# INSTALL PROGRAM

1.- Copy source files (binary files) into this folder:

**Location:** C:\Program Files\Kognifai\OPCUA\_GetStaticTagsService

Machine generated alternative text:
OPCUA GetStaticTagsService 
Home 
Share 
View 
Easy access 
Pin to Quick 
access 
Copy path 
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Select all 
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Date modified 
6/5/2020 AM 
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* Quick access 
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Downloads 
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Matrikon Settings 
OPCUA 
OPCUASource Gua 
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6,50 KB 

2.- Extract content of the zip file:

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Kognifai OPCUA GetStaticTagsService 
Date modified 
6/5/2020 AM 
Type 
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Extract Compressed (Zipped) Folders 
Select a Destination and Extract Files 
ot Is folder: 
GetStaticTagsServic 
Z] Show extracted files when complete 
Extract 
Browse... 
Cancel 

3.- Verify settings:

a.- Open the **appsettings.json** file

Location: C:\Program Files\Kognifai\OPCUA\_GetStaticTagsServicek

Machine generated alternative text:
Home 
Share 
View 
Copy path 
Pin to Quick 
Copy Paste 
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to 
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Name 
Kognifai OPCUA GetStaticTagsService bin 
Date modified 
6/5/2020 5:45 AM 
6/4/2020 8:02 AM 
3/29/2020 11:08 PM 
3/29/2020 11:00 PM 
6/5/2020 7:05 AM 
6/2/2020 9:40 PM 
6/5/2020 7:05 AM 
6/5/2020 7:05 AM 
6/3/2020 6:47 AM 
6/5/2020 7:05 AM 
6/5/2020 7:05 AM 
6/3/2020 4:38 PM 
6/5/2020 7:05 AM 
6/3/2020 11:03 AM 
Type 
File folder 
JSON File 
Application extens... 
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CONFIG File 
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Application extens... 
CONFIG File 
PD8 File 
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* Quick access 
Desktop 
Downloads 
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Matrikon Settings 
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This pc 
Desktop 
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Commands 
appsettings.json 
pto.dll 
8 ouncyCastIe.Crypto.xmI 
Kognifai.FiIe.dII 
Kognifai.FiIe.dII.config 
Kognifai.FiIe.pdb 
Kognifai.OPCUA.Connector.dII 
Kognifai.OPCUA.Connector.dII.config 
Kognifai.OPCUA.Connector.pdb 
Kognifai.WindowsService.TopSheIf.exe 
Kognifai.WindowsService.TopSheIf.exe.c... 
Kognifai.WindowsService.TopSheIf.pdb 
log4net.config 
2811 G 
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20 
38 
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92 
11 G 
28 
28 

b.- Edit the following settings:

**OpcUaServerUrl**:

You need to know the opcua server url and you need to set it in this parameter

Machine generated alternative text:
"opcUaServerUr1": "opc. tcp: / 
'sensorListFi1epath" 
"dataF01der" 
"pref ixFi1eName" • 
"Kognifai . GetOpcUaTagsVa1uesService . Results 
"monitoredItemsBatchSize" . 
20, //SO tags or sensors 
"moni toredItemsBa t chlnterva1Ms " : 
20000, //1 minute in Ms 
"subscriptionpriority". O, //byte data type range from 0 to 255 
Matrikon. csv" 
" subscr iptionKeepA1iveCount " • 
4, //Times the publishing time (if the publish time is 60sec then the keep—alive intezval will be 4 * 60 ) 
" subscr iptionLi fetimecount " 
1, //The lifetime of the Subscription will be a minimum of three times the keep—alive intezval negotiated by the Senyer. 
" subscriptionMaxNotificationsperpub1ish": 100000 
" subscr iptionpub1ishInterva1Ms " • 
5000, // S sec subscription publish intezval 
" defaultsamp1ingInterva1Ms" • 
5000, // S sec sampling intezval for each monitoredltem 
" serviceInterva1Minutes" • 
" connectionchecklnterval " • 
10, //IOOBO Minutes (7 Days) intezval to execute the OPCTJA Processor to read the tag values 
// Every minute we will check if we have connection to the OPCTJA Senyer 
(1440 
1 day) 

**SensorListFilePath**:

In this parameter, you need to specify the folder and the filename of the file which contents the list of the static tags.

The format for this file is:

Type: csv

Data: Just one column with all the sensors NodeIds

Machine generated alternative text:
Home 
Insert 
Draw 
Page Layout 
Formulas 
Data 
Review 
View 
Team 
sensorlist - Matrikon.csv - 
Tell me what you want to do 
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ns=2;s=O:Random.lnt1 
ns=2;s=O:Random.Sergio.DummyTag 
ns=2;s=O:Random.Sergi01000.lnt1 
ns=2;s=O:Random.Sergi01000.lnt2 
ns=2;s=O:Random.Sergi01000.lnt3 
ns=2;s=O:Random.Sergi01000.lnt4 
ns=2;s=O:Random.Sergi01000.lnt5 
ns=2;s=O:Random.Sergi01000.lnt6 
ns=2;s=O:Random.Sergi01000.lnt7 
ns=2;s=O:Random.Sergi01000.lnt8 
ns=2;s=O:Random.Sergi01000.lnt9 
ns=2;s=O:Random.Sergi01000.lnt10 
ns=2;s=O:Random.Sergi01000.lnt11 
ns=2;s=O:Random.Sergi01000.lnt12 
ns=2;s=O:Random.Sergi01000.lnt13 
ns=2;s=O:Random.Sergi01000.lnt14 
ns=2;s=O:Random.Sergi01000.lnt15 
ns=2;s=O:Random.Sergi01000.lnt16 
ns=2;s=O:Random.Sergi01000.lnt17 
ns=2;s=O:Random.Sergi01000.lnt18 
ns=2;s=O:Random.Sergi01000.lnt19 
ns=2;s=O:Random.Sergi01000.lnt20 
ns=2;s=O:Random.Sergi01000.lnt21 
ns=2;s=O:Random.Sergi01000.lnt22 

For convention, we suggest to create the following folder:

C:\ProgramData\Kognifai\OPCUA\_GetStaticTagsValuesService\SensorListSourceFile

And inside that folder you will need to save your file with the list of sensors.

Machine generated alternative text:
"opcUaServerUr1". "opc . tcp: / : 21381/ Matrikonopcuawrapper" , 
"sensorListFi1epath": "C: ensorlist 
"dataF01der" : 
"prefixFi1eName" • 
"Kognifai . GetOpcUaTagsVa1uesService . Results 
"moni ze" : 
20, //SO tags or sensors 
"moni toredItemsBa t chlnterva1Ms" • 
20000, //1 minute in Ms 
"subscriptionpriority". O, //byte data type range from 0 to 255 
Ma trikon . csv" 
" subscr iptionKeepA1iveCount " • 
4, //Times the publishing time (if the publish time is 60sec then the keep—alive intezval will be 4 * 60 ) 
" subscriptionLifetimeCount" 
1, //The lifetime of the Subscription will be a minimum of three times the keep—alive intezval negotiated by the Senyer. 
"subscriptionMaxNotificationsperpub1ish": 100000 
" subscr iptionpub1ishInterva1Ms" • 
5000, // S sec subscription publish intezval 
"default SamplingInterva1Ms" 
5000, // S sec sampling intezval for each monitoredltem 
" serviceInterva1Minutes" : 
" connectionchecklnterval" 
10, //IOOBO Minutes (7 Days) intezval to execute the OPCTJA Processor to read the tag values 
// Every minute we will check if we have connection to the OPCTJA Senyer 
(1440 
1 day) 

Check the values on these other parameters to verify that fulfil Shell default requirements:

1.- Sensor load rate:

monitoredItemsBatchSize

monitoredItemsBatchIntervalMs

2.- Windows Service Interval:

How often the windows service will trigger the process to read the static values

serviceIntervalMinutes

3.- Subscription and Sampling Intervals:

defaultSamplingIntervalMs

subscriptionPublishIntervalMs

4.- Install the Windows Service

To install the windows service, we just need to run some commands. Those commands have been put inside 4 batch files:

a.- KognifaiWindowsServiceTopShelf\_Install.bat

b.- KognifaiWindowsServiceTopShelf\_Start.bat

c.- KognifaiWindowsServiceTopShelf\_Stop.bat

d.- KognifaiWindowsServiceTopShelf\_Uninstall.bat

The location of the files is:

Location: C:\Program Files\Kognifai\OPCUA\_GetStaticTagsService\Commands

Machine generated alternative text:
Commands 
Home 
Share 
View 
Copy path 
Pin to Quick Copy Paste 
Move 
Copy 
Delete 
Organize 
Rename 
access 
-O Easy access 
New 
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This PC Windows Program Files Kognifai 
Name 
KognifaiWindowsServiceTopSheIf Install.bat 
KognifaiWindowsServiceTopSheIf Start.bat 
KognifaiWindowsServiceTopSheIf Stop.bat 
KognifaiWindowsServiceTopSheIf Uninstall.bat 
OPCUA GetStaticTagsService bin Commands 
* Quick access 
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[e Pictures 
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6/3/2020 4:44 PM 
6/3/2020 4:37 PM 
6/3/2020 4:37 PM 
6/3/2020 4:36 PM 
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Windows Batch File 
Windows Batch File 
Windows Batch File 
Windows Batch File 

To execute them you need Administrator rights. We suggest:

1.- Open a command prompt window with Administrator rights

Machine generated alternative text:
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Copy path 
Pin to Quick Copy Paste 
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access 
Copy 
Delete 
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Rename 
Kognifai 
-O Easy access 
New 
folder 
Paste shortcut to 
Clipboard 
open • 
Edit 
Properties 
Open 
This PC Windows Program Files 
Name 
OPCUA GetStaticTagsService bin Commands 
Select all 
Select none 
Invert selection 
Select 
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* Quick access 
Desktop 
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[e Pictures 
Download 
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Matrikon Settings 
OPCUASource Gua 
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[e Pictures 
Videos 
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Temporary Storage 
Network 
4 items 
KognifaiWindowsServiceTopSheIf Install.bat 
KogmfaiWindowsServiceTopSheIf Start.bat 
KognifaiWindowsServiceTopSheIf Stop.bat 
KognifaiWindowsServiceTopSheIf Uninstall.bat 
e nternet Explorer Enm 
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6/3/2020 4:37 PM 
6/3/2020 4:36 PM 
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Windows Batch File 
Windows Batch File 
Windows Batch File 
Windows Batch File 
Open 
Run as administrator 
Unpin from taskbar 
Properties 
Command 
Unpin from taskbar 
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E 
Matrikon opc UA Em 

2.- Move into the location where the batch files are:

cd C:\Program Files\Kognifai\OPCUA\_GetStaticTagsService\Commands

Machine generated alternative text:
Administrator: Command Prompt 
icrosoft Windows [Version 18.8.14393] 
(c) 2816 microsoft Corporation. All rights reserved . 
: \Users\kdi-admin>cd C: \Program Files\Kognifai\OPCUA GetStaticTagsService\bin\Commands 
: \Program Files\Kognifai\OPCUA GetStaticTagsService\bin\Commands>_ 

3.- Verify the path in the batch file where we set the path file:

set programpath="%programfiles%\Kognifai\OPCUA\_GetStaticTagsService"

3.- Execute the install batch file:

Machine generated alternative text:
Administrator: Command Prompt 
:\Program Files\Kognifai\OPCUA GetStaticTagsService\Commands>KognifaiWindowsServiceTopShelf_Insta11.bat 
Installing the service 
onfiguration Result: 
[Success] Name Kognifai OPCUA GetTags Service 
[Success] Description OPCUA Windows Service which gets the value from the static tags. 
[Success] ServiceName Kognifai OPCUA Get Tags Service 
Topshelf v4.2.1.21S, 
.NET Framework v4.e.3€319 .42eee 
Running a transacted installation. 
Beginning the Install phase of the installation. 
Installing Kognifai OPCUA GetTags Service service 
Installing service Kognifai OPCUA GetTags Service... 
Service Kognifai OPCUA Get Tags Service has been successfully installed. 
e Install phase completed successfully, and the Comit phase is beginning. 
e Comit phase completed successfully. 
e transacted install has completed. 
ait for 2e seconds for the service ready to install 
:\Program GetStaticTagsService\Commands>KognifaiWindowsServiceTopShelf_Start.bat 
SERVICE_NAME: Kognifai OPCUA GetTags service 
Starting Service 
onfiguration Result : 
Success Name K nifai OPCUA GetTa s Service 