Basics

Question 1: Why Linux Server for Application Hosting?

1. Linux-based hosting is more popular, it has more of the features web designers expect
2. To make windows server for hosting it need specific requirements.
3. If you are not running one of the applications below you should be okay using a Linux OS

**Windows applications which require a Windows server:**

* ASP Classic
* ASP.NET
* MSSQL (Microsoft SQL Server)
* MS Access (Microsoft Access)
* Visual Basic Development
* C#
* Remote Desktop (dedicated server only)

Windows Dedicated Servers can support additional Windows-specific applications. For some applications, you may need to purchase a license and install the software on your Windows dedicated server.

* Microsoft Exchange (requires license & Installation)
* Microsoft SharePoint (requires license & Installation)

1. Linux, while being a free and open-source platform, has remained an industry standard and is the most commonly used operating system today
2. It is by far the most popular operating system of choice for web servers and has more of the features that professional web designers expect

**Applications that require a Linux-based server:**

* SSH
* Scripts or applications that require specific Apache modules

**File Names**

Another difference between Linux and Windows servers is that Linux files are case sensitive while Windows files are not.

For example:

* On a Linux server, *home.html* and *Home.html* are different names.
* On a Windows server, *home.html*, *Home.html* and *HOME.HTML* are all the same name.

## Server Security

Although many people consider Linux to be more secure than Windows, both operating systems are equally secure. Security really depends more upon the server setup and the administrators running the server.

Q 2: What is SSH?

Answer: Secure Shell. A protocol that allows two machines to communicate securely over a nerwork.

How SSH works

Server

Where you want to Host

To Establish a SSH connection You need SSH to be installed on you computer as well as on server.

Client

For SSH on windows you can use SSH clients. That is Putty and GitBash.

In Linux and Mac you don’t need any SSH client you can directly use your terminal to establish SSH connection.

So to make a connection between your client and your serve you need a authentication. One way to do it using Password and the other way to do it using SSH key(That is Public and Private).

Commands : to connect you to Remote Server:

ssh user@ip

ssh root@(ip of the server of the system) for example ssh [root@165.32.10.10](mailto:root@165.32.10.10)

note root is default user in the linux based server you can change it and make a new admin user and use that user to connect to that server. Note root and yourUser name are on server and they are accounts.

Once you run the command you will be prompted with Password or ssh key. If you provide it then your connection built securely.

How to create ssh key.

Ssh-keygen –t rsa.

Now this key is by default store in .ssh folder. You can also store your ssh key to github in keys section.

<https://automationstepbystep.com/2020/07/23/a-story-of-ssh-secure-shell/>

**Minnie** – Keep going

**Mickey** – The ssh-key command generates two keys

id\_rsa  
id\_rsa.pub

**Minnie** – So here id\_rsa is the private key and id\_rsa.pub is the public key.

**Mickey** – Yes, the private key will remain on the local machine and public key will be sent to the server  
(Never share your private key with anyone)

**Minnie** – How to copy the public key to the server

**Mickey** – You can do in multiple ways like can use this command

ssh-copy-id user@ip  
e.g.  
ssh-copy-id root@126.45.65.10

**Minnie** –  Where will this key go on the remote system

**Mickey** – Good question, so the key gets copied at ~/.ssh/authorized\_keys on the remote. So remember if you use any other way to send the public key. Put it under this folder

SSH connect us to remote desktop from terminal which feels like we are using it from our computer. SSH is used to configure the server remotely or other system remotely.

Open SSH is work on port 22 and your server should also have port 22 open to listen the requests

**SSH** is the protocol. **OpenSSH** is an implementation client & server of that protocol.