Operating System

Standalone Operating System (OS):

Pros:

1. Simplicity for individual use.
2. Performance optimization for specific hardware.
3. Resource allocation dedicated to a single user.
4. Lower exposure to network security threats.

Cons:

1. Limited collaboration and scalability.
2. Less network capabilities.
3. Not suitable for managing network infrastructure or services.

Network Operating System (NOS):

Pros:

1. Efficient network resource management.
2. Scalability for multiple users and devices.
3. Facilitates collaboration and resource sharing.
4. Robust network security features.

Cons:

1. Complexity in setup and maintenance.
2. Potential resource overhead.
3. Licensing costs.
4. Exposed to network-based vulnerabilities.

Examples

Standalone Operating Systems:

1. **Windows 10**: A popular standalone OS designed for individual use on personal computers.
2. **macOS**: Apple's operating system for Mac computers, optimized for their hardware.
3. **Ubuntu**: A standalone Linux distribution suitable for personal and workstation use.

Network Operating Systems:

1. **Windows Server**: Designed for network management, user authentication, and server-based services like Active Directory.
2. **Linux-based Servers (e.g., CentOS, Red Hat)**: Used for various network services, web hosting, and server management.