

FAQ: Virtual Data Center

What is a Resource Reservation Pool?

Resource Reservation Pools are computing assets (CPU, RAM, and Disk) that are allocated to a Virtual Data Center. Evolve IP assigns VMWare virtualization computing resources to each customer's Virtual Data Center based on their selection in the order process. The reservation pool is made available to the IT administrator via the OSSmosis Enterprise Cloud Manager to self-provision virtual machines as required.

Can I over-provision Virtual Machines against the total amount of computing (CPU and RAM) in my allotted pool (quota)?

Yes, IT Administrators have full control over the use of computing resources within their pool. There are no limitations on the density ratios (virtual machines-to-vCPU/RAM), however, you cannot over-provision hard disk. Evolve IP utilizes thick-provisioning standards on the platform for all storage resources. Virtual Data Center customers have the ability to over-subscribe their own resources up to the maximum amount of disk available in their purchased quota.

Can I over-provision Disk on Virtual Machines beyond my allotted pool (quota)?

No, disk resources are thick-provisioned and dedicated on a Virtual Machine basis and cannot be over-provisioned.

Are my resources (GHz, RAM, and Disk) guaranteed strictly for my use?

Yes, your pool will be allocated the full amount of purchased resources and are available strictly for your use up to the maximum of your set quota. These resources are guaranteed to always be available within your pool.

Can I burst beyond my allocated pool of resource if needed? A: No, Evolve IP assigns resources based on the VMWare VSPP Reserved Resource Model.

Reserved Resources are committed and guaranteed to each customer's Virtual Data Center and platform resources are not oversubscribed. IT administrators should factor in any required growth or seasonality into their capacity requirements so resources can be self-provisioned via the OSSmosis Enterprise Cloud Manager on-demand.

Can the activities of one Virtual Data Center (over-subscription) impact other customers on the platform?

No, computing resources are allocated and isolated to each Virtual Data Center. The activities of one customer cannot impact other customers on the platform. This is a distinct differentiator of the Evolved Virtual Data Center and is employed to ensure our customers experience the highest level of performance and availability for hosted applications.

How do I add additional resources to my Virtual Data Center?

There are two ways to expand the quota of computing resources within your Virtual Data Center:

1. Submit an electronic ticket to support@evolveip.net with the details of your request.
2. Contact your Technology Advisor or Client Technology Advisor with the requirements

What if I need to join a Virtual Machine or Virtual Data Center to a different network or VLAN?

A: Evolve IP maintains very strict security guidelines and processes around virtual networking. As a result, any changes that require new virtual switches (VLAN's) within the Virtual Data Center or cross the boundaries of existing virtual switches (VLAN's) require a manual trouble ticket via support@evolveip.net.

How do I self-provision Virtual Machines within my Virtual Data Center?

Self-Provisioning virtual machines and computing resources within the Virtual Data Center are facilitated via the OSSmosis Enterprise Cloud Manager. All Virtual Data Center customers are provided access to the provisioning portal during the initial provisioning process. Virtual Machines can be created, tuned, and adjusted via the portal along with console access, utilization, and many other features.

How do I configure CPU, RAM, and Disk for a new machine?

For new machines, CPU and RAM is selected within the provisioning template in OSSmosis Enterprise Cloud Manager. For existing Virtual Machines, hot-adds for CPU and RAM and can be controlled within the "Virtual Machines" section in OSSmosis Enterprise Cloud Manager. Disk size and volumes (adds, changes, or deletes) require an electronic trouble ticket to support@evolveip.net.

What types of Virtual Machine templates are available?

RHEL, MS Windows 2008, 2012

Can I import my own templates?

Yes, if templates currently exist in an on-premise VMWare virtualization environment they can be imported into the OSSmosis Enterprise Cloud Manager and made available for your use with the Virtual Data Center environment.

What if I have a custom Virtual Machine or template requirement?

Custom templates can be created within the OSSmosis Enterprise Cloud Manager for use within the Virtual Data Center

Can I clone an existing Virtual Machine?

The OSSmosis Enterprise Cloud Manager provides multiple role-driven login capabilities with different rights within the Virtual Data Center to view, make changes, console, control machine state, and many other functions. Super-Administrators can have the ability to clone virtual machines if designated.

Can I add vCPU to my Virtual Machine through the portal?

Yes, processing resources can be added to Virtual Machines within the OSSmosis Enterprise Cloud Manager. This function can be performed on new machines being created or on existing machines that require additional resources. The OSSmosis Enterprise Cloud Manager supports hot-adds for immediate changes to Virtual Machines.

What is the maximum amount of vCPU I can self-provision per Virtual Machine?

The maximum amount of vCPU that can be added to a self-provisioned Virtual Machine within the OSSmosis Enterprise Cloud Manager is 8.

What if I need to provision a machine with more vCPU resources than allowed through the OSSmosis Enterprise Cloud Manager?

The OSSmosis Enterprise Cloud Manager has best-practice restrictions for certain large workloads with the Virtual Data Center environment. Machines requiring resources (CPU & RAM) above the amount available through self-provisioning should be requested through support@evolveip.net.

Can I add RAM to my virtual machine through the portal?

Yes, memory resources can be added to Virtual Machines within the OSSmosis Enterprise Cloud Manager. This function can be performed on new machines being created or on existing machines that require additional resources. The OSSmosis Enterprise Cloud Manager supports hot-adds for immediate changes to Virtual Machines.

What is the maximum amount of RAM I can self-provision per Virtual Machine?

The maximum amount of RAM that can be added to a self-provisioned Virtual Machine within the OSSmosis Enterprise Cloud Manager is 32GB.

What if I need to provision a machine with more RAM resources than allowed through OSSmosis Enterprise Cloud Manager?

The OSSmosis Enterprise Cloud Manager has best-practice restrictions for certain large workloads with the Virtual Data Center environment. Machines requiring resources (CPU & RAM) above the amount available through self-provisioning should be requested through support@evolveip.net.

How long will it take for a new machine to provision?

New Virtual Machines that are self-provisioned through the OSSmosis Enterprise Cloud Manager become available for console access within 15 minutes

How do I access my Virtual Machine?

Console access is available through the OSSmosis Enterprise Cloud Manager for each Virtual Machine within the Virtual Data Center environment.

What are the uptime and availability SLA's on the Virtual Data Center solution?

Evolved Virtual Data Center has a standard Service Level Agreement of 99.999% for all core platform elements for uptime and availability

What is a Limit Function?

Active CPU and Memory cannot be above the allocated Resource Pool Limit. 2 VM's with 1 CPU each in a 2GHz Limit Resource Pool will not contend or reach the limit unless both VM's are actively using 90% of their CPU at the same time. 2 VM's with 8GB of RAM in an 8GB RAM Limit Resource Pool will not contend or reach the limit unless both VM's are actively using 50% of their RAM at the same time.

Resource Pool Contention?

Occurs when the Active CPU and/or RAM of 1 or more VM's reaches the configured Resource Pool limit. Symptoms range from RAM Ballooning to VMDK Paging and CPU 100% within the VM state.