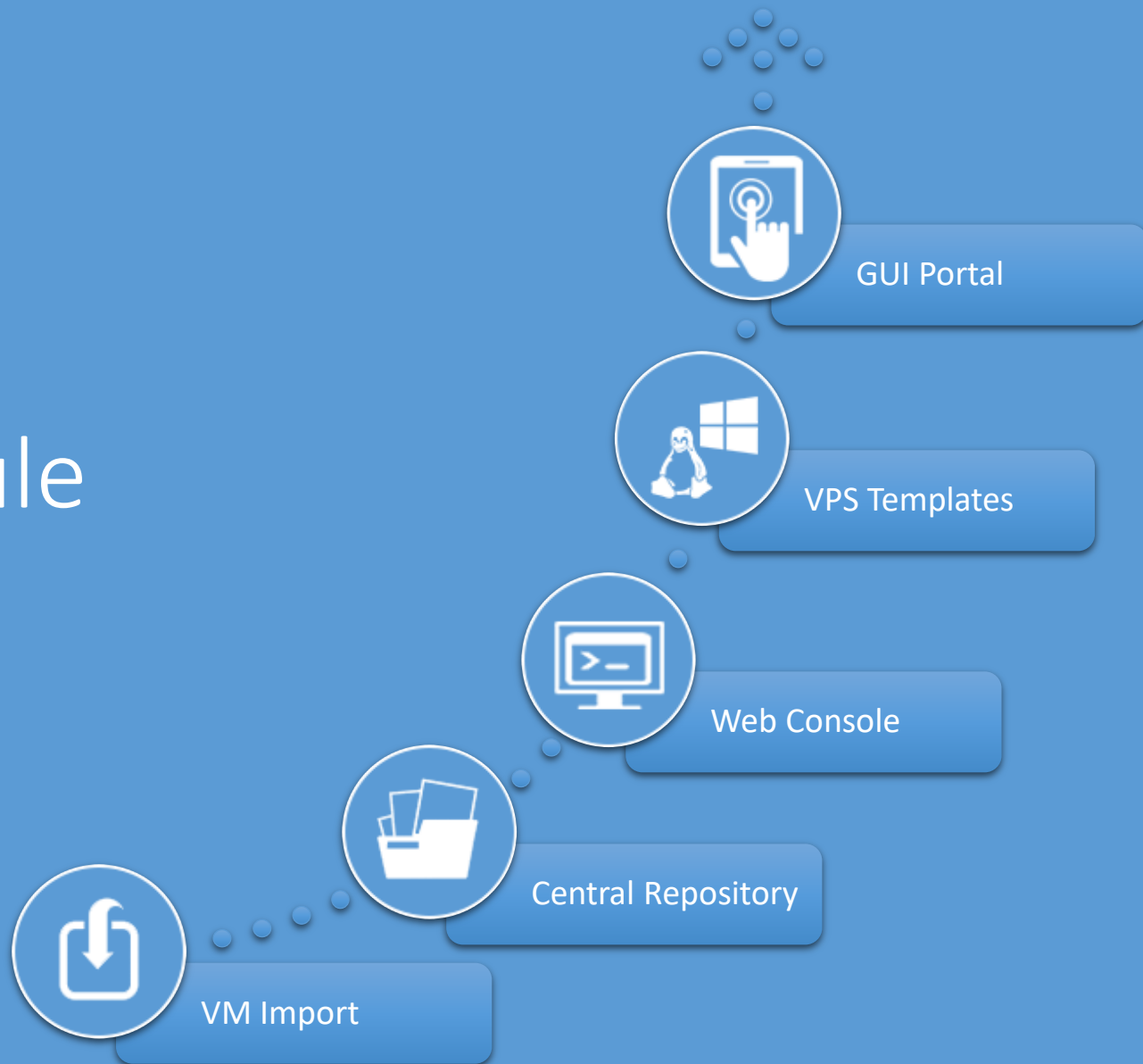
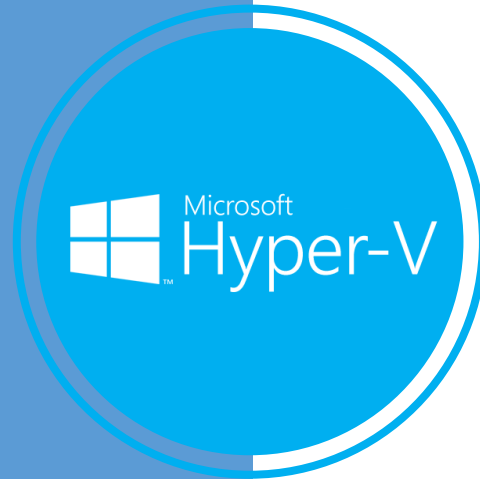




# HC Hyper-V Module





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

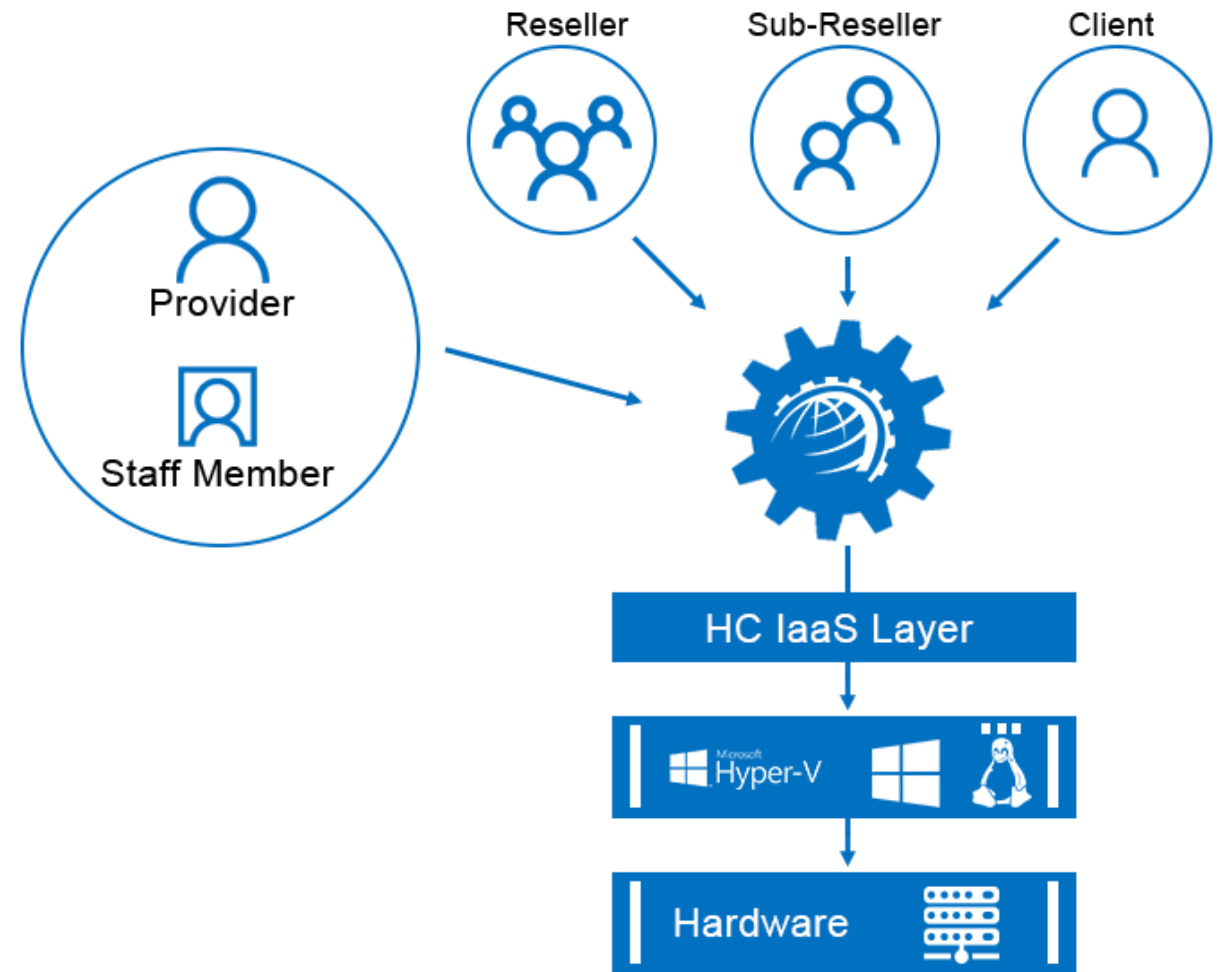
- 

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

Provisioning > Virtual Machines > Dashboard


### Virtual Machine Dashboard

27feb [🔗](#) root | [Change Password](#)

[Start](#) | [Pause](#) | [Shutdown](#) | [Reboot](#) | [Take Snapshot](#)

status	owner	cpu cores	ram size	vhd size	public ip address	private ip address
<span style="color: green;">Running</span>	hcadmin	2 Cores	300 MB	6 GB	58.65.163.125 <a href="#">Click to Change</a>	No IP assigned

Thumbnail



### Virtual Machine Details

**General Properties**

- VLANs
- Snapshots
- Public IP Addresses
- Private IP Addresses

OS Template	CentOs7
Select Offering	I'll choose my own offering
CPU Cores	2
RAM Size (MB)	300
VHD Size (GB)	6

#### Dynamic Memory Settings

Enable Dynamic Memory  Yes

Startup RAM (MB)	512
Minimum RAM (MB)	512

⚠️ "Startup RAM" and "Minimum RAM" must be a multiple of two, and both must be less than the "RAM Size".

[Save](#)

# - 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 3<sup>rd</sup> 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

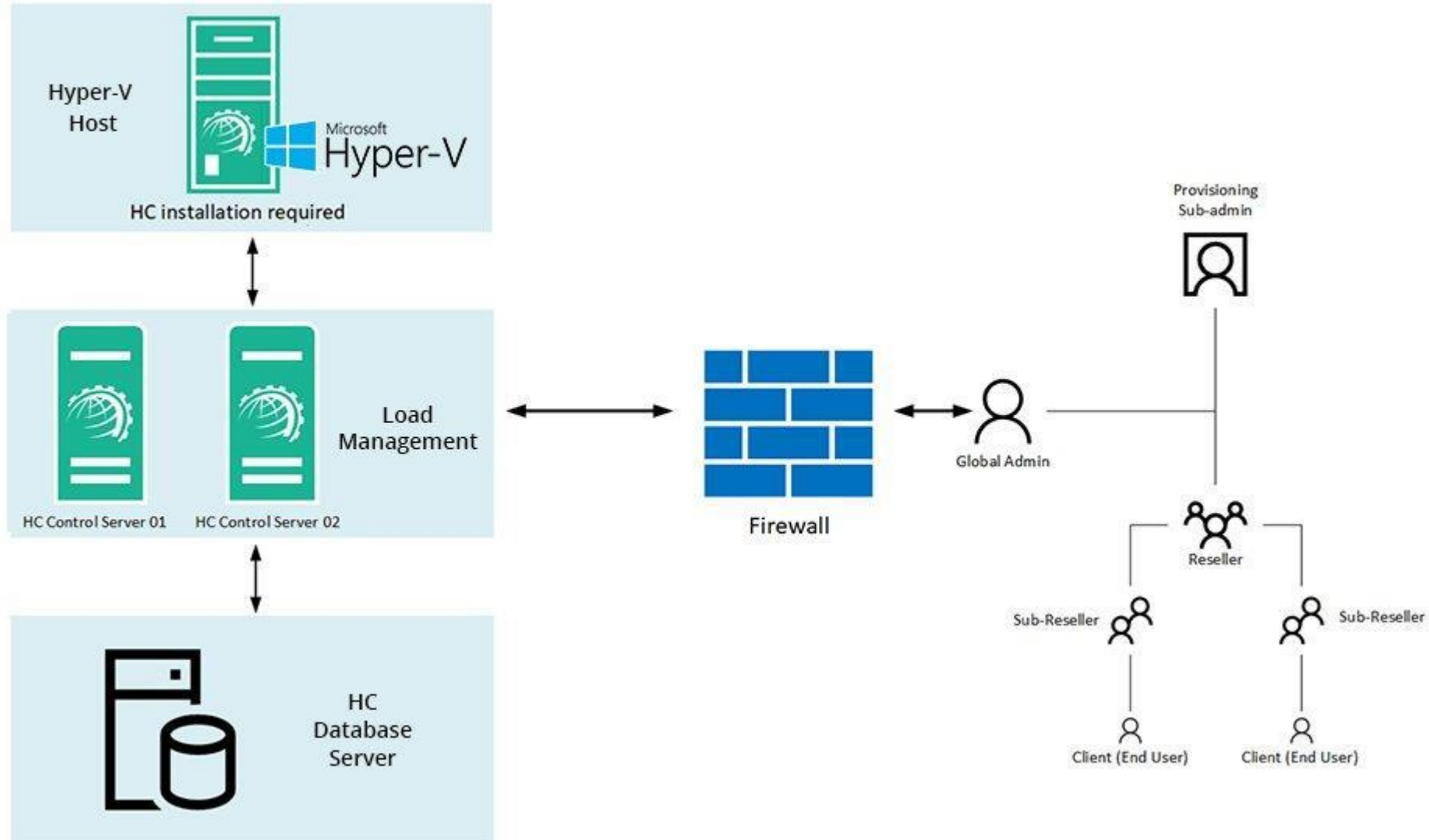
## Software

- 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.

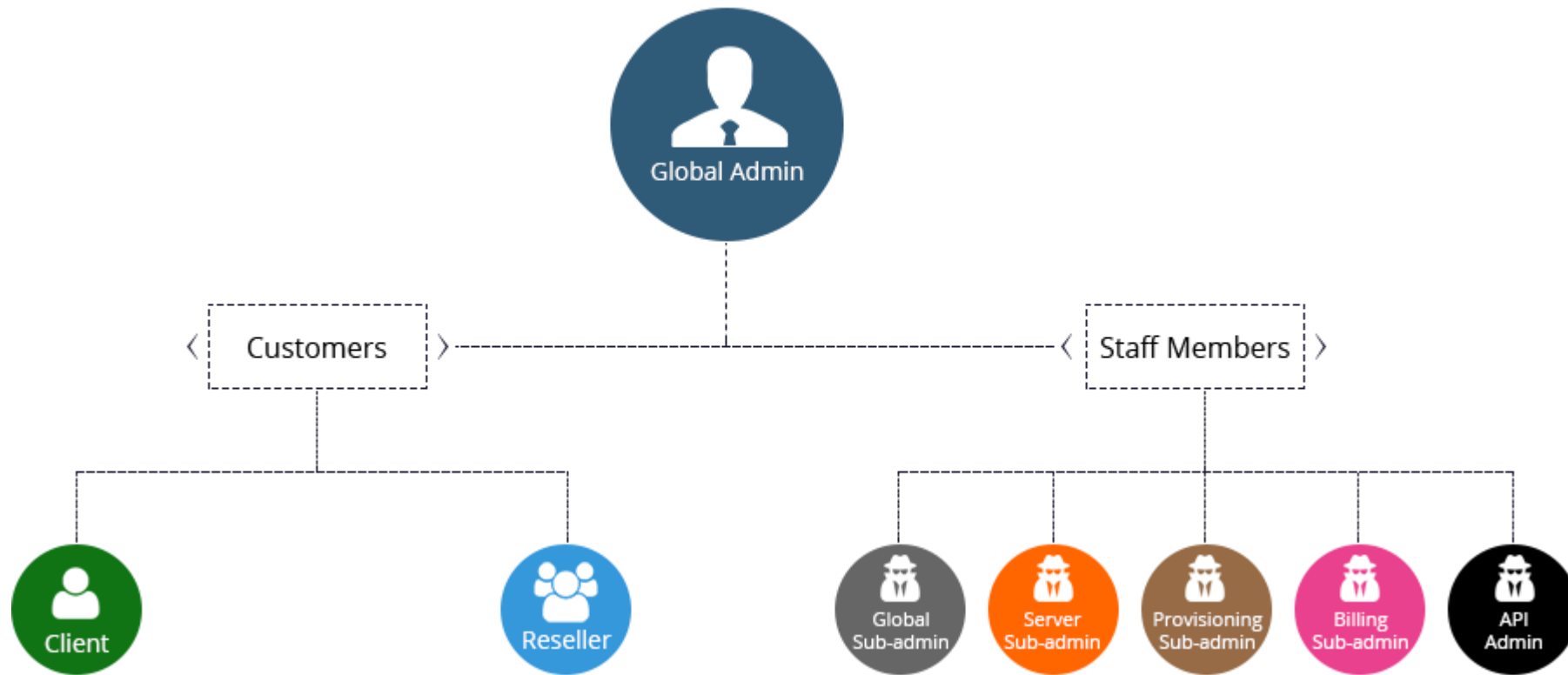
# The Environment



# Installing Hosting Controller

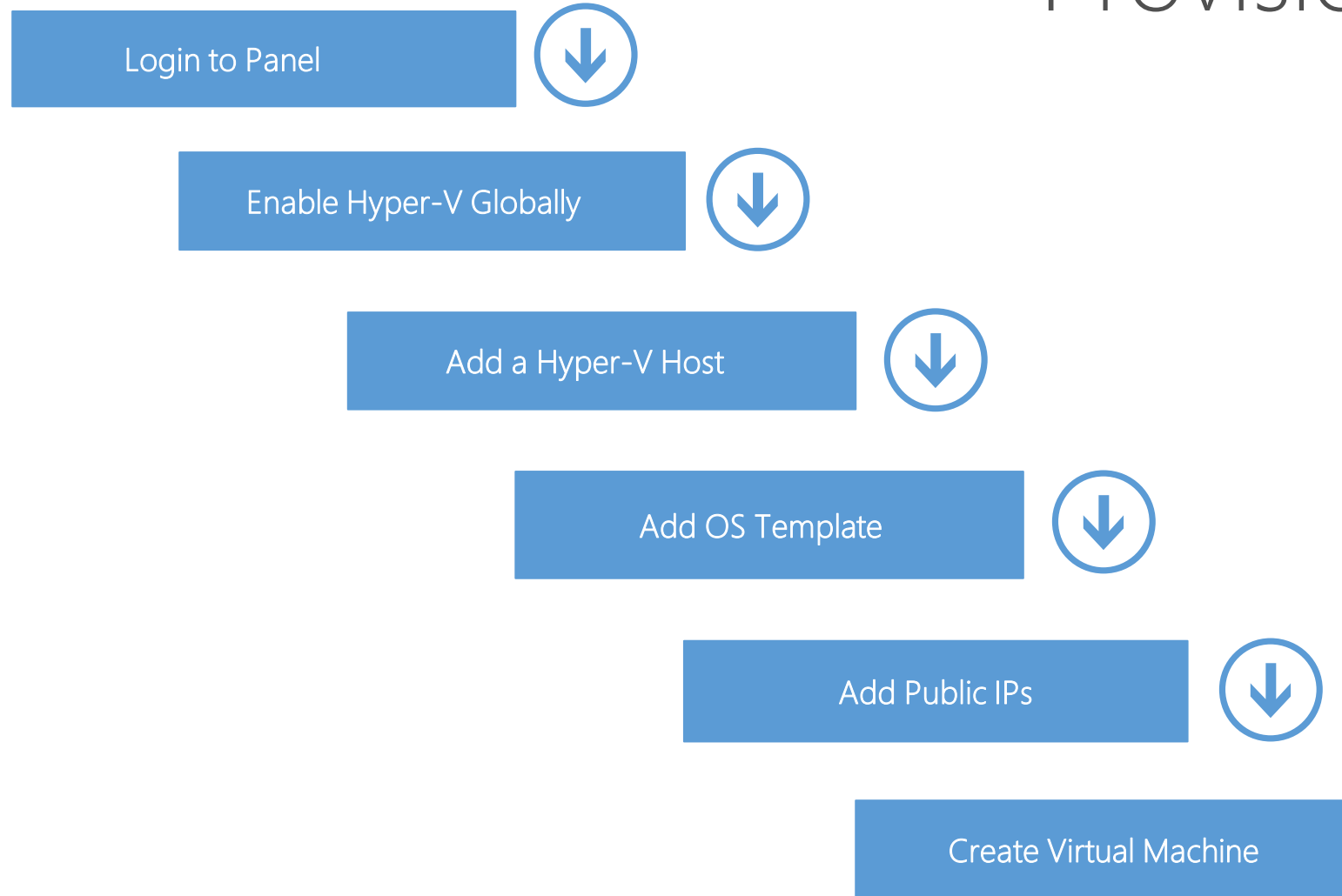
The installation of HC itself is fairly simple. Just download [HC installer](#) and apply it on the Hyper-V host. Follow a step by step wizard to complete the procedure. To view the installation procedure in detail, see [HC10 Installation Guide](#).

# HC User Structure

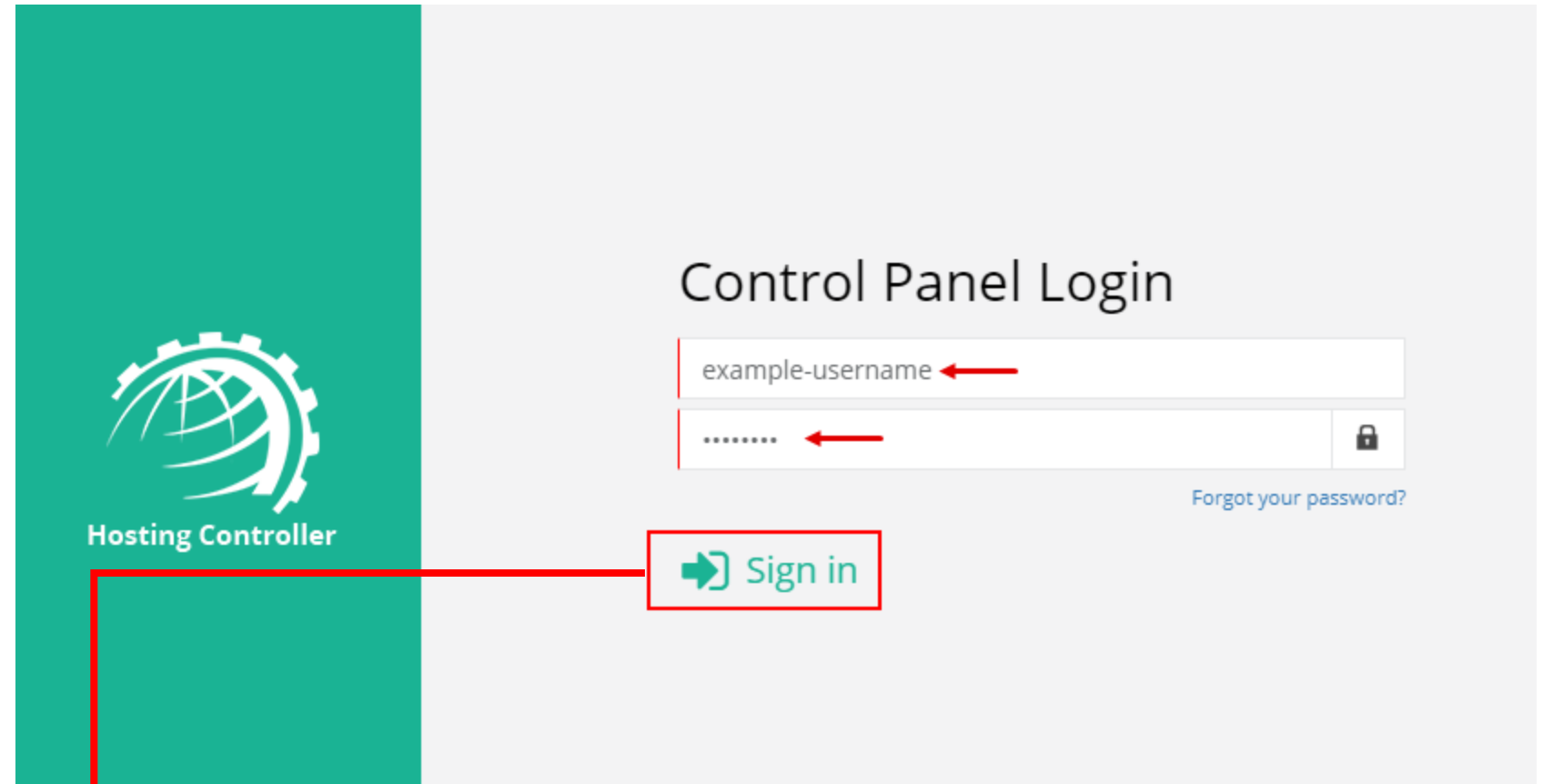


# Provisioning Virtual Machines

# Provisioning Process



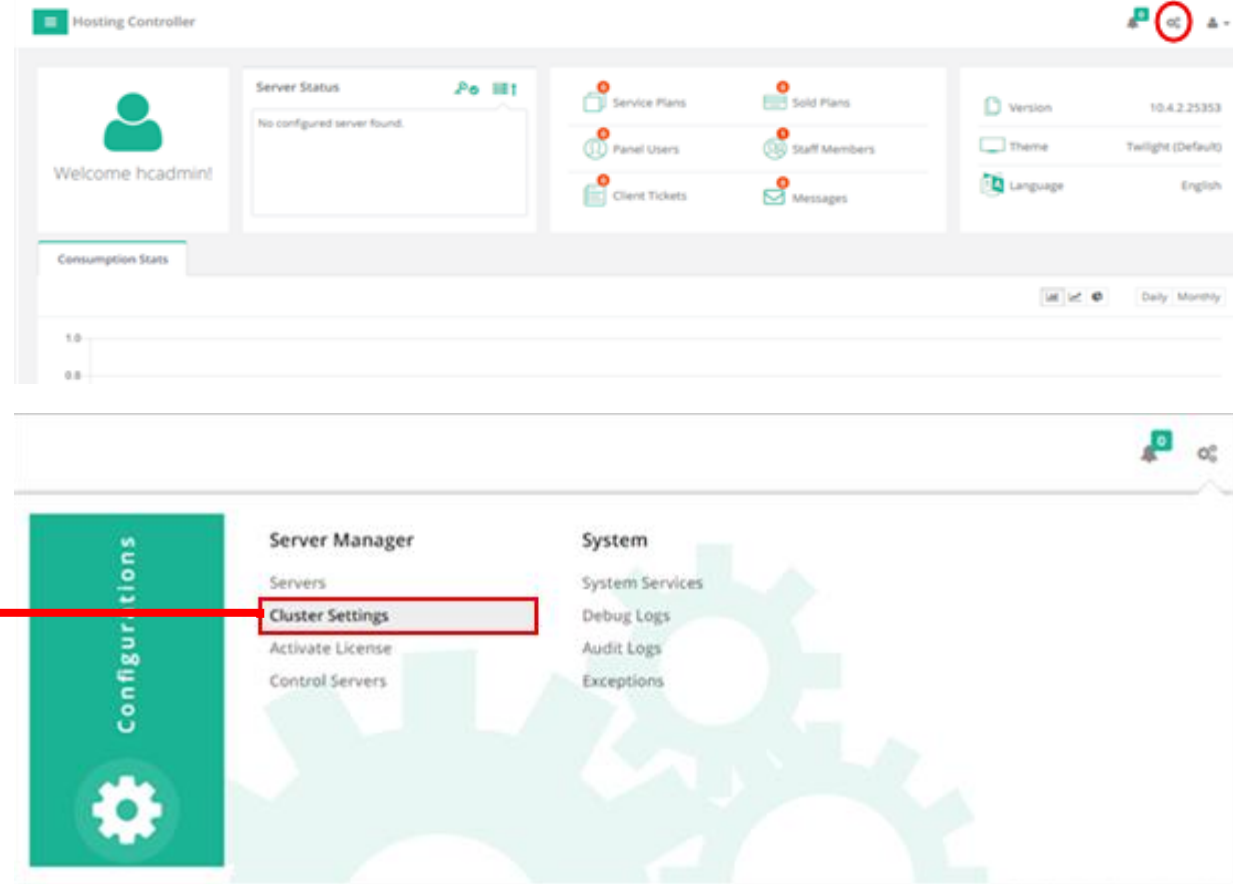
Open Control Panel  
Login screen



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

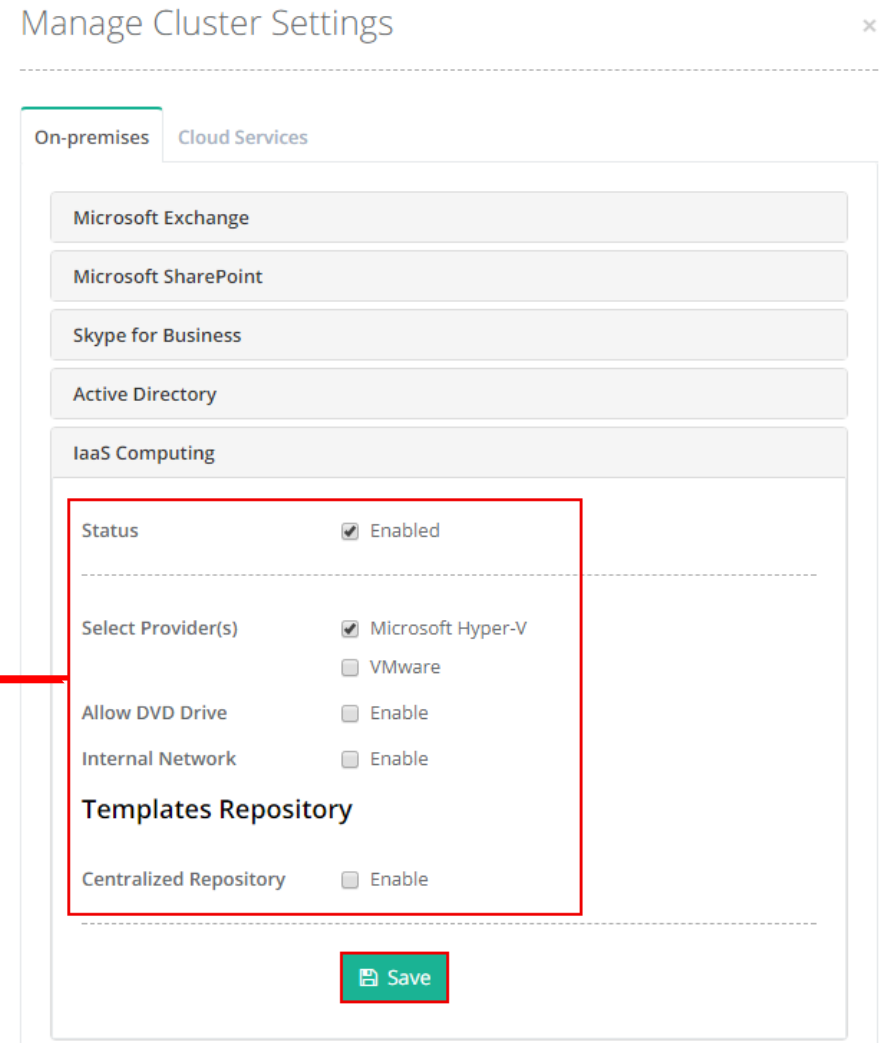


Go to Configuration screen



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**

## Add Server (On-premises Windows) ✕

### General Information

Server's Friendly Name

Hyper-V Host

IP Address

192.168.0.115

Admin User

administrator

Password

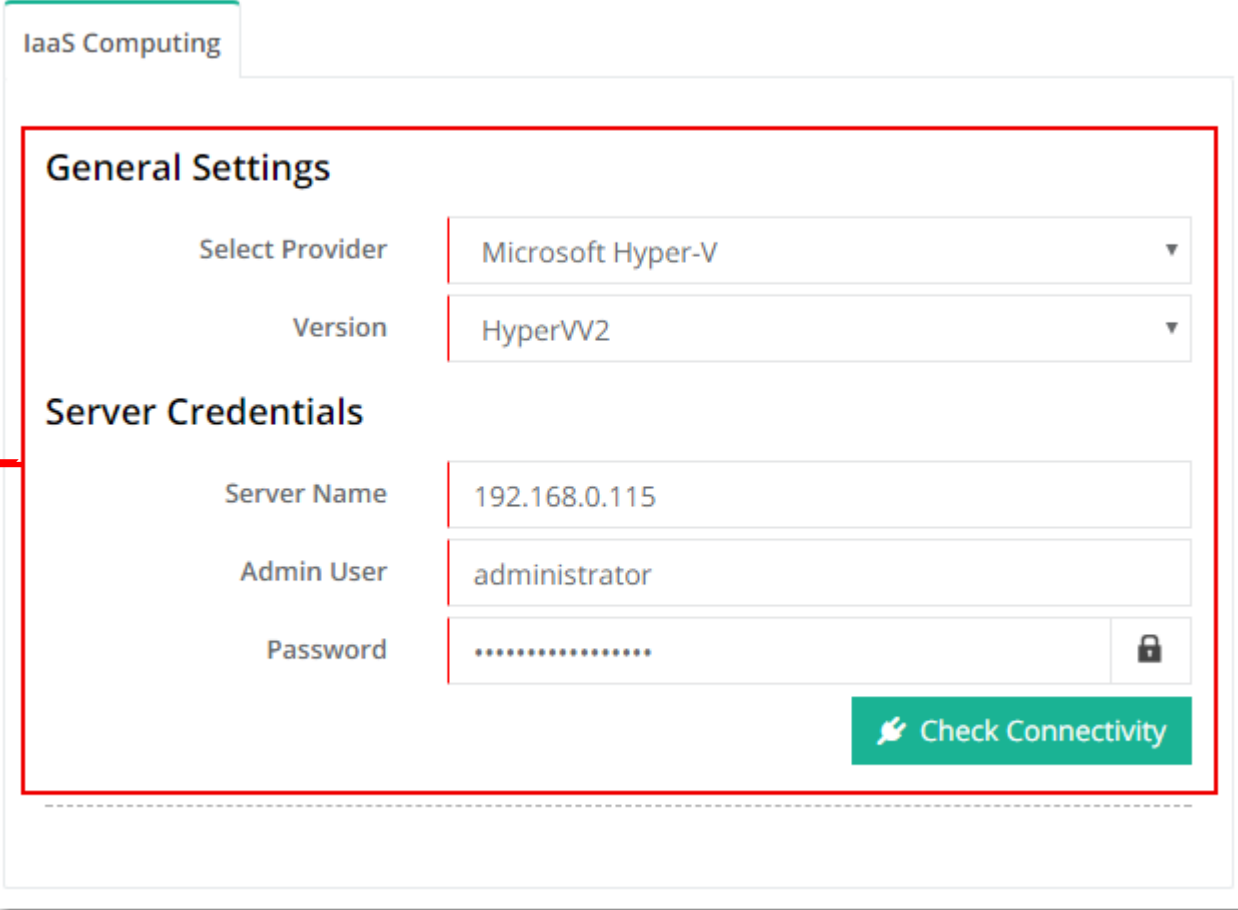
.....



Check Connectivity

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



The screenshot shows a configuration window titled "IaaS Computing". It contains two main sections: "General Settings" and "Server Credentials".

**General Settings**

- Select Provider: Microsoft Hyper-V
- Version: HyperVV2

**Server Credentials**

- Server Name: 192.168.0.115
- Admin User: administrator
- Password: [Redacted]

A green button labeled "Check Connectivity" is located at the bottom right of the form. A red box highlights the entire configuration area, and a red arrow points from the bottom left of this box towards the explanatory text below.

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

### Data Storage Folder

Virtual Machines Root

### Network Information

External Network

Preferred DNS

Alternate DNS

### Max. Available Limits

CPU Cores

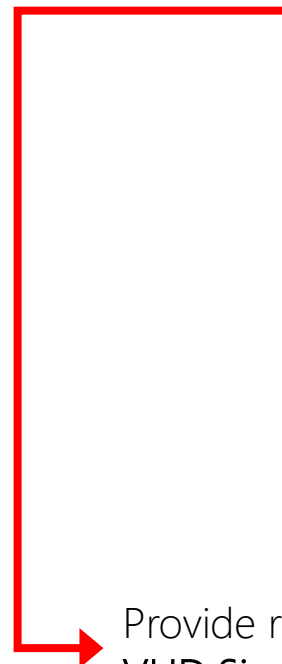
RAM Size (GB)

VHD Size (GB)

### Bandwidth Metering

Enable

---



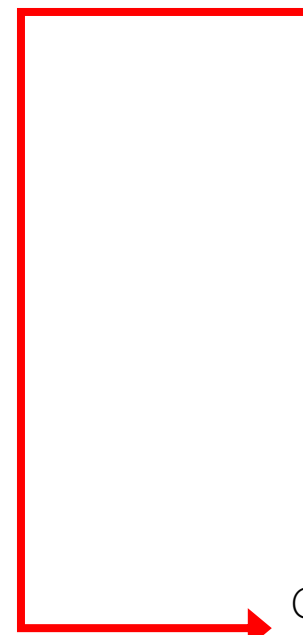
Provide rest of the details such as **Data Storage**, **Network Information**, **CPU**, **RAM** and **VHD Size** for virtual machines. Click **Save** to add Hyper-V Host.

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

### Add OS Template ×

---

Template Name	<input type="text" value="CentOS7"/>
Select Templates Repository	<input type="text" value="Hyper-V Host (192.168.0.115)"/> ▼
Base OS Type	<input type="text" value="Cent OS (64-bit)"/> ▼
Generation	<input type="text" value="1"/> ▼
Default Admin Account	<input type="text" value="root"/>
Default Admin Password	<input type="password" value="****"/>
Confirm Password	<input type="password" value="****"/>
Public Network Name	<input type="text" value="eth0"/>
Private Network Name	<input type="text" value="eth0"/>
VHD Location	<input type="text" value="D:\\Dell Laptop Backup Data\\OS Templates\\Cc"/> <input type="button" value="Browse"/>
Enable Dynamic Memory	<input checked="" type="checkbox"/> Yes



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

## Add OS Template

Success: OS template added successfully.

## OS Templates

Virt. Module Conf. / OS Templates

Search OS Template by Name

+ Add OS Template

Showing 1 to 1 of 1 Show 20 Records

Template Name	Base OS Type	Template Repository	Usage Count	Actions
CentOS7	Cent OS (64-bit)	Hyper-V Host (192.168.0.115)	0	Edit Inspect Disk

OS Template added successfully.

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

Add Public IP Address

Select Server: Hyper-V Host (192.168.0.115)

IP Address Range: 192.168.0.196 To 199

Subnet Mask: 255.255.255.0

Default Gateway: 192.168.0.1

Save Cancel

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

## Add Public IP Address

Success: IP address added successfully.

## IP Manager (Public IP Address)

Virt. Module Conf. / Public IP Addresses

Search IP Addresses

+ Add Public IP Address

Showing 1 to 4 of 4 Show 20 Records

IP Address	Subnet Mask	Gateway	Server	Status	Actions
192.168.0.196	255.255.255.0	192.168.0.1	Hyper-V Host (192.168.0.115)	Free	Delete
192.168.0.197	255.255.255.0	192.168.0.1	Hyper-V Host (192.168.0.115)	Free	Delete
192.168.0.198	255.255.255.0	192.168.0.1	Hyper-V Host (192.168.0.115)	Free	Delete
192.168.0.199	255.255.255.0	192.168.0.1	Hyper-V Host (192.168.0.115)	Free	Delete

IP addresses added successfully.

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

**Create Virtual Machine**

**Virtual Machine Configurations**

Owner  Create Virtual Machine for myself

Base OS Type

Select Provider

Select Virtualization Server

Select Offering

CPU Cores

RAM Size (MB)

VHD Size (GB)

Assign Public IP Address  Yes

**Virtual Machine Details**

Virtual Machine Name

Description

Admin Account

Password

Confirm Password

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 Summary

Success: Virtual machine creation process started successfully with the following details.

## Manage Virtual Machines



Provisioning / Virtual Machines

Search Virtual Machine by Name

+ Create Virtual Machine

Showing 1 to 1 of 1

Show 20 Records

Machine Name	Owner	Provider	Size	Last Known State	Server Name	Actions
Client CentOS	hcadmin		Cores:1, RAM:512MB, VHD:5GB	 Running	Hyper-V Host (192.168.0.115)	Dashboard Delete

Virtual machine created successfully.

# Contact Hosting Controller

Suite 401, 50 Burnhamthorpe Road W.  
Mississauga, ON, L5B 3C2 Canada



Canada: +1 (647) 799-1000  
USA: +1 (213) 341-8140



[sales@hostingcontroller.com](mailto:sales@hostingcontroller.com)



[www.hostingcontroller.com](http://www.hostingcontroller.com)