

# JTB WORLD LICENSE MANAGER

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Created by JTB World Inc.

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Here are the assemblies of the JTB World License Manager:

1. **JTB World License apps:**

License V4.dll and License Server, License Server Dashboard

License For Apps.exe: this is for VBA and other non .NET apps to use License V4.dll

License 4 AutoLisp 2013.dll, License 4 BricsCAD.dll: these are for CAD Plugin Lisp apps.

2. **Your company's apps:** developer by your company. They are clients of JTB World License apps.

3. **License MY [yourcompany].dll app**

Written in .NET, the source code is open for you. This assembly gives JTB World License apps the customization settings of your company.

Include in this assembly your logo, your company name, your support email, your passwords.

Also, your KeyGen code as well if you don't want to use the default one provided by JTB World.

4. **Passwords**

These are not apps, but secret keys to keep as confidential. Because to run a main function in JTB World License apps, you must provide it the right password. Some passwords are defined by JTB World. Most passwords are defined by developer yourself, compiled in the License MY [yourcompany].dll.

5. **JTB World License Manager apps**

Including Excel macro-enabled spreadsheets, and a Super Test app for you to "play" with JTB World License apps before creating any app of your own. These apps are for in-house use purpose, within your company only.

6. **AutoCAD and BricsCAD plugin loader apps**

Help you to set up the loading of your CAD plugins properly.

One important issue here is, unlike a stand-alone app, when you make a plugin app for AutoCAD or BricsCAD, the app can be working with other plugin apps from other developers, including JTB World plugin apps.

Therefore:

+ beside License MY [yourcompany].dll, there will be another License MY [othercompany].dll running.

+ there is only one License V4.dll can be loaded to AutoCAD. It might not the License V4.dll in your app's folder.

JTB World License apps are designed to solve this issue. Following JTB World instruction to set up your app is recommended to make it works in all scenarios.

## QUICK TOUR

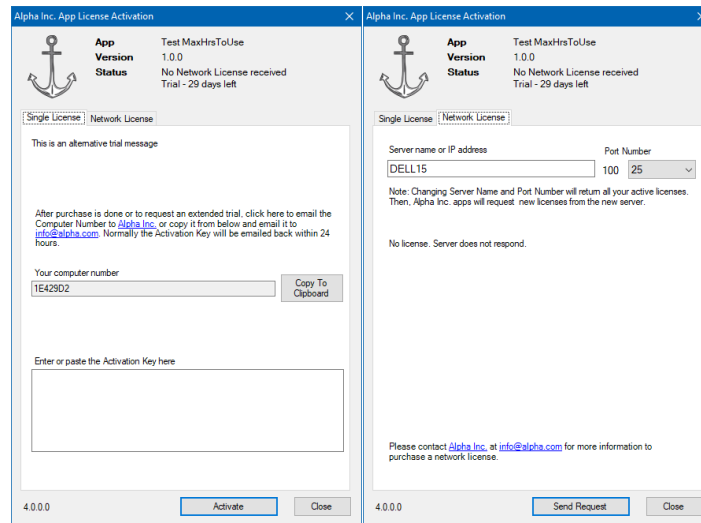
+ Start from the apps folder:

Name	Status	Date modified
Outbox	✓	11/30/2019 7:08 AM
Starter for App	✓	11/30/2019 7:10 AM
Starter for License MY	✓	11/30/2019 7:10 AM
JTB License MY Generator.exe	✓	11/30/2019 7:03 AM
JTB License System Super Test For Dev.exe	✓	11/30/2019 8:00 AM
JTB World License Server Dashboard.exe	✓	11/29/2019 6:48 AM
License for Apps.exe	✓	11/29/2019 6:48 AM
License Server.exe	✓	11/29/2019 6:48 AM
LicenseFileGenerator.exe	✓	11/30/2019 8:35 AM
Starter for BricsCAD V4.exe	✓	11/29/2019 8:37 AM
Def License MY.dll	✓	11/30/2019 7:03 AM
EPPlus.dll	✓	4/21/2018 2:22 PM
License 4 AutoLisp 2012.dll	✓	11/29/2019 9:22 AM
License 4 AutoLisp 2013.dll	✓	11/29/2019 9:22 AM
License 4 BricsCAD.dll	✓	11/29/2019 9:22 AM
License V4.dll	✓	11/30/2019 7:03 AM
Newtonsoft.Json.dll	✓	11/28/2017 3:48 PM
Starter 2012.dll	✓	11/29/2019 6:46 AM
Starter 2013.dll	✓	11/29/2019 6:46 AM
Toolbox 1.dll	✓	11/29/2019 9:22 AM
License V4.dll.config	✓	7/4/2019 10:56 PM
License MY Alpha.ini	✓	11/30/2019 6:10 AM
License MY Beta.ini	✓	11/30/2019 6:10 AM
License MY Gamma.ini	✓	11/30/2019 6:10 AM
License Manager.xlam	✓	11/30/2019 8:56 AM
JTB License Manager.xlsm	✓	11/30/2019 8:56 AM

### DEFINE LICENSE MY \*.DLL

+ Your custom info is stored in License MY [yourcompanyname].dll.

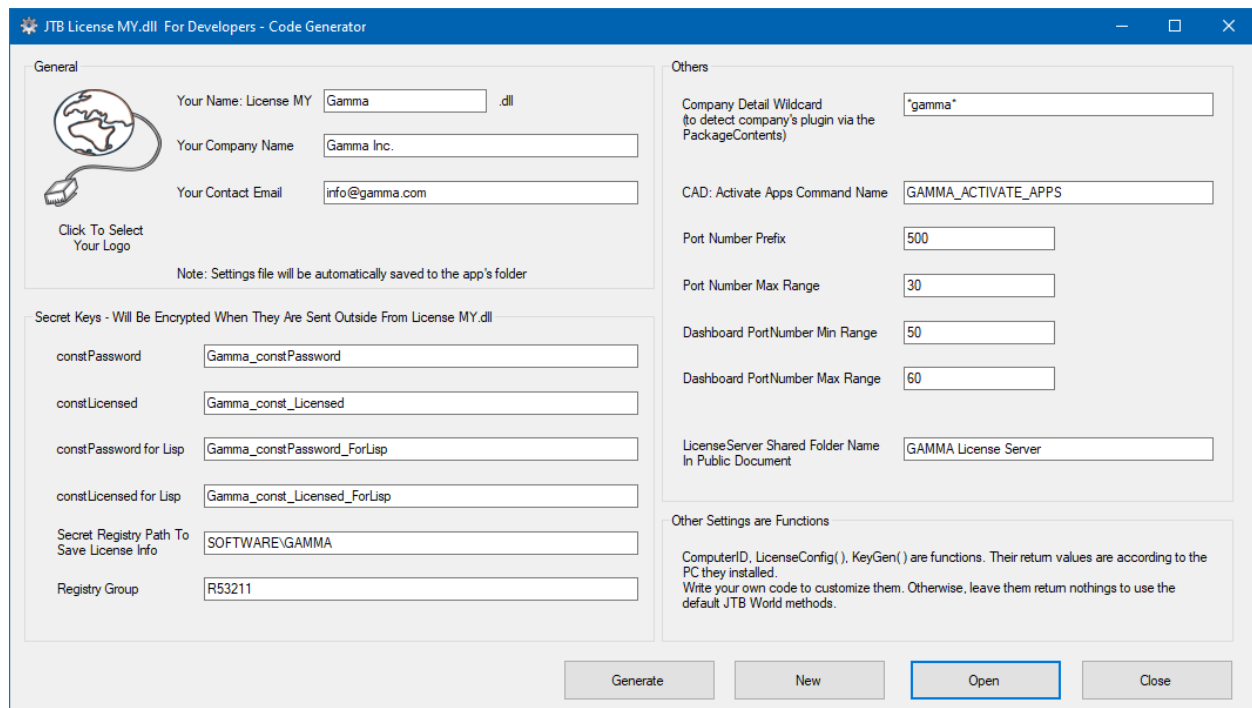
+ The target is to have a custom activation window, like this:



+ Run JTB License MY Generator.exe

+ In JTB License MY Generator window, click open and select the predefined License MY Alpha.ini, or License MY Beta.ini, or License MY Gamma.ini

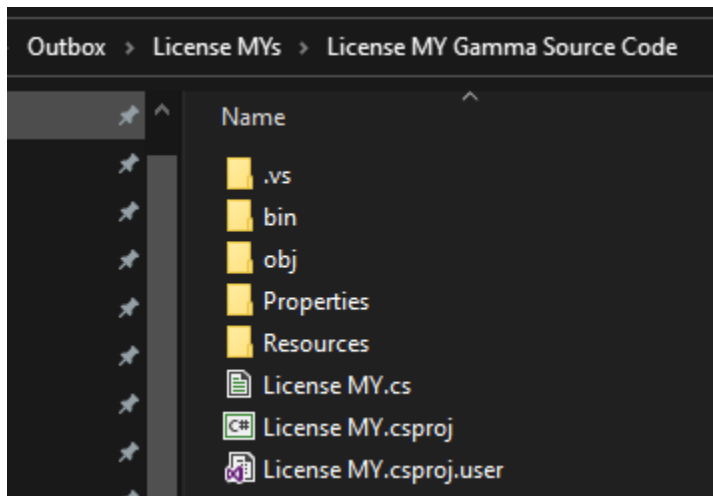
+ It will show up like this:



+ Click [Generate] and License MY Gamma.dll will be compiled, including the source code. You can change it, add your own KeyGen code, etc. Finally, recompile it.

+ compile License MY Alpha, Beta.dll as well.

+ Back to the apps folder, open Outbox, you can see the source code is generated for you to add further customization:



## DEFINE APPS

+ Open JTB License Manager.xlsm

C2				
=K6 & "\" & I6				
A	B	C	D	
1	License For Apps.exe file path:			
2	License MY*.dll file path:	.\\Outbox\\License MYs\\License MY Alpha Source Code\\Bin\\Debug\\License MY Alpha.dll		
3	const_Password	EDD5107639		
4	<p>App Alias (a shorter name, for easy to type in. Usage: within this Excel book only)</p> <p>App ID key (unique key for each app, to generate license)</p> <p>Computer Ider You can choose name, or the D</p>			
	App Full Name			
5	1 Test MinHrsToRelease	TESTMINHRS	TESTMINHRS	Drive C Serial N
6	2 Test MaxHrsToUse	TESTMAXHRS	TESTMAXHRS	Drive C Serial N
7	3 App Full Name 1	APP1	APP1	Computer Nan
8	4 App Full Name 2	APP2	APP2	Computer Nan
9	5 App Full Name 3	APP3	APP3	Computer Nan
10	6 App Full Name 4	APP4	APP4	Computer Nan
11	7 App Full Name 5	APP5	APP5	Drive C Serial N
12	8 App Full Name 6	APP6	APP6	Drive C Serial N
13	9 App Full Name 7	APP7	APP7	Drive C Serial N
14	10			

+ In sheet "Apps", there are already 9 sample apps definitions for you to test

+ License MY Alpha.dll path is specified in cell C2

+ const\_Password is in cell C3. This is License Manager app, used by developer only. Therefore, the password can be exposed out.

+ License For Apps.exe file path is specified by cell C1. Normally, it should be in the current folder, and the cell can be empty.

+ Save

## JTB LICENSE SYSTEM SUPER TEST (OR SUPER TEST APP IN SHORT)

+ Back to the apps folder again, run JTB License System Super Test For Dev.exe

+ It parses the License MY \*.ini files, parses the Outbox folder to get License MY \*.dll, parse the JTB World Manager.xlsm workbook to get the apps. Finally, it brings up following window:

Select to switch to License MY file found in [Current Folder]\License MY

License MY Filename	const_Password found in	const_Licensed	Registry	Port Number	Port Max
License MY Alpha.dll	Alpha_constPassword	Alpha_constLicensed	SOFTWARE\CLIENTS\55JK23	100	25
License MY Beta.dll	Beta_constPassword	Beta_constLicensed	SOFTWARE\CLIENTS\2A903	500	30
License MY Gamma.dll	Gamma_constPassw...	Gamma_const_Licen...	SOFTWARE\GAMMA\R53211	500	30

Open Location

Copy Info to paste to License Manger.xlsm

Setup License Server Folder For All

Select Apps To Run Commands - All Trial Limits are set to 7 to test

Application	Status	AppCode
Test MinHrsToRelease	Trial License.	TESTMINHRS
Test MaxHrsToUse	Trial License.	TESTMAXHRS
App Full Name 1	Trial License.	APP1
App Full Name 2	Trial License.	APP2
App Full Name 3	Trial License.	APP3
App Full Name 4	Trial License.	APP4
App Full Name 5	Trial License.	APP5
App Full Name 6	Trial License.	APP6
App Full Name 7	Trial License.	APP7

Open Selected App's Activation Window

Run Query for License on selected Apps

Set Purchase Licenses

Generate And Compile Plugin Apps

Open Activate Apps Window

Test License For Apps >>> Set Network License

Server  PortNumber

License For Apps.exe >>> Set Purchase Licenses

Network license info will be written to and read from the License MY\*.dll.config file, locate in the same folder of the License MY\*.dll. Check the file when testing functions.

Open Outbox

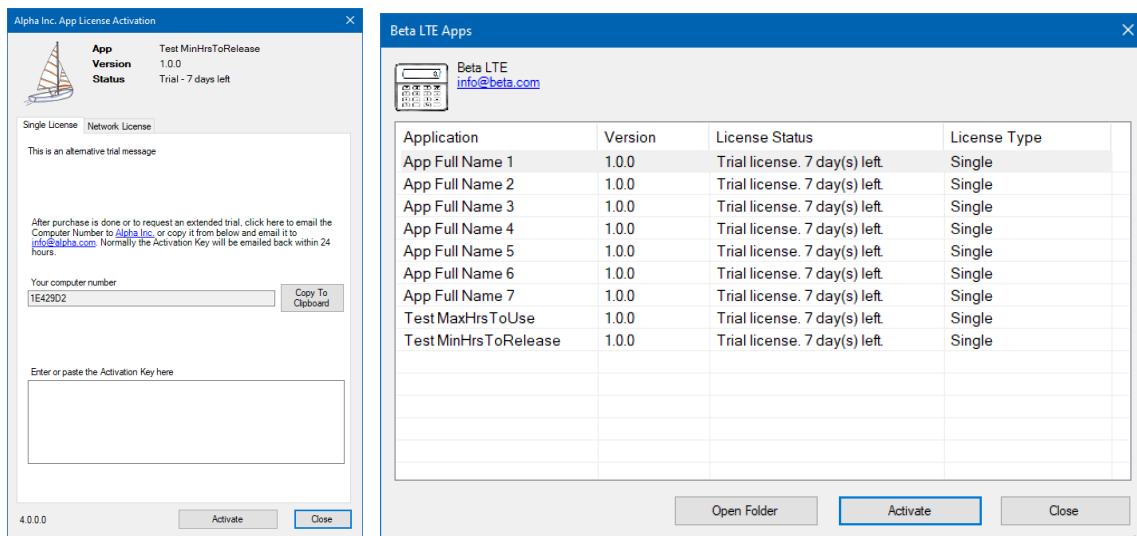
Close

+ Select License MY Alpha.dll in the top list, select an app in the below list, the click [Open Selected App's Activation Window]

+ Activation Window will bring up (image below)

+ Close it, select License MY Beta.dll, click [Open Activate Apps Window]

+ All Apps Activate Apps Window will bring up. Image below:



+ To get the Activation Key, open JTB License Manager.xlsm. Details will be document in later section.

+ Select some app, then click [Set As Purchased License] to test the function. You can see the trial license's time will be switched to 30 days, and the Status change:

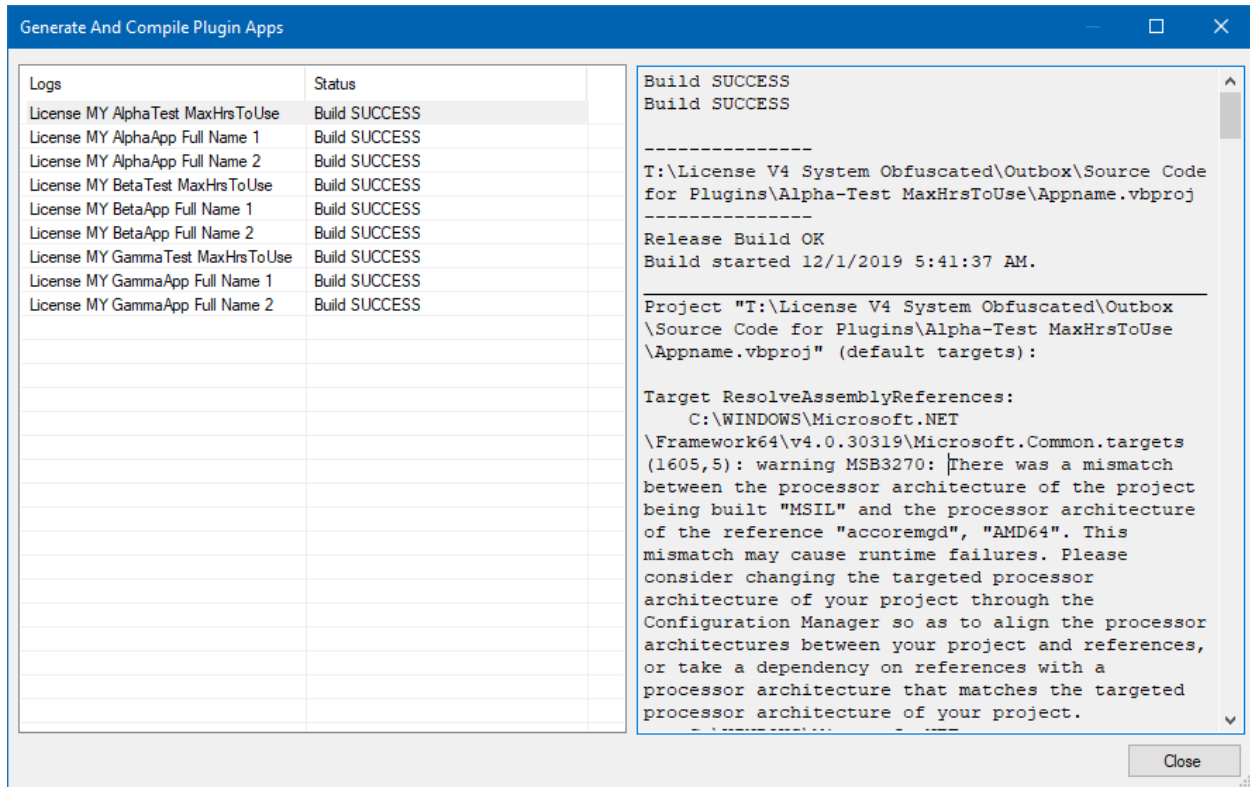
Select Apps To Run Commands - All Trial Limits are set to 7 to test		
Application	Status	AppCode
Test MinHrsToRelease	Purchased. Waiting for Activation Key.	TESTMINHRS
Test MaxHrsToUse	Purchased. Waiting for Activation Key.	TESTMAXHRS
App Full Name 1	Trial License.	APP1
App Full Name 2	Trial License.	APP2
App Full Name 3	Trial License.	APP3
App Full Name 4	Trial License.	APP4
App Full Name 5	Trial License.	APP5
App Full Name 6	Trial License.	APP6
App Full Name 7	Trial License.	APP7

Purchased license mode is written to the registry. When a customer buys an app, once purchase is done, they should have the link of a purchased license app installer. Then, the customer will get a new 30 days trial, unlimited function app until he/she has time to officially activate the app via its activation window.

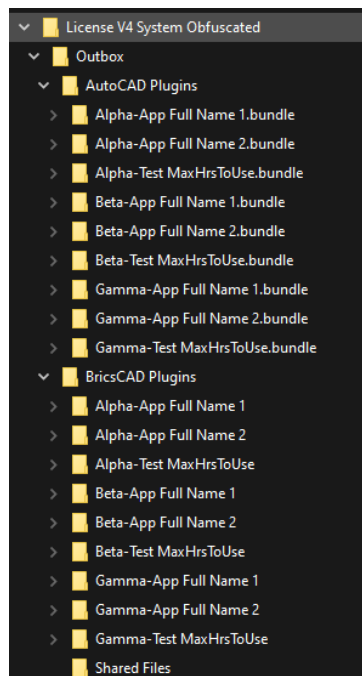
## GENERATE AND COMPILE PLUGIN APPS

+ Back to the Super Test window, select some apps, then click [Generate And Compile Plugin Apps]

+ It is assumed that your selected apps are for CAD, AutoCAD and/or BricsCAD. The [Generate And Compile Plugin Apps] will create these for you:



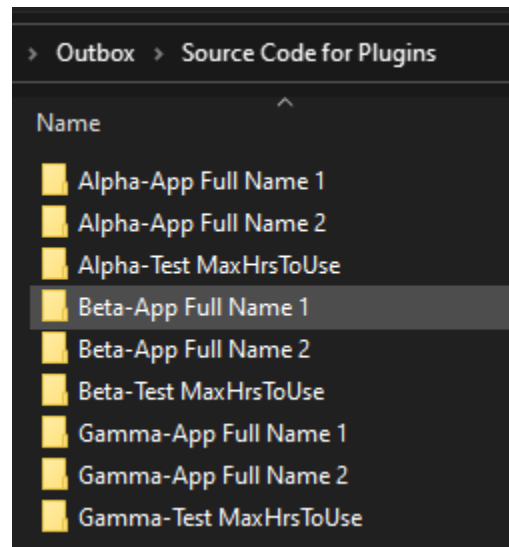
+ Open Outbox folder and you will see in this folder:



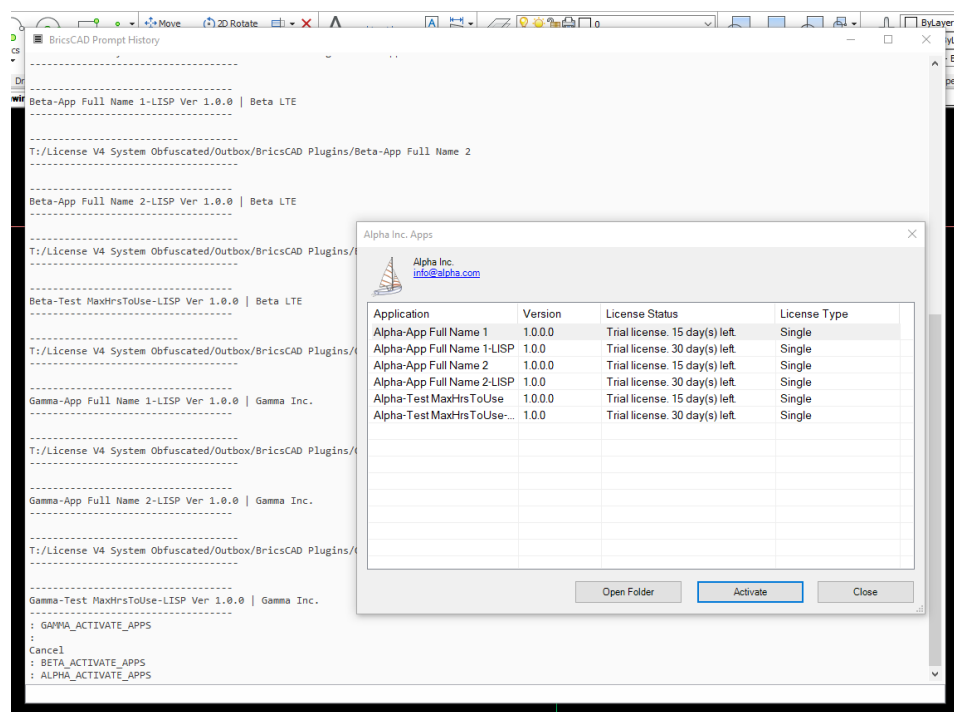
+ Quite a lot of apps. For BricsCAD, simply move or copy the BricsCAD Plugins to some location, rename it as you like.



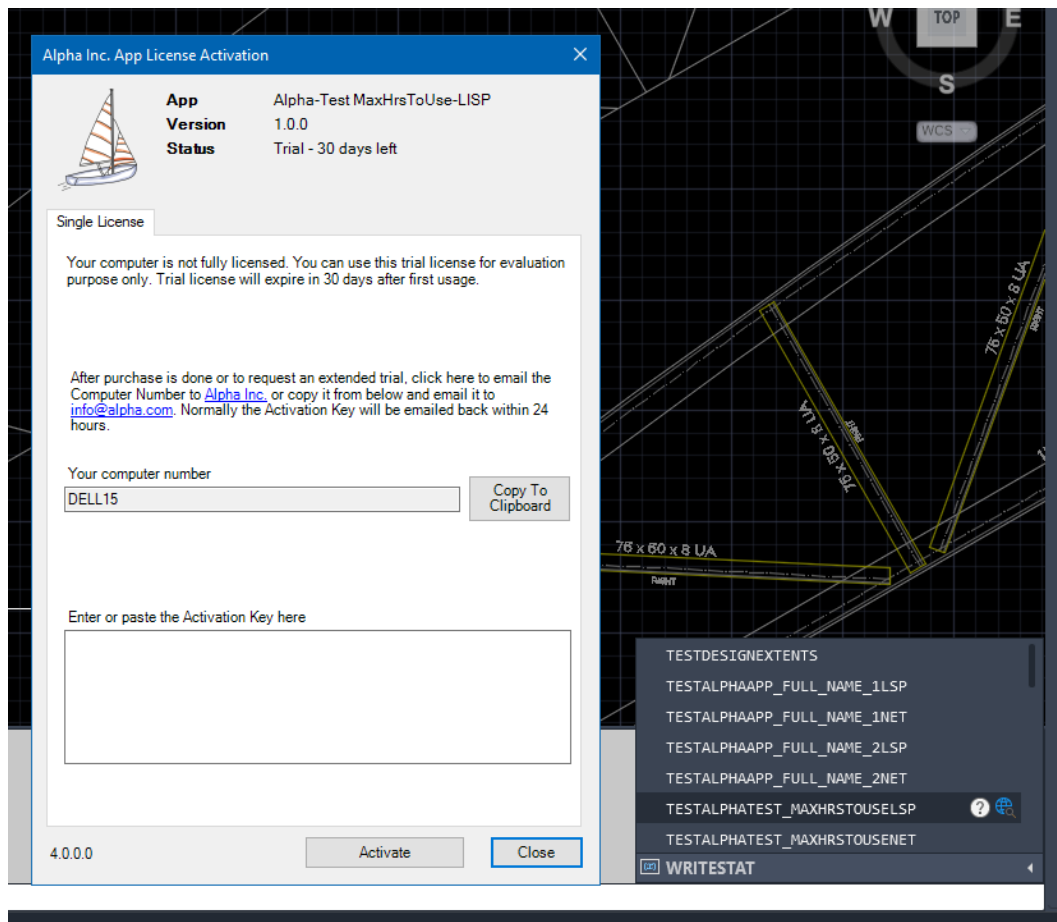
- + Open the folder\Shared Files subfolder and run Starter for BricsCAD V4.exe. Press "I" as install.
- + it will add the loader code to all on\_doc\_load.lsp of all BricsCAD versions found in your PC
- + it creates series of sample Test\*NET and Test\*LSP commands. VB.NET and Lisp Source code are available in Outbox folder.



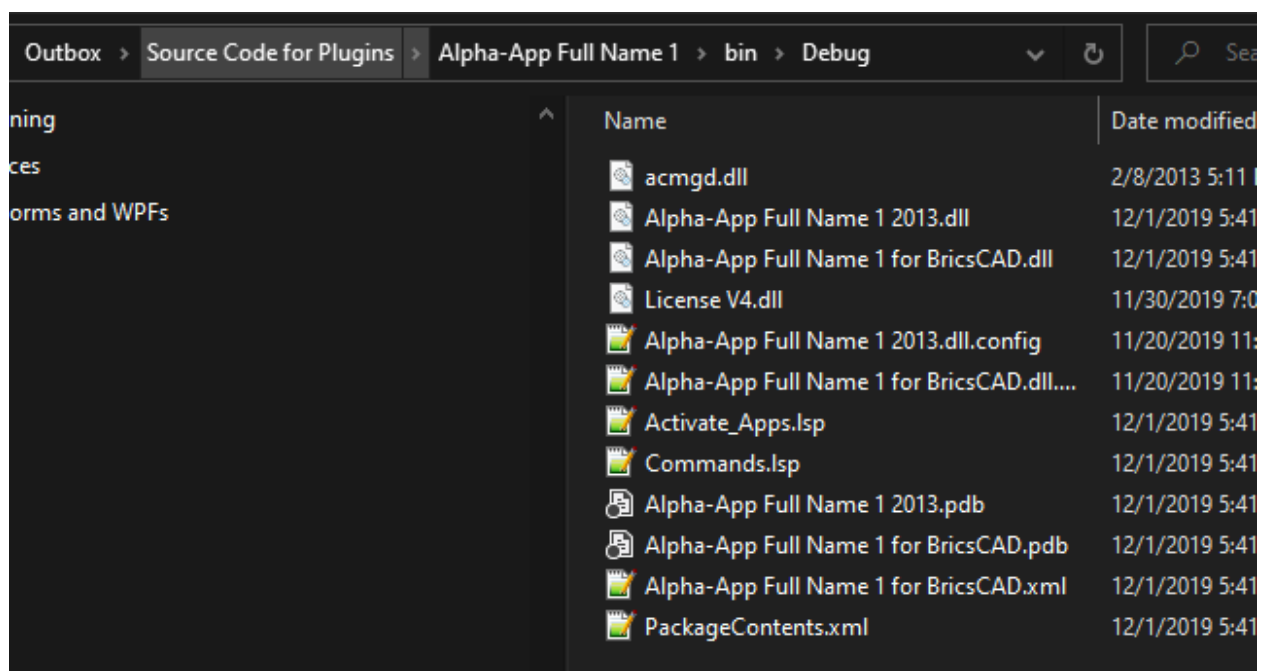
- + Open BricsCAD, you can see apps are loaded. Run Alpha\_Activate\_Apps etc. and you can see this window again, but this is within BricsCAD:







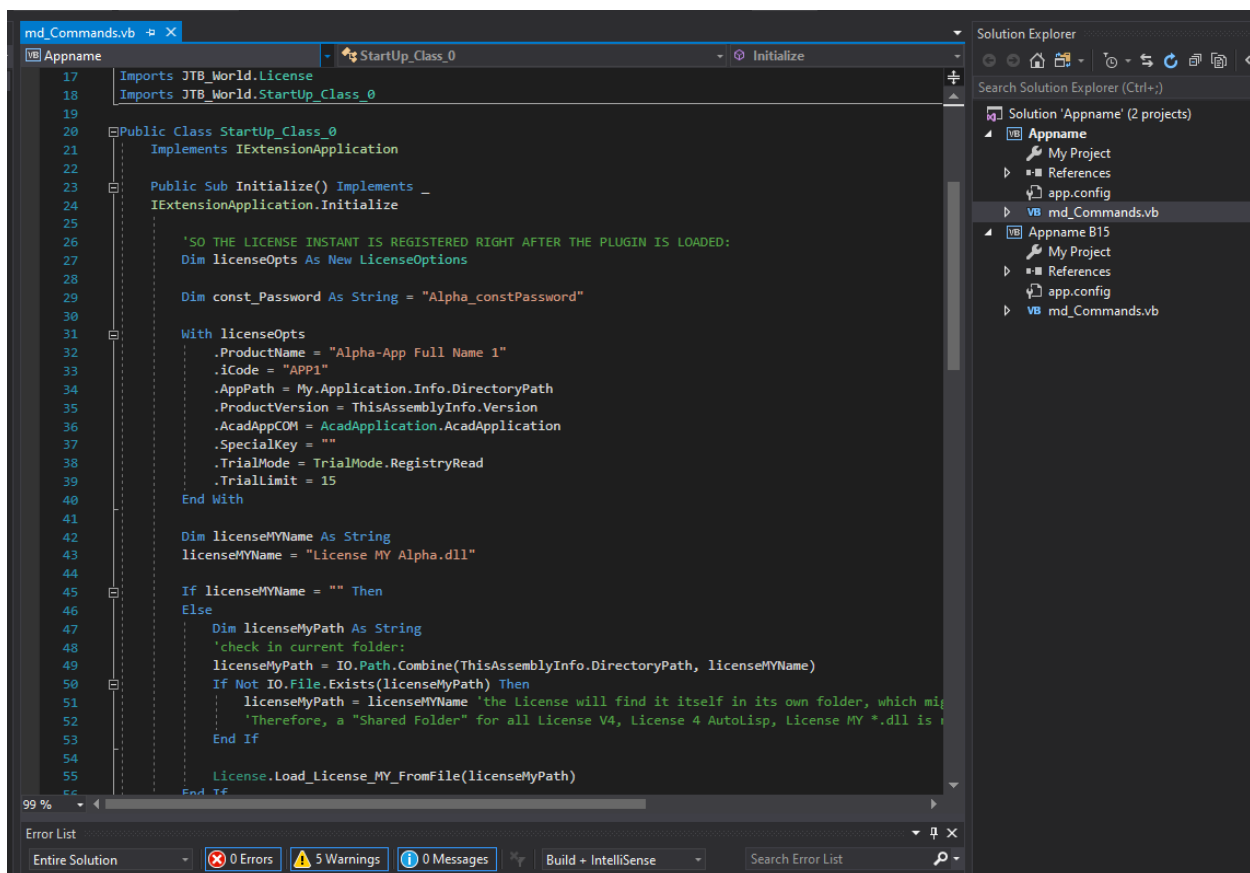
+ Back to Outbox, open the Source Code For Plugins folder, CAD plugin files are in this folder



Lisp source code:

```
1 ;REV1: 11-2019
2 ;-----
3 (defun C:ALPHA_ACTIVATE_APPS(/ filename filepath)
4   (setq filename "License MY Alpha.dll"
5     filepath (findfile filename)
6     ;For findfile to work, your License MY*.dll should be in support paths.
7     ;But sometime, due to some AutoCAD settings error, even if the License MY*.dll
8     ;is in support paths, findfile still returns nil.
9     ;Therefore, the best solution is create your own function
10    ;that always return your License MY*.dll fullpath.
11    ;JTB World don't know your app's name and folder setup. Therefore, we can't provide that function.
12  )
13  (if (null filepath)(setq filepath filename))
14  (l+activateApps filepath)
15  (princ)
16 )
17 (princ)
```

Assume that you have Visual Studio installed, you can open the vbproject:

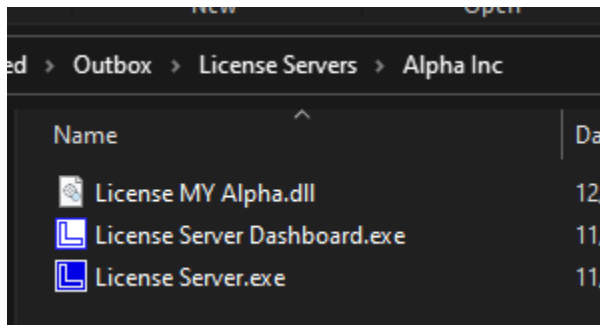


## NETWORK LICENSE SERVER

+ Back to the Super Test.exe app, now we check the Network License.

+ Click the red text button [Setup License Server For All]

+ For each License MY\*.dll, it will create a folder in Outbox. The folder should be installed to a server PC on your LAN network. But here, it is ok just to test it in your current PC.

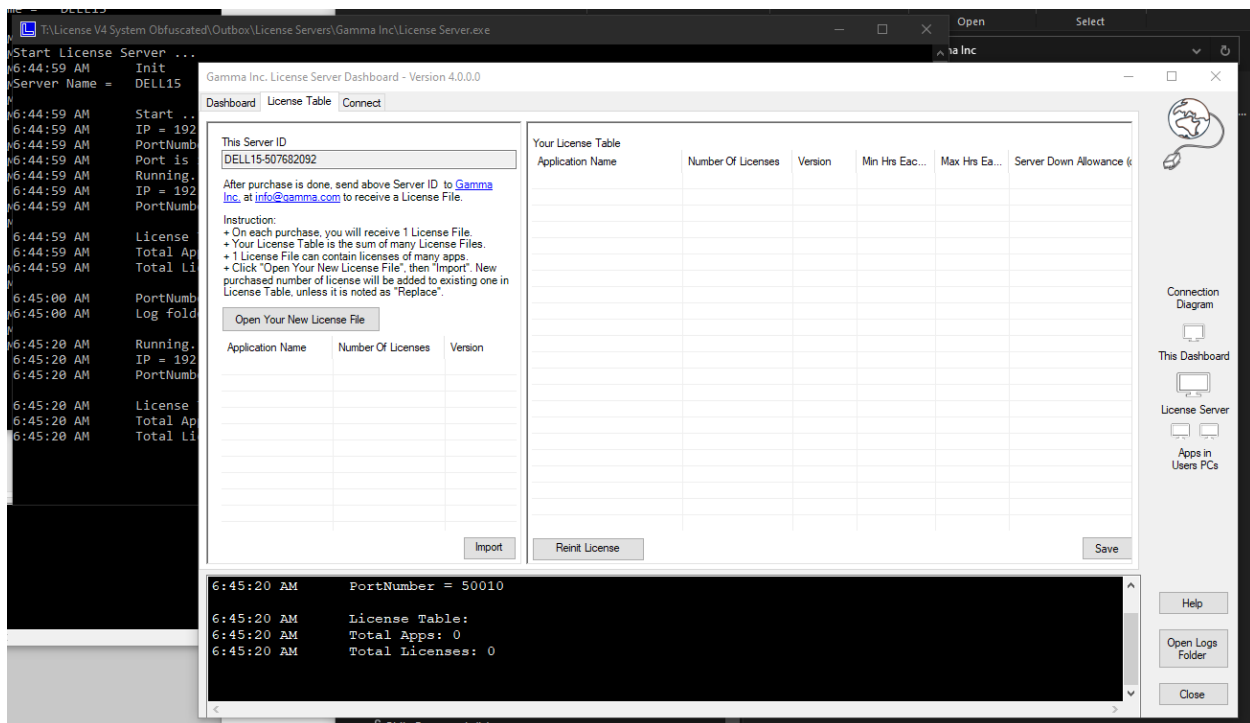


+ License Server.exe and License Server Dashboard.exe will run.

+ License Server.exe is where you have network licenses table to serve the License V4.dll. It should be run as a Window Service later.

+ Your App1, App2, etc. will get those network license via License V4.dll

+ License Server Dashboard.exe is the UI of License Server.exe. It can be run on another PC as well as License V4.dll. They connect with the License Server.exe via 2 different ports.



+ At first, the License Table is empty. Look at the top left This Server ID key. Copy it and open the JTB License Manager.xlsm to generate License File.

+ Open again the License Manager.xlsm >>> "License Server" sheet tab:

A		B		C	D	E	F	G	H	I	J
1	Client Name	TEST 1			Generate License File		These fields will be override to existing fields in License Table when they are imported				
2	Date	12:00:00 AM									
3	Client's Server ID:	DELLIS-507682092									
4	request ID number (optional)						Used licenses are saved in PC and Server, provided that ServerDownAllowance and DayToClearServer's disconnected licenses > 0				
5	Output: License File name to import to License Server (.lic)	TEST 1					If PC and Server disconnect, PC will remember it is licensed and Server will remember 1 license is taken				
6	App Full Name	Code Name (must matched)		Number of Licenses	Version (optional)	Replace ? (R or empty, optional)	MinHoursEach Use (double 0.##)	MaxHoursEach hUse (double 0.##)	SeverDownAllowance (days 0.##)	DaysToClearServer's disconnected licenses (days 0.###)	
7	Test MinHrsToRelease	TESTMINHRS		1	1.0.0.0	r	0.1				TEST 1
8	Test MaxHrsToUse	TESTMAXHRS		1	1.0.0.0	r		0.1			TEST 2
9	App Full Name 1	APP1		2	1.0.0.0	r					
10	App Full Name 2	APP2		2	1.0.0.0	r					
11	App Full Name 3	APP3		2	1.0.0.0	r					
12	App Full Name 4	APP4		3	1.0.0.0						
13	App Full Name 5	APP5		3	1.0.0.0						
14	App Full Name 6	APP6		2	1.0.0.0						
15	App Full Name 7	APP7		2	1.0.0.0						
16											

+ **Important:** Paste your Server ID to the B3 cell to Generate License File. Other sample fields can be leave as is.

+ Because in tab "Apps", cell C2 is "License MY Alpha" and there is also a list of other 3 License MY files in column I, J, K, then, the JTB License Manager.xlsm macro will generate license files for Beta, Gamma.

+ Click Generate License File

+ All license files are now available for you to test on all License Servers.

	A	B	C	D	E	F	G	H
1	Client Name	TEST 1		Generate License File		These fields will be override to existing fields in License are imported		
2	Date	12:00:00 AM						
3	Client's Server ID:	THIS COMPUTER ID						
4	request ID number (optional)					Used licenses are saved in PC and Server, provided that ServerDown, DayToClearServer's disconnected licenses > 0		
5	Output: License File name to import to License Server (.lic)	TEST 1						If PC and Server disconnect, PC licensed and Server will remem
6	App Full Name	Code Name (must matched)	Number of Licenses	Version (optional)	Replace ? (R or empty, optional)	MinHoursEach Use (double 0.##)	MaxHoursEach hUse (double 0.##)	SeverDownAllowance (days 0.##)
7	Test MinHrsToRelease	TESTMINHRS	1	1.0.0.0	r	0.1		
8	Test MaxHrsToUse	TESTMAXHRS	1	1.0.0.0	r		0.1	
9	App Full Name 1	APP1	2	1.0.0.0	r			
10	App Full Name 2	APP2	2	1.0.0.0	r			
11	App Full Name 3	APP3	2	1.0.0.0				
12	App Full Name 4	APP4	3	1.0.0.0				
13	App Full Name 5	APP5	3	1.0.0.0				
14	T:\License V4 System Obfuscated\LicenseFileGenerator.exe							
15	App Full Name 1	2	1.0.0.0	APP1	r	0	0	0
16	App Full Name 2	2	1.0.0.0	APP2	r	0	0	0
17	App Full Name 3	2	1.0.0.0	APP3	r	0	0	0
18	T:\License V4 System Obfuscated\LicenseFileGenerator.exe							
19	App Full Name 1	2	1.0.0.0	APP1	r	0	0	0
20	App Full Name 2	2	1.0.0.0	APP2	r	0	0	0
21	App Full Name 3	2	1.0.0.0	APP3	r	0	0	0
22	T:\License V4 System Obfuscated\LicenseFileGenerator.exe							
23	App Full Name 1	2	1.0.0.0	APP1	r	0	0	0
24	App Full Name 2	2	1.0.0.0	APP2	r	0	0	0
25	App Full Name 3	2	1.0.0.0	APP3	r	0	0	0
26	App Full Name 4	3	1.0.0.0	APP4	r	0	0	0
27	App Full Name 5	3	1.0.0.0	APP5	r	0	0	0
28	App Full Name 6	2	1.0.0.0	APP6	r	0	0	0
29	App Full Name 7	2	1.0.0.0	APP7	r	0	0	0
30	T:\License V4 System Obfuscated\LicenseFileGenerator.exe							
31	App Full Name 1	2	1.0.0.0	APP1	r	0	0	0
32	App Full Name 2	2	1.0.0.0	APP2	r	0	0	0
33	App Full Name 3	2	1.0.0.0	APP3	r	0	0	0
34	App Full Name 4	3	1.0.0.0	APP4	r	0	0	0
35	App Full Name 5	3	1.0.0.0	APP5	r	0	0	0
36	App Full Name 6	2	1.0.0.0	APP6	r	0	0	0
37	App Full Name 7	2	1.0.0.0	APP7	r	0	0	0
38	T:\License V4 System Obfuscated\LicenseFileGenerator.exe							
39	App Full Name 1	2	1.0.0.0	APP1	r	0	0	0
40	App Full Name 2	2	1.0.0.0	APP2	r	0	0	0
41	App Full Name 3	2	1.0.0.0	APP3	r	0	0	0
42	App Full Name 4	3	1.0.0.0	APP4	r	0	0	0
43	App Full Name 5	3	1.0.0.0	APP5	r	0	0	0
44	App Full Name 6	2	1.0.0.0	APP6	r	0	0	0
45	App Full Name 7	2	1.0.0.0	APP7	r	0	0	0
46	T:\License V4 System Obfuscated\LicenseFileGenerator.exe							
47	App Full Name 1	2	1.0.0.0	APP1	r	0	0	0
48	App Full Name 2	2	1.0.0.0	APP2	r	0	0	0
49	App Full Name 3	2	1.0.0.0	APP3	r	0	0	0
50	App Full Name 4	3	1.0.0.0	APP4	r	0	0	0
51	App Full Name 5	3	1.0.0.0	APP5	r	0	0	0
52	App Full Name 6	2	1.0.0.0	APP6	r	0	0	0
53	App Full Name 7	2	1.0.0.0	APP7	r	0	0	0
54	T:\License V4 System Obfuscated\LicenseFileGenerator.exe							
55	App Full Name 1	2	1.0.0.0	APP1	r	0	0	0
56	App Full Name 2	2	1.0.0.0	APP2	r	0	0	0
57	App Full Name 3	2	1.0.0.0	APP3	r	0	0	0
58	App Full Name 4	3	1.0.0.0	APP4	r	0	0	0
59	App Full Name 5	3	1.0.0.0	APP5	r	0	0	0
60	App Full Name 6	2	1.0.0.0	APP6	r	0	0	0
61	App Full Name 7	2	1.0.0.0	APP7	r	0	0	0
62	T:\License V4 System Obfuscated\LicenseFileGenerator.exe							
63	App Full Name 1	2	1.0.0.0	APP1	r	0	0	0
64	App Full Name 2	2	1.0.0.0	APP2	r	0	0	0
65	App Full Name 3	2	1.0.0.0	APP3	r	0	0	0
66	App Full Name 4	3	1.0.0.0	APP4	r	0	0	0
67	App Full Name 5	3	1.0.0.0	APP5	r	0	0	0
68	App Full Name 6	2	1.0.0.0	APP6	r	0	0	0
69	App Full Name 7	2	1.0.0.0	APP7	r	0	0	0
70	T:\License V4 System Obfuscated\LicenseFileGenerator.exe							
71	App Full Name 1	2	1.0.0.0	APP1	r	0	0	0
72	App Full Name 2	2	1.0.0.0	APP2	r	0	0	0
73	App Full Name 3	2	1.0.0.0	APP3	r	0	0	0
74	App Full Name 4	3	1.0.0.0	APP4	r	0	0	0
75	App Full Name 5	3	1.0.0.0	APP5	r	0	0	0
76	App Full Name 6	2	1.0.0.0	APP6	r	0	0	0
77	App Full Name 7	2	1.0.0.0	APP7	r	0	0	0
78	T:\License V4 System Obfuscated\LicenseFileGenerator.exe							
79	App Full Name 1	2	1.0.0.0	APP1	r	0	0	0
80	App Full Name 2	2	1.0.0.0	APP2	r	0	0	0
81	App Full Name 3	2	1.0.0.0	APP3	r	0	0	0
82	App Full Name 4	3	1.0.0.0	APP4	r	0	0	0
83	App Full Name 5	3	1.0.0.0	APP5	r	0	0	0
84	App Full Name 6	2	1.0.0.0	APP6	r	0	0	0
85	App Full Name 7	2	1.0.0.0	APP7	r	0	0	0
86	T:\License V4 System Obfuscated\LicenseFileGenerator.exe							
87	App Full Name 1	2	1.0.0.0	APP1	r	0	0	0
88	App Full Name 2	2	1.0.0.0	APP2	r	0	0	0
89	App Full Name 3	2	1.0.0.0	APP3	r	0	0	0
90	App Full Name 4	3	1.0.0.0	APP4	r	0	0	0
91	App Full Name 5	3	1.0.0.0	APP5	r	0	0	0
92	App Full Name 6	2	1.0.0.0	APP6	r	0	0	0
93	App Full Name 7	2	1.0.0.0	APP7	r	0	0	0
94	T:\License V4 System Obfuscated\LicenseFileGenerator.exe							
95	App Full Name 1	2	1.0.0.0	APP1	r	0	0	0
96	App Full Name 2	2	1.0.0.0	APP2	r	0	0	0
97	App Full Name 3	2	1.0.0.0	APP3	r	0	0	0
98	App Full Name 4	3	1.0.0.0	APP4	r	0	0	0
99	App Full Name 5	3	1.0.0.0	APP5	r	0	0	0
100	App Full Name 6	2	1.0.0.0	APP6	r	0	0	0
101	App Full Name 7	2	1.0.0.0	APP7	r	0	0	0
102	T:\License V4 System Obfuscated\LicenseFileGenerator.exe							
103	App Full Name 1	2	1.0.0.0	APP1	r	0	0	0
104	App Full Name 2	2	1.0.0.0	APP2	r	0	0	0
105	App Full Name 3	2	1.0.0.0	APP3	r	0	0	0
106	App Full Name 4	3	1.0.0.0	APP4	r	0	0	0
107	App Full Name 5	3	1.0.0.0	APP5	r	0	0	0
108	App Full Name 6	2	1.0.0.0	APP6	r	0	0	0
109	App Full Name 7	2	1.0.0.0	APP7	r	0	0	0
110	T:\License V4 System Obfuscated\LicenseFileGenerator.exe							
111	App Full Name 1	2	1.0.0.0	APP1	r	0	0	0
112	App Full Name 2	2	1.0.0.0	APP2	r	0	0	0
113	App Full Name 3	2	1.0.0.0	APP3	r	0	0	0
114	App Full Name 4	3	1.0.0.0	APP4	r	0	0	0
115	App Full Name 5	3	1.0.0.0	APP5	r	0	0	0
116	App Full Name 6	2	1.0.0.0	APP6	r	0	0	0
117	App Full Name 7	2	1.0.0.0	APP7	r	0	0	0
118	T:\License V4 System Obfuscated\LicenseFileGenerator.exe							
119	App Full Name 1	2	1.0.0.0	APP1	r	0	0	0
120	App Full Name 2	2	1.0.0.0	APP2	r	0	0	0
121	App Full Name 3	2	1.0.0.0	APP3	r	0	0	0
122	App Full Name 4	3	1.0.0.0	APP4	r	0	0	0
123	App Full Name 5	3	1.0.0.0	APP5	r	0	0	0
124	App Full Name 6	2	1.0.0.0	APP6	r	0	0	0
125	App Full Name 7	2	1.0.0.0	APP7	r	0	0	0
126	T:\License V4 System Obfuscated\LicenseFileGenerator.exe							
127	App Full Name 1	2	1.0.0.0	APP1	r	0	0	0
128	App Full Name 2	2	1.0.0.0	APP2	r	0	0	0
129	App Full Name 3	2	1.0.0.0	APP3	r	0	0	0
130	App Full Name 4	3	1.0.0.0	APP4	r	0	0	0
131	App Full Name 5	3	1.0.0.0	APP5	r	0	0	0
132	App Full Name 6	2	1.0.0.0	APP6	r	0	0	0
133	App Full Name 7	2	1.0.0.0	APP7	r	0	0	0
134	T:\License V4 System Obfuscated\LicenseFileGenerator.exe							
135	App Full Name 1	2	1.0.0.0	APP1	r	0	0	0
136	App Full Name 2	2	1.0.0.0	APP2	r	0	0	0
137	App Full Name 3	2	1.0.0.0	APP3	r	0	0	0
138	App Full Name 4	3	1.0.0.0	APP4	r	0	0	0
139	App Full Name 5	3	1.0.0.0	APP5	r	0	0	0
140	App Full Name 6	2	1.0.0.0	APP6	r	0	0	0
141	App Full Name 7	2	1.0.0.0	APP7	r	0	0	0
142	T:\License V4 System Obfuscated\LicenseFileGenerator.exe							
143	App Full Name 1	2	1.0.0.0	APP1	r	0	0	0
144	App Full Name 2	2	1.0.0.0	APP2	r	0	0	0
145	App Full Name 3	2	1.0.0.0	APP3	r	0	0	0
146	App Full Name 4	3	1.0.0.0	APP4	r	0	0	0
147	App Full Name 5	3	1.0.0.0	APP5	r	0	0	0
148	App Full Name 6	2	1.0.0.0	APP6	r	0	0	0
149	App Full Name 7	2	1.0.0.0	APP7	r	0	0	0
150	T:\License V4 System Obfuscated\LicenseFileGenerator.exe							
151	App Full Name 1	2	1.0.0.0	APP1	r	0	0	0
152	App Full Name 2	2	1.0.0.0	APP2	r	0	0	0
153	App Full Name 3	2	1.0.0.0	APP3	r	0	0	0
154	App Full Name 4	3	1.0.0.0	APP4	r	0	0	0
155	App Full Name 5	3	1.0.0.0	APP5	r	0	0	0
156	App Full Name 6	2	1.0.0.0	APP6	r	0	0	0
157	App Full Name 7	2	1.0.0.0	APP7	r	0	0	0
158	T:\License V4 System Obfuscated\LicenseFileGenerator.exe							
159	App Full Name 1	2	1.0.0.0	APP1	r	0	0	0
160	App Full Name 2	2	1.0.0.0	APP2	r	0	0	0
161	App Full Name 3	2	1.0.0.0	APP3	r	0	0	0
162	App Full Name 4	3	1.0.0.0	APP4	r	0	0	0
163	App Full Name 5	3	1.0.0.0	APP5	r	0	0	0
164	App Full Name 6	2	1.0.0.0	APP6	r	0	0	0
165	App Full Name 7	2	1.0.0.0	APP7	r	0	0	0
166	T:\License V4 System Obfuscated\LicenseFileGenerator.exe							
167	App Full Name 1	2	1.0.0.0	APP1	r	0	0	0
168	App Full Name 2	2	1.0.0.0	APP2	r	0	0	0
169	App Full Name 3	2	1.0.0.0	APP3	r	0	0	0
170	App Full Name 4	3	1.0.0.0	APP4	r	0	0	0
171	App Full Name 5	3	1.0.0.0	APP5	r	0	0	0
172	App Full Name 6	2	1.0.0.0	APP6	r	0	0	0
173	App Full Name 7	2	1.0.0.0	APP7	r	0	0	0
174	T:\License V4 System Obfuscated\LicenseFileGenerator.exe							
175	App Full Name 1	2	1.0.0.0	APP1	r	0	0	0
176	App Full Name 2	2	1.0.0.0	APP2	r	0	0	0
177	App Full Name 3	2	1.0.0.0	APP3	r	0	0	0
178	App Full Name 4	3	1.0.0.0	APP4	r	0	0	0
179	App Full Name 5	3	1.0.0.0	APP5	r	0	0	0
180	App Full Name 6	2	1.0.0.0	APP6	r	0	0	0
181	App Full Name 7	2	1.0.0.0	APP7	r	0	0	0
182	T:\License V4 System Obfuscated\LicenseFileGenerator.exe							
183	App Full Name 1	2	1.0.0.0	APP1	r	0	0	0
184	App Full Name 2	2	1.0.0.0	APP2	r	0	0	0
185	App Full Name 3	2	1.0.0.0	APP3	r	0	0	0
186	App Full Name 4	3	1.0.0.0	APP4	r	0	0	0
187	App Full Name 5	3	1.0.0.0	APP5	r	0	0	0
188	App Full Name 6	2	1.0.0.0	APP6	r	0	0	0
189	App Full Name 7	2	1.0.0.0	APP7	r	0	0	0
190	T:\License V4 System Obfuscated\LicenseFileGenerator.exe							
191	App Full Name 1	2	1.0.0.0	APP1	r	0	0	

License MY Alpha.ini	12/1/2019 5:40 AM
License MY Beta.ini	12/1/2019 5:40 AM
License MY Gamma.ini	12/1/2019 5:41 AM
TEST 1-alpha.lic	12/2/2019 7:18 AM
TEST 1-beta.lic	12/2/2019 7:18 AM
TEST 1-gamma.lic	12/2/2019 7:18 AM
License Manager.xlam	11/30/2019 8:56 AM
JTB License Manager.xlsm	12/2/2019 7:17 AM

+ Back to the Outbox\License Servers folder, check License Server.exe for Alpha, Beta, Gamma are running. Run License Server Dashboard.exe for each and import the Test-\*.lic file for each.

Alpha Inc. License Server Dashboard - Version 4.0.0.0

Dashboard | License Table | Connect

This Server ID  
DELL15-507682092

After purchase is done, send above Server ID to [Alpha Inc.](mailto:info@alpha.com) at [info@alpha.com](mailto:info@alpha.com) to receive a License File.

Instruction:  
 + On each purchase, you will receive 1 License File.  
 + Your License Table is the sum of many License Files.  
 + 1 License File can contain licenses of many apps.  
 + Click "Open Your New License File", then "Import". New purchased number of license will be added to existing one in License Table, unless it is noted as "Replace".

Open Your New License File

Application Name	Number Of Licenses	Version
Test MinHrsToRelea...	1	1.0.0.0
Test MaxHrsToUse	1	1.0.0.0
App Full Name 1	2	1.0.0.0
App Full Name 2	2	1.0.0.0
App Full Name 3	2	1.0.0.0
App Full Name 4	3	1.0.0.0
App Full Name 5	3	1.0.0.0
App Full Name 6	2	1.0.0.0
App Full Name 7	2	1.0.0.0

Import

Your License Table

Application Name	Number Of Licenses	Version	Min Hrs Eac...	Max Hrs Ea...	Server Down Allowance (s)
Test MinHrsToRelease	1	1.0.0.0	0.1	Any	0
Test MaxHrsToUse	1	1.0.0.0	Any	0.1	0
App Full Name 1	2	1.0.0.0	Any	Any	0
App Full Name 2	2	1.0.0.0	Any	Any	0
App Full Name 3	2	1.0.0.0	Any	Any	0
App Full Name 4	3	1.0.0.0	Any	Any	0
App Full Name 5	3	1.0.0.0	Any	Any	0
App Full Name 6	2	1.0.0.0	Any	Any	0
App Full Name 7	2	1.0.0.0	Any	Any	0

Reinit License

Save

7:34:27 AM PortNumber = 10025  
 7:34:27 AM License Table:  
 7:34:27 AM Total Apps: 9  
 7:34:27 AM Total Licenses: 18

Help  
 Open Logs Folder  
 Close

+ Now, back to the Super Test.exe, we can open app's Activation window and query for network license.

+ We also have generated plugins for CAD. Then, we can open AutoCAD, and run the test commands or the Alpha\_Activate\_Apps command, then, query for the network license.





## DETAIL DESCRIPTION

### THE LICENSE MY [YOURCOMPANY].DLL

+ Run JTB License MY Generator.exe to create and edit your License MY:

- Define the logo, your company name, your email address
- Create your confidential passwords
- Specify a registry "folder" location in your client's PC where all your license info will be saved to. This should be kept as a secret from the end users. License info is the installation date, the activation key, etc. It is used to determine when the trial period has started.
- Specify the Port Number range for License V4.dll and the network License Server apps.
- More detail will be written in another section.

+ Click generate and a new License MY [yourcompany].dll will be compiled, including the source code. You can change it, add your own KeyGen code, etc. Finally, recompile it.

+ The License MY [yourcompany].dll will be loaded by JTB World License apps at runtime, using late-bound calls. Obfuscate it with normal mode to keep it compatible with other assemblies.

### LICENSE V4.DLL

+ This is the central server of JTB World License apps.

When publishing your own software app, you include JTB World License apps and the License MY [yourcompany].dll assembly.

+ License V4.dll comes with 2 network license server apps:

**JTB License Server Service** and an installer to install it to a server

**JTB World License Server Dashboard.exe** and an installer to install it to your PC to manage the License Server service

### PASSWORDS (DEFINED IN LICENSE MY [YOURCOMPANY].DLL

const\_password

const\_licensed

const\_password\_Lisp

const\_licensed\_Lisp

+ The syntax of main functions in License V4.dll is: FunctionName(arguments, password)

The password must be your const\_password. This is to prevent others to use License V4.dll without permission.

+ each of **Your company's app** also has a password, which is the appcode. Without the appcode, other can't query the app's license.

+ when query for license, or trial license, if success, License V4.dll will return the const\_licensed key, not a Boolean value. So, you must keep the const\_licensed password and check it with the return value to determine the app is licensed or not.

This is to prevent others to mimic the License V4.dll's interface, create a License query function that return TRUE to crack the software.

(see more in sample source codes)

+ In Lisp, the syntax of main functions is: defun functionname (arguments password / ...) ...)

The password must be const\_password\_Lisp.

+ In Lisp, (l+checkLicense appcode) will return const\_licensed\_Lisp if license found.

Those passwords are different from above passwords because we don't want to expose const\_password and const\_licensed password out to Lisp code.

## LICENSE FOR APPS.EXE

Your VBA, VB6 and your installer apps can't refer to License V4.dll. Therefore, they got to use this exe app to work with License V4.dll.

To run this app, include your License MY [yourcompany].dll in the folder.

The usage is complicated. Sample code of usage is in the JTB License Manager.xlsm embedded VBA project.

## FOR YOUR AUTOCAD AND BRICSCAD PLUGIN APPS

+ If it is a .NET app, then you can refer directly to the License V4.dll and use its functions.

+ If it is a LISP app, then, you got to connect to the License V4.dll via loading one of the following assemblies:

**License 4 AutoLisp 2013.dll**

**License 4 AutoLisp 2012.dll**

**License 4 BricsCAD.dll**

Once loaded, you have a list of new LISP functions to work with License V4.dll

List of Lisp functions are:

Function used in [yourCompany]\_ACTIVATE\_APPS command:

**(l+activateApps** your\_LicenseMY\_filepath)

Your\_LicenseMY\_filepath should be a full path. But it can also just be the "License MY [yourcompanyname].dll" if you are sure it is already loaded properly.

**(l+activateMYLicenseMY** your\_LicenseMY\_filepath)

Because in CAD plugins workspace, there are many License MY.dll. You have to call (l+activateMYLicenseMY ...) function first before running the following functions:

**(l+createLicense** appname appcode  
const\_password\_Lisp  
[apppath] [version]  
[trialmode] [trialLimit]  
[altermsg1] [altermsg2] [altermsg3]  
[useComputername]  
[ispurchased]  
[no\_networklicense])

apppath can be nil.

Trialmode = 1 for days of usage limitation. Trialmode = 0 then the limitation of trial license bases on the number of entities in Model Space of the current drawing.

Once a license object is created, you can check the status:

**(l+CheckLicense** appcode const\_Password\_Lisp)

If license is activated, it returns the const\_Licensed\_Lisp (even it is purchased trial license)

If it is just a trial license, not yet expired, it returns "T" & const\_Licensed\_Lisp.

Function to open activation window:

**(l+ActivateLicense** appcode const\_Password\_Lisp)

## YOUR APPS

When you create:

- + A stand-alone app in .NET >>> add License V4.dll as reference
- + An AutoCAD Plugin App in .NET >>> add License V4.dll as reference
- + An AutoCAD Plugin App in LISP >>> netload License 4 AutoLisp [version].dll to use the license functions
- + A BricsCAD Plugin App in Dot NET >>> add License V4.dll as reference
- + A BricsCAD Plugin App in LISP >>> netload License 4 BricsCAD.dll to use the license functions
- + An Excel VBA App >>> call and communicate with License V4.dll via License For Apps.exe. Sample codes of the communication procedure are handy and available in JTB License Manager.xlsm.
- + VB6 App >>> call and communicate with License V4.dll via License For Apps.exe as above
- + An installer >>> call License For Apps.exe at post-install to set up the network license preference, the purchased trial license.

## AutoCAD - How To Set Up Your Plugins Installation

AutoCAD (and Autodesk product, in general) provides a place call ApplicationPlugins folder where you should install your apps to.

You can include the License MY\*.dll, License V4.dll, License 4 AutoLisp \*.dll in each of your app's folder and register it to AutoCAD via the PackageContents.xml. See Autodesk instructions on the PackageContents.xml.

---

### SHARED FOLDER FOR YOUR AUTOCAD PLUGINS

But since you can many apps, you might want **License MY\*.dll, License V4.dll, License 4 AutoLisp \*.dll** to be installed to a one-for-all-apps Shared Folder. That helps you to run the update easier.

+ you got to define a Shared Folder location. Each PC is different therefore the Shared Folder's address must be a soft address, defined by your installer

+ Move all the License MY\*.dll, License V4.dll, License 4 AutoLisp \*.dll to that Shared Folder

+ now, in your plugin app's folder, you will just have to load the Starter 2013.dll (or Starter 2012.dll) at AutoCAD startup.

That Starter 2013.dll is simple, small enough, and not subject to changes much. Therefore, it is ok to have it in all your apps folders.

+ Starter 2013.dll will find and load License 4 AutoLisp 2013.dll in your Shared Folder.

+ For Starter 2013.dll to know the location of your Shared Folder, you have to create a "Reference Locations.ini" file in its folder. Write down your Shared Folder address to that "Reference Locations.ini". The Starter 2013.dll will read it and get the path.

---

## ISSUES

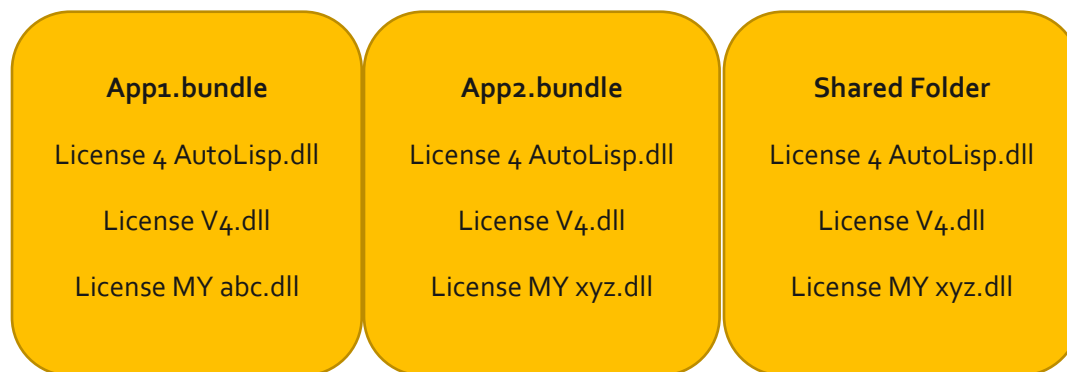
The autoapploader of AutoCAD is a little bit complicated because it is strictly managed by AutoCAD. We want, but never know how to tell AutoCAD to load Starter 2013.dll at the first place.

If it is not yet loaded, then all the lisp functions for license are not available, and your app might not be loaded properly.

We at JTB World found that put into the bottom of the loading list in the Package Contents.xml would make it load at first.

Another issue about plugin apps that required to be remembered is:

Let says there are many AutoCAD plugin apps present at the same time. At start-up, AutoCAD loads them and the License apps:



So, it is nothing for sure the loaded License V4.dll, License 4 AutoLisp.dll, etc. are in App1.bundle, or App2.bundle, or in Shared Folder. JTB World apps and Alpha, Beta, Gamm apps might be present as well.

Therefore, whenever you want to work with your License MY xyz.dll, you should specify the full path.

When you debug your app, make sure to disable all other apps.

For update, a Shared Folder for all is highly recommended.

## BricsCAD - How To Set Up Your Plugins Installation

BricsCAD has no specific requirements. Therefore, JTB World proposes its own method:

- + Create a custom folder for all your BricsCAD app folders. Name it and located it at your own preference folder.
- + install all your apps to one folder.
- + Inside that folder, create a Shared Files folder
- + Put all your License MY [yourcompanyname].dll, License V4.dll, License 4 BricsCAD.dll to that the Shared Folder
- + Including these as well:
  - Starter for BricsCAD V4.exe
  - on\_doc\_load\_lisp.lsp
- + At Post-install, run Starter for BricsCAD V4.exe, argument = "I" as install
- + Done. All your apps will be loaded to BricsCAD (from version 15 up, but version 17 and newer is recommended)
- + Open BricsCAD, and the Shared Folder\on\_doc\_load\_lisp.lsp will be loaded. In its turn, on\_doc\_load\_lisp.lsp does this:
  - Get all the app folders in the main folder
  - Find Windows sub folder in each
  - loads all the lisp app (\*.des, \*.lsp), all the .net apps found
  - Load all the cui files found

## In House Apps For Developer To Manage The Licensing System

### **JTB License Manager.xlsm + License Manager.xlam**

Macro-enabled Spreadsheets to manage licenses, generate activation keys, and generate network license files.

Language: VBA.

**License File Generator.exe:** this is called by the License Manager.xlam to generate activation keys and license files.

Language: .NET app.

### **Super Test.exe**

+ This app is already described in QUICK TOUR. It is for testing purpose. You can use it to test various License MY\*.dll and apps.

- + This app can generate CAD Plugin starter files and folders for your app, including source code, .NET assemblies and lisp file.
- + All sample code is in the generated source code created by this Super Test.