

Cybersecurity Cheat Sheet for Beginners

Master the essential protocols and port numbers every cybersecurity professional needs to know



Web Services

HTTP

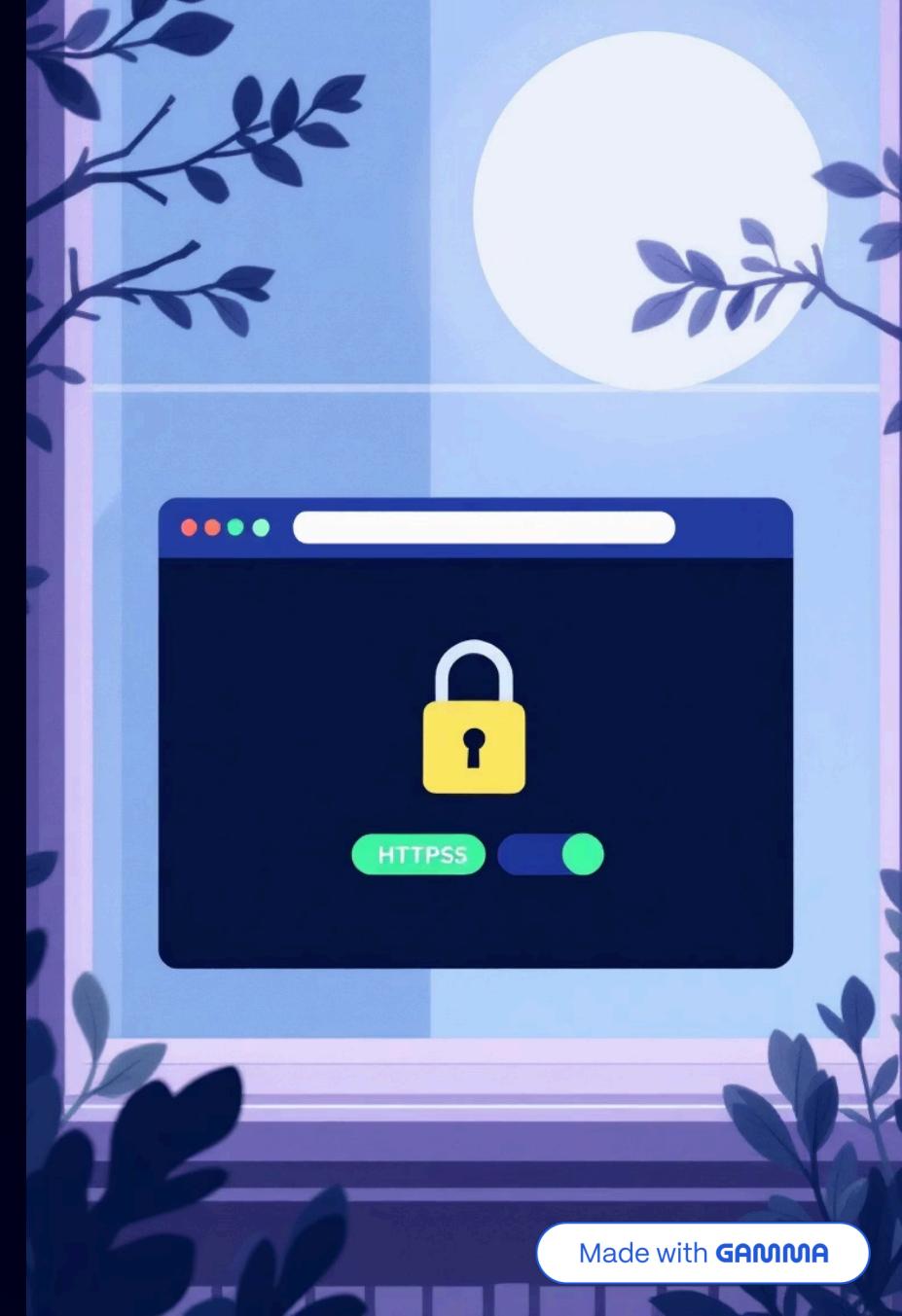
Port 80 (TCP)

Standard web traffic protocol for unencrypted communication

HTTPS

Port 443 (TCP)

Secure web traffic with SSL/TLS encryption for safe browsing



File Transfer Protocols

1

FTP

Port 21 (TCP) - Basic file transfer without encryption

2

SFTP

Port 22 (TCP) - Secure file transfer using SSH

3

FTPS

Port 990 (TCP) - FTP with SSL/TLS security

4

TFTP

Port 69 (UDP) - Trivial file transfer for simple operations



Email Services

Outgoing Mail (SMTP)

- Port 25 (TCP) - Standard
- Port 465 (TCP) - SSL
- Port 587 (TCP) - Submission

Incoming Mail

- IMAP: 143 (TCP), 993 (SSL)
- POP3: 110 (TCP), 995 (SSL)

Remote Access Protocols



SSH

Port 22 (TCP) - Secure shell for encrypted remote access and file transfers

Telnet

Port 23 (TCP) - Unencrypted remote terminal access (legacy)



RDP

Port 3389 (TCP) - Remote Desktop Protocol for Windows systems

Domain & Directory Services



DNS

Port 53 (TCP/UDP)

Domain name resolution



LDAP

Port 389 (TCP/UDP)

Directory access protocol



LDAPS

Port 636 (TCP)

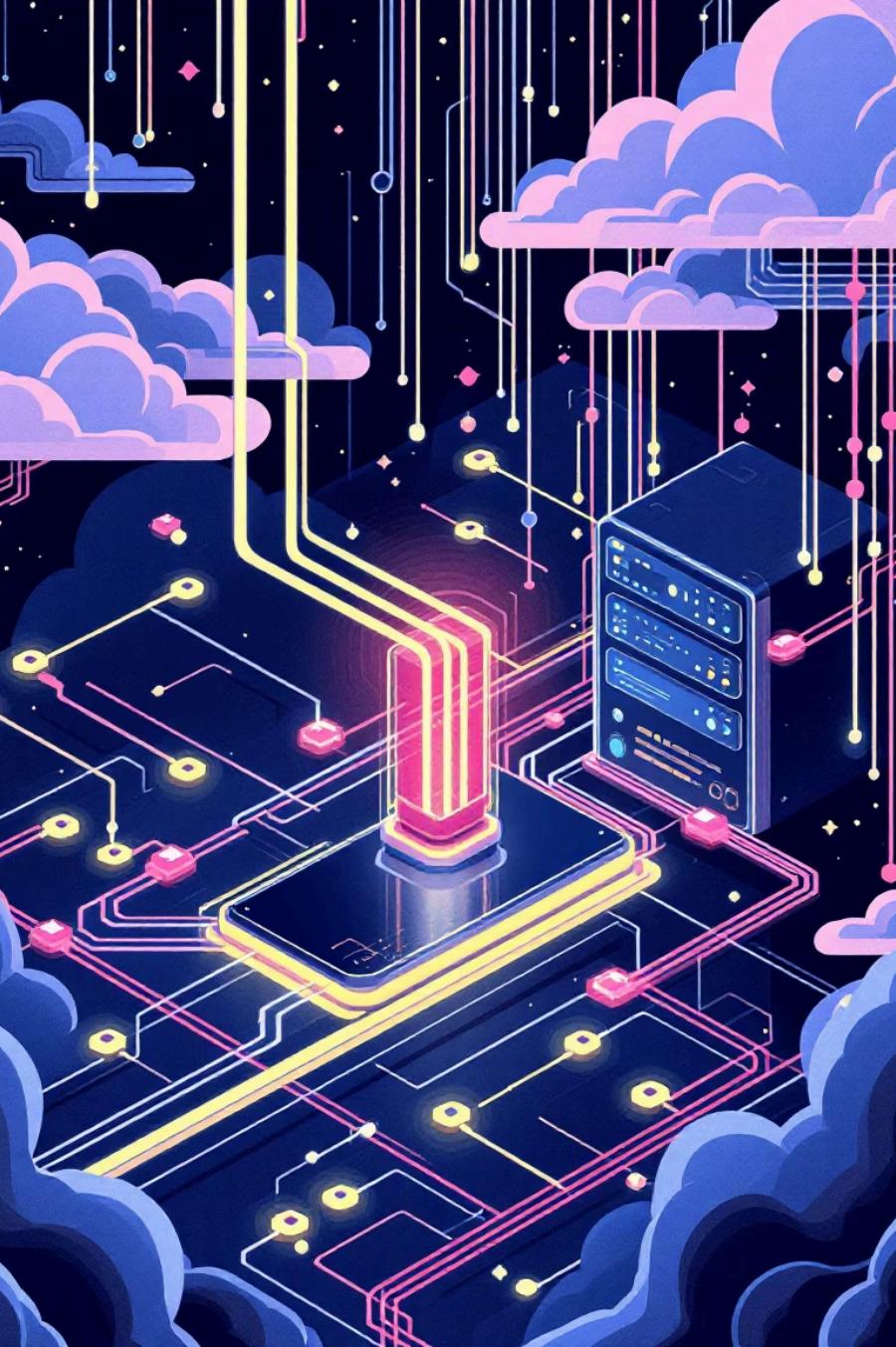
Secure LDAP with SSL



Kerberos

Port 88 (TCP/UDP)

Authentication protocol



Network Services



DHCP

Client: Port 68 (UDP)

Server: Port 67 (UDP)



SNMP

Port 161 (UDP)

Trap: Port 162 (UDP)



NTP

Port 123 (UDP)

Network time synchronization

Security Services

HTTPS VPN

Port 443 (TCP) - SSL/TLS VPN
connections for secure remote
access

IPSec

Port 500 (UDP) - Internet Key
Exchange for VPN tunnels

OpenVPN

Port 1194 (UDP) - Open-source VPN
solution for secure connections

Database Services

3306

MySQL

TCP - Popular relational
database

5432

PostgreSQL

TCP - Advanced open-source
database

27017

MongoDB

TCP - NoSQL document
database

6379

Redis

TCP - In-memory data structure
store

9200

Elasticsearch

TCP - Search and analytics
engine

TCP vs UDP: Know the Difference

TCP (Transmission Control Protocol)

- Connection-oriented and reliable
- Guarantees data delivery and order
- Used for web, email, file transfer

Pro Tip: Understanding which services use TCP vs UDP is crucial for network troubleshooting and security analysis. TCP provides reliability, while UDP prioritizes speed.

UDP (User Datagram Protocol)

- Connectionless and fast
- No delivery guarantee
- Used for DNS, DHCP, streaming

