

Skyline Floating License Server™ Version 7.1

User Guide

Skyline Software Systems Inc.

Information contained in this document is subject to change without notice and does not represent a commitment on behalf of Skyline Software Systems Inc. No part of this document may be reproduced or transmitted in any form or by any means, electronic or mechanical, including photocopying without the written permission of Skyline Software Systems Inc., 13873 Park Center Road, Suite 201 Herndon, VA 20171 USA.

Copyright © 2020 Skyline Software Systems Inc. All rights reserved. Printed in the United States of America.

Skyline, It's your world, the Skyline logo, TerraExplorer, TerraExplorer Pro, TerraExplorer Plus, TerraDeveloper, TerraBuilder, TerraGate, SFS, and the TerraExplorer logo are trademarks of Skyline Software Systems Inc.

Microsoft, Windows, and the Windows logo are trademarks, or registered trademarks of Microsoft Corporation in the United States and/or other countries.

Google Earth is a trademark of Google Corporation in the United States and/or other countries.

All other trademarks are the property of their respective holders.

Trademark names are used editorially, to the benefit of the trademark owner, with no intent to infringe on the trademark.

Protected by U. S. Patents 6111583, 6433792, 6496189, 6704017, 7551172, 8237713. Other patents pending.

Technical support support@skylinesoft.com

General information info@skylinesoft.com

Contact Skyline on the Internet at http://www.skylinesoft.com

Table of Contents

About the Skyline Floating License Mechanism	4
Requirements	5
System Requirements	5
Minimum Application Requirements	5
Application Requirements for MAC Address Checkout System	5
Supported Browsers	5
Installation & Configuration	6
Post Installation Procedures	6
Floating License Server Manager Main Pages	6
Products Page	7
Gigapixel Credits Page	8
Server Administration	8
Adding Products	9
Removing Products	9
Monitoring Activity	9
Server-Side Checkout	11
Loading Gigapixel Credits to SFLS	13
Client Administration	13
Configuring a Client to use the Floating License Server	13
Client-Side Checkout	14
Checking a License Back In	14

About the Skyline Floating License Mechanism

The Skyline Floating License Server (SFLS) enables a number of TerraExplorer, TerraBuilder, PhotoMesh, or SkylineGlobe Server licenses to be shared among a larger number of users through a centralized server. When a user with a floating license wants to run a Skyline application, a request for a license is sent to the license server, and if one is available, the license server allows the application to run. When the user finishes running the application, the license is returned to the license server for use by other users.

Floating licenses can also be "checked out" enabling them to function as machine dependent licenses, so that they require no connection to the license server when in use. Licenses can be checked out either by the client via the License Manager, or on the server side via the Floating License Server Manager. Licenses checked out by a client can be checked back in, but licenses checked out from the server side, are permanently removed from the license pool.

The Skyline Floating License Server also supports the PhotoMesh GX licensing mechanism, which allows gigapixel credits to be applied towards the building of PhotoMesh projects based on the number of gigapixels in each project. This mechanism can be implemented by pre-purchasing a bank of gigapixel credits, loading them to your organization's Skyline Floating License Server (SFLS), and then applying them to project photos when building a project.

The Skyline Floating License Server is managed from Skyline Floating License Server Manager, a centralized web management and configuration tool for performing all the following:

- Adding product licenses to the server
- Managing and monitoring license use
- Checking out licenses (if supported by the particular license)
- Loading gigapixel credits towards the building of your PhotoMesh projects

Requirements

System Requirements

- Windows[®] Server 2012 R2 / 2016 / 2019 64 bit
- Microsoft Internet Information Services IIS7.5, IIS8.5, IIS10 with .Net 4.0
- Client computer which meets the system requirements for the client Skyline software, e.g. TerraExplorer, PhotoMesh

Minimum Application Requirements

- TerraExplorer Pro v5.1 or higher
- TerraBuilder v1.7.6 or higher
- SGS v6.5
- PhotoMesh v7.0 (Use of gigapixel credits loaded to SFLS is supported from PM v7.6)
- Application license provided for use with the Floating License Mechanism
- **Note:** Client machines that use the Floating License Server for authentication must use licenses that are created for that purpose. Licenses that were created to stand alone cannot be converted.

Application Requirements for MAC Address Checkout System

- TerraExplorer v6.1.2 C2MP or higher
- TerraBuilder v6.0.3 or higher

Supported Browsers

Microsoft Internet Explorer 11, Chrome, Edge, and Firefox

Installation & Configuration

To install:

- 1. Run FloatingLicenseSetup.exe. By default the license server is installed under C:\Inetpub\wwwroot\SFLS.
- 2. Open a web browser and enter the following URL: http://<server_name>/SFLS/admin/. The Floating License Server Manager opens showing the Products page.

Post Installation Procedures

If you cannot access the License Server webpage after installing, try the following steps:

- If the License Server installation was unable to automatically add access permission for the directory, manually set the modify permission in the IIS for the Windows user account used by the server for the installation directory.
 - Note: The Windows user account used appears in the Local Server page in the Windows user account field.
- 2. Configure the following additional settings for Windows Server 2003:
 - Setting the server on Windows Server 2003 requires additional Web Service Extensions settings:
 - From the Computer Management console, Services and Applications, Internet Information Services, Web Service Extensions, set the ASP .NET extension status to Allowed.

() Skyline	Floating	License	Server	- Manag	er > P	roducts			
Products	Add Product								
Gigapixel Credits	License File:					Choose File	Add Product		
	Product Name	Total	Checked out	Floated out	Remaining	Remove Product			
	PhotoMesh	5	0	0	5	Remove			
	TerraExplorerPro	5	1	0	4	Remove			
	Log Note: Floated in and out transactions are not displayed.								
	Date Pro	duct Name		Transaction					
	12/18/2019 1:35:16 PM Ter	raExplorerPro		Added TerraExplorer	Pro License successfu	illy			
	12/18/2019 1:35:11 PM Ter	raExplorerPro		Removed TerraExplo	rerPro License succes	sfully			
	12/18/2019 1:34:10 PM Ten	raExplorerPro		Added TerraExplorer	Pro License successfu	illy			
	12/18/2019 1:34:05 PM Ten	raExplorerPro		Added TerraExplorer	Pro License successfu	sruny			
	12/18/2019 1:34:02 PM Ten	raExplorerPro		Removed TerraExplorer	rerPro License successiu	sfully			
	12/18/2019 12:43:28 PM Ten	raExplorerPro		Added TerraExplorer	Pro License successfu	illy			
	12/18/2019 12:43:15 рм	raExplorerPro		Removed TerraExplo	rerPro License succes	sfully			

Floating License Server Manager Main Pages

Floating License Server Manager

Products Page

The Products page provides general information and management of the product licenses on the license server:

- Add a product license to the server
- View a list of product licenses on the servers and their current status (Active Product List)
- Review the log of license transactions

Floa	Floating License Server Manager > Products										
Add Product											
License File: Choose File Add Product											
Active Product List											
Product Name	Total	Checked out	Floated out	Remaining	Remove Product]					
PhotoMesh	5	0	0	5	Remove						
TerraExplorerP	Pro 5	1	0	4	<u>Remove</u>						
Log Note: Floated in and out transactions are not displayed.											
Date	Product Name		Transaction								^
12/18/2019 1:35:16 PM	TerraExplorerPro	D	Added TerraE	xplorerPro Lic	ense successfully						
12/18/2019 1:35:11 PM	TerraExplorerPro	D	Removed Terr	aExplorerPro	License successfully						
12/18/2019 1:34:10 PM	TerraExplorerPro	0	Added TerraE	xplorerPro Lic	ense successfully						
12/18/2019 1:34:05 PM	TerraExplorerPro	0	Removed Terr	aExplorerPro	License successfully						
12/18/2019 1:34:02 PM	TerraExplorerPr	0	Added TerraE	xplorerPro Lic	ense successfully						
12/18/2019 1:33:55 PM	TerraExplorerPro	D	Removed Terr	aExplorerPro	License successfully						

Products Page

Gigapixel Credits Page

PhotoMesh (PM) gigapixel credits are loaded and monitored from the PM Gigapixel Credits page (opened from the **Floating License Server Manager** menu):

- Load PhotoMesh gigapixel credits
- View available gigapixel credit information
- Review the gigapixel log with information regarding gigapixel transactions (load or apply credits)

Floating License Server Manager > PM Gigapixel Credits
Load PhotoMesh Gigapixel credits
Gigapixel File: Choose File Add Gigapixels
Available Gigapixel Credits Available Gigapixel Credits 426.833507 Log
Date Transaction Comment
8/19/2019 8:26:52 AM Apply 26:17428 Cigapixel Credits Programmer Michael Mi
8/15/2019 3:30:58 PM Apply 1.237635 Gigapixel Credits Production Data Data Data Data Data Data Data Dat
8/13/2019 1:11:24 PM Apply 13:485343 Gigapixel Credits Projections Text, Projections Text, Projections
8/12/2019 1:47:25 PM Apply 2.358018 Gigapixel Credits Field Series Proc. Series Pro
8/12/2019 11:51:29 AM Apply 0.076723 Gigapixel Credits
8/12/2019 9:48:20 AM Apply 27.331154 Gigapixel Credits Projections III
8/12/2019 8:59:21 AM Apply 6:652027 Gigapixel Credits
8/11/2019 3:41:20 PM Apply 1.381629 Cigapixel Credits Registration and the second seco

Gigapixel Credits Page

Server Administration

The following functions are performed from the Floating License Server interface:

- Adding products
- Removing Products
- Monitoring activity
- <u>Checking out licenses</u>
 - Reclaiming licenses
- Loading gigapixel credits to SFLS

Adding Products

To add a product's license to the server:

- **Note:** The license must be also loaded on all computers that will use the license server. **See** "Configuring Each Client to use the Floating License Server" for more information.
- 1. From the **Floating License Server Manager** menu, select **Products**. The Products page is displayed.
- 2. Browse to the product's license file and click Add Product.

Removing Products

To remove all of a product's licenses from the server:

- 1. From the **Floating License Server Manager** menu, select **Products**. The Products page is displayed.
- 2. In the Active Product List, in the row of the product licenses you want to remove, click Remove.

Monitoring Activity

The Active Product List on the Products page provides general information about the product licenses on the license server.

To view the Active Product List:

- 1. From the **Floating License Server Manager** menu, select **Products**. The Products page is displayed.
- 2. In the Active Product List, the following information is provided:
 - Product name: Lists the product licenses available from the server.
 - **Total**: Total number of licenses added for this product to the server. This determines the number of users that can operate or check out this product license at the same time.
 - Checked out (licenses): Number of licenses that were checked out, either via the Floating License Server Manager or via the client's License Manager. A checked out license functions as a machine dependent license so no connection to the license server is required while it is in use.
 - Floated out (licenses): Number of licenses currently in use by users connected to the server (not
 including those checked out). A floated out license is returned to the pool when the application
 using the license is closed.
 - Remaining: Number of licenses currently available for checking/floating out.

To view detailed information about the product licenses:

- On the **Products** page, in the active **Product List**, click a product name. The Product Details page is displayed with the following information:
 - **Computer Name**: Name of the computer from where the product (e.g.,. TerraBuilder) is running.
 - User Name: Username of the user logged into that computer.
 - Use Method: Type of license running on the computer: Floating, Server Checkout, Client Checkout
 - **Checkout Expire**: Number of seconds of idle time, after which a **floated out** license should be returned to the list of available licenses. This setting does not affect checked out licenses.
 - Instances: Number of products running on the computer.

Floating License Server Manager > Product Details

Details

Product	TerraExplorerPro
License Status	Max: 5, Checked out: 2, Floated: 0, Remaining: 3
Server Checkout	Click <u>here</u> to check out a license. Note that licenses checked out from the server side are permanently removed from the license pool.

Active Computer List

Computer Name	Username	Use Method	Checkout Time	Checkout Expire [sec]	Instances	Reclaim License
<u>gg</u>	Max	Manual	12/18/2019 12:25:21 PM [1 Hour ago]		1	<u>Reclaim</u>

Product Details Page

Server-Side Checkout

A checked out license functions as a machine dependent license so no connection to the license server is required while it is in use. When a license is checked out from the server side, it is **permanently** removed from the license pool. It can only be restored to the pool with special permission from Skyline using the License Server's Reclaim function. **See** "<u>Reclaiming a License</u>" for more information. A floating license can also be checked out from the client side, via the License Manager. In this case, the license can be checked back in. **See** "<u>Client-Side Checkout</u>" for more information.

Only some licenses support server-side checkout. The checkout fields and commands described below are only displayed if one or more of the licenses available on the server support server-side checkout.

To check out a license:

- 1. From the **Floating License Server Manager** menu, select **Products**. The Products page is displayed.
- 2. In the Active Product List, select the required product. The Product Details page is displayed.
- 3. In the **Details** section, in the **Checkout** field, click the <u>here</u> link. The Server Checkout page is displayed.

Floating Lic	ense Server N	Manager >	Server Checkout
Details			
Note that licenses checked out from	the server side are permanently remove	d from the license pool.	
Product	TerraExplorerPro		
License Status	Max: 5, Checked out: 2, Float	ed: 0, Remaining: 3	
Checkout Details			
Username:			
Machine Name:			
Checkout Type:		Machine Code	T
Machine code / MAC Address:	Ch	neck out	

Server Checkout

- 4. Enter the **Username** and **Machine Name** for the intended computer and end user. This information is not written to the license file. It is only stored in the License Server Administrator page to help keep track of where licenses have been issued.
- Select Machine Code or MAC address. To get the Machine Code, run the License Registration tool on the intended computer. For the MAC address, open a command prompt and run the command

IPConfig.exe /all. The resulting MAC address will look like 6 2-digit pairs of letters and numbers.

6. Enter the corresponding value into the **Machine Code / MAC address** field and click **Check out.** A license will be written, and you will be prompted by the browser to save the file.

7. You do not need to connect the intended machine to a network in this workflow. After downloading the license file, it can be delivered by any means to the intended computer. This license will then be permanently removed from the license pool.

Reclaiming a License

When a license is checked out from the server side ("Server Check Out"), it is **permanently** removed from the license pool. It can only be restored to the pool with special permission from Skyline using the License Server's Reclaim function.

The Reclaim function also allows the administrator to restore licenses, which have become unrecoverable, e.g., they were checked out on a computer that has been reimaged, damaged or destroyed. A separate Reclaim request must be submitted to Skyline for each product that was on this machine.

To reclaim a license:

1. On the **Product Details** page, in the required product row, click the **Reclaim** link. The License page is displayed:

Floating License	Server Manager 🔅	> Reclaim Licer	nse
Contact Skyline with the following information to re-	ceive a Key Code:		
2. User Code:	762-21821-01		
Enter the Key Code received from Skyline:			
Note: The User Code changes each time this page is i	refreshed. Enter the Key Code issued for the specific L	lser Code.	
Con	tact information:		
email:	support@skylinesoft.com	ţm	
Tel:	1-877-GO-SKYLINE	(1-877-467-5954)	
Fax:	+1-703-378-3760		
	Cancel	OK	

Note: Do not reload this page until this process is complete, as the user code will change.

2. Contact Skyline and provide the User Code given on this page.

Phone: (703) 378-3780 Fax: (703) 378-3760 E-mail: <u>support@skylinesoft.com</u>

3. Enter the Key Code you receive from Skyline, and then click **OK**. When the Product Details page reloads, the count should have added this license back to the count.

Loading Gigapixel Credits to SFLS

PhotoMesh Gigapixel (GX) is a licensing mechanism that allows you to apply gigapixel credits towards the building of your PhotoMesh projects based on the number of gigapixels in each project. This mechanism can be implemented by pre-purchasing a bank of gigapixel credits, loading them to your Skyline Floating License Server (SFLS), and then applying them to project photos when building a project.

To load gigapixel credits to SLFS:

1. From the **Floating License Server Manager** menu, select **Gigapixel Credits**. The PM Gigapixel Credits page is displayed.

Floating Lice	ense Server Manage	r > PM C	Gigapixel Credits
Load PhotoMesh Gigapixel	credits		
Gigapixel File:		Choose File	Add Gigapixels
Available Gigapixel Credits Available Gigapixel Credits 426.833507 Log			
Date	Transaction		Comment
8/19/2019 8:26:52 AM	Apply 26.17428 Gigapixel Credits		Projectivene real means an annual second second
8/13/2019 1-11-24 PM	Apply 1.257055 Gigapixet Credits		Proprior Rent Court I, Provinci 120
8/12/2019 1:47:25 PM	Apply 2 358018 Gigapixel Credits		Project Kame Parce Centry British Institute 188
8/12/2019 11:51:29 AM	Apply 0.076723 Gigapixet Credits		Right State Print & State Roberts and St
8/12/2019 9:48:20 AM	Apply 27.331154 Gigapixel Credits		Projeničkame 23, Photos Josefi (18)
8/12/2019 8:59:21 AM	Apply 6.652027 Gigapixel Credits		Project Name Hhidt, Photos Count: 184
8/11/2019 3:41:20 PM	Apply 1.381629 Gigapixel Credits		Projecthame: 4541, Photostowic SP

PM Gigapixel Credits

- 2. Click Choose File, and browse to the gigapixel file received from Skyline (*.pmgp)...
- 3. Click **Add Gigapixels**. The number of available credits is updated in the Available Gigapixel Credits section.

Client Administration

The following functions are performed from the client's License Manager:

- Configuring a Client to use the Floating License Server
- <u>Client-Side Checkout</u>
- <u>Checking a License Back In</u>

Configuring a Client to use the Floating License Server

The Skyline Floating License must be loaded on each of the machines that is sharing the license.

To load your Skyline Floating License on a client machine running a Skyline application:

1. Open the License Manager either from the application's Resources menu (File button > Resources > License Manager) or from the Start menu.

- 2. From the License Manager **File** menu, select **Load License File**, and load the application's license file received from Skyline.
- 3. From the **File** menu, select **Set Floating License Server** to set the floating license server URL, e.g.,: http://<server_name>/SFLS.
- 4. The licenses table will refresh and the license manager will appear as in the example below (version and expiration information will vary based on the hosted license):

🎗 License Manager					-		\times
File View Help							
Component	installed	License Status	Protection Type	License	Expiration	Version	^
TerraExplorer Pro Modules	About		Check Out				
TerraExplorer Pro	Ø	Valid	Floating	Evaluation	12/31/2018	7	
TerraExplorer Developer							
Embedded (Run Time Pro)							
C2MP							
Publish Mobile Offline Kit	Ø	Valid	Floating	Evaluation	12/31/2018	7	

Client-Side Checkout

A checked out license functions as a machine dependent license until it is checked back in so no connection to the license server is required while it is in use. A floating license can also be checked out from the Floating License Server Manager. **See** "<u>Server-Side Checkout</u>" for more information.

To check out a license:

- 1. Close the application for which you want to check out a license.
- Open the License Manager, and under the section for the desired application select Check Out. The Application Protection Type field will refresh and read Floating (Checked Out). When the License Server Products page is refreshed, the Checked out count will have increased by the number of licenses checked out.

Checking a License Back In

To check a license back in:

• Open the License Manager and select Check In.