## <u>W-1, D-2</u>

## 1. What is DNS and DNS hosting provider? What is Nameserver?

DNS	<ul> <li>Phonebook of the Internet. Humans access information online through domain names, like nytimes.com or espn.com. Web browsers interact through Internet Protocol (IP) addresses.</li> <li>DNS translates domain names to IP addresses so browsers can load Internet resources.</li> <li>DNS is very important and adding an enigmatic dot (ex. www.facebook.com.) at the end of domain name by adding memory cache.</li> <li>Operating System will ask Resolving Name Server (RNS) to find the domain to get the root, then RNS sends all to TLD and TLD to Authoritative Name Server (ANS) to find the actual IP for this domain.</li> </ul>
DNS Hosting Provider	<ul> <li>DNS hosting is a type of network service that provides domain name system resolution services.</li> <li>It builds, operates and provisions domain name servers, which are used and integrated with domain name registrars, Web hosting services and Internet service providers (ISP).</li> <li>Host companies and Internet Service Providers interact with the Central Registry on a regular schedule to get updated DNS information.</li> </ul>
Nameserver	<ul> <li>Handling queries regarding the location of a domain name's various services.</li> <li>Fundamental part of the Domain Name System (DNS).</li> <li>Allow using domains instead of IP addresses.</li> <li>Help web browsers and another services access in the domain's DNS records.</li> </ul>

W-1, D-2
2. What is domain? What is TXT, MX, SRV, SPF, A and CNAME RECORDS?

Domain	<ul> <li>A domain name is an identification string that defines a realm of administrative autonomy, authority or control within the Internet.</li> <li>It represents an Internet Protocol (IP) resource, such as a personal computer used to access the Internet, a server computer hosting a web site, or the web site itself or any other service communicated via the Internet.</li> <li>Domain names are formed by the rules and procedures of the Domain Name System (DNS). Any name registered in the DNS is a domain name.</li> <li>Domain names are organized in subordinate levels (subdomains) of the DNS root domain, which is nameless. The first-level set of domain names are the top-level domains (TLDs), including the generic top-level domains (gTLDs), such as the prominent domains com, info, net, edu, and org, and the country code top-level domains (ccTLDs).</li> </ul>	
	DNS Records	
TXT	<ul> <li>This can be edited to include any additional information about the domain that isn't currently listed.</li> <li>These records aren't used to direct any traffic. Instead they're used to provide needed information to outside sources.</li> <li>Used to verify the domain (recommended).</li> </ul>	
MX	This refers to any mail servers that might be used in accordance with your domain.	
SRV	<ul> <li>SRV (Service) record points one domain to another domain name using a specific destination port.</li> <li>Allow specific services, such as VOIP or IM, to be directed to a separate location.</li> </ul>	
SPF	<ul> <li>A powerful email authentication method.</li> <li>SPF (Sender Policy Framework) are used by many email systems to help identify if email is coming from a trusted source.</li> <li>Helping filter out spam or messages pretending to be from your domain (called spoofing).</li> </ul>	

A	<ul> <li>A record (Address Record) refers to the actual IP address that's associated with the Domain.</li> <li>It points a domain or subdomain to an IP address. For example, you can use it for store.website.com or blog.website.com and point it to where you have your store.</li> <li>As an example, an A Record is used to point a logical domain name, such as "google.com", to the IP address of Google's hosting server, "74.125.224.147".</li> </ul>	
CNAME	<ul> <li>A CNAME (Canonical Name) points one domain or subdomain to another domain name.</li> <li>Allow to update one record each time, regardless of how many Host Records need to resolve to that IP address.</li> <li>These records point www.example.com to example.com, imap.example.com to mail.example.com, and docs.example.com to ghs.google.com.</li> <li>The first record allows the domain to resolve to the same server with or without the www subdomain.</li> <li>The second record allows you to use an alternative subdomain for email hosting an delivery.</li> </ul>	

### 3. REGISTER NEW DOMAIN (FREE OR PAID).

- Please click here
- Please go to -Services > Register a New Domain
- Please write down the desired domain & check availability.
- If the domain is available, you will see in the next page and choose any of the free domains.
- Please go to -
- Get in Now > then select the domain and click Checkout
- Please choose the best option for you (12 Months @ free) and click Continue.

- You will see that there is no charge for this domain and you can choose your email/google/facebook to sign up here.
- Whatever you select, they will send you the verification email.
- Please check the email and click the link in the email to get this form. Please fill up details carefully and click Complete Order.
- Sign in to your account and please go to -Services > My Domains

Enjoy your Free Domain for 12 Months fully free

#### 4. How to check where domain is hosted?

There are several ways to check where the domain is hosted. But the best way to use WHOIS Lookup page provided by ICANN, a non-profit organization that compiles domain information. Another way is to go directly to <a href="https://www.whois.net">www.whois.net</a> and search the desired domain for details. All the processes to check where domain is hosted given below:

- Please go to <a href="https://www.lookup.icann.org">https://www.lookup.icann.org</a>
- Please enter the dejsired website
- Please scroll down to check the details of the page including the location & contacts.
   There are a lot of information available related to the website domain.

#### 5. Why do we need to add a company domain?

Brand	It creates brand value of the company and customer can easily rely on this particular company.	
Verified Email	If a company has a specific domain, they can create verified email for the employees and it ensures that the employee only get the email from the company. For example, a university has their own website and the associated faculty members have their email related to the University domain. Any students around the world would easily	

	recognize the faculty members by looking his email account, which can really be helpful for the students/teachers.
Walk-in Business	If you decide to register a domain name that matches the concept of your business, you might draw Web surfers in search of that topic. For instance, a dropshipping store that registered <a href="www.shadmart.com">www.shadmart.com</a> might get visitors looking for dropshipping in their own country.
Easy to Remember	It is easy to remember the company name through domain name.
SEO	This allows a company to boost their business around the world and eventually, those who are interested with company's product/services can contact with them. If any customer search in bing/google/yahoo, they will get the company profile, which may help the customer for taking decision whether they will take the products/service from that particular company or not.

### 6. Adding a domain to the trial tenant.

Steps for adding a domain -

- Adding a domain
- Verify a domain
- Choose Online Services
- Update DNS Records
  - Please go to -<u>https://admin.microsoft.com</u>
     Please go to -
- Please go to Add domain

Settings > Domains

- Please input the domain which you created earlier from <u>www.freenom.com</u>
- You will find two options here to verify the domain -

TXT Record
MX Record

TXT Record is recommended because if you have done any mistake in the process it will not hamper other services such as Exchange Online, SharePoint etc.

You will see there a TXT value. Please copy the value and go to DNS hosting management.

• Please go to the DNS hosting Provider. Here it is freenom recommended by Microsoft for free domain.

Please go to -

Services > My Domains > Manage Domains

Please go to -

Manage Freenom DNS

- Copy the TXT Records in the paste here and click Save Changes.
- Please wait 10-15 minutes after adding the TXT records in the DNS management and then please go to -

Verify > Continue in the next page

- Now you will see MX, CNAME, SPF Records.
- Please add MX, CNAME, SPF Records in the manage freenom DNS and click Save Changes.
- Please wait 10-15 minutes and click Continue in the Microsoft Admin Center Domain Add Stage. Domain is added successfully.

## 7. What is MX record of a domain? How to check MX, SPF records for domain?

An MX-record is a type of resource record in the Domain Name System (DNS). This is the system that, among other indicates to what specific IP address emails need to be sent. The

MX-record contains the host name of the computer(s) that handle the emails for a domain and a prioritization code.

### Through Command Prompt (MX Records)

- Please open a command prompt.
- Please type "nslookup" then press Enter.
- Please Type "set q=mx" then press Enter to get the MX value.
- Please type any domain name that you want to know the MX value. You will see the
  details there.

### Through Command Prompt (SPF Records)

• Please Type -

"nslookup -type=txt" a space, and then the domain/host name. e.g. "nslookup -type=txt facebook.com"

- 8. What services can be assigned during domain verification process?
  - a. Exchange online
  - b. Skype for business
  - c. MDM-mobile device management for office 365
- 9. How to remove a domain? If there are no active users and groups using this domain and the domain can still not be removed, what else you need to check?

#### Remove a Domain

Please go to -

Settings > Domains

Select the Domain and Click -

Remove Domain

If there are no dependencies it will be deleted.

# Remove a Domain with Dependencies even if there are no active users and groups using this domain

- If the domain is set as default it will not be deleted.
- Users, Groups & Resources need to be removed manually before deleted
- 10. How many domains can be added in Microsoft 365 tenant? Is it possible to add a domain in Microsoft 365, if it is already added to another service provider?

Maximum Domain in Microsoft 365	900 domains in a single subscription.
Add a Domain if it is already added to another service provider	<ul> <li>It is not possible.</li> <li>If we want to add in the tenant then we must delete from the previous tenant</li> </ul>

11. How to find URLs and IPs used by the Microsoft 365? What are they used for?

Steps	Flow Process
Please <u>click here</u> and scroll down to check the URLs & IPs used by Microsoft 365	
<ul> <li>Please scroll down to the page and check URLs &amp; IPs for the specific Microsoft 365</li> <li>Services. Here, it is Exchange Online</li> </ul>	

**Necessity of the URLs & IPs:** If sometimes the link mentioned in the green boxes are not working then we can tell ISP to allow all the IPs related to that link and from the next time the desired link will work. It is necessary for proper functioning of exchange online. Thus, these IPs are crucial to troubleshoot the exchange online problem.

#### 12. If I put wrong MX records, what will happen?

The mail will not be sent. We will see the error after sending the email.

13. Why do we recommend txt records to verify the domain rather than choosing MX records?

If we make any mistake during txt records entry, it will not affect other services such as Exchange Online. As MX records is used for Exchange Online, if we choose MX records to verify the domain and make a mistake then we can't send email through this domain.

14. What are the things we need to consider during MX records checkup?

#### MS Preference -

- ✓ If the value is lower, that mail exchange server will get the highest priority but if there is any problem of sending/receiving any email using that server, then this will try to the next lowest valued MX preference mail exchange server.
- ✓ For example, there are 3 mail exchange servers (MX preference 10, 20, 30) for a specific domain. At first, it will try value 10 mail exchange server and if not working then 20, accordingly 30.
- 15. IS THERE ANY OTHER WAY TO CHECK DNS RECORDS EXCEPT CMD?
- √ www.mxtoolbox.com
- ✓ Put Domain name > choose MX lookup/TXT > check details.
- 16. How can I check the SPF version and why it is TXT RECORDS?
- $\checkmark$  Suppose "v=spf1 redirect=\_spf.facebook.com" is the facebook's spf records.
- $\checkmark$  This is 1<sup>st</sup> version means only one spf records available.
- ✓ SPF is itself a txt record.