

FEB 2020

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# License Manager (How to manage licensing)

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**AVEVA**

# AVEVA Licensing 3.5.1

## 2017 Product Releases

- License Server based on Computer Name
- Offline Activation has a Web UI
- Reservation available
- Tools and better error messaging for Tech Support
- UI is more user-friendly and offers more information

- Application Server
- InTouch
- InTouch OMI
- InTouch Access Anywhere
- OI Server\*
- Historian
- Historian Client
- Skelta BPM
- Recipe Manager Plus
- WW Intelligence

# Whats in 3.5.1

- You can verify the version of License Manager by navigating to **Control Panel** and selecting **Programs and Features**. The installed AVEVA Enterprise License Manager, AVEVA Enterprise License Server, or AVEVA Enterprise Licensing (licensing platform components) version displays in the **Version** column.
- Supported Operating Systems
  - Below are the Operating System minimum requirements:
  - Client Operating System (x86 and x64):
    - Windows 8.1 Professional
    - Windows 10 Version 1607
  - Server Operating System (x64 only):
    - Windows Server 2012
  - AVEVA Enterprise Licensing requires .Net Framework 4.5.1. The licensing installation process checks if .NET version 4.5.1 is installed. If not, you are prompted to allow .NET installation.
- Please refer to the readme file on resolved issues and known issues.



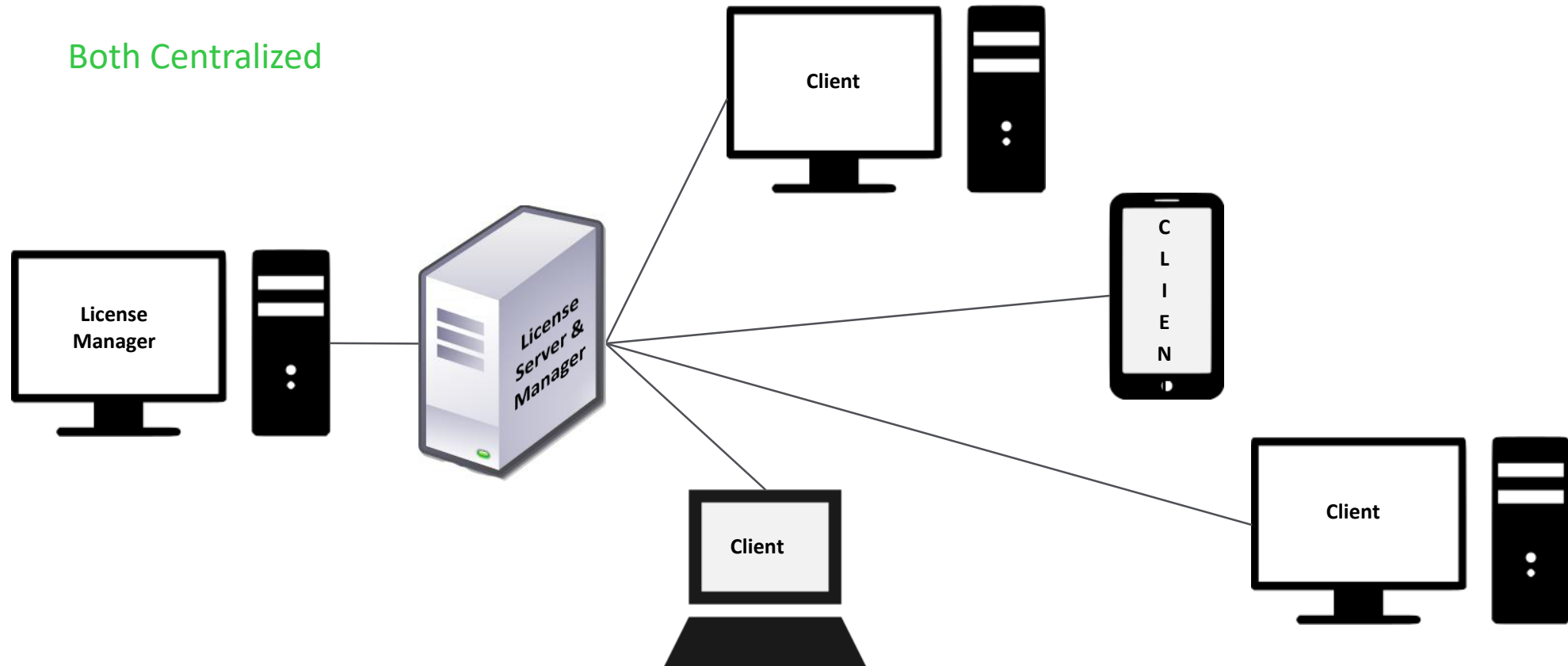
# Architectural and Management

**AVEVA**

# Architectural Options

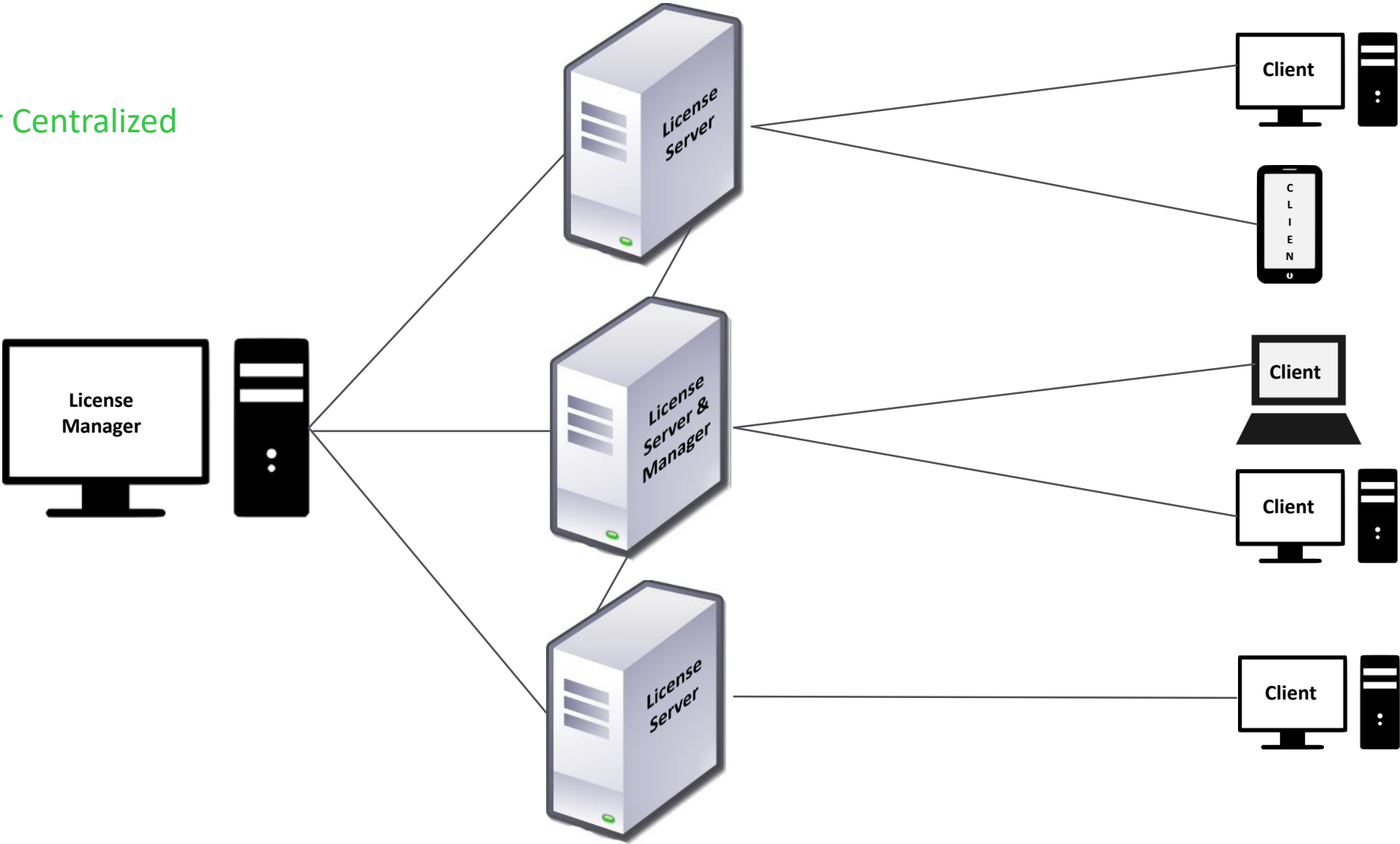
Localized or Centralized License Server? Localized or Centralized License Manager?

Both Centralized



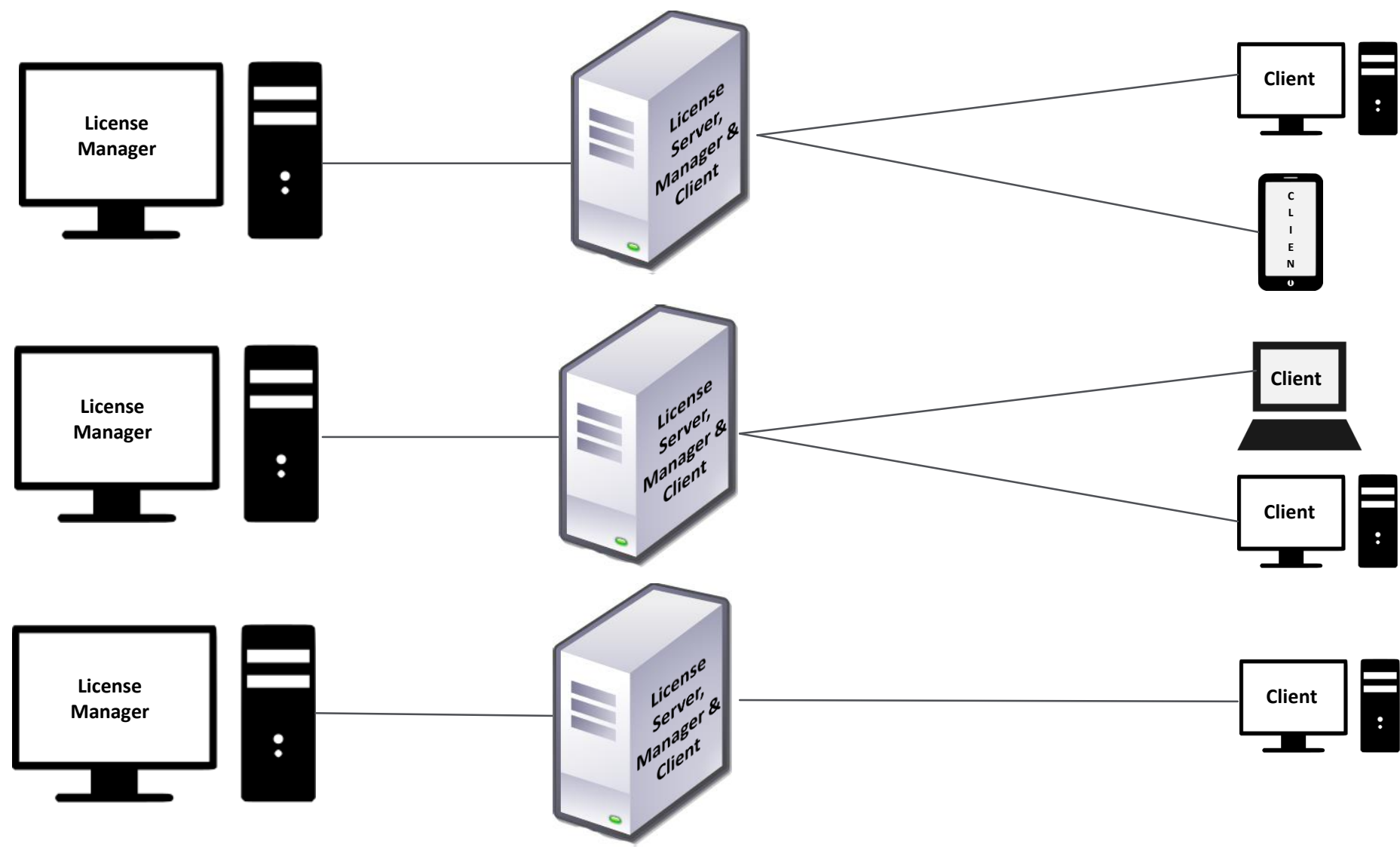
# Architectural Options

Manager Centralized



# Architectural Options

None Centralized



# License Installation/ Upgrade Activation -

Came with our product installation or download from GCS Website (upgrade)

Detail steps are explained in licensing guide. (SELicenseManagerGuide35.pdf)

Please also refer to the readme in the ISO image or zip file



# License Activation

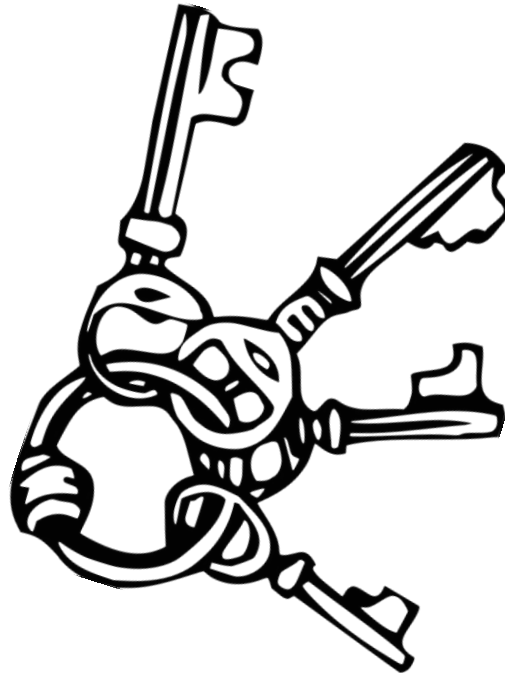
All Licenses Must be Activated, and Each Production License Can Only Be Activated Once

## Online Activation

- Used if the AVEVA License Manager has a direct connection to the Internet.
- Can even be used within a highly-secured network if a port can be temporarily opened just long enough for activation to occur.

## Offline Activation

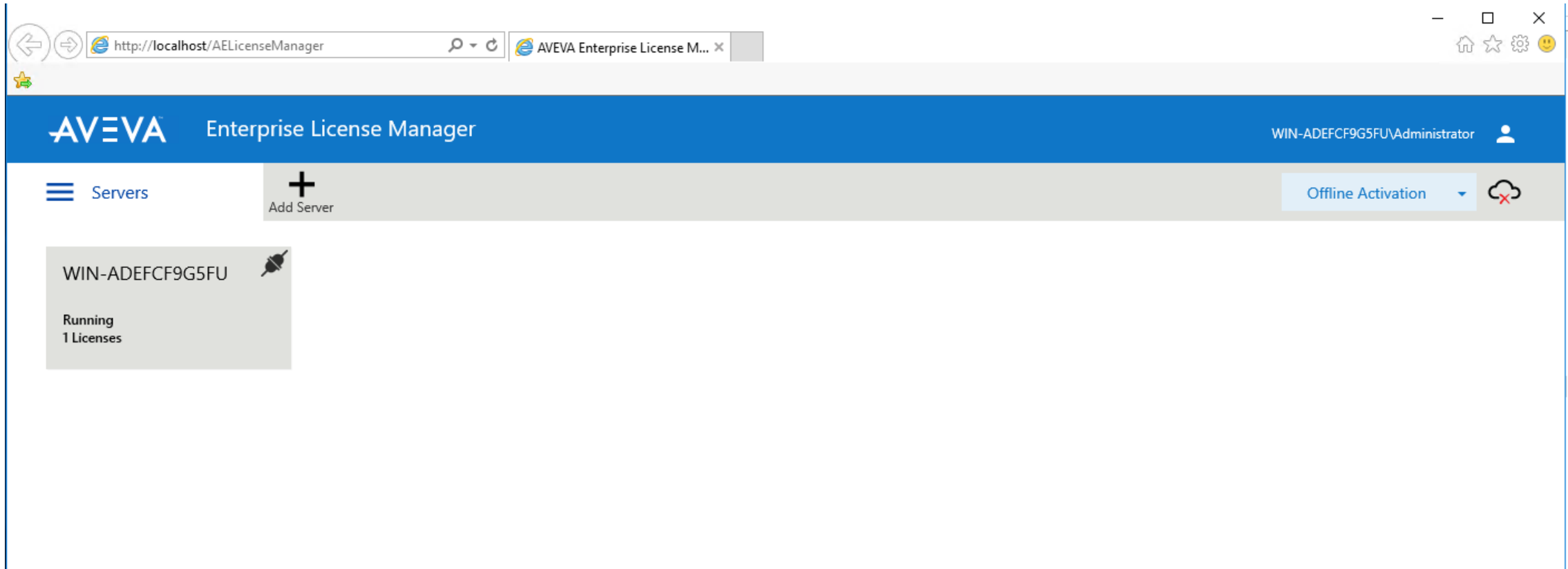
- Used if the AVEVA License Manager does not have a direct connection to the Internet.
- Requires a second machine that has either a browser (IE, Chrome) or AVEVA License Manager installed and has a direct connection to the Internet.



# License Activation – Online/offline Activation

Online Activation is used when the License Manager has Internet Access

Offline Activation when License Manager has no Internet Access



# US Features - License Reservation

## Reserve a License to a Particular Device or User

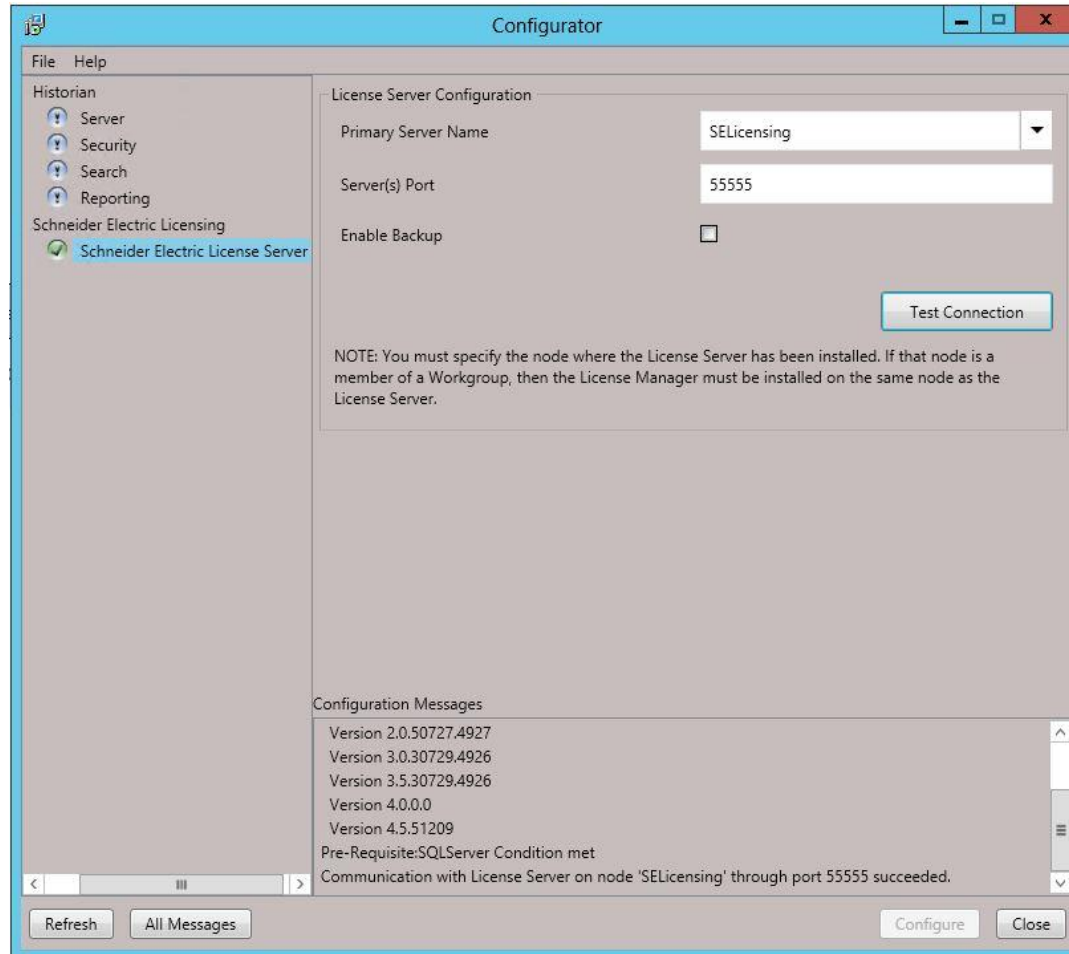
The screenshot displays the AVEVA Enterprise License Manager web application. The browser address bar shows 'http://localhost/AELicenseManager'. The application header includes the AVEVA logo and 'Enterprise License Manager'. The main navigation bar shows 'Servers' and a search bar. The 'Reservation' tab is selected, showing a table of licenses. The table has columns: Feature, License Type, Version, Type, Device/User, Expiry Date, and Comment. The table lists five licenses, all with an expiry date of 8/7/2020. The first four are 'Batch Management Server, Unlimited Units' (Server, 2017 (12.0)) and the fifth is 'Skelta BPM - Developers Edition' (Server, 2017 (5.1)). The table footer shows '1-233 of 233 License(s)' and 'Rows per page: 1000 Page 1 of 1'.

Feature	License Type	Version	Type	Device/User	Expiry Date	Comment
Batch Management Server, Unlimited Units	Server	2017 (12.0)			8/7/2020	
Batch Management Server, Unlimited Units	Server	2017 (12.0)			8/7/2020	
Batch Management Development Client	Client	2017 (12.0)			8/7/2020	
Batch Management Development Client	Client	2017 (12.0)			8/7/2020	
Skelta BPM - Developers Edition	Server	2017 (5.1)			8/7/2020	

When serving multiple licenses for the same product, Reservation is a must.

# The Configurator

Used on Each machine Hosting Wonderware Products to Let the Product Know Where to Go to Grab a License



# UI Features - Usage Summary

Which Licenses are in Use?

←

SELICENSING

Description

⬆

⬇

License Server ID

SELICENSING\_Z501DUIS

Status

Running

License

Reservations

Usage Summary

Usage Details

×

Feature	License Type	Version	Quantity	Reserved	In Use	
Skelta BPM - Developers Edition	Server	2017 (5.0)	1	0	0	⬆
BPM Client connection	Client	2017 (5.0)	20	0	0	
Historian Enterprise 500K Tags	Server	2017 (17.0)	1	0	1	
Historian Client	Client	2017 (17.0)	25	0	1	
Historian InSight	Client	2017 (17.0)	25	0	0	
Intelligence Professional Server	Server	2017 (2.1)	1	0	0	
InTouch RT 60K Tags	Server	2017 (17.0)	25	0	1	
		2017 (17.0)	5	0	0	
		2017 (17.0)	5	0	0	
		2017 (17.0)	25	0	0	⬇

Page

1

of 2

⏪

⏩

18 License(s) found

View how many licenses are available for each product, and how many are in use.

# UI Features – Usage Details

Who is Using a License, and on What Machine?

←

SELICENSING

Description

⬆

License

Reservations

Usage Summary

Usage Details

License Server ID

SELICENSING\_Z5O1DUIS

Status

Running

Historian Client

✕ 🔍

Feature	Type	Version	In Use/Total	Device	User	Expected return
Historian Client	Client	2017 (17.0)	1/25	TSW2017GR	MAGELLANDEV2000\WWUSER	9/17/2017 11:47:36 PM

1-1 of 1 License(s)

Page 1 of 1

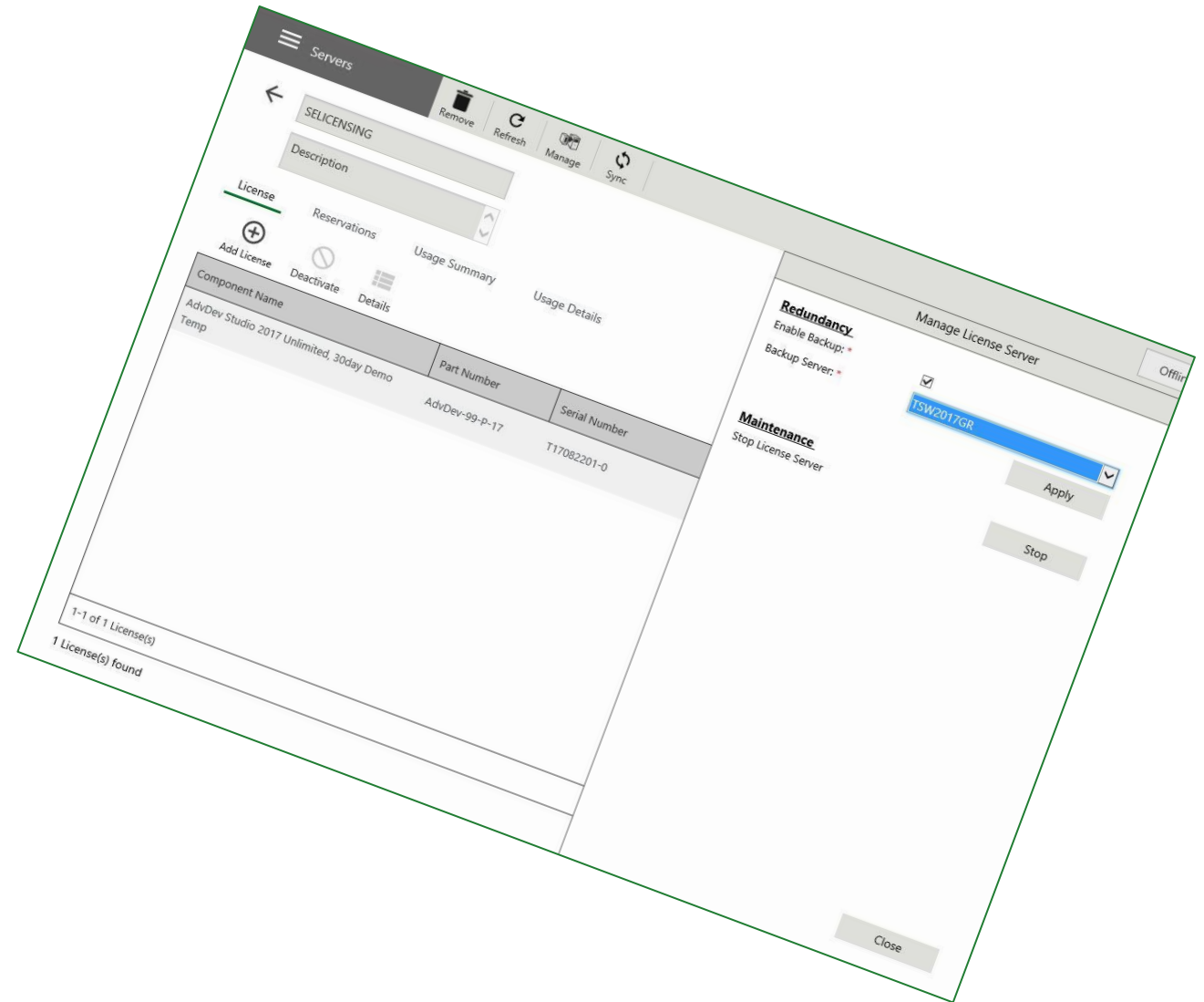
Handy information when you need to free up a license for use by another Machine/User.

# License Server Redundancy

## License Server Failover

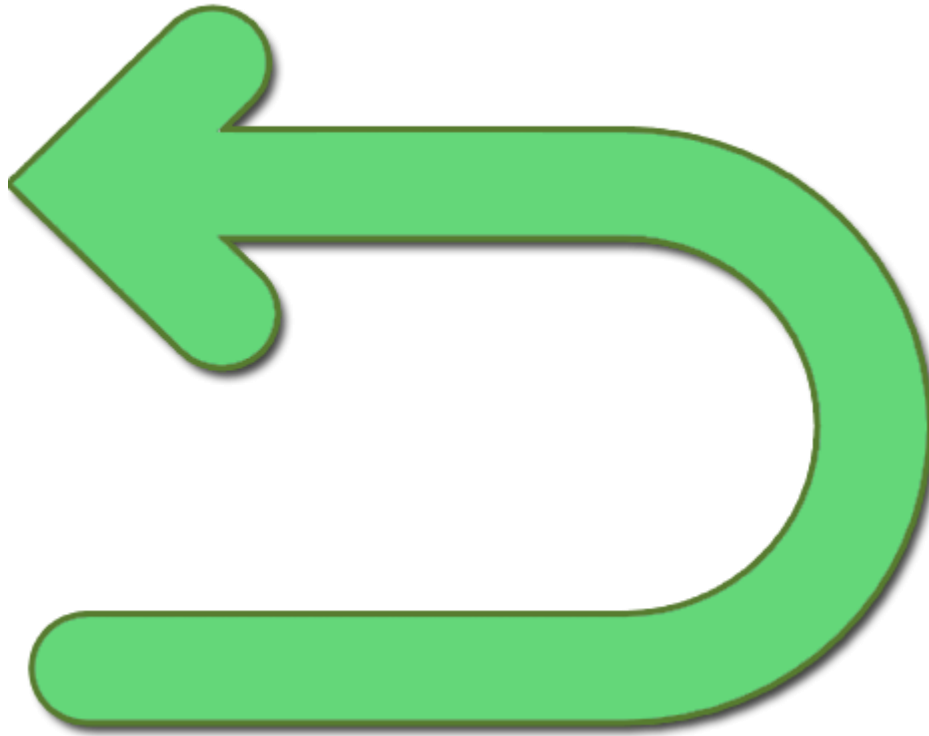
### Steps to Configure:

1. Add a Second Server to the License Manager.
2. Select the Primary Server, then open the Manage panel.
3. Check the Enable Redundancy Option.
4. Select the Second Server from the select menu.
5. The Primary will Pair with the Secondary and Show as a Single Server on the Server Summary Page.
6. Sync the Pair.
7. For each Product, re-run the Configurator and Point to the Pair.



# How It Works – License Return

How does a license become available for use by another instance of the product?



- 2 Ways to Return a License:
  1. On proper shutdown of the product, the license is returned.
  2. If a product cannot be properly shutdown, the license will remain reserved to that instance of the product until the License Server forces return – 20 minutes or 2 weeks.



# Things to Consider

1. Loss of communication with the License Server may result in an unexpected impact on production.
2. Failure to shut down a product properly may make a license unavailable for use until the license is force-returned to the License Server.



# Best Practices



1. If a change in HostName of the License Server machine is required, deactivate all licenses first, change the machine name, reset the License Server, then reactivate all of the licenses.
2. Make an image of all License Servers. (Do not start the Image or else it will go into Grace Period)
3. Always properly shut down products to ensure return of the license to the License Server.
4. Consider using a local License Server for critical components of your Wonderware System.



- Activation Based Licensing
- Tech Notes and Tech Alerts
- TN2907 - [Schneider Electric Licensing – Best Practices](#)
- TN2908 - [Resolving Historian Server Unable to Return License to the License Server](#)
- 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 sh...](#)
- TA280 - [Improper Shutdown of InTouch from within an InTouch RDS/TSE Session May Result in the License U...](#)
- 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 C...](#)
- TA358 - [The Backup License Server fails to serve licenses when the Primary License Server is down for m...](#)

# XML file



Dear Customer,

Thank you for your Wonderware software order. This messa

## ORDER INFORMATION

Site 631: Wonderware Temp License Site - 631

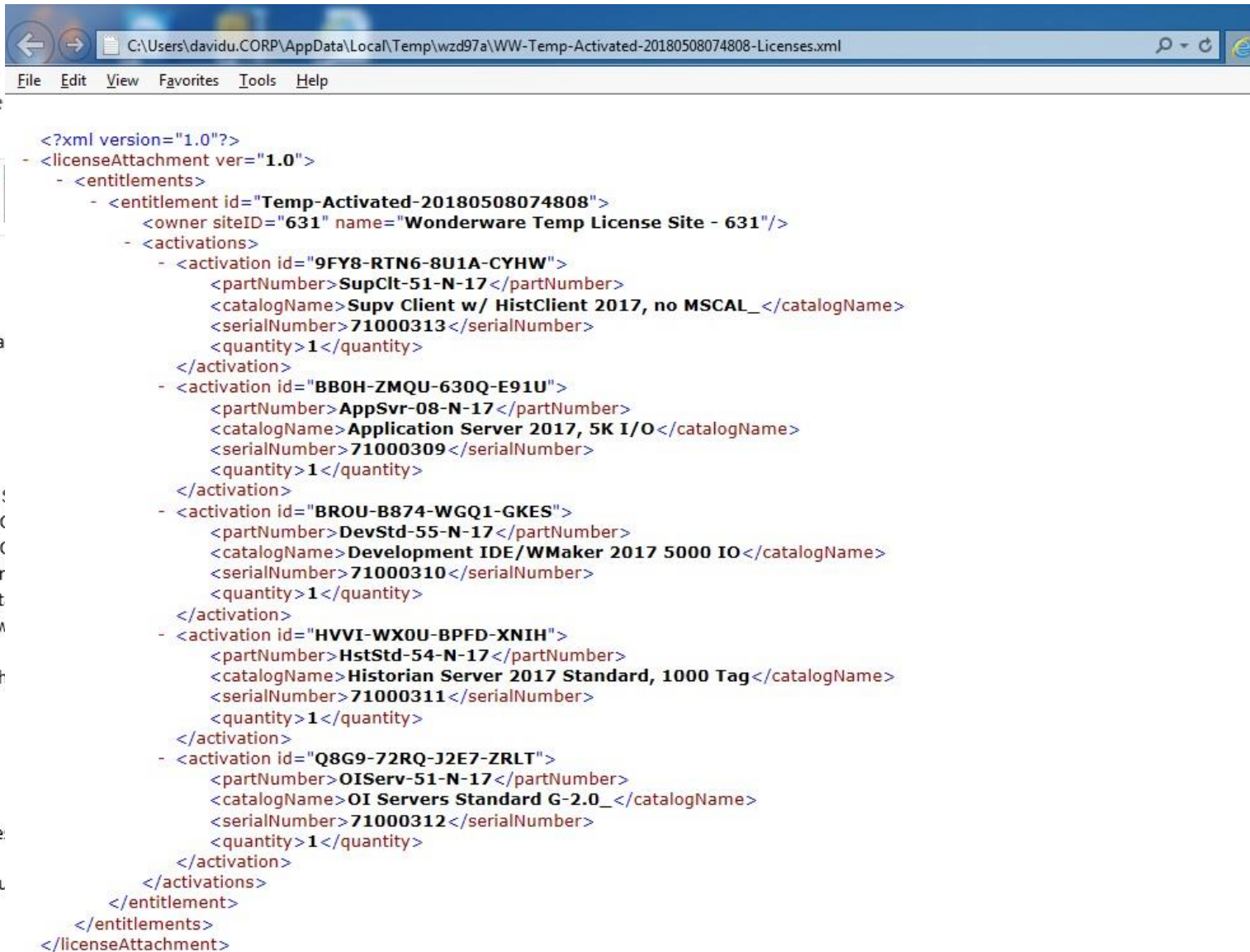
Order ID: Temp-Activated-20180507102518

Part Number: AppSvr-08-N-17 Part Description: Application !  
Part Number: SupClt-03-N-17 Part Description: Supervisory C  
Part Number: SupClt-03-N-17 Part Description: Supervisory C  
Part Number: HstStd-53-N-17 Part Description: Historian Ser  
Part Number: OIServ-51-N-17 Part Description: OI Servers St  
Part Number: SupClt-51-N-17 Part Description: Supv Client v

You can download the software installation package using th  
Four simple steps will activate your License:

- 1) Save the attached [xml.zip](#) License file
- 2) Install product software
- 3) Open the License Manager
- 4) Activate. For detailed instructions on the activation proce

For license activation or product support, please contact you  
contact info here if desired.)



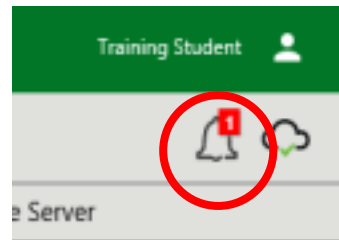
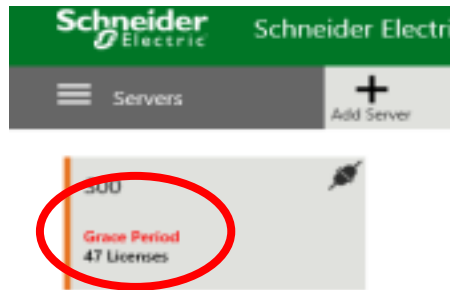


# Grace Period

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# License Server Grace Period

- A mean of supporting the license server in virtual environments without the use of dongles
- When Cloning virtual machine License server enters grace period
- License server keep working for a Grace Period of 2 weeks
- 3 ways to identify Grace period





# Ways to exit Grace Period

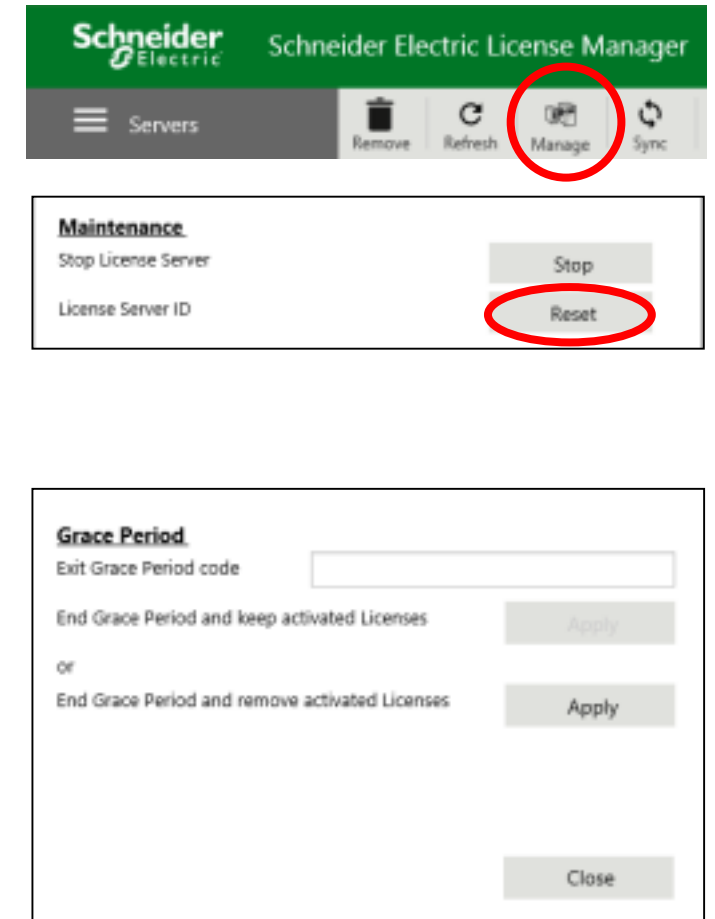
- All accessible from Manage License server
- When **NO** licenses are activated
  - Reset License server ID
- When licenses are activated
  - Exit while keeping licenses active

This requires entering grace period code

- Exit and remove licenses

This will also reset the server ID

New licenses can then be activated.



The screenshot displays the Schneider Electric License Manager web interface. The top navigation bar includes the Schneider Electric logo and the title 'Schneider Electric License Manager'. Below the navigation bar, there are several icons: 'Servers', 'Remove', 'Refresh', 'Manage' (circled in red), and 'Sync'. The 'Manage' icon is a document with a gear. Below the navigation bar, there is a 'Maintenance' section. It contains two rows: 'Stop License Server' with a 'Stop' button, and 'License Server ID' with a 'Reset' button (circled in red). Below the 'Maintenance' section, there is a 'Grace Period' section. It contains a text input field for 'Exit Grace Period code'. Below the input field, there are two options: 'End Grace Period and keep activated Licenses' with an 'Apply' button, and 'End Grace Period and remove activated Licenses' with an 'Apply' button. At the bottom of the 'Grace Period' section, there is a 'Close' button.



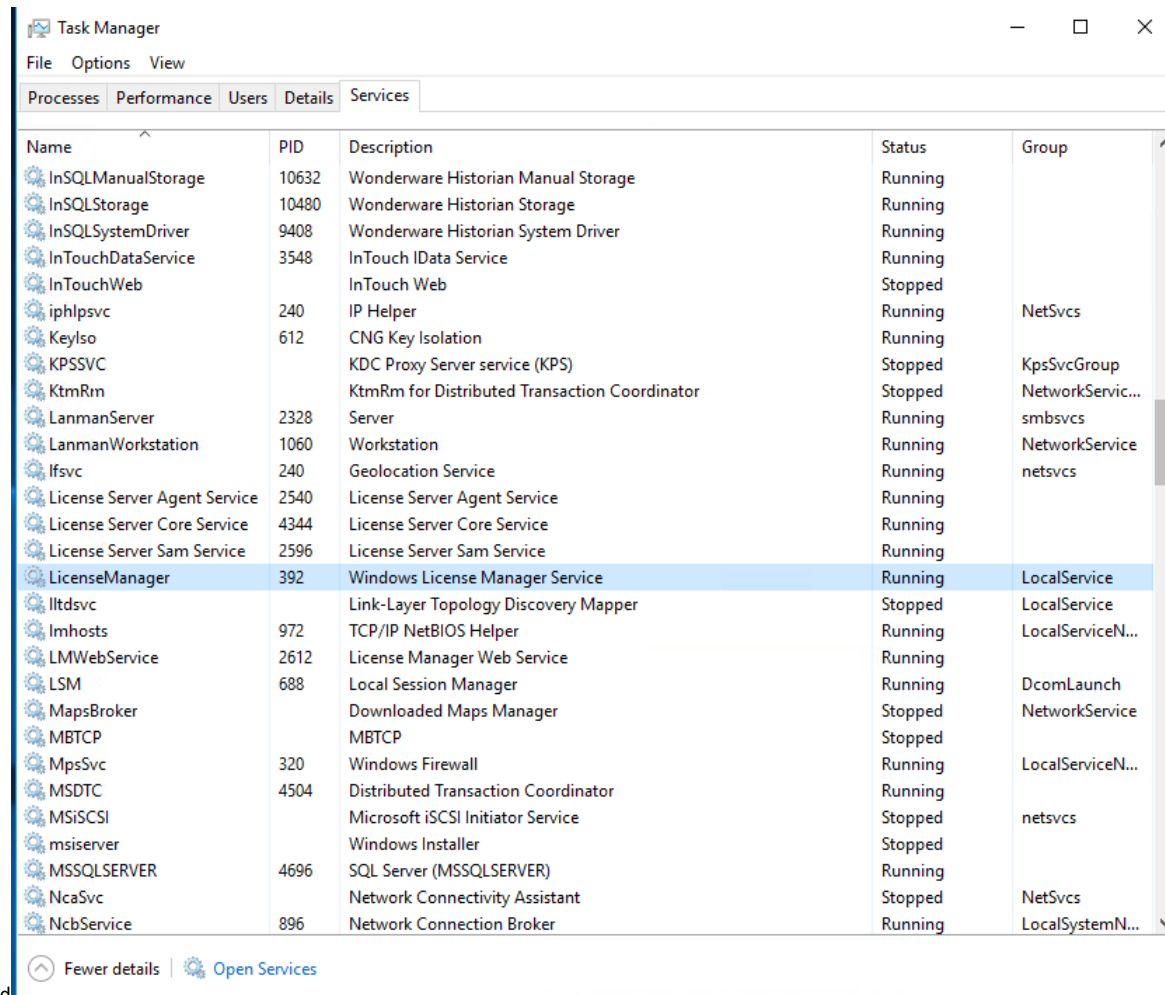
# Troubleshooting

**AVEVA**



# Services

Made sure services are running

A screenshot of the Windows Task Manager application, specifically the 'Services' tab. The window title is 'Task Manager' and it has standard Windows window controls (minimize, maximize, close). The menu bar includes 'File', 'Options', and 'View'. Below the menu bar are tabs for 'Processes', 'Performance', 'Users', 'Details', and 'Services', with 'Services' being the active tab. The main area displays a list of system services in a table format. The table has five columns: 'Name', 'PID', 'Description', 'Status', and 'Group'. The 'LicenseManager' service is highlighted with a blue selection bar. At the bottom of the window, there are links for 'Fewer details' and 'Open Services'.

Name	PID	Description	Status	Group
InSQLManualStorage	10632	Wonderware Historian Manual Storage	Running	
InSQLStorage	10480	Wonderware Historian Storage	Running	
InSQLSystemDriver	9408	Wonderware Historian System Driver	Running	
InTouchDataService	3548	InTouch IData Service	Running	
InTouchWeb		InTouch Web	Stopped	
iphlpvc	240	IP Helper	Running	NetSvcs
KeyIso	612	CNG Key Isolation	Running	
KPSVC		KDC Proxy Server service (KPS)	Stopped	KpsSvcGroup
KtmRm		KtmRm for Distributed Transaction Coordinator	Stopped	NetworkService...
LanmanServer	2328	Server	Running	smbsvcs
LanmanWorkstation	1060	Workstation	Running	NetworkService
lfsvc	240	Geolocation Service	Running	netsvcs
License Server Agent Service	2540	License Server Agent Service	Running	
License Server Core Service	4344	License Server Core Service	Running	
License Server Sam Service	2596	License Server Sam Service	Running	
LicenseManager	392	Windows License Manager Service	Running	LocalService
ltdsvc		Link-Layer Topology Discovery Mapper	Stopped	LocalService
lmhosts	972	TCP/IP NetBIOS Helper	Running	LocalServiceN...
LMWebService	2612	License Manager Web Service	Running	
LSM	688	Local Session Manager	Running	DcomLaunch
MapsBroker		Downloaded Maps Manager	Stopped	NetworkService
MBTCP		MBTCP	Stopped	
MpsSvc	320	Windows Firewall	Running	LocalServiceN...
MSDTC	4504	Distributed Transaction Coordinator	Running	
MSiSCSI		Microsoft iSCSI Initiator Service	Stopped	netsvcs
msiserver		Windows Installer	Stopped	
MSSQLSERVER	4696	SQL Server (MSSQLSERVER)	Running	
NcaSvc		Network Connectivity Assistant	Stopped	NetSvcs
NcbService	896	Network Connection Broker	Running	LocalSystemN...



# License not updated?

- Try to do a “sync”

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# Troubleshooting with Global Log Flags



DU2017THENU1 (Local) - Log Flag Editor

File View Help

DU2017THENU1 (Local)

Global

\$du2017thenu1.aaEngine

\$du2017thenu1.Checkpoint

\$du2017thenu1.Checkpoint

\$du2017thenu1.Scheduler

aaAFCommonTypes

aaAlarmExtensionPackage

aaAlarmPackage2

aaAlarmRuntime2

aaASBRegistrationUtility

aaBootstrap

aaCALWrapper

aaConfigurationServiceHo

aaContentProviderHost

aaDCOMTransport

aaDDESuiteLinkClientPack

aaDiscoveryLocal

aaDiscoveryPrimaryGlobal

aaEngine

aaGlobalDataCacheMonit

aaGR

aahClientAccessPoint

aaHistClientDatabase

aaHistClientTagPicker

aaHistClientTrendControl

aaHistClientTrendObject

aaHistoryExtensionPackag

aaIDE

aaMxDataConsumer

Global Log Flags

☒ Error

☒ Warning

☒ Info

☐ Trace

☐ Start-Stop

☐ Entry-Exit

☐ ThreadStart-Stop

☐ SQL

☐ Connection

☐ Ctor-Dtor

☐ RefCount

☒ SELicensing

☒ Info-Licensing

☒ SELicAcquire

☒ SELicTiming

Components using Error

☒ \$du2017thenu1.aaEngine

☒ \$du2017thenu1.Checkpointer

☒ \$du2017thenu1.CheckpointFile

☒ \$du2017thenu1.Scheduler

☒ aaAFCommonTypes

☒ aaAlarmExtensionPackage4

☒ aaAlarmPackage2

☒ aaAlarmRuntime2

☒ aaASBRegistrationUtility

SElicensing LMWeb.Controller ActivationsController::PostActivate: StatusCode: 400, R

Info LicAPI ServersController::Refresh Server call for License Server

SElicensing LMWeb.Repository LicenseServerBase::BuildLicenseServerFailedMessage:Ur

SElicensing LMWeb.Repository LicenseServerRepository::RefreshLicenseServer: License

SElicensing LMWeb.Repository LicenseServerRepository::RefreshLicenseServer: Unable

SElicensing LMWeb.Repository LicenseServerInfo::UpdatePairStatusPair not Available

Trace rdbhandler status=acquired;gpleft=0;

Trace rdbhandler rdbhandler license write back status acquired, write back

Error LMWeb.Repository There was no endpoint listening at net.tcp://duwis56only

SElicensing LMWeb.Repository LicenseServerInfo::FetchGracePeriodDate:No grace peri

SElicensing LMWeb.Repository LicenseServerBase::BuildLicenseServerFailedMessage:Ur

Info aahClientCommon LocalHost: Storage not ready to receive data [CommonB

Info aahClientCommon LocalHost: Storage not ready to receive data [CommonB

SElicensing LicAPI LicAPIUtility::IsLicensorServerAccessible status is: False

SElicensing LicAPI LicAPITrustedStorage::FetchAllCapabilitiesFromTrustedS

Info-Licensing LicAPI There are no Acquired licenses available.

Message Details

Time	Process ID	Thread ID	Log Flag	Component
3:02:48 PM	2020	5672	SELicAcquire	LicAPI

Message:

License server 'DUWIS56ONLY' is detected in disconnect state.



# Troubleshooting with Product Log Flags



DUWIS56ONLY (Local) - Log Flag Editor

File View Help

GlobalDataDistributionServ  
GlobalDataRepositoryProx  
GraphicEditor  
GRBrowseServiceAdapter  
GRPostInstallCleanup  
hd  
Historian  
HTSPT  
iexplore  
IIS7ConfigSupport  
IMS.Server.Configurator  
Information Server  
InformationServerFeature  
intouch  
InTouchViewAppPackageS  
INTSPT  
IOMBLSService  
JupiterGraphic  
**LicAPI**  
LicAPIConnection  
LicAPILoader  
LicServAPI  
LicServer  
LicServer SamService  
LicServer.AgentService  
LMWeb.Controller  
LMWeb.DataAccessor  
LMWeb.Repository  
Lmx  
LoginDialogServer

Log Flags for LicAPI

☒ Error  
☒ Warning  
☒ Info  
☐ Trace  
☐ Start-Stop  
☐ Entry-Exit  
☐ ThreadStart-Stop  
☐ SQL  
☐ Connection  
☐ Ctor-Dtor  
☐ RefCount

☒ SELicensing  
☒ Info-Licensing  
☒ SELicAcquire  
☒ SELicTiming

Components using Error

☒ 16PENTREND  
☒ aaAFCommonTypes  
☒ aaAlarmPackage2  
☒ aaAlarmRuntime2  
☒ aaASBBootstrapWS  
☒ aaASBConfigurationUtility  
☒ aaBootstrap  
☒ aaConfigurationServiceHost  
☒ aaContentProviderHost

Host: DUWIS56ONLY (Local)

Process ID	Thread ID	Log Flag	Component	Message
15016		Info	alarmmar	Registering AlarmMar with SI SSVC as "AlarmMar"
9944		Info	hd	InTouch Historical Data Server - 17.0.18000
14280		Info	VTEW	Wonderware I/O Server Toolkit for Windows NT - Version 7,2,1,14

Message Details

No:	Date	Time	Process ID	Thread ID	Log Flag
640103	9/7/2018	2:05:06 PM	15084	7504	SELicAcq

Requested client license details: Feature Name: wsp-i-supdientro; Feature Version: 17.0; Device ID: DUWIS56ONLY.2; User Name:

Process ID	Thread ID	Log Flag	Component	Message
7504		SELicTiming	LicAPI	Total time taken to acquire client license is: 00:00:00.04
14280		Info	view	License state is Licensed and Acceptable
7504		SELicAcquire	LicAPI	Requested client license details: Feature Name: wsp-i-supdientro; Feature Version: 17.0; Device ID: ..
7504		SELicAcquire	LicAPI	Since, requested feature list is already available, it's returned from local trusted storage
7504		SELicAcquire	LicAPI	Requested client features are acquired successfully
7504		SELicTiming	LicAPI	Total time taken to acquire client license is: 00:00:00.03

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# Additional Error Logs (To be sent to R&D)

Go to C:\ProgramData\Schneider Electric\Licensing\License Server


- Envid\_data.log
- Fne-access.log
- Fne-error.log


# Questions?



This presentation may include predictions, estimates, intentions, beliefs and other statements that are or may be construed as being forward-looking. While these forward-looking statements represent our current judgment on what the future holds, they are subject to risks and uncertainties that could result in actual outcomes differing materially from those projected in these statements. No statement contained herein constitutes a commitment by AVEVA to perform any particular action or to deliver any particular product or product features. Readers are cautioned not to place undue reliance on these forward-looking statements, which reflect our opinions only as of the date of this presentation.

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AVEVA is a global leader in engineering and industrial software driving digital transformation across the entire asset and operational life cycle of capital-intensive industries.

The company's engineering, planning and operations, asset performance, and monitoring and control solutions deliver proven results to over 16,000 customers across the globe. Its customers are supported by the largest industrial software ecosystem, including 4,200 partners and 5,700 certified developers. AVEVA is headquartered in Cambridge, UK, with over 4,400 employees at 80 locations in over 40 countries.

[aveva.com](https://www.aveva.com)