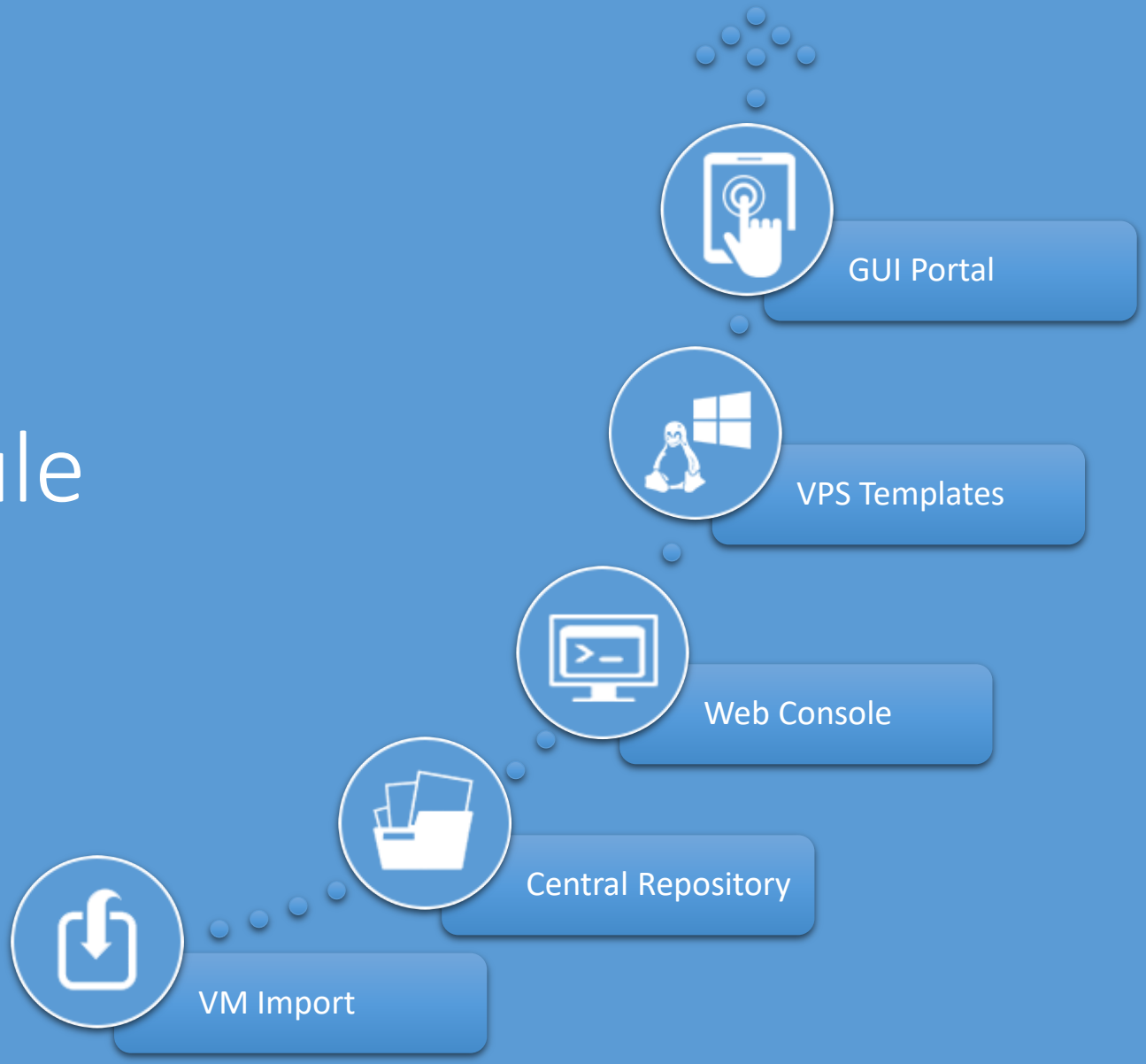
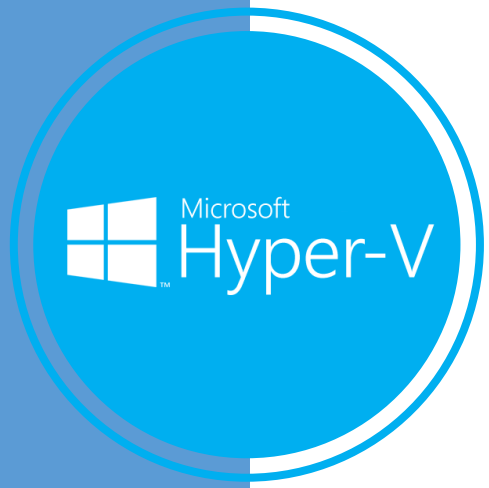
HC Hyper-V Module



HC Hyper-V

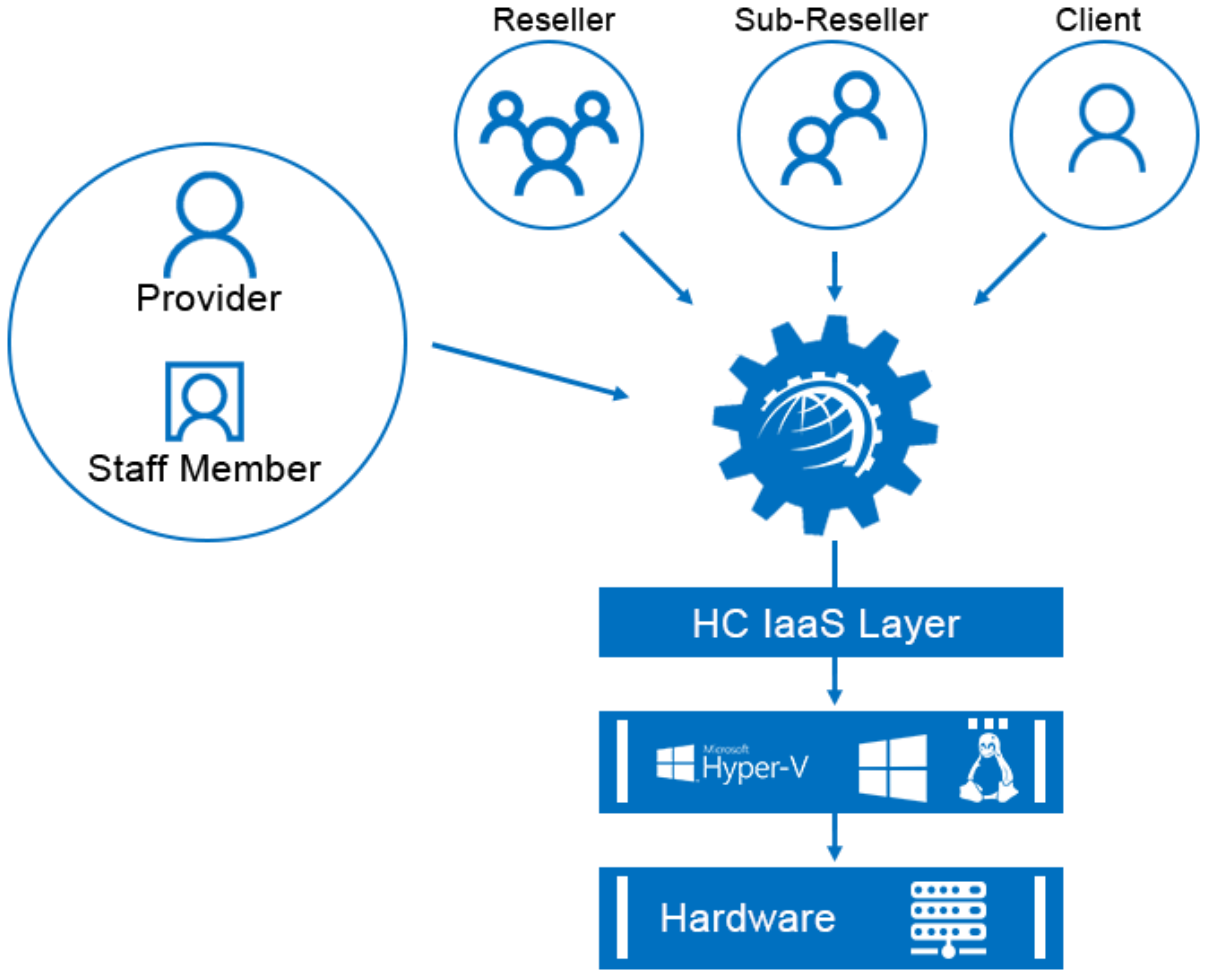
Hyper-V is Microsoft's native hypervisor and utilizes Windows as its underlying operating system. It allows the creation of virtual machines (VMs) on Windows servers, enabling each virtual machine to run in its own isolated space. Hyper-V is simply a more efficient way to use hardware than just running one operating system on physical hardware.



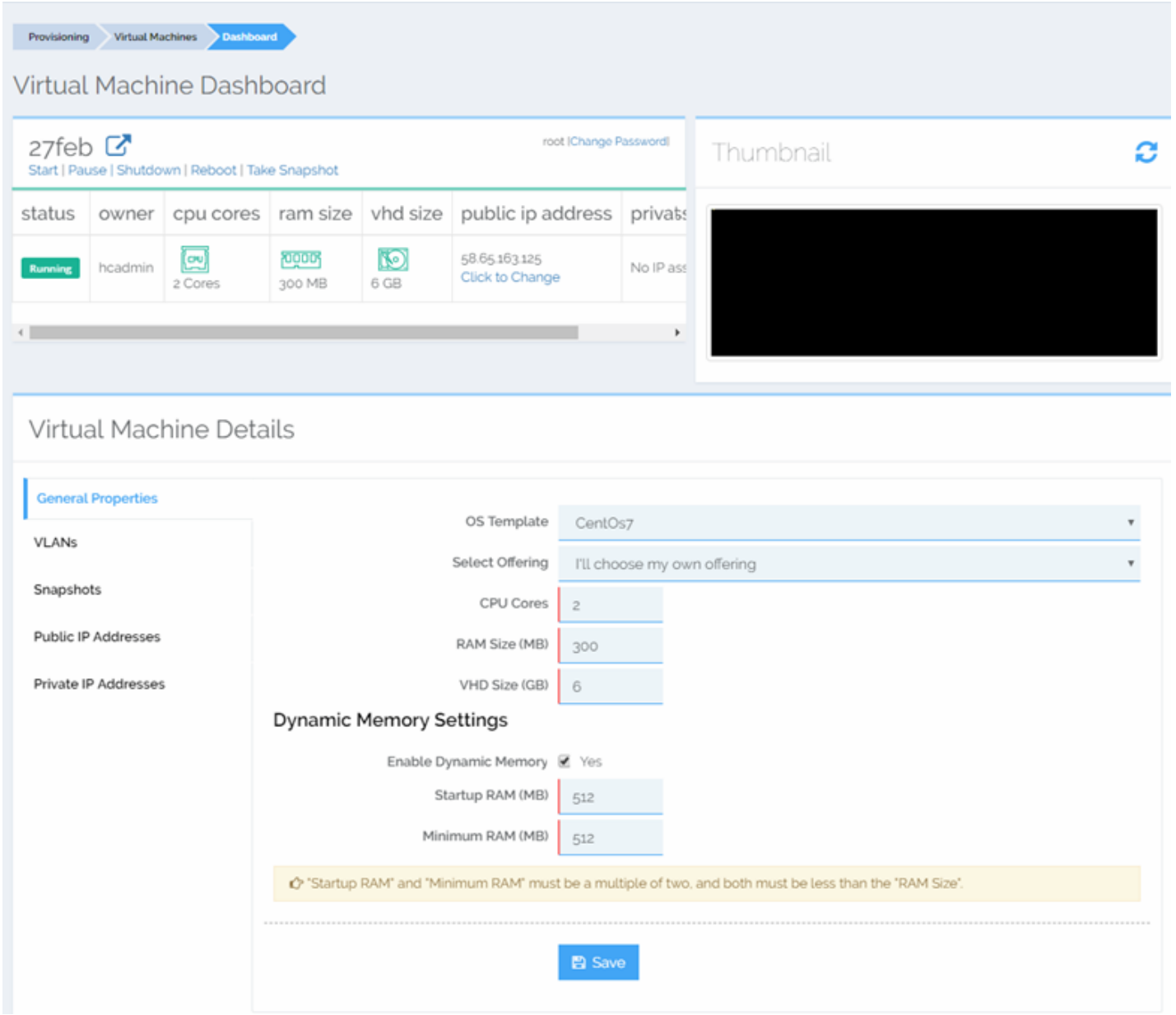
HC Hyper-V module is an additional layer above the hypervisor, facilitating easy creation and management of virtual machines through a web based UI. It strengthens the overall functionality of Hyper-V by furnishing a web platform to VPS providers and datacenters, allowing them a firm grip over various configurations of CPU, memory, storage and networking.

HC Hyper-V Module Key Features

- Self-Served GUI Portal for Management
- Preconfigured OS Templates
- Various Configurations of CPU, Memory, Storage and Networking
- Web Console for Hyper-V



What You Control



- Service Provider Features

Hyper-V hosts	Add, Edit, Delete and Check Health of Hyper-V hosts.
Base OS Management	Choose from a wide range of Windows/Linux base OS types. Edit, Disable, Make a copy of base OS types.
Repository Management	Maintain virtual hard disks (.vhdx) files on a separate central location and fetch these files from the central repository.
OS Templates	Add, Edit, Delete and Inspect Disks of VPS templates.
Public IP Addresses	Add and Delete range of logical public IP addresses to and from the Hyper-V host.
Private IP Addresses	Add and Delete range of logical private IP addresses to and from the Hyper-V host.
VLAN Management	Add VLANs existing at the backend to the panel. Assign the same VLANs to control panel users.
Web Console	Specify web console settings for Hyper-V and allow customers to access their VMs through a browser.
Plan Management	Add, Sell, Edit and Delete service plans and composite resources with IaaS (virtualization) resources.

- Service Provider Features

Bandwidth Metering	Enable bandwidth metering for each VM via a 3rd party tool.
Reporting	View and Download usage reports for the number of virtual machines and their allocated & consumed CPU/memory/storage.
Network Information	Indicate settings for internal and external switches.
Data Storage Folder	Specify the storage location of virtual machines.
VM Import	Import existing virtual machines.
VM Transfer	Move virtual machines between control panel users.
Summary Email Management	Send out summary emails for creation, transfer and import of virtual machines.
DVD Drive	Allow DVD drive in media on virtual machines.
API Availability	Integrate with external applications and interfaces through a firm API.

- End User Features

VM Creation	Create a virtual machine.
VM Deletion	Delete a virtual machine.
VM Search	Search virtual machine by name.
VM Listing	View list of virtual machines.
VM Details	View virtual machine CPU/memory/storage size.
Change Details	Change virtual machine CPU/memory/storage size.
VM State	Start, Pause, Refresh, Shut down and Reboot virtual machine.
Change Password	Change virtual machine administrator password.
Dynamic Memory Settings	Enable dynamic memory and specify startup RAM and minimum RAM.

- End User Features

VLAN Assignment	Assign VLAN to virtual machines.
Snapshots	Take virtual machine snapshot and view its date taken. Apply and remove snapshot.
Thumbnail	View current state of virtual machine.
Public IP Assignment	Assign and Delete public IP addresses to and from the virtual machine.
Private IP Assignment	Assign and Delete private IP addresses to and from the virtual machine.

System Requirements

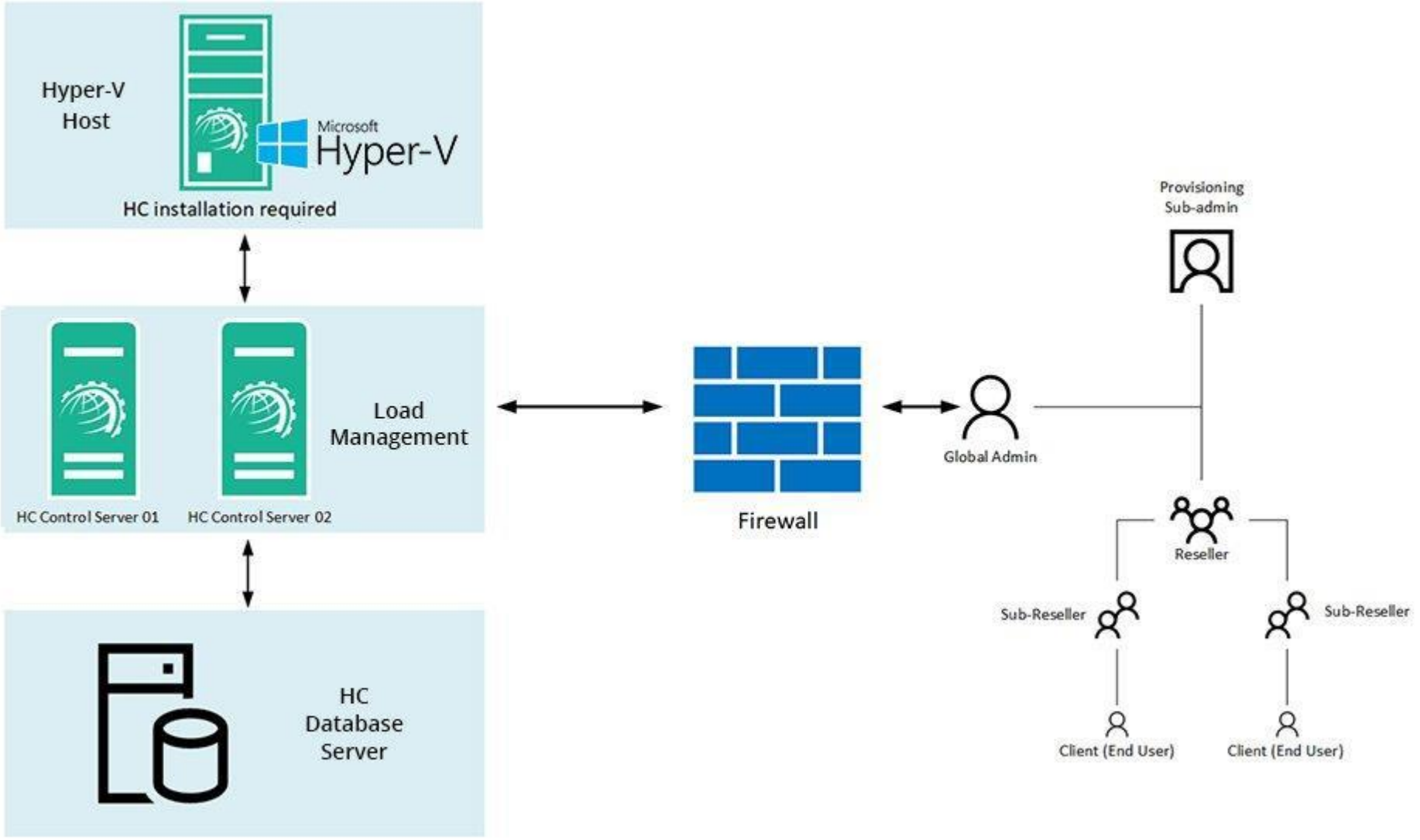
Software

- Windows Server 2019/2016/2012/2008 and 2012 R2 Standard x64 Edition or above with Hyper-V role. Hyper-V Server 2008 is also supported. We recommend Windows Server 2019/2016/2012/2008 and 2012 R2 Datacenter Edition which allows unlimited number of virtual machines without additional licensing. You may lease Windows Server 2019/2016/2012/2008 and 2012 R2 Datacenter Edition with Hyper-V from your data center or dedicated server providers.
- It is recommended to have a clean install of x64 edition of Windows Server 2019/2016/2012/2008 and 2012 R2 to be able to use the Hyper-V technology.
- HC10 Windows License
- HC Virtualization Module License

Hardware

- 64-bit system with hardware-assisted virtualization enabled (AMD processor with AMD-V technology or Intel processor with Intel-VT technology)and data execution prevention (DEP) is required.

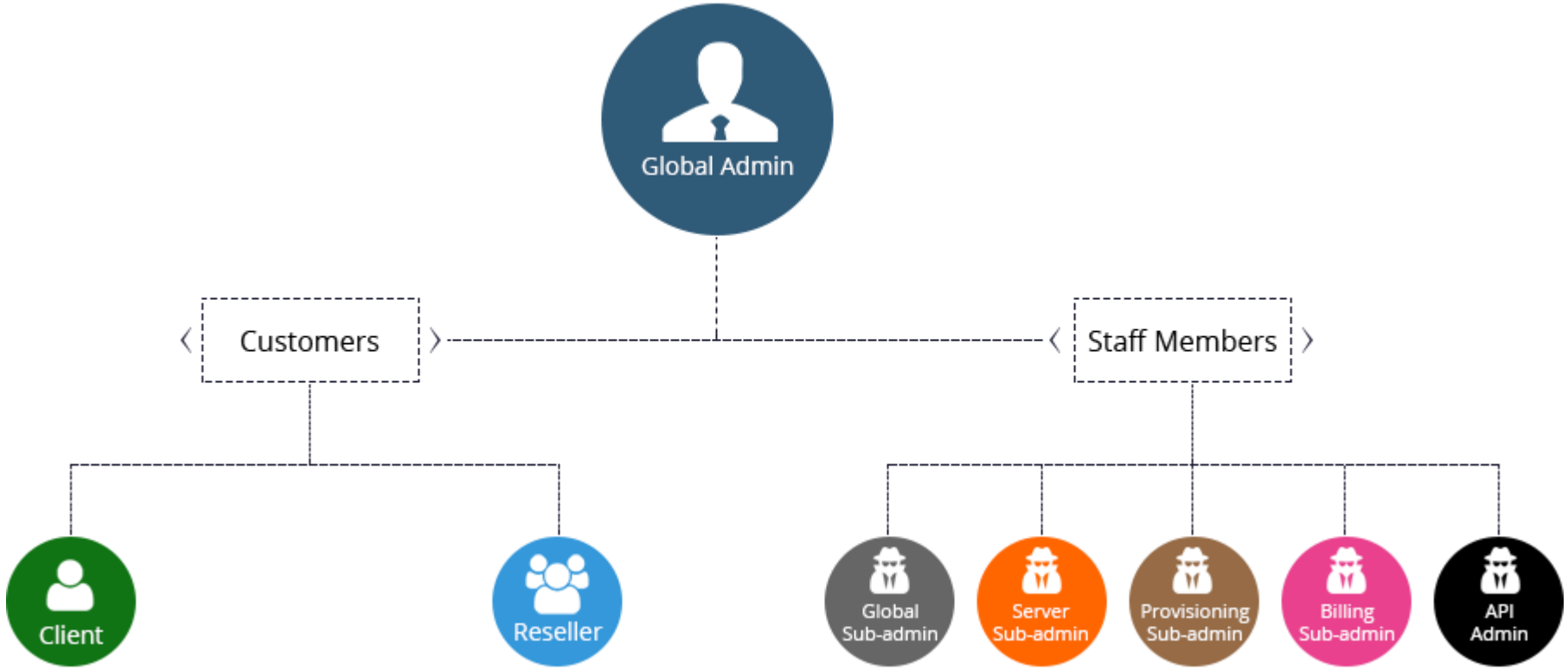
The Environment


Hyper-V
Host
Microsoft
Hyper-V
HC installation required
HC Control Server 01
HC Control Server 02
Load
Management
HC
Database
Server
Firewall
Global Admin
Provisioning
Sub-admin
Reseller
Sub-Reseller
Sub-Reseller
Client (End User)
Client (End User)

Installing Hosting Controller

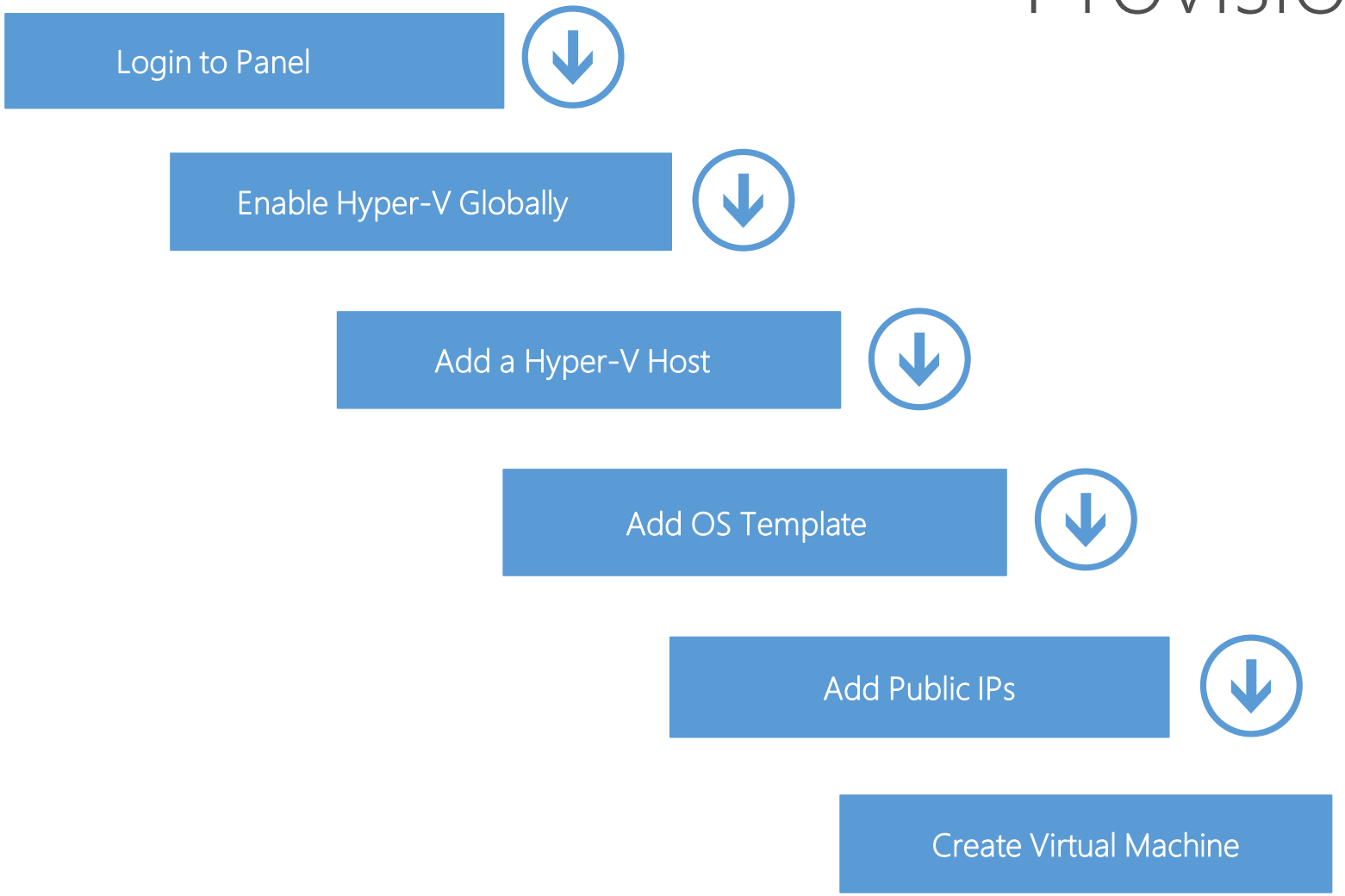
The installation of HC itself is fairly simple. Just download HC installer and apply it on the Hyper-V host. Follow a step by step wizard to complete the procedure. To view the installation procedure in detail, see HC10 Installation Guide.

HC User Structure

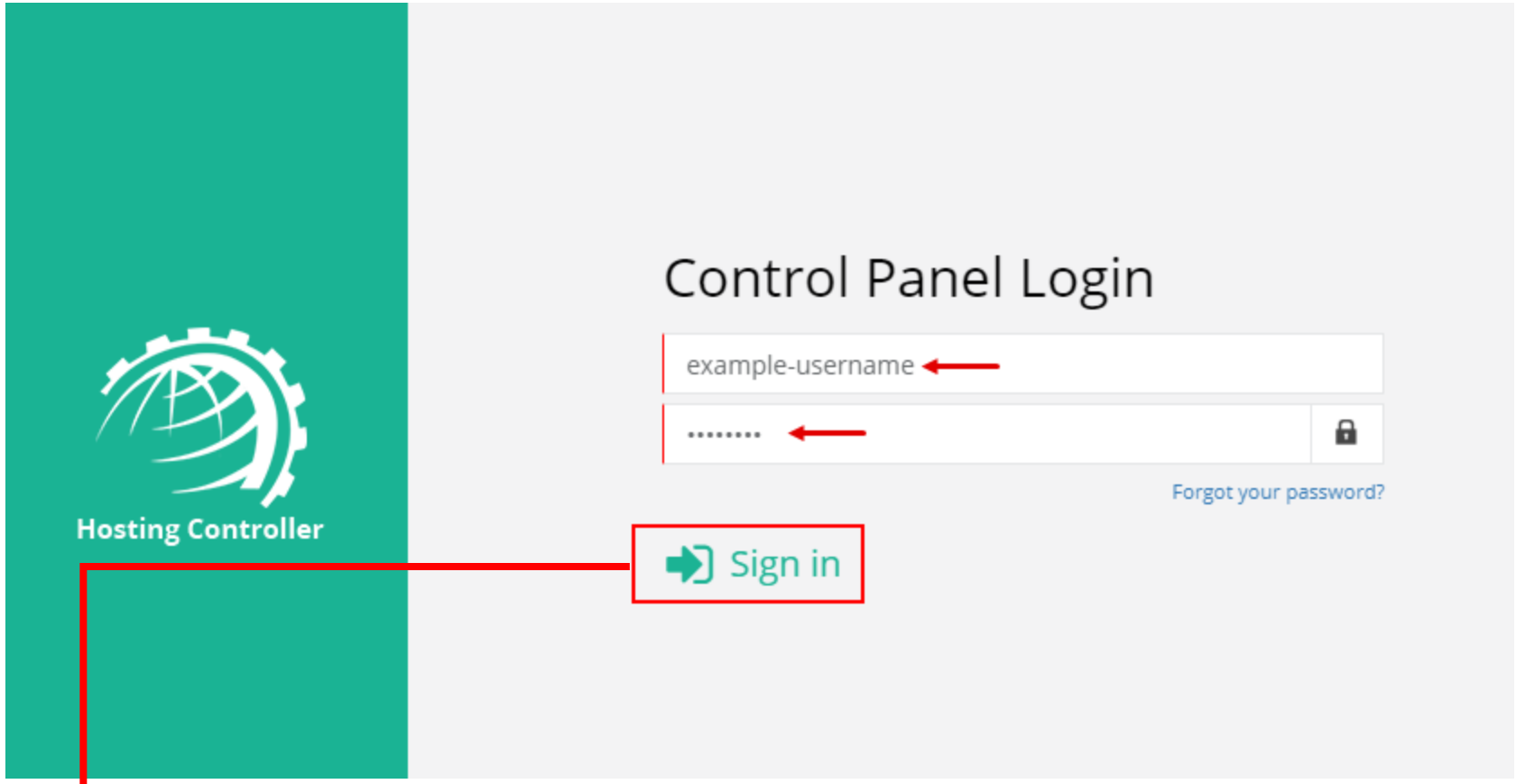


Provisioning Virtual Machines

Provisioning Process

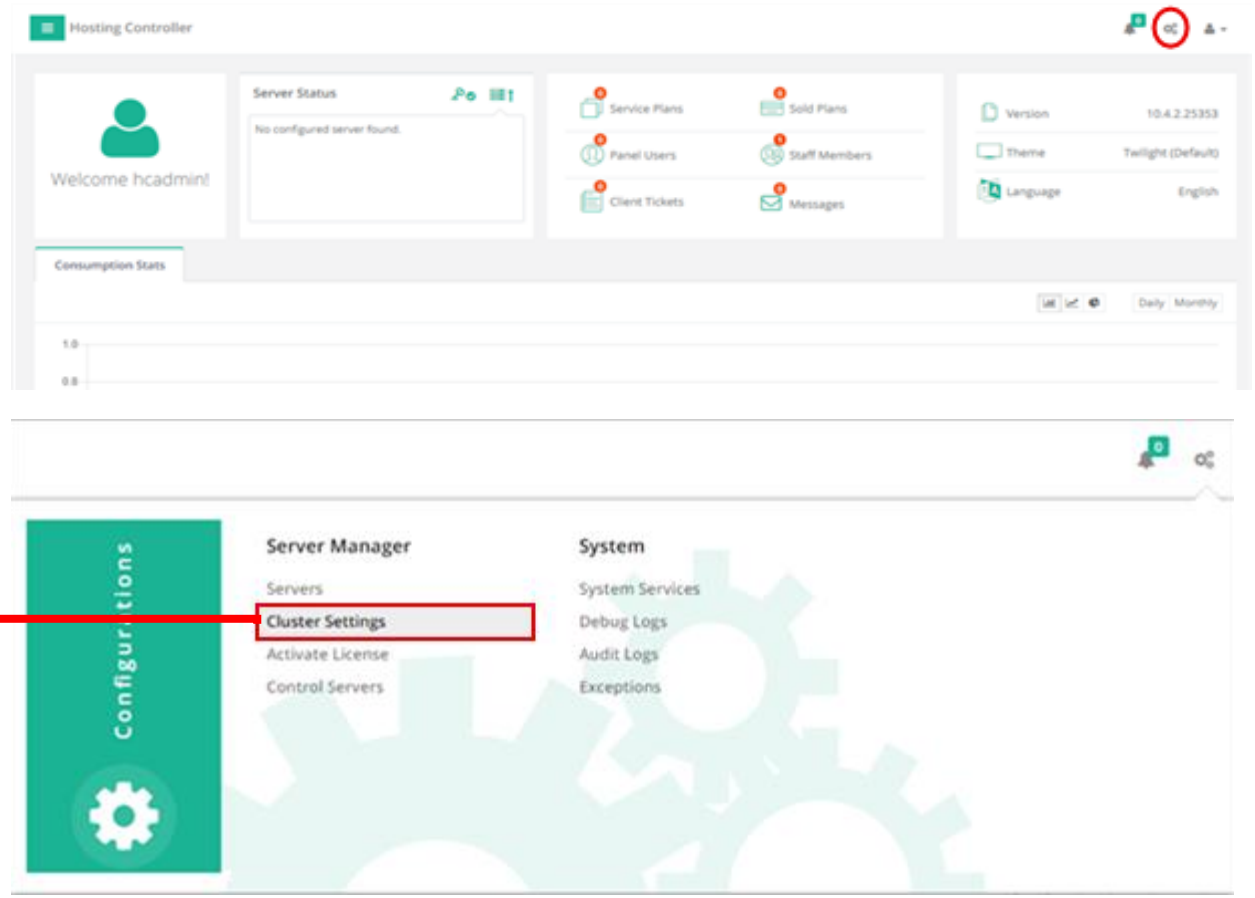


Open **Control Panel Login** screen



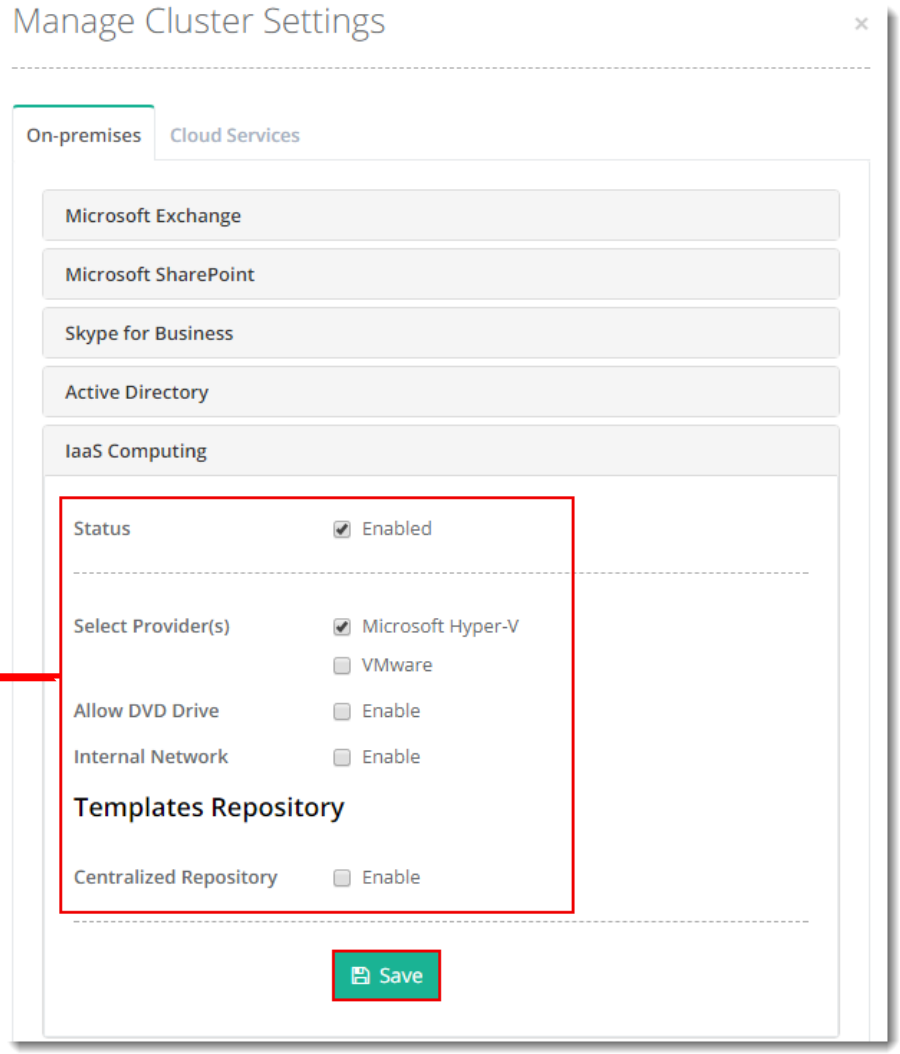
Go to http://YourIP:8797 to log on to HC10 control panel. Specify user credentials and click **Sign in** to proceed.

Go to **Configuration** screen



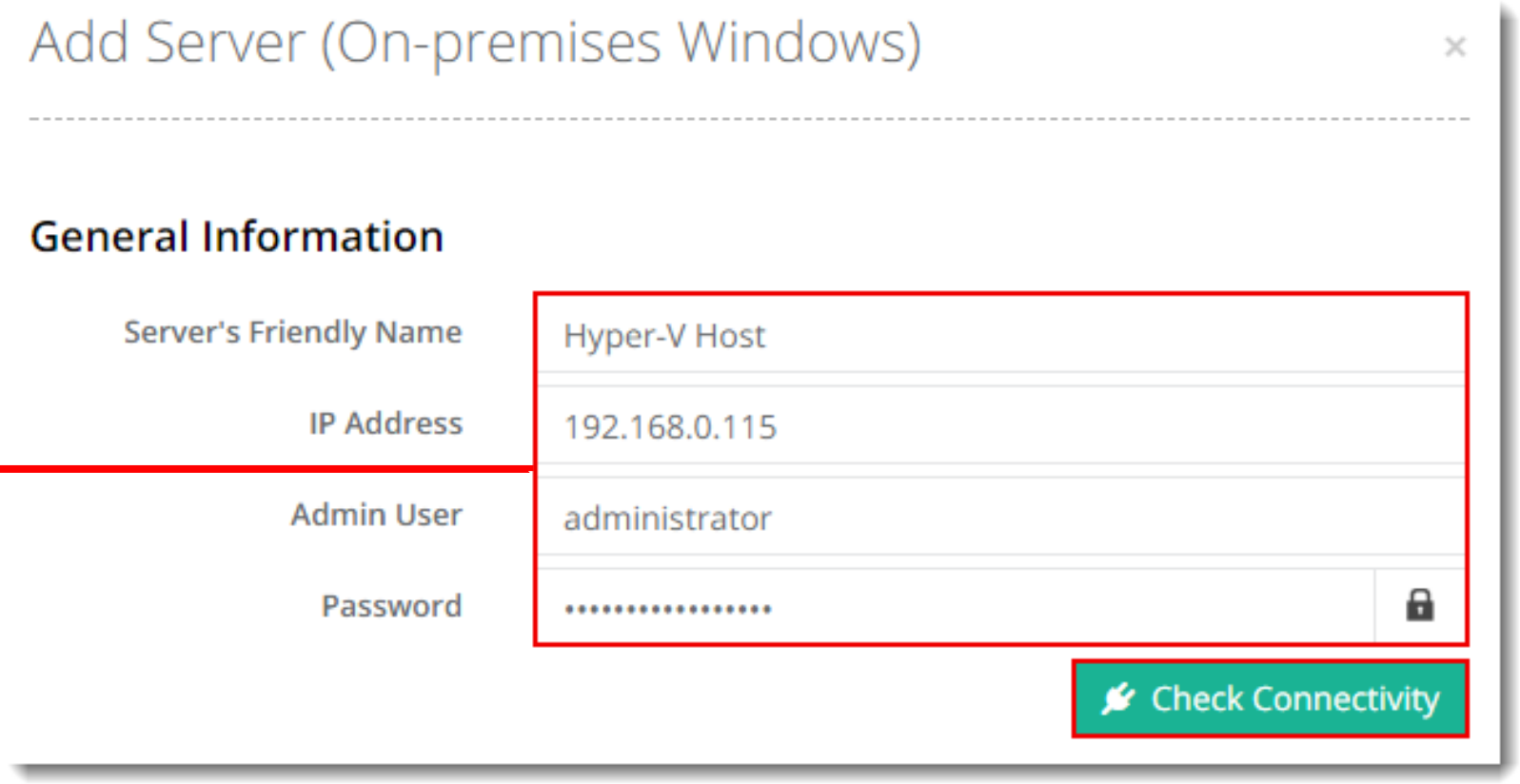
Go to **Cluster Settings** to enable Hyper-V and select Provider(s).

Enable **Hyper-V** globally from **Manage Cluster Settings** page



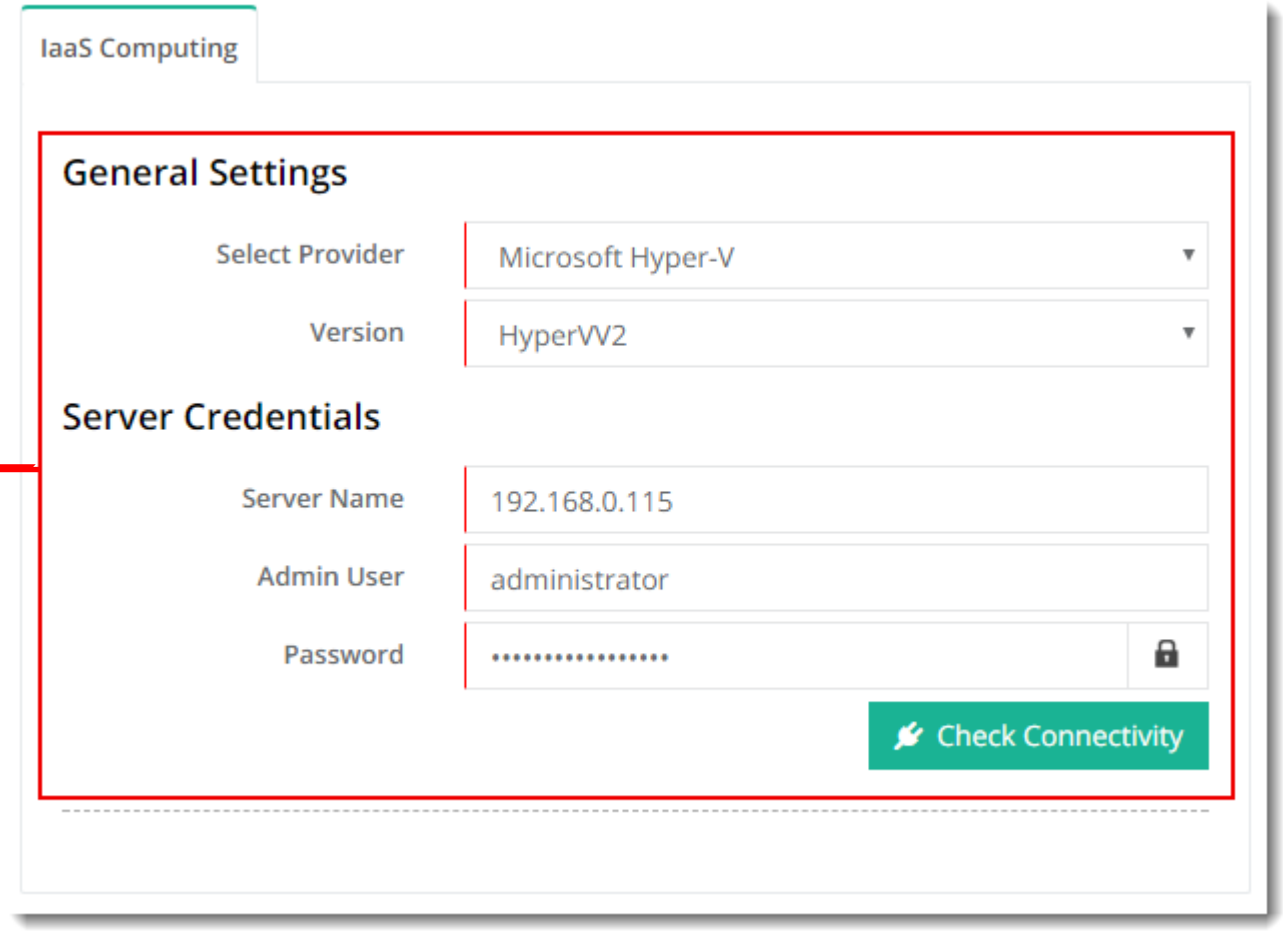
Go to **Cluster Settings** >> **IaaS Computing** to enable Hyper-V and select Provider(s) .

From **Manage Servers** page click **Add Server**



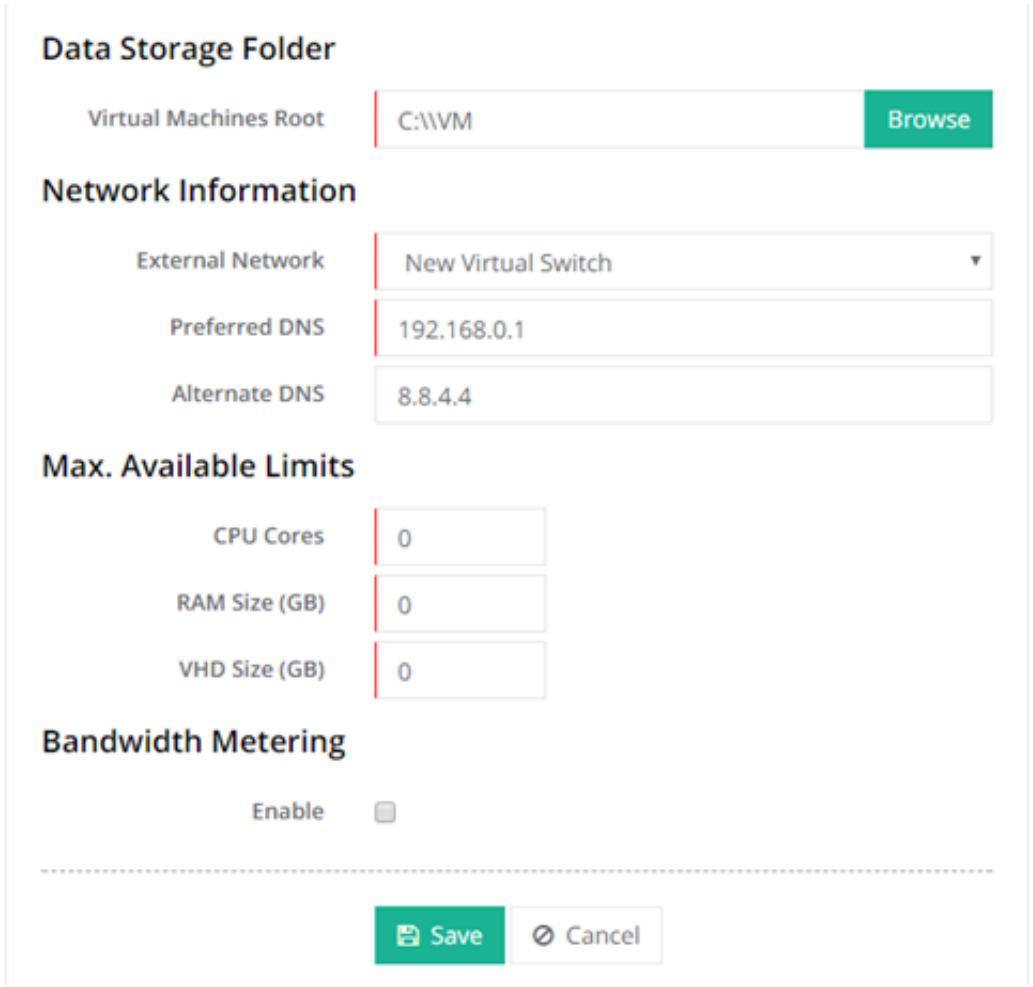
Go to **Manage Servers** >> **Add Server** page to add Hyper-V server. Fill out the **IP**, **Admin User** and **Password** for the Hyper-V Host. Check **Connectivity** to proceed.

Continue to configure the server



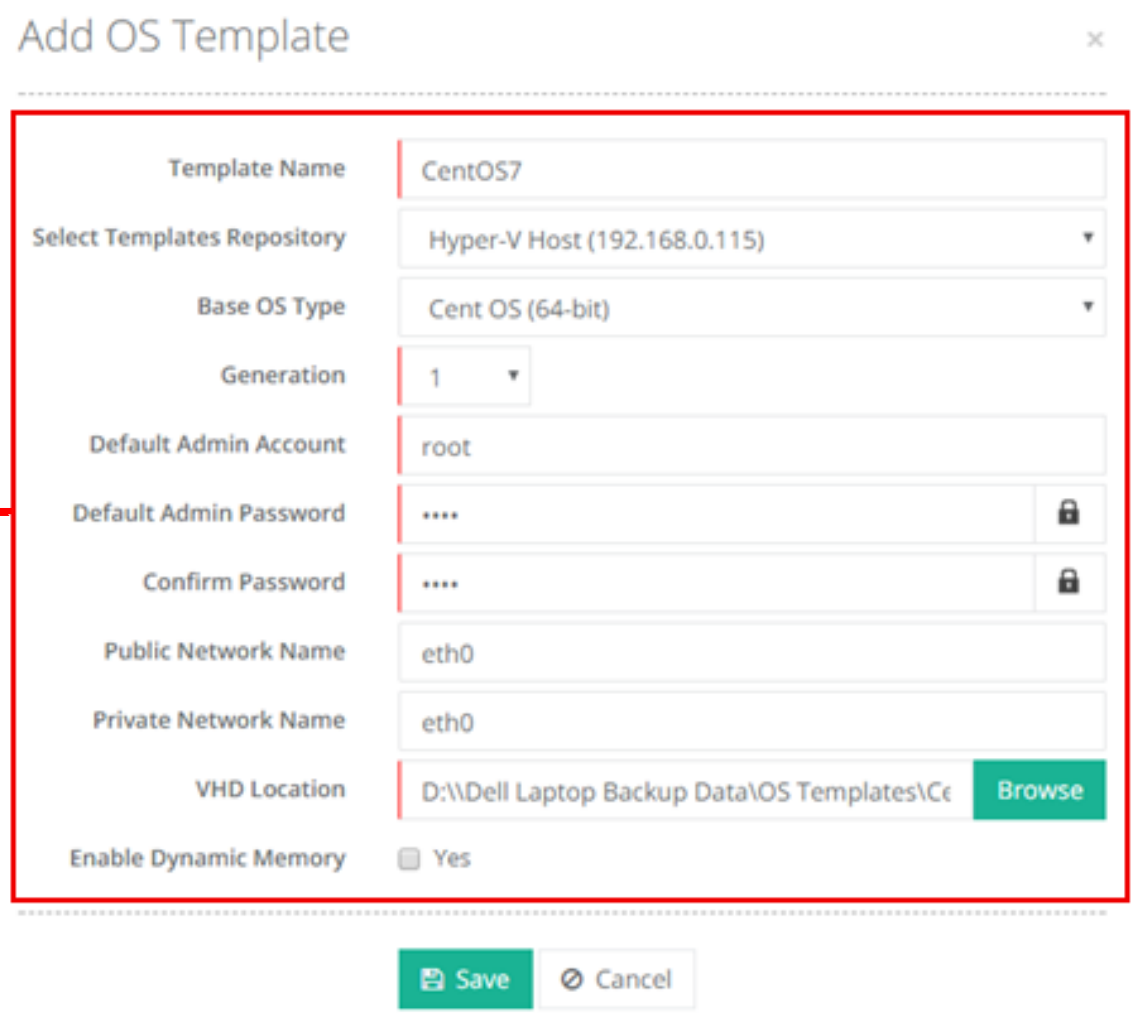
Specify **General Settings** to continue configuring. Fill out the **Server Name**, **Admin User** and **Password** option. Check **connectivity** to proceed.

Provide rest of the details to add a Hyper-V Host



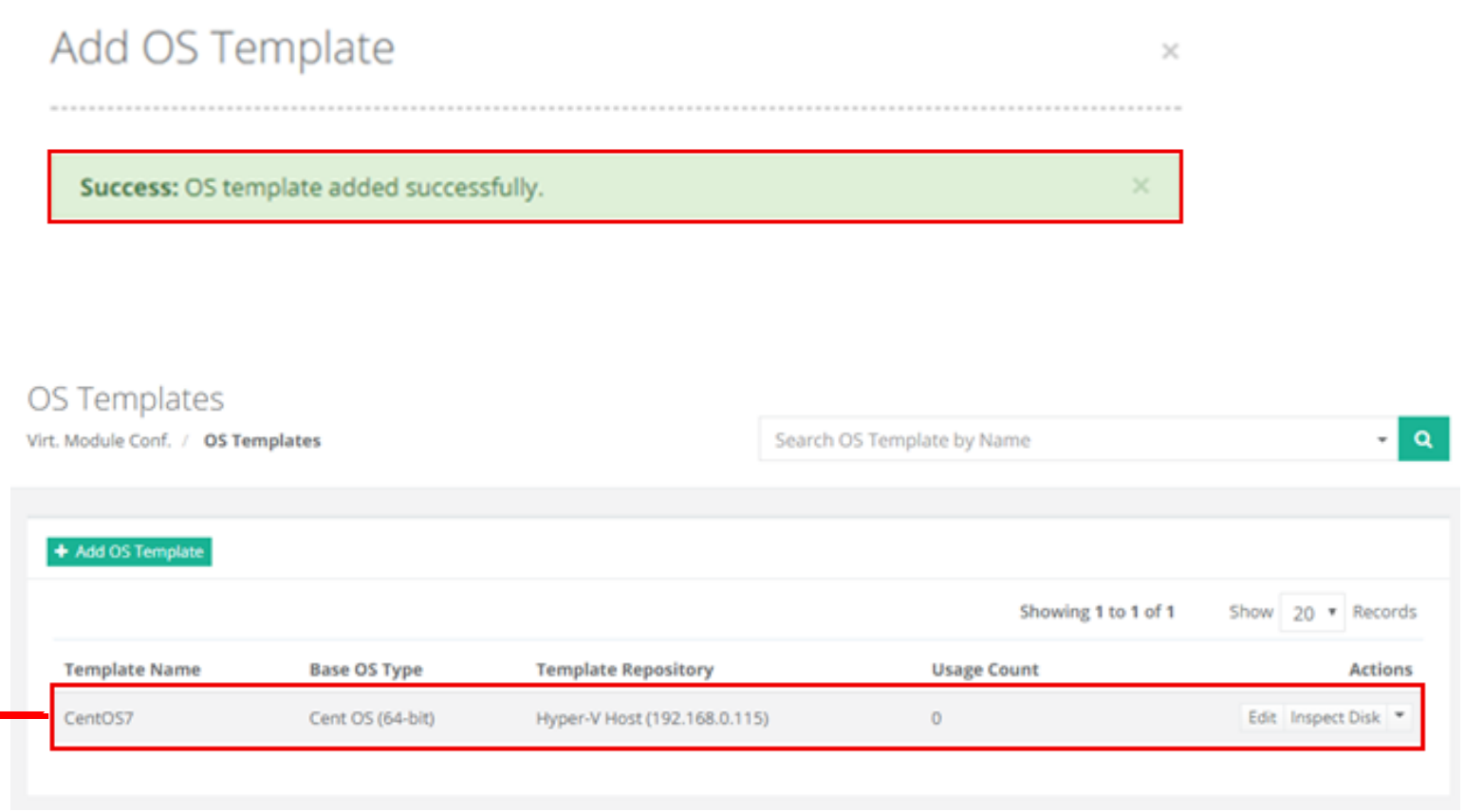
Provide rest of the details such as **Data Storage**, **Network Information**, **CPU**, **RAM** and **VHD Size** for virtual machines. Click **Save** to add Hyper-V Host.

From **OS Templates** page click **Add OS Template** to add an OS template



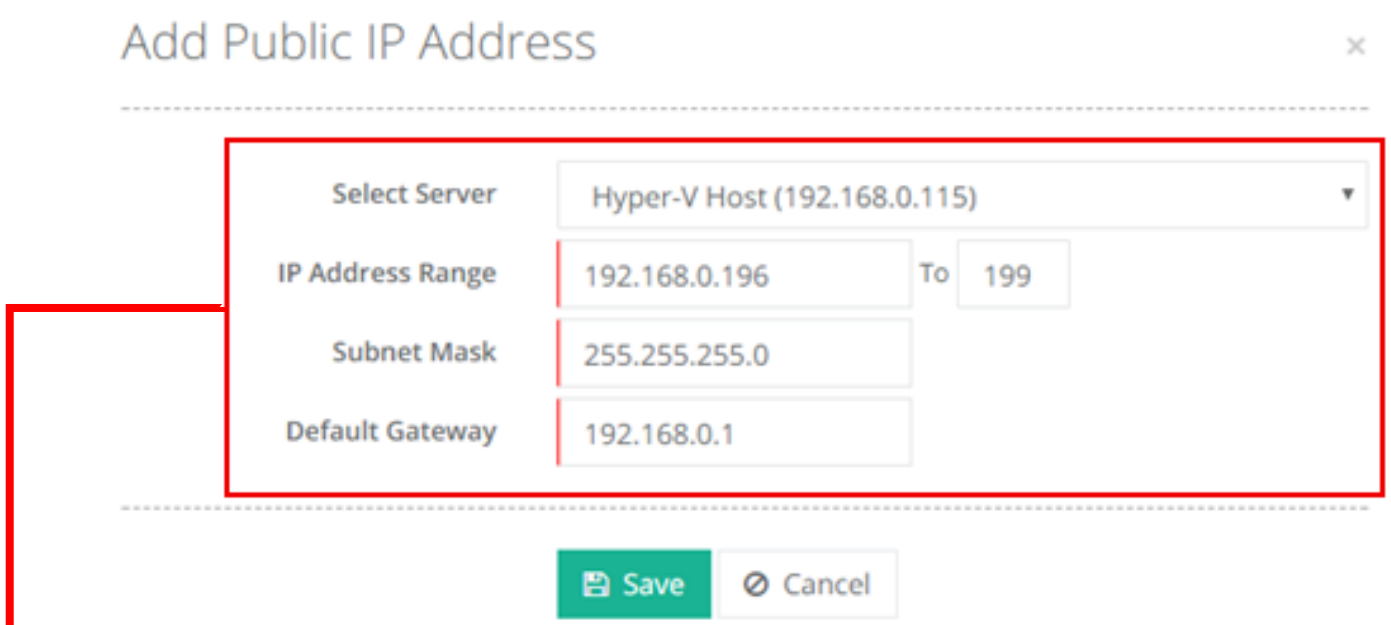
Go to **Virtual Module Conf.** >> **OS Templates** page to add an OS template. Click **Add OS Template** and fill out all the details. Click **Save** to add a template.

OS Template added and success message displayed



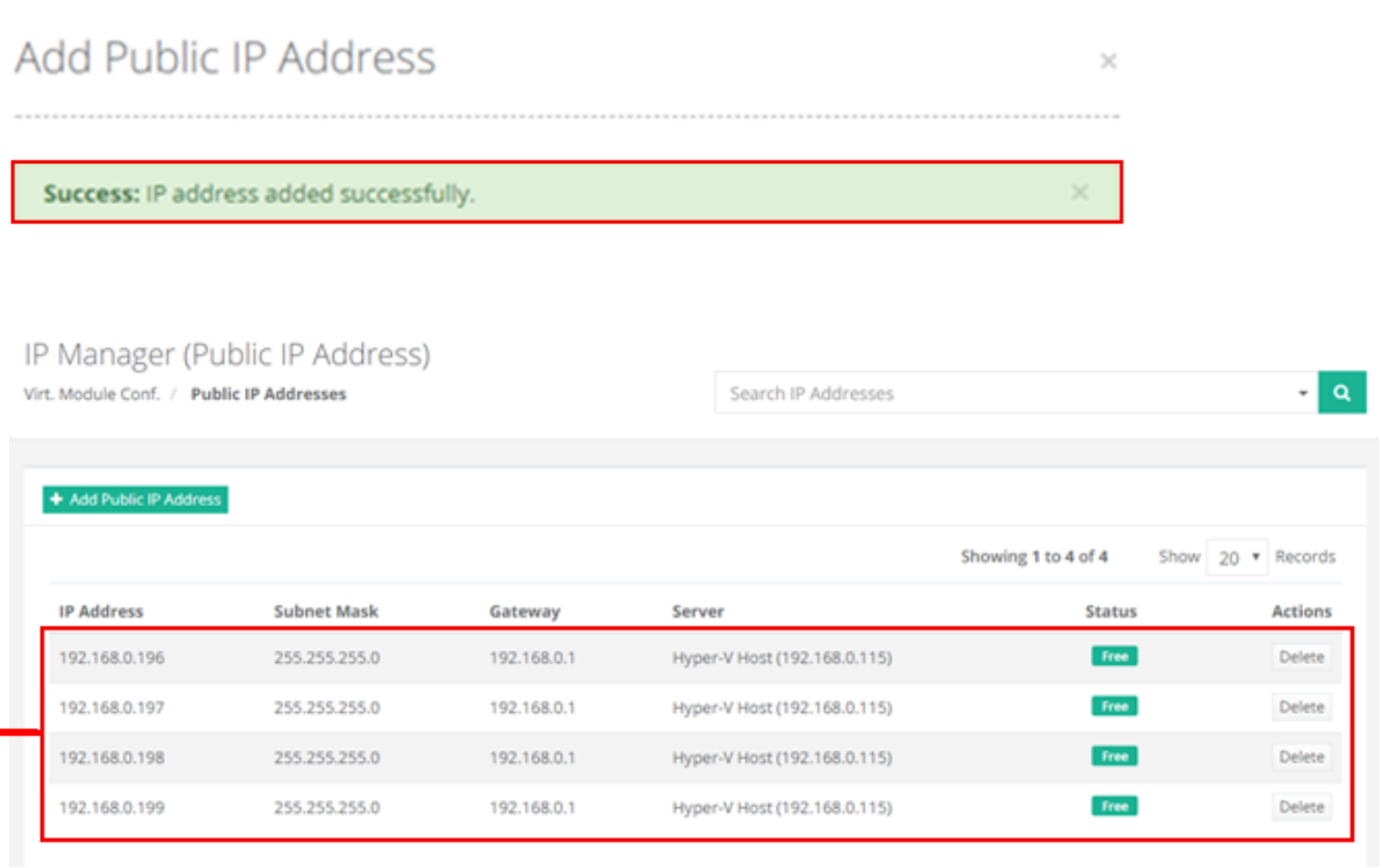
OS Template added successfully.

From **IP Manager** page click **Add Public IP Address** to add a range of public IPs



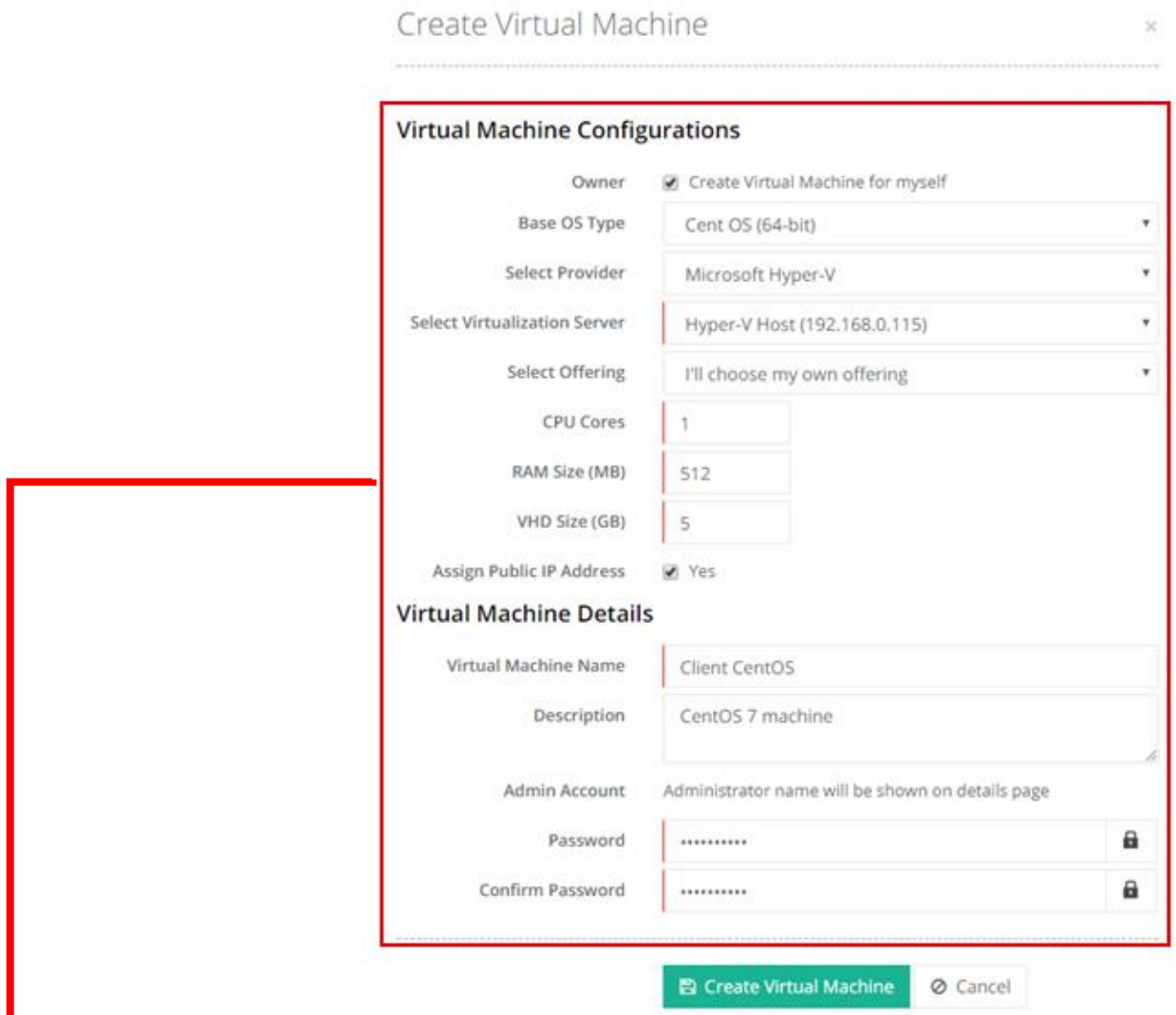
Go to **Virtual Module Conf.** >> **Public IP Addresses** page to specify a range of public IPs. Click **Add Public IP Address** and specify the **IP Address Range**, **Subnet Mask** and **Default Gateway**. Click **Save** to add the IPs.

IP addresses added and success message displayed



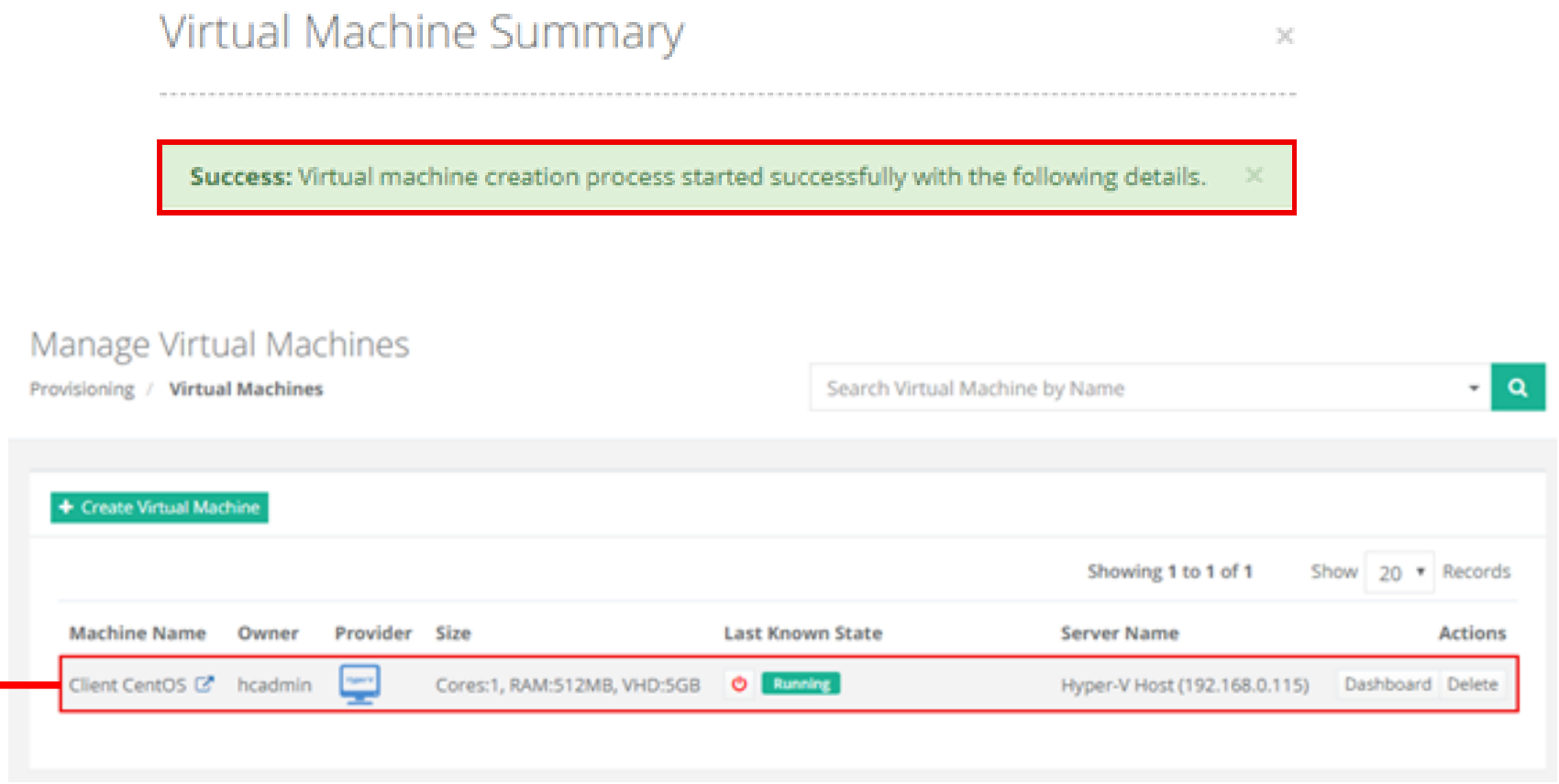
IP addresses added successfully.

From **Virtual Machines** page click **Create Virtual Machine** to add a virtual machine



Go to **Provisioning** >> **Virtual Machines** page to create a virtual machine. Click **Create Virtual Machine** and specify various configurations such as **Base OS Type**, **CPU**, **RAM**, **VHD** etc. Click **Create Virtual Machine**.

Virtual machine added and success message displayed



Virtual machine created successfully.

Contact Hosting Controller

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Microsoft Hyper-V

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