AMD EPYC

Virtual Machine Migration Guide

VIRTUAL MACHINE MIGRATION	
The process of moving a virtual machine from one physical hardware environment to another. This can be done via live migration or cold migration.	
LIVE MIGRATION	**COLD MIGRATION**
○ The virtual machine is migrated without disconnecting the client or requiring a reboot ○ Does not require any downtime	○ The virtual machine requires shutdown before it can be migrated ○ Requires downtime

For those operating in mixed environments, ***virtual machines can easily be migrated between AMD EPYC™ processors and Intel Xeon processors*** without any specialized tools or software, however; certain conditions must be met. The table below provides a summary of migration capabilities for VMware, Microsoft® Hyper-V and Linux® KVM environments.

	LIVE MIGRATION	COLD MIGRATION
INTEL (ANY) TO AMD EPYC	✗	✓
AMD EPYC TO INTEL (ANY)	✗	✓
INTEL 2600 v4 (BROADWELL) TO INTEL SP (SKYLAKE/SCALABLE)	✗ (Yes only if SP is defeatured to 2600 v4 level)	✓
AMD EPYC TO AMD EPYC	✓	✓
INTEL SP (SKYLAKE/SCALABLE) TO INTEL SP	✓	✓

VMWARE	○ https://www.vmware.com/products/vsphere.html#compare ○ https://www.vmware.com/products/vsan.html
MICROSOFT	○ https://docs.microsoft.com/en-us/windows-server/virtualization/hyper-v/manage/live-migration-overview
KVM	○ http://www.linux-kvm.org/page/Migration ○ https://access.redhat.com/documentation/en-us/red_hat_enterprise_linux/5/html/virtualization/chap-virtualization-kvm_live_migration