



GLPK installation guide for windows 10 users

Disclaimer: This instruction sheet is prepared for the training sessions on **MoManI**. In order to be able to use this effectively, you will need to have a computer with windows 10 as operating system and to have full administrative rights to be able to install and add new files to your system.

Instructions:

1) First of all, you need to know the what is the type of your windows operating system. To check that, navigate to: *Control panel >> System >> About*

Home Find a setting		Windows 10
System	PC name	ITMEGI-189
🖵 ballery	Organization	ITMAD
📼 Storage	Edition	Windows 10 Education
	Version	1607
仰 Offline maps	OS Build	14393.576
- Tablet mode	Product ID	00328-10000-00001-AA412
D Multitasking	Processor	Intel(R) Core(TM) i7-5600U CPU @ 2.60GHz 2.60 GHz
1223	Installed RAM	16.0 GB (15.9 GB usable)
Projecting to this PC	System type	64-bit operating system, x64-based processor
Apps for websites	Pen and touch	No pen or touch input is available for this display
	Change product	t key or upgrade your edition of Windows
() About	Read the Privacy	y Statement for Windows and Microsoft services

2) Download the latest version of GLPK solver (glpk-4.60.tar.gz) from the following link:

https://sourceforge.net/projects/winglpk/

This will download a zip file in your '*downloads*' folder.

 Extract the Zip folder by: right clicking on the folder and then>> 7-Zip >> Extract Here as shown below:





This PC > Downloads		ٽ ~	Searc	h Downloads	Q		
Name	~	Date modifie	d	Туре	Size		
Name	Open 7-Zip CRC SHA Edit with Notepad++ Scan with Windows De Open with Share with Restore previous version Send to Cut Cut Copy	Date modifie		Type zip Archive Open archive Open archive Extract files Extract Here Extract Here Extract to "win Test archive Add to archiv Compress and Add to "wing! Compress to " Add to "wing!	Size 18,61 hglpk-4.60\" e d email lpk-4.60.zip.7z" "winglpk-4.60.zip.7z"	z" and email	>
	Create shortcut Delete Rename Properties			Compress to	wingipk-4.00.zip.zi		

4) Now you will see a new folder called (**glpk-4.60**), move this folder to your (**C**:) Drive or any other folder you want the solver to be saved in. (*Hint: You may need to log in as administrator to be able to add a file to your C: drive.*)

By this you have the solver installed in your computer, you **DO NOT** need to click install or run any executable. The only thing we need to be able to use the solver, is to set the environmental path variable. Which we will show in the following steps.

- 5) Double click on (**glpk-4.60**) folder, you should find many folders and files and among them you can find two folders (**w32**) and (**w64**).
- 6) Based on the operating system type (step 1), open the (w32) folder if you have a 32-bit operating system or open (w64) if you have a 64-bit operating system. In this case we have 64-bit operating system and we open (w64).
- 7) From the address bar, **COPY** the directory to this folder (**C:\glpk-4.60\w64**) as shown below:

-	w64	4 <u>44 8</u>	Х	1880 1
File Hom	e Share View		V	0
$\leftrightarrow \rightarrow * '$	► C:\glpk-4.60\w64		P]
1.0.11	Name Date modified Type		Size	^





8) On the right side of the browsing windows, right click on (**This PC**) and select (**Properties**):



9) This will open a new window, on the right side menu, click on (Advanced System Settings)

System				115	
← → · ↑ 🔜 · Contro	ol Panel > System and Security > Sy	stem	5 V	Search Control Panel	P
Control Panel Home	View basic information	about your computer			0
😌 Device Manager	Windows edition				
😌 Remote settings	Windows 10 Education				
System protection	© 2016 Microsoft Corpora	tion. All rights reserved.		lindows	:10
Advanced system settings				maows	010
	System				
	Processor:	Intel(R) Core(TM) i7-5600U CPU @ 2.60GHz 2.60 GHz		Support	Information
	Installed memory (RAM):	16.0 GB (15.9 GB usable)			
	System type:	64-bit Operating System, x64-based processor			
	Pen and Touch:	No Pen or Touch Input is available for this Display			
	Computer name, domain, and	workgroup settings			
	Computer name:	ITMEGI-189		Chang	e settings
2	Full computer name:	ITMEGI-189.ad.itm.kth.se			
	Computer description:				
	Domain:	ad.itm.kth.se			

10) On this new window, click on (Environmental Variable) option at the bottom





omputer Name Hardware	Advanced	System Protection	Remote
You must be logged on as a	an Administra	tor to make most of t	hese changes.
Performance			
Visual effects, processor s	cheduling, m	emory usage, and vi	rtual memory
		L	Settings
User Profiles			
Desktop settings related to	o vour sian-in		
			Settings
Status and Pasavan			
Svetem etartun, evetem fai	lure and deb	ugging information	
oystom startap, system fai			
			Settings
		Environme	ent Variables

11) Again you will have a new window. From bottom list, select (Path) and then click on (Edit) as shown below:

ystem Properties X	Environment Variables	
Computer Name Hardware Advanced System Protection Remote	User variables for adm.almulla	
Defenses	Variable	Value
Viewal effects processor scheduling memory usage, and vitual memory	Path	%USERPROFILE%\AppData\Local\Microsoft\WindowsApps;
viada enecta, processor acreduling, memory usage, and virtual memory	TEMP	%USERPROFILE%\AppData\Local\Temp
Settings	ТМР	%USERPROFILE%\AppData\Local\Temp
User Profiles		
Desktop settings related to your sign-in		
Settings		New Edit Delete
Startup and Recovery	Custom unichlas	
System startup, system failure, and debugging information	System variables	
Settings	Variable	Value
	ComSpec	C:\WINDOWS\system32\cmd.exe
Frank Market	NUMBER_OF_PROCESSORS	4
Environment valiables	OS	Windows_NT
	Path	C:\ProgramData\Oracle\Java\Javapath;C:\Program Files (x8b)\Intel\I
OK Cancel Apoly		CONT.EAE;.BAT;.CMD;.VBS;.VBE;.JS;JSE;.WSF;.WSH;.MSC AMD64
computer description.	PROCESSOR IDENTIFIER	Intel64 Family 6 Model 61 Stepping 4. GenuineIntel
Domain: a	IC	
		New Edit Delete
Windows activation	-	

12) This will lead you to a new window with a list of all path variable defined in your computer, click on (**New**) to be able to add a new path variable to GLPK solver.





13) In the bottom field, paste the directory to GLPK (**'C:\glpk-4.60\w64'**, which we have copied in step 7):

C:\ProgramData\Oracle\Java\javapath	New
C:\Program Files (x86)\Intel\iCLS Client\	
C:\Program Files\Intel\iCLS Client\	Edit
%SystemRoot%\system32	
%SystemRoot%	Browse
%SystemRoot%\System32\Wbem	
%SYSTEMROOT%\System32\WindowsPowerShell\v1.0\	Delete
C:\Program Files (x86)\Intel\Intel(R) Management Engine Component	-
C:\Program Files\Intel\Intel(R) Management Engine Components\DAL	-
C:\Program Files (x86)\Intel\Intel(R) Management Engine Component	Move Up
C:\Program Files\Intel\Intel(R) Management Engine Components\IPT	
C:\Program Files\Intel\WiFi\bin\	Move Down
C:\Program Files\Common Files\Intel\WirelessCommon\	
C:\Program Files (x86)\GnuWin32\bin	-
C:\Python27	Edit text
C:\Program Files (x86)\Skype\Phone\	
C:\glpk-4.60\w64	

Finally click (OK) to save your work.

To check if the solver is installed successfully:

- 1) Open (command prompt) window
- 2) Type (glpsol)
- 3) Click enter
- 4) You should find a msg like the one shown below: (GLPSOL: GLPK LP/MIP Solver, v4-60):

