Collax V-Cube+

Virtualization and high availability for SMEs

Virtualization and high availability

Collax V-Cube+ connects two nodes (physical servers) to form a network. Several virtual machines (regardless of which server or operating system is used) can be operated separately on one node. If a node fails, all VMs of the affected node are automatically moved to the active node. This process is not noticed by the users. There may only be minor performance changes, as all VMs are now operated on the same physical machine. All data and applications are thus designed to be highly available and fail-safe.

No additional SAN required

Every high-availability solution also requires high-availability storage. This is often a cost-intensive additional SAN. Collax V-Cube+, on the other hand, already has a fail-safe, integrated storage solution (embedded SAN). This connects the hard disks of the cluster nodes with each other. This guarantees that all data is synchronously available on all data carriers.

Simple (remote) administration

Collax V-Cube+ is administered via Collax's own browser-based user interface. The structure is logical and is further simplified by many graphical icons. This allows even non-experts to make necessary settings. The user interface is also available remotely, as it is browser-based.

Maximum flexibility - minimum costs

Collax V-Cube+ provides virtualization technology based on KVM (Kernelbased Virtual Machine). This is a modern hypervisor based on open source technologies. Supported by the Open Virtualization Alliance, the technology is constantly being improved.

Live migration

Live migration allows a server to be moved from one node to another node in the cluster while the server is running. This ensures that this server can continue all tasks and functions without disruption. All network connections also remain intact.

Collax V-Cube+ as appliance

Collax V-Cube+ is also available as an appliance (hardware with pre-installed software). Suitable hardware can be found at our certified distributors. Please visit our website at www.collax.com/partner.

Collax V-Cube+ - extensions

Collax Central - active system monitoring **Collax V-Transfer** - easy migration of virtual machines between Collax Vproducts (Collax V-Cube, V-Cube+ and V-Bien) Accords Packup Advanced for Collax Virtualization - world leading backup

Acronis Backup Advanced for Collax Virtualization - world leading backup solution for Collax V products



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Advantages

- Minimization of total cost of ownership
- High availability of any operating system
- Highly available storage
- Highly available Cluster Manager
- Integrated backup & restore
- Maximum access speed
- Intuitive administration
- Simple licensing model



Technical details

Redundant Cluster Manager

The cluster can be monitored and managed with the highly available, browserbased user interface. Administrators thus centrally control all virtual machines (VMs) in the cluster and distribute the required resources as needed. The user interface is already redundantly integrated into the cluster.

Embedded SAN

Instead of an expensive and complex SAN solution, the two nodes are equipped with a sufficiently large hard disk capacity. Based on Embedded SAN technology, the Collax V-Cube+ combines these two areas and makes them available as shared, redundant storage.

Backup and restore

All VMs in the cluster can be included in a unified backup. Helpful functions such as instant VM or V-Recovery, which are only possible in a virtualized environment, round off the backup system.

Snapshots

Snapshots of virtual machines make it possible to return to a specific point in time when the VM was running.

Screen console via RDP

The screen console of the VMs is also exported via Remote Desktop Protocol. The user can access a cluster node as an RDP server via the RDP client commonly used in Windows and thus obtain the list of accessible virtual machines.

Supported guest operating systems

Windows 7 through Windows 10, Windows Server 2008 through Windows Server 2022, SUSE Linux Enterprise Server, RedHat Enterprise Linux, Ubuntu Server

Supported hardware

- Memory: up to 1024 GB
- Hard disk capacity: up to 16 TB
- Processors (cores): up to 256

Virtual guest resources

- Processors: Up to 64 (vSMP)
- Memory: Up to 512 GB
- Up to 8 virtual network cards
- Up to 4 virtual hard disks or CD/DVD drives
- Virtual hard disk capacity up to 16 TB

System requirements

- Two Collax V-Cube each equipped with:
- 64-bit processor (Intel64 or AMD64) with Intel VT or AMD-V Support
- Hard disk: 160 GB
- Two network interfaces
- Memory: 4096 MB
- Installation: Bootable USB stick or CD-ROM drive
- Fencing Device (Collax Fencing Device or PDU)