

10

Advanced Technology Days

12. i 13. studenog 2014., Cinestar Arena Centar

10

Neiskorištene mogućnosti Windows-a 8.1

Željko Lav Pišpek
System Engineer
zeljko.lav.pispek@blento.org



Sadržaj

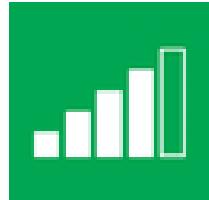
- Windows 8.1 kao WiFi pristupna točka (HotSpot)
- Korištenje Hyper-V Role bez administratorskih ovlasti
- VPN on Demand (VPN na zahtjev)

Što nam je sve potrebno?

- Računalo koje ima najmanje dvije mrežne kartice
- Jedna mrežna kartica mora biti bežična
- Jedna mrežna kartica mora biti spojena na Internet

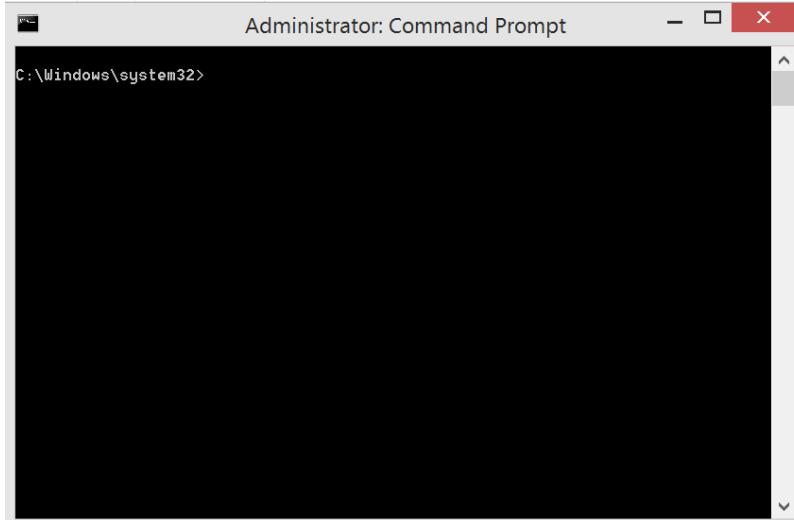
Windows 8.1 kao WiFi pristupna točka (HotSpot)

- Prijašnje verzije windowsa imale mogućnost GUI-a
- Sada podržane samo CMD naredbe
- Hot spot možemo koristiti na 3 načina, koristeći:
 - mrežnu karticu za Internet i WiFi za klijente
 - USB 3G ili 4G za Internet i WiFi za klijente
 - 2 WiFi kartice, jedna spojena na Internet a druga za klijente



Korak 1 - izrada virtualne mreže u win 8 & 8.1

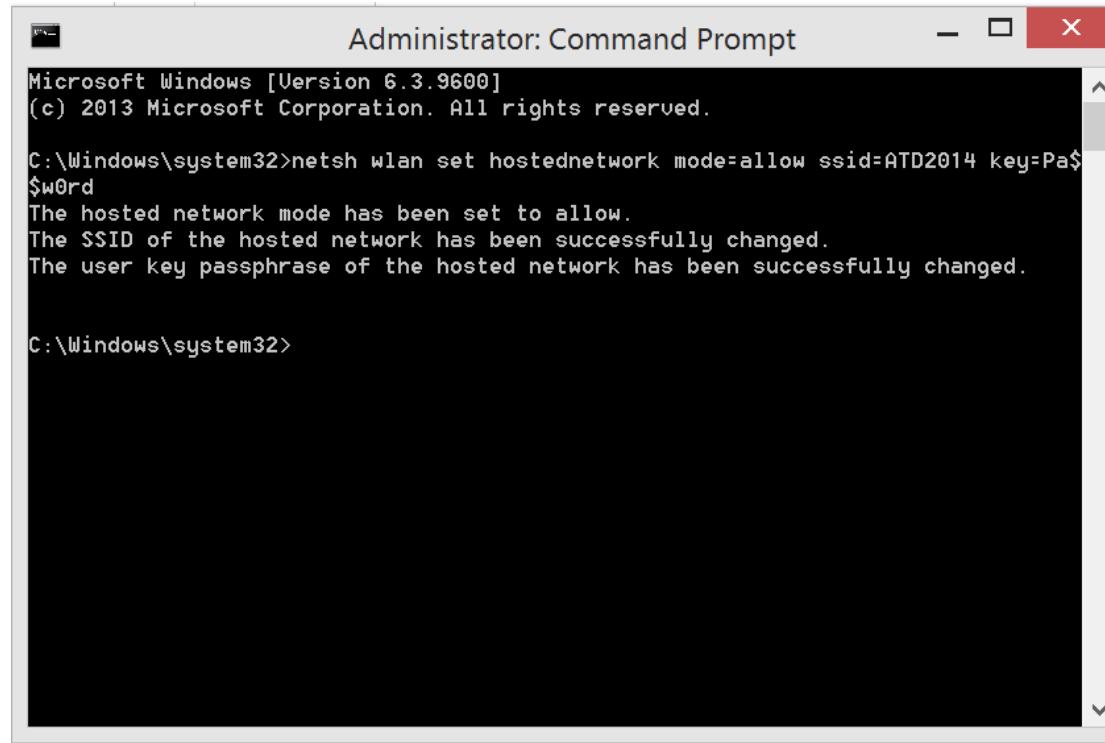
- Otvoriti CMD sa Administratorskim privilegijama



- Kreirat ćemo bežičnu mrežu imena: ATD2014 i zaporkom:
Pa\$\$w0rd

Korak 1 - izrada virtualne mreže u win 8 & 8.1

- U CMD unijeti naredbu:
 - *netsh wlan set hostednetwork mode=allow ssid=ATD2014 key=Pa\$\$w0rd*



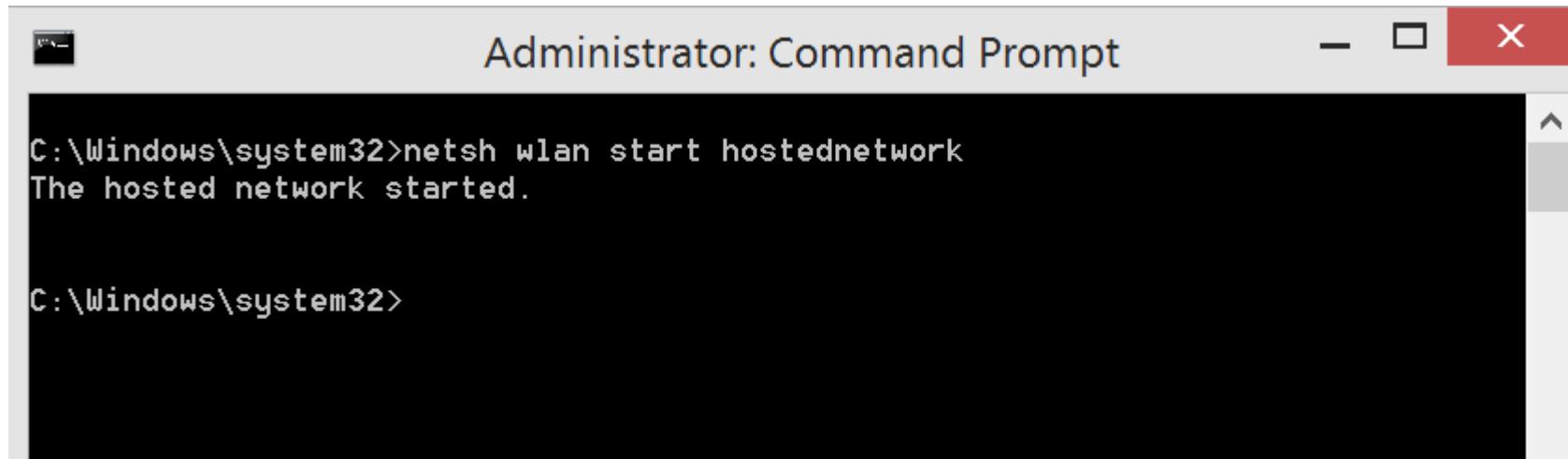
```
Administrator: Command Prompt
Microsoft Windows [Version 6.3.9600]
(c) 2013 Microsoft Corporation. All rights reserved.

C:\Windows\system32>netsh wlan set hostednetwork mode=allow ssid=ATD2014 key=Pa$$w0rd
The hosted network mode has been set to allow.
The SSID of the hosted network has been successfully changed.
The user key passphrase of the hosted network has been successfully changed.

C:\Windows\system32>
```

Korak 1 ...

- Kreiran virtualni adapter koji može raditi kao wireless access point
- Da bi radio potrebno ga je omogućiti CMD naredbom:
 - *netsh wlan start hostednetwork*



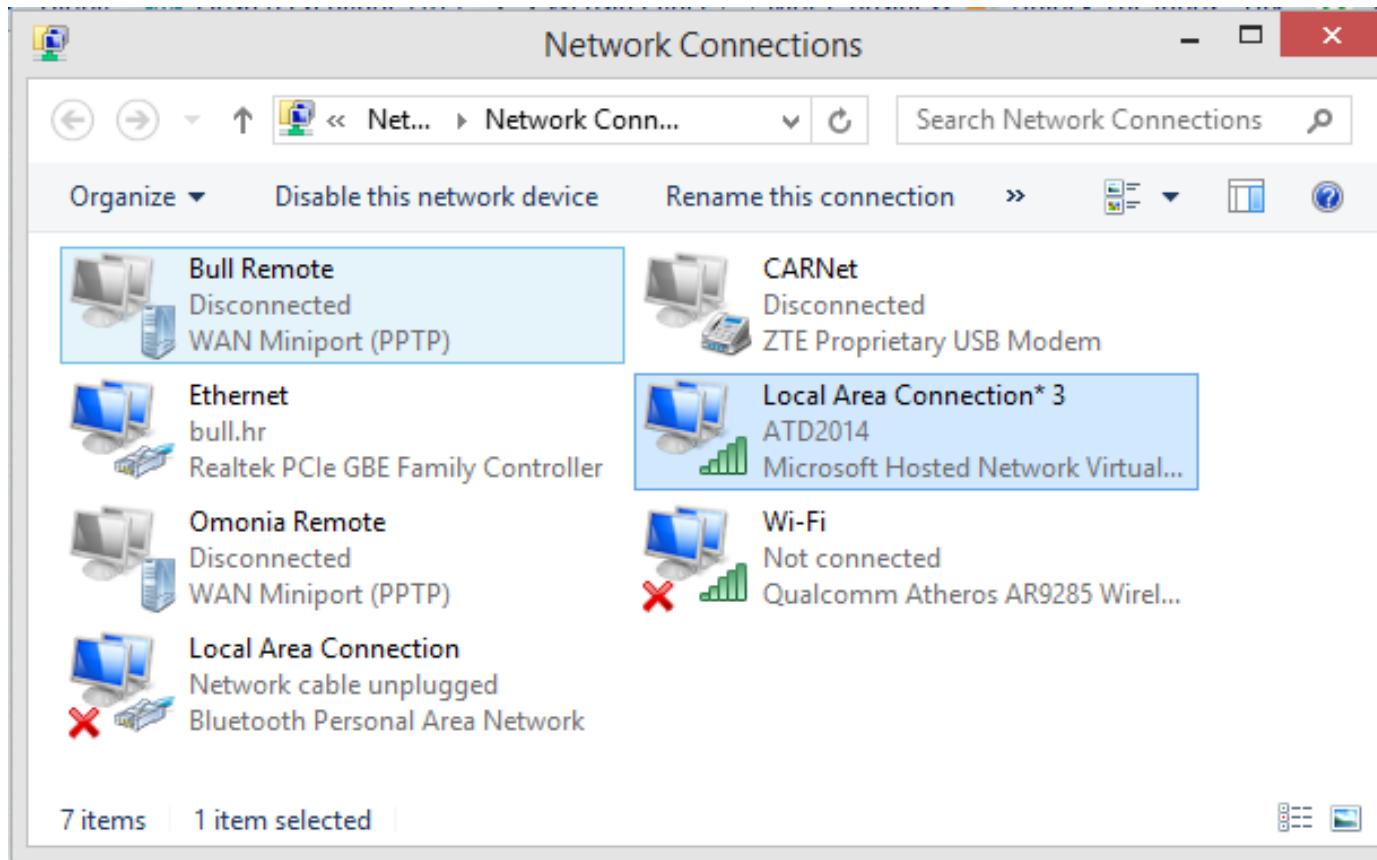
The screenshot shows an "Administrator: Command Prompt" window. The command `netsh wlan start hostednetwork` is entered, and the response "The hosted network started." is displayed. The window has a red title bar and standard Windows-style buttons.

```
C:\Windows\system32>netsh wlan start hostednetwork
The hosted network started.

C:\Windows\system32>
```

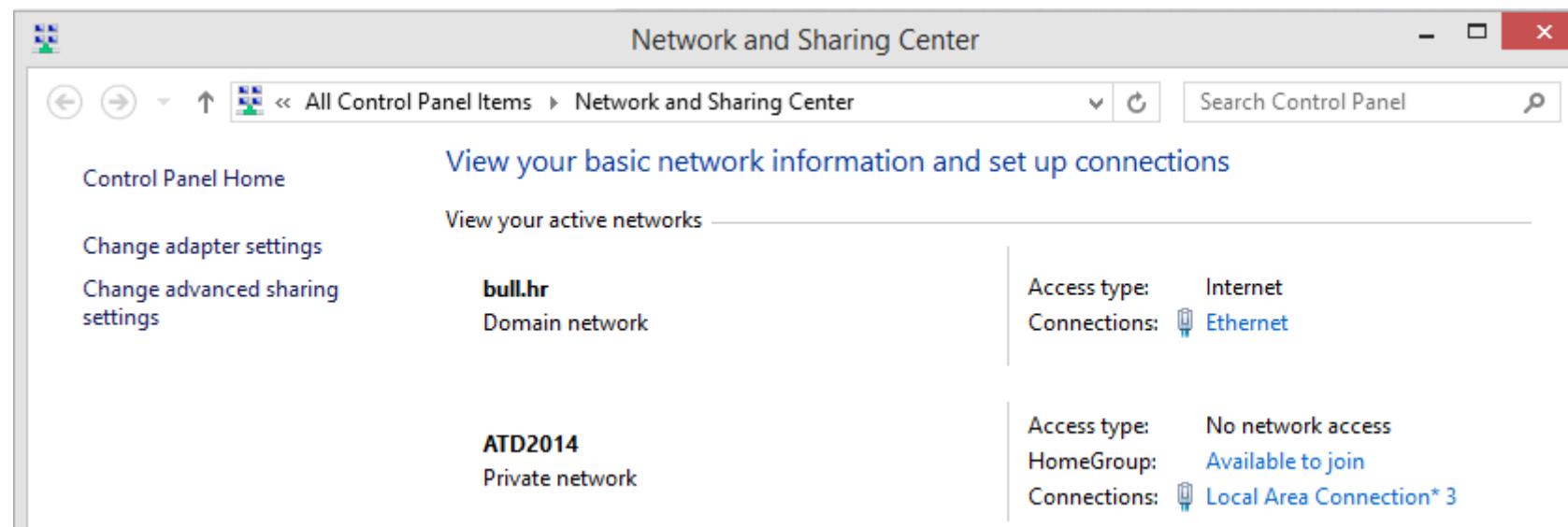
Korak 1 ...

- Virtualni mrežni adapter je pokrenut i može se vidjeti pod 'Network and shareing centar'



Korak 2 – dozvola Internet pristupa spojenim uređajima na virtualnu WiFi mrežu

- Ako otvorimo „NASC“ primijetit ćemo da je virtualni mrežni adapter aktivan ali nema Internet povezanost



Korak 2 ...

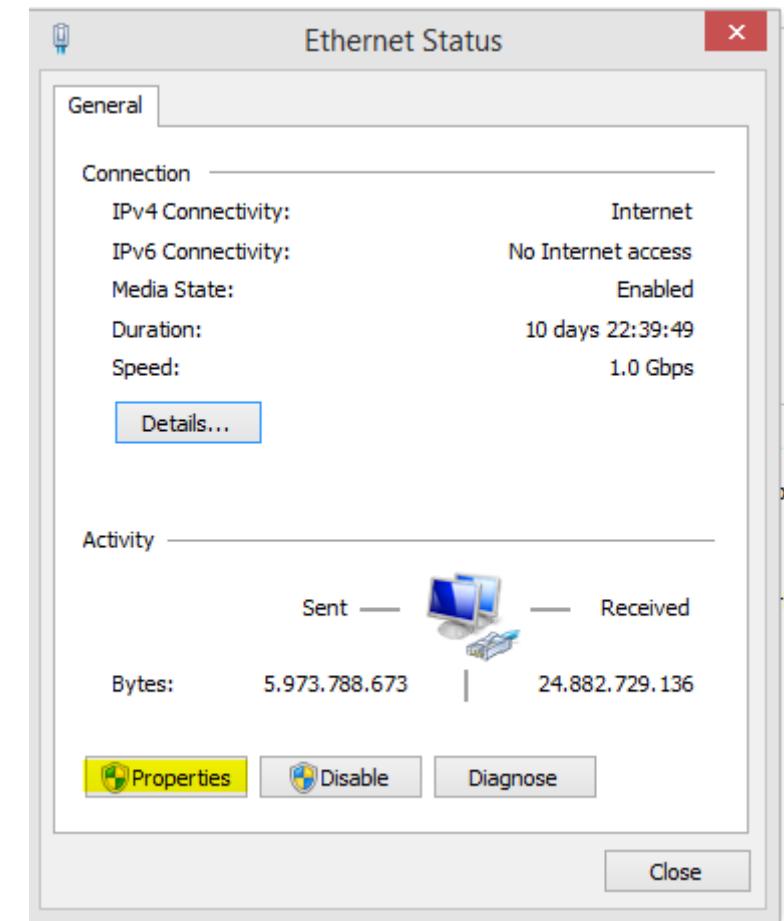
- potrebno je odabrati fizički mrežni adapter koji ima Internet pristup, a u našem slučaju je to *Ethernet* adapter

[View your basic network information and set up connections](#)

[View your active networks](#)

bull.hr
Domain network

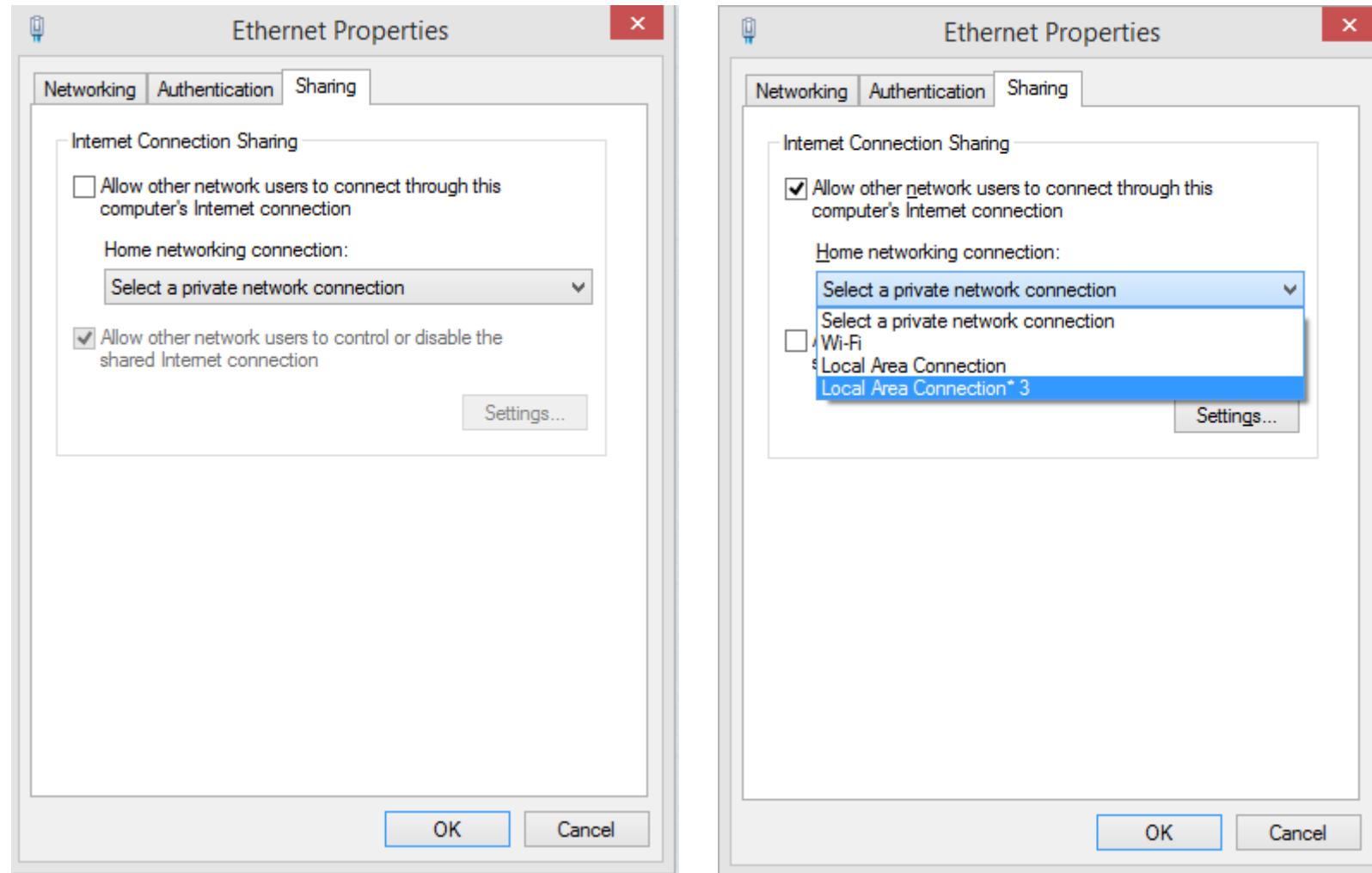
Access type: Internet
Connections: **Ethernet**



- za otvaranje „Status“ prozora odabiremo karticu „Properties“

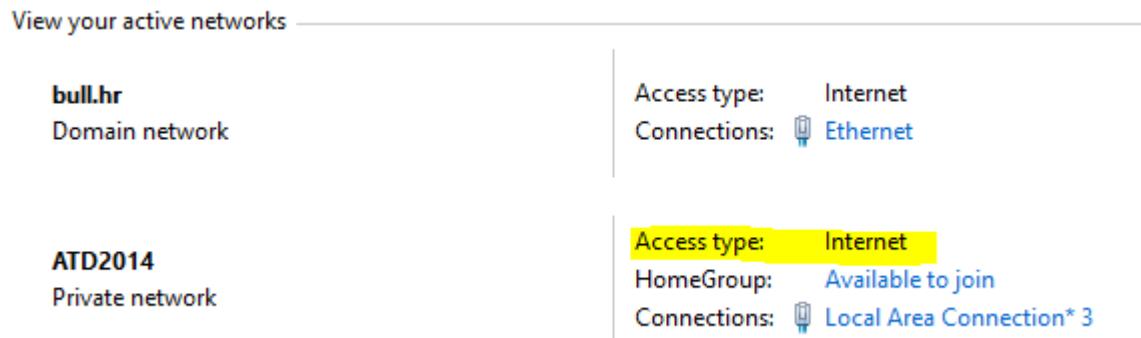
Korak 2 ...

- nakon odabira „Properties“ kartice odaberemo karticu „Sharing“



Korak 2 ...

- Nakon odabira *OK* i *Close* za spremanje promjena potrebno pričekati nekoliko sekundi kako bi se napravio interni *bridge* između WiFi i Ethernet kartice.
- Za provjeru uspješnog bridge-anja provjeriti status na „NASC”
 - Status virtualnog mrežnog adaptera „*Internet*”

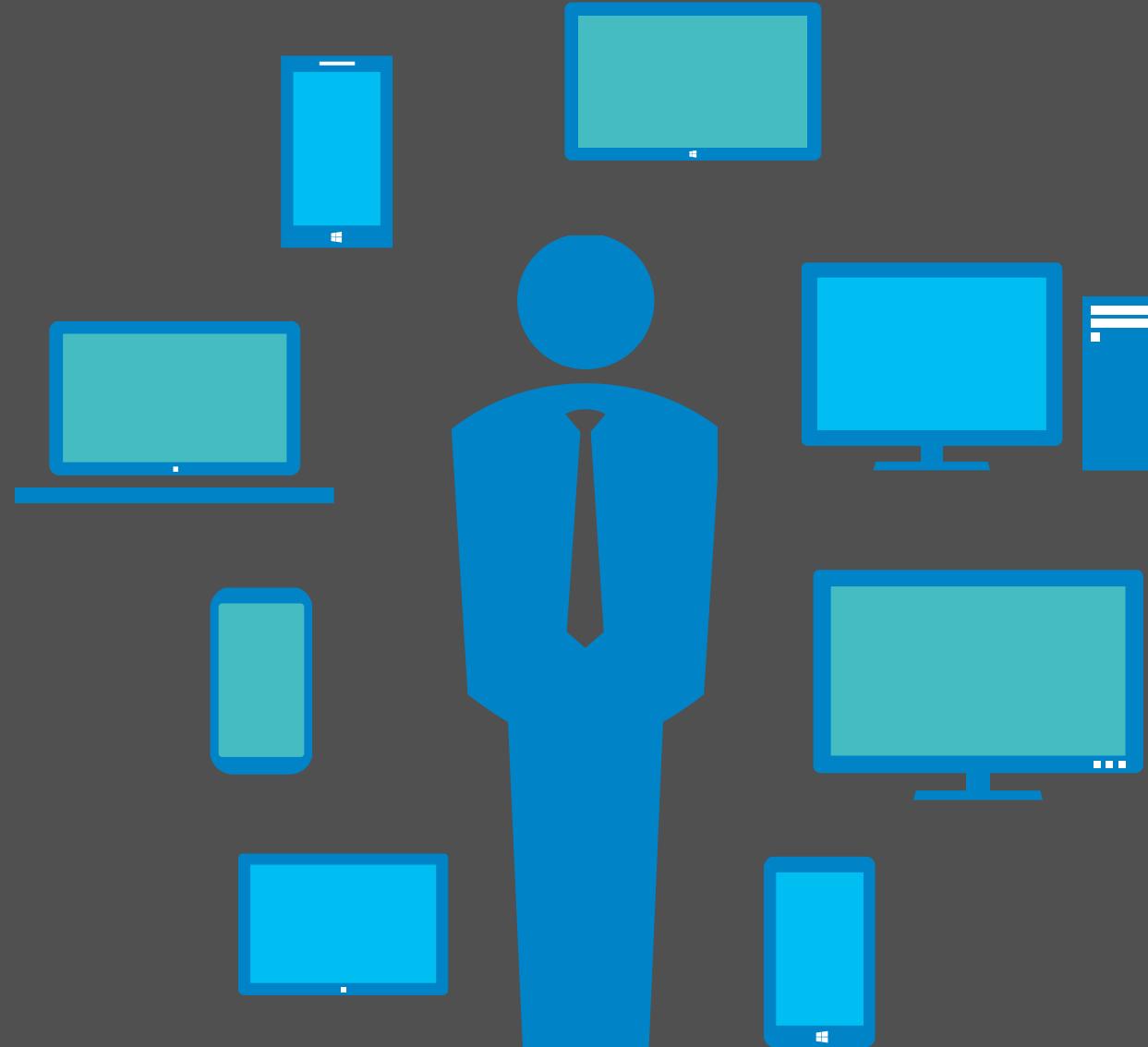


Korak 3 – Povezivanje WiFi uređaja na HotSpot

- Potrebno je na uređaju koji želimo povezati odabrati kreirani SSID (ATD2014) i upisati zaporku za spajanje (Pa\$\$w0rd) kako bismo mogli pristupiti internetu
- Svi uređaji koji se spoje na kreirani HotSpot se nalaze u istom mrežnom segmentu te je između njih moguće razmjenjivanje sadržaja (datoteka....)

Hosted Network

DEMO



Brisanje HotSpot moda

- Pokrenuti CMD pod administratorskim ovlastima
 - *netsh wlan stop hostednetwork* – zaustavljanje virt. adaptera
 - *netsh wlan set hostednetwork mode=disallow* – onemogućavanje virt. Adaptera
 - *netsh wlan show settings* – provjera postavki hosted mrežnog moda

The image shows two windows of the Windows Command Prompt running as Administrator. The left window displays the output of the command `netsh wlan show settings`, which shows various wireless LAN settings, including the **Hosted network mode allowed in WLAN service: No**. The right window shows the output of the command `netsh wlan set hostednetwork mode=disallow`, which confirms that the hosted network mode has been set to disallow.

```
Administrator: Command Prompt
Microsoft Windows [Version 6.3.9600]
(c) 2013 Microsoft Corporation. All rights reserved.

C:\Windows\system32>netsh wlan show settings
Wireless LAN settings
Show blocked networks in visible network list: Yes
Only use GP profiles on GP-configured networks: No
Hosted network mode allowed in WLAN service: No
Allow shared user credentials for network authentication: Yes
Block period: Not Configured.
Auto configuration logic is enabled on interface "Wi-Fi"

C:\Windows\system32>

Administrator: Command Prompt
C:\Windows\system32>netsh wlan stop hostednetwork
The hosted network stopped.

C:\Windows\system32>netsh wlan set hostednetwork mode=disallow
The hosted network mode has been set to disallow.

C:\Windows\system32>
```

Aktivacija Hyper-V role

- Preduvjeti za instalaciju
 - Windows 8/8.1 Pro x64
 - 64 bit procesor s SLAT tehnologijom
 - 4 GB sistemske memorije min
 - BIOS-level Hardware Virtualization



Aktivacija Hyper-V role

- Instalacija Hyper-V role
 -  + Q – upisati „turn windows features on or off“
 - Odabrat i omogućiti Hyper-V

Ukoliko hyper-v rola nije bila prije omogućena potrebno je prihvati izmjene te ponovno pokrenuti računalo

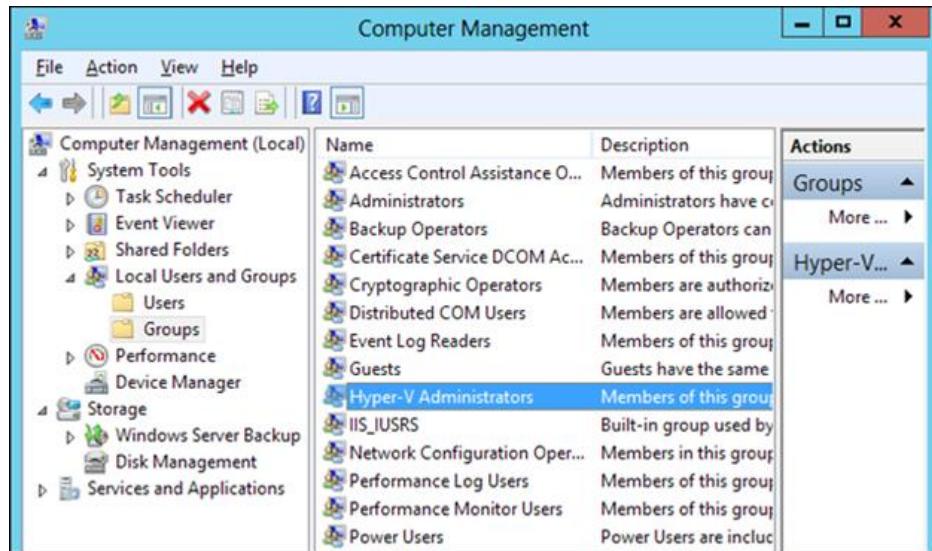


Korištenje Hyper-V role bez admin ovlasti

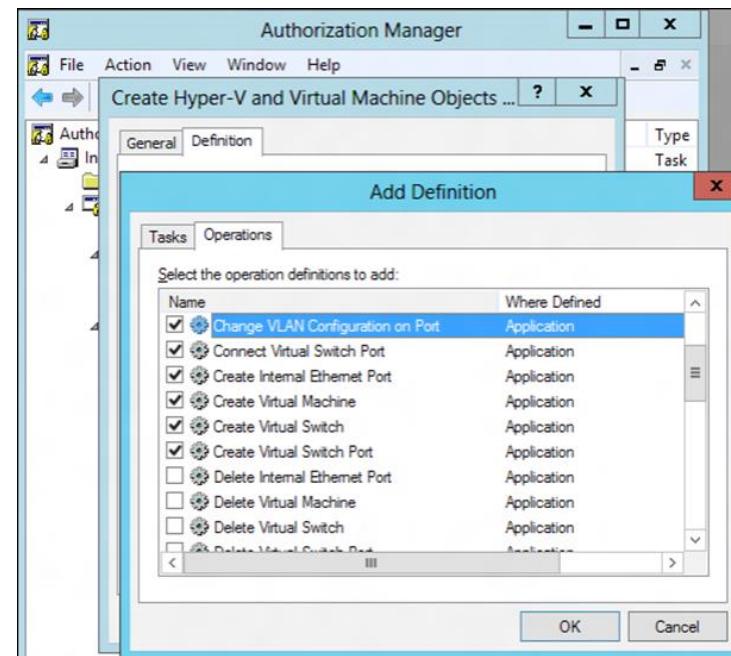
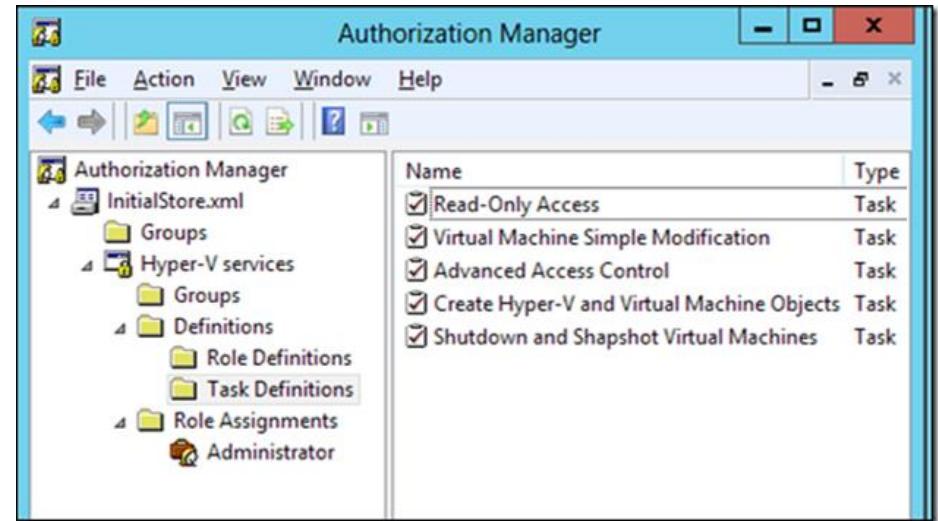
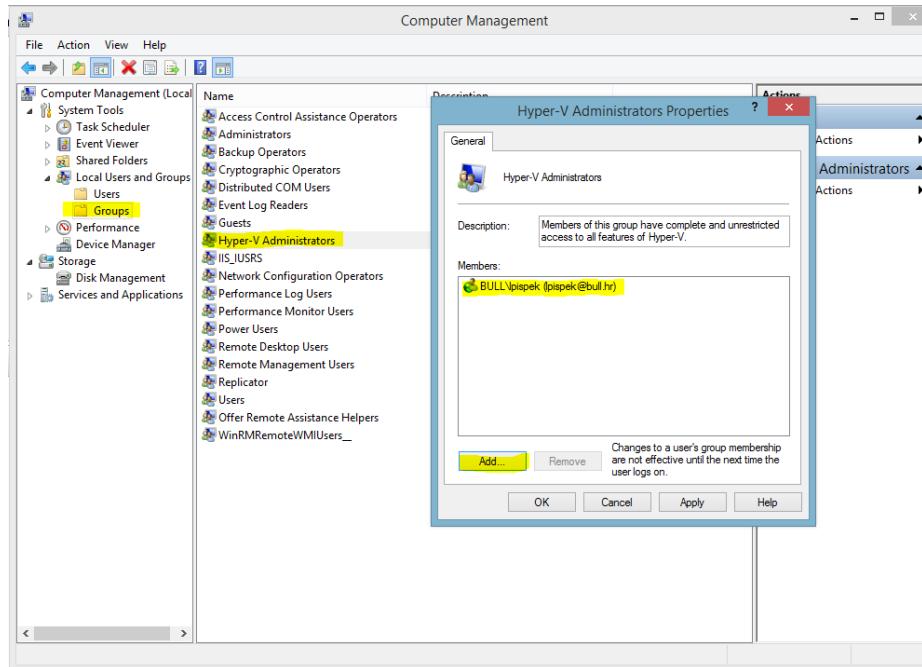
- Da bismo mogli koristiti hyper-v opcije moramo delegirati prava na hyper-v običnom domenskom korisniku
- Najjednostavniji način je da na klijentskom računalu na kojem imamo instaliranu hyper-v rolu dodamo domenskog korisnika u lokalnu „Hyper-V Administrators“ grupu

Dodavanje korisnika u „Hyper-V Admin” grupu

- Korisnika dodajemo na slijedeći način
 - odaberemo  + Q i zatim upišemo „Computer Management”
 - otvorimo „System Tools” > „Local Users and Groups”
 - sa desne strane odaberemo „Groups” > otvorimo „Hyper-V Administrators” grupu

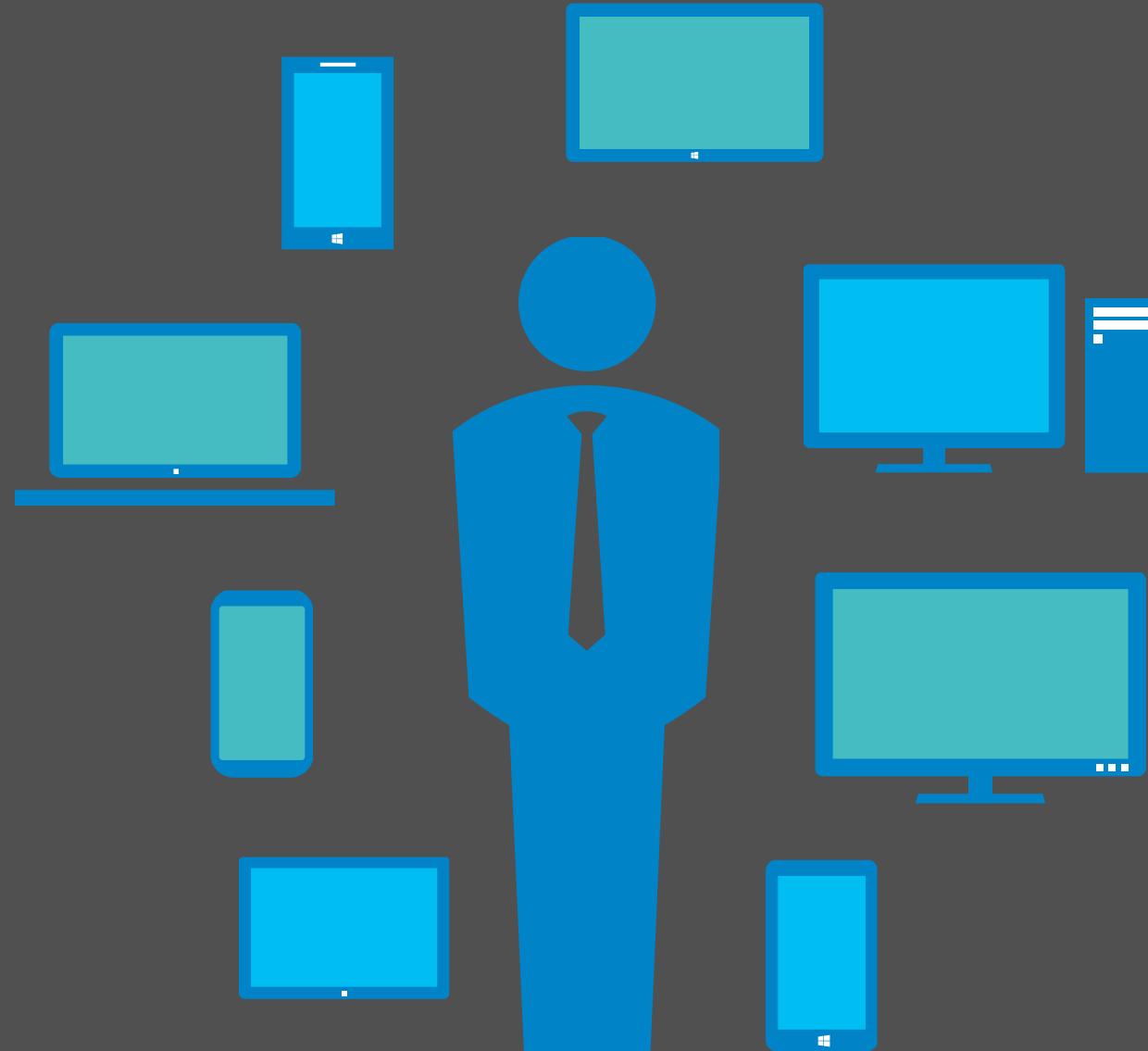


Dodavanje korisnika u „Hyper-V Admin” grupu



DEMO

Hyper-V

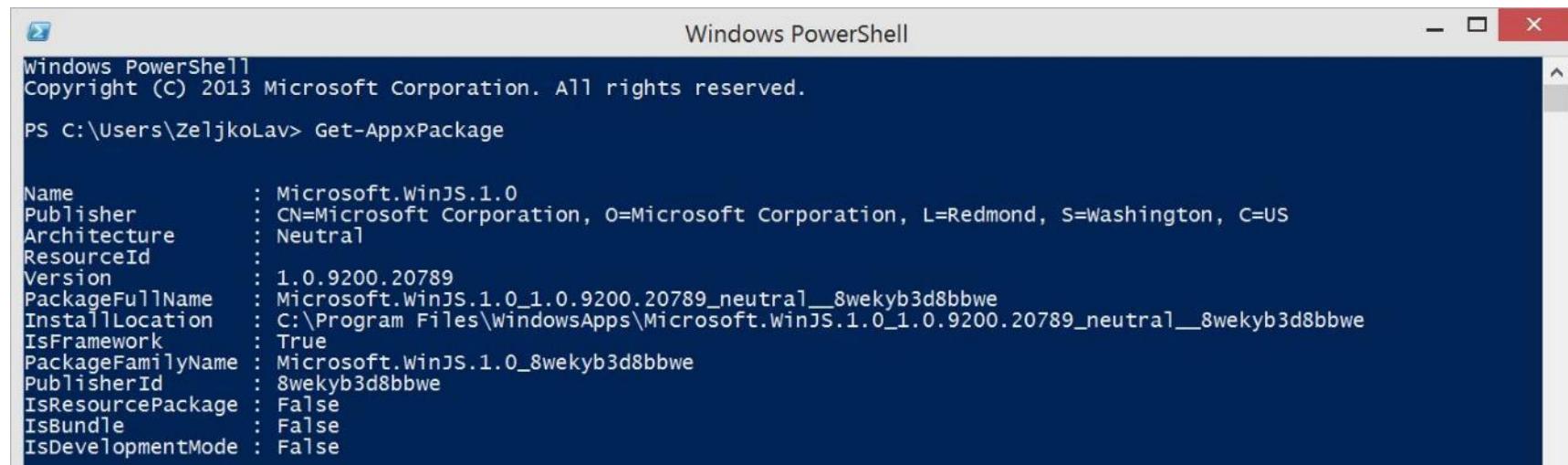


VPN on demand (VPN na zahtjev)

- windows 8.1 klijent omogućava podizanje VPN-a na zahtjev
- omogućuje spajanje u korporativnu mrežu automatski prilikom pokretanja aplikacije za koju podesimo VPN spajanje
- VPN on demand nije podržan ako:
 - su računala članovi domene
 - nije omogućena opcija „Split Tunneling“

VPN on demand (VPN na zahtjev)

- Pokretanje VPN-a se definira parametrom „ApplicationID”
 - standardne aplikacije to je putanja do „binary” datoteke (.exe)
 - windows 8 style aplikacije koristimo ime paketa aplikacije
 - npr. za skype - *Microsoft.SkypeApp_kzf8qxf38zg5c*
- Popis pakeka aplikacija možemo dohvatiti PowerShell naredbom
 - *Get-appxpackage*



```
Windows PowerShell
Copyright (C) 2013 Microsoft Corporation. All rights reserved.

PS C:\Users\ZeljkoLav> Get-AppxPackage

Name          : Microsoft.WinJS.1.0
Publisher     : CN=Microsoft Corporation, O=Microsoft Corporation, L=Redmond, S=Washington, C=US
Architecture   : Neutral
ResourceId    :
Version       : 1.0.9200.20789
PackageFullName: Microsoft.WinJS.1.0_1.0.9200.20789_neutral__8wekyb3d8bbwe
InstallLocation: C:\Program Files\WindowsApps\Microsoft.WinJS.1.0_1.0.9200.20789_neutral__8wekyb3d8bbwe
IsFramework   : True
PackageFamilyName: Microsoft.WinJS.1.0_8wekyb3d8bbwe
PublisherId   : 8wekyb3d8bbwe
IsResourcePackage: False
IsBundle      : False
IsDevelopmentMode: False
```

VPN on demand (VPN na zahtjev)

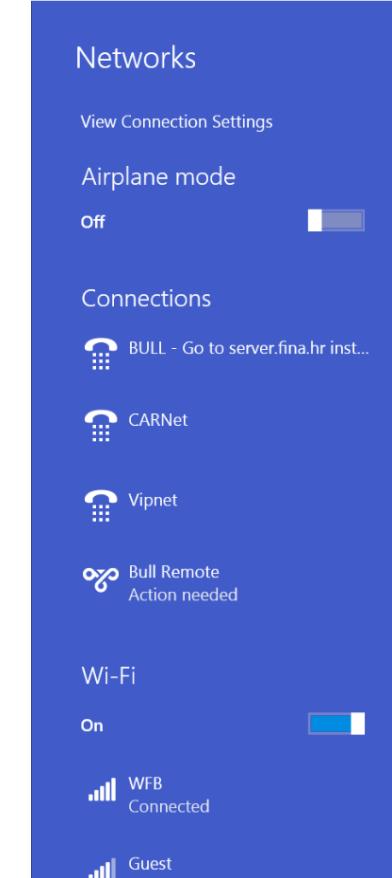
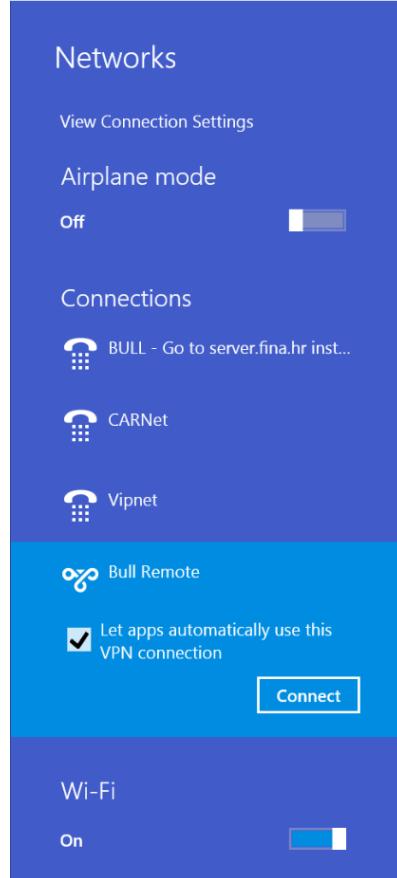
- Dodavanje aplikacije u VPN profil – PowerShell
 - *Add-VpnConnectionTriggerApplication [-Name] <string> –ApplicationID <String[]> -PassThru*
- VPN veza se sama od spaja kada zatvorimo sve aplikacije koje su dio konfiguracije okidanja VPN-a
- Više profila za okidanje VPN veze
 - Samo jedan profil može biti omogućen za automatsko VPN povezivanje
 - Ako je više profila na klijentu onda prvi kreirani profil ima omogućen trigger, a svi ostali profili imaju onemogućen trigger
 - Kroz GUI možemo omogućiti trigger za drugi profil – izvorni se onemogućuje
 - Ako obrišemo profil sa sustava idući dostupni postaje omogućen

VPN on demand (VPN na zahtjev)

- Filtriranje okidanja VPN-a
 - Možemo dodati mreže kojima vjerujemo te kada dođemo u iste da se VPN ne pokreće
 - Definiciju mreža radimo prema DNS suffix-u
 - PowerShell:
 - *Add-VpnConnectionTriggerTrustedNetwork [-Name] <string> [-DnsSuffix] <string[]>*
 - *Remove-VpnConnectionTriggerTrustedNetwork [-Name] <string> [-DnsSuffix] <string[]>*
 - *Remove-VpnConnectionTriggerApplication [-Name] <string> -ApplicationID <String[]> -PassThru*

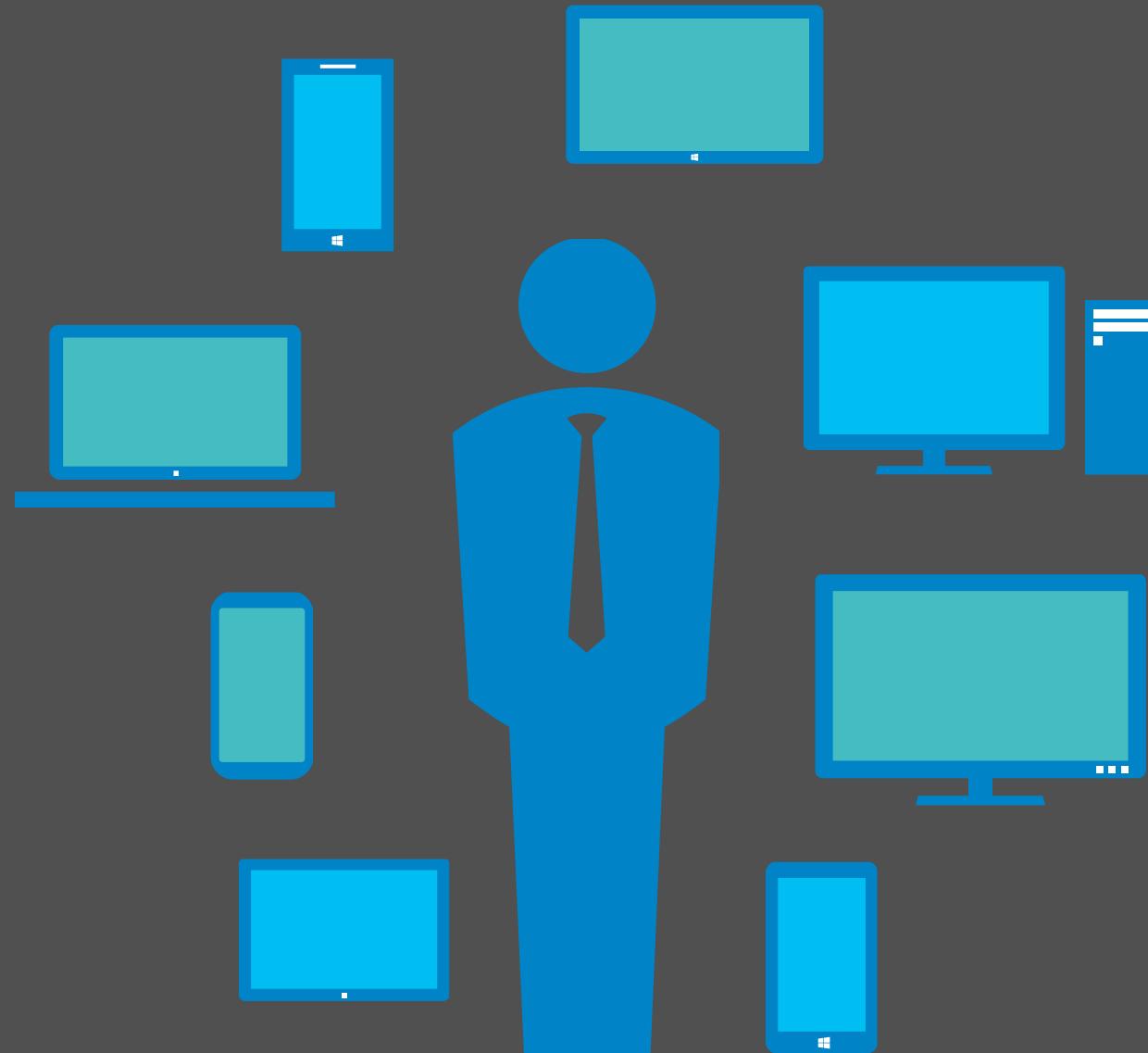
Korisničko iskustvo

- VPN profil s automatskim okidanjem se može vidjeti u Networks UI
- Ukoliko je aplikacija koja treba VPN pokrenuta i računalo ode u sleep nakon buđenja se VPN automatski spaja



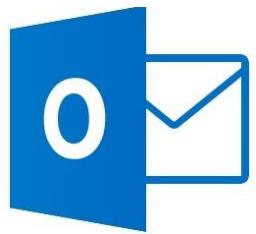
DEMO

VPN



Wiki

<http://wikidesk.makrobit.com>



zeljko.lav.pispek@blento.org



[@LavPispek](https://twitter.com/LavPispek)



lpispek@hotmail.com



lpispek@makrobit.com



© 2013 Microsoft Corporation. All rights reserved. Microsoft, Windows, Windows Vista and other product names are or may be registered trademarks and/or trademarks in the U.S. and/or other countries.
The information herein is for informational purposes only and represents the current view of Microsoft Corporation as of the date of this presentation. Because Microsoft must respond to changing market conditions, it should not be interpreted to be a commitment on the part of Microsoft, and Microsoft cannot guarantee the accuracy of any information provided after the date of this presentation. MICROSOFT MAKES NO WARRANTIES, EXPRESS, IMPLIED OR STATUTORY, AS TO THE INFORMATION IN THIS PRESENTATION.