

SPPU-TE-COMP-CONTENT – KSKA Git

Q3.) Explain Features of KVM.

ANS. The Features of KVM (kernel-based Virtual Machine) are:-

1. Full Virtualization:

KVM allows full virtualization, meaning it can run unmodified guest operating system like Linux, Windows and more.

2. Kernel Integration.

Since KVM is a part of the Linux kernel, it benefits from all the security and performance features of the kernel.

3. Scalability.

KVM can scale to handle large number of virtual machines (VM's) due to its efficient resource management and support for large physical memory sizes.

4. Hardware Support.

It takes advantage of hardware virtualization extensions (Intel VT-x and AMD-V) for improved performance and reduced overhead.

5. Live Migration

KVM supports Live Migration, allowing VM's to be moved from one host to another with minimal downtime.

6. Resource Control.

It provides fine-grained control over CPU, Memory, and I/O resources for VM's, ensuring efficient utilization and performance isolation.

7. Security

KVM benefits from Linux's robust security features, such as SELinux and AppArmor, to provide enhanced security for VM's.

8. Snapshots.

It supports snapshots allowing users to capture the state of a VM at a particular point in time and revert to it if needed.

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9. Virtualized Hardware

KVM emulates various hardware devices like network interfaces, storage controllers, and more, enabling guest OSes to run seamlessly.

10. Compatibility.

KVM works with a wide range of Linux distributions and can be managed using standard virtualization tools like libvirt, QEMU, and Virt Manager.

Q2) Install and configure KVM on Linux.

Please attach screenshots of KVM setup process.