# VirtualBox Configuration Summary Sheet (Non-Network)

Asst. Prof. Tuul Triyason, Ph.D.

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## 1. System Settings

### Boot Order

- Defines the order of devices to boot from: Floppy, Optical, Hard Disk, Network.

- Set Optical first when installing an OS from ISO.

### Chipset: PIIX3 vs ICH9

- **PIIX3** (default): Compatible and stable with most guest OSes.

- **ICH9**: Supports PCI Express and more devices; advanced use cases.

### EFI/BIOS

- **BIOS (Legacy)**: Suitable for older OS installations.

- **EFI (UEFI)**: Required by some modern OSes (e.g., Windows 11).

- Enable only when the OS explicitly requires it.

## 2. Processor Settings

### Enable PAE/NX

- Allows 32-bit guest OS to access more than 4GB RAM (Physical Address Extension).

- Required by some Linux distributions.

### Execution Cap

- Limits the percentage of host CPU time used by the VM.

- Useful for reducing CPU usage on host under heavy load.

## 3. Display Settings

### Video Memory

- Allocates VRAM to the VM display (up to 128MB).

- Affects graphics performance and resolution support.

### 3D / 2D Acceleration

- Enables hardware-accelerated graphics.

- Requires Guest Additions to function properly.

- May cause compatibility issues on some guest OSes.

## 4. Storage Settings

### Disk File Type

- **VDI (VirtualBox Disk Image)**: Default format, supports all VBox features.

- **VHD**: Compatible with Microsoft Hyper-V.

- **VMDK**: Used by VMware, good for interoperability.

### Disk Allocation

- **Dynamically Allocated**: Grows as needed, saves host disk space.

- **Fixed Size**: Pre-allocates full disk space, slightly faster I/O.

## 5. Guest Integration

### Shared Clipboard

- Enables copy-paste between host and guest.

- Requires Guest Additions.

### Drag and Drop

- Allows file dragging between host and guest.

- Needs Guest Additions; choose direction (Host to Guest or Bidirectional).

### Shared Folder

- Allows a host folder to be mounted inside the guest.

- Requires Guest Additions and proper user group permissions.

## 6. Cloning Virtual Machines

### Clone Types

- **Full Clone**: Independent copy, does not rely on original VM.

- **Linked Clone**: Saves space by referencing original disk; not portable alone.

### Cautions When Cloning

- Update hostname, MAC address, and IP if running multiple clones.

- Linked clones are ideal for temporary testing only.

- Consider snapshot state when cloning; you can include or exclude snapshots.

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**Note:** Networking settings are excluded in this sheet and will be covered in a separate session.