

# **Glossary of Terms**

## **Web server:**

- A web server is made up of hardware and software that saves, processes that serve website content to users.
- How it works on the MCAST website: When user enters the URL the MCAST website uses a web server to provide them the homepage, student portal and content pages.

## **Web Hosting:**

- A service that allows you to post and store your website onto the internet.
- How it works on the MCAST website: Professional web hosting platform guarantees security, backups, and 24/7 access on which MCAST hosts their website.

## **IP Address:**

- A unique string of numbers separated by dots or colons that identifies a device on a network.
- How it works on the MCAST website: The domain mcast.edu.mt points to a specific IP address of the server that hosts the site.

## **Domain Name:**

- A human-readable address used to access websites (e.g., google.com).
- How it works on the MCAST website: Users access the MCAST site by entering mcast.edu.mt instead of the IP address.

### **Domain Name System:**

- A system that translates domain names into IP addresses.
- How it works on the MCAST website: When users type mcast.edu.mt the DNS finds the correct IP address and connects them to the MCAST web server.

### **HTTP/HTTPS Protocol:**

- Protocols used to transmit data over the web. HTTPS is the secure version of HTTP.
- How it works on the MCAST website: The website uses HTTPS to encrypt data between the user's browser and the server for secure communication.

### **SSL/TLS Certificate:**

- **SSL: Secure Sockets Layer**
- **TLS: Transport Layer Security**
- A digital certificate that secures data through encryption.
- They ensure data cannot be easily read if intercepted.
- How it works on the MCAST website: The MCAST site has an SSL/TLS certificate, shown by the padlock icon in the browser, ensuring a secure connection.

## **Internet Services**

### **Service 1: Content Delivery Network (CDN)**

- Function: Distributes website content to servers around the world to load pages faster.
- Value: Increases speed and reduces server load, improving user experience.
- Improvement: Use a CDN with edge caching to make videos and large files load faster globally.

### **Service 2: Email Hosting**

- Function: Manages and stores emails using the MCAST domain (e.g., staff@mcast.edu.mt).
- Value: Provides professional and reliable email communication for staff and students.
- Improvement: Integrate multi-factor authentication (MFA) for added security.