On Premise Installation – VirtualBox

Both Dispatch Server and Customer Server installed on premise as VirtualBox appliance. Provided appliance uses Ubuntu 18.04 LTS operating system and contains the installer of WebAccess/VPN. Since this is the on premise version, sole customer is responsible for the run of the WebAccess/VPN system, its security and updates, including operating system provided in the appliance.

Prerequisites:

AD\ANTECH

- A computer with Internet access and VirtualBox installed.
- WebAccess/VPN .ova file (VirtualBox appliance).
- **Domain name** for your WebAccess/VPN installation is needed. It is recommended to setup your own domain for standalone version. Advantech can provide a domain name for public IP only (subdomain of vpnportal.cloud domain).
- Recommended: A DHCP server in network that will lease fixed IP address to your bridged VirtualBox machine with WebAccess/VPN.
- 1. In your VirtualBox Manager, go to File Import Appliance...



2. Choose the WebAccess-VPN .ova file to import:

Appliance to import

VirtualBox currently supports importing appliances saved in the Open Virtualization Format (OVF). To continue, select the file to import below.

C:\Users\jan.svoboda\vpnportal-standard-1.0.0.ova

- 3. Review the imported settings. Recommended parameters:
 - CPU: 2

- RAM: 2 GB
- VideoRAM (display): 64 MB (accessible later in settings)
- Network: bridged (accessible later in settings)
- HDD storage size: 20 GB (accessible later in settings)

Check the Reinitialize the MAC address of all network cards option. Run Import.

irtual System 1		^
😪 Name	Ubuntu_18.04_LTS-WebAccess/VPN-1.0.0	
🗮 Guest OS Type	🌠 Ubuntu (64-bit)	
CPU	2	
RAM	2048 MB	
💿 dvd		
USB Controller		ł
뒏 Sound Card	ICH AC97	
🛃 Network Adapter	Intel PRO/1000 MT Desktop (82540EM)	
Storage Controller (IDE)	PIIX4	~

4. Wait while the appliance file is imported.



5. After import, do not run the appliance immediately, but go to Settings and check the Network settings:



6. In Network Settings check that there is the *Bridged Adapter* set in *"Attached to:"* option. Choose your physical network interface below.



Note: the bridged network is needed so the WebAccess/VPN is available directly in your network. IP address of the WebAccess/VPN has to be accessible by routers and clients you want to add to WebAccess/VPN.

7. Now run the appliance:

Ubuntu_18.04_LTS-V	VebA	ccess/VPN-1.0	.0		🛛 😥 Sta
	() () () () () () () () () () () () () (Settings Clone Remove Group	Ctrl+S Ctrl+O Ctrl+R Ctrl+U		Controlle IDE Sec Controlle SATA P
	\Rightarrow	Start	+		Normal Start
		Pause	Ctrl+P	Ð	Headless Start
	0	Reset	Ctrl+T	ø	Detachable Start

- 8. Wait for the system to boot and login to Ubuntu with these credentials:
 - Username: ubuntu

• Password: wavpn123

ubuntu	
Password:	
••••••	
Cancel	🌣 Sign In

9. Find out the IP address of the appliance's bridged network interface. It is accessible via GUI in system settings, or in terminal after a command prompt. Both methods are described below:

In GUI system settings: Open Settings by clicking the top bar in the top right corner (1 in Figure below), choose settings icon (2) and then Network settings in menu. Click the settings icon (3) and read the IP address in *IPv4 Address* field.

	Čt 09:0	ท		<u></u>
٩	Settings	Network		
(1.	Wi-Fi			l €
*	Bluetooth	Wired	+	🛃 Wired Connected 🛛 🔸
4	Background	Connected - 1000 Mb/s ON		🔁 Fully Charged 🥢 🕨
D	Dock	VPN	<u> </u>	
A	Notifications	Not set up		2 % a O
۹	Search		\	
ĝ.	Region & Language	Network Proxy	Off 🗱	
0	Universal Access			
€Dr	Online Accounts			
Ш	Privacy			
<	Sharing			
40	Sound			
Ge	Power			
Q?				

AD\ANTECH

Via terminal: Run the terminal – right click on desktop and choose *Open Terminal*. Then use one of the commands "ip a s" or "ifconfig" to find out the IP address of physical interface (enp0s3).

Activitie	s		
٩			
	Trash	New Folder	Shift+Ctrl+N
		Paste	
		Select All	Ctrl+A
A		✓Keep aligned Organize Desktop by Na	ame
		Change Background	
		Open Terminal	

ubuntu@vpn:~	•
File Edit View Search Terminal Help	
<pre>ubuntu@vpn:~\$ ip a s files: <loopback,up,lower_up> mtu 65536 qdisc noqueue state UNKNOWN group de t qlen 1000 link/loopback 00:00:00:00:00:00 brd 00:00:00:00:00:00 inet 127.0.0.1/8 scope host lo valid_lft forever preferred_lft forever inet6 ::1/128 scope host valid_lft forever preferred_lft forever 2: enp0s3: <broadcast,multicast,up,lower_up> mtu 1500 qdisc fq_codel state P oup default qlen 1000 link/ether_08:00:27:ab:bf:d1 brd ff:ff:ff:ff:ff:ff</broadcast,multicast,up,lower_up></loopback,up,lower_up></pre>	efaul UP gr
<pre>inet 10.40.40.160 24 brd 10.40.40.255 scope global dynamic noprefixrouto 0s3 valid_lft 628sec preferred_lft 628sec inet6 fe80::4f64:b22d:624b:b92b/64 scope link noprefixroute valid_lft forever preferred_lft forever ubuntu@vpn:~\$</pre>	e enp



10. Now go to your browser in superior system (where VirtualBox is running) or anywhere in the network where the IP address of appliance is accessible.

Access the WebAccess/VPN installation wizard – type explicit **https:**// to the browser address bar, the IP address of appliance and port 8881. Example: **https:**//IP-OF-APPLIANCE:8881

Q https://10.40.40.160:8881

HTTPS explicit is necessary since HTTP is not redirected. Ignore invalid certificate autority notice and continue to site (CA will be configured in the first step of installation).

11. Follow the instructions in installation wizard. If you don't have Certification Authority to import (certificate file in CRT format and key file in PEM format), use wizard to create some for you.

Attention: If using your own Certificate Authority, the key file to be imported must not be password protected!

WebAccess/VPN	
Installation Wizard	
CA Setup Network Settings	3 4 5 6 7 Domain Settings Set Web Admin EULA Agreement Summary Start Installation
All future commu	nication certificates will be signed by the following Certificate Authority. Import existing CA Create new CA
The foll	owing information will be inserted into the new CA certificate.
Common Name *	Jan
Organization	ADVANTECH
Country	Czech Republic •
Locality	Brno
Email	jan.svoboda@advantech.com
	* Required field
	Next



12. In Step 2, your virtual internal network is set (for OpenVPN with routers). Recommended values are network 10.8.0.0 and mask prefix chosen from the options available. Mask will affect a number of devices possible to connect to WebAccess/VPN. See the number of routers calculated under the form field. Number of devices per router is always 254 and can not be changed. Virtual network address and mask (affecting overall number of devices) can be changed later in setting, but only if there are no validated routers.

WebAccess/VPN Installation Wizard 2 CA Setup Network Settings Domain Settings Set Web Admin Password EULA Agreement Summary Start Installation Virtual network specifies the pool of virtual addresses. First of them will be given to the VPN server, others will be allocated for routers and their local devices. External IP specifies the non-virtual IP address of the VPN server. Ensure it is reachable from your routers. Virtual Network * 10.8.0.0 / 255.254.0.0 (/15) Result address pool: 509 routers, 254 devices per router External IP * 10.40.40.160 * Required field Back

External IP is the IP address of the VirtualBox appliance.

13. In Step 3, either enter your own domain name of WebAccess/VPN (recommended for on-premise installations), or create a new subdomain managed by Advantech (available for public IP only, it si a vpnportal.cloud subdomain).

WebAccess/VPN					
Installation Wizard					
12			5	6	
CA Setup Network Settings	Domain Settings	Set Web Admin Password	EULA Agreement	Summary	Start Installation
Enter the dom	ain name for Web/	Access/VPN's web:	site (e.g. wavpn.myc	ompany.com).	
	0	Use my existing do	main		
	۲	Create new subdon	hain		
Domain Name *	jan			.vpnportal.cl	loud
	* Required field				
					Back Next

Using your own domain name: when pointing your domain's DNS records to IP of your installation, add this additional "A" record to your domain: ***.mydomain.com**

(or *.sub.mydomain.com if your installation will use a subdomain).

This matches all possible subdomains and is necessary for some features of WebAccess/VPN.

Using domain name from Advantech: Suitable only if your VirtualBox appliance has a public IP! Choose unused subdomain name of domain vpnportal.cloud. The form field will go red if the name typed in is already taken. Note that Advantech will set the DNS records and manage them for you, thus future changes are not flexible as it would be with your own domain.



14. In step 4, setup the password for Web user admin access.

NebAccess/VPN					
Installation Wizard					
CA Setup Network Settings	3 Domain Settings	4 Set Web Admin Password	5 EULA Agreement	6 Summary	7 Start Installation
S Password *	et password for V	NebAccess/VPN's	web administrator.		
Password check *	* Required field				
					Back Next

15. In step 5, read and agree with EULA:

We	ebAccess/VPN
	Installation Wizard
	1 2 3 4 5 6 7 CA Setup Network Settings Domain Settings Set Web Admin Password EULA Agreement Summary Start Installation
	You agree with EULA by pressing the Next button. End User License Agreement for ADVANTECH software
	 PREAMBLE This End User License Agreement (hereinafter "EULA") is a legally binding document specifying the legal relationship between the company Advantech B+B SmartWorkx s.r.o., identification number 24148661, with its registered offices at Sokolská 71, Kerhartice, 562 04 Ústí nad Orlicí, registered with Regional Court of Hradec Králové, section C, record 31061



16. In step 6 overview the installation parameters.



Warning: Note that the installation wizard can be run only once and will be deactivated after installation.

WebAccess/VPN

	2	-3	4	5		
CA Setup	Network Settings	Domain Settings	Set Web Admin Password	EULA Agreement	Summary	Start Installation
	Now you c	an check your set	tings and start the i	nstallation if they are c	orrect.	
	Certificate Author	the crost	tod>			
	Common Nai	me: Jan	icus			
	Organizati	on: ADVANTECH	1			
	Coun	try: CZ				
	Loca	lity: Brno				
	Em	ail: jan.svoboda@	@advantech.com			
	External	IP: 10.40.40.160				
	Virtual Netwo	ork: 10.8.0.0/255.	254.0.0			
	Website Doma	ain: <will be="" regis<="" td=""><td>tred></td><td></td><td></td><td></td></will>	tred>			
	Domain Na	me: jan.vpnportal.	cloud			



17. Click *Start installation* and wait while "Installation in progress, please wait" remains on top of the page. After installation is done, the message will change to "Installation is completed, you can continue to login" and the button *Go to Login* will be active.

WebAccess/VPN
Installation Wizard
####################################
Go to Login

18. Click that button, or go to to page https://IP-OF-APPLIANCE and login to WebAccess/VPN admin account (username admin, password you set in wizard). Installation wizard is now deactivated.

WebAc	cess/VPN login
Username	
Password	
Log in	Lost your password?
©2017 Adv	vantech B+B SmartWorx.

Default license (5 Routers, 2 Standalone VPN Clients) is active after installation. You can download router user modules for the next step directly from WebAccess/VPN (Administration, Application menu item).