understanding of the recent license improvements in 2017 Update 1, 2, and 3 and AVEVA Licensing v3.5.1. After the summary of the licensing process, the license improvements are described.

#### LICENSE CREATION AND ACTIVATION:

A license is created and delivered as an XML file. The XML file contains one to many Activation IDs, one ID for each license purchased. Distributors forward the XML file to the customer who activates the XML file by connecting their local License Server to the Activation Server in the Cloud by using the License Manager application typically installed on their local License Server. The License is locked to the License Server node when the activation process takes place. During this Activation process, the local License Server is typically connected to the Internet, however, after Activation is complete, connection of License Server to the Activation Server in the Cloud is no longer necessary.

Please note that should the local License Server not have access to the Internet, there is an offline process to activate licenses. See the Licensing Guide for details.

The License Manager application allows management of the licenses across the network.

## LICENSE USE

Once activated and using the License Manager application, licenses can be 'reserved' to a particular node or left unreserved (floating) to be acquired by a software product on the network. A License Server can be located on the SCADA network as a centralized License Server serving and managing all licenses across the network or the License Server can be the same node running the product software.

Once a license is acquired by product software, the license cannot be used by another product until the license is released back to the License Server. The release of the license occurs when the product goes through a proper shutdown or when the License Server Administrator manually releases the license.

## LICENSE SYSTEM HANDLES NETWORK OUTAGES

When a license is acquired, a 'borrowed time' counter starts counting down. This 'borrowed time' is periodically reset by contacting the License Server.

For most company SCADA networks, the licensed nodes will be in permanent contact with the License Server over the SCADA network. The node running the product software and the centralized License Server are in 'heart beat' communication.

Sometimes the network may be disconnected between the licensed node and the License Server.

The system was originally designed so that when a disconnect occurs, the product software that acquired the license would stop running after the borrowed time was exceeded. (this behavior has been modified so that the product software does not stop running; see below stated enhancements).

Additionally, when the borrowed time is exceeded, the acquired license is then automatically released by the License Server making it available for use.

If a node has successfully acquired a license and the product software is running when the borrowed time is exceeded, it will continue to run even if connection to the License Server is not available. However, if the product software continues to be disconnected from the License Server and the product software is stopped and a restart is attempted, it will not be able to acquire a license or restart.

## OFF-LINE ACTIVATION

When a License Server is not directly connected to the Internet, an off-line license activation process is available. Please see the License Manager Help or the AVEVA Licensing Guide for details.

## WHEN PRODUCT MACHINES FAIL

If the product software is not gracefully shut down or the device fails, then the license is not released back to the License Server. Therefore, the license is not available for another node or the same node. So, the product software will not be able to start again until a license is available and acquired. The License Administrator has three choices: 1) Replace the failed machine with another machine of the exact same computer Host name; 2) Manually release the license from the License Server (one of the enhancements described below); or 3) Wait for the borrowed time to end, thus releasing the license.

## License Improvements:

After the release of 2017, several field scenarios were brought to our attention that required changes in the licensing system. Multiple improvements have been made to address them. Following is a list of these enhancements.

### IMPROVED LICENSE MANAGEMENT: ALLOWS THE RELEASE OF A LICENSE VIA THE LICENSE MANAGER

Q: One of my computers was physically damaged while various components of the Wonderware System Platform software were running. Licenses had been acquired by the product software. My understanding is that the licenses are released automatically at the end of “borrowed time” which in some cases is 20 minutes and in others 14 days but I cannot wait that long. Is there a way I can force the release of a license using the License Manager?

A: Yes.

Previously, the release of an acquired license involved a multi-step process that included a call to our Global Customer Service (GCS) team.

The primary solution for this issue is to start up a device with the same name to recover the license. If the primary solution is not an option, starting with 2017 Update 2, the License Administrator can release a license by simply selecting it in the License Manager, deactivating and reactivating it. This requires fewer steps and eliminates the need to contact GCS.

Note: If your system has no connection to the Internet, you need to do the deactivation /reactivation using the offline procedure.

### IMPROVED LICENSE SERVER: LICENSE SERVER RENAMING

Q: Changing the Host Name of a License Server with activated licenses will orphan licenses. Has this been addressed?

A: Yes.

Starting with 2017 Update 2, it is possible to rename a License Server containing Activated Licenses without losing licenses. Administrator must re-run the Configurator on each licensed node. Recovery is possible without contacting GCS.

### SOFTWARE PERSISTENCE: PRODUCTS CONTINUE TO RUN, EVEN IF THEY LOSE CONNECTION TO THE LICENSE SERVER

Q: While the product is running, if it loses connection to the License Server will it continue to run even after the original time limit (aka: Borrowed Time)?

A: Yes, starting with 2017 Update 1, products are no longer shut down at the end of the time limit if the connection to the License Server is lost.

Note: If the Borrowed Time has elapsed and the product is restarted, it will require a connection to the License Server to acquire a valid license.

### **IMPROVED LICENSE RELEASE: AWARENESS OF OS SHUTDOWN EVENTS**

Q: There are many customers using InTouch in an RDS environment who configure the Microsoft RDS Server to automatically end disconnected sessions after a preconfigured timeout period. We noticed this would not give InTouch the opportunity to do a graceful shutdown and therefore would not release the license back to the License Server and the licenses then could not be used by other nodes requesting a license. Has this been addressed?

A: Yes.

In Update 2, InTouch WindowViewer is now aware of OS Shutdown events. When it detects the OS initiating a shutdown it immediately releases the license to the License Server, and then continues to perform its other internal shutdown sequences that can be safely interrupted by the OS if needed.

### **CONSISTENCY WITH PREVIOUS VERSIONS: FAILOVER LICENSES REINTRODUCED**

Q: How many licenses do I need for failover functionality? I thought with the new activated licensing system failover did not require a second set.

A: FLB (Failover/Load Balance) licenses are required.

Customer feedback on their typical product usage in scenarios involving Remote Desktop Services turned out to be different than we anticipated. Further testing for many of those scenarios determined that Failover / Load Balance (FLB) licenses are still needed for common implementations in the field. Hence, FLB licenses have been reintroduced to provide the most robust, consistent licensing experience for our customers.

For more details, see the following Sales Brief posted on Oct 24, 2017:

[https://team.schneider-electric.com/TeamDocs/Sales%20Brief\\_InTouch%20and%20Supervisory%20Client%202017%20Failover\\_Load%20Balance%20Licenses\\_1017.pdf](https://team.schneider-electric.com/TeamDocs/Sales%20Brief_InTouch%20and%20Supervisory%20Client%202017%20Failover_Load%20Balance%20Licenses_1017.pdf)

### **IMPROVED RDS SESSION HANDLING: HANDLING OF MULTIPLE REMOTE DESKTOP SESSIONS FROM A SINGLE CLIENT**

Q: In an architecture where multiple InTouch RDS client sessions were launched from a single client node and successfully acquired licenses, if the primary RDS server failed and an attempt was made to connect the same client node to a secondary RDS server and launch the same number of InTouch RD client sessions, sessions beyond the first one could not run. Has this been addressed?

A: Yes.

With Update 2, the ID structure has been improved, addressing this issue.

## **IMPROVED LICENSE RESERVATIONS: SUPERVISORY CLIENT AND INTOUCH WEB CLIENT LICENSE RESERVATIONS**

Q: InTouch stand-alone licenses can be reserved to a device. However, there are issues reserving Supervisory Client (OMI and InTouch View) licenses and InTouch Web Client licenses to a node. Has this been addressed?

A: Yes.

The licenses on the FNO Activation Server have been corrected in June 2018 to address this issue. Supervisory Client and InTouch Web Client licenses can now be reserved to a specific machine. Licenses that have not been activated are fine. For licenses that were already activated, the customers just need to Sync their License Server with the FNO Activation Server.

Note: *The License Manager pull down list displays an option to reserve a license to a User. This functionality is not implemented.* For more details, see Tech Alert 297 (on GCS) the Sales Brief posted on May 14, 2018 on TEAM.

[https://team.schneider-electric.com/TeamDocs/Sales%20Brief\\_LicenseReservationsFix\\_0518.pdf](https://team.schneider-electric.com/TeamDocs/Sales%20Brief_LicenseReservationsFix_0518.pdf)

## **REMOVAL OF LICENSE SERVER REDUNDANCY TIME LIMIT**

Q: A redundant License Server had a 3 day operational limit. Has this been addressed?

A: Yes. The limit was removed in Licensing v3.4 (available for download from GCS). There is no longer a limit to how long a backup license server can serve licenses.

For details on the issue, please refer to Tech Alert TA358.

## **LICENSE SERVER SUPPORT FOR WORKGROUPS.**

Q: Are License Servers supported in a Workgroup environment?

A: Yes. The new licensing system was enhanced in Update 2 to support Workgroups.

## **NEW LICENSING WORKGROUP CONFIGURATION UTILITY**

Q: Even after Update 1, configuring licenses within a Workgroup environment was complicated. Has this been addressed?

A: Yes.

Licensing Workgroup Configuration Utility configures licensing nodes that are in workgroup environment, so that node-to-node communication can be established between licensing components (License server and License Manger).

The Licensing Workgroup Configuration Utility allows you to add a License Server to a remote license manager in work group environment.

The Workgroup Utility is part of Licensing v3.4 install. More information about the Workgroup Configuration Utility in a document located here: C:\Program Files\Common Files\Archestra\Licensing Framework\Licensing Utilities

#### **LICENSE SERVER NO LONGER GOES INTO GRACE PERIOD WITHOUT EXPLANATION**

Q: My customer experienced the License Server going into its Grace Period without explanation. Has this been addressed?

A: Yes.

Grace Period is a condition that occurs when the licensing software believes that the License Server has been cloned. Licensing v3.4 includes a fix so that Grace Period is not triggered erroneously.

#### **REDUNDANT LICENSE SERVER NO LONGER UNPAIRS WITHOUT EXPLANATION**

Q: My customer experienced the redundant License Server unpairing from the primary License Server without explanation. Has this been addressed?

A: Yes.

Licensing v3.4 includes a fix so this does not happen.

### **2017 UPDATE 3/AVEVA LICENSING v3.5 AND 3.5.1 LICENSE IMPROVEMENTS**

#### **IMPORTANT NOTICE!**

AVEVA Licensing v3.5.1 fixes a few additional scenarios over the fixes in v3.5. **If you have installed AVEVA Enterprise Licensing platform version 3.5, automatically installed with Wonderware System Platform 2017 Update 3, we highly recommend upgrading to version 3.5.1 to address critical issues. A special upgrade procedure is required for License Servers only. That procedure is provided in a Tech Alert available from the AVEVA Customer Support web site. See Tech Alert TA388.**

For customers on 2017 Update 1 or Update 2 and wanting only to upgrade their licensing, simply install the separately downloadable AVEVA Licensing v3.5.1.

#### **IMPROVED LICENSE SERVER REDUNDANCY: HANDLING DAMAGED MACHINE**

Q: I paired two License Server machines to configure License Server redundancy. If one of the paired machines is damaged and is no longer available can I now replace it and continue having a pair of redundant License Servers?

A: Yes. Starting with 2017 Update 3, it is possible to replace a redundant License Server, that is no longer available, from a paired set. Basically, an administrator will prepare the replacement License Server machine (with the same name as the replaced machine or a different name), point the License Manager to the replacement machine, and using the License Manager use the 'Redundancy Repair' function.

#### **IMPROVED LICENSE SERVER REDUNDANCY: HANDLING RENAMED MACHINE**

Q: I paired two License Server machines to configure License Server redundancy. If one of the paired machines is renamed, can I now make the two License Servers communicate with each other?

A: Yes, the procedures for this are explained in the AVEVA License Management Guide. Be aware that initially the nodes hosting the product software will stop communicating to the License Server that was renamed. But the product software will still communicate to the License Server that was not renamed and licenses will not be lost.

#### **FIXED LICENSE SERVER UPGRADE INITIATING GRACE PERIOD**

Q: In Licensing v3.4 and prior, occasionally a License Server software version upgrade could cause the License Server to go into Grace Period (15 day limit). Has this been fixed?

A: Yes. Now in Licensing v3.5.1 when a License Server software is upgraded, it does not go into Grace Period.

#### **NEW FEATURE – DOMAIN GROUPS SUPPORT**

Q: Can we now provide Windows Authentication Domain Groups within License Manager Security Groups (SELicMgr Group).

A: Yes. This allows a customer Domain defined group of users to access License Manager via the one Domain group configured as a member of the SELicMgr Group. So administrator does not need to list all members, just the Domain Group. And, the administrator only needs to manage the Domain group members in one place.

#### **EXPANDED FEATURE – UNLIMITED SUPERVISORY SERVER READ WRITE AND READ ONLY**

Q: Unlimited Supervisory Server offering (introduced in 2017 Update 2) enabled unlimited Read Write RDS sessions. Can it also enable unlimited Read Only RDS sessions?

A: Yes. As of Update 3, the Unlimited Supervisory Server license can be used to enable both Read Write and Read Only capabilities. Use the same license for either type. Whether the application is meant to run as Read Write or Read Only is determined by configuration, not the license.

Configuration for InTouch is done via the application while configuration for OMI is done via the ViewEngine.

Here is a brief description how to configure an application to run in Read-Only mode:

- InTouch Access Anywhere with InTouch/InTouch for System Platform:

Using an Unlimited Supervisory Server license, User launches an InTouchViewApp that is configured as "ReadOnly" via the InTouch Access Anywhere interface, then it will run as ReadOnly.

- System Platform:

Using an Unlimited Supervisory Server license, User will need to deploy their OMI ViewApp (OMI) to a ViewEngine that is configured with the new "ViewApps are Read Only" attribute set to TRUE.

There can be multiple ViewEngines on one Server node, so User can have ViewEngines configured for Read-Write applications and ViewEngines configured for Read-Only applications on the same node.

Also remember, in Application Server it is possible to manage Groups and Users such that you can create a "ReadOnly" Group and give certain Users authority to only READ values.

### **FOR ADDITIONAL INFORMATION ABOUT LICENSING, PLEASE SEE THE TECH NOTES AND TECH ALERTS**

TA271 - Installing 2017 Software or License Server on the Same Computer on which a 2014 License Server ...

TA274 - Communication failure between Wonderware products and a License Server can result in product...

TA280 - Improper Shutdown of InTouch from within an InTouch RDS/TSE Session May Result in the License ...

TA281 - Do NOT Rename the License Server Computer when Licenses are Activated

TA297 - Issue with 2017 Licensing - Reserve License Capability For Supervisory Client and InTouch Web Client

TA358 - The Backup License Server fails to serve licenses when the Primary License Server is down...

TA367 – License Server Limitation on Number of Product Activation IDs

TN2868 - Configuring Schneider Electric Licensing for Wonderware Historian Server 2017 and remote Historian Client 2017

TN2907 - Schneider Electric Licensing – Best Practices

TN2908 - Resolving Historian Server Unable to Return License to the License Server

TN3019 - Working with License Server Redundancy

**FOR MORE INFORMATION AND DOCUMENTATION POSTED ON TEAM AS OF MARCH 25, 2019**

<https://team.schneider-electric.com/Pages/Licensing.aspx>

Sort by Publication Date/Descending to see the most recent at the top of the list.

- Sales Brief
- Updated “Improvements to SysPlatform Activated Licensing” detailed document
- Updated “Improvements to SysPlatform Activated Licensing” PowerPoint
- NEW AVEVA Licensing Getting Started Guide. A paper copy is included in the product software media!
- Updated Licensing Online Guide (.pdf version)
- Technical Support ppt presented at User Conference in Dallas, TX
  - “MC-15 Wonderware Licensing Updates and Guide for Success”
- Free Basic Licensing Training Class: Log into AVEVA Training site.
  - <https://industrialtraining.aveva.com/wonderware/portal/catalog.cfm?calendarID=3>
- Add the Dev Consignment usage and Tables to this list. See the Sales Brief for details.