



Installation & Configuration Instructions

----- REQUIREMENTS -----

- Windows NT, 2000, XP or 2003 that can be left running to initiate statistics collection
- Permission to create and run Windows Scheduled Tasks
- Remote or local AR System server version 6.0 or higher
- All OS/DB combinations of the AR System Server that are supported by Remedy will work with the LicenseTracker

----- PRODUCT SUPPORT -----

LicenseTracker - Build 070910

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If you encounter any problems using this software, please do not hesitate to contact our support team via e-mail support@wave-form.com so that we may help you.

Comments, suggestions, and enhancement requests are always welcome. Please send them to feedback@wave-form.com

----- DEFINITIONS -----

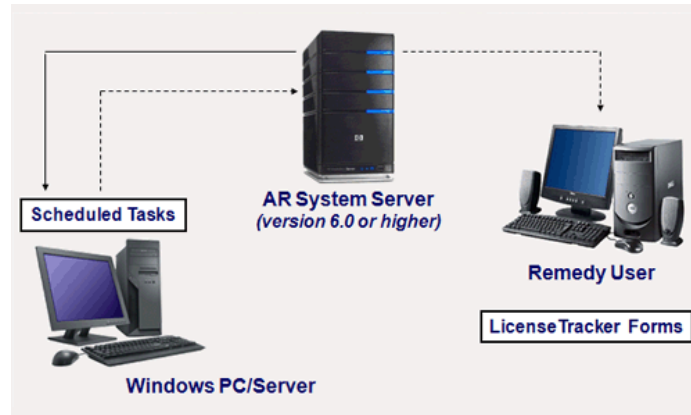
Source – the AR System server you wish to monitor for license usage

Target – the AR System server where the license statistics are stored

- **Note:** If you wish to store the statistics on the same server that is being monitored, the **Target** and the **Source** will be the same.

----- SINGLE SERVER INSTALLATION INSTRUCTIONS -----

- **Sections A through F** of this document will describe how to install the LicenseTracker and configure a single Windows Workstation/Server to initiate statistics collection for a single AR System server.



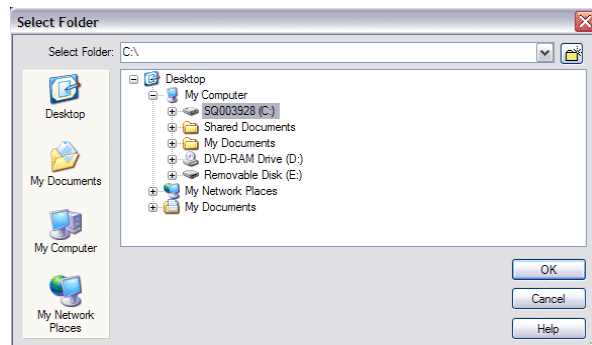
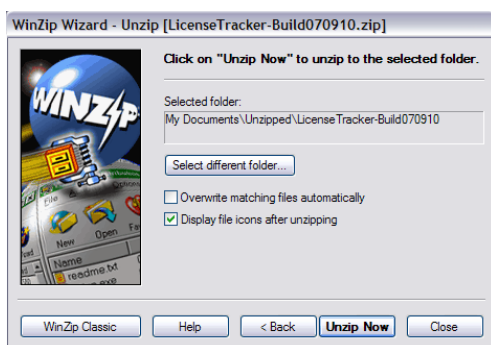
- **Note:** See **Page 9 - Multiple Server Configuration** once you have completed Sections A through F for instructions on how to initiate statistics collection for multiple AR System servers.

A. Installing the LicenseTracker Files:

1. Open the document **LicenseTracker Installation and Configuration Instructions** as a reference while installing this software.
2. Make sure that all installation files are moved to the **Windows Workstation/Server** to be used to initiate statistics collection (ex. C:\ drive).

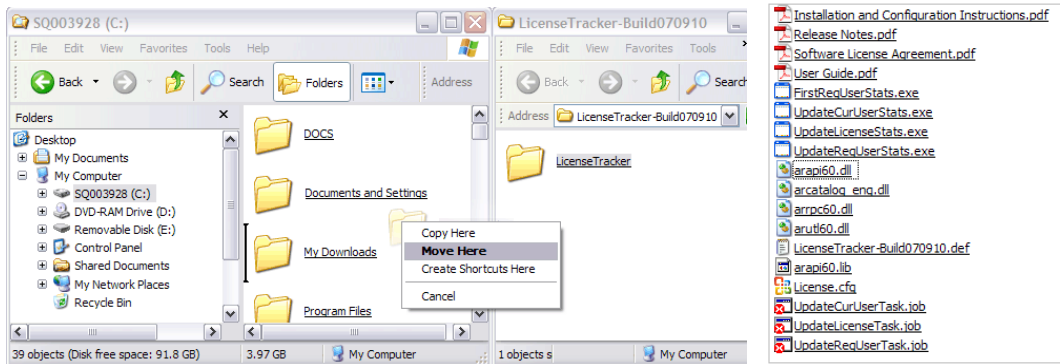
Option A From WinZip (or other archive program), choose the appropriate directory to unzip files.

- If using WinZip Wizard > **Select Different Folder** > **C:** > **OK**.
- If using WinZip Classic, use the **Extract** feature and select **C:** drive > **OK**.



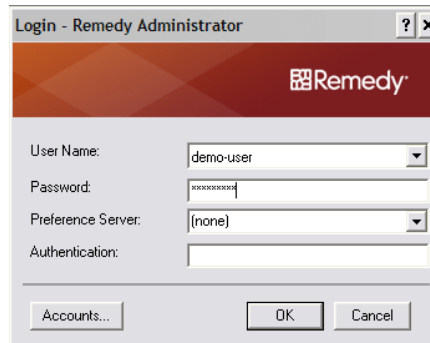
Option B If your archive program places the files in a default directory, move the LicenseTracker folder from the default directory into the C:\ drive.

- Go to **Start** > right-click, **Explore** > **C:** > right-click, **Move Here**
- Then open the **LicenseTracker** folder to confirm that you have all 18 files before proceeding to next step.

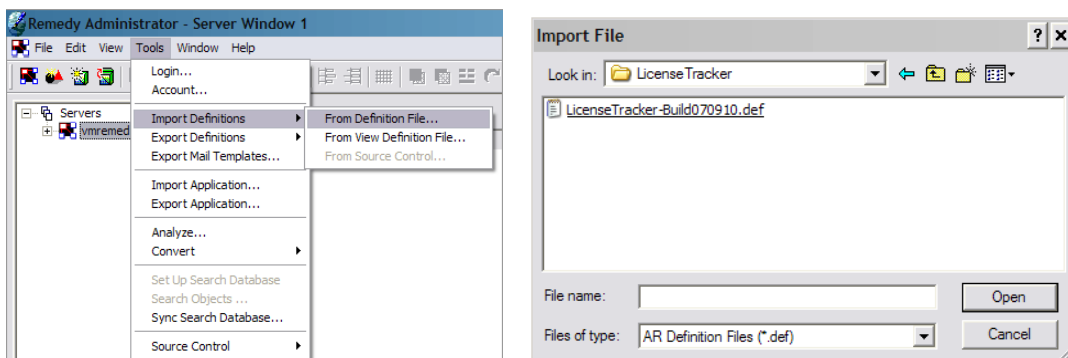


B. Importing the AR Definition Files to the Target Server (.def):

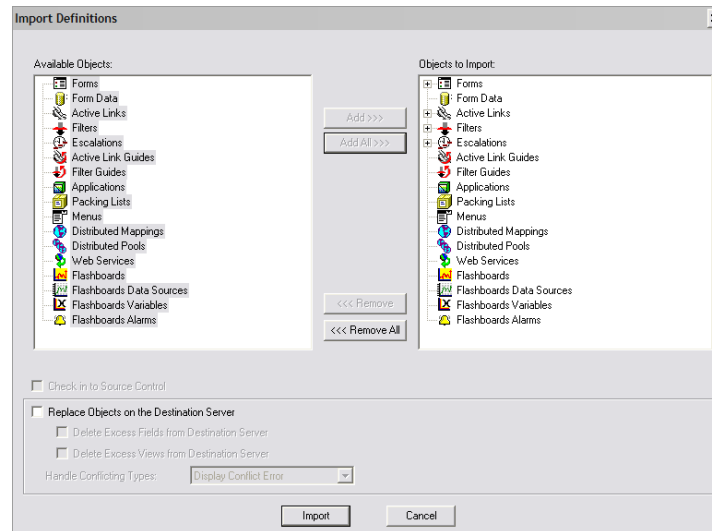
3. Log into the **Remedy Administrator Tool**.



4. Click on the **Target Server** (ex. vmremedy) > **Tools** > **Import Definitions** > **From Definition File** > **C:\LicenseTracker** > **.def file** > **Open**.

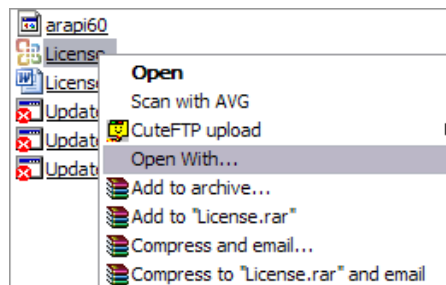


- Choose **Add All > Import**; then click **OK** and **Close** the **Import Definitions** window.



C. Editing your Source & Target Server Information (.cfg):

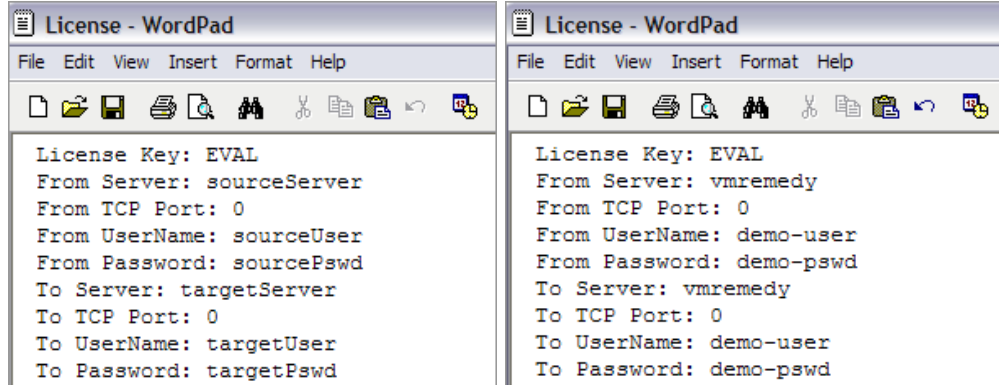
- Go to **C:\LicenseTracker > License.cfg > right-click, Open With... > WordPad**.



- In **WordPad**, edit the **License.cfg** file to specify the following, then save and close:

- **License Key:** <Generated from your **Source** Remedy Server ID>
- **From Server:** <**Source** server you wish to monitor for license usage>
- **From TCP Port:** <TCP Port defined for **Source** server>
- **From UserName:** <Remedy account with administrator privileges>
- **From Password:** <Password>
- **To Server:** <**Target** server where you wish to store the license statistics>
- **To TCP Port:** <TCP Port defined for **Target** server>
- **To UserName:** <Remedy account with administrator privileges>
- **To Password:** <Password>

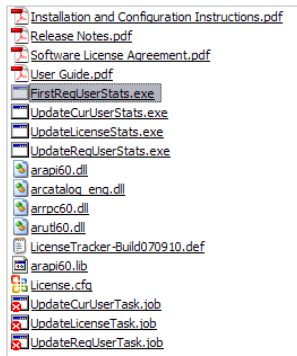
Unedited Configuration File vs. Edited Configuration File



- Ensure that there are no trailing spaces behind the data entered into this file and that there is a hard return at the end of the configuration file.

D. Confirming the Connection to the AR System Server(s)

- Next, run the executable **FirstRegUserStats.exe** to populate a list of all registered user accounts in the **WAVE-UserStats** form.
 - Go to **C:\LicenseTracker** > double-click, **FirstRegUserStats.exe**.



- If successful, the **Command Prompt** will appear and display the following verification message:

```
C:\LicenseTracker>FirstRegUserStats.exe

LicenseTracker - Build 070910
Waveform Enterprises Incorporated

Evaluation license period verified

Retrieving registered user information from
Source server: vmremedy with account: demo-user

Storing information on 26 registered users on
Target server: vmremedy with account: demo-user

Press 'Enter' to continue
```

E. Troubleshooting Installation Errors

- Cannot establish a network connection to the AR System server
 - Ensure that you have do not have any trailing spaces after the **Server** names in the **License.cfg** file.
 - Ensure that the TCP Ports in the **License.cfg** file match your server settings in the Remedy Administrator Tool under: **File > Server Information > Server Ports and Queues > Server TCP/IP Port.**
 - **Note:** If you are using the **7.1.00 Remedy Administrator Tool**, this information is now located in the:
 - **Remedy User Tool > Object List > AR System Administration Console > System > General > Server Information > Ports and Queues > Server TCP/IP Port**
-
- Authentication failed
 - Ensure that you have do not have any trailing spaces after the User Names/User Passwords and that there is a hard return at the end of the **License.cfg** file.

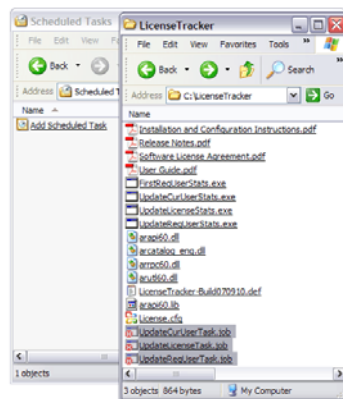
F. Configuring Windows Scheduled Tasks

10. In order to automatically capture statistics, you will need to configure Scheduled Tasks to invoke:

- **UpdateCurUserStats.exe** - Captures statistics on users currently logged
- **UpdateLicenseStats.exe** - Captures summary statistics on licenses purchased, registered, and utilized
- **UpdateRegUserStats.exe** - Captures statistics on registered users

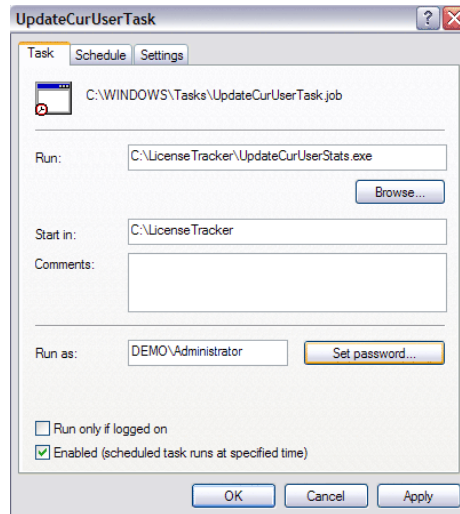
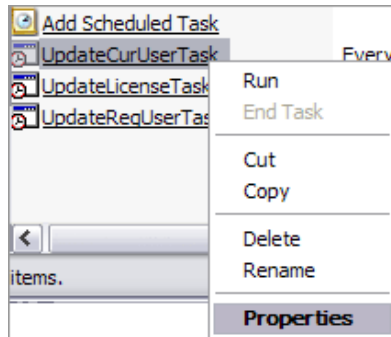
Option A Copying and Enabling Pre-Configured Windows Scheduled Tasks

1. Open **C:\LicenseTracker** folder (*keep open*).
2. Then, go to **Start > Control Panel > Scheduled Tasks**.
3. Copy the following files from the **C:\LicenseTracker** folder to the **Scheduled Tasks** folder.
 - UpdateCurUserTask.job
 - UpdateLicenseTask.job
 - UpdateRegUserTask.job

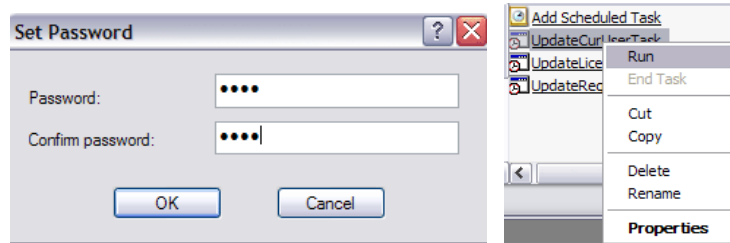


4. Then for each **Scheduled Task** > right-click, **Properties**.

- UpdateCurUserTask.job
- UpdateLicenseTask.job
- UpdateRegUserTask.job



5. Make sure that the *Enabled (scheduled task runs at specified time)* box is checked.
6. In the 'Run as:' field, make sure that the **COMPUTER NAME\User Name** is correct; then **Set Password (User Password for computer)**.
7. Type your **password** > confirm **password** > **OK**; then **Apply** > **OK**.
8. Now run each task: right-click, **Run**; you should see status of the task show "Running"; the "Last Run Time" will then show the current date and time.



9. To verify that the *UpdateCurUserTask.job* has run successfully:

- Open the **Remedy User Tool** > **Object List** > **WAVE-UserStats** > **Search**.
- Enter **"%"** in the 'User Name' and initiate your search.
- Sort descending by 'Last Update'. The date/time should be within a few minutes of manually running the scheduled task.

10. To verify that the *UpdateLicenseTask.job* has run successfully:

- Go back to the **Object List** > **WAVE-LicenseStats** > **Search**.
- Enter **"%"** in the 'User Name' and initiate your search.
- Sort descending by 'Last Update'. The date/time should be within a few minutes of manually running the scheduled task.

Option B Manual method - Creating, Configuring & Enabling Windows Scheduled Tasks:

- a. Go to the **Scheduled Tasks** folder > **Add Scheduled Task**; the Scheduled Task Wizard will appear.
- b. Click, **Next** to continue; and then click **Browse** to find the executables located in the **C:\LicenseTracker** folder. Follow the same procedure for the three scheduled tasks listed below.

- c. For the first task - Browse to: **C:\LicenseTracker\UpdateCurUserStats.exe**
- d. Schedule the task to run **Daily** starting at **18 minutes after the hour** (i.e. 8:18 AM) > **OK/NEXT**.
- e. Enter **COMPUTER NAME\User Name** > **Set Password** (*User Password for computer*) > **OK/NEXT**.
- f. Confirm scheduled task and select the checkbox: *Open Advanced Properties for this Task When I Click Finish* > **Finish**.
- g. On the **Schedule** tab, click on the **Advanced** button and repeat the task every **20 minutes** > Set the Duration to **24 hours**.

- h. For the second task - Browse to: **C:\LicenseTracker\UpdateLicenseStats.exe**
- i. Schedule the task to run **Daily** starting at the **top of the hour** (i.e. 8:00 AM) > **OK/NEXT**.
- j. Enter **COMPUTER NAME\User Name** > **Set Password** (*User Password for computer*) > **OK/NEXT**.
- k. Confirm scheduled task and select the checkbox: *Open Advanced Properties for this Task When I Click Finish* > **Finish**.
- l. On the **Schedule** tab, click on the **Advanced** button and repeat the task every **12 minutes** > Set the Duration to **24 hours**.

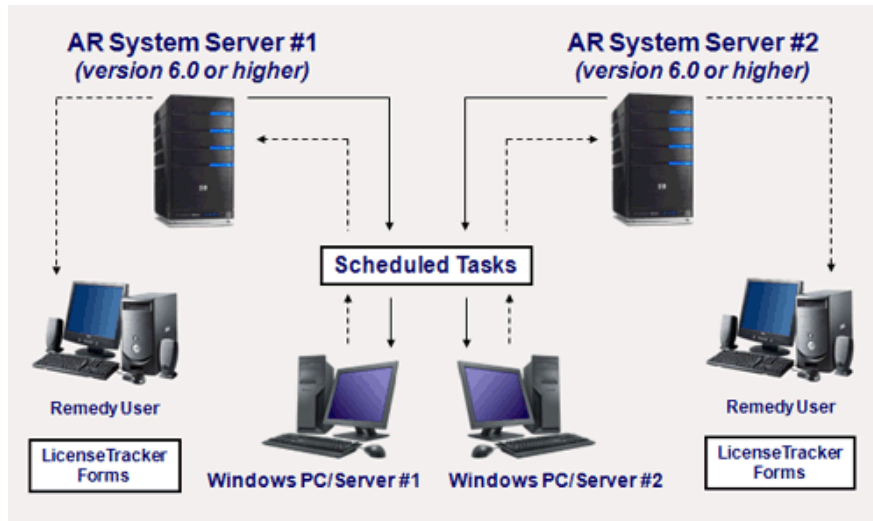
- m. For the third task - Browse to: **C:\LicenseTracker\UpdateRegUserStats.exe**
- n. Schedule the task to run **Daily** starting at **12:01 AM**) > **OK/NEXT**.
- o. Enter **COMPUTER NAME\User Name** > **Set Password** (*User Password for computer*) > **Finish**.

----- **SINGLE SERVER INSTALLATION COMPLETED** -----

----- **MULTIPLE SERVER CONFIGURATION (OPTIONAL)** -----

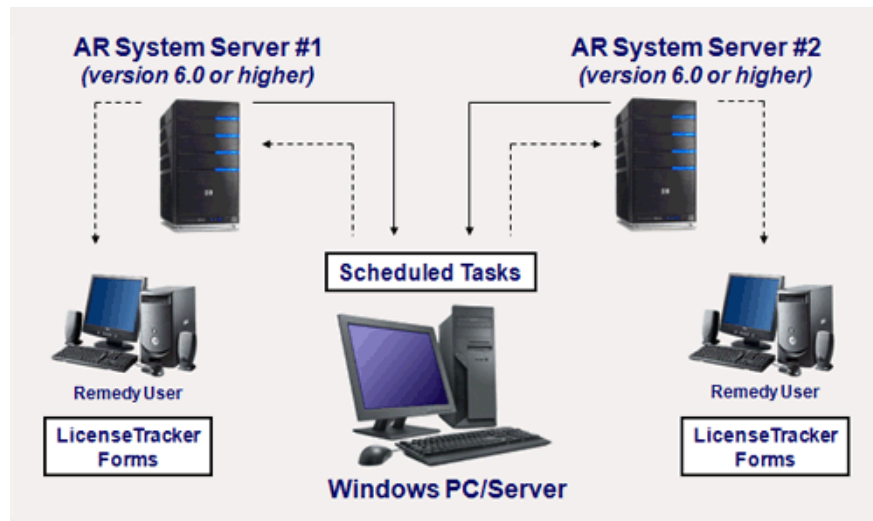
This section describes how to initiate statistics collection for multiple AR System servers. These instructions are based on the assumption that you have successfully completed **Sections A through F**.

Option A Configure one Windows Workstation/Server for each AR System server.

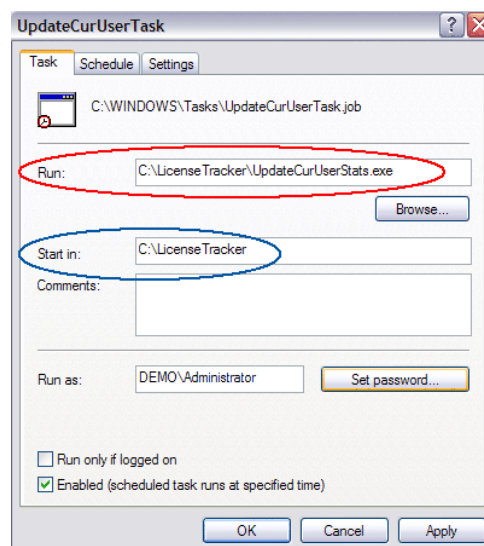


1. Repeat **Sections A through F** for each additional AR System server as needed.

Option B Consolidate statistics collection for all AR System servers onto a single Windows Workstation/Server. Follow steps 1 through 10 on the following pages to complete installation.



1. Go to **Start** > right-click, **Explore**; right-click, **Rename** the LicenseTracker folder from *C:\LicenseTracker* to **C:\LicenseTracker1**.
2. Right-click, **Copy** the entire **C:\LicenseTracker1** folder and its contents > **Paste** back to the C:\ drive; then right-click, **Rename** the folder to **C:\LicenseTracker2**.
3. Using the **Remedy Administrator Tool**, import the **AR Definition file** to the second **Target Server**:
 - a. Click on the second **Target Server** > **Tools** > **Import Definitions** > **From Definition File** > *C:\LicenseTracker2* > *.def file* > **Open**.
 - b. Choose **Add All** > **Import**; then click **OK**; **Close** the Import Definitions window.
4. Go to **Start** > **Control Panel** > **Scheduled Tasks**, right-click; **Rename** the existing Scheduled Tasks:
 - *UpdateCurUserTask.job* > **UpdateCurUserTask1.job**
 - *UpdateLicenseTask.job* > **UpdateLicenseTask1.job**
 - *UpdateRegUserTask.job* > **UpdateRegUserTask1.job**
5. **Re-point** the three Scheduled Tasks by changing the properties for each task.
 - a. Right-click, **UpdateCurUserTask1.job** > **Properties**.
 - b. Change the 'Run:' property "*C:\LicenseTracker1\UpdateCurUserStats.exe*".
 - c. Change the 'Start in:' property "*C:\LicenseTracker1*".
 - d. Click **Apply** > another window will appear, you must retype your **Password (User Password for computer)** > **OK** > **OK** again.



6. Return to the **C:\LicenseTracker2** folder; right-click, **Rename** the existing Scheduled Tasks:
 - UpdateCurUserTask.job > **UpdateCurUserTask2.job**
 - UpdateLicenseTask.job > **UpdateLicenseTask2.job**
 - UpdateRegUserTask.job > **UpdateRegUserTask2.job**
7. Next, **Copy** the Scheduled Task files from the **C:\LicenseTracker2** folder to the **Scheduled Tasks** folder.
8. **Re-point** the three Scheduled Tasks by changing the properties for each task. For example:
 - a. Right-click on the **UpdateCurUserTask**; then choose **Properties**.
 - b. Change the 'Run:' property "*C:\LicenseTracker2\UpdateCurUserStats.exe*".
 - c. Change the 'Start in:' property "*C:\LicenseTracker2*".
 - d. Click **Apply** > another window will appear, you must retype your **Password** (*User Password for computer*) > **OK** > **OK** again.

9. Change the **License.cfg** file in **C:\LicenseTracker2** folder to reference the second AR System server.
10. Run **FirstRegUserStats** from **C:\LicenseTracker2** folder to ensure the configuration is correct.

11. Repeat steps 2 to 10 for each additional AR System server as needed.

----- MULTIPLE SERVER INSTALLATION COMPLETED -----

----- LICENSETRACKER CONFIGURATION -----

1. Initiate the population of default values for threshold identification and notification preferences.
 - **Remedy User Tool** > Object List > **WAVE-Configuration** > Search
 - It is recommended that you use these default values for 2-3 days before making changes to allow the system time to gather an accurate baseline.
2. Allow the **LicenseTracker** to run for a few hours to gather preliminary statistics. The longer it runs, the more accurate the statistics will be for the license usage on your server.
3. If you change the **License Type** of a user, you will not see that change reflected in the **WAVE-UserStats** form until either:
 - the user logs in again - OR -
 - the Scheduled Task that runs daily to capture statistics on registered users
4. If you are storing the statistics on a different server than the one being monitored for license activity, modify the Open Window action of this active link to reference the **Source** server:
 - **Remedy Administrator Tool** > Active Links > **WAVE-US-400-bShowUserTicket** > **If Action** - (1) - then change the **Target** server name to the **Source** server name
5. The **WAVE-UserStats** form is configured to automatically delete 6 month old records at the beginning of every month. This can be altered/disabled via:
 - **Remedy Administrator Tool** > Forms > **WAVE-UserStats** > Form Properties > Archive