Другие языки: English • <u>русский</u>

## **iRidium Server for Raspberry Pi**

Installing and setting up a server in a project i3 lite

**iRidium Sever for Raspberry Pi** is a program implementation of iRidium Server, which is launched as daemon or console application on a Raspberry Pi 3 controller

Download iRidium server for Raspberry Pi3



## **Technical characteristics:**

• <u>raspberrypi.org</u>

iridium server conects to a hardware and send commands from a control panel to it. The control panels connect to the server to control the hardware through it, receive feedback, upload logs and database.



## **Installation and configuration**

To install iRidium server on Raspberry Pi download and install a required software:

- 1. <u>Download</u> (\*.deb) server file for Raspberry Pi
- 2. Download and install WinSCP
- 3. <u>Download</u> and install PuTTY

Connect and configure Raspberry Pi according to instructions from <u>raspberrypi.org</u>. Raspbian operating system must be installed on your device (officially supported operating system Raspberry Pi on the basis of Debian).

1 Launch **WinSCP**. In the program interface configure:

🌆 Login - WinSCP		
Vew Site	Session Eile protocol: SCP Host name: 192.168.0.136	Po <u>r</u> t number:
	User name: Password pi •••••• Save ▼ Cancel	: Advanced
Tools V Manage V	Login 🔽 Clos	se Help

- File Protocol: SCP
- Host name: Raspberry Pi IP-address (to find out your address enter ifconfig in the pi console)
- Port number: 22
- User name: your login ("pi" by default)
- Password: your password ("raspberry" by default)

2 Save the settings with the Save key. Connect to Raspberry by pressing Login button . If the connection parameters are entered correctly, you will see a window on the right side of which is a menu for working with your Raspberry files:

5		pi - pi@1	192.168.0.36 - WinSCP				- 🗆 🗙	
Локально Выбор Файлы Команды Соединение Настройки Сервер Справка								
🖶 💦 📚 Синхронизация 🦻	🖉 💽 🚳 🗉 🗃	Очередь 👻 Настройки пер	редачи По умолчанию	- 🚅 Новое	соединение 🚽 🛒 🖣	🔓 🔚 Подключ	чения - 🥩 -	
📮 pi@192.168.0.36 📑 Новое сое	инение							
📔 Мои документы 🔹 🚰 🔽		1 2 %	📗 pi 🔹	• 🖆 🔽 🔶 • •	-> - 🖻 🗖 🏠 🥭	🖀 Найти фай.	лы 🗣	
🗐 💮 Отправить 🗊 📝 Править	🗙 🛃 🕞 Свойства	🖆 🚡 🖃 🖃 🗹	📓 Получить 📓	📝 Править 🗙 🛛	🔏 🕞 Свойства 📑 [	• • • V		
C:\Users\Никита\Documents			/home/pi					
Имя Разме	р Тип	Изменено	Имя	Размер	Изменено	Права	Владел	
<ul> <li></li> <li>iRidium mobile 2</li> <li>iRidium mobile 3</li> <li>iRidium pro Docume</li> <li>iRidium pro docume</li> <li>iRidium pro docume</li> <li>iridiumserver</li> <li>Panels</li> <li>uhjiki</li> <li>ViberDownloads</li> <li>www</li> <li>iridiumserverFS</li> <li>4 319 k</li> <li>IridiumServerFS</li> <li>12 124 k</li> <li>IridiumStorage_old.db</li> <li>121 288 k</li> <li>netscan.xml</li> <li>42 k</li> <li>Project 1.irpz</li> <li>740 k</li> <li>Project.irp</li> <li>6 k</li> </ul>	Родительская па Папка с файлами Папка с файлами В файл "DB" В Файл "DB" В Файл "DB" В Файл "DB" В Файл "DB" В Файл "DB"	17.11.2015 17:49:45 08.10.2015 11:16:33 21.08.2015 9:47:01 07.10.2015 16:23:14 17.11.2015 17:49:45 13.11.2015 12:56:06 24.09.2015 13:31:00 17.09.2015 13:31:00 17.09.2015 13:42:82 09.11.2015 12:29:58 13.11.2015 15:55:49 10.09.2015 16:03:27 24.09.2015 13:32:26 12.10.2015 10:00:47 14.07.2015 10:843 11.07.2015 10:20:38 22.09.2015 10:45:24 19.04.1970 4:32:03	Desktop python_games		06.05.2015 22:20:16 06.05.2015 23:32:18 27.01.2015 8:34:28		root pi pi	

3Copy a(\*.deb) file, which you downloaded by link #1, in /home/pi folder

/home/pi			
Имя	Размер	Изменено	Права
		06.05.2015 22:20:16	rwxr-xr-x
퉬 Desktop		06.05.2015 23:32:18	rwxr-xr-x
퉬 python_games		27.01.2015 8:34:28	rwxrwxr-x
iridiumserver_1.0.0-5934_Pl.deb	2 609 KB	25.11.2015 7:19:32	rw-rr

4 Launch **PuTTY**. In the program interface set up:

R	PuTTY Configuration ? ×
Category: 	Puttry Configuration       ? ×         Basic options for your Puttry session         Specify the destination you want to connect to         Host Name (or IP address)       Port         192.168.0.138       22         Connection type:       Port         O Raw       Telnet       Rlogin         Load, save or delete a stored session       Saved Sessions         PI       Default Settings       Load         JAVIAR       Image: Save Im
<u>A</u> bout <u>H</u> elp	<u>O</u> pen <u>C</u> ancel

- Host Name (or IP address): IP-address of your Raspberry
- Port: 22 (default)
- Connection Type: SSH
- Saved Session: enter the name of the current setting and click Save
- Close window on exit: Only on clean exit

 $5\ {\rm In\ the\ configured\ PuTTY\ click\ "Open"}$  - the console will open. Enter login and password for connecting to the server.



entered password does NOT displayed in the console - it is normal. Press "Enter", when you finish to enter

6 If the login and password are correct, you will see a message about a successful connection to Raspberry



You can configure a static IP-address for Raspberry through Putty, by instruction

7 Install the package loaded into the Raspberry memory using the command:

```
sudo dpkg -i /<way_to the_package>/<package_name>.deb
```

For example:

sudo dpkg -i /home/pi/iridiumserver\_1.0.0-5934\_PI.deb

pi@raspberrypi ~ \$ sudo dpkg -i /home/pi/iridiumserver 1.0.0-5934 PI.deb

Wait for the installation to complete. Do NOT turn off the power of the device. As a result, you will see:



After installation, the server runs as a daemon - the PuTTY log will NOT display any working

information, when you restart, the Raspberry Server will start automatically.

8 Launch the server from the iridiumserver directory. To do this, there are commands:

- sudo ./iridium launch the server. When you close the console, the server closes
- sudo ./iridium --hidden launch the server in the background (like a daemon). When the console is closed, the server does NOT close

Successful server startup:

pi@ras	pberr	ypi	/iridiums	erver \$	sude	o ./ir:	idium				
#	###	###	#		#	#					
	#	#			#						
###	#	#	###	####	##	###	#	#	###	##	
#	###	###	#	#	#	#	#	#	#	# #	ŧ
#	#	#	#	#	#	#	#	#	#	# #	ŧ
#	#	#	ŧ.	#	#	#	#	##	#	# #	ŧ
****	#	#	#####	####	##	#####	##	## #	#	+	Ļ
Server	Vers	ion:	1.0.0:59	34 (Nov	7 17 2	2015, 3	18:17:	26)			
Can't (	creat	e RO	OT_DIR /v	ar/lib/	'iRidi	ium Sei	cver/				
Get Se	rial	From	/proc/cp	uinfo O	00000	000d11	5d375	size:	16		
Name ra	aspbe	rryp	i(Server)	Os Lin	iux Fa	amily a	armv61	Model	L Ra	spbe	erry
Doc Di	r /va	r/li	b/iRidium	Server	/Doci	uments,	/				
Cache l	Dir /	var/	lib/iRidi	um Serv	ver/Do	ocument	cs/				
Log Di	r /va	r/li	b/iRidium	Server	/Logs	з/					
Res Di	r /ir	idiu	mserver/								
DB Dir	/var	/lib	/iRidium	Server/	Data	Base/					
[02-12-	-2015	13:	01:45.000	]	DEBU	UG CO	ORE	Core	Dol	nit	
[02-12-	-2015	13:	01:45.000	]	DEBU	UG CO	ORE	HWID	Gen	erat	;ion

An error may occur when you try to restart the server in the background:

#	###	###	#	-	# #						
	#	#		:	#						
###	#	#	###	#####	# ###	#	#	###	##		
#	###	###	#	#	# #	#	#	#	# #		
#	#	#	#	# :	# #	#	#	#	# #		
#	#	#	#	#	# #	#	##	#	# #		
****	#	#	*****	*****	* *****	##:	## #	#	#		
Find fi	ile /	tmp/i	rdaemon.	pid with	pid 2609	. iRid:	ium D	aemo	n alrea	dy runni	ng. Delet
e this	file	and	kill pro	cess							
iRidiur	n NOT	Star	ted!								
			Exi	t from il	Ridium Se:	rver ==				==	

In case of such an error, enter the command:

sudo rm /tmp/irdaemon.pid

pi@raspberrypi /iridiumserver \$ sudo rm /tmp/irdaemon.pid

and restart the server (item 8).

9 The server is ready to work with the project

## Adding a server to the i3 lite project

You may add the server to the project in two ways:

1 Adding the server during the creation of the project

Launch the i3 lite application and start to create a project. The application will ask you to add a server. You need to agree.



You will see a window with the servers available on the local network. You need to select your server

Cancel	Servers	Refresh
<b>techruvb-Vir</b> 192.168.0.92	tualBox(Server)	
IRIDIUMUSE 192.168.0.42	R-PC(Server)	
raspberrypi( 192.168.1.185	Server)	
TMP(Server)		
DESKTOP-4 192.168.0.77	1SH2796(Server)	
CREATORP	C(Server)	

The application will ask you to enter the activation code using the QR scanner or manually

iPad ᅙ	4:28 PM		Þ
	tero apoponina		
	Enter the license l	key	
	XXXX-XXXX-XXXX-XXXX		
	Cancel	OK	
	Scan OB-co	da	

Now the server is added to the project. 2 Adding a server to the already created project Open the project and go to the Config



Click the "server" tab and click the "Select Server" button.



You will see a window with the servers available on the local network. You need to select your server. The application will ask you to enter the pin code from the server (pin code is default 2007). After entering the PIN code, the server must be activated by clicking on the corresponding button