Installing & Activating
Floating Licenses

extendsim. 2024

Important Information -- read before you begin installing

- The ExtendSim Floating license is used for the deployment of ExtendSim Pro, DE, CP, or Analysis RunTime (ART) products to multiple users through native installation of ExtendSim on their devices.
- This is a concurrent-user Client/Server configuration that:
  - Is managed by a License Manager (*RLM.exe*)* that is installed on a Server, runs as a Service, and regulates the number of concurrent users by monitoring Client license requests transmitted through TCP/IP ports.
  - Allows the ExtendSim application and files to be installed on any number of Client devices anywhere as long as they can communicate with the License Manager over a local or wide-area network.
  - And, unless disabled at customer request prior to activation, permits Client devices to use a checked out (roaming) license of ExtendSim for up to 30 days while disconnected from the network.
- The Floating license requires two stages of activation.
  1. First, activate the License Manager on a Server using a numeric Activation Key that is specific for the ExtendSim product and the number of licensed concurrent users. License Manager activation can be accomplished automatically** over the internet or, if automatic activation is not supported, processed manually in-house.
  2. Second, activate ExtendSim on Client devices using a copy of the license file (*extendsim.lic*) that got generated when the License Manager was activated.

  * *Note: If Reprise License Manager (RLM) is already running on the Server you wish to install the ExtendSim License Manager on, see* RLM Already Installed *in the separate document* Frequently Asked Questions • Floating Licenses.

  ** *For automated activation, network and system access is required. If the Server has no internet access or blocks the License Manager from receiving encrypted data from the internet, activation must be accomplished manually (in-house).*

Requirements

Clients (where ExtendSim is installed)
- Two TCP ports (5053 and the ISV Server port, which is 51006 by default) must be open on Client devices for outbound access. ExtendSim uses these ports to request and receive encrypted license information (product, license status and availability, server hostname, etc.) from the Server's License Manager over your network. If needed, these ports can be changed as discussed in the separate document *Frequently Asked Questions • Floating Licenses*.
- Client devices can be a physical or virtual machine (VM).
- Operating system: A 64-bit version of Windows, such as 11, 10, or Server.
- 1Ghz processor, 2GB RAM, 500MB disk space.

Server (where the License Manager is installed)
- Three unblocked ports:
  - 5054 (a web server port) so you can use a browser to communicate locally (on your network) with the License Manager.
  - Two TCP ports (5053 and the ISV Server port, which is 51006 by default) must be open for inbound access on the Server. The License Manager uses these ports to receive ExtendSim requests for license information, send an encrypted response over your network, and communicate internally with license management files on the Server. If needed, these ports can be changed as discussed in the separate document *Frequently Asked Questions • Floating Licenses*.
- The Server can be a physical or virtual machine. If it's a VM, the MAC/Ethernet address must be static.
- Operating system: A 64-bit version of Windows, such as 11, 10, or Server.
- Disk space: 100 MB.
- A browser to communicate with the License Manager locally (over an intranet, not the internet) for activation.

Restrictions

- You cannot install more than one ExtendSim License Manager on a Server, but you can use that Server's License Manager to control multiple ExtendSim products. See the document *Frequently Asked Questions • Floating Licenses*.
- Unless purchased as a Global Floating license, the Floating License is restricted for use within one specified continent: Africa, Asia, Europe, North America, Oceania, or South America.

ANDRITZ
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License Manager
Installation & Activation Instructions

Part 1 • Install License Manager on the Server

1. If possible, install the License Manager software on the Server before installing ExtendSim on Client devices.

2. If Reprise License Manager (RLM) is already running on the Server you wish to install the ExtendSim License on, see *Common Errors* below.

3. Use the License Manager installer (*ExtendSimServerLicenseManager.exe*) and follow its instructions to install the files on the Server. You may need to install with elevated or administrative privileges.

4. By default the installer creates a folder named *ExtendSimFloatingLicenseServer* that is placed at the root of the Server's C drive (C:\ExtendSimFloatingLicenseServer).
   • The folder can be installed on a drive other than the C drive, but it **must** be installed at the root of the drive and it **must** be named *ExtendSimFloatingLicenseServer*.
   • The folder contains the *RLM Svc Starter* folder and three files: *extendsim.set*, *logfile*, and *RLM.exe*.
   • Log files and diagnostic reports will be placed in this folder.

5. After installation, the License Manager (*RLM.exe*) will silently run in the background as a Service named *ExtendSimLicServer*.

6. Before proceeding, we suggest you verify that ExtendSimLicServer is running as a Service.
   For instructions, see *License Manager on Server* in the separate document *Frequently Asked Questions • Floating Licenses.*

ExtendSimLicServer	Reprise License Server	Running	Automatic	Local System

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Common errors when installing the License Manager

• Installing on a virtual machine (VM) that uses dynamic MAC/Ethernet addresses. Some hardware virtualization products, such as Microsoft's Hyper-V, create VMs that, by default, have dynamic Mac/Ethernet addresses. For the License Manager to continue working on a virtual server after restarts, the server must use a static Mac/Ethernet address. If your server uses dynamic MAC/Ethernet addresses, you must change the settings in the VM's Manager so that the server uses a static address.

• Not installing the License Manager at the root of the drive or changing the name of the folder from the default name.

• Installing the new License Manager files over a previous installation without first stopping the service and uninstalling; see *License Manager on Server* in the separate document *Frequently Asked Questions • Floating Licenses*.

• Installing on a Server that is already running the Reprise License Manager (RLM). If RLM is already running on the Server you wish to install the ExtendSim License Manager on, see *RLM Already Installed* in the separate document *Frequently Asked Questions • Floating Licenses*.

Part 2 • Activate License Manager -- IMPORTANT TO CLOSELY FOLLOW THE INSTRUCTIONS IN THIS SECTION!

1. Open a browser
   - Once the License Manager is running as a service, you can communicate with it locally via a browser.
   - If you open the browser on the Server that you've installed the License Manager on, enter **localhost:5054** in the browser's address line and press *Enter*. (If your browser inserts *https://* in the address line, remove that text.)
   - If you open the browser on another device:
     - It must be on the same network as the device where you installed the License Manager.
     - Enter **servername:5054** in the browser's address line and press Enter. (Be sure *servername* is the name of the Server that has the License Manager installed and the text in the address line does not include *https://*.)
   - This takes you to the Reprise License Server Administration (RLSA) window.

2. From the commands on the left side of the RLSA window:
   - Select the **Activate License** command.

3. In the License Activation window that opens:
   - Click the button: **BEGIN License Activation**.
   - Then follow the five License Activation steps (steps 1-5) as described below.

4. **License Activation (Step 1 of 5)**
   - Don't make any changes to *ISV activation website: www.hostedactivation.com*. →
   - Click **Next**.

   ISV activation website:

   www.hostedactivation.com

5. **License Activation (Step 2 of 5)**
   - Change the ISV from *reprise* to **extendsim**.
     (Note: Enter extendsim *all in lower case as the ISV is case specific.)*.
   - Enter your License Activation Key, including dashes.
   - Click **Next**.

   ISV: extendsim

   License Activation Key: 1234-5678-9098-7654

6. **License Activation (Step 3 of 5)**
   - Don't make any changes to the *License Server hostid*.
   - Change the *License count (for Floating licenses)* to **0**.
     (Note: entering a zero ensures that none of the licenses you've purchased will be held back from being used by the Client devices that access this Server.)
   - Click **Next**.

   License Server or Node-Locked hostid: f06da4f564f7

   License count (for Floating licenses): 0

7. **License Activation (Step 4 of 5)**
   - For *License File to create or edit*, change *.\activate1.lic* to **extendsim.lic** (without the . , \ , or 1).
   - Click **Next**.

   License File to create or edit

   extendsim.lic

8. **License Activation (Step 5 of 5)**
   - Verify the information
     - ISV is *extendsim*.
     - Activation Key is entered correctly with dashes.
     - Count is 0.
     - License file is *extendsim.lic* (without the . , \ , or 1).
   - If information is not correct, go **Back** and correct it.
   - If information is correct, click **Request License**.

Activation Request Data:	
Activation Server	www.hostedactivation.com
ISV	extendsim
Activation Key	1234-5678-9098-7654
Count	0
Hostid	f06da4f564f7
License File	extendsim.lic

   REQUEST LICENSE
   <-Back

9. License Activation window. Which window do you see?

License Activation - license retrieved	**License Activation - license retrieved**
Writing License to extendsim.lic:	Error generating License: -132
HOST ExtendSimLicenseServer f06da4f564f7 ISV extendsim	Cannot connect to specified URL (-132) Attempting to access license generator at: www.hostedactivation.com

   No error messages? The license has been successfully activated, but you still need to generate the license file. Proceed to #10.

   Any error message? **STOP HERE.** Don't continue in this section. Instead note the name and number of the error message, then go to *Manual Activation of the License Manager* beginning on page 6 of this document.

Part 2 • Activate License Manager -- continued

10. If there are no error messages in the License Activation window, click the **(RE)START LICENSE SERVER** button (this does not restart the Server; it only restarts the License Manager).

11. In the *Reread/Restart Servers* window:
    • Don't make any changes to the *ISV=* popup.
    • Click the **REREAD/RESTART** button.
    • You will get the message *Reread command sent...* to all servers or to ExtendSim.

ISV= -all- ▾

12. Verify information by clicking the Status command on the left side of the RLSA window.
    • If the Status command reports *No ISV Servers running*, you've made an error. Restart at #2 of *Part 1 • Install License Manager on the Server*.
    • If instead the ISV Servers panel is present:
        • Does it report that the ISV server is running?
        • Check if the ISV port (by default, 51006) is blocked. If it is blocked, either unblock it (recommended) or set a different ISV port as discussed under *License Manager on Server* in the separate document *Frequently Asked Questions • Floating Licenses.*

ISV Servers					
Name	port	Running	Restarts	Server Status	License Usage
extendsim	51006	Yes	0	extendsim	extendsim

13. If the License Manager is running and the ISV port is unblocked, you may close the browser.

14. Make a copy of the *extendsim.lic* file for use in activating ExtendSim Pro, DE, CP, or ART on each Client device.
    • By default, the license file is located on the Server at *C:\ExtendSimFloatingLicenseServer*.
    • Also, if you subsequently edit the license file, you might need to distribute the modified file to Clients!

15. Install ExtendSim on Client devices as instructed under *Client Devices* on page 5.

Common errors when activating the License Manager

• Not unblocking the required ports - 5053 and the ISV port (by default, 51006).

• Not installing the License Manager with Administrative privileges.

• Not entering 0 for the count during #6 (Step 3 of 5).

• Continuing to try to do an automatic activation after receiving an error message in the License Activation window in #9.

Client Devices
Installation & Activation

Part 3 • Clients: Install ExtendSim

1. Get the **ExtendSim** installer for your product.
   - Be sure to use the correct installer for the ExtendSim Floating license product you purchased: ExtendSim Pro, ExtendSim DE, ExtendSim CP, or ExtendSim Analysis RunTime.
   - Obtain the ExtendSim installer from the Floating license package downloaded from our online store or by downloading a Trial version from https://ExtendSim.com/products/trial. (Trial option is not available for Analysis RunTime installations).

2. Install ExtendSim on each Client device, following the installer's instructions.
   - Install ExtendSim with Admin privileges to the end user's account, not to an Admin's account.
   - The installation destination for the ExtendSim folder that contains user-modifiable files must be to a location for which the end user has read-write access so they can open, change, and save models and libraries. By default, that folder is UserName*Documents**ExtendSim*.
   - You can install ExtendSim one time on as many devices as you want as long as ExtendSim can communicate with the License Manager.

3. Do not launch ExtendSim yet. If you do launch it, do not enter the Activation Key in the ExtendSim Activation Dialog. For a Floating license, the Activation Key is **only** used for the License Manager's activation.

Note for universities installing on Client devices in a lab environment: If installing ExtendSim on devices intended for use by multiple persons, please see Notes for Installation at Universities *later in this document.*

Part 4 • Clients: Activate ExtendSim

1. Before launching ExtendSim, copy the license file (*extendsim.lic*) that is on the Server. By default, the license file is located on the Server's C drive in the folder named *ExtendSimFloatingLicenseServer*.

2. On each Client device, paste the license file (*extendsim.lic*) into the ExtendSim folder that contains the user modifiable files such as Libraries and Examples. (By default, that folder is located at UserName*Documents**ExtendSim*.)
   Note: The end user must have Read-Write access to the folder that contains the user-modifiable files.

3. Launch ExtendSim. It will now be activated as indicated on its startup screen. (If instead the Activation Dialog appears, ExtendSim could not locate nor verify the license file. Check that there is a valid copy of the license file in the correct location.)

Common errors when installing or activating ExtendSim on Client Devices

- Installing ExtendSim to the Admin account rather than to the End User account.
- Not installing ExtendSim with elevated or administrative privileges.
- Not unblocking the required ports - 5053 and the ISV port (by default, 51006).
- Trying to activate ExtendSim using the Activation Key rather than the license file.
- Failing to copy the license file to the correct location on the Client device.
- Moving user-modifiable files to a different location without changing the *ExtendSimDocPath*.
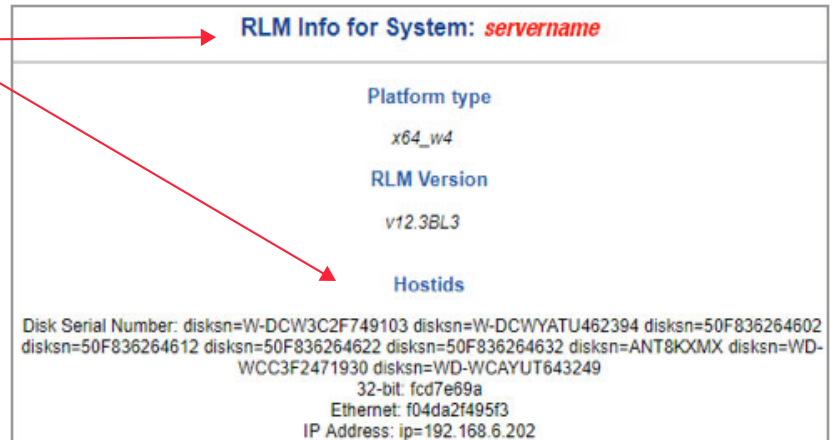
Manual Activation
of the License Manager on the Server

Manual Activation of the License Manager on the Server -- use only if unable to automatically activate

During the activation process, if the License Activation window displays **ANY** error messages (e.g. *Error generating license or -132*), the automated activation couldn't happen. In this case you need to do a manual activation. This involves you sending us some information, us sending you a license file, and you activating the license locally.

1. Click the **System Info** command on the left of the RLSA window and copy or write down:

   a. The **name of the Server** as shown in the text *RLM Info for System:* **servername**. ⟶

   b. The **Hostid**. If there are multiple **Hostid's**, copy the first one - either the first Disk Serial Number (e.g. "disksn=W-DCW3C2F749103") or the Ethernet number (e.g. "Ethernet: f04da2f495f3").

RLM Info for System: *servername*

Platform type
x64_w4

RLM Version
v12.3BL3

Hostids

Disk Serial Number: disksn=W-DCW3C2F749103 disksn=W-DCWYATU462394 disksn=50F836264602 disksn=50F836264612 disksn=50F836264622 disksn=50F836264632 disksn=ANT8KXMX disksn=WD-WCC3F2471930 disksn=WD-WCAYUT643249
32-bit: fcd7e69a
Ethernet: f04da2f495f3
IP Address: ip=192.168.6.202

2. Using an email that can receive an attached text file in return, email the following four (4) pieces of information to Sales.ExtendSim@Andritz.com:
   - Your Activation Key
   - The Server name
   - The Hostid
   - The name and number, or a screen shot, of the error message from Part 2, #9

3. After you email us the information, we will generate a text file named *extendsim.lic* and email it to you. (This could take up to 3 days.)

4. After you receive the license file from us, open the RLSA window using a browser:

   a. If you open the browser on the Server where you've installed the License Manager, enter **localhost:5054** in the browser's address line and press Enter. (If your browser inserts the text *https://* in the address line, remove that text so the address line is just **localhost:5054**.)

   b. If you open the browser on another device:
      - It must be on the same network as the device where you installed the License Manager.
      - Enter **servername:5054** in the browser's address line and press Enter. (Be sure *servername* is the name of the License Server where the License Manager installed and the text in the address line does not include *https://*.)

5. On the left side of the Reprise License Server Administration (RLSA) window, click the **Edit License Files** command.

6. In the *Edit License File* window that appears:
   - Do not change the *License File to Edit* field. ⟶
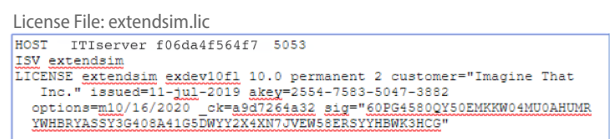   - Click the **Edit License File** button. ⟶

   License File to Edit: -choose filename- ▾
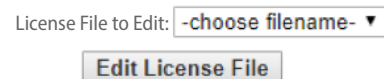
   Edit License File

7. In the next window:
   - For *License File to create or edit*: enter **extendsim.lic**. ⟶
   - Click the **Edit License File** button.

   License File to create or edit

   extendsim.lic

8. In the next window:
   - Copy the **contents** of the *extendsim.lic* file and paste the contents into the field.
   - Scroll to the bottom of the window and click **Update License File**.

   License File: extendsim.lic

   ```
   HOST   ITIserver f06da4f564f7  5053
   ISV extendsim
   LICENSE extendsim exdev10fl 10.0 permanent 2 customer="Imagine That
       Inc." issued=11-jul-2019 akey=2554-7583-5047-3882
       options=m10/16/2020 _ck=a9d7264a32 sig="60PG4580QY50EMKKW04MU0AHUMR
   YWHBRYASSY3G408A41G5DWYY2X4XN7JVEW58ERSYYHBWK3HCG"
   ```

9. In the next window:
   - You should get the message *license file extendsim.lic written*.
   - Click the **Back to Status** button.

Manual Activation of the License Manager - continued

10. On the left-hand side of the RLSA window, click the **Reread/Restart Servers** command (this does not restart the Server; it only restarts the License Manager).

11. In the *Reread/Restart Servers* window:
    • Don't make any changes to the *ISV=* popup.   ISV= [-all- ▾]
    • Click the **REREAD/RESTART** button.
    • You will get the message *Reread command sent...* to all servers or to ExtendSim.

12. Verify information by clicking the Status command on the left side of the RLSA window.
    • If the Status command reports *No ISV Servers running*, you've made an error. Restart at #2 of *Part 1 • Install License Manager on the Server*.
    • If instead the ISV Servers panel is present:
        • Does it report that the ISV server is running?
        • Check if the ISV port (by default, 51006) is blocked.
          If it is blocked, either unblock it (recommended) or set a
          different ISV port as discussed under *License Manager on Server* in the separate document
          Frequently Asked Questions • Floating Licenses.

| ISV Servers | | | | | |
Name	port	Running	Restarts	Server Status	License Usage
extendsim	51006	Yes	0	extendsim	extendsim

13. If the License Manager is running and the ISV port is unblocked, you may close the browser.

14. Make a copy of the *extendsim.lic* file for use in activating ExtendSim Pro, DE, CP, or ART on each Client device.
    • By default, the license file is located on the Server at *C:\ExtendSimFloatingLicenseServer*.
    • Also, if you subsequently edit the license file, you might need to distribute the modified file to Clients!

15. Install ExtendSim on Client devices as instructed under *Client Devices* on page 5.

Common errors when manually activating the License Manager

• Not unblocking the required ports - 5053 and the ISV port (by default, 51006).

• Not installing the License Manager with elevated or administrative privileges.

Notes for Installation at Universities

Installing a Floating License at a University

For a Floating license, ExtendSim is typically installed such that each Client device is used by only one person. This works well for academic institutions if students and professors install ExtendSim on their own computers (the Clients) since it allows ExtendSim to be used on the network or checked out from the network (roaming) for up to 30 days. However, some institutions have a lab environment where students share devices.

1. If each device will only be used by one person, follow the instructions under *Client Devices • Installation & Activation* in this document.

2. If instead you are installing ExtendSim on devices intended for use by multiple persons, such as in a lab environment, please note these special instructions:

   • As you install on each multi-user computer, when you get to the installer's *Installing User Documents* section, select a location on the target machine that the students will have read/write access to. For example, you might select *C:\Users\Public\Public Documents* as the Destination Folder. This will install user-modifiable files at the root of the C drive.

   • To activate ExtendSim on a Client device, copy the license file (*extendsim.lic*) that was created during License Manager activation to the folder selected in the *User Documents* section of the installer. In the example, this would be *C:\Users\Public\Public Documents\ExtendSim*.

   • Give the *Users* group full (not just read/write) access to the folder that has the user-modifiable files.

Note: At the end of their sessions, students should save their models (.mox) files to locations where other users won't interfere with and/or copy their work. Students should not run models located on external drives or in the cloud, but use a local copy while doing work. Models will run slowly or could report errors if they reside on an external drive or in the cloud.