# **Setting up License Harvesting**

The information on this page refers to License Statistics v6.20 and newer, which added a new "Dry Run" option to the Release Methods. If you are using an earlier version, please refer to the documentation for earlier versions.

To use License Harvesting, you must:

- Install License Statistics Agent and connect it to the License Statistics server.
- Add one or more Agent groups, if none have yet been added.
- Configure the applications to be monitored for License Harvesting, as described in this section.

## Configuring applications for License Harvesting

After you have connected License Statistics Agent to the License Statistics server and added one or more Agent groups, you can configure applications to use License Harvesting, as described below.

1. Select **Custom Applications** under the Administration section in the left pane.

ministration: Custo	n Applications											٢	Administrato
oplications													×
Advanced Settings 🕷	1												
					Harves	ting Trigger		Harvesting U	ser Confirmation	Harvesting Mode			
1 I Name	Executable Name	Agent Group	License server	Harvesting Enabled	Work Days	Work Hours	Max inactivity	CPU Threshold	Show Popup	Popup Timeout	Release Method	Graceful Timeout	Action
1 notepad app	notepad	notepad group	notepad	No									1
2 notepad app 2	notepad.exe	notepad group	notepad server	No									1
dication Events Application	tion: notepad app												>
1 J Time		User				Host				Event			
No application events													
j Delete All 🔍 <   Pa	ge o of 0   > >	0 C - 20	¥									i.	Save As

- 2. Click the Add button located in the bottom left corner of the Applications grid to add a new application, or click Edit to edit an existing application. The Custom Application form opens.
- 3. If you are adding a new application, see the instructions on configuring the new application before proceeding to the next step. If you are editing an existing application, continue to the next step.
- 4. Go to the Harvesting tab and toggle on Enable Harvesting.

General Monitoring   Harvesting     Enable Harvesting   Trigger   Inactive User Duration   (seconds)   or   cPU Activity Below   30   or   Outside Working Hours   Outside Working Hours   Confirmation   Confirmation Required   (seconds)   10
Enable Harvesting
Trigger         Inactive User Duration (Seconds)         or         Or         CPU Activity Below         30<
Inactive User Duration (Seconds) or CPU Activity Below S 30
or CPU Activity Below 🗭 30 🗘 % during last 60 or Outside Working Hours User Confirmation Confirmation Required 🗹 10 
CPU Activity Below <table-cell> 30   96 during last 60   seconds or Outside Working Hours User Confirmation Confirmation Required   10  10   10</table-cell>
or Outside Working Hours User Confirmation Confirmation Required (Seconds) 10  10
Outside Working Hours
User Confirmation Confirmation Required Confirmation Timeout (Seconds) 10
Confirmation Required 🖌
Confirmation Timeout (Seconds)
(seconds)
Mode
Release Method 💿 Graceful 🔿 Force 🔿 Suspend 🔿 Dry Run
Graceful Wait Time
(Seconas)
Features
Harvestable Features No features selected



- Complete the application configuration settings, as described in the next section.
   After the application is configured, click Save at the bottom of the page. You return to the Administration: License Harvesting page, where you will see that License Harvesting is active for the application by looking in the Harvesting Enabled column for the application.

Appl	Applications X •													
	Advanced Settings 🖬													
					Harvesting Trigger		Harvesting User Confirmation		Harvesting Mode					
	1 T Name	Executable Name Agent Group	Agent Group	License Server	Harvesting Enabled	Work Days	Work Hours	Max Inactivity	CPU Threshold	Show Popup	Popup Timeout	Release Method	Graceful Timeout	Action
1	notepad app	notepad	notepad group	notepad	No									1
2	notepad app 2	notepad.exe	notepad group	notepad server	Yes	Every day	24H	120	30	Yes	10	Graceful	10	/ 1
+										🗟 Save As 👻				

# **Application configuration settings**

The settings for configuring an application for License Harvesting include the following.

Setting	Description						
Trigger (Li	Trigger (License Harvesting will be triggered when any of the enabled conditions are met. Each setting may be used alone or together.)						
Inactive User Duration	When toggled on, the maximum amount of time (in seconds) that the application is allowed to be idle (the user is not actively using the application), after which the License Harvesting procedure will begin for that application. You may either type the number of seconds, or use the increase/decrease arrows to adjust the number of seconds.						
CPU Activity Below	When toggled on, the maximum percentage that the CPU activity is allowed to drop down during the specified duration (in seconds), after which the License Harvesting procedure will begin for that application.						
Outside Working Hours	Days Days of the week that the application is available for use. For example, if you want to exclude weekend days from the times that the application can be used, you would toggle off Saturday and Sunday.						

	Hours
	Time range (24-hour clock) that the application is available for use. For example, if you want to limit the hours of usage from 7 a.m. to 7 p. m., you would enter From: 07:00 To: 19:00.
	You may either type the time or select it from the drop-down list.
User Confi	irmation
Confirmat ion Required	When toggled on, when License Harvesting detects that the application is in an idle state, a confirmation message will be sent to the end- user asking them to confirm closing the application.
roquiou	When this option is not toggled on, the application will be closed immediately with no alert to the end-user.
Confirmat	This option may be toggled on only when Confirmation Required has been toggled on.
Timeout	When this option is toggled on, it sets the time (in seconds) to display the confirmation message to the user, after which License Harvesting will automatically close or suspend the application.
	When this option is not toggled on, the user confirmation alert will remain on the end-user's machine until the end-user dismisses the alert.
Mode	
Release Method	<ul> <li>Toggle to select the desired release method to use when releasing the application license due to idle state detection. Release methods include the following:</li> <li>The Dry Run method gathers information about application usage, and optionally, issues an alert to the end-user, informing them that the application is idle and recommending that the user close it. Regardless of the user action, all application events are reported so the administrator knows the history of the application's usage.</li> <li>The Graceful method asks the application to close, but allows the application to wait and remain open if there is user action required to resolve unsaved state questions or confirmations.</li> <li>The Force method immediately closes the application and ignores any unsaved state questions or confirmations.</li> <li>The Suspend method "freezes" the application so it can be released to the license pool. Although the application at any time. See Setting up Suspend mode for information on requirements for using Suspend mode.</li> </ul>
Wait Time	When toggled on, the time (in seconds) to wait for unsaved state questions or confirmations to be resolved, after which the application will be forced to close.
	When not toggled on, the application will remain open indefinitely if there are unsaved state questions or confirmations needed.
Features	
Harvesta ble Features	Allows remote session closing for features of applications configured for License Harvesting. When a feature has been enabled for harvesting, after License Harvesting closes an application on the end-user host, License Statistics will automatically force the session to release on the corresponding license server and return the license to the available pool.
	This setting is applicable only for LM-X and FlexNet license manager types.

## **Configuration scenarios**

The following table illustrates combinations of configuration settings that serve end-user experiences ranging from the least to most aggressive handling of license harvesting.

- The most gentle end-user experience (intensity level 1) uses the Dry Run method without confirmation.
  The most abrupt end-user experience (intensity level 14) employs the Force release method, which does not allow for any user confirmation /timeout periods.

Intensity	User Confirmation	User Confirmation Timeout	Dry Run Method	Suspend Release Method	Graceful Release Method	Graceful Timeout	Force Release Method
1	8	-	Ø	-	-	-	-
2	V	<b>O</b>	V	-	-	-	-
3	V	8	V	-	-	-	-
4	Ø	8	-	•	-	-	-

5	V	Ø	-	<b>O</b>	-	-	-
6	8	-	-	<b>Ø</b>	-	-	-
7	Ø	⊗	-	-	<b>Ø</b>	8	-
8	Ø	Ø	-	-	<b>Ø</b>	8	-
9	Ø	Ø	-	-	<b>Ø</b>	Ø	-
10	8	-	-	-	<b>Ø</b>	8	-
11	8	-	-	-	<b>Ø</b>	Ø	-
12	<b>v</b>	$\boldsymbol{\otimes}$	-	-	-	-	<b>v</b>
13	Ø	Ø	-	-	-	-	Ø
14	8	-	-	-	-	-	Ø

I = enabled I = disabled - = not applicable

## Considerations for using the Dry Run method

The Dry Run method is the least intense method, and is particularly useful for the following:

- Testing how License Harvesting works with specific applications without closing those applications
- With confirmations disabled, you can monitor how end-users are using particular applications without sending alerts or taking any other actions that disrupt their work
- With confirmations enabled, you can notify end-users that they have idle applications running, and allow the users the choice to close the
  application, without taking any automatic action to close it

#### **Considerations for using Graceful timeout**

The Graceful release method is similar to closing the application using its Close button. For most applications, the Graceful release method results in an indefinite wait for the user to respond to a prompt to close the application. However, some applications may handle the request from License Harvester differently than the Close button, any may perform custom operations or fail to save the current state. Since License Harvester is set up for all applications instead of individual applications (and therefore License Statistics is not able to monitor how individual applications behave), be sure to test results for each application being monitored and apply the correct intensity level for your needs.

If an application does not save the state automatically, consider using intensity level 1, which most closely simulates an infinite popup prompt from the application to save the state, including:

- · Prompting the user to close the application, but won't close the application without the user's confirmation
- Keeping the confirmation prompt open with no timeout
- Enabling the user to postpone closing the application or to save the state manually and then close the application

### Enabling remote closing for features

For LM-X License Manager this functionality is supported as of v4.9.24.

You can enable remote session closing for individual features of applications being monitored by License Harvesting.

- 🖬 Features		
Harvestable Features	f2 (win2016) ×	٣
	Filter harvestable features	]
Agents	borrow (win2016)	
Agent Groups	f1 (win2016)	
	fast_feature (win2016)	
	licensedexampleclass (win2016)	

When a feature has been enabled for harvesting, after License Harvesting closes an application on the end-user host, License Statistics will automatically force the session to release on the corresponding license server and return the license to the available pool.

## Setting up Suspend mode

To use the Suspend mode for License Harvesting, the following requirements must be met:

- The License Statistics Agent version must be v6.19 or newer. If the Agent version is older than v6.19, the Suspend configuration won't be applied and no harvesting will be used on those hosts.
- Agent must have Optional Harvesting Tools installed.

#### **Optional Harvesting Tools installation**

The tools are installed by default when using the installer for installation or update. Make sure Optional Harvesting Tools is toggled on in the Initial Configuration pane of the installation:

License Statistics Agent v6.19	0.0 Setup	—		$\times$
Initial Configuration Provide configuration information	tion and click Next to begin installation.		X-Forn	natio
Connect to License Statistics:				
License Statistics URL:	http://win-ryba.int.x-formation.com	1		
Agent API Token:	21cc80e65ec34561e753fcb05dd2eo How can I find the API Token?	:7d		
Agent Mode:	• End User • Server Which mode should I choose?			
Optional Harvesting Tools:	Why should I install optional tools?			
	Back Next	:	Canc	el

Alternatively, you can install the Optional Harvesting Tools at any time using License Statistics Agent Manager:



For instructions on installing the Optional Harvesting Tools from a command line, see Installing and configuring License Statistics Agent.

#### **Results of installing Optional Harvesting Tools**

Installing the Optional Harvesting Tools will automatically download the required PSTools libraries from the Microsoft website (these libraries cannot be included directly in License Statistics due to licensing restrictions; however, they are free to use).

Agent will use the PSSuspend.exe application to execute the operation.