CLOUD HOSTING

CLIENT PORTAL USER GUIDE

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SaskTel
Business Solutions

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1. INTRODUCTION

SaskTel Cloud Hosting self-serve portal offers an intuitive and easy-to-use interface where you can manage your virtual environment. To access the portal, log in to your profile at **mysasktel.com** and launch the Cloud Hosting link (sasktelcloudservice.com).

Log in using the email address and password provided to you by SaskTel. The Dashboard is the first screen you will see after logging into the portal.

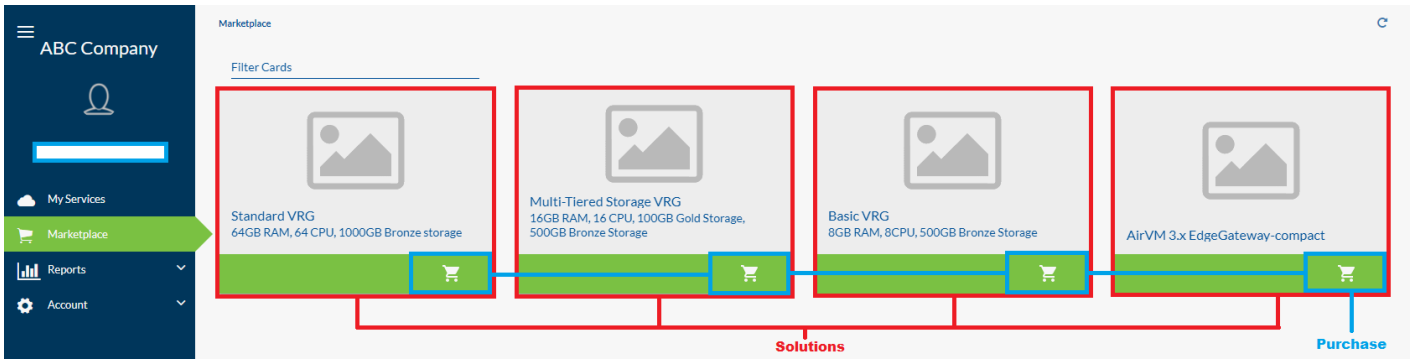
Key elements that will make navigating and using the Portal more intuitive include:

A. **Profile Section:** Displays the account currently logged into the portal. From this section you can access your user profile section where you can update all your personal information, change users, and sign out.
B. **Main Navigation:** This section contains menu items that allow you to manage your virtual data center and virtual resources including: My Services, Marketplace, Reports, and Account.
C. **Task Bar:** Displays notifications of any Running tasks, Completed tasks, and Failed Tasks.
D. **Refresh:** Allows you to refresh your display screen.

2. MAIN NAVIGATION – MARKETPLACE

The Marketplace sections displays all the products available to be purchased. Click **Purchase** to buy the selected product.

NOTE: This may have previously been completed by SaskTel if requested.

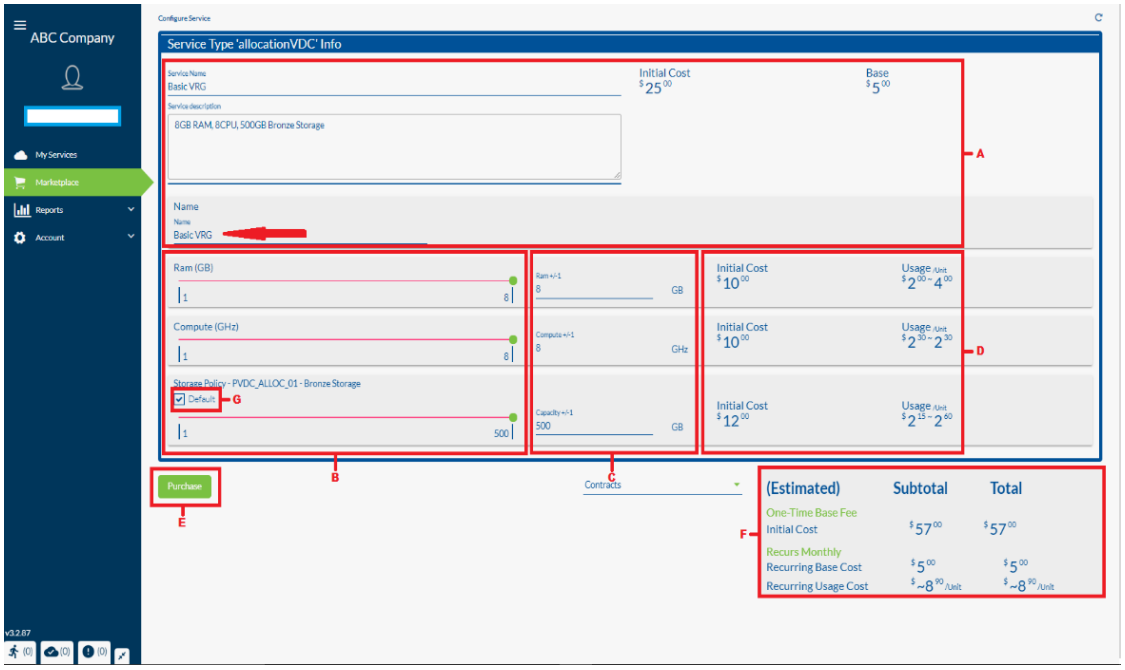


Add Services

Description of acronyms used in this section of the document:

NAME	DESCRIPTION
Virtual Resource Group (VRG)	A virtual Resource Group is a pool or collection of cloud infrastructure resources specifically designed for your enterprise business needs. The basic resources are the processor (CPU), memory (RAM), storage (disk space).
vApp	vApps are containers that can hold VMs and Networks.
vApp Template / Virtual Machine Template	A vApp template is a virtual machine image that is loaded with an operating system, applications, patches (if any), and data.
Storage Policy	Storage policy defines the Tier storage the VM resides in. Tier Storage is defined based on IOPS limit.

The first step in setting up your environment will be to purchase a VRG. **NOTE:** This step is usually completed by SaskTel. After selecting a VRG product to be purchased, you will be taken to the configure service page to finalize the purchase and provision the solution.



A. Displays the current product selected for purchase. Enter the Customer name.
B. Allows you to adjust the amount of RAM (GB), CPU (GHz), and Storage Policy (GB) that is being purchased.
C. Displays the maximum RAM, CPU, and Storage that can be purchased in this Solution.
D. Displays the initial cost and usage per unit.
E. Displays the current product selected to be purchased.
F. Displays the total costs of the solution.
G. Displays all storage policies. Select the required storage policy and click Add Storage Policies.

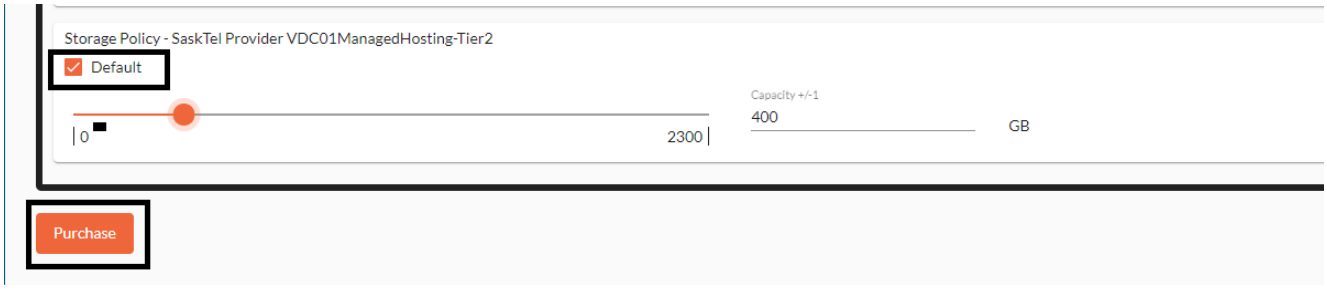
TIER STORAGE NAME	MAX IOPS
CloudHosting-Tier2	5000
CloudHosting-Tier3	1000
CloudHosting-Tier4	250

NOTE: You can select more than one storage policy based on your VRG requirements.

Select the required storage to be purchased and check **Default**.

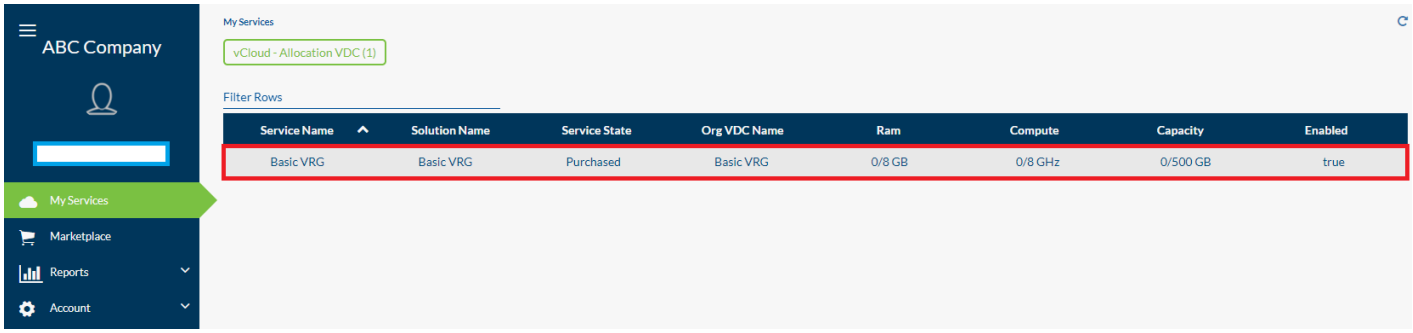
NOTE: You need to select at least one storage policy as **Default** storage policy. If you select **CloudHosting-Tier2** as default, VMs are stored in this Tier storage by default.

Click **Purchase** to buy the product.



3. MAIN NAVIGATION – MY SERVICES

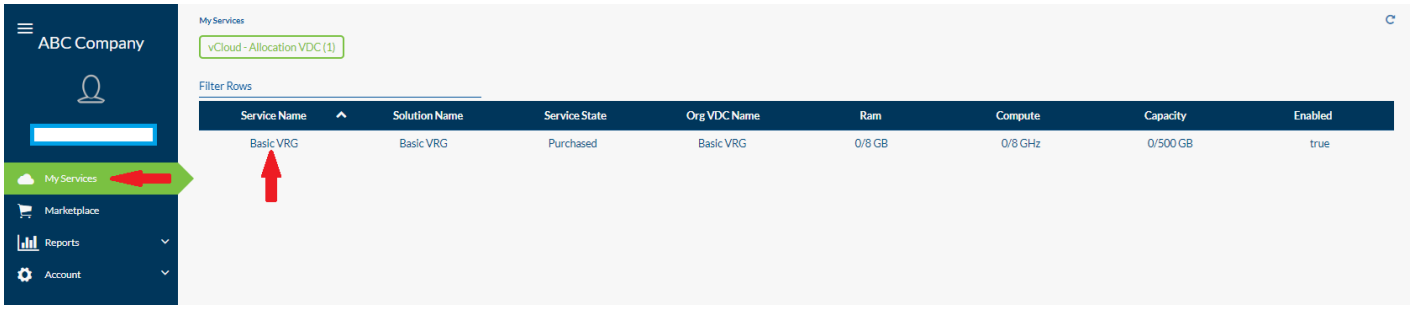
The My Services section displays all the products that have been purchased to date through the marketplace section.



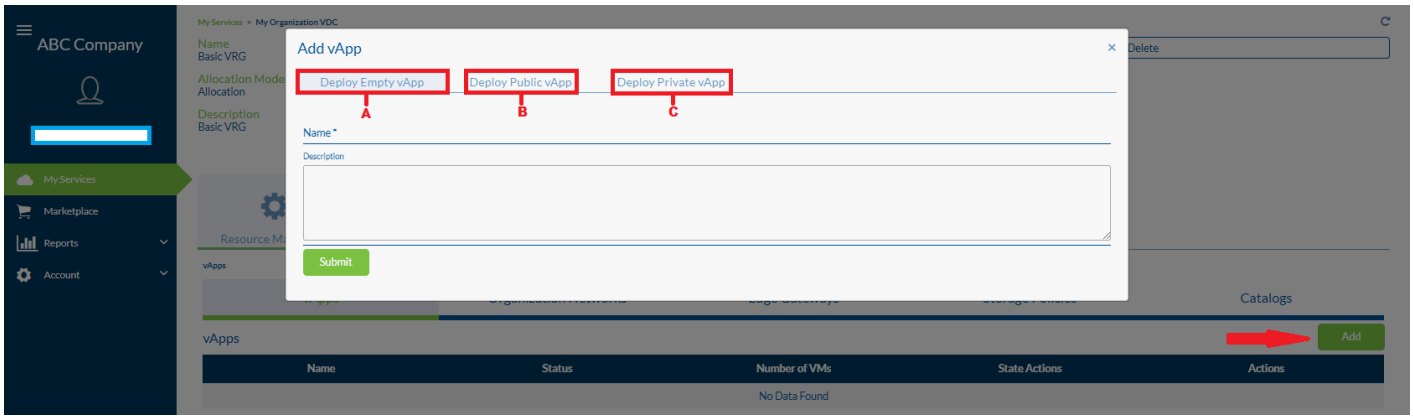
vApp/VM Deployment

During the previous step a VRG was created, you will now be able to create a vApp or multiple vApps.

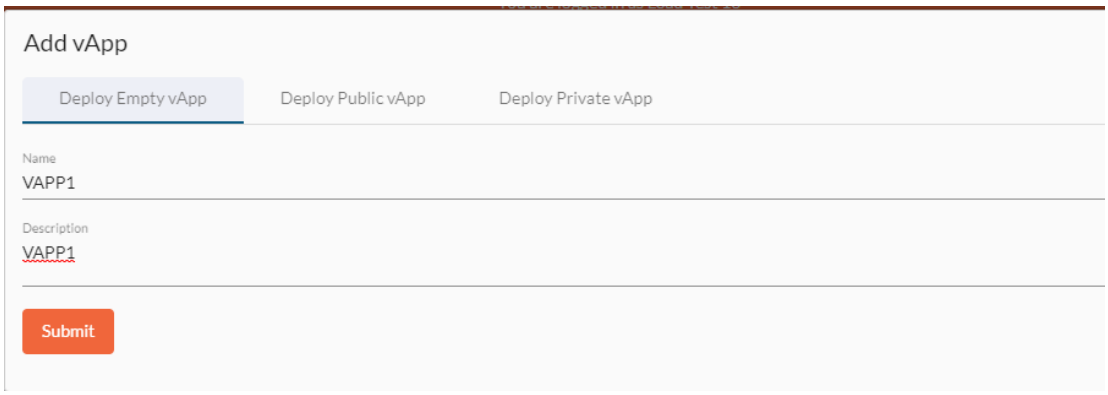
To create vApp/VMs select the **My Services** tab and select the VRG you would like to add a vApp to. You can deploy as many vApps as long as you meet the specs of the VRG resources.



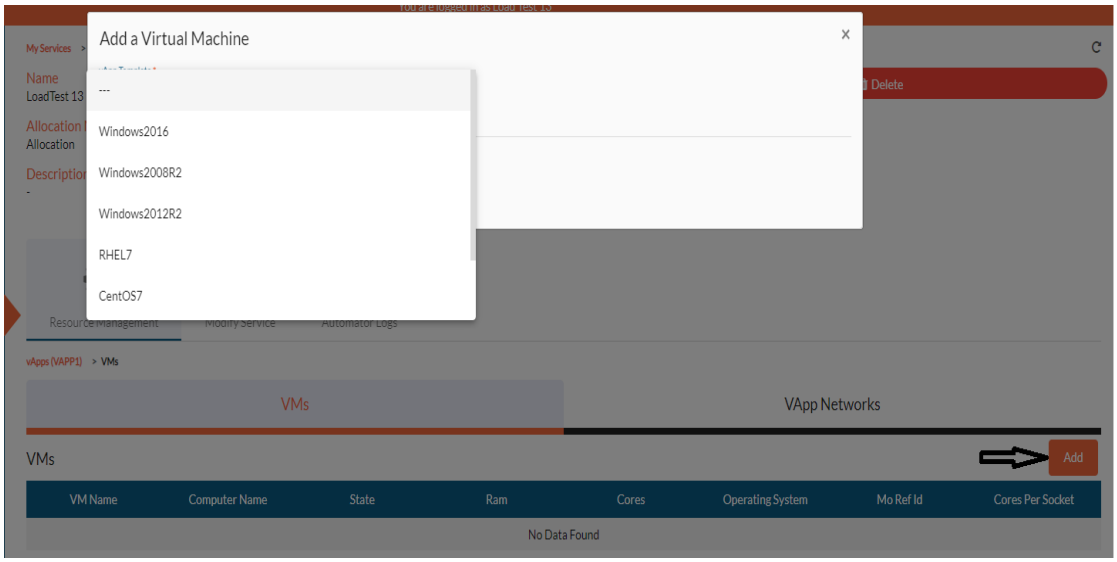
Once the VRG has been selected you can now proceed to click **Add**, which will pop up the Add vApp option. There will be three options to choose from:



1. **Deploy Empty vApp** – This option creates a vApp with no virtual machine. Enter the vApp Name, Description and click **Submit**.

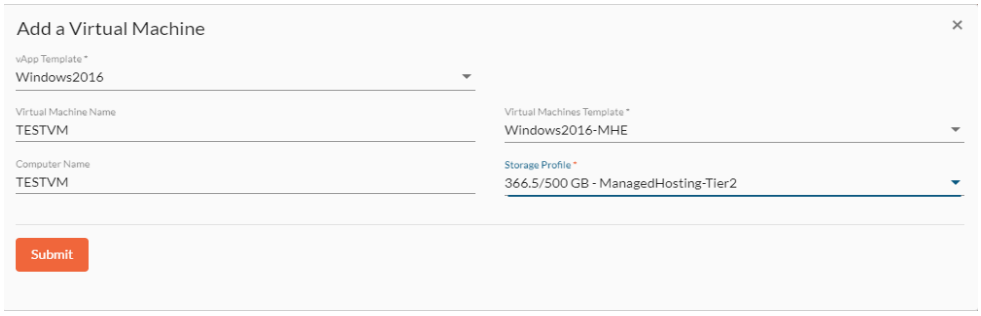


Once you have named and created this vApp. You will now be able to select this vApp and add a Virtual Machine (VM). Click the drop-down menu and select the desired template.



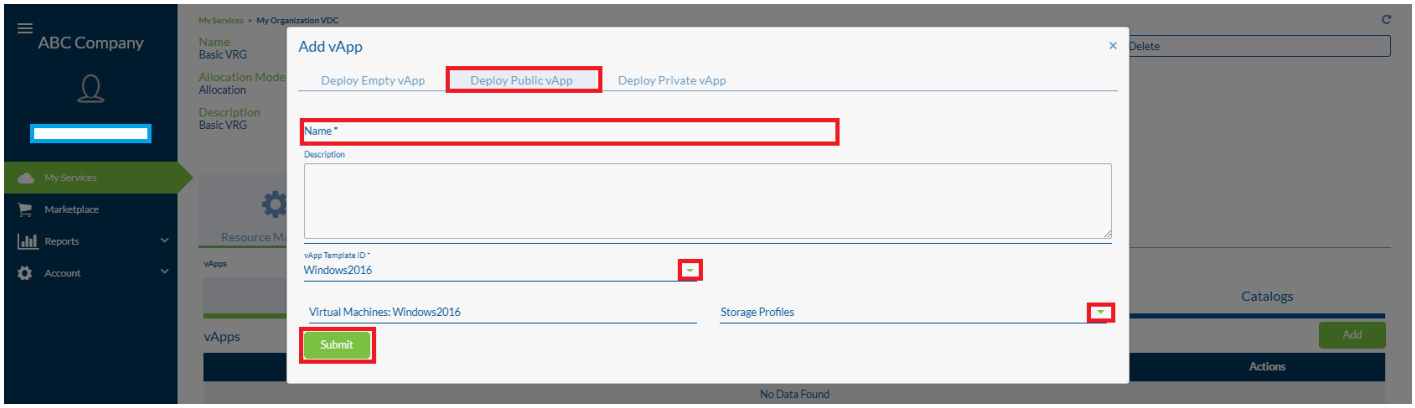
After adding this template, you will need to also fill in the same name for the Virtual Machine name and Computer name.

Select the Virtual Machine Template and desired storage policy. Click **Submit** to deploy the VM.



NOTE: Wait for about 10 mins for a VM deployment to finish. The VM will do a reboot after your login. Interrupting the VM deployment before fully finished will cause the OS to go to an inconsistent state.

2. **Deploy Public vApp** – This option creates a VM at the same time as creating the vApp. Add the Name of the vApp and choose the vApp template for the VM that will be created. You will also choose the Storage Profile from the drop-down menu then click **Submit** to complete the vApp and VM creation.



3. **Deploy Private vApp** – This option is identical to the Public vApp except the template will be provided by the customer and will only be available to the customer who has created it.

Networking

Description of acronyms used in this section of the document:

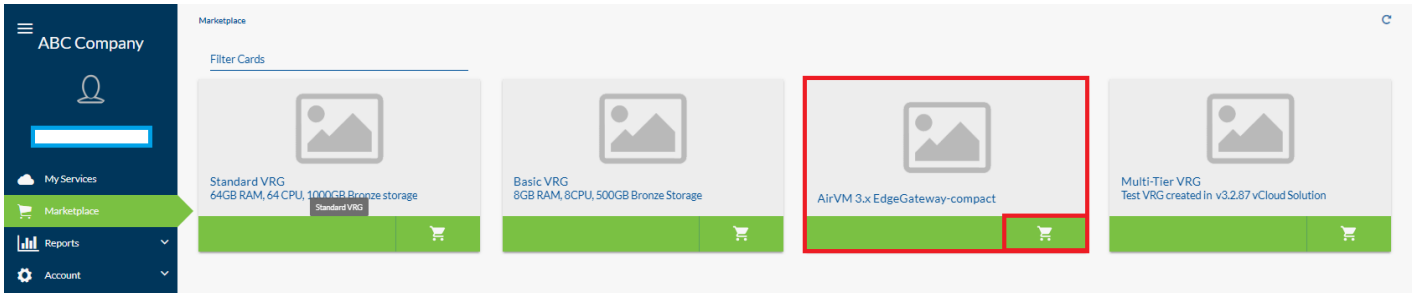
NAME	DESCRIPTION
Edge Gateway	An Edge Gateway is a virtual router for organization vDC networks. You can configure it to provide network services such as firewall, NAT, static routing, VPN, and load balancing.
Organization VRG Network	An organization VRG network with a routed connection provides controlled access to machines and networks outside of the organization vDC.
vApp Network	A vApp network is a logical network that controls how the virtual machines in a vApp connect to each other and to organization vDC networks.

The next step in setting up your environment will be to purchase an Edge Gateway product.

NOTE: This may have previously been completed by SaskTel if requested.

Edge Gateway Deployment:

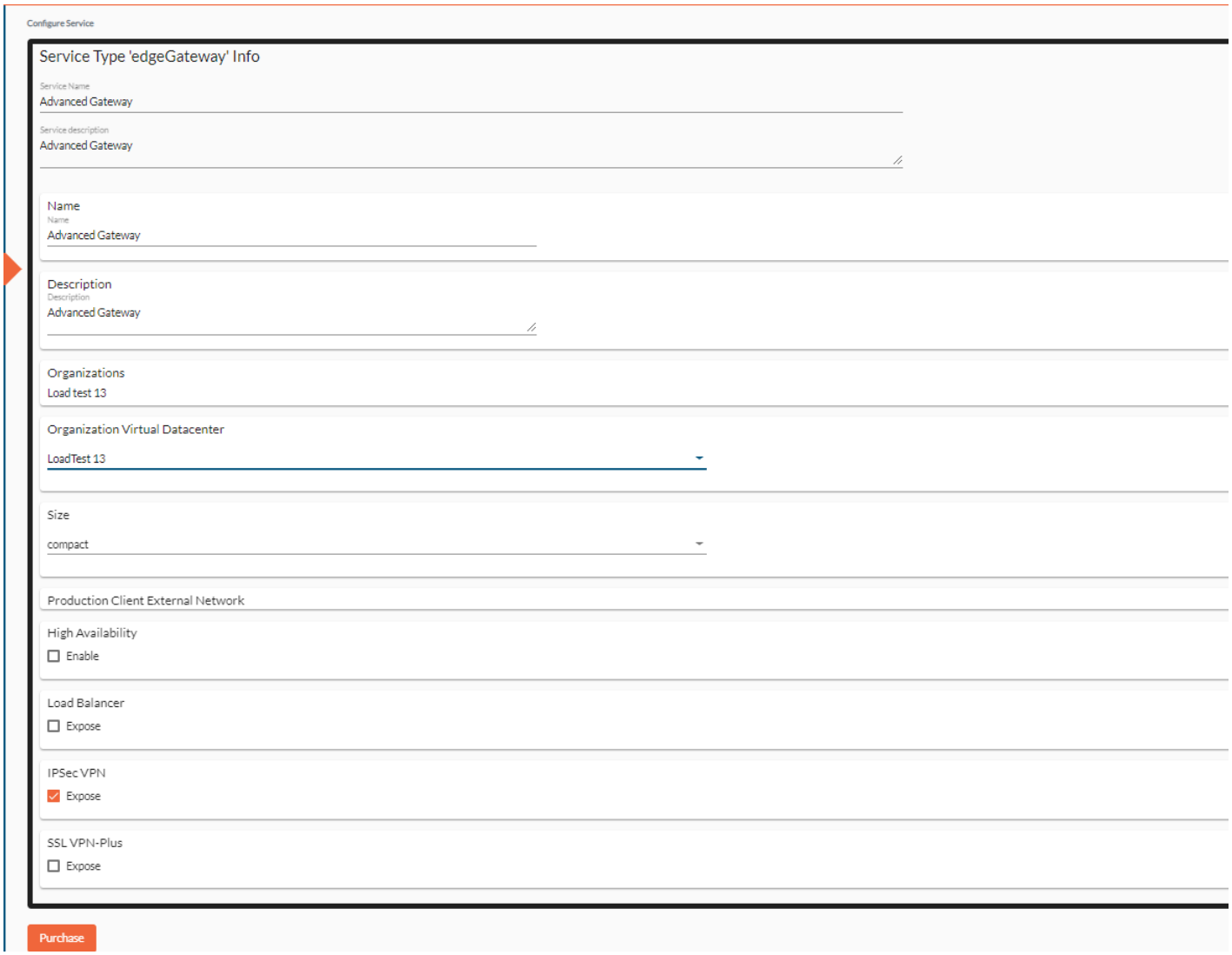
To create an Edge Gateway, go to Marketplace and select the appropriate Edge Gateway and click **Purchase**.



Once purchased you will be transferred to the Configure Service page:

- Enter the Service Name for the Edge Gateway. You can keep the default name as well.
- Enter the Service Description if required.
- Enter the Name and Description.
- Organization Name is auto populated. **Do not** make any changes.
- Organization Virtual Datacenter is auto populated. In case you have more than one Organization Virtual Datacenter, select the correct Organization Virtual Datacenter from the drop-down menu.
- Select the size **Compact**, **Full**, or, **Full 4** based on your requirements:
    - Compact resources: 1 vCPU and 256 MB of memory
    - Full/Large resources: 2 vCPU and 1 GB of memory
    - Full4 resources: 2 vCPU and 8 GB of memory
- Check additional networking options you require: **High Availability**, **Load Balancer**, **IP SEC VPN**, **SSL VPN**.
- Click **Purchase** to buy the product.

Deployment of the Edge Gateway will take approximately 5 mins to complete.

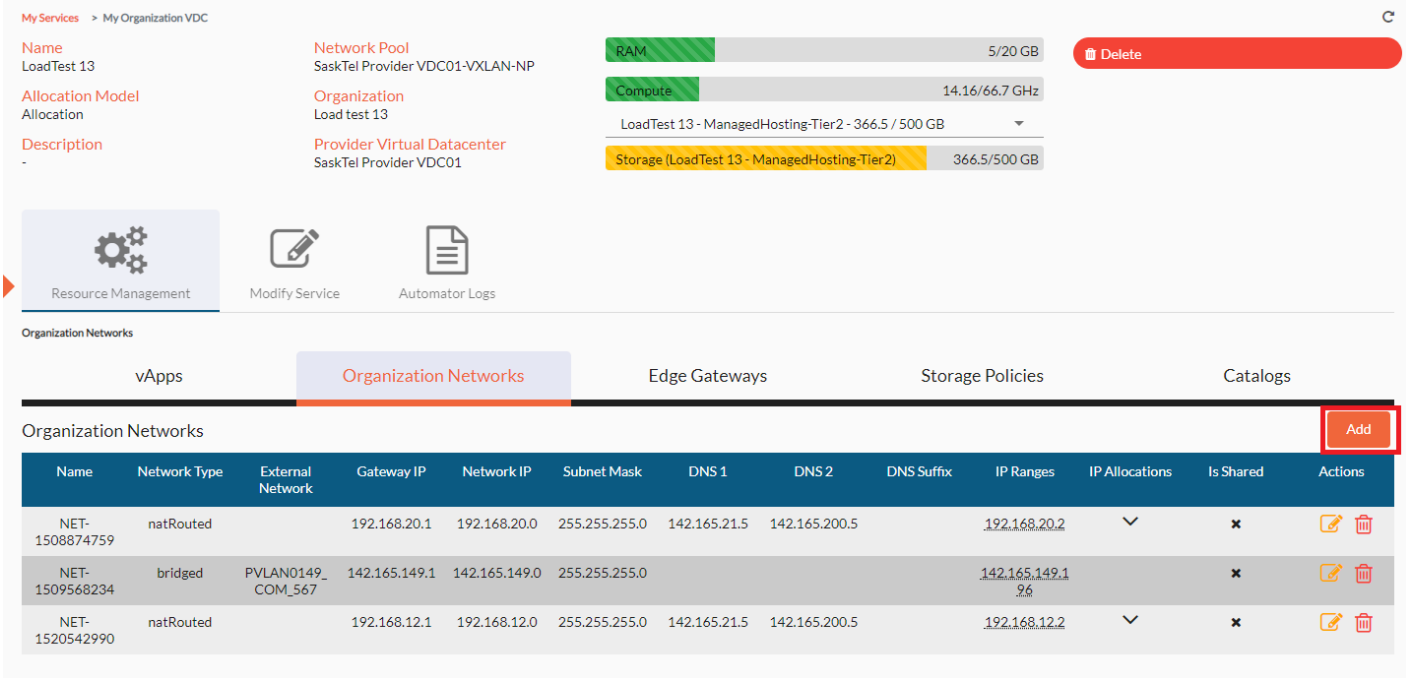


Adding Organization VRG Network

Organization Networks allow the user to create a private or public network within their vDC. There are 3 types of networks you can deploy:

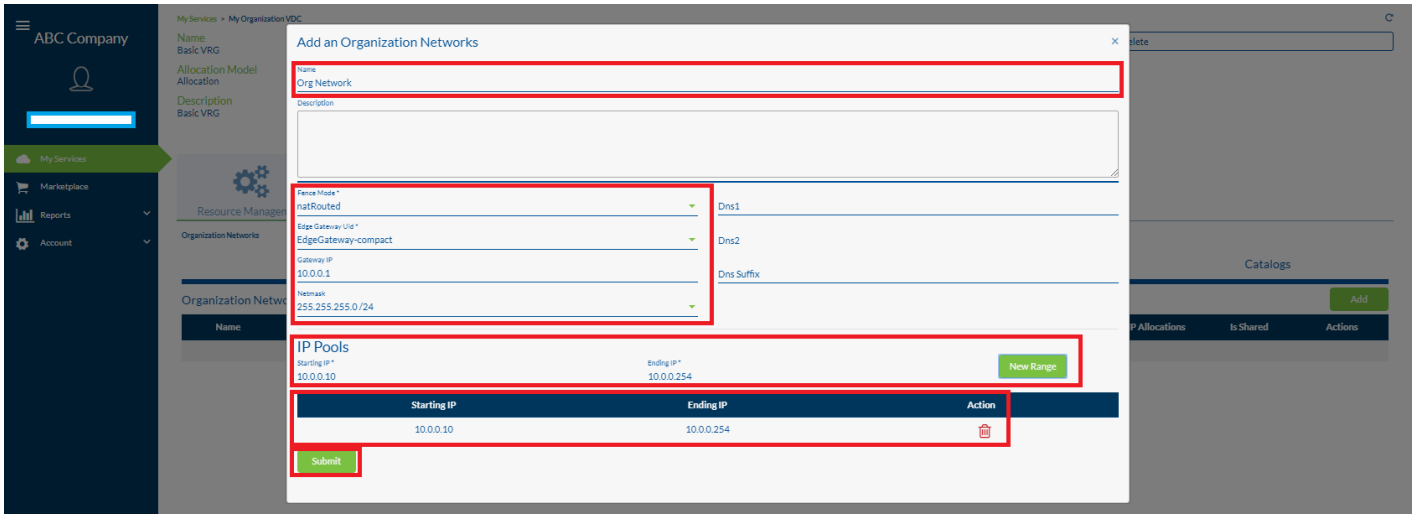
- **Isolated** - This creates a private network within the vDC.
- **natRouted** - A private/public network that works only with NSX Edge Gateways. You will need at least one NSX Edge Gateway to use this option (See NSX Edge Gateway Service for more details)
- **Bridged** - Uses the provider's public networks.

Click on **MyServices** → Open the VRG → Navigate to Organization Networks→ Click **Add**.



- Name – Enter the Name for Organization VRG Network
- Fence Mode – natRouted
- Gateway IP-- Enter the Gateway IP (Example: 10.0.0.1)
- Net Mask – Enter a subnet mask (Example: 255.255.255.0.24)
- IP Pools – Enter the Range of IP and click **New Range**
- DNS/DNS Suffix – Enter the DNS IP and DNS suffix (Not Mandatory)

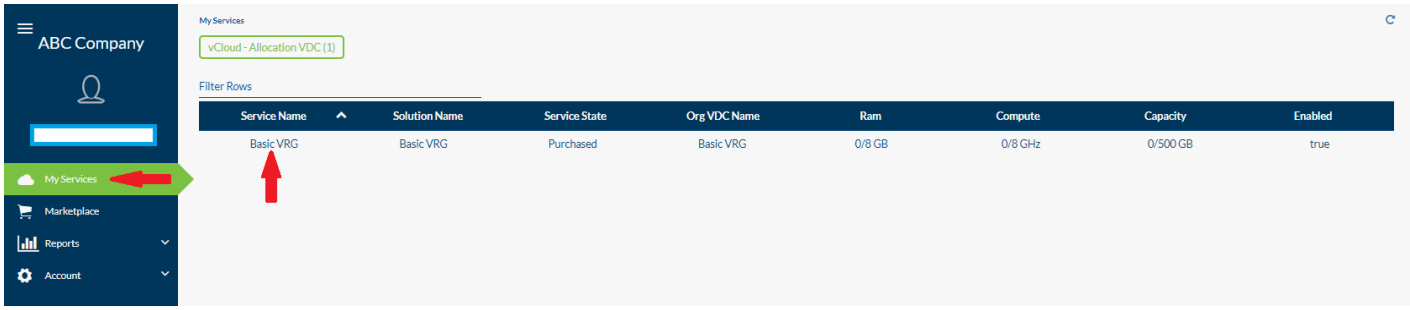
Click **Submit** to create the Organization VRG Network.



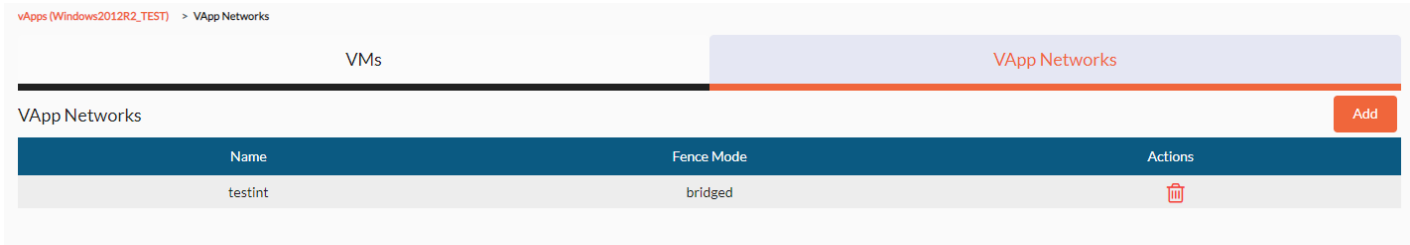
Adding vApp Networks

vApp networks allow the VMs to communicate with each other and to the outside world to connect to Organization Networks. The vApp network is the only type that can be assigned to a VM Network Card.

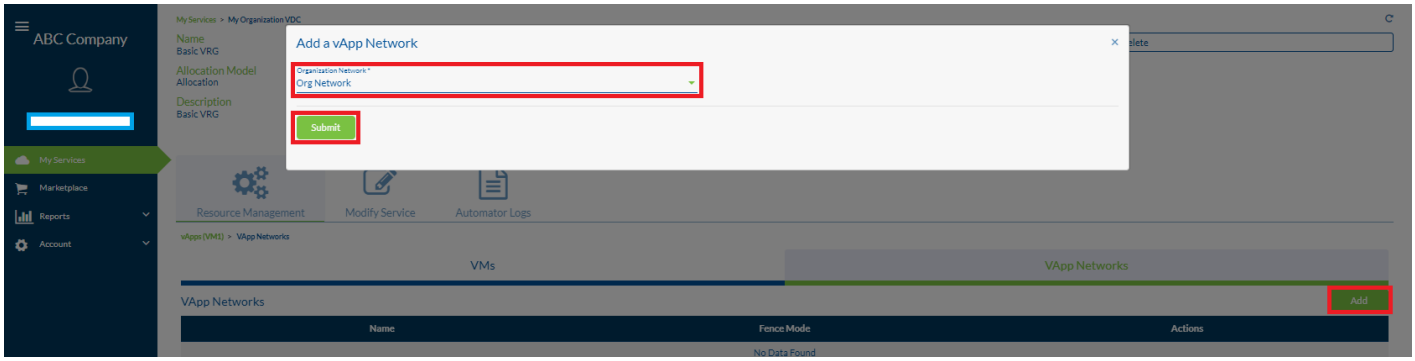
To create a vApp network, click **My Services** and into your VRG.



Open the vApp and navigate to vApp Network tab. Click **Add** to create the vApp Network.

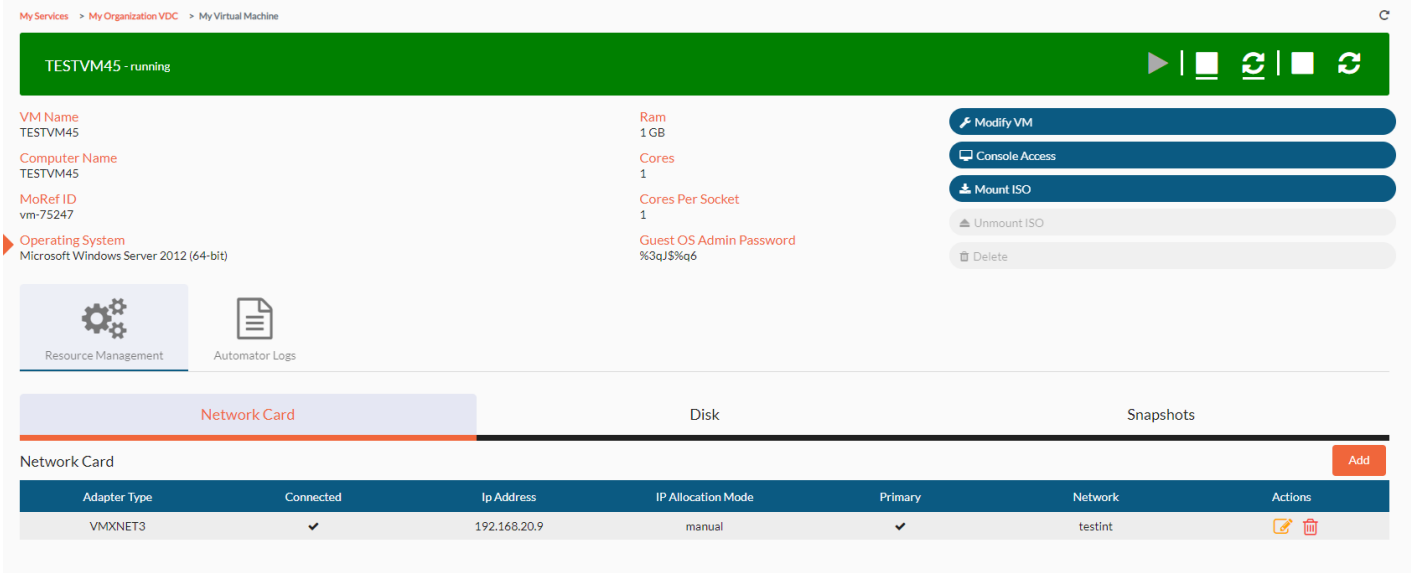


Select the Organization VRG Network and click **Submit**.



Virtual Machine Management

The Virtual Machine Management (VMM) interface allows you to access a VM's guest OS. You can modify resource power, change virtual peripherals, or take a virtual snapshot to back up the exact state of the VM at any given time.



The VM page is split into three sub-sections:

- **VM Information** – Displays the VM name, specs, and guest OS information. It will also show if access is enabled to power on/off/restart the VM. There are a few options the user can perform here:

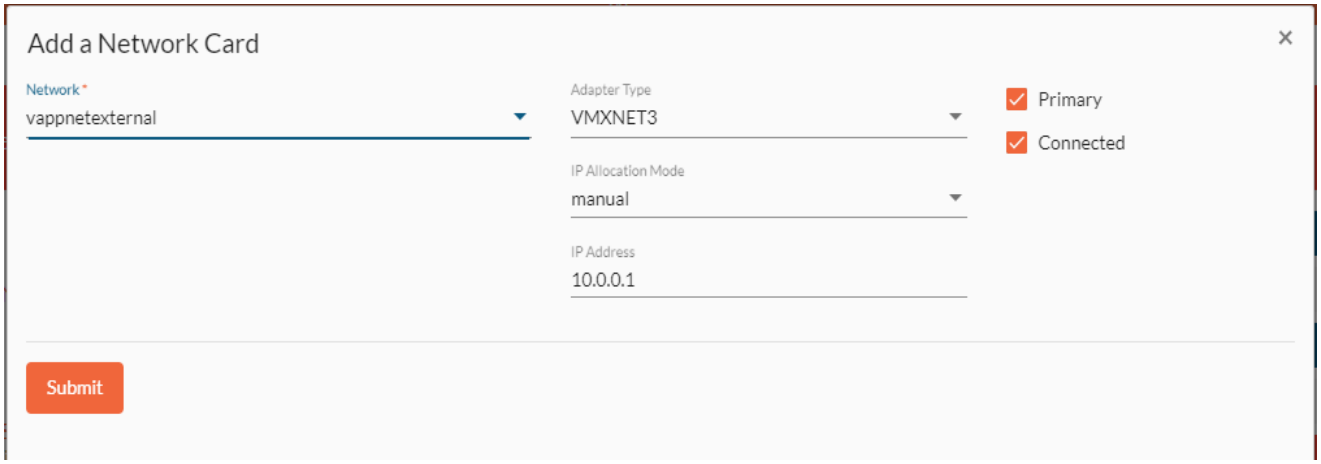
    - **Power Options** – The VM can be Powered On, Off, Rebooted, or, if the Guest supports it, you can also perform a graceful shutdown or graceful reboot
    - **Modify VM** – Change the VM name, hostname, or CPU/RAM values
    - **Console Access** – Opens a new window with a GUI interface that allows the client to access the guest OS
    - **Mount ISO** – Mount an ISO uploaded by the client to their catalog
    - **Unmount ISO** – Eject a mounted ISO and unmount it.
    - **Delete** – Delete the entire VM

- **VM Management** – See which virtual peripherals are attached to the VM and view the logs for VM related tasks completed by Hyalto.
- **VM Details** – See virtual peripheral details, add or remove virtual peripherals, and create or remove snapshots.

Adding Network Cards to a VM

To add a network card (NIC) to a VM you must first power down the server to allow changes to be made. Second go to the VM that you would like to add the NIC to. Once selected, click **Add** and it will bring up a pop-up menu. In the pop-up menu you will be shown multiple drop-down options.

1. Network – Choose which network to be used for this VM.
2. Adapter Type - Select VMXNET3.
3. IP Allocation Mode – Pick a free IP from the IP pool defined in Organization VRG Network and select Manual. Enter the IP address.
4. There is a check box that you can choose if this will be your primary NIC or alternate NIC. If this will be your Primary NIC, check the box.
5. Once Completed Click **Submit**.



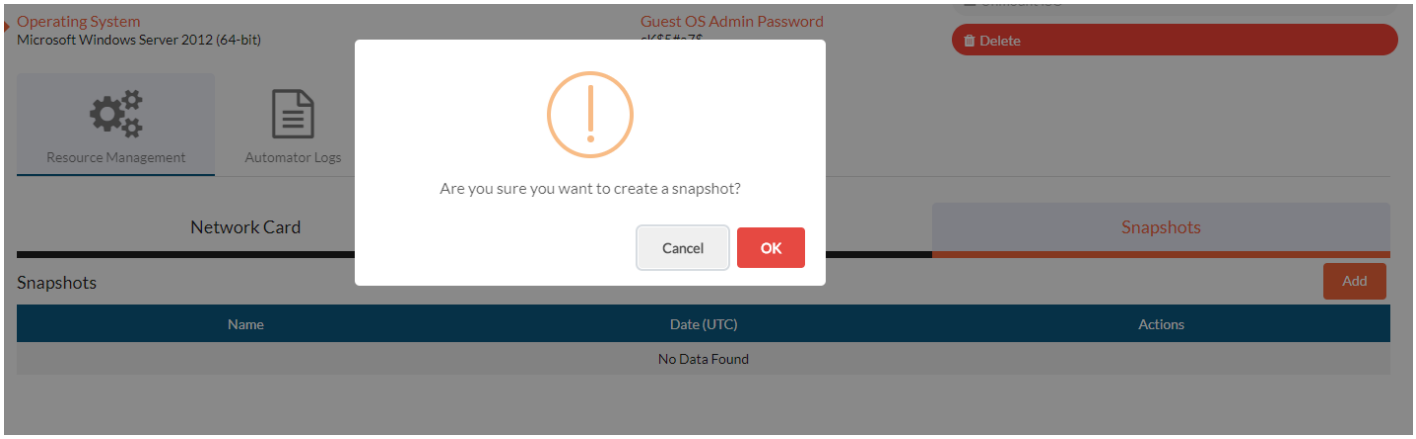
Adding Disk to VM

1. Click on the VM you would like to add storage to and navigate to Disk tab.
2. Click **Add** and enter the capacity, Storage Unit, and the Storage Policy.
3. Click **Submit**.
4. Login to the OS and perform the disk addition if necessary:
    - For Example: Windows OS – Open Disk Management and add the disk to the OS.

Creating Snapshots of a VM

Snapshots allow the customer to take a copy of the current state of the VM, and back it up in case of a fatal error or requirement to revert to a previous version. Snapshots are stored using the default storage policy.

1. Click on the VM you would like to take a snapshot.
2. Click **Add**.

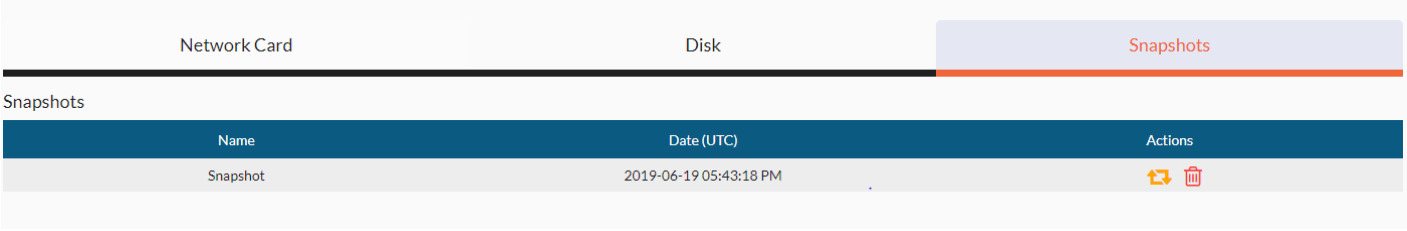


NOTE: Do not perform any Modify VM operation like CPU/Memory/Disk modification, when a snapshot of a VM has been taken.

Restore/Delete Snapshot

Restore snapshot will restore the VM to a state prior to the snapshot. If any changes you made were not successful, you will select **restore snapshot** to revert the changes made.

Delete snapshot will commit the changes to the Disk. If your change is successful, you will select **delete snapshot** to commit the changes.



Networking – Edge Gateway Management

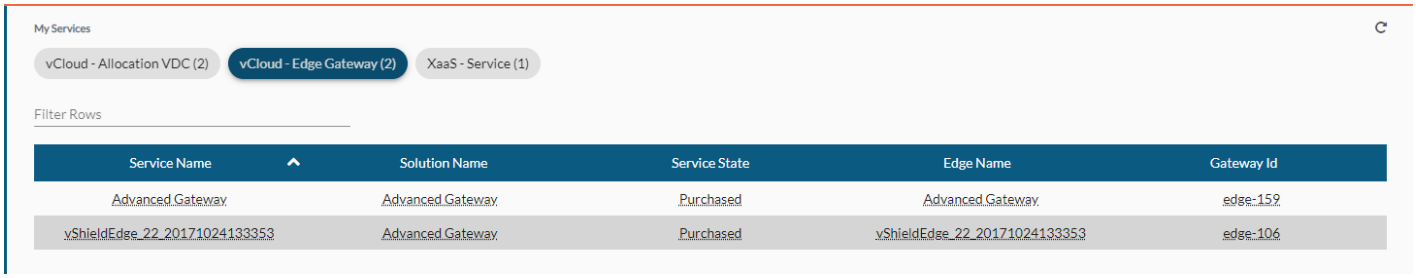
Firewall Rules

By default, all traffic to and from the internet is denied by the SaskTel firewall. Firewall and NAT rules must be created to allow traffic from one interface to the next.

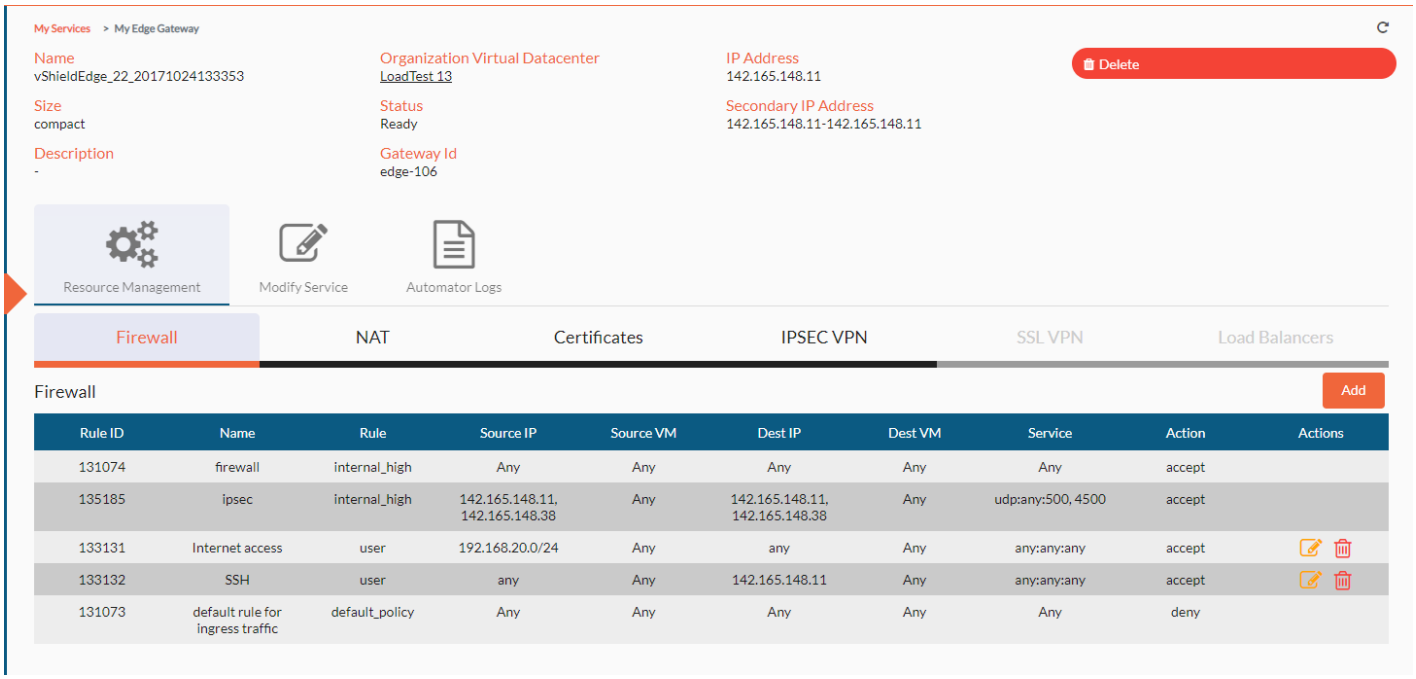
NAT Rules

There are two types of NAT rules available. DNAT rules route traffic from an external IP to an internal IP and SNAT rules route traffic from an internal IP to an external IP.

My Services → vCloud EdgeGateway → Select the Edge Gateway and open it.



Navigate to Firewall / NAT/ IPSEC VPN section to create Networking rules.



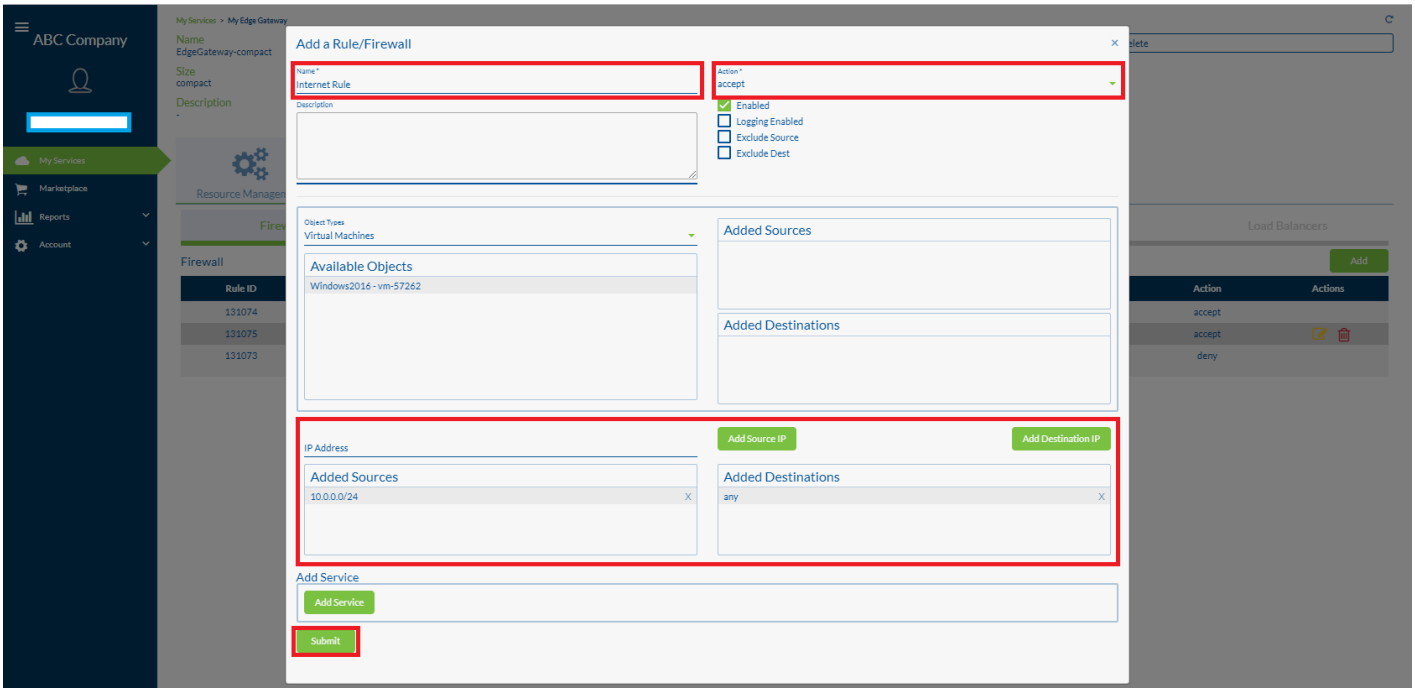
Basic Access Rule Examples

Internet Access

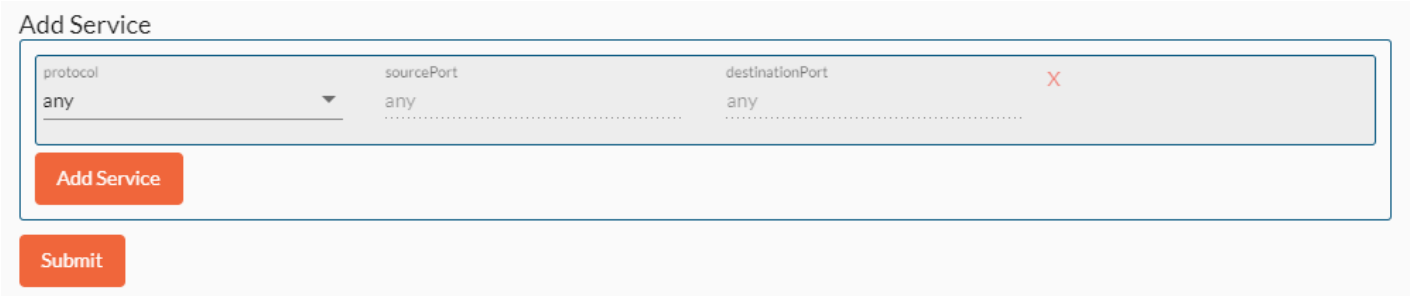
To get internet access to your servers, you must create a Firewall rule and SNAT rule.

Firewall Rule for Internet Access:

1. Name the firewall rule and provide a Description.
2. Click on the **Action** drop down list and select **Accept**.
3. Provide a Source IP Address. For internet access, provide the whole subnet of your Organization VRG network (For Example 10.0.0.0/24).
4. Type **Any** in IP Address section and click **Add Destination IP**.

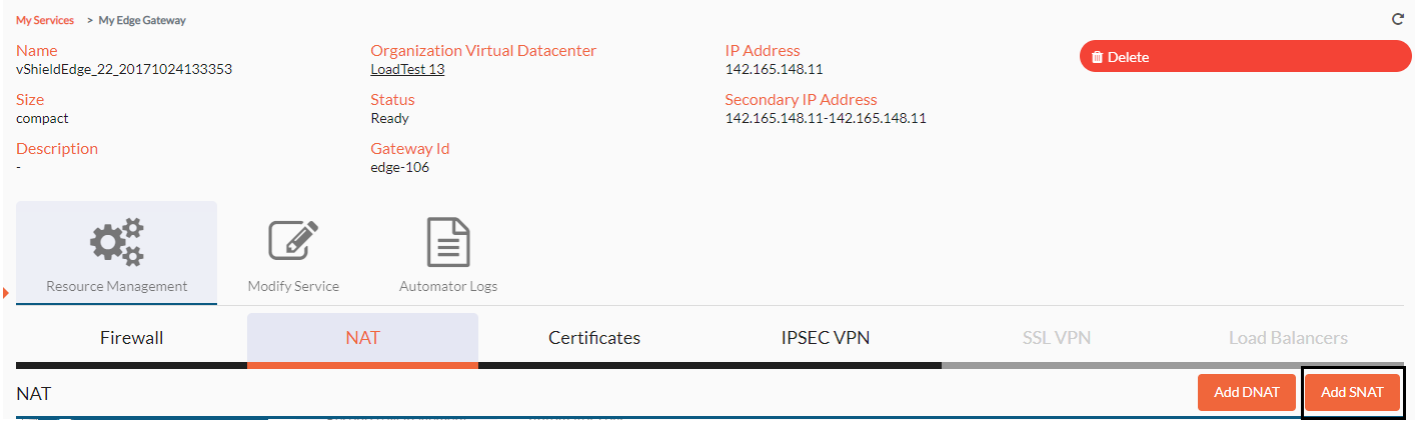


5.Click **Add Service** and keep the default setting.
6.Click **Submit** to apply the firewall rule.

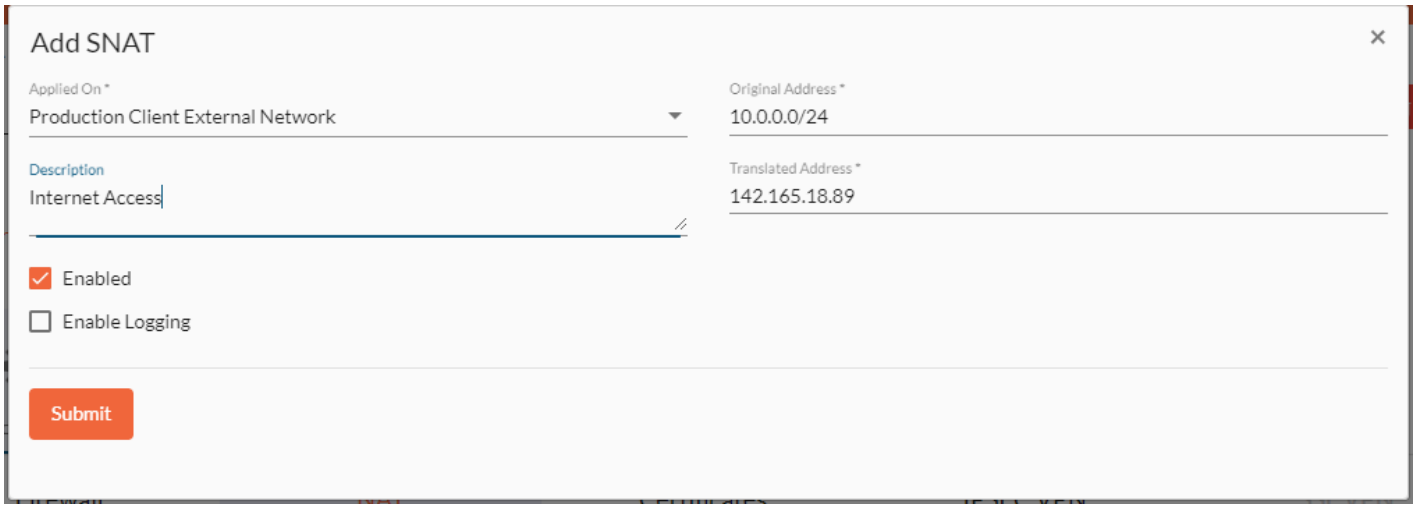


SNAT Rule for Internet Access:

1. Navigate to the NAT section and click **Add SNAT**.



2. Applied on – Select the **Production Client External Network**.
3. Original Address: Subnet of your Organization VRG Network (For Example: 10.0.0.0/24).
4. Translated Address: IP address of your Edge Gateway (142.165.18.89).
5. Check **Enabled** check box and click **Submit**.



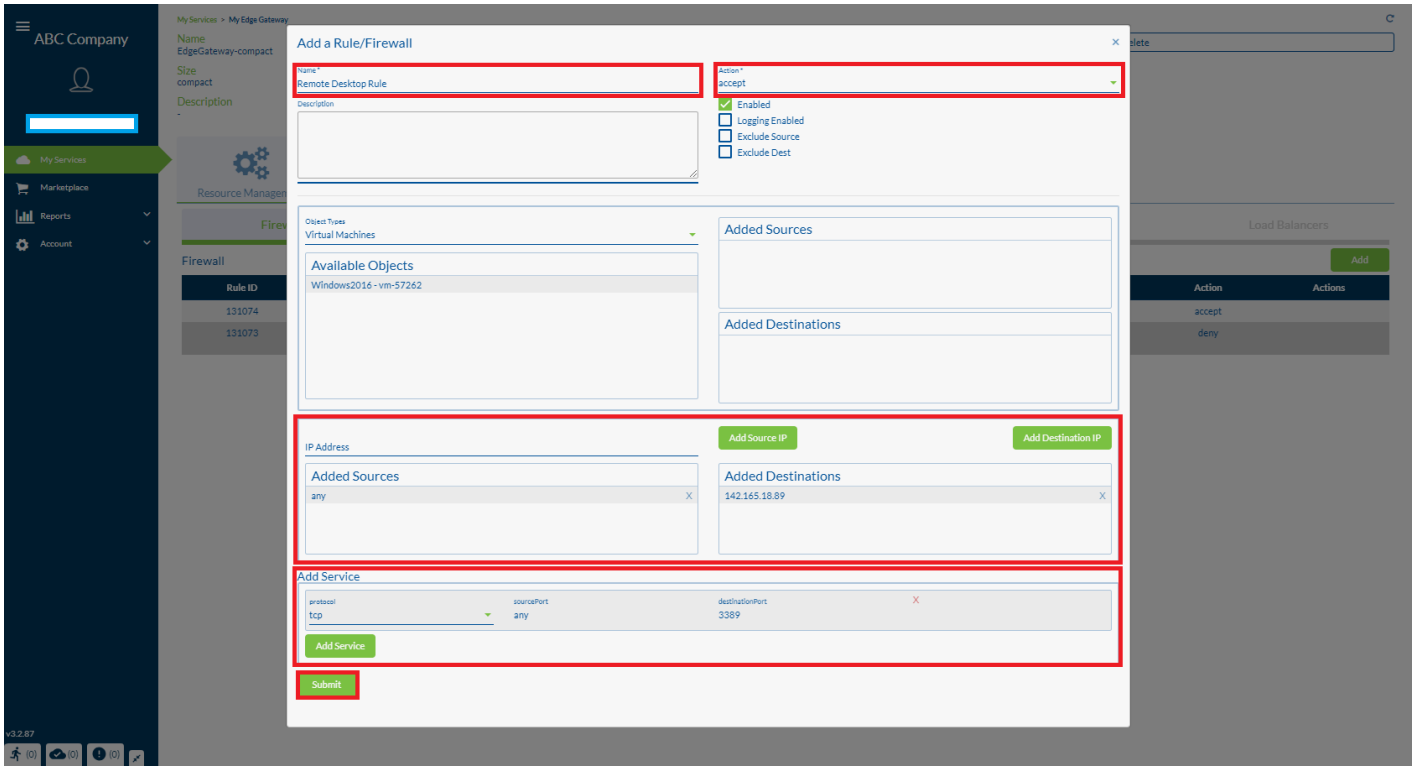
After creating both the rules, login to the server and validate you have internet access.

RDP Rule

An RDP rule allows a user to be able to log into your server from an outside source. To get RDP rule working, you need to create a firewall rule and DNAT rule:

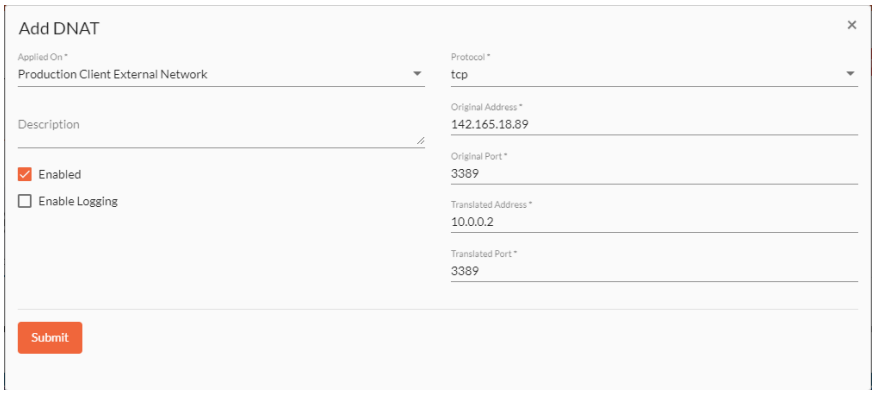
Firewall Rule for RDP Access:

1. Name the firewall rule and provide a Description.
2. Click on the **Action** drop down list and select **Accept**.
3. Provide a Source IP Address. For RDP, provide the public IP you are connecting from. You can type **Any** if you are allowing RDP access on internet.
4. Provide the Edge Gateway IP Address in the IP address section and click **Add Destination IP**.
5. Click **Add Service** and provide the protocol/source port and destination port. For RDP access protocol will be **TCP** and source port /destination port is **3389.**
6. Click **Submit** and finish the firewall rule.



DNAT

1. Navigate to the NAT section and click **Add DNAT**.
2. Applied On – Select **Production Client External Network** from the drop-down menu.
3. Protocol – TCP.
4. Original Address – IP address of the Edge Gateway.
5. Original Port – 3389.
6. Translation Address – IP address of the server (For Example: 10.0.0.2).
7. Translated Port – 3389.
8. Check **Enabled** and click **Submit**.



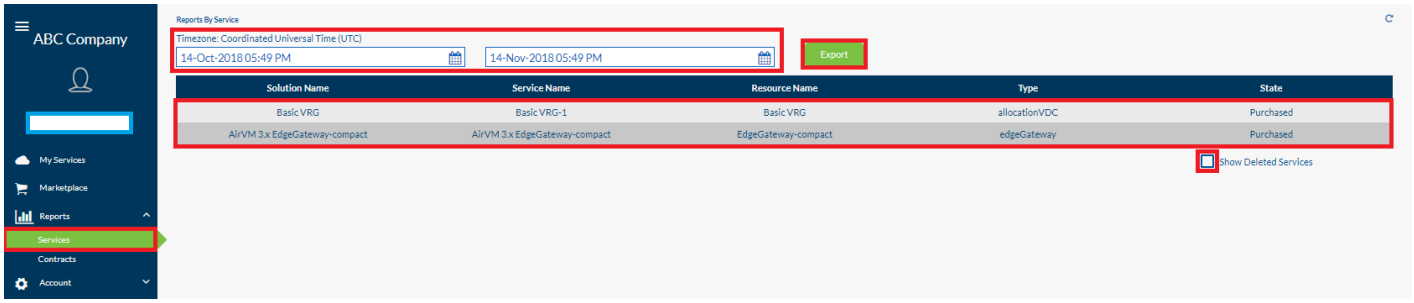
Try RDP access after creating both the rules.

4. MAIN NAVIGATION – REPORTS

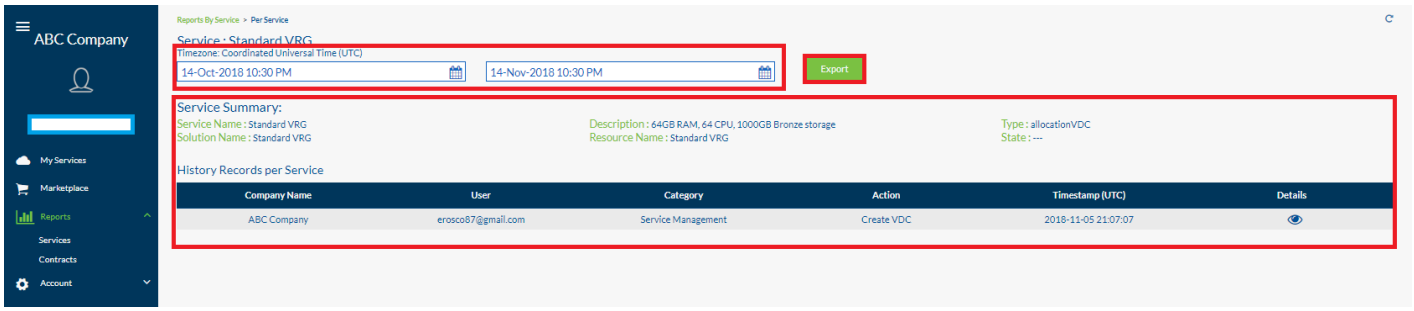
This section contains the Reports by Service and Reports by Contract.

Services

The Reports by Service allows you to see and export a list of services you have purchased. You can pick a time frame that you would like to be shown as well as deleted services with the **Show Deleted Services** check box.

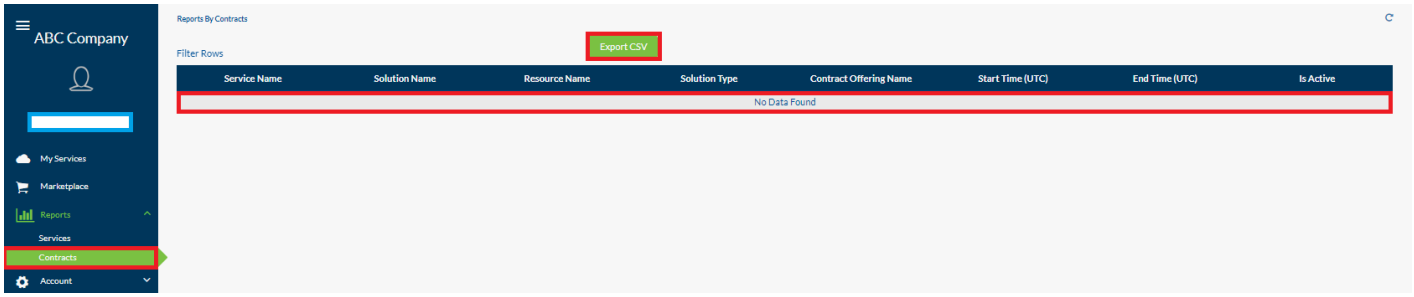


To find out more information about the solution, click into the solution and you will then be able to export information on the specific service and review the service.



Contracts

The Reports by Contract show you the information of the Contract you have purchased. You may export this info into an excel spreadsheet.

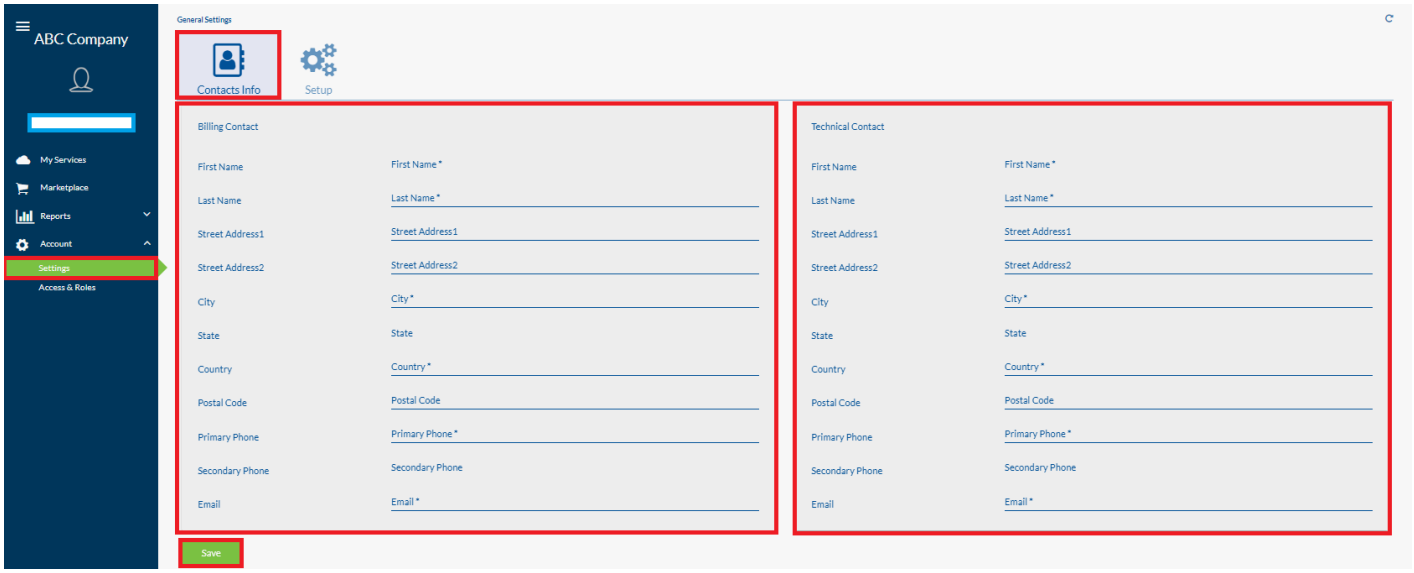


5. MAIN NAVIGATION – ACCOUNTS

Settings

Contact info

Contact Info allows you to add all the Billing Contacts and Technical Contact information that will be used on this account.



Setup

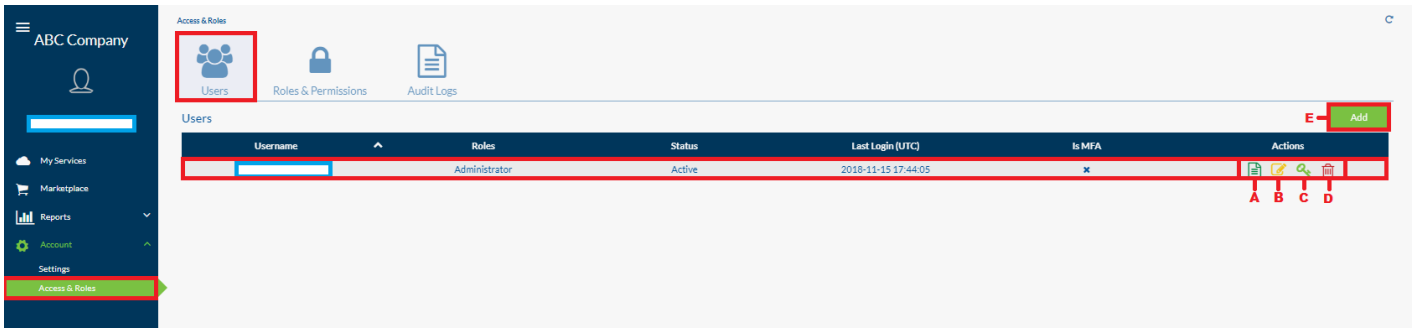
In setup you will be able to view the company name. Modification to Company name can be made in this section.

Access & Roles

Users

Users can view, add, and change users

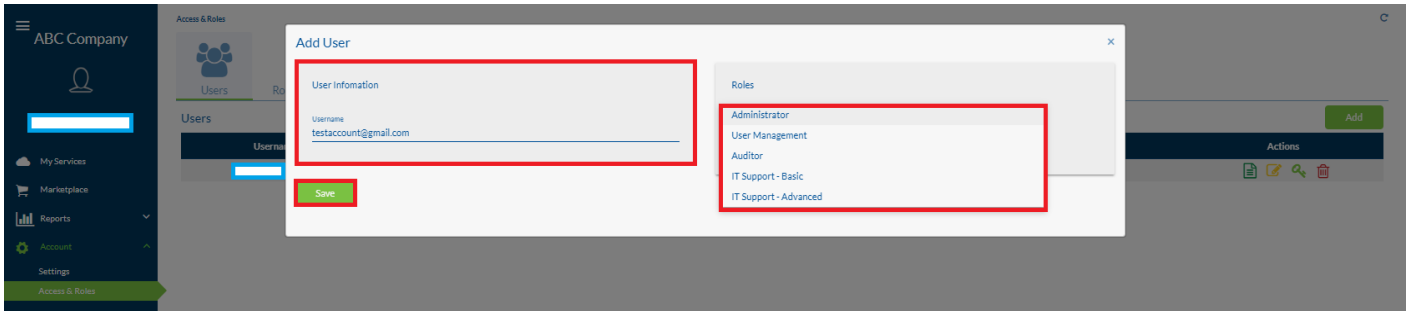
A. Audit Logs
B. Modify
C. Reset Password
D. Delete
E. Add User



Adding Users

To add a user, click **Add** and it will bring a pop-up to add user information and the roles that will be applied to that user. The drop down will give you multiple options

- Administrator
- Auditor
- IT Support – Basic
- IT Support – Advanced



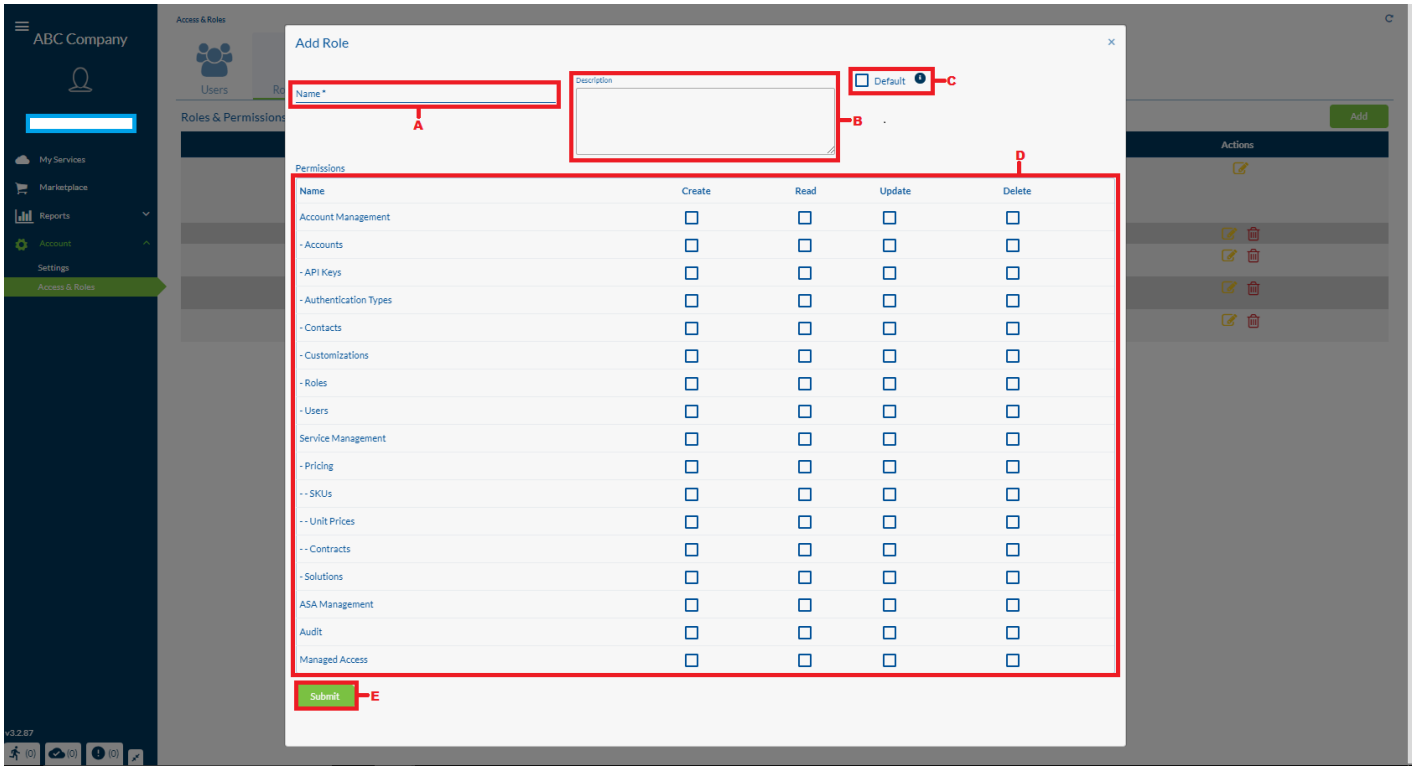
Roles & Permissions

Roles and Permissions will show the permissions for each role that comes default. You may add your own Roles & Permissions by clicking **Add**.

Adding a Role

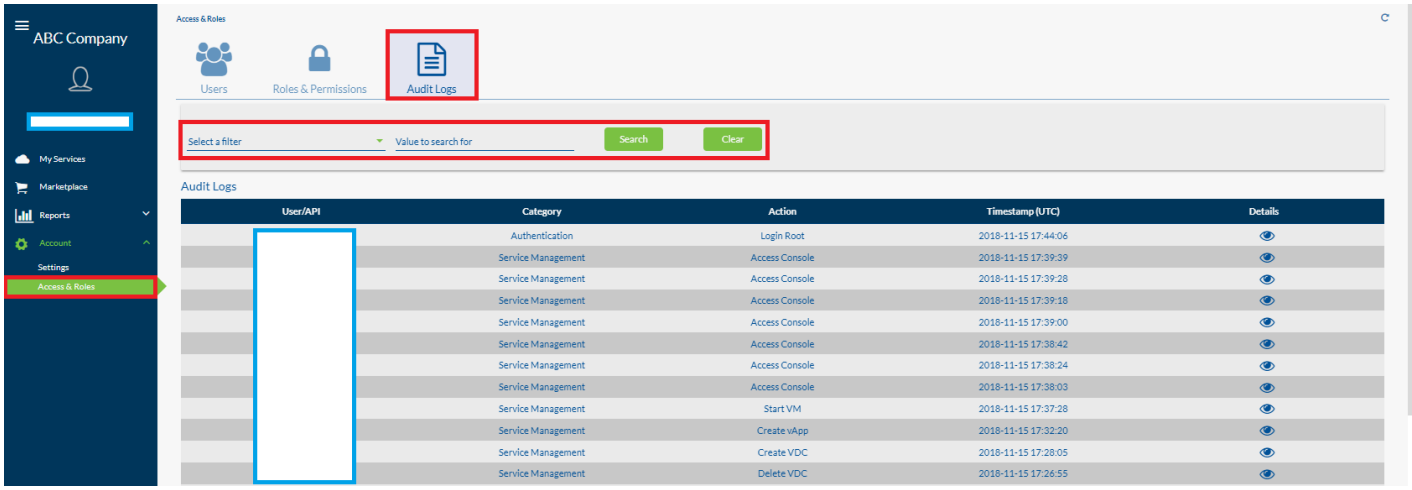
To add a role you will have to complete the following 5 steps:

A. Add a name to your role.
B. Add a description to your role.
C. Default checkbox – Initial role used when adding a rule.
D. Permissions that will be allowed in the role that is being created.
E. **Submit**.



Audit Logs

Audit Logs will show which user has made purchases or changes. You can search logs with the filter drop down and adding a value. You can look more in depth in the details tab as well.


ABC Company
My Services
Marketplace
Reports
Account
Settings
Access & Roles
Access & Roles
Users
Roles & Permissions
Audit Logs
Select a filter
Value to search for
Search
Clear
Audit Logs
User/API
Category
Action
Timestamp (UTC)
Details
Authentication
Login Root
2018-11-15 17:44:06
Service Management
Access Console
2018-11-15 17:39:39
Service Management
Access Console
2018-11-15 17:39:28
Service Management
Access Console
2018-11-15 17:39:18
Service Management
Access Console
2018-11-15 17:39:00
Service Management
Access Console
2018-11-15 17:38:42
Service Management
Access Console
2018-11-15 17:38:24
Service Management
Access Console
2018-11-15 17:38:03
Service Management
Start VM
2018-11-15 17:37:28
Service Management
Create vApp
2018-11-15 17:32:20
Service Management
Create VDC
2018-11-15 17:28:05
Service Management
Delete VDC
2018-11-15 17:26:55