

Schneider Electric Floating License Manager

Version 2.3.1.0

Release Notes

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Version History

V2.3.1.0:

- Fixed cybersecurity vulnerabilities in FLEXnet License Administrator

V2.3.0.0:

- Fixed cybersecurity vulnerability in Floating License Manager
- Fixed cybersecurity vulnerabilities in FLEXnet License Administrator
- Fixed memory leak in FLEXnet Licensing Service
- New End User License Agreement (EULA)
- Additional minor bug fixes and improvements

V2.2.0.0:

- Fixed bug of V2.1.0.0 where the installation of the Schneider Electric Floating License Manager failed with the error code 0x2015, if the web port number of the FLEXnet License Administrator was already in use by another running software program
- Fixed bug of V2.1.0.0 where the installation of the Schneider Electric Floating License Manager failed with the error code 0x2017, if the logged-in Windows user name was containing blank characters
- Added port number checks in the "FLEXnet License Administrator Configuration" installation dialog to identify port conflicts
- Fixed blocking issues when license requests were made using the "web portal" method and when the size of the License Request File was exceeding 16 kB
- The task menu "Restart FLEXnet License Administrator" renames the log files 'ladmin.log' and 'schneide.log' of the FLEXnet License Server during the restart, when their file size exceeds 5 MB. This allows the user to free up disk space by manually deleting the renamed log files which otherwise could grow over the time to several MB. The renamed log file names contain a number e.g. 'ladmin1.log' and 'schneide1.log', and are created in the folder "C:\ProgramData\Schneider Electric\Floating License Manager\FLEXnet Publisher License Server Manager\logs"
- New End User License Agreement (EULA)
- Additional minor bug fixes and improvements

V2.1.0.0:

- Fixed cybersecurity vulnerability CVE-2016-10395 in FLEXnet Licensing Service
- Fixed cybersecurity vulnerability CVE-2016-2177 and CVE-2017-5571 in FLEXnet License Administrator
- Removed local "admin" user account of FLEXnet License Administrator web portal for improved cybersecurity. Read the FAQs below on how to login on this web portal.
- Several other security relevant improvements
- Improved FLEXnet License Administrator port configuration

Vendor Daemon Port number is set by default to 27010 and License Server Port gets new default port number 27011. This solves firewall problems and improves the performance for floating license usage. Read more details on the port configuration in the FAQs below.

- Improved license user tracking
License user data tracking at license activation: either the computer name and Windows user name or the email address is used. This information is visible for the license owner in his account in the Software Licensing Web Portal.
- Support of Windows Server 2016
- Additional quality improvements and minor bug fixes

V2.0.0.0:

- Simplified and faster license lifecycle operations, mostly in online mode
- Floating License Manager can be started also without elevated permissions
- Support of Windows OS enabled security policy setting: "System cryptography: Use FIPS compliant algorithms for encryption, hashing, and signing"
- Additional security and quality improvements
- Additional minor bug fixes

V1.9.9.0:

- Fixed cybersecurity vulnerability CVE-2016-6273 in FLEXnet License Administrator
- Improved FLEXnet License Administrator version
- Automatic import of FLEXnet License Administrator configuration from previous versions
- License update process by web portal and by email keeps licenses active
- Supported activation of licenses in VirtualBox
- Updated instructions for license activation by web portal
- Additional security improvements and bug fixes

V1.9.4.0/V1.9.4.1:

- Fixed cybersecurity vulnerability CVE-2015-8277 in vendor daemon
- Improved license registration and user identification dialogs
- Updated contact information of Schneider Electric Software Registration Centers
- Additional security and quality improvements

V1.9.0.0:

- Secure HTTPS communication for online license lifecycle operations
- New End User License Agreement (EULA)
- Fixed crash on Italian and Spanish Windows versions if there exist a license that expires in the month March
- Improved user guidance for some license lifecycle operations
- Additional security and quality improvements
- Additional minor bug fixes

Known Issues

Firewall or virus scanner may block ports that are required to access your Floating Licenses

If your software product pops up the error message "Failed to find a valid license! Failed to establish a connection with the Enterprise License Server. (0x80000205)" please check the used port numbers on your Enterprise License Server, the firewall or virus scanner might block the port(s). Read more details above in the FAQs.

Note: Some software products install the Schneider Electric Floating License Manager locally together with the software product. In this case, the Enterprise License Server is running on the local client machine and not on a server.

Possible communication interference in case another software product also uses the same FLEXnet License Server Port numbers

Several software products from different vendors are based on the FLEXnet License Server. In the case that more than one FLEXnet License Server is running on a single machine it is important that each FLEXnet License Server uses its own port numbers otherwise the software products will not find your floating license(s). During the installation of the Schneider Electric Floating License Manager you can define the port numbers to be used. Starting with V1.6.0.0 the default License Server Port number was changed to 27010 that is outside of the typically used ports of other FLEXnet License Servers. This new default port is only preset when there was no previous Schneider Electric Floating License Manager version installed before, otherwise your previous used ports are preset.

If your software product pops up the error message "Failed to find a valid license! Failed to establish a connection with the Enterprise License Server. (0x80000205)" it may possible that several FLEXnet License Servers are running on a single machine that conflicts with each other. Open the Windows Task Manager and check if more than one FLEXnet License Server processes are running on your machine with the process name "ladmin" and/or "lmgd". In this case check on the FLEXnet License Administrator web portal that there are configured unique port numbers not used by the other FLEXnet License Servers. Read more details above in the FAQs.

Software product doesn't find a valid floating license after machine reboot

If your software product doesn't find a valid floating license after machine reboot it could be possible that the Enterprise License Server is not yet ready. Please wait a few minutes after the machine reboot and start your software product again.

Software product doesn't find the floating license after license activation

If your software product doesn't find a valid floating license directly after completion of a license request it might be necessary to restart the Enterprise License Server. Restart it by selecting the "Task -> Restart FLEXnet License Administrator" menu of the Schneider Electric Floating License Manager and start your software product again.

Unicode characters in the installation destination folder are not supported

Don't install the Schneider Electric Floating License Manager to a folder that contains Unicode characters (e.g. Chinese characters). Otherwise at startup of the Schneider Electric Floating License Manager there is shown the following error message: The Windows service "ladminSchneider" for the FLEXnet License Administrator is not available. Program will be terminated. In this case reinstall it in a destination folder not using any Unicode characters.

Installation fails with error "Installation of FLEXnet License Administrator failed."

If this error message pops up during installation with the error code 0x2001, 0x2005 or 0x2011 then try the following steps to solve the problem:

1. Uninstall the Schneider Electric Floating License Manager
2. Manually delete the FLEXnet License Administrator configurations from previous Schneider Electric Floating License Manager versions.
Delete the following folders on your machine:
"C:\ProgramData\Schneider Electric\Floating License Manager\FLEXnet Publisher License Server Manager\conf" and
"C:\Program Files (x86)\Schneider Electric\Floating License Manager\FLEXnet Publisher License Server Manager\conf"
3. Install the Schneider Electric Floating License Manager again
4. Ensure that the FLEXnet License Administrator port configuration is properly done. Read more details above in the FAQs.

Installation fails with error "The program can't start because MSVCR100.dll is missing from your computer."

If this error message pops up during installation then please install the VC++ 2010 SP1 x86 redistributable on your machine and reinstall the Schneider Electric Floating License Manager.

Unsynchronized system clock may cause issues, esp. in virtual machines

In virtual machines, it is strongly recommended to synchronize the system clock of the virtual machine with the host time and to synchronize the guest and host time in addition with a time server. If the system clock of your machine is not set correct, the Schneider Electric Floating License Manager startup may take longer and it may not offer the online license lifecycle operations although your machine is connected to the Internet. Please correct the system clock of your machine before doing any license lifecycle operation. Avoid system clock changes by more than 24 hours after license activation as this may result in licensing issues. The daylight-saving clock changes are uncritical.

License return operations result in temporary unavailable license if your machine is not connected with the Internet

If you start a license return request on your machine that is not connected with the Internet, then the selected license will be temporarily unavailable until the request is completed. A request can be completed only once you have downloaded the XML response file from the Software Licensing Web Portal and completed it in the Schneider Electric Floating License Manager. If you cannot accept temporary license unavailability, please connect your machine with the Internet before doing the license return.

Licenses can become untrusted in virtual machines during cloning or snapshot operations

If you activate licenses in virtual machines it is important to know that there are specific copy protection mechanisms in place that ensures the license usage in compliance with the End User License Agreement (EULA). It is recommended to return your license before you clone your virtual machine or before you revert to a snapshot of your virtual machine. After cloning or reverting of a snapshot you can activate your license again on your virtual machine. If you don't follow this recommendation your license in the virtual machine will be set to an untrusted status so that it cannot be used anymore without repair. In few cases even the repair will not be possible.

Licenses can become untrusted in virtual machines when the MAC address changes

If you activate licenses in virtual machines it is important to know that there are specific copy protection mechanisms in place that ensures the license usage in compliance with the End User License Agreement (EULA). In virtual machines, it may happen that the MAC address of the virtual network adapter changes dynamically in specific events. VMware for example changes the MAC address automatically when the configuration file is moved to another machine or folder. Hyper-V for example uses by default dynamic MAC address assignment. To avoid getting untrusted licenses it is required to use a static MAC address.

Display of critical alerts in the FLEXnet License Administrator web portal

The FLEXnet License Administrator web portal displays alerts, by default also not critical alerts are shown. It can be configured in the FLEXnet License Administrator web portal which alerts are displayed. To configure the alerts, open the Schneider Electric Floating License Manager "Help -> FLEXnet License Administrator" menu. At this web portal proceed to the "Administration" tab and login (default credentials "admin/admin"). Under the "Alert Configuration" tab you can decide which alerts are shown as critical or important.

Important Security Advice

The Floating License Manager installs the FLEXnet License Server communicating via a network connection with the licensed software products and the vendor daemon. This license server offers also a web portal called FLEXnet License Administrator that can be accessed via the Help menu of the Schneider Electric Floating License Manager.

Following best practices protect this license server against security vulnerabilities:

- Expose the license server and vendor daemon ports only to a trusted network
- Enable the Windows Data Execution Prevention (DEP)

Recommendations to Increase Security

- Frequently update your virus definitions

- Regularly apply available Security Updates for Windows
- Ensure you have up-to-date backups
- Enable strong spam filters to prevent phishing e-mails from reaching the end users and authenticate in-bound e-mail
- Disable macro scripts from Microsoft Office files transmitted via e-mail
- Inform and educate your employees to identify scams, malicious links, and social engineering attempts
- Configure access controls including file, directory, and network share permissions with least privilege in mind
- Restrict TCP ports and traffic to where it is absolutely needed using router ACLs
- Use host-based firewalls to limit communication on TCP ports, especially between workstations
- Ensure all other cyber-defenses are up-to-date. If you are unclear then seek engagement with Schneider Electric's cybersecurity services team (<https://www.schneider-electric.com/en/work/services/field-services/industrial-automation/industrial-cybersecurity/industrial-cybersecurity.jsp>)

To obtain assistance on how to protect your installation, please contact your local Schneider Electric representative.

For further information on vulnerabilities in Schneider Electric's products, please visit Schneider Electric's cybersecurity web page (<https://www.schneider-electric.com/en/work/support/cybersecurity/overview.jsp>).

FAQs

1. Where do I find the Activation ID of my license?

If you have purchased a license for a Schneider Electric software product, then you (license owner) either received an email with a Schneider Electric Entitlement Certificate that contains the Activation ID or you have received a Schneider Electric Certificate of Authenticity where the Activation ID is printed on.

2. What is the FLEXnet License Administrator and how to logon on its web portal?

The FLEXnet License Administrator is the licensing component to manage the FLEXnet License Server (aka Enterprise License Server) and it is automatically installed by the Schneider Electric Floating License Manager. This server is required to manage floating licenses.

The FLEXnet License Administrator web portal can be accessed via the Help menu of the Schneider Electric Floating License Manager. On the FLEXnet License Administrator web portal you can view license information on the "Dashboard" tab. On the "Administration" tab you can login to configure the Enterprise License Server, e.g. the license server port and vendor daemon port, additional user accounts, etc. For more information, click the Help button within the web portal.

By default, you can login only with the Windows domain user account of the user who has installed the Schneider Electric Floating License Manager. If you don't remember who has installed the Schneider Electric Floating License Manager, you need to reinstall it to add again a new default user account. At login, enter the user name of the default user in the format *domain\username*, whereas *domain* is the computer name if the default user account is a local user. The user name is not case-sensitive.

Note: It is not supported to login with an empty password, so ensure that your default user account has set a password.

3. Where do I find the contact information of my Software Registration Center?

Open the Floating License Manager menu "Help->Support ..." to get all contact information.

4. How to configure the FLEXnet License Administrator port numbers?

The FLEXnet License Administrator requires 3 ports that must be configured and opened by your firewall. If the port configuration is not properly done, your software product is not able to find your floating license(s).

The Web Port (default 8090) is required to access the FLEXnet License Administrator web portal. The License Server Port (default 27011) or Vendor Daemon Port (default 27010) is required by your software product to find your available floating licenses on the Enterprise License Server.

All these 3 port numbers can be configured either during installation of the Schneider Electric Floating License Manager or after installation via the FLEXnet License Administrator web portal. The web portal can be opened via the Schneider Electric Floating License Manager "Help -> FLEXnet License Administrator" menu.

For port configuration, you need to logon on the "Administration" tab (read details in the previous FAQ). After login, the License Server Port can be set under "Server Configuration --> License Server Configuration" and the Web Port can be set under "Server Configuration --> Web Server Configuration". The Vendor Daemon Port can be set under "Vendor Daemon Configuration --> schneide --> General Configuration".

Changes on the port configuration need to be saved and require a restart of the FLEXnet License Administrator. The restart can be done by selecting the "Task -> Restart FLEXnet License Administrator" menu of the Schneider Electric Floating License Manager.

Note: It is important that the same port numbers are properly configured on the machine where the software product is installed. This can be done usually via the Schneider Electric License Manager under "Options --> Enterprise License Server" menu.

Note: For performance reasons, it is recommended to configure there the Vendor Daemon Port instead of the License Server Port.

5. Why my computer cannot connect to the Schneider Electric License Server?

If during the license activation process you get the message "Your computer could not connect to the Schneider Electric License Server" then it can be for one of the following reasons:

a. Your computer is not connected to the Internet

In this case, please check your Internet connection and click on "Try to connect again". If no Internet access is available click on "Use another activation method".

b. You are connected to the Internet through a proxy which is blocking the access to the Schneider Electric License Server

In this case, please contact your system or network administrator who should add an access rule on this proxy for the following URL:
<https://www.schneider-electric.com>

c. There is a temporary problem on the Schneider Electric License Server

In this case, please try again later or contact your Software Registration Center.