CLOUD4C

UCP Manual for Linux+Oracle

CLOUD4C SERVICES PVT LTD

Document control

Prepared By

Version	Author	Date
V 1.0	Sai Krishna	29-04-2022
V 1.1	Sai Krishna	27-05-2022

Reviewed By

Version	Reviewer	Date
V 1.0	Priyadarshi Mishra	30-04-2022
V 1.1	Priyadarshi Mishra	31-05-2022

Approved By

Version	Approver	Date
V 1.0	Harmandeep Singh	30-04-2022
V 1.1	Harmandeep Singh	31-05-2022

Change Control

Version	Change Reason	Effective Date
V 1.0	Initial Release	30-04-2022
V 1.1	Introduction, UCP access, Detailed view, Subheadings, corrections	31-05-2022

STATEMENT OF CONFIDENTIALITY

Contents

1. Introduction to UCP

Welcome to Universal Cloud Platform user guide. UCP is a multi-cloud Self-Service platform that allows users to provision Virtual Machines into Azure Environment. Along with provisioning Linux, SAP & Windows Virtual Machines, you will be able to manage them, perform 2nd Day operations, decommission, obtain or provide access to the virtual machine.

UCP not only does allow to provision the virtual machine but also configures monitoring via Splunk Monitoring, configures backup via Netbackup software, on-board Linux VMs to CyberMark Platform to obtain secure access, on-board Windows VMs to Active Directory.

You will be able to create Virtual machines for both Test & Production purposes.

UCP creates a CMDB CI entry in Global Service Now (GSN) for every virtual machine that get provisioned.

UCP also creates a Change Management ticket (RFC) for every VM that has been deployed for Production purposes only. Based on this RFC ticket, every virtual machine undergoes thorough automated and manual checks for its readiness on the day of the delivery.

Welcome to UCP User guide.

This document helps users to provision different types of Linux Machines, namely the following

a. Linux + Oracle Images

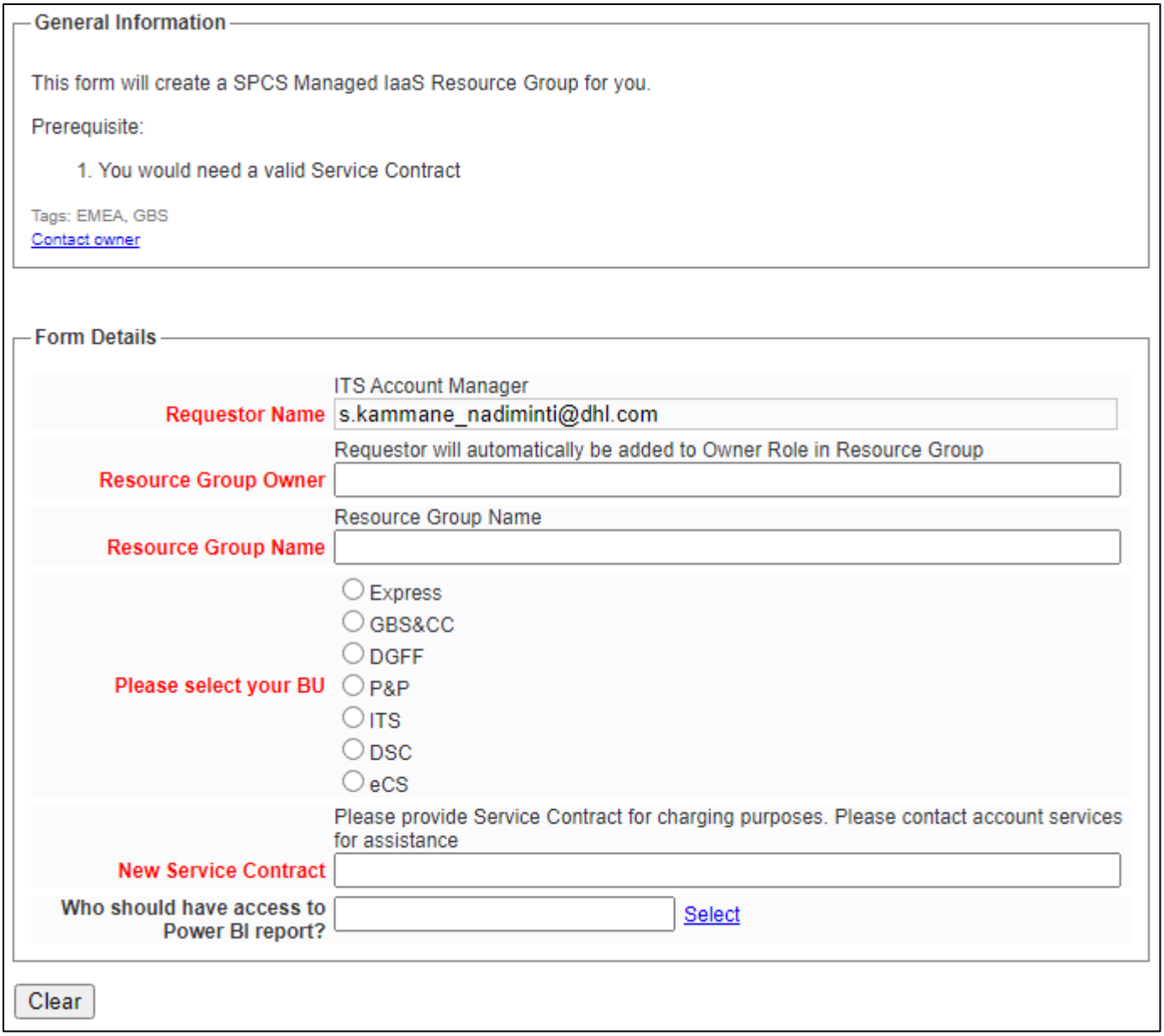
In addition, this document also emphasizes on various features such as

a. Mountpoints
b. Additional Disk requests while raising a service order
c. Provisioning in desired zones
d. Provisioning with desired availability sets
e. Cloning of Machines

2. How to get access to UCP?

In order to be able to get access to UCP, the user should be part of the “UDLDHL-UCP” Active Directory Group.

If you’re a Team Manager for a Project, then you should request for a new project to be created in Azure via the GSD form https://gsd.dhl.com/forms/4887



The form involves 4 steps where the SPCS Cloud Ops IaaS team will grant you the following

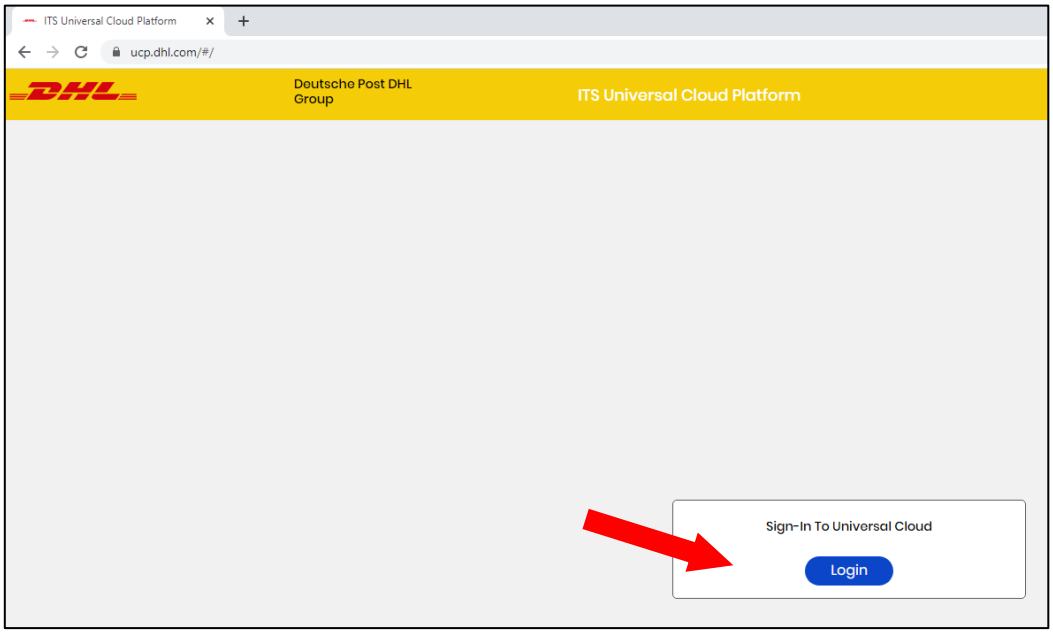
a. The desired Project Name / Resource Group Name
b. Assign you to the UDLDHL-UCP Active Directory Group
c. Assign both Production & Test Subscriptions for the Project Name and
d. Assign you the Team Manager role where you will be able to onboard and add other team members within your project.

Note: Only "@dhl.com" email ids can only be onboarded onto UCP.

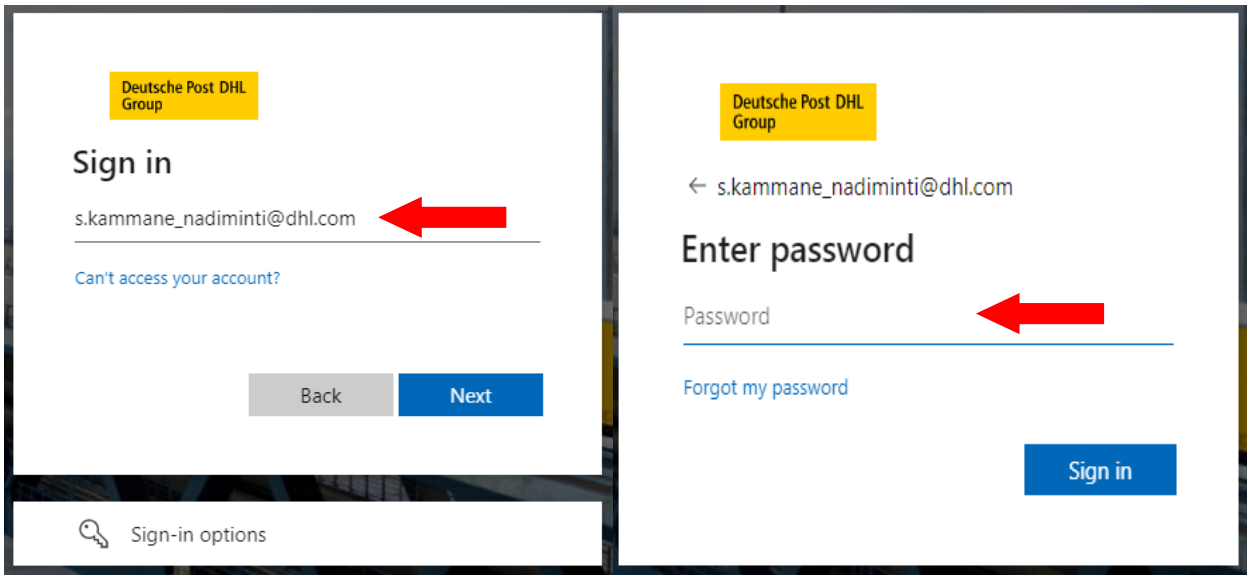
Once you receive a confirmation email notification that your request has been fulfilled, you will be able to login to the platform with your Active Directory credentials i.e. email-id & password provided to you at the time of creating your DHL account. You will be able to use the same credentials for accessing other platforms too.

3. How do I deploy my first Oracle machine?

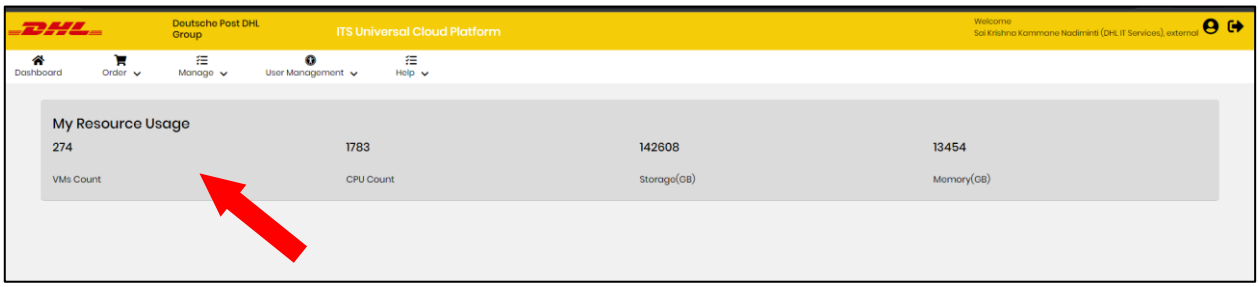
Once the access to UCP is granted via GSD Form, you will be able to login to UCP by navigating to https://ucp.dhl.com



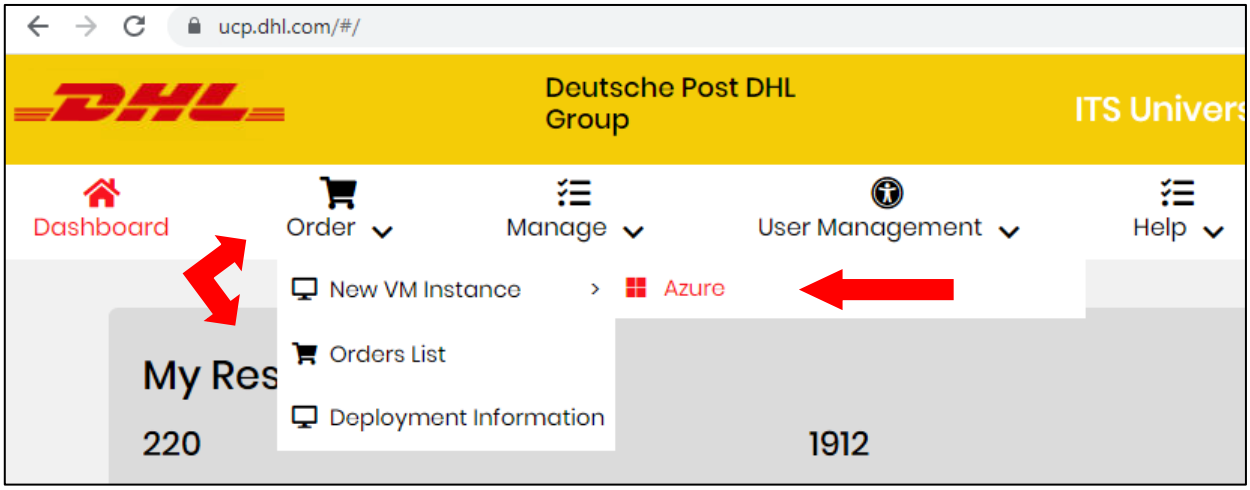
Click on Login and enter your credentials



You will be landing on the dashboard as shown hereunder. The dashboard shows a list of Virtual Machines that you have configured and related details.



In order to provision your first machine or Service Order, Clicking on Order -> New VM Instance -> Azure



The service Order Page appears as below

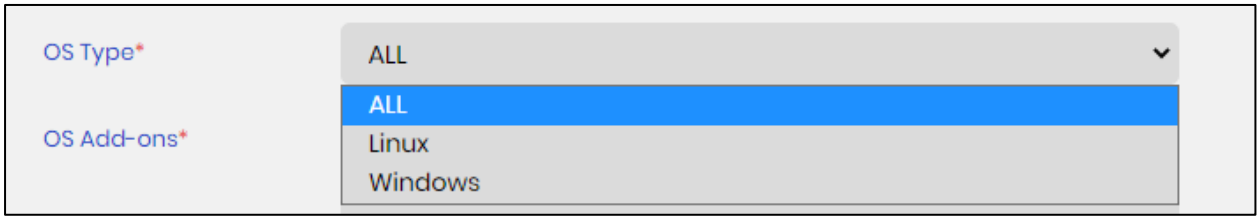
3.1 Basic Info Tab

In the Basic Info Page, you will be able to select the purpose of the virtual machine, region, type of the machine, etc. Based on these details the desired virtual machine gets provisioned and delivered to you. Please follow the instructions, given below to configure your machine.

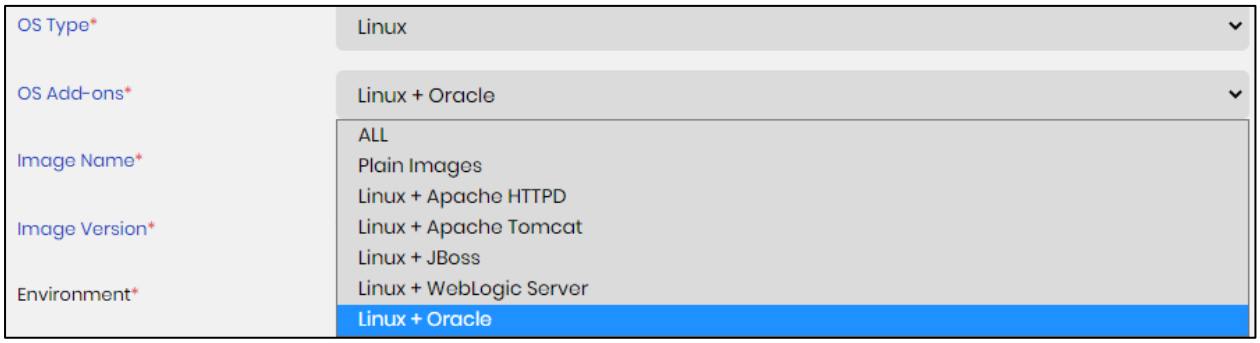
Please select one of the following details

a. Servers being provisioned for **Production** purpose, please select ITS-SPCS-Azure-Managed-VM-PROD-122
b. Servers being provisioned for **Test** purpose, please select ITS-SPCS-Azure-Managed-VM-TEST-123

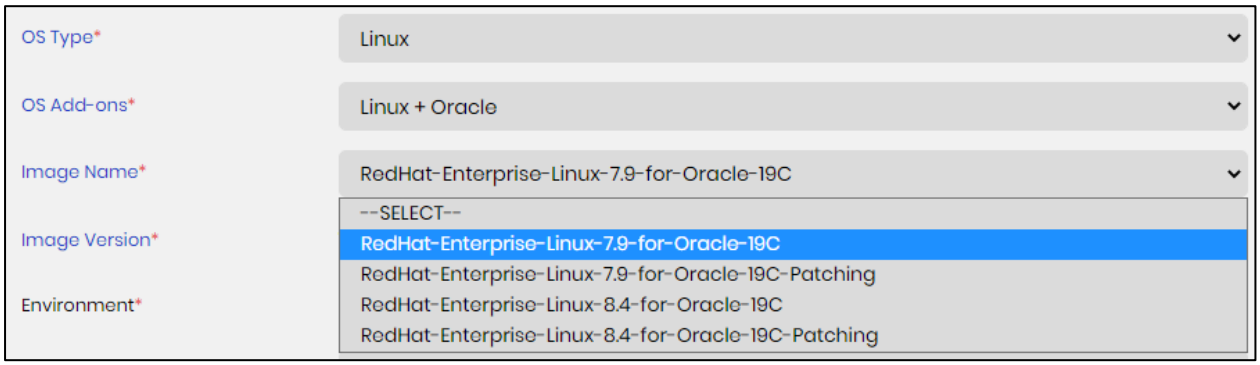
c. VM Resource group automatically populates to the one that you're assigned to.
d. If you're assigned to more than one Resource Group, you may click on the drop-down list to view and select the relevant Resource Group.
e. The Gallery Name is automatically set to sig_dhl_iaas_images. This cannot be modified. Gallery is the repository for the OS Templates which are used to provision the servers.
f. Servers can be provisioned based on two types of Operating Systems
    a. Linux
    b. Windows



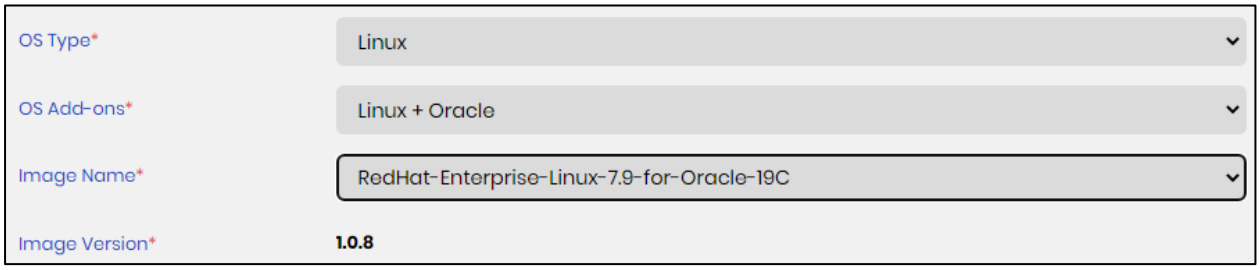
g. Selecting Linux Will show the Add-Ons as below.



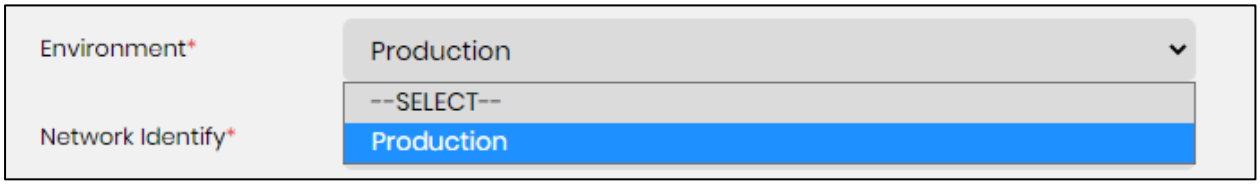
h. By Selecting Linux + Oracle option, the following images will appear.

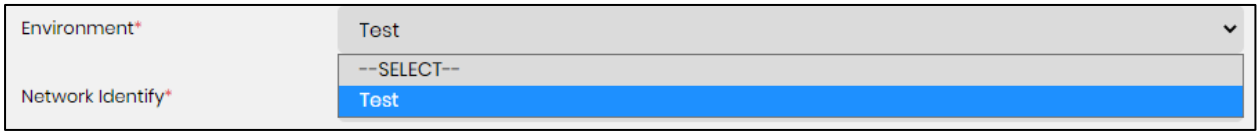


i. After selecting the desired image the latest version of the image will automatically appear.

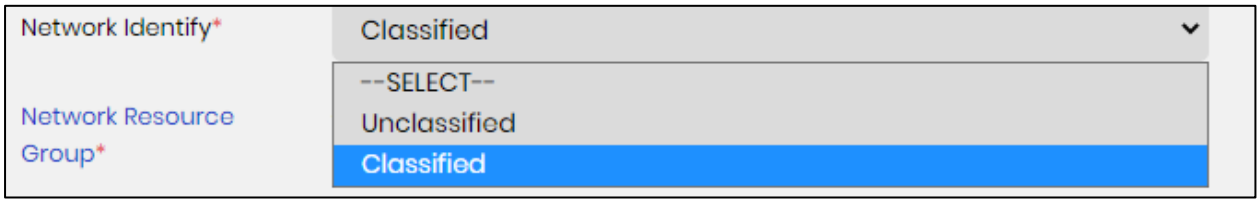


j. There are two types of Environments
   a. PRODUCTION – Purpose of the server is for a Production instance. This option is automatically selected when ITS-SPCS-Azure-Managed-VM-PROD-122 is selected for provision purpose.
   b. TEST – Purpose of the server is for a Test instance. This option is automatically selected when ITS-SPCS-Azure-Managed-VM-TEST-123 is selected for provision purpose.

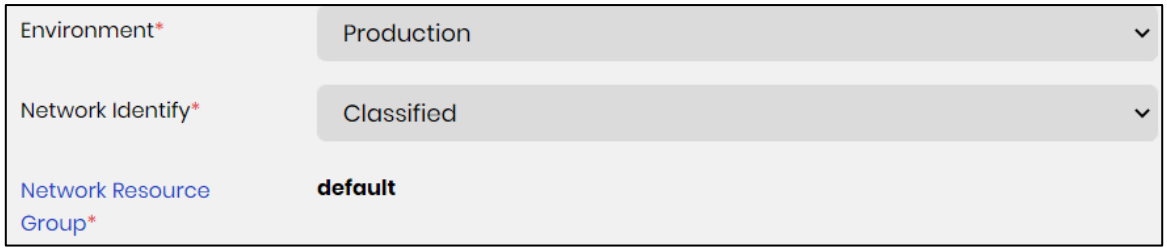




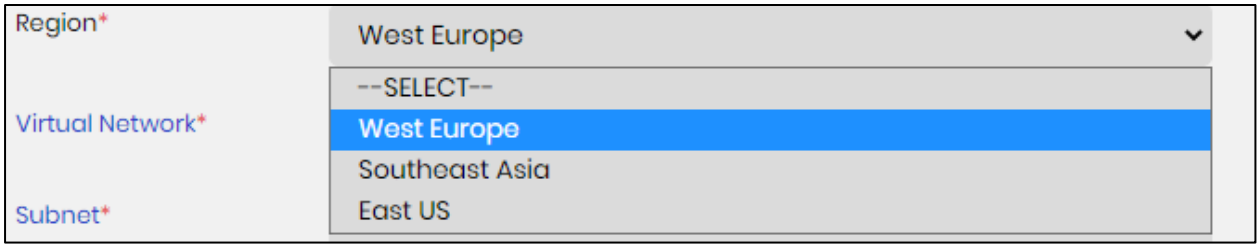
k. Network Identity Selection. There are two types of Network identity option.
   a. Classified: Any external server will be able to access this server, via internet, that you have provisioned with Classified Network setting.
   b. Unclassified: Any external server will be not be able to access this server, via internet, that you have provisioned with Classified Network setting.



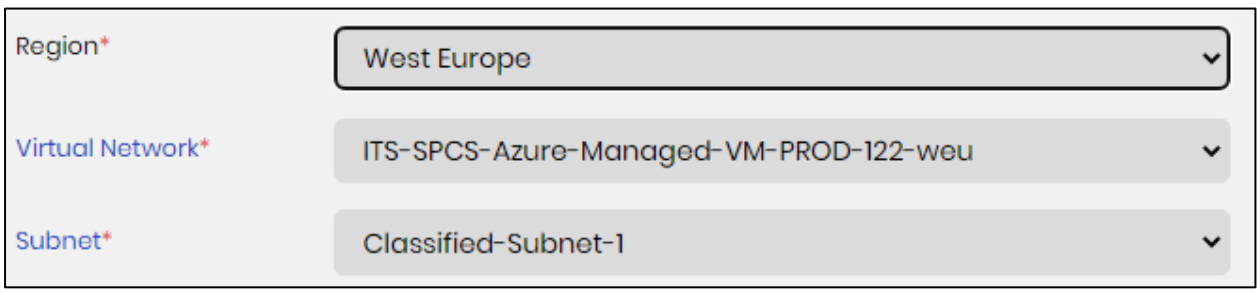
l. Network Resource Group is set to Default.

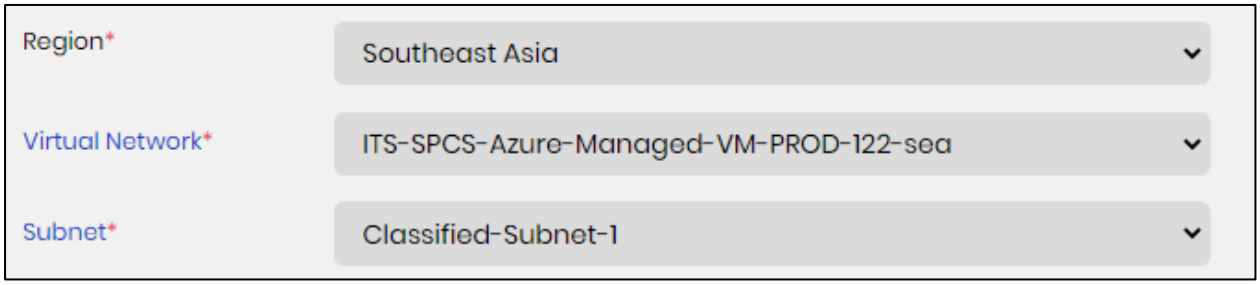


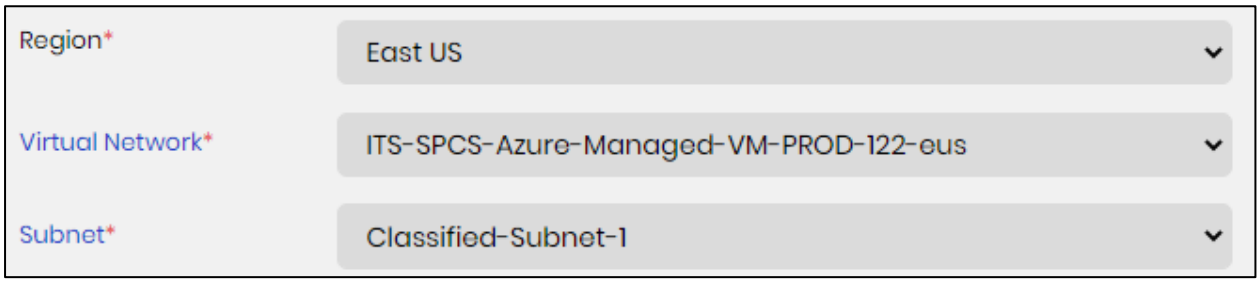
m. Please select desired Region. The selected region is the datacenter where the requested server will be provisioned.



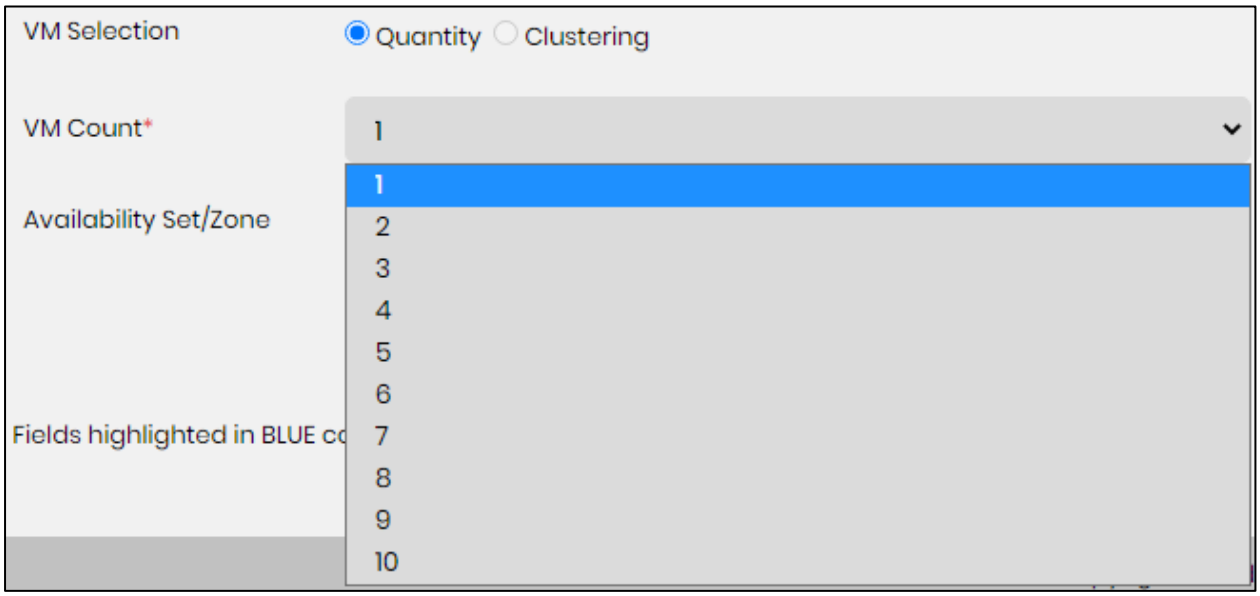
n. Based on the region selected, the corresponding Virtual Network is automatically selected along with the subnet.
   a. For Linux Machines with Classified Network setting, the subnet assigned, by default, is Classified-Subnet-1.
   b. For Linux Machines with Unclassified Network Setting, the subnet assigned, by default, is Unclassified-Subnet-1.



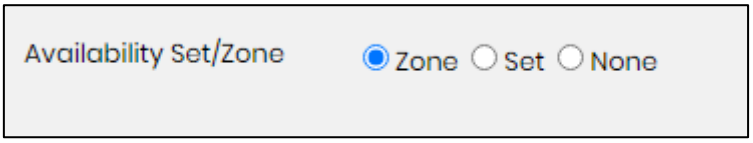




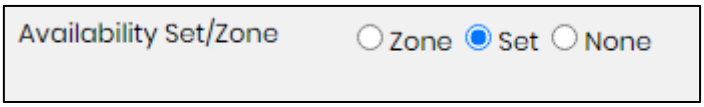
o. Select the number of servers that need to be provisioned in a single order.
   a. At a time, a maximum of 10 similar servers can be ordered & provisioned.
   b. Note: These servers will have exactly the same base machine or SKU. This will be explained in the following steps



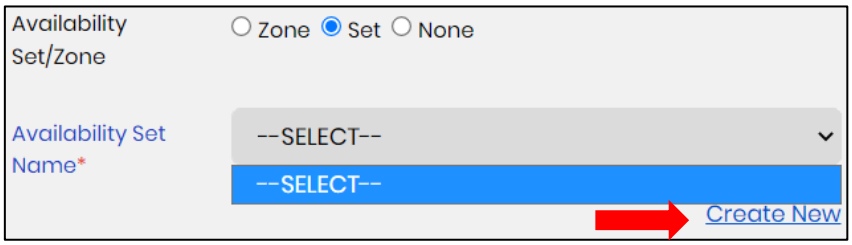
p. Cluster option will be explained in the user guide for Cluster Servers.
q. For every order either an Availability Zone / Availability Set / None option can be selected.
   a. **Availability Zone**: Azure regions and availability zones are physically separate locations within each Azure region that are tolerant to datacenter failures because of redundant infrastructure and logical isolation of Azure services. There are 3 zones numbered 1/2/3 available in UCP to provision servers.

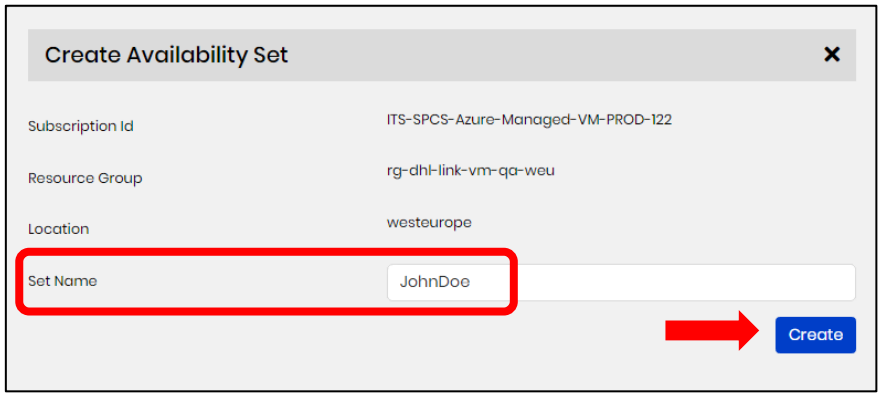


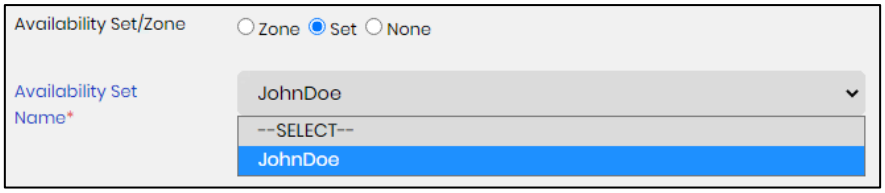
b. **Availability Set:** An availability set is a logical grouping of VMs that allows Azure to understand how your application is built to provide for redundancy and availability. We recommended that two or more VMs are created within an availability set to provide for a highly available application and to meet the 99.95% Azure SLA



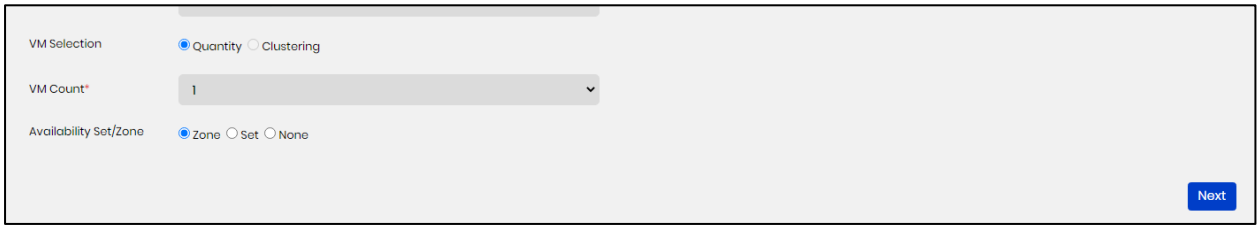
c. **Create Availability Set:** Availability Set Name will be listing out the Sets that are already configured in the Subscription. If there are no availability sets and if you wish to create one, then the "Create New" button will allow you to create a New Availability set.



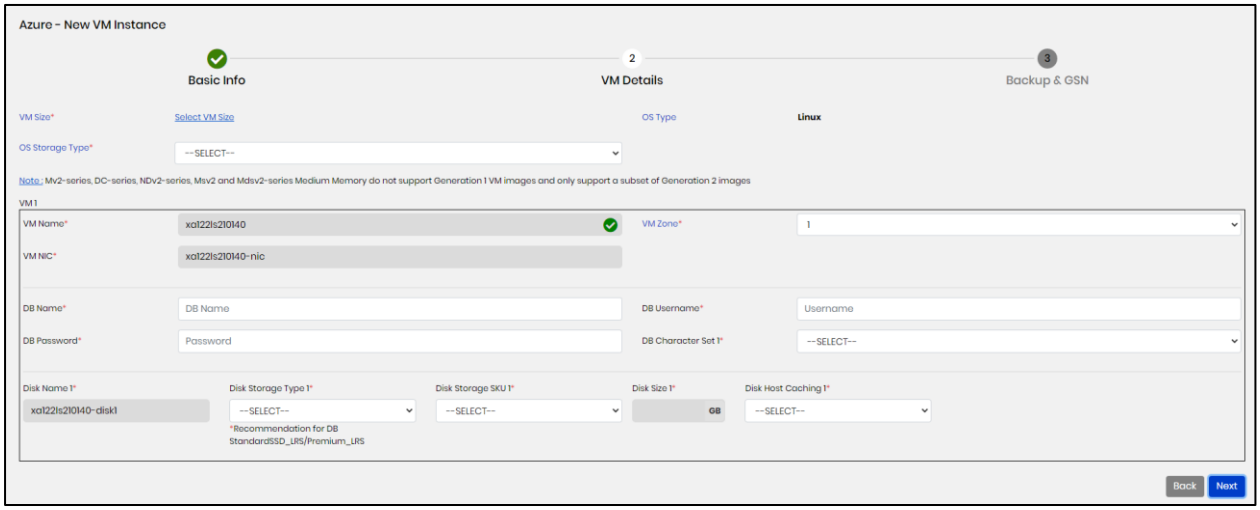




r. After selected all the relevant options please click on Next on the bottom Right of the screen.



3.2 VM Details Tab



a. Select the desired server size by clicking on “Select VM Size” which will then show the list of VM sizes available for the relevant image.
    a. Note: For each image of Linux & Windows only the supported list of VM SKUs will appear for selection.

VM Size

Save

Note : For Oracle Prod VM's please select SKU D series or higher.

Show entries 10

Search

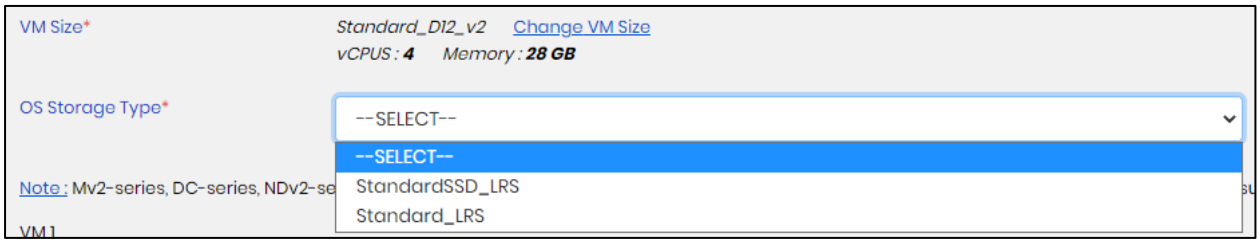
	VM Size	CPU Core	RAM	Max Disks	Accelerated Networking Enabled	Premium IO
◉	Standard_D12_v2	4	28 GB	16	True	Not Supported
○	Standard_D13_v2	8	56 GB	32	True	Not Supported
○	Standard_D14_v2	16	112 GB	64	True	Not Supported
○	Standard_D16ads_v5	16	64 GB	32	True	Supported
○	Standard_D16as_v4	16	64 GB	32	True	Supported
○	Standard_D16as_v5	16	64 GB	32	True	Supported
○	Standard_D16a_v4	16	64 GB	32	True	Not Supported
○	Standard_D16ds_v4	16	64 GB	32	True	Supported
○	Standard_D16ds_v5	16	64 GB	32	True	Supported
○	Standard_D16d_v4	16	64 GB	32	True	Not Supported

Showing 1 to 10 of 305 entries

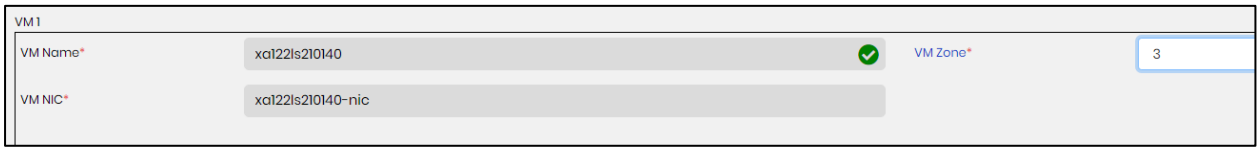
Previous 1 2 3 4 5 6 7 8 Next

b. Select the desired VM size and click on the SAVE button.
c. You may also be able to change the server size by clicking on “Change VM Size” button and re-selecting another SKU.

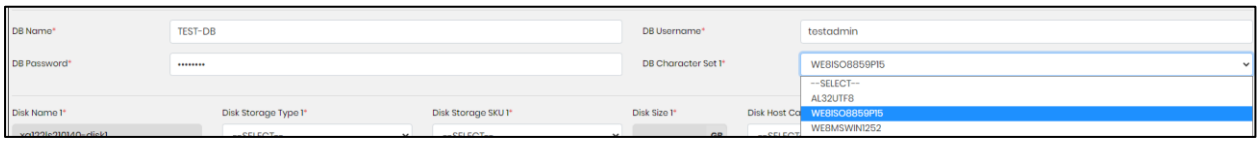
d. The list of SKUs(VM Sizes) that are displayed here are based on the OS Image template.
e. User can select the desired Operating System Storage Type from the list shown below.
    a. Standard SSD_LRS : This type of OS Disk is a Solid State Drive which is Locally Redundant Storage
    b. Standard_LRS : This type of OS Disk is a Hard Disk Drive which is Locally Redundant Storage.



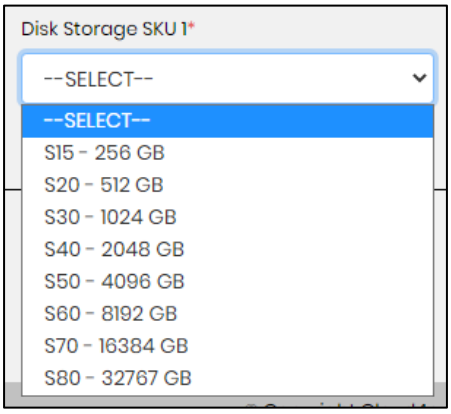
f. The Network details & NIC information is automatically populated and cannot be modified.
g. However, a relevant zone can be selected based on previous selection in Step-3.p

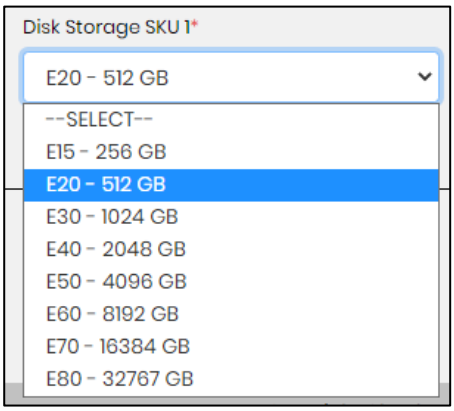


h. You should then add the following details.
    a. DB Name - Name of the database
    b. DB Username – Custom username for the database
    c. DB Password – Custom password for the database
    d. DB Character set – Custom Character set for the database



i. Disk Storage SKU1 dropdown option will provide the list of supported disk types along with the size of the disk. Either Standard or Standard_SSD

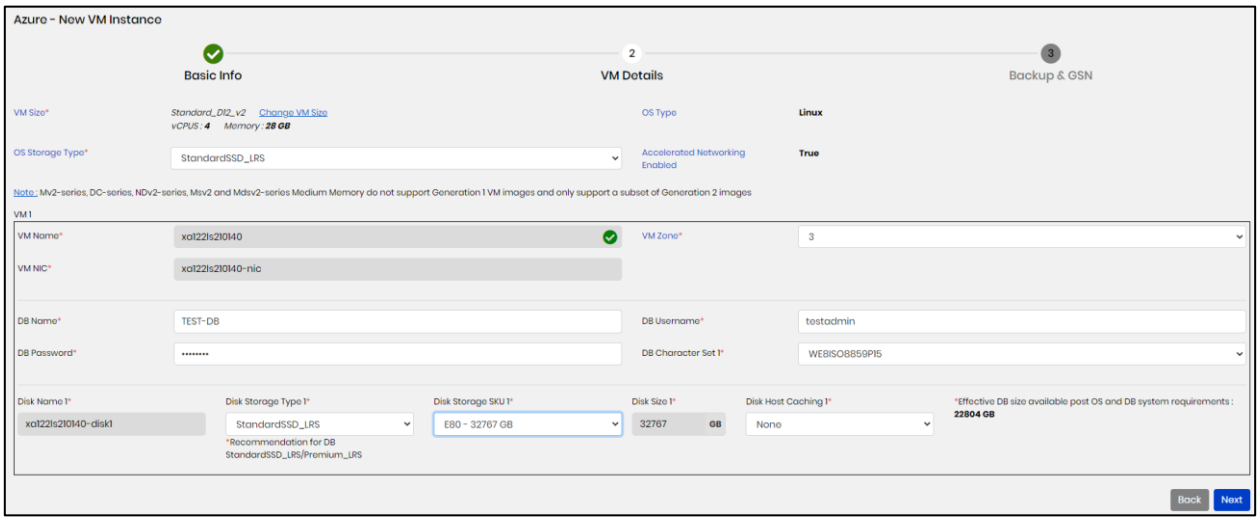




j. After selecting relevant disk type & size, Disk Host caching can be selected based on the options available

Note : The Effective database disk size available will be between **17.9% to 69.5%**

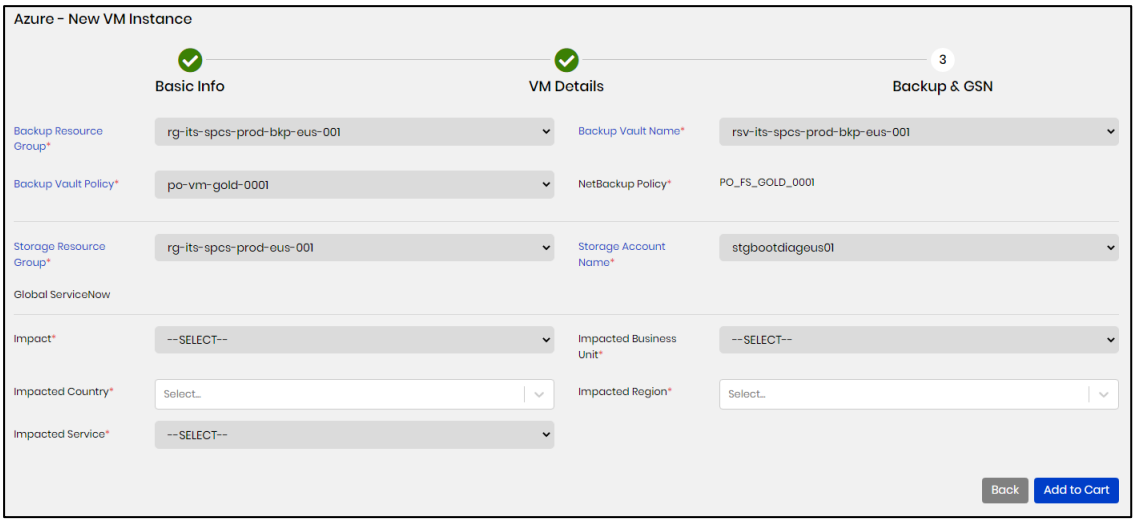
k. After configuring the desired option, click next on the bottom right to select Backup related information and Global Service Now Details for Business purposes

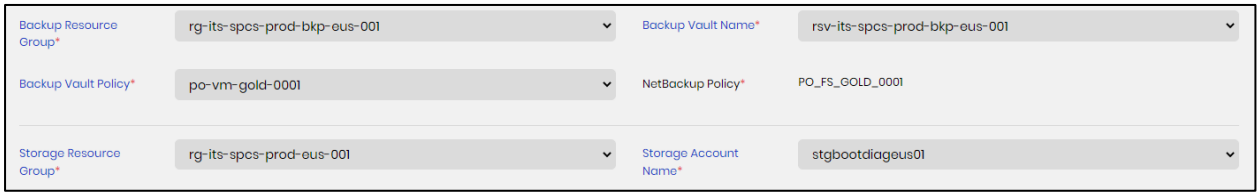


l. Or Click on Back to go to the previous page for changes in Basic Information.

3.3 Backup & GSN Tab

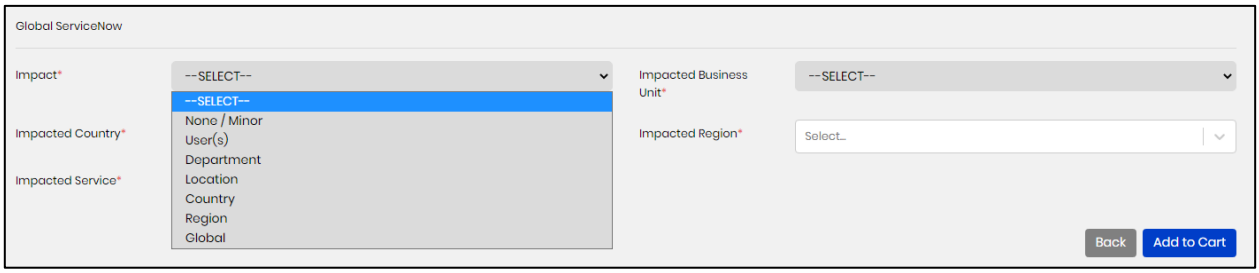
a. The Backup options are automatically selected based on the Type of server that is selected to Provisioned.
   i. There are two types of Backup Policies
      1. GOLD – Gold Policy is applied by default for every server that is built for Production Purposes
      2. BRONZE – Bronze Policy is applied by default for every server that is built for Testing Purposes.
      3. The Backup Policy details are mentioned in the FAQ section.



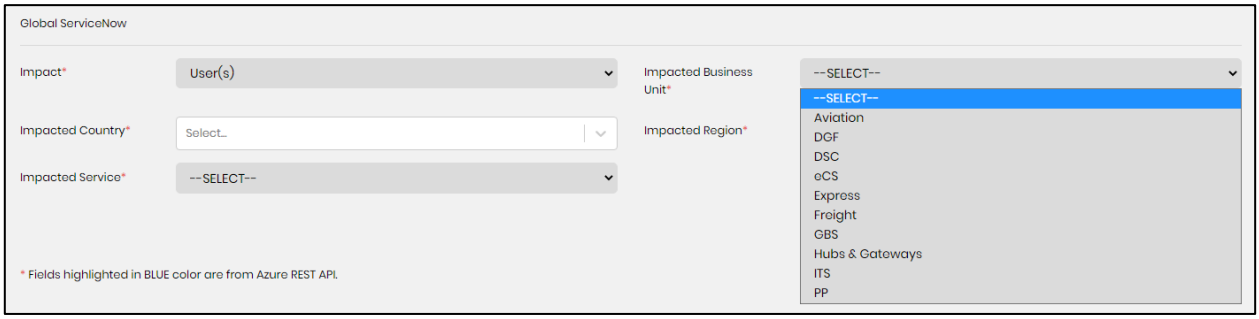


b. For Global Service Now Business details the Following options can be selected

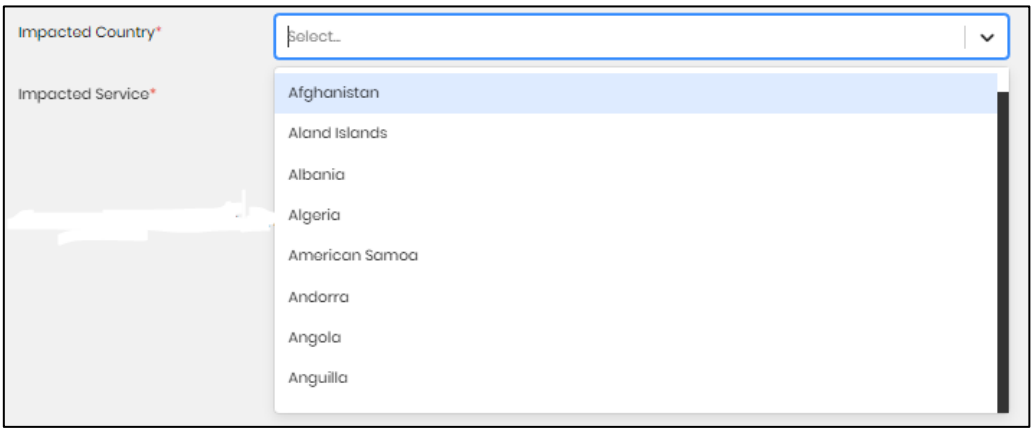
i. IMPACT



ii. Impacted BUSINESS UNIT

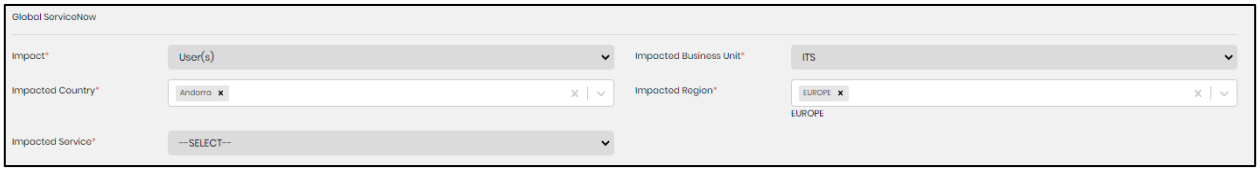


iii. Impacted COUNTRY.

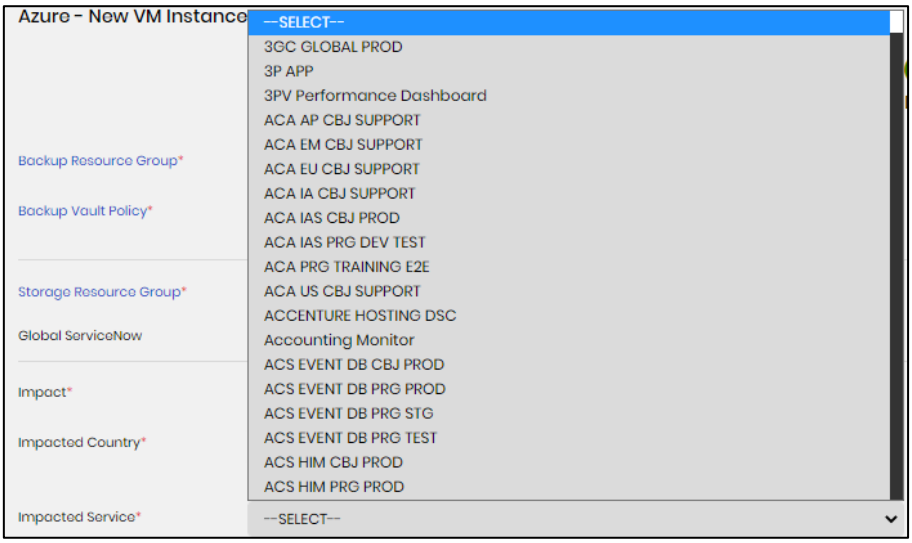


iv. Impacted region is automatically selected based on the Impacted Country.

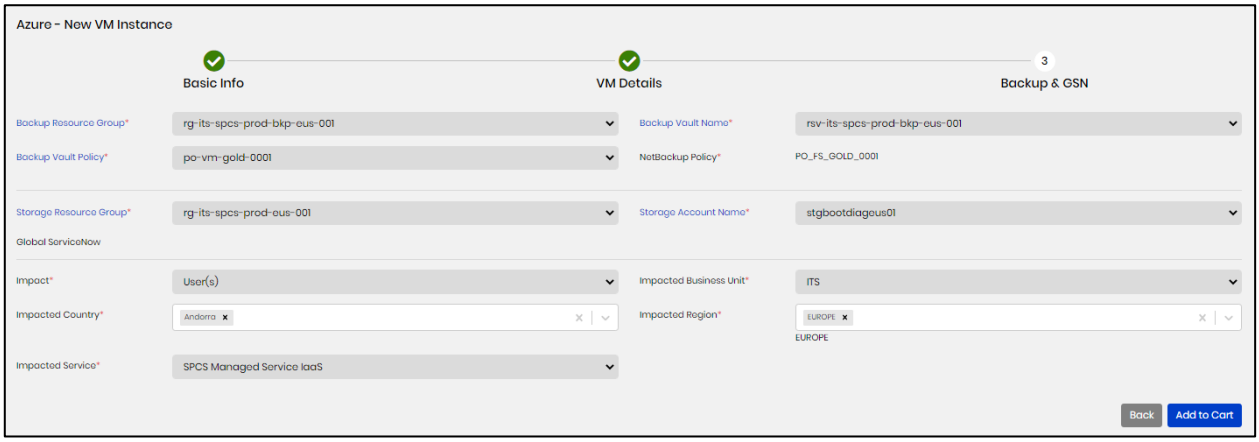
1. Note : Multiple Countries & Regions can be selected based on the business requirements.
2. Note : Selecting multiple Countries will auto select regions and vice-versa.



v. Impacted service can be selected based on the list of 4000+ services available.



c. After having selected all the relevant information click on the “Add to Cart” button to place the order for the service.



3.4 Order List

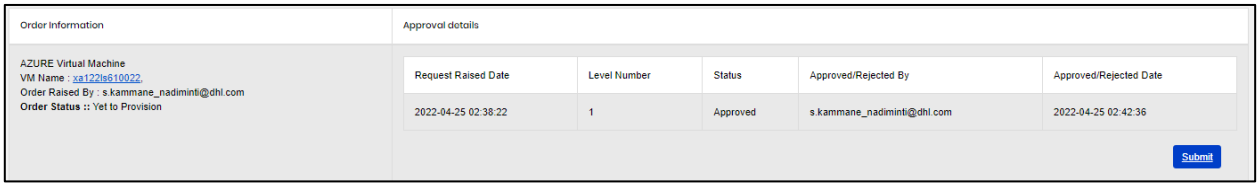
You will be navigated to Order List screen for approving the provisioning.

Note: If the user requesting for the server is a Team Member then the Team Manager (Resource Group Owner) alone can approve or reject the Order request.

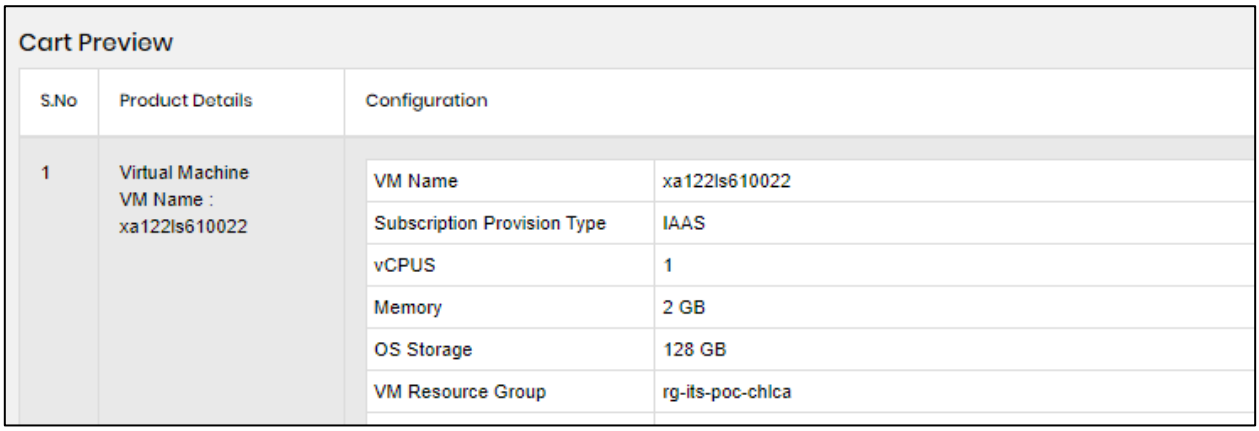
Note: If the Team Manager (Resource group Owner) him/her-self is raising the Service Order request then the order can be Approved/Rejected by him/her-self.

After approving the request the Resource Group Owner/ Team Manager should click on Submit to Order the server for Provisioning.

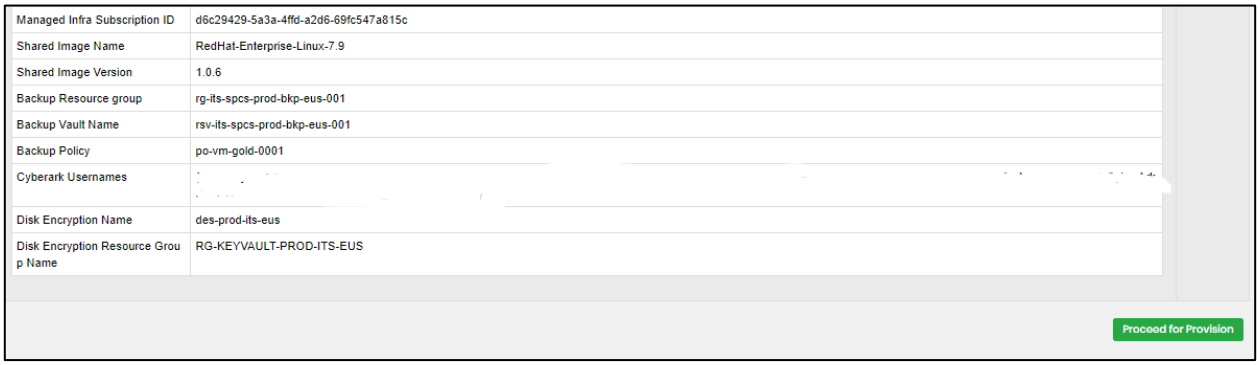
Note: Until the Submit button is clicked, the Order will **not be** sent for Provisioning.



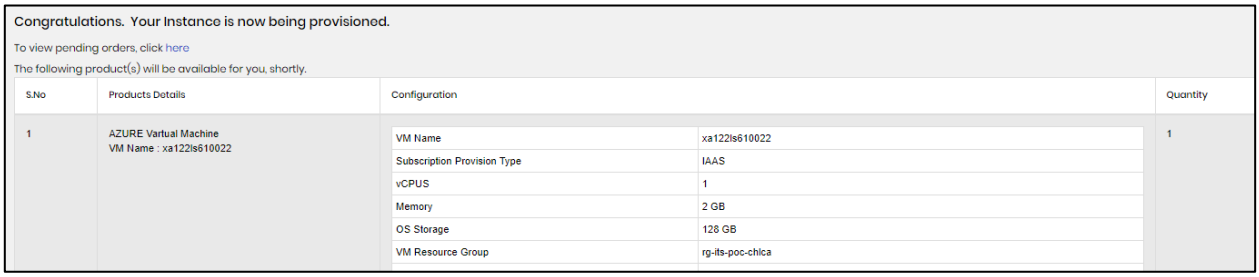
After clicking on Submit Button the preview of the Order is shown in the next screen.



The Team Manager or Resource Group Owner only can click on Proceed to Provisioning button to order the server.



Once the desired server is sent to provisioning the following acknowledgement screen will appear, along with an acknowledgement email.



Mon 4/25/2022 4:48 PM

noreply@dhl.com

Server is being Provisioned - xa122ls610022

To Sai Krishna Kammane Nadiminti (DHL IT Services), external

Cc Sai Krishna Kammane Nadiminti (DHL IT Services), external

Dear Team Member,

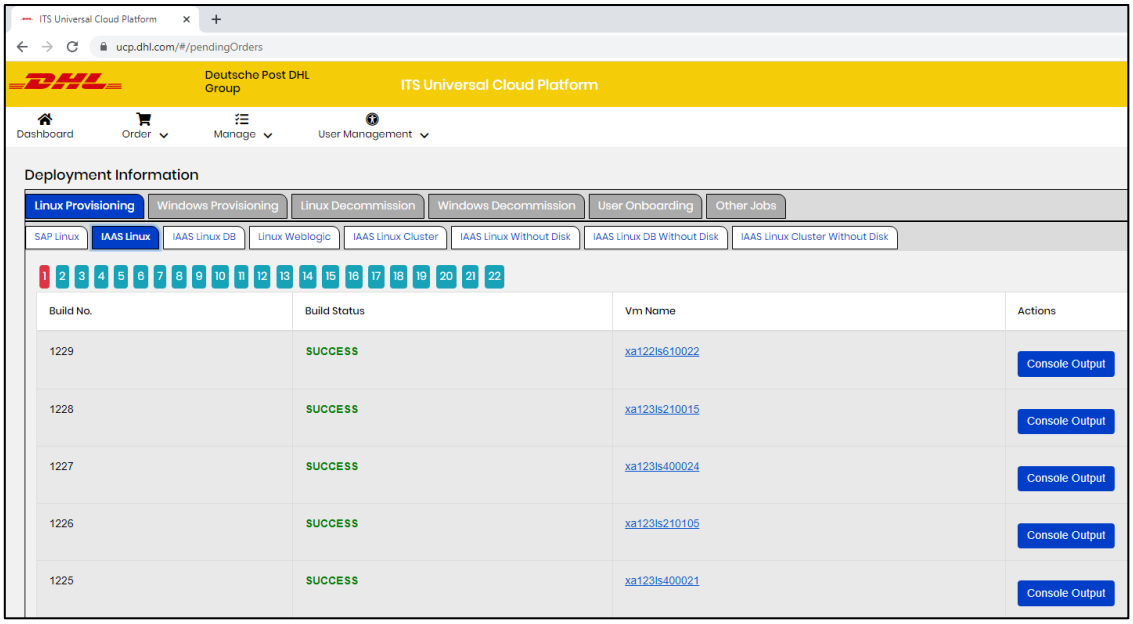
The following server(s) have been sent for Provisioning. Kindly navigate to Deployment Information Page and select relevant tab to view the status

#1 : VM Information

VM Name	xa122ls610022
Subscription Provision Type	IAAS
vCPUS	1
Memory	2 GB
OS Storage	128 GB
VM Resource Group	rg-its-poc-chlca
NIC Name	xa122ls610022-nic
Managed Disk Name	["xa122ls610022-disk1"]
Managed Disk Host Caching	["None"]
Managed Disk Storage Size	["S4_0_32"]
Managed Disk Size	[32]
Managed Disk Size Storage Account Type	["Standard_LRS"]
Network Resource Group Name	default
Virtual Network Name	ITS-SPCS-Azure-Managed-VM-PROD-122-eus
Subnet Name	Classified-Subnet-1
Zone	1

3.5 Deployment Information Menu

In order to Check for Provisioning Status, Navigate to Order -> Deployment Information.



a. There are several tabs to check for the status of activities performed in UCP. The table mentioned hereunder outlines all the activities.

Sl.No	Main Tab	Sub-Tab	Acitivity
1.	Linux Provisioning	IAAS Linux	i. Plain Linux Machines **with** Additional Disk

2		IAAS Linux DB	i. Oracle Machines **with** Additional Disk ii. TOMCAT Machines **with** Additional Disk iii. APACHE Machines **with** Additional Disk iv. JBOSS Machines **with** Additional Disk
3.		Linux WebLogic	i. WebLogic Machines **with** Additional Disk
4.		IAAS Linux Cluster	i. SAP Veritas Clusters **with** Additional Disk ii. Veritas Clusters **with** Additional Disk
5		IAAS Linux Without Disk	i. Plain Linux Machines **without** Additional Disk
6		IAAS Linux DB Without Disk	i. Oracle Machines **without** Additional Disk ii. TOMCAT Machines **without** Additional Disk iii. APACHE Machines **without** Additional Disk iv. JBOSS Machines **without** Additional Disk
7		IAAS Linux Cluster Without Disk	i. SAP Veritas Clusters **without** Additional Disk ii. Veritas Clusters **without** Additional Disk
8	Windows Provisioning	IAAS Windows	i. Plain Windows with Additional Disk ii. Windows IIS with Additional Disk
9		IAAS Windows DB	i. Windows MSSQL with Additional Disk
10		IAAS Windows without Disk	i. Plain Windows **without** Additional Disk ii. Windows IIS **without** Additional Disk
11		IAAS Windows DB without Disk	i. Windows MSSQL without Additional Disk
12	Linux Decommissioning	IAAS Linux Decommissioning	i. Plain Linux Machines **with** Additional Disk
13		IAAS Linux DB Decommissioning	i. Oracle Machines **with** Additional Disk ii. TOMCAT Machines **with** Additional Disk iii. APACHE Machines **with** Additional Disk iv. JBOSS Machines **with** Additional Disk
14		Linux WebLogic Decommissioning	i. WebLogic Machines **with** Additional Disk
15		IAAS Linux Cluster Decommissioning	i. SAP Veritas Clusters **with** Additional Disk ii. Veritas Clusters **with** Additional Disk
16		IAAS Linux Without Disk Decommissioning	i. Plain Linux Machines **without** Additional Disk
17		IAAS Linux DB Without Disk Decommissioning	i. Oracle Machines **without** Additional Disk ii. TOMCAT Machines **without** Additional Disk iii. APACHE Machines **without** Additional Disk iv. JBOSS Machines **without** Additional Disk
18		IAAS Linux Cluster Without Disk Decommissioning	i. SAP Veritas Clusters **without** Additional Disk ii. Veritas Clusters **without** Additional Disk
19	Windows Decommissioning	IAAS Windows Decommissioning	i. Plain Windows with Additional Disk ii. Windows IIS with Additional Disk
20		IAAS Windows DB Decommissioning	i. Windows MSSQL with Additional Disk

21		IAAS Windows without Disk Decommissioning	i. Plain Windows **without** Additional Disk ii. Windows IIS **without** Additional Disk
22		IAAS Windows DB without Disk Decommissioning	i. Windows MSSQL without Additional Disk
23	User On-boarding	Windows User On-boarding	Onboard a user to a Windows Plain or IIS machine as either i. Administrator or ii. Remote Desktop User
24		Windows User Off-boarding	Offboard a user from a Windows Plain or IIS Machine either as i. Administrator or ii. Remote Desktop User
25		Windows SQL user On-boarding	Onboard a Database user onto MSSQL DB as a. User Account i. MSSQL Reader ii. MSSQL DataReader iii. MSSQL DataWriter iv. MSSQL AgentReader v. MSSQL DBSSISAdmin
26		AD User Onboarding (Active Directory)	Onboard a abc@dhl.com email id user to i. UDLDHL-UCP (UCP Access) ii. UDLDHL-PVWA (Cyberark Platform Acces)
27		AD User Off-boarding (Active Directory)	Offboard a abc@dhl.com email id user from i. UDLDHL-UCP (UCP Access) ii. UDLDHL-PVWA (Cyberark Platform Acces)
28	Other Jobs	Windows SQL Service Account Onboarding	Onboard a Database user onto MSSQL DB as a. Service Account i. MSSQL DBOwner ii. MSSQL SysAdmin iii. MSSQL AgentReader iv. MSSQL DBSSISAdmin
29		IAAS Windows OAT Rerun	Status of OAT Checklist Re-Run for Windows Plain & IIS Machines
30		IAAS Linux OAT Rerun	Status of OAT Checklist Re-Run for any Plain Linux Machine
31		IAAS-Linux DB OAT Rerun	Status of OAT Checklist Re-Run for all i. Oracle Machines ii. Tomcat Machines iii. Apache Machines iv. JBOSS Machines
32		IAAS-Linux Weblogic OAT Rerun	Status of OAT Checklist Re-Run for all i. Weblogic Machines
33		IAAS-Linux Cluster OAT Re-Run	Status of OAT Checklist Re-Run for all i. SAP Veritas Cluster Machines ii. Vertias Cluster Machines
34		IAAS-Windows SQL OAT Re-Run	Status of OAT Checklist Re-Run for all i. MSSQL Machines

35		IAAS Linux DB Add Disk	Provisioning of Additional Disk for **already provisioned** i. Oracle Machines ii. Tomcat Machines iii. Apache Machines iv. JBOSS Machines
36		IAAS Linux Weblogic Add Disk	Provisioning of Additional Disk for **already provisioned** i. Weblogic Machines
37		IAAS Windows DB Add Disk	Provisioning of Additional Disk for **already provisioned** i. MSSQL Machines

b. Status of Provisioning – There are 3 Statuses

Provisioning	IN-PROGRESS	Provisioning of a server is In-Progress
	SUCCESS	Provisioning of a server is Successful
	FAILURE	Provisioning of a server has Failed

c. Status of Resizing – There are 3 Statuses

Resizing	IN-PROGRESS	Resizing of a server is In-Progress
	SUCCESS	Resizing of a server is Successful
	FAILURE	Resizing of a server has Failed

d. Status of Decommissioning – There are 3 Statuses

0. Decommissioning	1. IN-PROGRESS	2. Decommissioning of a server is In-Progress
3.	4. SUCCESS	5. Decommissioning of a server is Successful
6.	7. FAILURE	8. Decommissioning of a server has Failed

3.6 Email Acknowledgements

If you are ordering for a new service, you will receive the following Acknowledgement emails

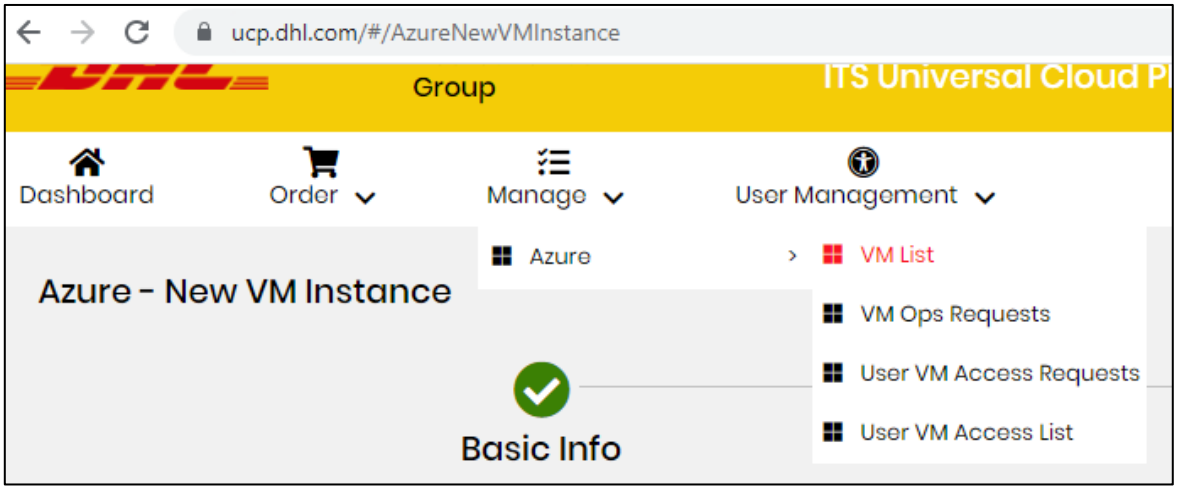
1. Service Order Raising Request.
2. Server Order Pending for Approval Email.
3. Approval Email – Stating that your server is being provisioned.
4. Rejection Email – Your service order has been rejected.
5. Success Email – You server has been provisioned successfully.

Failure Email – Your server has failed to provision.

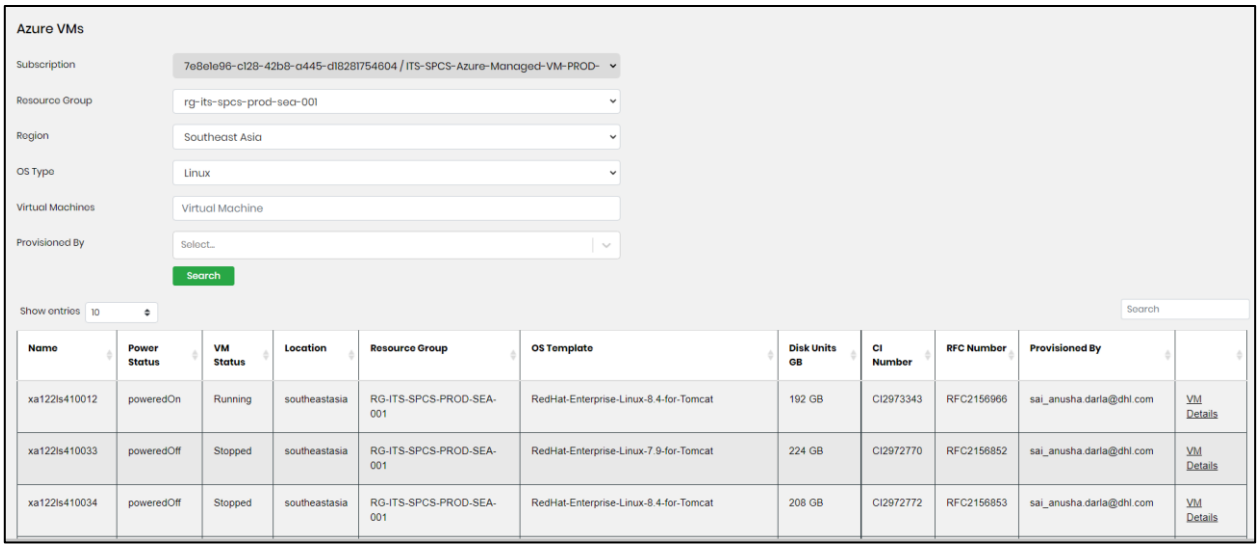
4. Where is MY Server?

4.1 VM List Menu

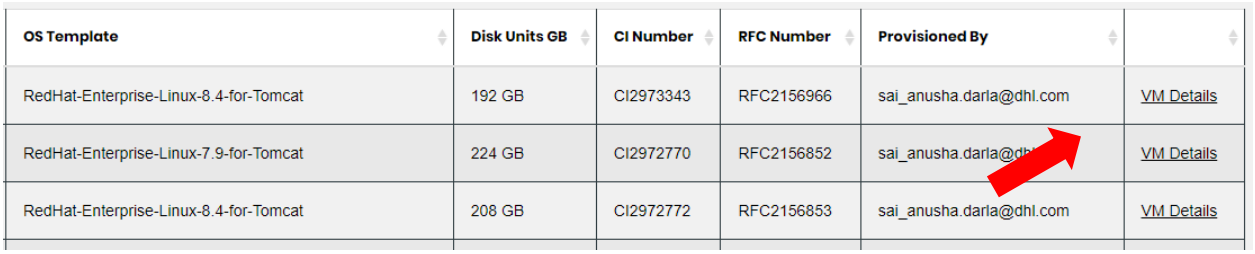
The VM List menu depicts the list of servers provisioned within the resource groups you have been assigned to. In order to view the list of successfully provisioned servers you should navigate to Manage -> Azure -> VM List



a. You will be able to see your server either by the filtering the options available or you can directly enter the hostname of the server in the search box.



b. Click on VM Details Button to view the details of the server that has been provisioned.



OS Template	Disk Units GB	CI Number	RFC Number	Provisioned By	
RedHat-Enterprise-Linux-8.4-for-Tomcat	192 GB	CI2973343	RFC2156966	sai_anusha.darla@dhl.com	VM Details
RedHat-Enterprise-Linux-7.9-for-Tomcat	224 GB	CI2972770	RFC2156852	sai_anusha.darla@dhl	VM Details
RedHat-Enterprise-Linux-8.4-for-Tomcat	208 GB	CI2972772	RFC2156853	sai_anusha.darla@dhl.com	VM Details


VM Details
Note : If you see any discrepancy in VM information, Please click on "Sync Data From Azure"
Reboot
Decommission
Resize
History
Latest OAT Checklist
Re-run OAT checklist
Lock
Sync Data From Azure
VM Name : xal22ls410012
VM Location : southeastasia
Resource Group : RG-ITS-SPCS-PROD-SEA-001
Memory(GB) : 2
OS Template : RedHat-Enterprise-Linux-8.4-for-Tomcat
OS Name : redhat
Virtual Network : ITS-SPCS-Azure-Managed-VM-PROD-122-sea
Accelerated Networking : false
CI Number : CI2973343
Search Code : AP-SVLV-XAI22LS410012
DB Search Code :
Is Cluster : No
Azure tags : Backup-Vault-Policy : po-vm-gold-0001
Business_service : ACS EVENT DB PRG TEST
Cloud_service : Managed IaaS
Provisioned_By : UCP
s_Ops Support Prod_MW : 200000012906
s_Ops Support Prod_OS : 200000012908
v_OS_RHEL : 8.4
VM Status : Running
VM Size : Standard_A1_v2
CPU Core : 1
Total Disk Size(GB) : 192
OS Disk Size(GB) : 128
OS Version : 8.4
Network Interface : xal22ls410012-nic
Private IP Address : 10.234.80.15
RFC Number : RFC2156966
MiddleWare CI Number : CI2973344
DB CI Number :
Impacted BU : ITS
VM Creation Time : 2022-04-20 01:44:59
VM Provisioned By : sai_anusha.darla@dhl.com
VM Locked Status : Unlock

5. Glossary

5.1 Definition

Terms	Abbreviation
VM	Virtual Macine
UCP	Universal Cloud Platform