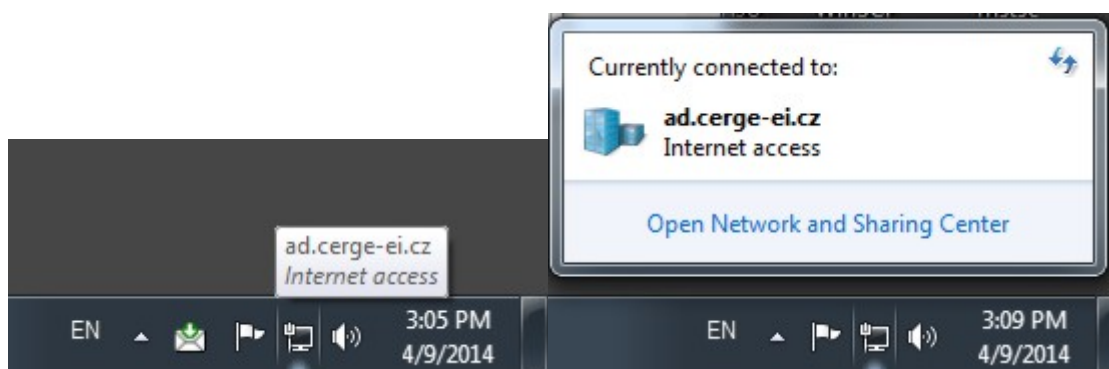


Network Connection

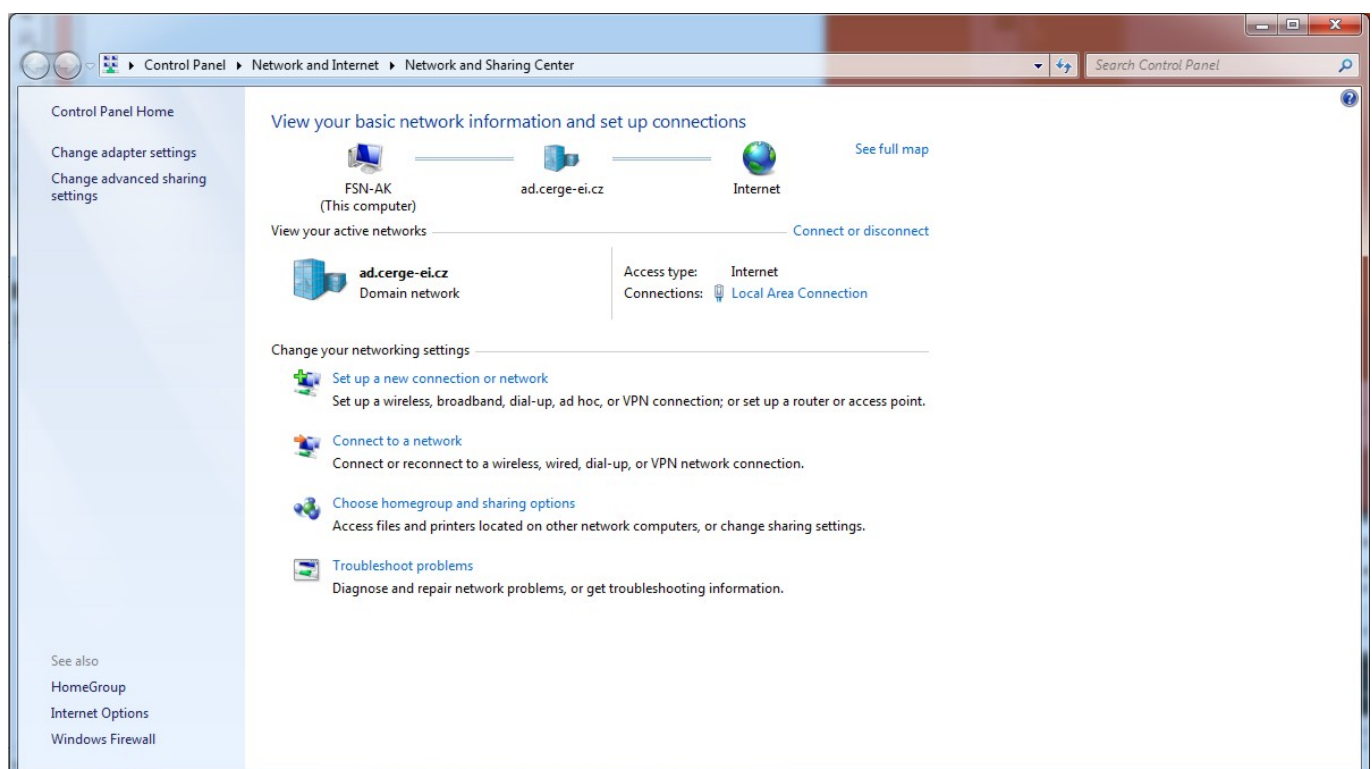
- [How to check connectivity](#)
- [How to check IP address](#)
- [How to differentiate malfunctions in network services](#)

How to check connectivity

There are different small icons on the taskbar in the lower right most corner of the Windows desktop. The following icon shows that you are connected to the local area network, authenticated on ad.cerge-ei.cz Active Directory and connected further to Internet.

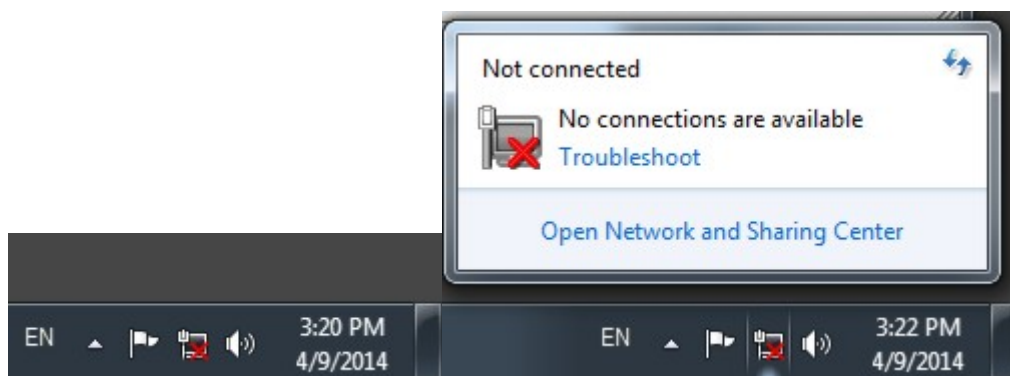


If you click on the icon and further on **Open Network and Sharing Center**, you'll get the following window:



It provides basic network information and set up connections (your computer name, domain network name/Active Directory etc.)

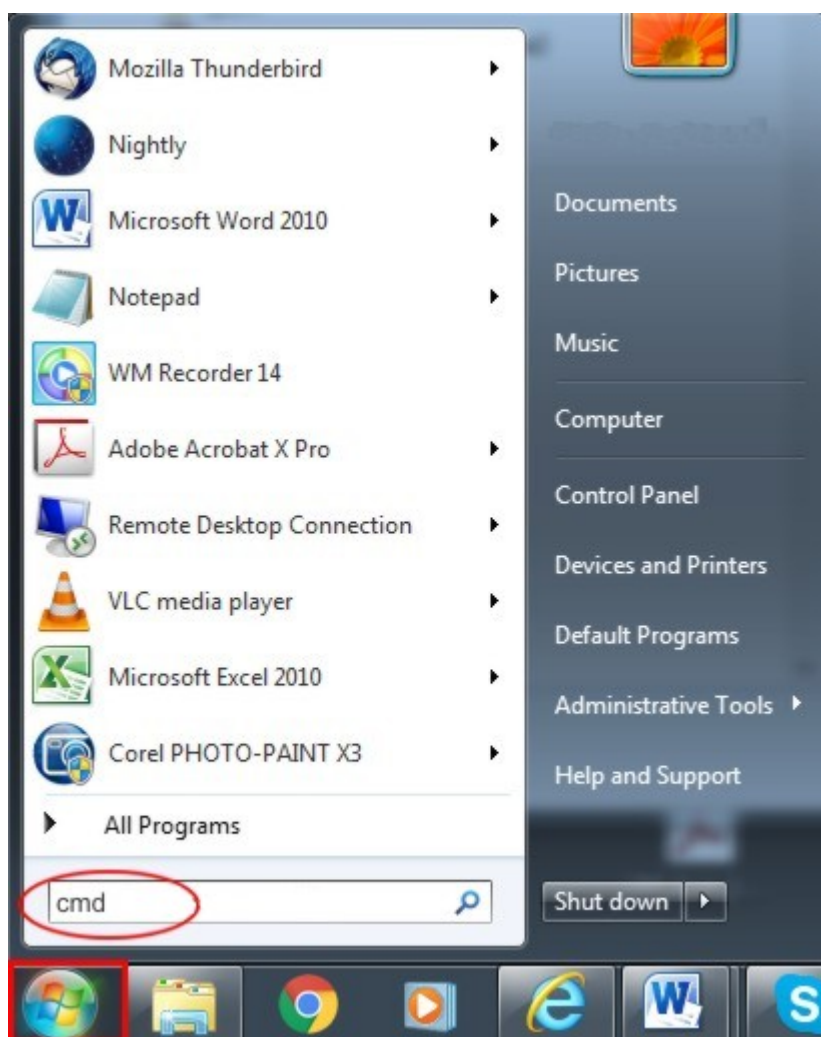
If the icon is crossed out, as shown bellow, it means that your computer has no network connection



How to check IP address

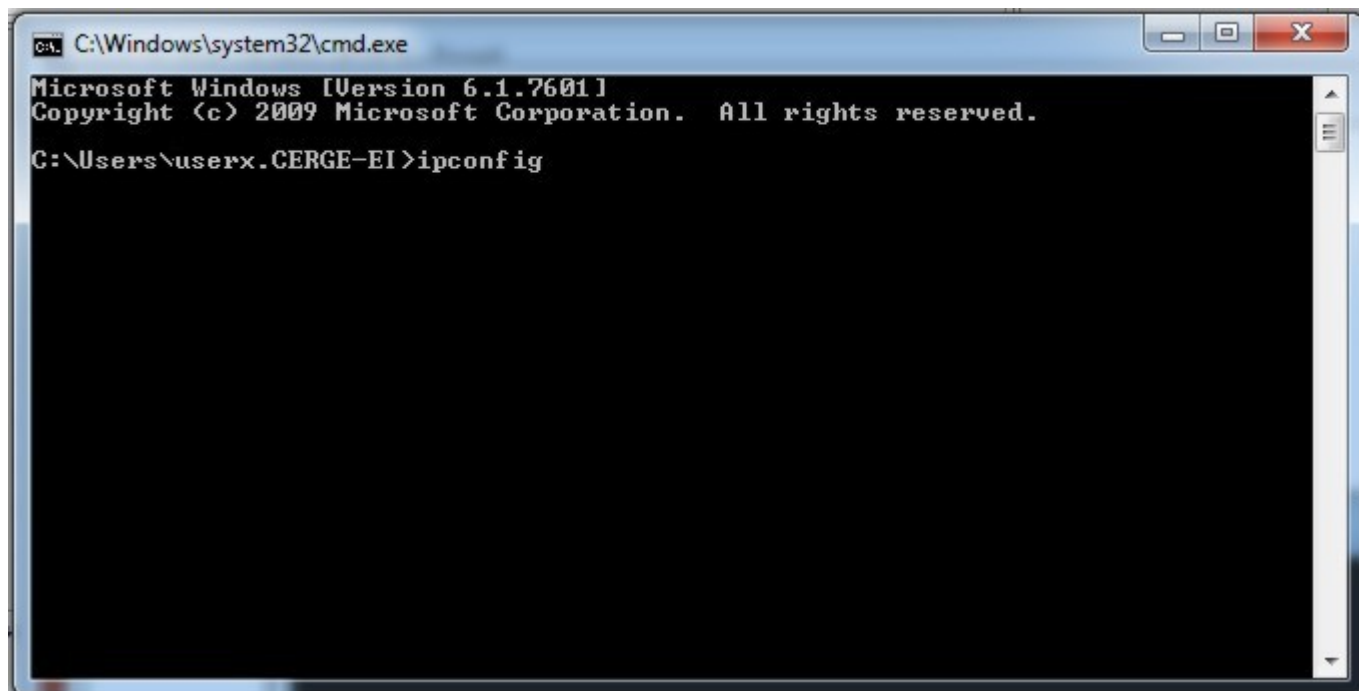


1. Left-click on the windows icon in the bottom left of your screen;



type **cmd** as indicated above and press Enter;

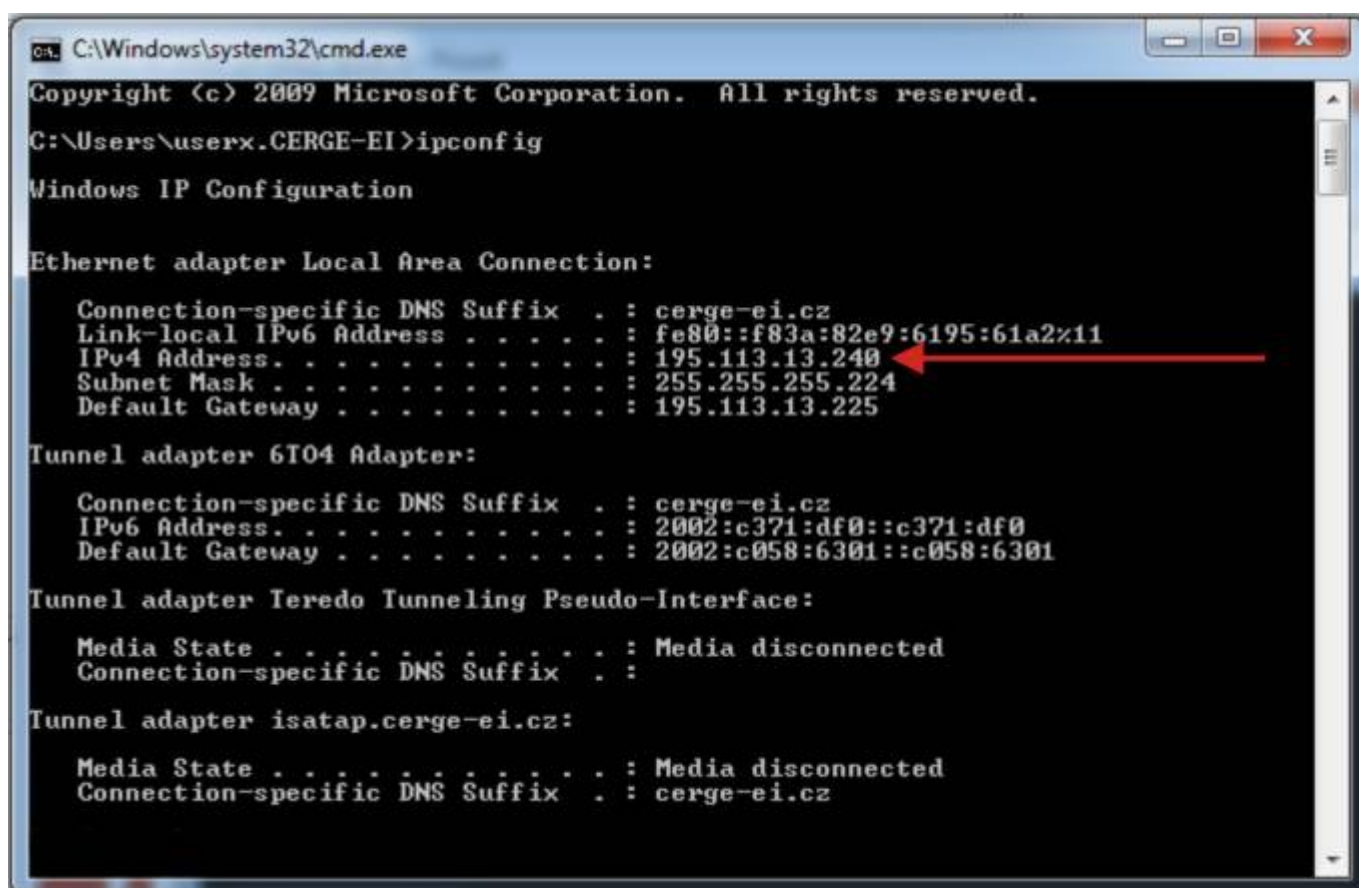
type **ipconfig** as indicated bellow



```
C:\Windows\system32\cmd.exe
Microsoft Windows [Version 6.1.7601]
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\userx.CERGE-EI>ipconfig
```

The IP address of your computer is displayed as indicated.



```
C:\Windows\system32\cmd.exe
Copyright (c) 2009 Microsoft Corporation. All rights reserved.

C:\Users\userx.CERGE-EI>ipconfig

Windows IP Configuration

Ethernet adapter Local Area Connection:

    Connection-specific DNS Suffix  . : cerge-ei.cz
    Link-local IPv6 Address . . . . . : fe80::f83a:82e9:6195:61a2%11
    IPv4 Address. . . . . : 195.113.13.240
    Subnet Mask . . . . . : 255.255.255.224
    Default Gateway . . . . . : 195.113.13.225

Tunnel adapter 6TO4 Adapter:

    Connection-specific DNS Suffix  . : cerge-ei.cz
    IPv6 Address. . . . . : 2002:c371:df0::c371:df0
    Default Gateway . . . . . : 2002:c058:6301::c058:6301

Tunnel adapter Teredo Tunneling Pseudo-Interface:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . :

Tunnel adapter isatap.cerge-ei.cz:

    Media State . . . . . : Media disconnected
    Connection-specific DNS Suffix  . : cerge-ei.cz
```

How to differentiate malfunctions in network services

Loss of network connectivity can manifest itself in different ways: logon failure due to inaccessible domain controller, no internet connection, mail server inaccessible, network resources inaccessible etc. Computer networking is structured in so called layers (https://en.wikipedia.org/wiki/OSI_model), where **layer 1** is the physical layer, which is practically the physical connection, a cable. Although

you can't trace completely the whole physical route, at least you can first check the connection of your device to the network socket via a UTP cable, provided you are connected by a cable to the network. If you notice that your device has no network connectivity (see "Check connectivity") **check the cable first.**



RJ45 connector of UTP data cable and Data wall socket

From:

<https://itinfo.cerge-ei.cz/> - CERGE-EI Infrastructure Services

Permanent link:

https://itinfo.cerge-ei.cz/doku.php?id=public:network_connection&rev=1473863768

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