GLOMOSIM SETUP

Glomosim Installation

Things Got Simpler!!! See Creativity Unleashed!

Dwarak

http://www.dwarakrocks.blogspot.com

Global Mobile Information System Simulator (GloMoSim) is a network protocol simulation software that simulates wireless and wired network systems.GloMoSim is designed using the parallel discrete event simulation capability provided by Parsec, a parallel programming language.GloMoSim currently supports protocols for a purely wireless network.GloMoSim is academic research version available for academic use only. Commercial GloMoSim Based Product is QualNet.

Glomosim installation just got much simpler!!!

About a week or a month back, our college seniors had organized a workshop/working session on Glomosim – Global Mobile information system Simulator – a popular wireless/wired simulator that is basically a command line simulator with a Parsec cum c compiler.

The hard part that we faced was the installation! We needed to install JAVA v1.2 and VB6 (installating newer versions of both JAVA and VB meant additional burden on top because newer versions of both the software packages do not have the extra advantage of having the environment variables added automatically to the system).

We were given VB6 that could have environment variables added automatically. But JAVA was newer and we had to manually add environment variables to the PC. As far the glomosim setup, we had no choice. We had to manually add the environment variables for the glomosim to work.

A lot of the participants of the workshop found this extremely tough. A significant time got wasted in instructing students as to how to set up environment variables and helping them. Newbies got very tired of repeated failures in setting the software up.

To overcome this, I have come up with a .exe setup that could make things easier.

INSTALLATION STEPS :

- 1. Before we proceed to the installation of Glomosim, you need to install two other softwares essential for glomosim to work.
 - Visual C++
 - Java JDK v1.2 or higher & Java JRE v1.2 or higher

Visual C++ from VB 6.0 package is recommended since, you need not worry about altering environment variables externally. If you prefer to go with a newer version of Visual Studio, then, here are the environment variable lists that you need to manipulate according to your installation package.

PATH : C:\Program Files\Microsoft Visual Studio\Common\Tools\WinNT;C:\Program Files\Microsoft Visual Studio\Common\MSDev98\Bin;C:\Program Files\Microsoft Visual Studio\Common\Tools;C:\Program Files\Microsoft Visual Studio\VC98\bin;

INCLUDE : C:\Program Files\Microsoft Visual Studio\VC98\atl\include;C:\Program Files\Microsoft Visual Studio\VC98\mfc\include;C:\Program Files\Microsoft Visual Studio\VC98\include;

LIB : C:\Program Files\Microsoft Visual Studio\VC98\mfc\lib;C:\Program Files\Microsoft Visual Studio\VC98\lib

MSDEVDIR: C:\Program Files\Microsoft Visual Studio\Common\MSDev98

You can add environment variables here by Right click my computer \rightarrow properties \rightarrow advanced system settings \rightarrow advanced \rightarrow environment variables

All these files are being installed in C:\

<u>NOTE: DO THIS ONLY IF YOU WANT TO HAVE VISUAL STUDIO 7.0 OR ABOVE. IF YOU HAVE VISUAL STUDIO 6.0 (RECOMMENDED) DON'T DO THIS !</u>

Setup_files path Files		
Coll Subject Files		
Soogle Chrome	Home	
VLC media player	Documents	
Adobe Reader X	Pictures	
Microsoft Word 2010	Music	
Winamp	Games	
ovi Nokia Ovi Suite	Network	Open
BitTorrent	Control Panel	TeraCopy Command Prompt
Mozilla Firefox	😗 Devices and Pr	Manage
PSpice AD Student	Default Program	Disconnect network drive
WinRAR •	Help and Supp	Show on Desktop
All Programs	Run	Properties
Search programs and files	Shut down 🕨	Service State

Control Panel 🕨	All Control Panel Items 🕨 Syster	n 🗸 👍 Search Control Panel 👂					
Control Panel Home Device Manager Remote settings System protection Advanced system settings	View basic information about your computer Windows edition Windows 7 Ultimate Copyright © 2009 Microsoft Corporation. All rights reserved. Service Pack 1						
	System						
	Manufacturer:	Samsung					
See also	Rating:	3.8 Windows Experience Index					
Action Center Windows Update	Processor:	Intel(R) Core(TM)2 Duo CPU E7400 @ SAMSUNG 2.80GHz 2.79 GHz					
Performance Information and	Installed memory (RAM):	4.00 GB (3.24 GB usable)					
Tools	System type:	32-bit Operating System					
	Dan and Taush	Ale Dan an Tauah Innuk is suailahla ƙashhis					



mputer Name Hardw	Advanced System Protection Remote	_	
vironment Variable	s 📃	anel Items 🕨 Syste	m 👻 🍫 Search Control Panel
User variables for H	lome		
Variable	Value	asic information	n about your computer
ASCODIR	C:\Program Files\Qucs	edition	
HOME	C:\Users\Home	burs 7 Ultimate	
include	C:\Program Files\Microsoft Visual Studio	ows / Onintace	
lib	C:\Program Files\Microsoft Visual Studio	ght © 2009 Micros	oft Corporation. All rights reserved.
	New Edit Delete	Packi	
System variables			
Variable	Value		
asl.log	Destination=file;OnFirstLog=command,		
CLASSPATH	.;C:\Program Files\Java\jre6\lb\ext\QT		
ComSpec	C:\Windows\system32\cmd.exe	facturer:	Samsung
		1 F	BiB Windows Experience Index
	New Edit Delete	FFOR	Intel/P) Core/TM/2 Duo CPU E7/00 @ SAMSUNG
		SSOI:	2,80GHz 2.79 GHz
	OK Cancel	ed memory (RAM):	4.00 GB (3.24 GB usable)
	OK Cancel	ed memory (RAM):	4.00 GB (3.24 GB usable)

For the java part, download the latest 6.0 version at

<u>http://www.oracle.com/technetwork/java/javase/downloads/index.html</u> (just Java JDK - the first option there.)

Install both Java and Visual Studio before you proceed further.

2. If you are using Windows Vista/Windows 7, you first need to disable the user account settings to 'Never Notify Me'. That is, you are trying to disable all the Security features of Windows that prevent you from making changes to it. This is essential for the setup to add the environment variables. If you are using Windows XP, you need not bother about this step. You may proceed to step 2.

Now, how do you do this?

- Either, type UAC in Start Menu or goto Control Panel → User Accounts → Click 'Change User Account Control Settings' at the very bottom of the User Accounts Page.
- You'll get a screen very similar to this (Mine is Windows 7 Ultimate SP 1)





YOU WILL HAVE TO RESTART WINDOWS TO COMPLETE THIS ACTION. ONLY THEN THE UAC SETTINGS GET SAVED.

3. Now, Run the Glomosim Setup as shown below



	Glomosim Setup		
***	Setup By		
···	Dwarak <u>www.dwarakrocks.blogspr</u>	<u>ot.com</u>	
-	Contact : https://profiles.google	e.com/dtsdwarak/about	
	Click Install to continue		
COLUD			-
Secup	Destination folder		
	C:N	 Brows 	e
	Installation progress		

	Extracting glomosim/glomosim/main/driver.pc Extracting glomosim/glomosim/main/fileio.pc Extracting glomosim/glomosim/main/glomo.pc Extracting glomosim/glomosim/main/heap.h Extracting glomosim/glomosim/main/heap.pc Extracting glomosim/glomosim/main/lookahea Extracting glomosim/glomosim/main/lookahea Extracting glomosim/glomosim/main/makefile Extracting glomosim/glomosim/main/makefile Extracting glomosim/glomosim/main/makefile Extracting glomosim/glomosim/main/makefile Extracting glomosim/glomosim/main/makefile Extracting glomosim/glomosim/main/mobility.p Extracting glomosim/glomosim/main/mobility.p	ad.h ad.pc .pc .pc .c .race.h	
Secup	Destination folder		
	C.1	-	Browse
	Installation progress		

If you get a popup complaining of some compiling error, then either you have not turned off the UAC account settings or you have still not gone for a system restart from UAC setting change.

- 4. After this installation step, half your burden has got over.
- 5. Now, Click Run \rightarrow type 'cmd'. You'll get command prompt window there.



• There, type

'cd c:\glomosim\glomosim\main'



• Now, type ' makent '. i.e., it will be like c:\glomosim\glomosim\main>makent

• A screen goes like this.



Now, type cd ..\bin and you will end up like c:\glomosim\glomosim\bin>

Now, type, glomosim config.in

* i.e.,	something	like, c:'	\glomosim [\]	glomosim	\bin>glom	osim	config.in
---------	-----------	------------------	------------------------	----------	-----------	------	-----------

Jurrent	Sim	Time[s]	-	756.	.003202254	Real	Time[s]	9 11 67	Ø	Completed	84%	1 ×
Current	Sim	Time[s]	e de la	765.	.003064375	Real	Time[s]		Ø	Completed	85%	52
Current	Sim	Time[s]	=	774.	023322262	Real	Time[s]	=	Ø	Completed	86%	
Current	Sim	Time[s]	e de la	783.	.044713021	Real	Time[s]		Ø	Completed	87%	
Current	Sim	Time[s]	=	792.	.000951318	Real	Time[s]	=	Ø	Completed	88%	
Current	Sim	Time[s]	π, i	801.	.010370516	Real	Time[s]		Ø	Completed	89%	
Current	Sim	Time[s]	=	810.	.019936587	Real	Time[s]	=	Ø	Completed	90%	
Current	Sim	Time[s]	te de la composición de la com	819.	.007265386	Real	Time[s]	.=»	Ø	Completed	91%	
Current	Sim	Time[s]	=	828.	.017614770	Real	Time[s]	=	Ø	Completed	92%	
Current	Sim	Time[s]		837.	.008815110	Real	Time[s]		Ø	Completed	93%	
Current	Sim	Time[s]	=	846.	.006505914	Real	Time[s]	=	Ø	Completed	94%	
Current	Sim	Time[s]	52	855.	.030478574	Real	Time[s]	=	Ø	Completed	95%	
Current	Sim	Time[s]	=	864.	.052366162	Real	Time[s]	=	Ø	Completed	96%	
Current	Sim	Time[s]	52	873.	.064564290	Real	Time[s]	1. .	Ø	Completed	97%	
Current	Sim	Time[s]	=	882.	.072024056	Real	Time[s]	=	Ø	Completed	98%	
Current	Sim	Time[s]	52.3	891.	.081945395	Real	Time[s]	=	Ø	Completed	99%	
Executio	on ti	lme: Ø	1.54	00 s	sec							
umber o	of me	ssages p	POC	esse	ed : 4							
umber o	of co	ntext sw	vitc	hes	occurred	: 12						
umber o	of Lo	cal NULL	me	ssag	jes sent :	พ_						
umber o	of Re	mote NUL	L M	essa	ages sent	: 0						
otal N	umber	of NULL	me	ssag	ges sent :	0000						1
me:	ssage	s / Kegu	llar	mes	sages : U	. 000						100

- You will get a screen like the one above. Congrats! You have successfully installed glomosim on your PC !
- In order to continue with Optional Java Visualization tool, you need to configure Java tool. to do that, copy all the files in C:\glomosim\glomosim\bin to C:\glomosim\glomosim\java_gui.
- Now, go back to command prompt, and type 'cd c:\glomosim\glomosim\java_gui'. Now, type javac *.java.
- 8. Now, type 'java GlomoMain' to visually see the results.

2	GloMoSin	n Visualizati	on Tool					Ŀ		x
Eil	e <u>V</u> iew	<u>S</u> imulate	<u>Options</u>	<u>D</u> ebug						<u>H</u> elp
		¥	θ	\oplus			Timer(sec	:msec:mi	crosec)	
	0			1 ⁵⁰		1100			1 ¹⁵⁰	
0 50										
100										

Download Glomosim.exe here : <u>http://ubuntuone.com/p/kXS/</u>