CLOUD4C



UCP Manual for Linux + MiddleWare

CLOUD4C SERVICES PVT LTD



Document control

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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 Cyberark 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.

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

- a. Plain Linux Images
- b. Apache HTTPD Linux Images
- c. Apache TOMCAT Linux Images
- d. JBOSS Linux Images

In addition, this document also emphasizes various features such as

- a. Mount-points
- 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



General Information	
Prerequisite: 1. You would need a valid Se Tags: EMEA, GBS Contact owner	aged laaS Resource Group for you.
Form Details —	
	ITS Account Manager s.kammane_nadiminti@dhl.com
Resource Group Owner	Requestor will automatically be added to Owner Role in Resource Group
Resource Group Name	Resource Group Name
Please select your BU	 ○ Express ○ GBS&CC ○ DGFF ○ P&P ○ ITS ○ DSC ○ eCS
	Please provide Service Contract for charging purposes. Please contact account services for assistance
New Service Contract	
Who should have access to Power BI report?	Select
Clear	

The form involves 4 steps where the SPCS Cloud Ops laaS 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.

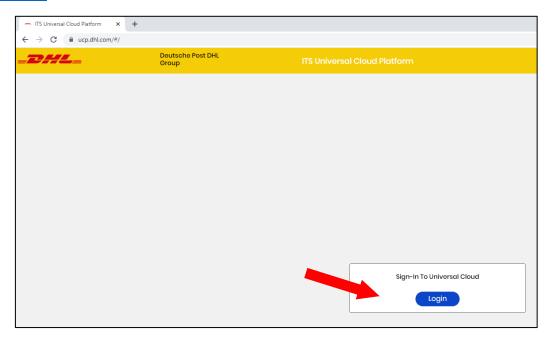
Note: Only "@dhl.com" email ids can only be onboarded onto UCP.

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.

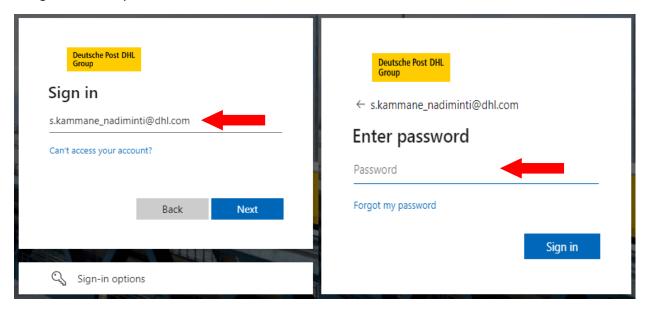
3. How do I deploy my first machine?



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

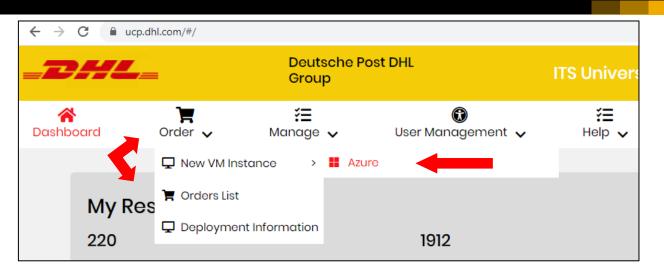


You will be landing on the dashboard as shown hereunder. The dashboard shows a list of Virtual Machines that you have configured and related details.



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





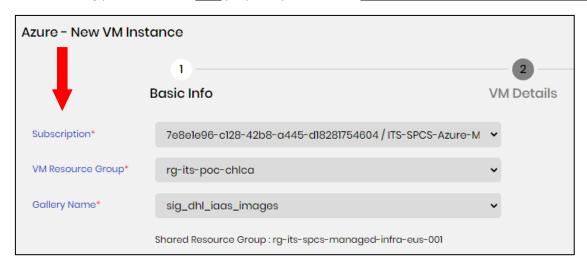
The service Order Page appears as below

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.

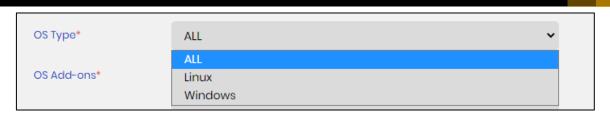
Please select one of the following details

- 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

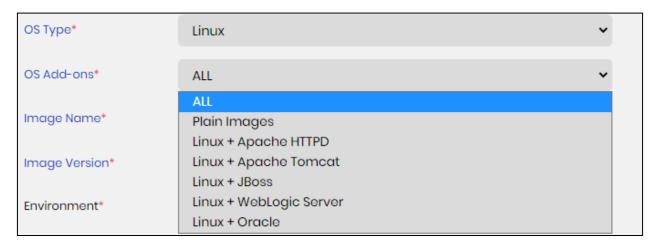


- c. VM Resource group automatically populates to the one that you're assigned to.
- d. If you're assigned to more than one Resource Group, you may click on the drop-down list to view and select the relevant Resource Group.
- e. The Gallery Name is automatically set to sig_dhl_iaas_images. This cannot 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

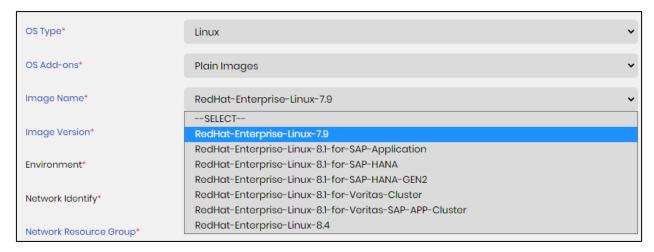




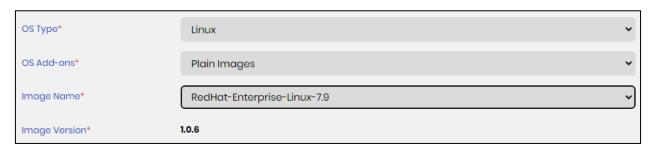
g. Selecting Linux operating system will show the Add-Ons as below.



h. Selecting relevant Add-on will then filter the related images with which servers can be provisioned. For example this is how a Plain Linux template can be selected.



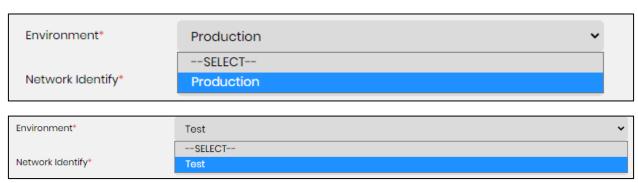
i. After selecting the desired image the latest version of the image will appear automatically.



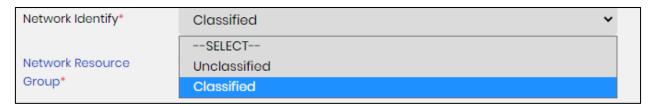
j. There are two types of Environments



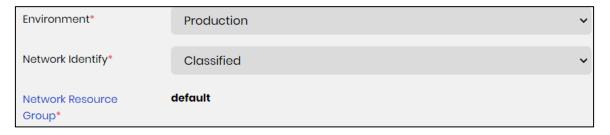
- a. PRODUCTION Purpose of the server is for a Production instance. This option is automatically selected when ITS-SPCS-Azure-Managed-VM-PROD-122 is selected for provision purpose.
- b. TEST Purpose of the server is for a Test instance. This option is automatically selected when ITS-SPCS-Azure-Managed-VM-TEST-123 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 <u>not be</u> able to access this server, via internet, that you have provisioned with Classified Network setting.



I. Network Resource Group is set to Default always.



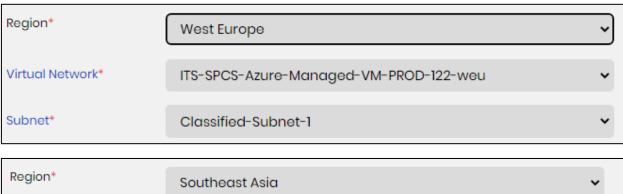
m. Please select the desired Region. The selected region is the datacenter where the requested server will be provisioned.



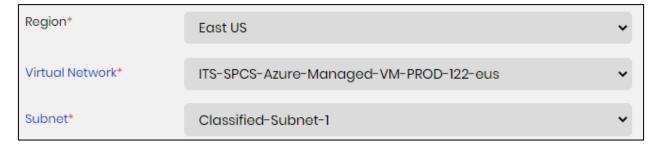
- n. Based on the region selected, the corresponding Virtual Network is automatically selected along with the subnet.
 - a. For Linux Machines with Classified Network setting, the subnet assigned, by default, is Classified-Subnet-1.



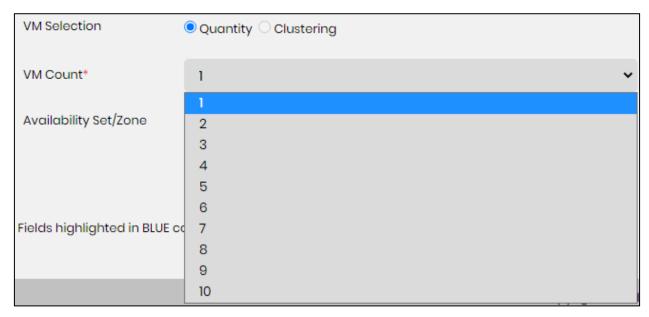
b. For Linux Machines with Unclassified Network Setting, the subnet assigned, by default, is Unclassified-Subnet-1.







- 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



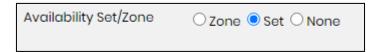
p. Cluster option will be explained in the user guide for Cluster Servers.



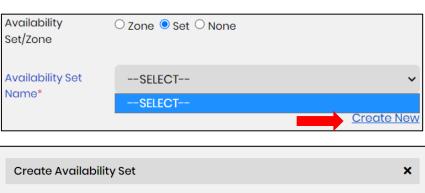
- q. For every order either an Availability Zone / Availability Set / None option can be selected.
 - a. **Availability Zone**: Azure regions and availability zones are physically separate locations within each Azure region that are tolerant to datacenter failures because of redundant infrastructure 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.





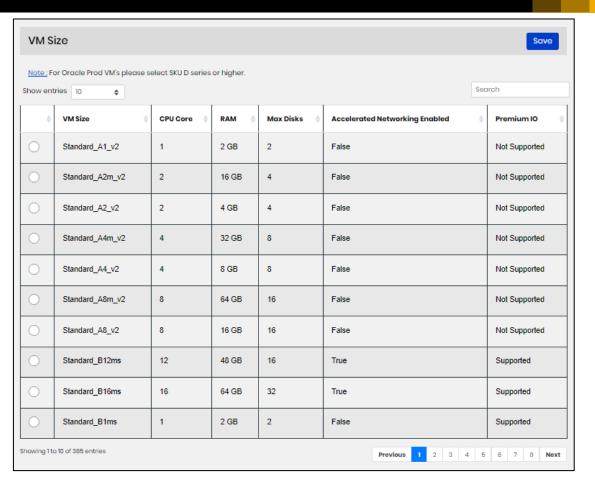
3.2 VM Details Tab

The next page allows the user to select the Base Machine details.

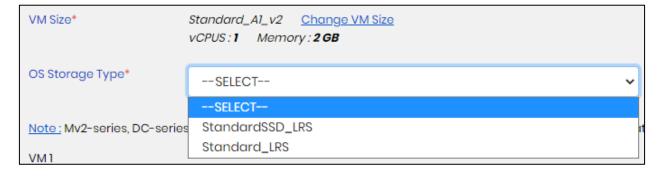


- a. Select the desired server size by clicking on "Select VM Size" which will then show the list of VM sizes available for the relevant image.
 - a. Note: For each image of Linux & Windows only the supported list of VM SKUs will appear for selection.





- 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

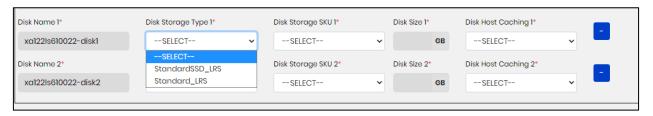


- f. The Network details & NIC information are automatically populated and cannot be modified.
- g. However, a relevant zone can be selected based on previous selection in Step-3.p

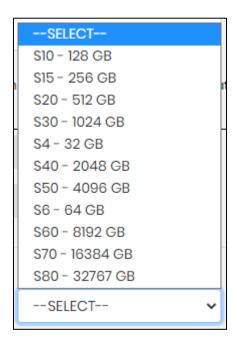




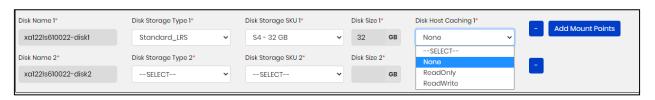
- h. User may choose to add Additional disks if required. This is possible by clicking on Add Disks button.
 - a. **Note**: The number of maximum disks that can be added is pre-defined by the Size of the base machine that has been selected in Step-4.a.a
 - b. In the below mentioned example a server size is selected where it can support only 2 additional disks.
 - c. You may also select additional disks based on available disk types & sizes.



d. Disk Storage SKU1 dropdown option will provide the list of supported disk types along with the size of the disk.



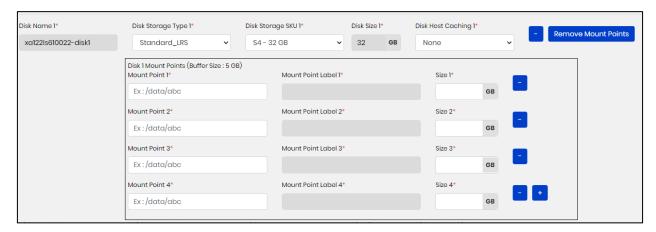
e. After selecting relevant disk type & size, Disk Host caching can be selected based on the options available.



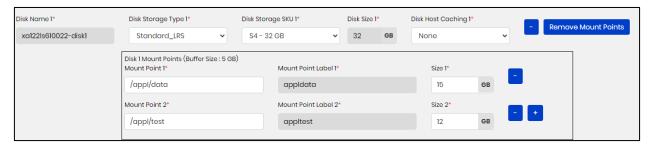
f. Mount-points to each disk can be defined by clicking on Add Mount-points button.



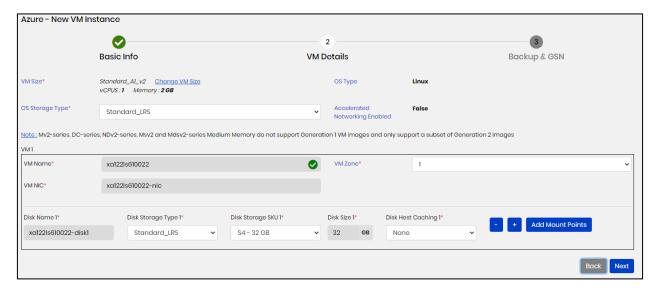
 Note: As many mount-points as possible can be defined in this section, however the sum of all partitions of the mount-points cannot be exceed 5GB less of Disk Size. Meaning if a 32GB disk is selected, the sum of all partitions cannot be greater than 27 GB.



i. A mount-point needs to be defined with a "/" before and after mount-point name; and the label name will be automatically populate for every mount point as per the format mentioned in the text box.



g. After configuring the desired option, click "NEXT" on the bottom right to configure Backup for the server being provisioned and Global Service Now Details for Business purposes.

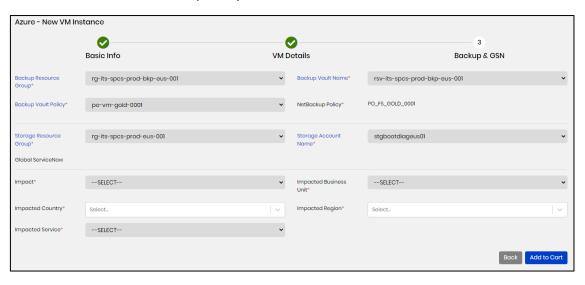


h. Or Click on Back to go to the previous page for changes in Basic Information.



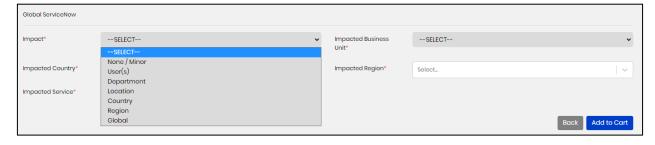
3.3 Backup & GSN Tab

- 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 s built for Testing Purposes.
 - 3. The Backup Policy details are mentioned in the FAQ section.



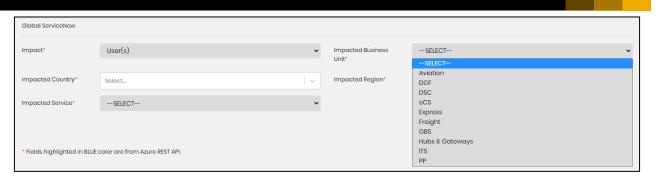


- j. For Global Service Now Business details the Following options can be selected
 - i. IMPACT

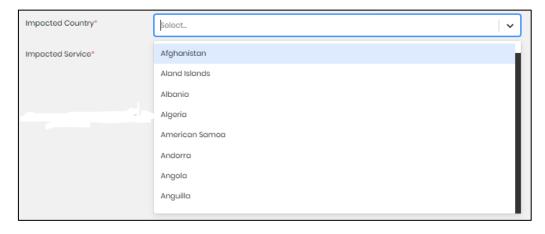


ii. Impacted BUSINESS UNIT





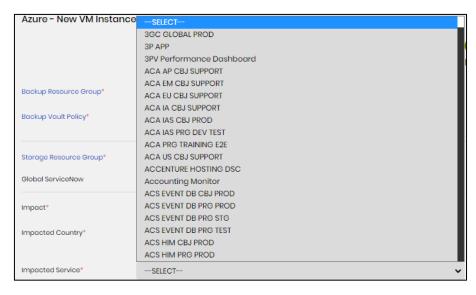
iii. Impacted COUNTRY.



- 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.

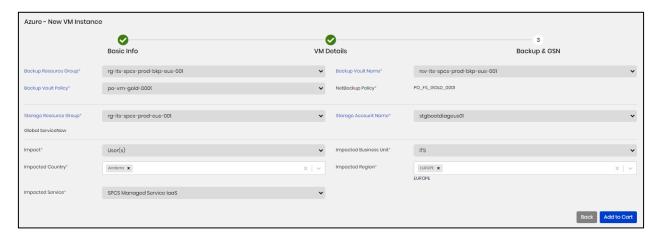


v. Impacted service can be selected based on the list of 4000+ services available.





k. 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 Menu

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.

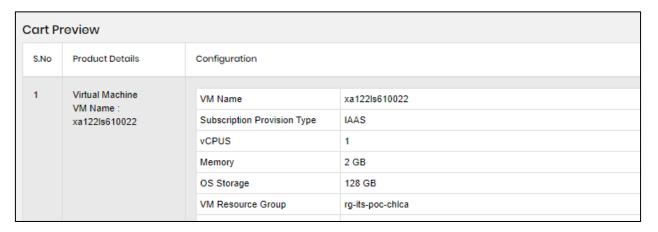
Note: If the Team Manager (Resource group Owner) him/her-self is raising the Service Order request then the order can be Approved/Rejected by him/her-self.

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.

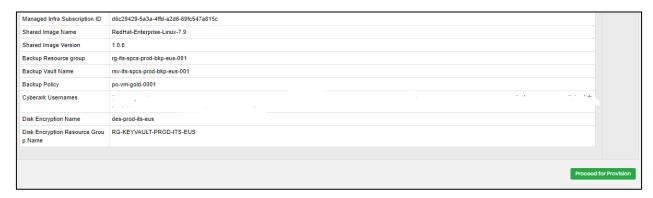


After clicking on Submit Button the preview of the Order is visible in the next screen.

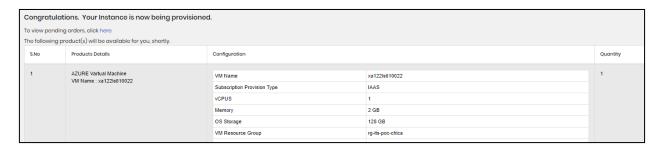


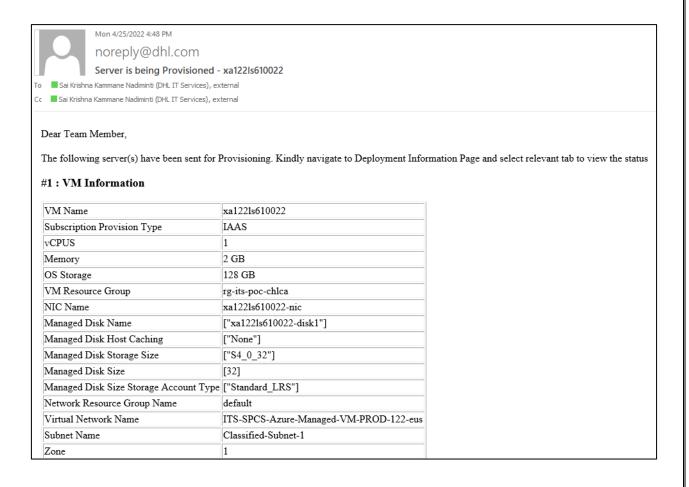


The Team Manager or Resource Group Owner only can click on Proceed to Provisioning button to order the server.



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

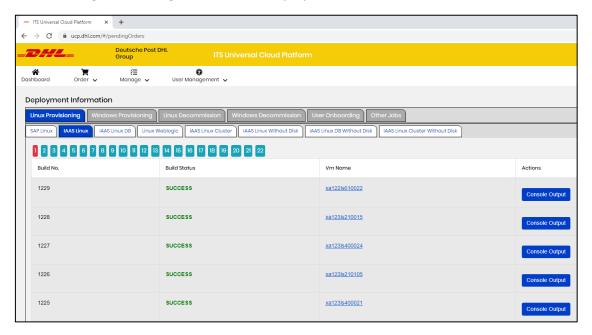






3.5 Deployment Information Menu

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	Activit	у
1.		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	Linux Provisioning	IAAS Linux Without Disk	i.	Plain Linux Machines without Additional Disk
6		IAAS Linux DB	i.	Oracle Machines without Additional Disk
		Without Disk	ii.	TOMCAT Machines without Additional Disk
			iii.	APACHE Machines without Additional Disk
			iv.	JBOSS Machines without Additional Disk
7		IAAS Linux Cluster	i.	SAP Veritas Clusters without Additional Disk
		Without Disk	ii.	Veritas Clusters without Additional Disk
8		IAAS Windows	i.	Plain Windows with Additional Disk
	Windows		ii.	Windows IIS with Additional Disk
. 9	Provisioning	IAAS Windows DB	i.	Windows MSSQL with Additional Disk
10	riovisiolillig	IAAS Windows	i.	Plain Windows without Additional Disk
		without Disk	ii.	Windows IIS without Additional Disk



11		IAAS Windows DB	i. Windows MSSQL without Additional Disk
		without Disk	
12		IAAS Linux	i. Plain Linux Machines with Additional Disk
		Decommissioning	
13		IAAS Linux DB	i. Oracle Machines with Additional Disk
		Decommissioning	ii. TOMCAT Machines with Additional Disk
			iii. APACHE Machines with Additional Disk
			iv. JBOSS Machines with Additional Disk
14		Linux WebLogic	i. WebLogic Machines with Additional Disk
		Decommissioning	
15		IAAS Linux Cluster	i. SAP Veritas Clusters with Additional Disk
	Linux	Decommissioning	ii. Veritas Clusters with Additional Disk
16	Decommissioning	IAAS Linux Without	i. Plain Linux Machines without Additional Disk
		Disk Decommissioning	ii i i i i i i i i i i i i i i i i i i
17		IAAS Linux DB	i. Oracle Machines without Additional Disk
		Without Disk	ii. TOMCAT Machines without Additional Disk
		Decommissioning	iii. APACHE Machines without Additional Disk
		Ü	iv. JBOSS Machines without Additional Disk
			1v. Jboss Machines without Additional Disk
18		IAAS Linux Cluster	i. SAP Veritas Clusters without Additional Disk
		Without Disk	ii. Veritas Clusters without Additional Disk
		Decommissioning	
19		IAAS Windows	i. Plain Windows with Additional Disk
		Decommissioning	ii. Windows IIS with Additional Disk
20		IAAS Windows DB	i. Windows MSSQL with Additional Disk
		Decommissioning	
21	Windows	IAAS Windows	i. Plain Windows without Additional Disk
	Decommissioning	without Disk	ii. Windows IIS without Additional Disk
		Decommissioning	
22		IAAS Windows DB	i. Windows MSSQL without Additional Disk
		without Disk	
		Decommissioning	
23		Windows User On-	Onboard a user to a Windows Plain or IIS machine as
		boarding	either
			i. Administrator or
		14 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ii. Remote Desktop User
24		Windows User Off-	Offboard a user from a Windows Plain or IIS Machine
		boarding	either as
			i. Administrator or
25		Windows COL	ii. Remote Desktop User
25	User On-boarding	Windows SQL user	Onboard a Database user onto MSSQL DB as
		On-boarding	a. User Account
			i. MSSQL Reader ii. MSSQL DataReader
			iii. MSSQL DataWriter
			iv. MSSQL AgentReader v. MSSQL DBSSISAdmin
26		AD User Onboarding	Onboard a <u>abc@dhl.com</u> email id user to
20			i. UDLDHL-UCP (UCP Access)
		(Active Directory)	•
			ii. UDLDHL-PVWA (Cyberark Platform Acces)



27		AD User Off-boarding	Offboard a <u>abc@dhl.com</u> email id user from
		(Active Directory)	i. UDLDHL-UCP (UCP Access)
			ii. UDLDHL-PVWA (Cyberark Platform Acces)
28		Windows SQL Service	Onboard a Database user onto MSSQL DB as
		Account Onboarding	a. Service Account
			i. MSSQL DBOwner
			ii. MSSQL SysAdmin
			iii. MSSQL AgentReader
			iv. MSSQL DBSSISAdmin
			~
29		IAAS Windows OAT	Status of OAT Checklist Re-Run for Windows Plain & IIS
		Rerun	Machines
30		IAAS Linux OAT Rerun	Status of OAT Checklist Re-Run for any Plain Linux
			Machine
31		IAAS-Linux DB OAT	Status of OAT Checklist Re-Run for all
		Rerun	i. Oracle Machines
			ii. Tomcat Machines
			iii. Apache Machines
			iv. JBOSS Machines
32	Other Jobs	IAAS-Linux Weblogic	Status of OAT Checklist Re-Run for all
		OAT Rerun	i. Weblogic Machines
33		IAAS-Linux Cluster	Status of OAT Checklist Re-Run for all
		OAT Re-Run	i. SAP Veritas Cluster Machines
			ii. Veritas Cluster Machines
34		IAAS-Windows SQL	Status of OAT Checklist Re-Run for all
		OAT Re-Run	i. MSSQL Machines
35		IAAS Linux DB Add	Provisioning of Additional Disk for already provisioned
		Disk	i. Oracle Machines
			ii. Tomcat Machines
			iii. Apache Machines
			iv. JBOSS Machines
36		IAAS Linux Weblogic	Provisioning of Additional Disk for already provisioned
		Add Disk	i. Weblogic Machines
37		IAAS Windows DB Add	Provisioning of Additional Disk for already provisioned
		Disk	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

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



3.6 Email Acknowledgements

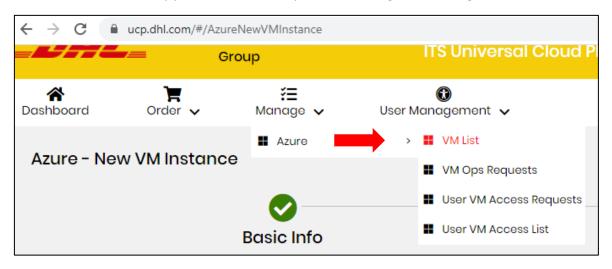
If you are ordering for a new service, you will receive the following Acknowledgement emails

- 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.
- 6. Failure Email Your server has failed to provision.

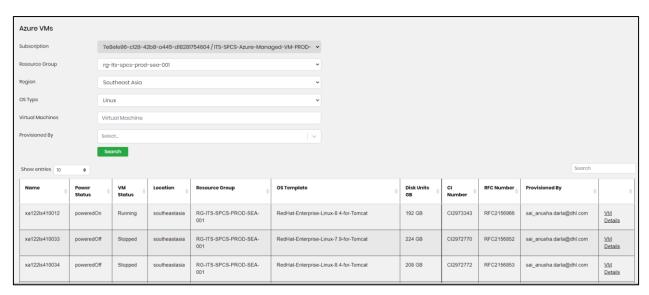
4. Where is MY Server?

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. s



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







5. Glossary

5.1 **Definition**

Terms	Abbreviation
VM	Virtual Machine
UCP	Universal Cloud Platform