

# Module 8: Impact of Domain Statuses and DNS Settings on Website and Email Availability

Impact of Domain Statuses and DNS Settings on Website and Email Availability

# 8.1 Impact of Domain Status Codes on Availability

- **Domain status codes**—both server and client codes—are critical in determining the operational state of a domain. Misinterpreting or failing to resolve specific domain statuses can directly impact the availability of your website or email services.
- **Example Status Codes Affecting Availability:**
  1. **clientHold/serverHold:** If a domain is in this state, DNS resolution will be suspended, leading to downtime for both the website and email.

# 8.1 Impact of Domain Status Codes on Availability

- **Inactive:** In this state, DNS resolution might be impacted, affecting website and email accessibility.
- **PendingCreate** - This means the domain is not yet fully activated at the registry level. This may be due to domain requirements such as .ac.ke or .edu.ng which requires documentation. Thus Domain does not resolve and emails or websites will not work.
- Knowing how to handle these domain status codes is crucial to maintaining availability.

## 8.2 DNS Settings and Their Impact on Availability

- DNS settings are central to the operation of any domain. Incorrect or missing DNS records can cause websites and emails to become unavailable.
- **Critical DNS Record Types for Website and Email:**
  - A Record:** If the A record (which points to the web server's IP address) is misconfigured, the website won't load.
  - MX Record:** Improper MX records will cause email services to fail, as they define the mail server responsible for receiving emails.

## 8.2 DNS Settings and Their Impact on Availability

- **3. CNAME Record:** Incorrect CNAME records may break subdomains or redirect services, leading to unavailability.
- **SPF, DKIM, DMARC:** Misconfigured email authentication records can result in emails being marked as spam or not delivered at all.
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## 8.3 TTL and Propagation Delays

- **TTL (Time to Live):** TTL determines how long DNS records are cached by DNS resolvers before a refresh is required. Short TTLs can improve update propagation speed but may increase DNS query load. Long TTLs reduce DNS load but slow down propagation of changes.
- **Impact on Availability:** When changing DNS records (e.g., A, MX, or CNAME), propagation delays can cause temporary unavailability of websites or email as the updates propagate across the internet.
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## 8.4 Common DNS Misconfigurations and Their Impact

- **Missing DNS Records:** If a domain is missing essential DNS records (e.g., no A or MX records), both the website and email services will be down.
- **Incorrect Nameservers:** Pointing to the wrong nameservers will break DNS resolution entirely, causing both the website and email services to become inaccessible.
- **Expired Domain:** If a domain is not renewed in time, DNS resolution halts, leading to complete unavailability of associated services.

# 8.5 Truehost and Olitt DNS Settings

- **Truehost DNS Configuration:**
- When using Truehost's cpanel shared hosting, ensure you've correctly pointed your domain to their authoritative nameservers:
  - ns1.cloudoon.com
  - ns2.cloudoon.net
  - ns3.cloudoon.org

When using Truehost's Windows Shared hosting, ensure you've correctly pointed your domain to their authoritative nameservers:

# 8.5 Truehost and Olitt DNS Settings

- For an account hosted on Lim202.truehost.cloud windows server
  - **dns3.cloudoon.com**
  - **dns4.cloudoon.com**
- For an account hosted on Hnk202.truehost.cloud windows server.
  - **dns5.cloudoon.com**
  - **dns6.cloudoon.net**

Any misconfigurations in these settings will result in disruptions in service.

## 8.5 Truehost and Olitt DNS Settings

- **Olitt DNS Management:** Olitt provides an intuitive DNS management platform. Misconfiguring DNS records here will similarly affect availability. Ensure records like A, MX, and CNAME are properly set for both website and email to function smoothly.
- When using Olitt DNS manager, ensure your domain nameservers are correct and using the ones below.
  - **ns1.olitt.com**
  - **ns1.olitt.net**

# Conclusion

- This Marks the end of the Domains and DNS Course.
- The course is by no means exhaustive as this was just a primer.
- Consider reading further online to understand more on Domains and DNS.

The End...