VPS Guide for MT4

(version 1.1) by ckowyong.com, 7 december 2007

Introduction

This guide aims to help you configure a Windows Virtual Private Server(from now on refered to as a **VPS**) for the purpose of running a MT4 trading platform. Where possible, I'll try not to use too much technical jargon to explain how things are done. But being a technical document, it's hard not to be a bit technical at times.

For the techies, this document will be easy to follow. For those who are not as technically inclined, I suggest that you get assistance from a friend who is more comfortable with the contents within this document.

As this document is distributed to many people, I will not be able to provide any technical support with regards to setting up your VPS. However, you can visit the following link to post your questions, and hopefully one of the many kind souls out there will be able to help you. Who knows... your queries may have been asked and answered in the past.

I will also be checking it regularly to see how I can help. I believe this form of 'support' will work out better in the long run since everyone will be able to see the Qs and As to help themselves as much as they can. I'll also post new versions of this guide there for download when it becomes available.

For all your Q's and A's, please visit http://www.ckowyong.com/blog/vps

In this guide, I'll tell you what you need to know to :

- 1. purchase a suitable Windows VPS for running MT4.
- 2. set up a shortcut to access your VPS in console mode.
- 3. configure your VPS to automatically log in using the administrator's account after a restart.
- 4. configure your MT4 software to start automatically when Windows starts up.
- 5. configure your VPS to restart on a fixed schedule to keep it running healthy.
- 6. disconnecting from your VPS and securing it.

1. Purchasing your Windows VPS package

There are many Windows VPS service providers out there. As I was searching for the most affordable ones, I came across these 2 :

- 1. SouthWest Technologies Ltd http://www.swvps.com
- 2. VPSLand.com http://www.vpsland.com

I have used them both before and found them equally usable for running the MT4 platforms. Everything that's discussed here are possible on both their offerings. As to which is better?... I don't really have a preference. But one thing for sure is that SouthWest's pricing is much better at US\$19.00 per month. They'll even give you 2 months free if choose to pay annually, which will come up to about 52 cents a day... way cheaper than a cup of coffee!

IMPORTANT : When you select a VPS package, make sure you choose a "WINDOWS VPS" plan. There are basically 2 types out there : WINDOWS-based and LINUX-based. MT4 only runs on WINDOWS, so if you got a LINUX one, it's not going to work.

So, remember, select a WINDOWS VPS plan. The cheapest offering from SWVPS is good enough for running the MT4 platform. In fact, I'm running 3 instances of MT4 on my VPS from SWVPS without any problems..... so far.

2. Setting up a shortcut to access your VPS in console mode

After purchasing your VPS, your service provider will send you a couple of emails. Besides a sale-confirmation email or payment-acknowledgment email, you will receive a very very important email which will contain the following information :

- 1. your Virtual Private Server's IP address (eg. 64.111.222.333)
- 2. your administrator's username (which is usually 'administrator')
- your administrator's password (this could be a password generated by them, or it could be one that you have chosen when you were filling up the registration/purchase form on their website)
- your Virtual Private Server's control panel website address (eg. <u>Http://64.111.222.333:3456</u>. I'll explain more about this later.)

Once you have your VPS's IP address, you are all ready to set up the shortcut to your VPS. It's important that you connect to your VPS in the 'console' mode, as doing it any other way is no good for our purpose of running the MT4 platform 24x7.

To create the shortcut, minimize all applications on your home computer so that you can see your Windows Desktop.

	Eolder
	Bhortcut
	📁 Briefcase
	Bitmap Image
	Microsoft Word Document MetaQuotes Language 4 file
	🔁 OpenDocument Drawing
	C OpenDocument Presentation
Arrange <u>I</u> cons By	a OpenDocument Spreadsheet
R <u>e</u> fresh	🔁 OpenDocument Text
Paste	Microsoft PowerPoint Presentation
Paste Shortcut	🚺 Adobe Photoshop Image
Carelia Danastia	E Text Document
Graphics Properties	🔄 Winamp media file
Graphics Options	Microsoft Excel Worksheet
Ne <u>w</u> ►	🗐 WinZip File
Properties	

Right-mouse-click on an empty space on your Desktop and select New -> Shortcut

Create Shortcut		×
	This wizard helps you to create shortcuts to local or network programs, files, folders, computers, or Internet addresses.	:
	Type the location of the item:	
	mstsc.exe /v:aaa.bbb.ccc.ddd /console Browse	
	Click Next to continue.	
	< Back Next > Cancel	

In the box above, enter the following and click $\ensuremath{\textbf{Next}}$:

mstsc.exe /v:aaa.bbb.ccc.ddd /console

(where aaa.bbb.ccc.ddd represents your VPS's IP address)

Select a Title for the Proc	jram	×
	Type a name for this shortcut: MyVPS Console	
	Click Finish to create the shortcut.	
	< <u>B</u> ack Finish Cancel	

On this screen, give your new short-cut a name (eg. MyVPS Console) and click Finish.

Now you can double-click on the shortcut and see what happens. But before you do that, I would suggest that you print this document out and have it on hand. You'll know why later :O)

CKO-SWVPS Console	
Connecting	
Cornecting to 64.191. 64.191	
Cancel	

When you double-click on the short-cut, you should see a little connection screen appear like the one above. After a while, you'll see a new Window appear, prompting you for the administrator's username and password.

64.191.승규.(S) - Remote Desktop	
Log On to Windows	
Windows Server 2003 Standard Edition	
Copyright © 1985-2003 Microsoft Corporation Microsoft	
User name: Administrator	
Password	
Cosmolar II	
OK Cancel Options >>	

For the User name field, enter administrator. For the password, use that administrator's

password that you have received in your email from your VPS service provider. Once done, click **OK**.

Once you have connected and keyed in your administrator's username and password, you'll notice that your computer now looks a bit funny. You may find that all your stuff you had on your desktop is now 'missing'... and that somehow, the task-bar at the bottom of your screen looks different now.

What you are looking at now is your VPS. Everything you see on your entire screen is your VPS. To really appreciate what I'm trying to say, you'll need to move your mouse up to the top of your screen (all the way to the top and middle) to reveal a hidden control bar. It should look like the image below.



Just click on the restore button which looks like this : $mathbb{B}$



Now you should be able to see your own computer again. Note the **START** button for your computer and that of the VPS.

Your connection (or 'session') to your VPS is now contained in the window titled "aaa.bbb.ccc.ddd – Remote Desktop" With the VPS in a 'restored' state, you should be able to tell which is your computer and which is your VPS. Play with the maximise and restore buttons a bit and you should get a hang of it quite quickly.

Your VPS is like a full-fledged computer system. It has it's own hard disk space and ram, but how much you get is dependent on which plan you sign up for. The basic SWVPS plan is good enough for you to run your MT4 platform.

3. Configure your VPS to log in automatically using your administrator's account

Now, since we are going to run the MT4 trading platform 24x7, and also have the computer automatically rebooted everyday, we will need to make sure that the VPS does not remain in the 'prompting for username and password' screen every time it's rebooted. This is what happens by default, and no application will run if it remains at the login screen after a restart or a power interruption.

We will now need to configure your VPS to log in automatically using the administrator's username and password. This is the only way (or easiest way... to be exact) to ensure that your MT4 platform runs as soon as the VPS comes back up after a restart.

From **within your VPS** (not your comupter!!...I say again.... not your computer!!), open Internet Explorer and go to <u>http://www.ckowyong.com/blog/vps_downloads</u>



Download the file named **reg_update.reg** and save it to your VPS Desktop (ie. right-mouseclick and select **Save Target As...**) The **reg_update.reg** file is a Windows registry import file that will help you make the necessary registry settings to enable the automatic log in.

IMPORTANT : Modifying the Windows Registry carries some risks of totally screwing up the computer. Although I have tested the procedure to be safe, please don't come after me if anything should go wrong. If you are not comfortable with this, please do not proceed further.



Once the file is on your Desktop, right-mouse-click on it and select **Merge**). Then click **Yes** and then **OK** when prompted.

		Program		
	u	Crogram	Run	<u>? ×</u>
	3	<u>D</u> ocume		Type the name of a program, folder, document, or
lition	<u>v</u>	<u>S</u> ettings		Internet resource, and Windows will open it for you.
Je E	\mathbf{P}	Sear <u>c</u> h	Open:	regedit
Hom	•	<u>H</u> elp and		OK Cancel Braures
XP		<u>R</u> un		
indow	\swarrow	Log Off o	:hick	Browse
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Next (the tricky part), you will need to edit your Windows registry. From **within your VPS** (not your comupter!!...I say again.... not your computer!!), click on **Start -> Run**, and in the **Open** field, type in **regedit** and click OK. This will start up the Windows Registry Editor program.



You should now see a window that looks look like the one below.

The left panel looks like a bunch of folders, and the right contains the contents of the folder that's currently open. Please take note of the bottom of this window. It tells you exactly where you are in the registry. This is very very useful as the 'folder' structure is very very complex. Knowing where you are in the mayhem of folders is important, as you really won't want to change anything other than the exact thing that I'm going to tell you.

In the left panel, navigate (like what you would do with folders) to this folder called 'Winlogon'. The full path of it's location is this :

```
HKEY_LOCAL_MACHINE\
SOFTWARE\
Microsoft\
Windows NT\
CurrentVersion\
Winlogon
```

e	Edit	View	Favorites	Help				
				Prefetcher	*	Name	Туре	Data
			🕀 🧰	Print		(Default)	REG_SZ	(value not set)
			• 🕒	ProfileList		allocatecdroms	REG_SZ	0
				related.desc		allocatedasd	REG_SZ	0
			E	SeCEdit		allocatefloppies	REG_SZ	0
				Setup		AllowMultipleTS	REG_DWORD	0x00000000 (0)
				SvcHost		AltDefaultDomai	REG_SZ	CKLT
				SystemRestore		AltDefaultUserN	REG_SZ	chick -
				Time Zener		AutoAdminLogon	REG_SZ	0
				Tracing		B AutoRestartShell	REG_DWORD	0x00000001 (1)
				Type 1 Installer		Background	REG_SZ	000
			1.0	Userinstallable.drive		ab cachedlogonsco	REG_SZ	10
				Windows		DebugServerCo	REG_SZ	no
			B	Winlogon		DefaultDomainN	REG_SZ	CKLT
				Credentials		DefaultPassword	REG_SZ	enter_administrator_password_here
				GPExtensions	_	ab DefaultUserName	REG_SZ	chick
-		11		Mohify	-	References	DEC DWODD	0~00000000 (0)
						•		

Once there, you should see something like this :

To confirm that you are at the correct place, check the bottom of the window. You should see : My Computer\HKEY_LOCAL_MACHINE\SOFTWARE\Microsoft\Windows NT\CurrentVersion\Winlogon

On the right panel, you should also see an item called **DefaultPassword** which contains the data **enter administrator password here**.

Now, double-click on the item ' DefaultPassword' and you should see this screen :

Edit String	<u>? ×</u>
Value <u>n</u> ame:	
DefaultPassword	
<u>V</u> alue data:	
enter_administrator_password_here	
	OK Cancel

Enter your VPS administrator's password in the **Value data** field and click **OK**. From the top menu of the Registry Editor window, select **File -> Exit** close the Registry Editor program.

What we have essentially done is that we have hard-coded your administrator's password into your VPS. When the server restarts, the server will now make use of the hard-coded user name and password to log into automatically into the VPS.

The next thing to do now is to install your MT4 trading platform. You may use any broker you want, be it IBFX, RFXT, FXDD... it does not really matter.

From **within your VPS**, go to your broker's website to download and install your broker's MT4 trading platform. After installation of the MT4 platform, install your Expert Advisor. If you wondering how you can get a file (ie. the Expert Advisor EX4 file) on your home computer to your VPS, try emailing it to yourself. From within your VPS, you can access your web-based email account (ie. Gmail, Yahoo, Hotmail.... etc) to download that file that you have emailed to yourself.

4. Configure your MT4 software to start automatically when Windows starts up

From **within your VPS**, open Internet Explorer and go to http://www.ckowyong.com/blog/vps_downloads



Download the file named **start.cmd** and save it to your VPS Desktop (ie. right-mouse-click and select **Save Target As...**)

You can open up that file using Windows NotePad and see the contents. Basically, the most important lines are these 3 :

```
ping localhost -n 30
start "1" "C:\Program Files\Interbank FX Trader 4\terminal.exe"
exit
```

The first line tells your VPS to wait 30 seconds before proceeding. I have found this to be critical for the MT4 software to start successfully.

Depending on which broker you use, and also the folder where you installed the MT4 software, **line 2** may need to be modified for your own VPS.

For the ease of explaining, I'll assume that you have installed IBFX's MT4 trading platform. If you are using other brokers, the steps should be more or less the same. Just substitute IBFX with your broker's name wherever you see it.



After installing IBFX, you will have an icon on your **VPS** Desktop. Right-mouse-click on it and select **Properties**.

In the property windows, you will see something like this :

55	Interbank FX Trader 4 Properties
Interbank FX Trader 4	General Shortcut Compatibility
	Interbank FX Trader 4
	Target type: Application
	Target location: Interbank FX Trader 4
	Iarget: ["C:\Program Files\Interbank FX Trader 4\terminal
	Start in: "C:\Program Files\Interbank FX Trader 4\"
	Shortcut <u>k</u> ey: None
	<u>B</u> un: Normal window
	Comment:

The most important information you will need is in the field called **Target**. This shows the location where you have installed the program. Note that it MUST be the same as what you see in **line 2** of the **start.cmd** file. See the highlighted text in red below :

```
ping localhost -n 30
start "1" "C:\Program Files\Interbank FX Trader 4\terminal.exe"
exit
```

If you have installed IBFX's platform and used the defaults during the installation process, you should not need to change a thing in the **start.cmd** file.

However, if you have installed IBFX's platform in a location that's not the same as the above, you will need to modify the **start.cmd** file and make sure that **line 2** show's the same 'Target' as what you see in the icon properties. Similiarly, if you are using RFXT or FXDD, you will need to make sure that **line 2** in the **start.cmd** file is amended accordingly.

So, in brief, what you see in **line 2** of **start.cmd** file MUST follow the **Target** found in the short-cut properties of your MT4 trading platform.

Once you're done with the **start.cmd** file, you will then need to copy and paste it into the Start Up folder.

🔯 C:\Documents and Settings\Administrator\Start Menu\Programs\Startup
<u>File E</u> dit <u>V</u> iew F <u>a</u> vorites <u>T</u> ools <u>H</u> elp
🔇 Back 🝷 🏐 🖌 💋 Search 🌔 Folders 🕼 🔅 🕉 🗙 🏹 🛄 🗸
Address C:\Documents and Settings\Administrator\Start Menu\Programs\Startup
Folders × desktop.ini
🕝 Desktop 💽 🔤 start.cmd
🗉 🛅 My Documents
🖃 😼 My Computer
🖃 🧇 Local Disk (C:)
🗆 🛅 Documents and Settings
🗆 🧰 Administrator
🕀 🧰 Application Data
Cookies
🗄 🧰 Desktop
🗄 👷 Favorites
🕀 🧰 Local Settings
Documents My Documents
My Recent Documents
Contraction NetHood
C PrintHood
🗀 SendTo
🗆 🧰 Start Menu
🗆 🥅 Programs
🗄 🤠 Accessories
🛄 Royal Trader 4
G Startup
🛨 🛄 All Users

Open Windows Explorer and navigate to this foler :

C:\Documents and Settings\Administrator\Start Menu\Programs\Startup

Copy the **start.cmd** file into this folder.

To test that everything is working as expected, double-click on the **start.cmd** file and see what it does. If your MT4 application did not launch, revisit this section again carefully and check through what you have done.

5. Configure your VPS to restart on a fixed schedule to keep it running healthy

It is good practice to restart your VPS occasionally to ensure that it runs smoothly. If the VPS is left running for too long, the system may become unstable and the MT4 application may stall. I trust you understand the consequence of that, especially when your Expert Advisor is active and have several open positions in the market.

To do this, you will need to start the Windows Scheduler program. From within your **VPS**, go to **Start -> Program Files -> Accessories -> System Tools -> Scheduled Tasks**



Double-click on Add Scheduled Task



Click Next.

Scheduled Task Wizard			×
	Click the program you want Windows To see more programs, click Browse.	s to run.	
	Application	Version	
2	About QuickTime AC3Filter Config Accessibility Wizard Ad-Aware SE Personal Ad-Aware SE Personal Manual	5.1.2600.218	
	💟 Address Book	6.00.2900.21	
	Managar Managar	1 2 0 1 0	ן נ
		Browse	
	< <u>B</u> ack <u>N</u> ext >	Cancel	

Click Browse.

Select Program t	o Schedule							<u>? ×</u>
Look jn:	🗀 system32		•	0	ø	ø	•••	
Recent Desktop My Documents My Computer	3com_dmi 1025 1028 1031 1033 1037 1041 1042 1054 2052 3076 CatRoot CatRoot2 Com Config		 dhcp DirectX DLA dllcache drivers DRVSTORE en-US export FxsTmp hauppauge ias icsxml IME inetsrv LogFiles 					Macromed MAGIX Microsoft MsDtc mui npp oobe PPLive PreInstall quicktime ras ReinstallBac Resource Restore Setup
My Network Places	File <u>n</u> ame:	shutdown.exe Programs				•		▶ <u> ①</u> pen Cancel

In the **Select Program to Schedule** screen, navigate to the file called **shutdown.exe** in the following location : **c:/windows/system32/shutdown.exe**

Scheduled Task Wizard		×
12	Image: Image	
	< <u>B</u> ack <u>N</u> ext > Cancel	

After selecting the file **shutdown.exe**, click on the 'Open' button.

At the above screen, change the first field from **shutdown** to **daily restart** like above. Then select **Daily** and click **Next**.

Scheduled Task Wizard		×
	Select the time and day you want this task to star Start time:	
	Perforn this task: © Every Day © Weekdays © Every 1 📑 days Start date: 9/3C/2007 💽	
	<back next=""> Cancel</back>	

On the screen above, you will need to set a very important piece of information – **Start time**. This is the time when your VPS server will initiate the restart (with reference to the system clock on your VPS). The most ideal time to set this would be during a period when the forex market is most quite. This would typically be some time during the Asian market trading hours when the London and European markets are closed. You may want to check with the seller of your Expert Advisor on the best time to restart your MT4 platform, since some Expert Advisors (like RobinHood and a few others) execute their trades at specific times of the day.

If you do not have that information right now, just accept the default start time and click 'Next'. You can always come back to modify it later.

Scheduled Task Wizard			×
	Enter the name and pas run as if it were started b	sword of a user. The task will by that user.	
· 9	Enter the user n <u>a</u> me:	MYVPS\administrator	
14	Enter the <u>p</u> assword:	••••	
6	<u>C</u> onfirm password:	•••••	
	If a password is not ente not run.	ered, scheduled tasks might	
	< <u>B</u> ack	Next > Cancel	

When promted with the above screen, leave the user name field as it is (it should end with **\administrator**). In the password fields, enter your VPS administrator's password twice and click **Next**.

Scheduled Task Wizard		X
	You have successfully scheduled the following task: daily restart	
Z	At 5:37 PM every day, starting 9/30/2007	
	Dpen advanced properties for this task when I click Finish.	
	Click Finish to add this task to your Windows schedule.	
	< <u>B</u> ack Finish Cancel	

When you see the above confirmation screen, click 'Finish' to complete the task.



You should now see the new scheduled task that you have just created. However, there's still one last important thing to do. What we have now is a scheduled task to run the shutdown.exe program. Without making any changes, it will do exactly that – SHUTDOWN!!

However, what we need it to do is to RESTART, instead of SHUTDOWN. The following steps will guide you to make this happen.

🔗 Scheduled	Tasks	_	
<u>E</u> ile <u>E</u> dit <u>y</u>	/iew F <u>a</u> vorites	Tools Advanced Help	2
🕞 Back 👻	🕤 - 🏂 🔎	Search 😥 Folders 🔯	»
🖸 Add Schedul	ed Task		
🚰 daily restart		1	
	R <u>u</u> n		
	End Task		
	Cu <u>t</u>		
	⊆ору		
Displays the	Delete	ected items.	1
9	Rena <u>m</u> e		- 111
	P <u>r</u> operties		

In the Scheduled Tasks window, right-mouse-click on the newly created task and select

Properties.

daily restart	? ×
Task Schedu	le Settings Security
. c.w	INDOWS\Tasks\daily restart.job
<u>B</u> un:	C:\windows\system32\shutdown.exe /r /t 60 /f /c "VPS
	<u>B</u> rowse
S <u>t</u> art in:	C:\WINDOWS\system32
<u>C</u> omments:	
R <u>u</u> n as:	MYVPS\Administrator <u>S</u> et password
☐ Run only if ☐ Enabled (so	logged on cheduled task runs at specified time)
	OK Cancel Apply

In the 'Run' field, you will initially see this :

C:\windows\system32\shutdown.exe

What we need to do now, is to change this line from :

C:\windows\system32\shutdown.exe

to

C:\windows\system32\shutdown.exe /r /t 60 /f /c "VPS Restarting"

Once done, click 'OK'. You will be prompted to enter the administrator's password again.

The extra bits that you see at the end of the line tells the VPS to do the following when the program shutdown.exe runs :

- 1. /r : tells it to restart instead of shutdown
- 2. /t 60 : tells it to do a 60-second countdown before restarting
- 3. /f : tells it to force all applications to close prior to restarting
- 4. /c "VPS Restarting" : tells it to display the said caption during the countdown

Assuming that you have completed all the above steps, we are now ready to test it out.

Ready? Don't worry :O) You are not trading live with this VPS yet. Just make all the mistakes you can now and have them corrected. Better now than when you have it trading real money!



Ready for the test? Let's do it !!

At the Scheduled Tasks window, right-click on your **daily restart** task and select **Run**.

You should immediately see a little window appear, counting down from 60 to a system restart. Once the countdown reaches 0, you will loose connection to your VPS while the server shuts down and restarts.

Give it about 5 mins or so before connecting to it again using the short-cut that you have created earlier in this guide. Once logged on, you should see that your MT4 platform would already be running. That's the work of the start.cmd file that you have put into the Startup folder earlier.

Play around with your VPS for a few days to get a hang of it. You may want to run a forward-test using one of the built-in Expert Advisors (eg. MACD) to see how it runs.

Test the **daily restart** task a few times and make sure that after each time, you should be able to log in 5 mins later to see that the MT4 is again up and running.

6. Disconnecting from your VPS

On your home computer, you would typically click **Start -> Turn off computer** when you are done with your computer. Since we want our VPS to keep running, we should NEVER shut it down.

When you have done what you needed to do in your VPS, **disconnect** by just clicking on the button on the top-right hand corner of the VPS window. You will then see this message :



Just click **OK** and you are disconnected. Your MT4 software will continue to run on the VPS.

That's it!! You are all set. Congratulations to you for getting through this rather technical guide. I hope the guide has not been too difficult to follow.

If you have any comments or feedback about what has been documented, please visit the website mentioned in the **Introduction** page. Leave your comments and feedback at the blog so that we can all learn together.

I wish you success in your trading and hope that your VPS gives you a better way to trade with automated trading systems.

To our success!! - ck