

## Day 2 Windows Fundamentals → Module 2 → Intro to Windows OS

- └ Desktop → Timeline (1985 → 2022)
- └ Server → 3.1 → Win Server 2022
- └ phone (Windows Phone 7)

### Windows Desktop vs Server

- personal use
- Basic task
- Inexp (200\$)
- Basic features
- " Security
- provide services
- complex / heavy workload
- 100-6000\$
- Adv. Features → Active Dir., IIS (web server)
- Adv. Security

### Folder → Windows

- 1) program files → 64 bit app → files
- 2) files (x86) → 32 bit " → reg. files
- 3) program data
- 4) users → subfolders for each user
- 5) windows → OS system files

### Imp. Info about the OS

- 1) Edition (Win 10 desktop) ← home  
pro  
enterprise
- 2) System Architecture
  - 32 bit
  - 64 bit (Modern OS)
    - ↳ processing more data at the same time
- 3) processor
  - ↳ Many
  - ↳ series (no. of cores)
  - ↳ base speed
  - ↳ Max speed
  - ↳ GHz
  - ↳ 64bit & 32bit
  - ↳ 2.40 GHz [ 2.42 GHz ] 1 GHz = 1 billion instructions per cycle

## Module 3: User & Group management in Windows

- User → entity → has a user account → login → System
- Types of user accounts
  - \* Local
    - ↳ Standard user
    - ↳ Guest user
    - ↳ Administrator
  - ↳ Domain → centrally
  - ↳ Microsoft Account
- Groups → coll. of users
  - why?
  - org / better management
  - permissions
- Types of groups
  - ↳ local groups → 3rd party apps / tool
  - ↳ Domain groups
  - ↳ Built in groups
    - ↳ Administrators group
    - ↳ users
    - ↳ guests

- ✓ Auth 1 ✓ Auth 2
- username & pwd
- email & pwd
- biometrics
- pin

### Module 3 (continued)

- 3 options: User & groups in Windows
- |         |                                      |   |  |
|---------|--------------------------------------|---|--|
| Edition | Home 1) Command prompt → Admin (CLI) | Pro/Enterprise 2) Computer Management (GUI) | Home 3) Settings → Security & other users → Accounts |
|         | ↳ commands                           | ↳ search                                    | ↳ standard   |
|         |                                      | win + X → cmd                               | ↳ Admin  |
|         |                                      | win + R → cmd                               |  |

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### (Command prompt → Commands → U&G Management)

- create a new user: net user username password /add
- create a new group: net localgroup groupname /add
- Add user to group: net localgroup groupname username /add
- list all users: net user
- list all groups: net localgroup
- Remove a user: net user username /delete
- " a group: net localgroup groupname /delete
- " " user from a group: net localgroup groupname username /delete
- describe a group: net localgroup groupname

grp3

grp2

User1 → grp1

## Module 4: Device Management

H/w, peripheral devices (I/O devices)

→ Responsibilities of the OS → manage I/O devices

↳ generic drivers s/w

↳ display

↳ keyboard

↳ camera

↳ mic

↳ speaker

↳ device driver

[System software]

→ Intermediate Comp / Translator b/w OS & the

device

USB → device driver s/w installed → contents of pendrive

\* legacy mode: manually install the driver s/w

Connect the device

Access " "

\* plug n play: Modern OS

Connect device → auto driver s/w installed

→ access the device

### Device Manager (utility in win)

↳ search

win + R → devmgmt.msc

win + X → device manager

\*

1) view all the device

2) device properties

3) Add / remove devices

4) view the status of the device

5) Troubleshooting → device

6) view the device driver details

7) install the device driver

8) uninstall " " "

9) upgrade the " " " version

10) rollback → previous version v2

↓ Disabled the device

? Device is not compatible

! Device is not working

properly.