

Simplifying Virtual Infrastructures with IceWEB's Unified Management Console

IceWEB's VM Manager provides a unified management console for controlling all storage-related aspects of a virtualized infrastructure, supporting the following hypervisors:

- VMware ESX
- Citrix Xen
- Microsoft Hyper-V

Summary of VM Manager Capabilities

Feature	VMWare ESX	Citrix XEN	MS Hyper-V
Virtual Machine cloning	X	X	X
Virtual Machine templating	X	-	-
VMotion support	X	-	-
Create a new VM from scratch	X	X	-
NFS virtual data storage support	X	X	-
iSCSI virtual data storage support	X	X	X
Virtual storage relocation (migration)	X	-	-
Support for automated replication service	X	X	X

Key Features

VM Manager offers the following features, each of which is described in more detail below:

- ZFS snapshot and automated replication services integration
- Virtual host consolidation
- Virtual machine cloning and templating
- Virtual machine multi-cloning
- Support of native VMware VMotion capability

ZFS Snapshot Integration

Administrators can create any number of automated replication services for a vBackstore, an IceWEB defined storage container for VM Datastore. The following auto services are available:

- Auto-Snap - VM Snapshots may be taken periodically as defined by an administrator-defined schedule.
- Auto-Tier - This service provides a file-level tiering mechanism for managing local to remote or remote to local networking protocol tiering using RSYNC, RSYNC over SSH, etc.
- Auto-Sync - a syncing mechanism that provides periodic syncing from a local to a remote datastore. This service transfers data and metadata, including all the VM snapshots, establishing a complete copy of the source on the target.

Additionally, any snapshot taken over a folder or volume containing a vBackstore will automatically take a corresponding virtual host level snapshot. Conversely, the snapshot destroy operation will automatically destroy corresponding virtual host level snapshots. This ensures a single snapshot captures the state of the virtual host and it's corresponding data.

Virtual Host Consolidation

This feature provides a unified management facility for the datastore management services for multi-vendor virtual hosts, including support for VMware ESX 3.5, VMware ESX 4.x and Xen Citrix 5.x.

Virtual Machine Cloning and Templating

Any virtual machine stored on local storage (i.e., storage devices contained within the appliance or an appliance group) could be used as a template for a virtual machine clone. Cloning of a virtual machine is tightly integrated with the snapshot functionality and ensures consistent states of a virtual machine are maintained.

Virtual Machine Multi-Cloning

Multi-cloning allows the administrator to replicate a virtual machine as many times as needed. Please note that this functionality requires that the cloned virtual machine is assigned to a single datastore.

VMware VMotion Support

VMware VMotion is a native VMware capability available when you use vCenter as the VHost Factory. This capability allows the administrator to migrate a running virtual machine from one virtualization host to another provided both virtual hosts are registered with the vCenter inventory and have compatible CPU architectures.

