**Overview of telnet**

telnet is a command-line tool used to connect to remote systems over a TCP/IP network, typically on port 23. It allows users to remotely access servers and manage network services.

**Key Components of telnet**

1. **Connection Setup**:
   * Establishes a connection to a remote server by specifying the IP address and port number.
2. **Text-Based Communication**:
   * Allows interaction with the server through a terminal interface.
3. **Authentication**:
   * Supports basic login via username and password.

**How It Works**

1. **Establishing a Connection**:
   * The user initiates a telnet session, specifying the target server and port.
2. **Interacting with the Server**:
   * Commands are typed and transmitted over the established connection.

**Conclusion**

telnet is primarily used for testing and troubleshooting network services and remote connections, although it is now less commonly used for secure communication due to the lack of encryption.