

# **Network Assignment**

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**SWA**

## **1-why do we use both IP addresses and MAC address in the (TCP/IP) protocol?**

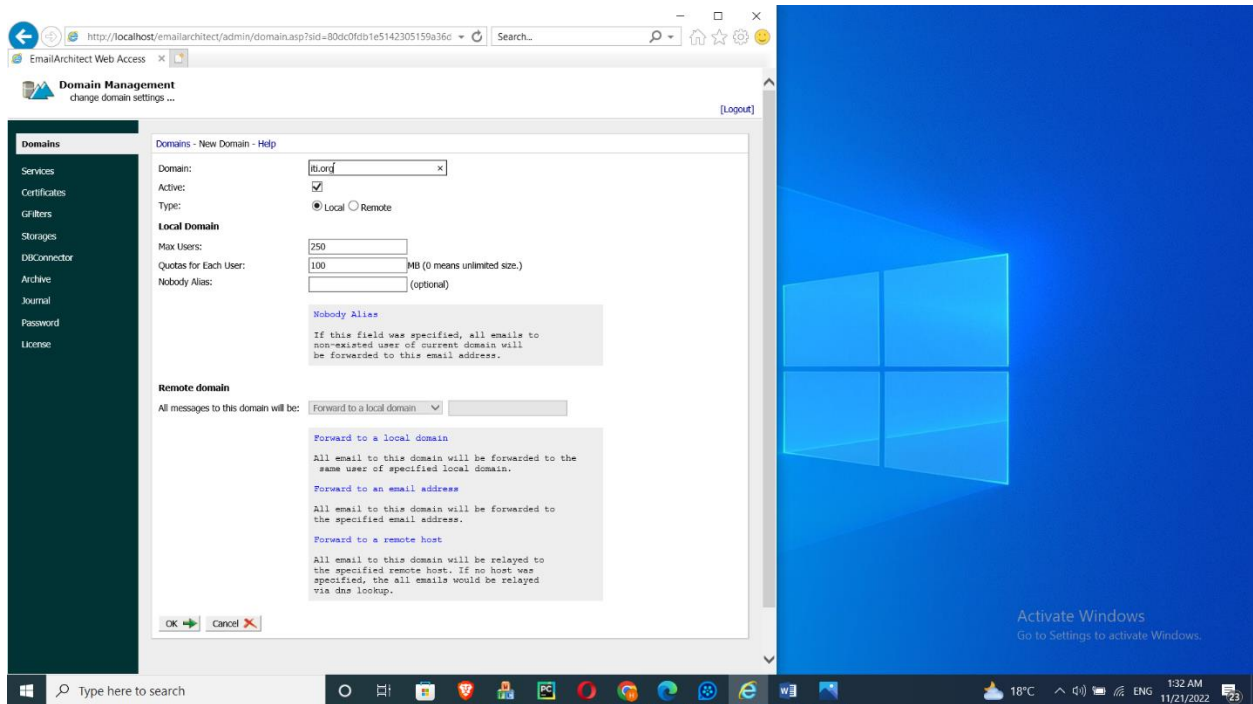
MAC addresses and IP addresses operate on different layers of the internet protocol suite. MAC addresses are used to identify machines within the same broadcast network on layer 2, while IP addresses are used on layer 3 to identify machines throughout different networks.

Even if your computer has an IP address, it still needs a MAC address to find other machines on the same network (especially the router/gateway to the rest of the network/internet), since every layer is using underlying layers.

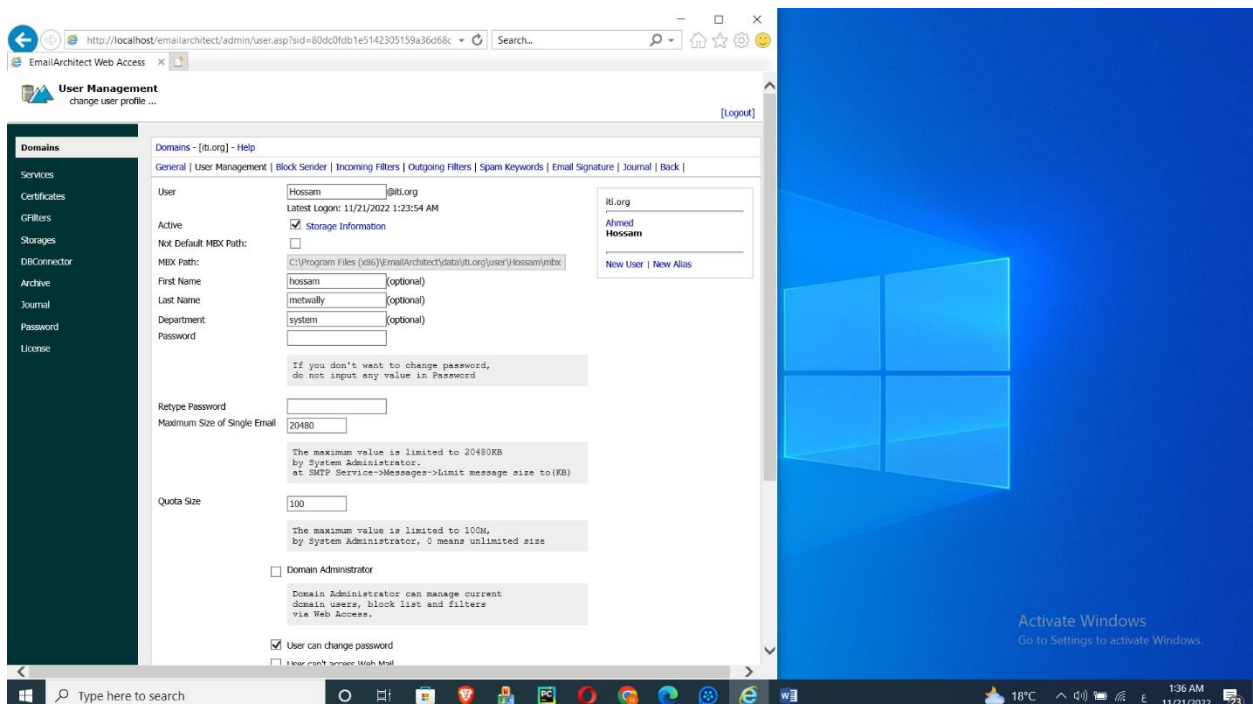
## **2-why do we get only one IP address for google.com when we use nslookup command?**

Google has hundreds of thousands of servers across the entire world. But maybe when you look up the domain, it gives you only one IP, which will point to the nearest load balancer in the nearest datacenter.

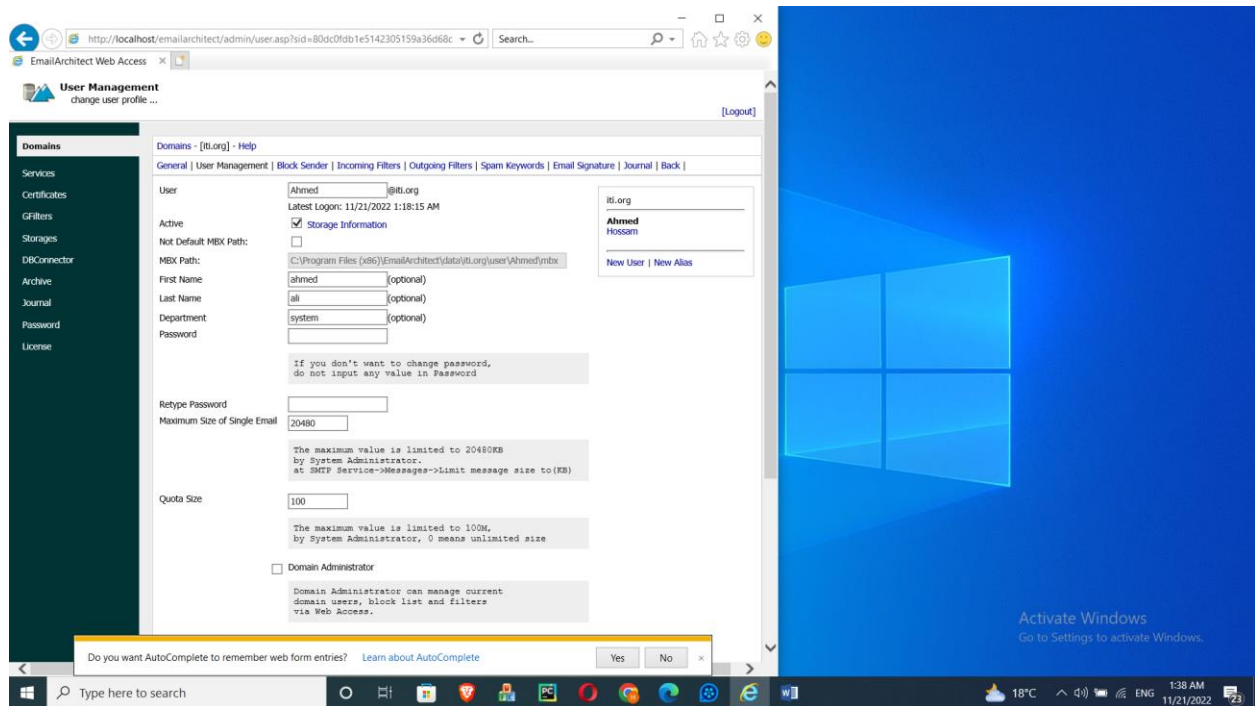
## Create the domain [iti.org]



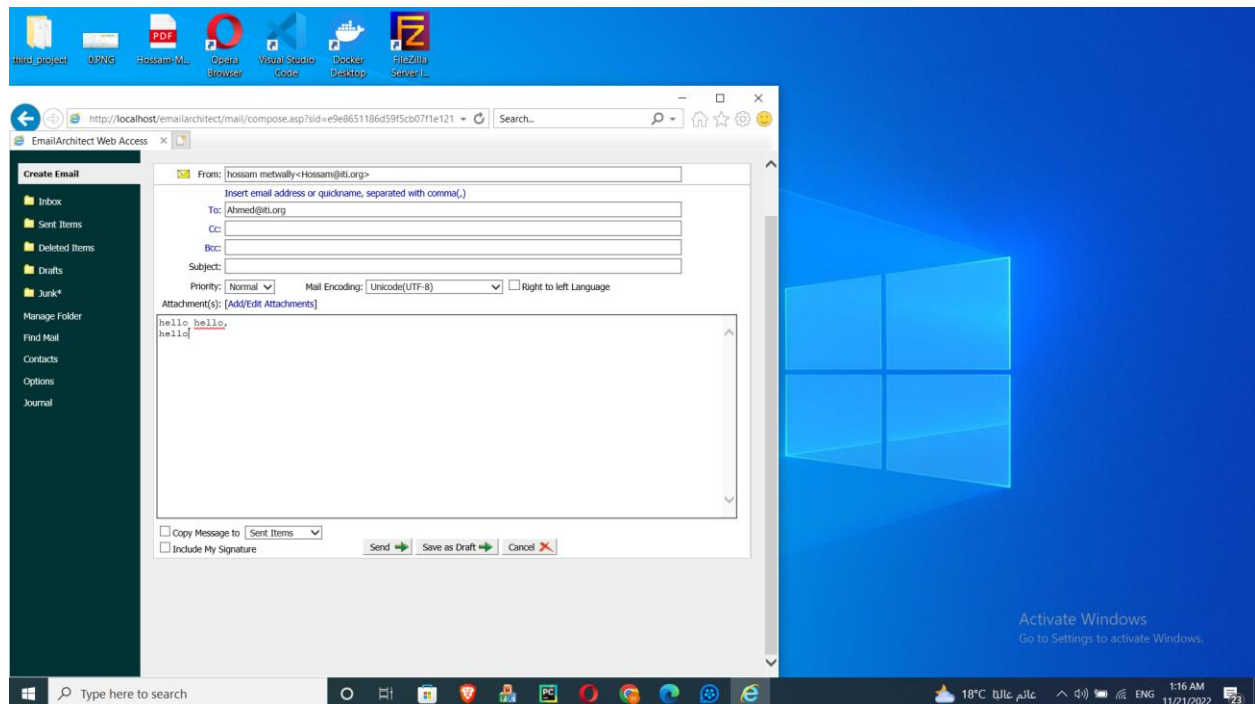
## Create the first user [Hossam/imap4]

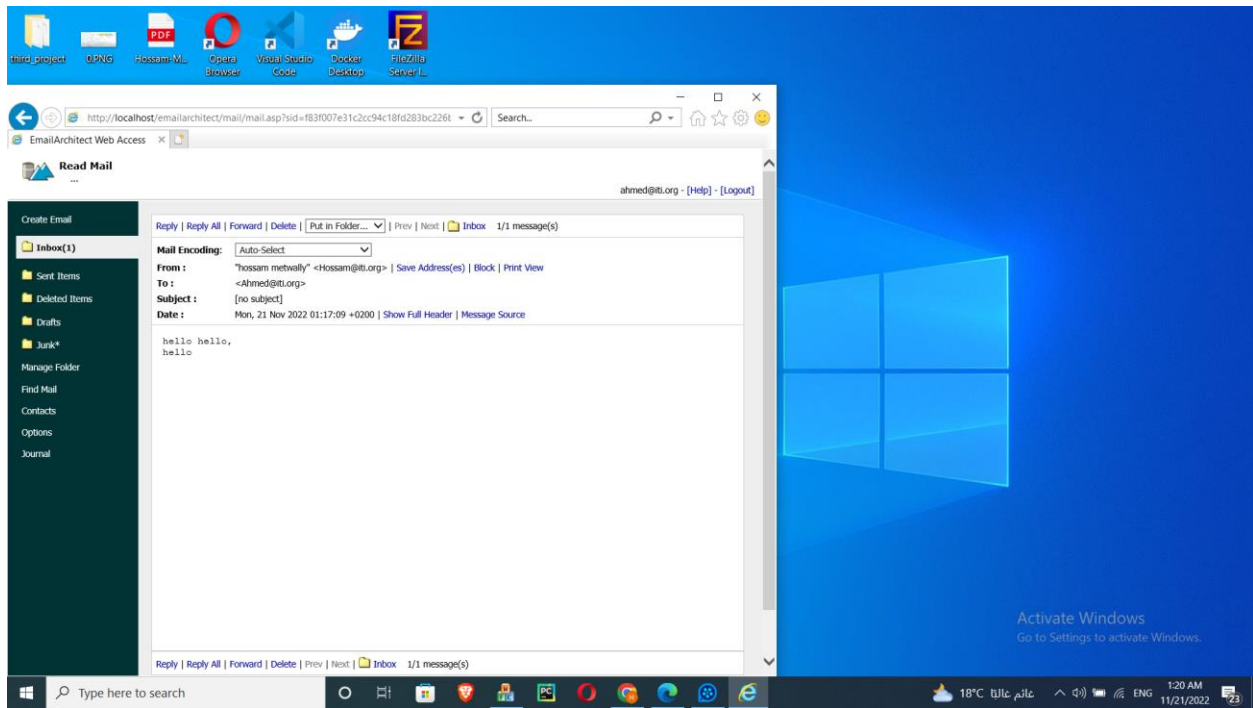
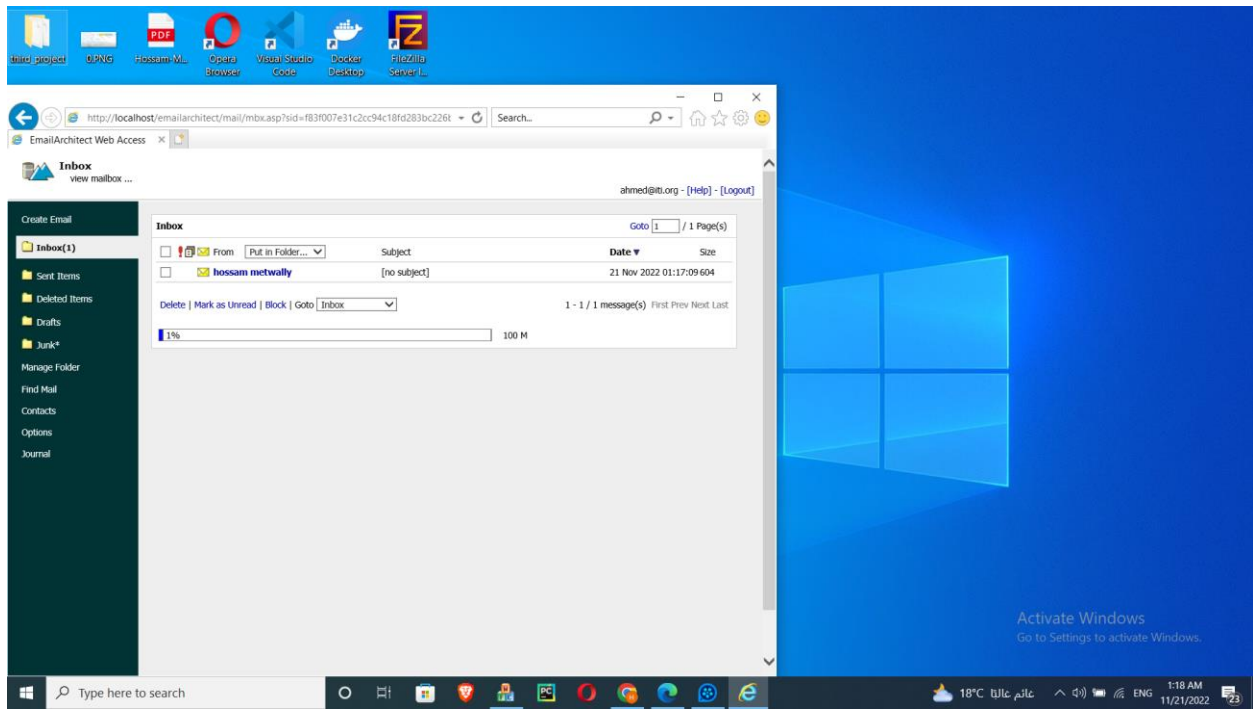


## Create the second user [Ahmed/pop3]

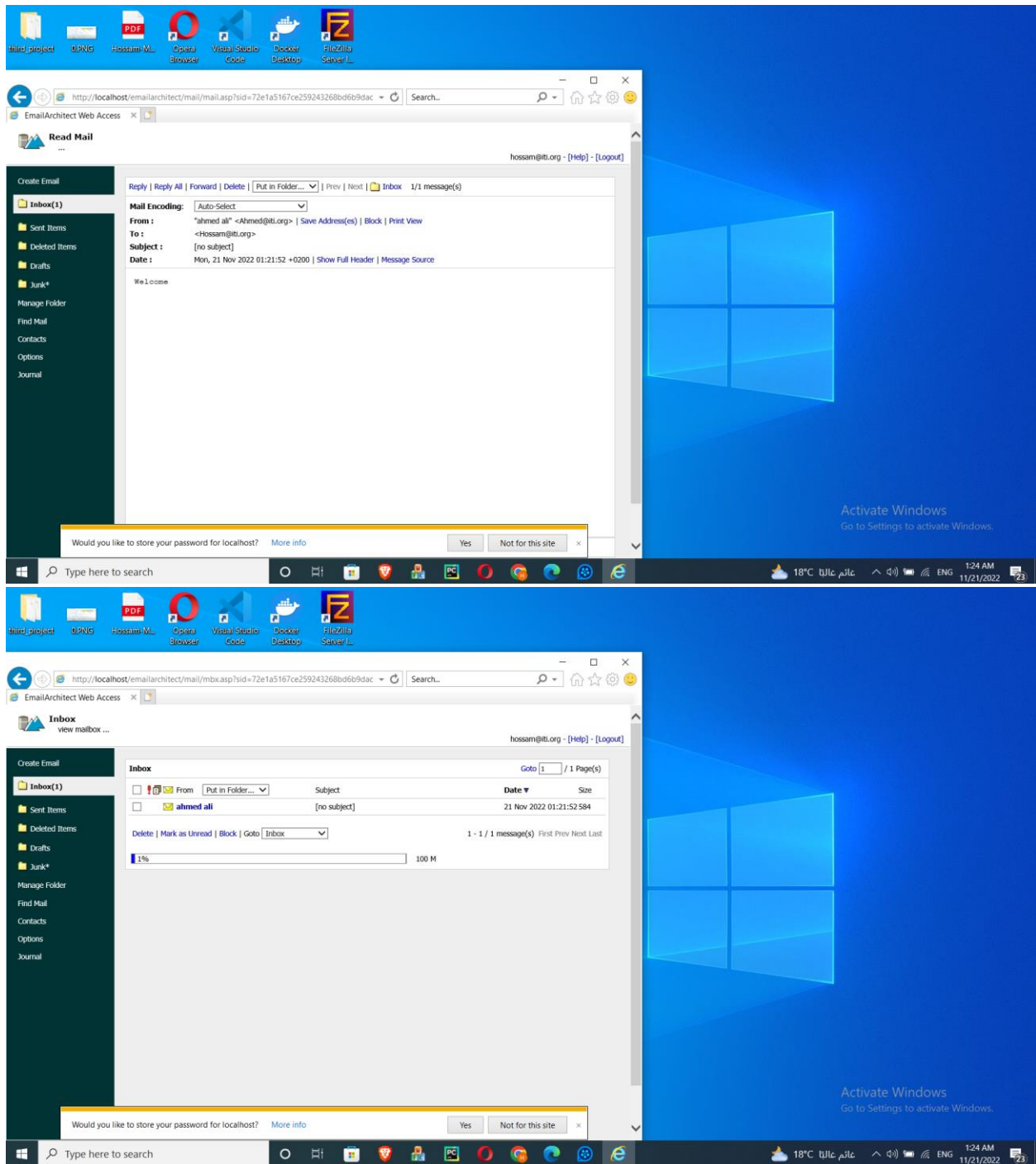


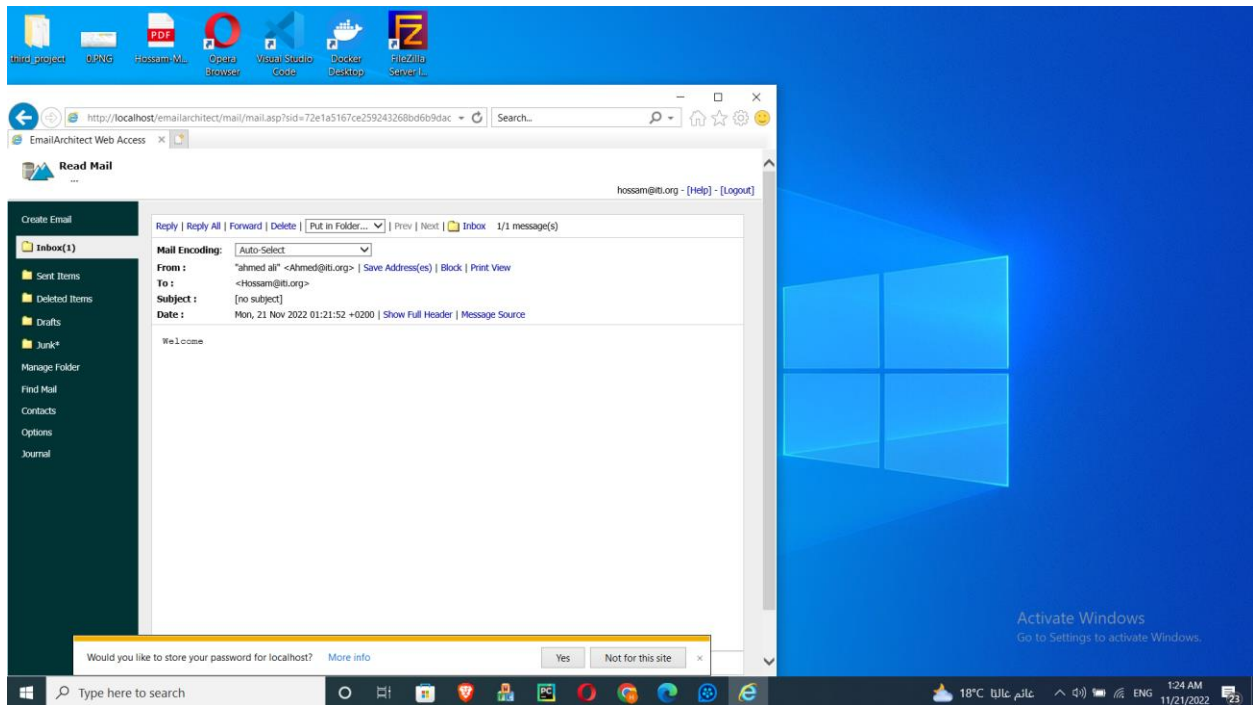
## Sending message from Hossam to Ahmed





## Sending message from Ahmed to Hossam





## Domain

