

CLOUD
INFRASTRUCTURE
VIRTUAL SERVER
(DEDICATED) GEN2
USER GUIDE



WELCOME TO THE VIRTUAL SERVER (DEDICATED) GEN2 USER GUIDE

AUSTRALIAN ACCOUNT HOLDERS

For sales, account set-up enquiries and technical support, contact your Telstra representative or visit the [Cloud Services website \(www.cloud.telstra.com\)](http://www.cloud.telstra.com), where you'll find all our contact details plus a glossary, FAQs and Our Customer Terms.

TELSTRA GLOBAL ACCOUNT HOLDERS

This service is not yet available in regions outside Australia. Contact your Telstra Global representative or visit the [Telstra Global website \(www.telstraglobal.com/cloud\)](http://www.telstraglobal.com/cloud) for current information on the products available.

Note: we don't provide assistance with issues specific to a customer's local network, servers, operating systems and software (post-installation). Specialist technical support may be charged as an additional service.

CONVENTIONS USED IN THIS GUIDE

The following typographical conventions are used in this guide for simplicity and readability:

Web addresses, email addresses and hyperlinks are shown in ***bold italics***; for example www.cloud.telstra.com.

Button names and titles/features on your computer screen are shown in *italics*.

User input is shown in `typewriter` font.

Virtual Server on Dedicated Compute User Guide, Version 2.0

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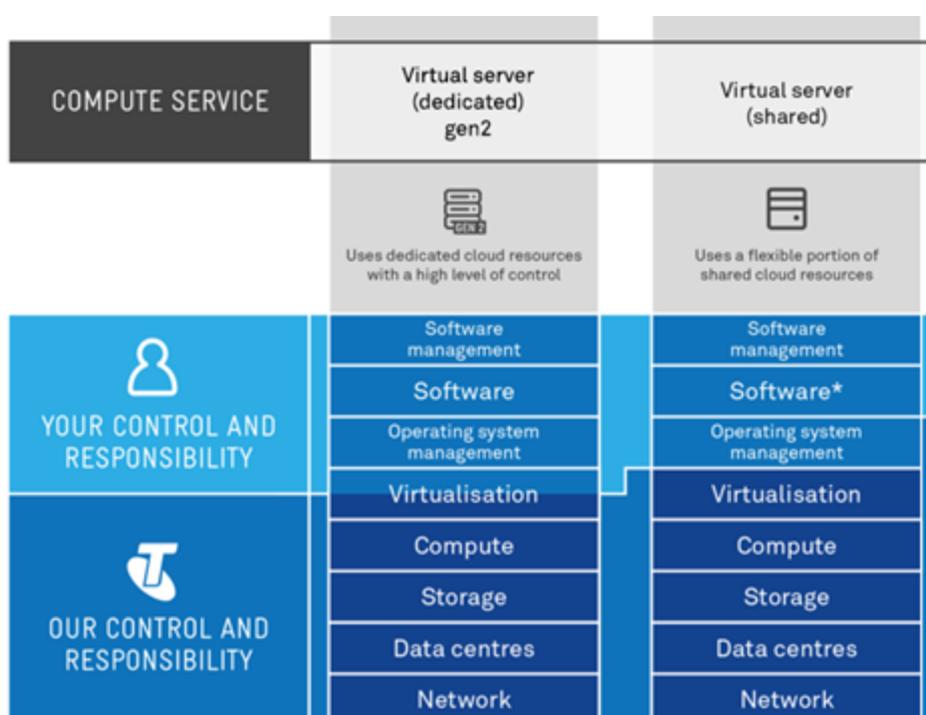
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CHAPTER 1 OVERVIEW

There are two virtual server services available on Telstra's cloud infrastructure. Each one offers different ways to create and manage your cloud resources. There are new complementary services available to manage your virtual server Gen 2 service.

This guide refers specifically to our **Virtual Server (Dedicated) Gen2** service and outlines your resources plus how to create and manage your virtual servers.



*Software licensing available for this subscription

This user guide does not include detailed information about account management, networks and security, infrastructure design and pricing. This along with other information features in the following guides, which can be used in conjunction with this one:

- [Account Management Guide](#)
- [Network and Security Gen2 User Guide](#)
- [Infrastructure Design Guide](#)
- [Pricing Guides](#)
- [Responsibilities Guide](#)

Australian customers can also view the terms and conditions associated with their cloud services in [Our Customer Terms](#). For terms and conditions for customers outside Australia, contact your account representative.

CHAPTER 2

HOW IT WORKS

When you purchase this service, you complete an order form detailing the resources you need for us to set up your service. You also receive separate welcome emails, which include:

- Your vCenter Server IP address, which you need to complete the vSphere Client installation
- The VMware ESXi host name – ESXi is installed on the blades that your virtual server(s) run on
- The IP address for your connection
- On separate emails, the username and password you need to complete the installation

PHYSICAL ENVIRONMENT

On our Virtual Server (Dedicated) Gen2 service, dedicated physical blades are allocated entirely to your environment.

Your service includes a minimum of two blade (physical) servers that are physically separate from those of other data centre tenants. The processing capacity of each blade is also dedicated to you. Blades can be added or removed on request. We manage the physical server environment according to defined service level agreements.

Our data centres house the physical resources used to provide your virtual servers and feature high availability and 24/7 security. For more details on our data centres, see the [Network and Security Gen2 User Guide](#).

VCENTER SERVER

All your servers on this service are created using vSphere Client on the [VMware® vCenter Server](#) platform.

vSphere Client is the Windows program you use to create, modify or delete virtual servers. Resources including CPU, RAM and storage are also virtualised in vCenter Server, and can be scaled up or down to meet your needs.

INFRASTRUCTURE PATCH MANAGEMENT

We actively monitor your compute environment and liaise with our vendors.

Our vendors provide vCenter patches – updates for reasons including, but not limited to, issues with stability and performance, vulnerabilities, supportability and weaknesses. Most patches are assumed to have been rigorously tested by the respective vendor under strict conditions; however the vendor cannot realistically test for all interoperability scenarios. This is why we test all selected patches that can potentially impact the platform.

We conduct two levels of testing and validation to ensure patch integrity and to mitigate virus damage from accidental execution of the file. The patch is then analysed through technical evaluation, a business impact assessment, security evaluation and a risk evaluation report providing a severity rating for how essential the patch is and how quickly it should be applied.

PATCH RISKS AND ACTIONS

SEVERITY	RISK	ACTION REQUIRED	RECOMMENDED TIMEFRAME
Critical	Unacceptable	ASAP	Deploy within maximum of 24 hours

Important or moderate	Marginally accepted	Consider action soon	Deploy within maximum of four months
Low	Acceptable	No immediate action	Deploy within maximum of 12 months

We always minimise the risk of disruption in applying the patch to your service. Part of the assessment is to determine whether an outage is necessary and, if required, when the best time is to restart your system. Applying patches in the cloud infrastructure environment is subject to the following normal change management procedures:

1. Review each patch and approve it for the environment.
2. Send you a detailed report of patches/updates required for each of your servers with notification of the patching plan.
3. Schedule with you an agreed date to apply patches.
4. Perform pre-implementation checks (e.g. previous day backup completed, key Telstra services are up).
5. Perform the patches, confirm installation and perform post-implementation checks.
6. Notification sent to you advising you to test the application.
7. Notification sent to our support desk advising completion and alarming to be actioned.

THE CLOUD SERVICES MANAGEMENT CONSOLE

You can manage, configure and view elements of this service using our secure online Cloud Services management console at www.cloud.telstra.com/manage.

These include:

- View and submit requests to modify your dedicated resources (**blades**, **clusters** and active/performance **storage**)
- Create clusters
- Find the IP address of your vCenter Server
- Request public IP address and management IP addresses
- View the public port group (for public network) and management port group (for the management connection)
- Request a backup of your virtual server data
- Configure, manage or remove your backup set-up
- Submit and manage various network requests (see the [Network and Security Gen2 User Guide](#))
- View your activity log

Instructions on how to use the Cloud Services management console are included in this guide. For details about how to access the Cloud Services management console, see our [Account Management Guide](#).

VIRTUAL SERVER (DEDICATED) GEN2 SERVICE

Each Virtual Server (Dedicated) Gen2 service allows you to create virtual servers within a virtual data centre and add and configure individual virtual server resources.

While there's no limit to the number of virtual servers you create in either your public or private network, the number of virtual servers you run in your cluster can affect your virtualisation **high availability**. Also, bear in mind that **clusters** have a limitation.

A private network connection is required to access virtual servers in your private network.

Our services come in a range of sizes, including varying amounts of cloud resources. [Contact us](#) to find out more about our different plans.

NETWORK RESOURCES

Network and security resources for your virtual servers (dedicated) Gen2 can be created and managed in the Cloud Services management console, but are not detailed in this guide.

Your use of network resources is calculated under your virtual data centre subscription.

Refer to the [Gen2 Network and Security Guide](#) for information about:

- Virtual data centres
- Networks and network connections
- Firewalls
- Load balancers
- IPsec VPN
- SSL VPN
- SMTP mail relay (optional service)
- Security (including denial of service and web content security)
- Security add-ons
- NAT Gateway

CHAPTER 3

DEDICATED RESOURCES – BLADES AND STORAGE

VIEW DEDICATED RESOURCES

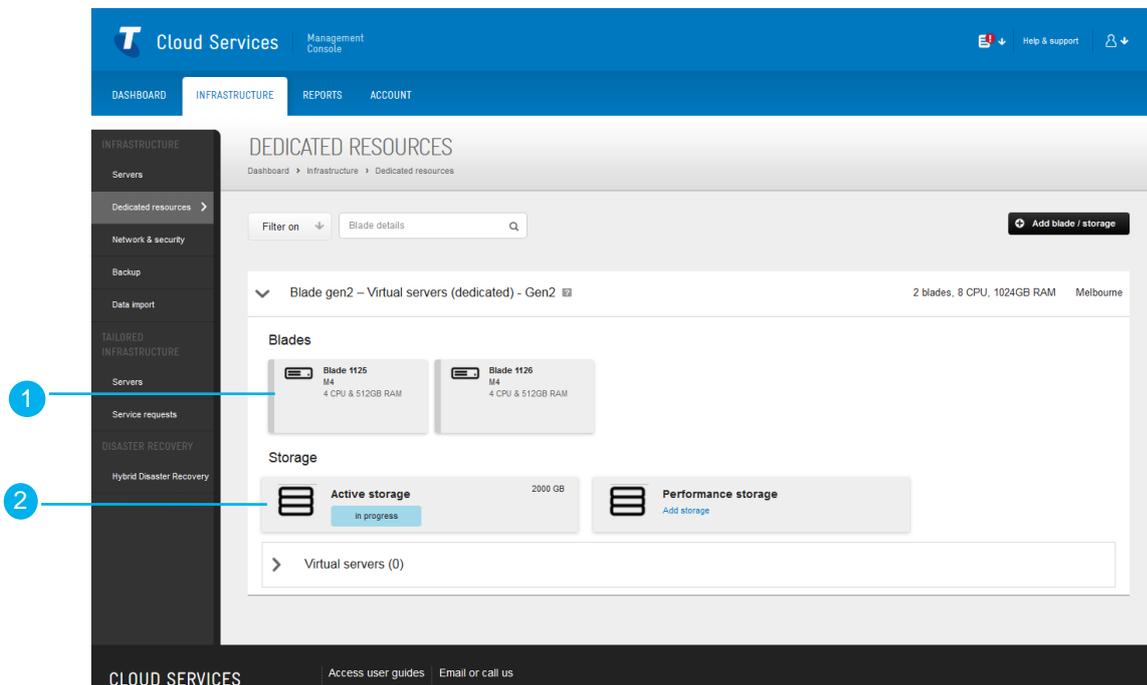
View your dedicated resources at any time via our secure online Cloud Services management console at www.cloud.telstra.com/manage.

The *Dedicated Resources* screen highlights the details of your **blades**, **cluster(s)** and **active/performance storage**.

Any changes you make to your dedicated resources appear on this screen. You can also filter your view by blade type, cluster and virtual data centre location.

If you're viewing this console screen for the first time after purchasing Virtual Server (Dedicated) Gen2, you'll see the cluster you created, including a minimum two blades plus their CPU, RAM, storage type and capacity.

You can also check on the status of a blade – it may be awaiting activation or removal. You can add blades and storage from this page.



1. Select a specific blade to reveal a summary of its details, including: the blade ID; blade type; the data centre it's associated with; CPU, number of cores, RAM; and the term of your service.
2. Select a storage type to reveal which datastore and virtual server(s) it's allocated to, the amount of storage allocated plus storage removal options.

WHAT IS A CLUSTER?

A cluster is a grouping of the blades and storage you need to run your virtual servers. Virtual servers are then associated with a cluster.

Clusters provide a way to manage groups of blades and storage. Networks can connect between clusters. You might want to use resource pools to manage your CPU and RAM resources to separate testing/development/production virtual servers. You can have different datastores in a cluster for e.g. test/development/production virtual servers.

Each cluster:

- Contains at least two blades of the same configuration plus associated storage (each blade in your subscription can only be associated with one cluster)
- Is visible to public and private network containers
- Can only be associated with one virtual data centre (i.e. a single network)
- Has its own physical RAM and CPU load, independent of other clusters

Limitations

You can't have a mix of blade types in the same cluster. (e.g. you can't have general purpose M4 blades in the same cluster as high-performance M4 TDI blades).

There is a limit to the number of virtual servers that can be deployed to a cluster. This is based on capacity limits in our infrastructure, including total amounts of CPU, RAM and storage.

You need to manage your cluster so that if the blade with the highest specifications is taken out (in the case of fault or assurance/operation activities) that the remaining blades in the cluster can manage your virtual servers. See below.

Ensuring high availability in a cluster

Your service levels are dependent on enough high-availability capacity being maintained for each virtual server in a cluster. You must ensure enough RAM and CPU capacity is available to failover any virtual server within the cluster.

BLADES (PHYSICAL SERVERS)

Your service includes a minimum of two blade (physical) servers that are physically separate from those of other data centre tenants. The processing capacity of each blade is also dedicated to your use (Note: a small proportion of your resources may be taken up by your use of VMware NSX®, the network virtualisation used on the Virtual Server (Dedicated) Gen2 service). Blades can be added or removed on request. We manage the physical server environment according to defined service level agreements.

A blade chassis may be shared by multiple customers, but you will have your own dedicated blade server (i.e. the blades are unique) on the chassis.

All blades on the Virtual Server (Dedicated) Gen2 service are Cisco M4 blade servers. These include high-performance M4 blades recommended for SAP HANA TDI workloads.

Blades are available in the following configurations:

CPU	2	2	4	2*
RAM	128	256	512	768

*This configuration is for high-performance SAP HANA TDI blades.

OPERATING SYSTEMS AND APPLICATIONS

You need to provide and license the operating system and application(s) required for this service.

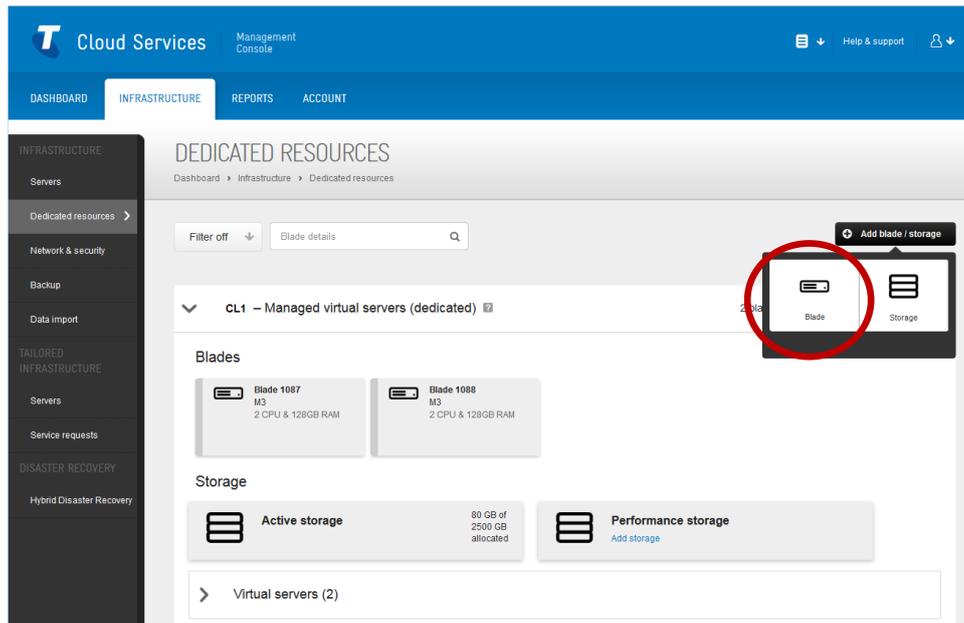
OPERATING SYSTEM COMPATIBILITY

Check www.vmware.com to ensure your operating system is compatible and <http://kb.vmware.com> if any workarounds need to be implemented for use on the platform.

If you see any issues visit <http://kb.vmware.com> for guidance.

ADD A BLADE(S)

From *Dedicated Resources*, choose *Add Blade/Storage* and select *Blade* from the dropdown.



You'll be taken to the *Request Blade* form. Complete the requirements on the form in order to submit a request to us to add a blade(s) to your service.

CONFIGURE BLADES

You'll need to know:

- Which virtual server configuration to add the blade to (if you have more than one)
- The blade model you'd like to add. All blades on this service are Cisco M4, however, you can choose between:
 - Blades used for typical workloads
 - High-performance blades recommended for SAP HANA TDI workloads
- The amount of CPU per blade (2 or 4). If you order multiple blades of differing CPU, you'll need to complete the *Request blade* form twice (you can increase the number of blades your chosen configuration on the *Configure clusters* tab).
- The amount of RAM per blade, typically 128GB, 256GB or 512GB. You can select 768GB for high-performance TDI blades.
- Payment terms are monthly or on a fixed-term basis. Choosing the fixed term option constitutes a contract for that period. Fees are lower for longer terms.

Note: each general purpose blade is allocated 1,000GB (1TB) of active storage by default, though the entire 1TB is not available after formatting. High-performance TDI blades come with 1TB of performance storage.

After completing your blade configuration, the next step is to allocate them into clusters.

REQUEST BLADE

Dashboard > Infrastructure > Dedicated resources > Request blade

Grow your infrastructure and improve your servers' performance by adding more blades.

1. Configure blades | 2. Configure clusters | 3. Review and purchase

Select the service you'd like to add the blade(s) to *

Virtual servers (dedicated) - Gen2 - 1902536 - Gen 2

Need a different virtual server service or need to add another location? [Find out more](#)

To purchase [Virtual Server \(dedicated\)](#), [Managed Virtual Server \(Dedicated\)](#) or [Virtual Server\(Dedicated\) Gen 2](#) Contact us.

Blade Model

The service you have selected supports M4 blades.

Choose blade type

Which type of Cisco M4 dedicated blade is right for you? [Find out more](#) You can select one type of blade and configuration with each request. Complete a new form for different blades.

Typical workloads | High performance or recommended SAP HANA TDI workloads

Configure blades

CPU

2 CPU (10 core/CPU) | 4 CPU (10 core/CPU)

RAM

128GB | 256GB

Pay per month or fixed term?

Fees decrease if you choose a longer contract term.

Pay per month

Fixed term

Your blade summary

Blade Type: M4
 CPU: 2 CPU (10 core/CPU)
 RAM: 128GB
 Term: Pay per month
 Included Active Storage: 1000GB per blade

On the next page you can select how many blades you need, which cluster(s) you'd like to add them to, and where you'd like to allocate the storage that comes with your blade(s).

Next - configure clusters | Cancel

CONFIGURE CLUSTERS

The blade you request must be allocated to a new or existing **cluster**. A new cluster must have a minimum of two blades allocated to it. You can increase the number of the blades on this tab.

Note: each blade is allocated 1,000GB (1TB) of storage by default, though the entire 1TB is not available after formatting. TDI blades can only have performance storage, while all other blades will have active storage allocated to them.

All the storage you've received per blade must be consolidated or divided between clusters. Using the allocated storage, a datastore is created per cluster. The maximum size of a datastore is 8TB.

REVIEW AND PURCHASE

Review your blades and cluster configuration, the estimated fee and make changes to your request before submitting it to us.

REMOVE A BLADE

Removing a blade is upon request. You must [contact us](#) to remove blades, ensuring any virtual servers using resources on the blade won't be affected by its removal.

STORAGE

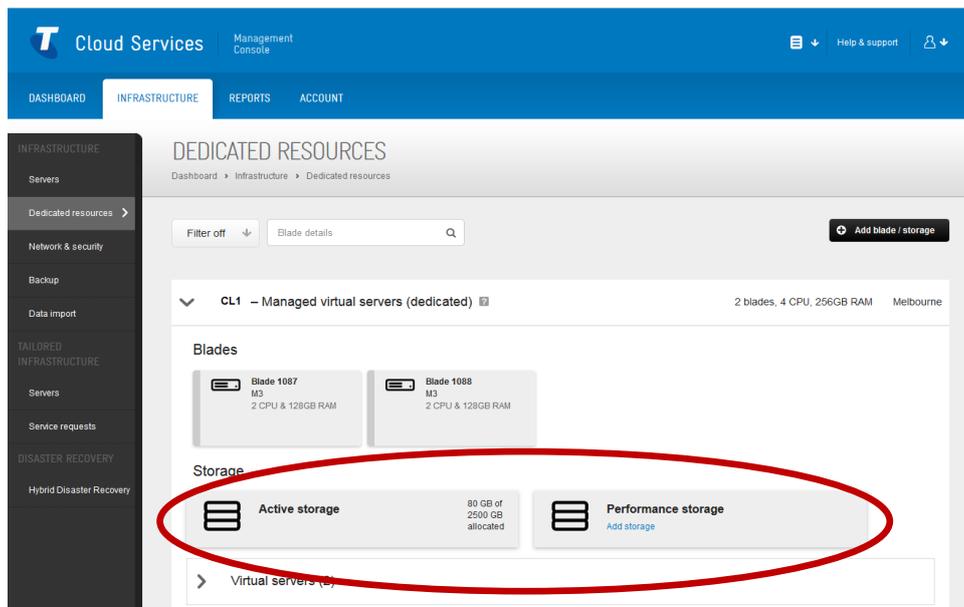
VIEW STORAGE

The *Dedicated resources* page summarises the amount of *Active storage* and/or *Performance storage* allocated to your selected cluster.

Active storage is suitable for standard intense file, print and mixed workloads, offering up to 1,000 IOPS (input/output operations per second).

Performance storage is our premium offering, designed to meet demanding workloads of up to 20,000 IOPS, such as databases and business analytics. It comes at a higher fee. You can request an upgrade to performance storage at any time.

You can have as much of each type of storage as required in a cluster.



Storage summary view

If you've submitted a request to us to add or remove storage, these actions are displayed as *In progress*.

MODIFY STORAGE

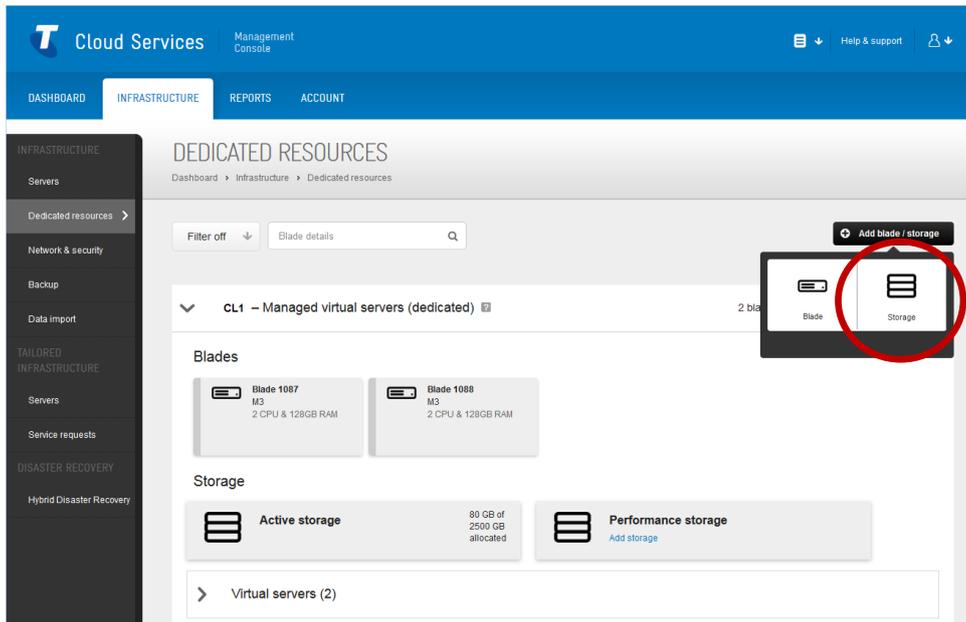
You can submit a request to add storage (datastore) or to downsize a datastore. A datastore is a unit of storage assigned to a **cluster** – when a datastore is created it is added to all VMware ESXi hosts in a cluster. The maximum size of a datastore is 8TB.

You can track your request in the **activity log** on the Cloud Services management console.

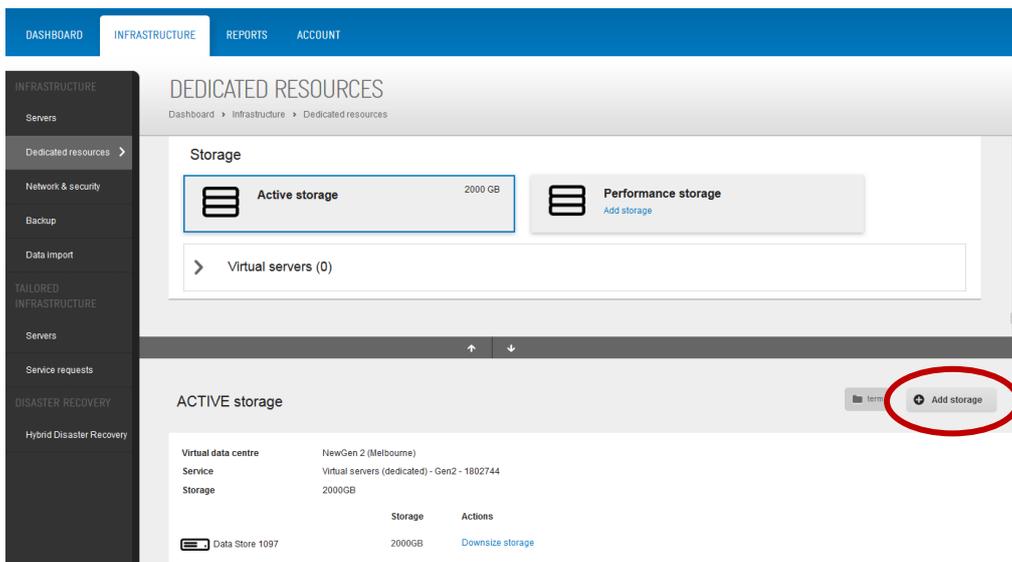
Add storage

Adding storage increases the capacity of your infrastructure.

1. From *Dedicated resources*, choose *Add blade/storage* and select *Storage* from the dropdown. This takes you to the *Request storage* page.



Or you can access the *Request storage* page from the *Active storage* (*Performance storage* if your blades are high-performance TDI) details page. Select *Add storage*.



2. Complete the details on the *Request storage* page, including:

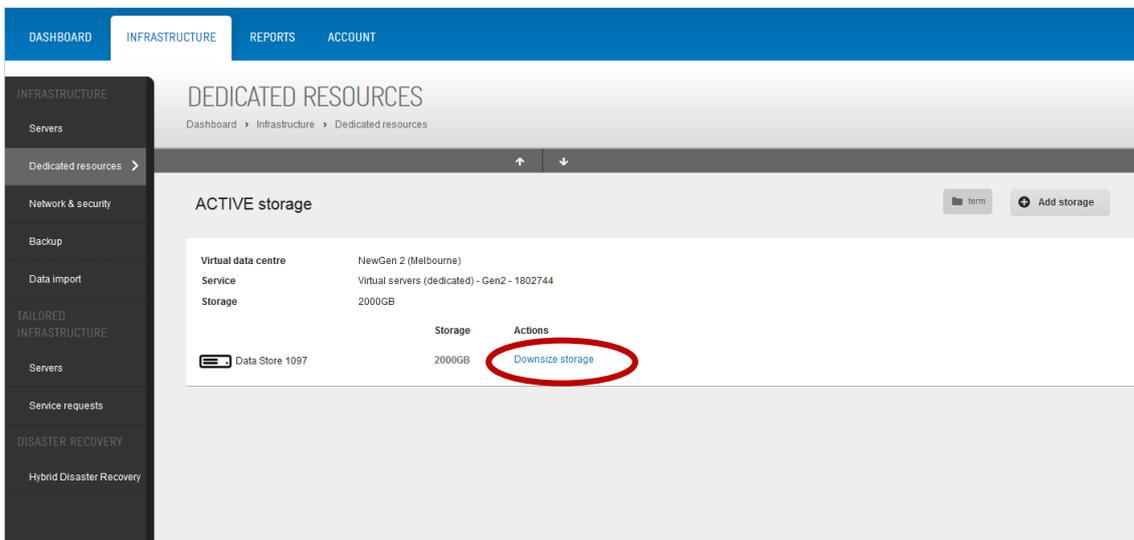
- The cluster you're adding storage to
- The datastore you'd like the storage in (new or existing)
- The type of storage (active or performance)
- The new storage quantity
- If 8TB is exceeded in the request, a new datastore is created for the remaining storage
- The datastore name (if you've selected an existing datastore)

Downsize storage (datastore)

On the storage details page for each cluster, a *Downsize* option appears alongside your datastore(s).

Before you submit a downsize request, make sure any virtual servers using the resources on that datastore won't be affected.

When you request to downsize a datastore, we move the data from the old datastore to one with the storage amount you have requested.



CHAPTER 4

MANAGING YOUR VIRTUAL SERVERS

You've chosen a service that allows you to manage your own virtual server environment. Before you begin, there are some things you need to know about who is responsible for what within the environment. Where possible, we've provided you with all the access and privileges you need. Bear in mind that we're responsible for some parts of the infrastructure, so some access and privileges are restricted.

YOUR ACCESS ROLES

VM LEVEL AND VCENTER LEVEL ACCESS

Using VMware® vCenter Server, two roles are provided for your virtual servers with similar privileges granted; however there are a few additional privileges in the **VM level** role:

1. Customer Access Role with **vCenter level** privileges in vSphere, and
2. Customer Access Role **VM level** privileges in vSphere.

Both roles are granted permissions to your user account at different points in the vCenter Server object hierarchy. The **vCenter level** role has root level access to the vCenter object and the **VM level** role has access to your *Customer virtual machines* folder. It's recommended that you place all your virtual servers in this folder for the right permission levels to manage the servers.

If you need separate folders at the same level as this folder, they can be created by you but will not have the necessary permissions to manage your virtual servers. To have the permissions apply, [contact us](#).

These configurations ensure we can avert uncontrolled change to objects that may prevent us from being able to support your service.

You'll receive credentials for five vCenter users and one VM level

RESTRICTED ACCESS

To ensure compliance with our security best practice, access is not given to infrastructure that is managed by us to support your service.

A VM folder, port groups and datastores are used to isolate infrastructure under our management and operation.

As these parts of the infrastructure have restricted access you will not see them in your vSphere Client; however you will see the resource capacity that has been allocated to them.

For a breakdown of vSphere permissions under the Virtual Server (Dedicated) Gen2 model, see [Appendix A](#).

VCENTER SERVER ACCESS

The following ports to the vCenter Server and ESXi hosts are opened so your vSphere web client can connect to the vCenter Server from your private/Telstra Next IP[®] network subnets or SSL VPN private subnet. This allows you to manage your virtual servers and the application interfaces that run your service.

NAME	PROTOCOL	PORT
WWW	TCP	80
Internet Locator Service	TCP	389
HTTPS	TCP	443
TCP_636	TCP	636
UDP_902	UDP	902
TCP_902-903	TCP	902-903
TCP_5989	TCP	5989
TCP_8080	TCP	8080
TCP_8443	TCP	8443
TCP_60099	TCP	60099

ACCESS THE VCENTER SERVER VIA SSL VPN

Regardless of whether you've selected internet only or requested a connection to the Telstra Next IP[®] network (using Cloud Gateway in Melbourne and Sydney data centres), you'll receive a default SSL VPN connection. Telstra Next IP[®] network customers have the option of opting in for an SSL VPN connection.

For the pre-conditions required for connecting to these services (network, firewalls etc.), see the [Network and Security Gen2 User Guide](#).

You'll need to update the host file on the workstation or PC you're using to connect to your vCenter server with the entries provided in your welcome emails. Refer to your operating system instructions on how to update your host file.

To access the vSphere web client, go to the SSL VPN login page address using your internet browser. This address was included in the SSL VPN details email you should have already received.

Note: we recommend using the vSphere web client, which offers all the necessary functionality that may not be available on the thick client.

Log in with the SSL VPN username provided in the same email to you. Your password was provided in a separate email. Your SSL VPN agent will automatically install when using SSL VPN for the first time.

Once logged in, you can access vCentre via the vSphere web client.

To access vSphere via web client:

1. Open your internet browser and type in your vCenter IP address/host name, which was provided in your welcome emails
2. Type in your vCenter username and password, also provided via previous emails

You can now **create virtual server(s)** using the VMware vCenter.

ACCESS THE VCENTER SERVER VIA A TELSTRA NEXT IP® NETWORK SERVICE

You'll need to update the host file on the workstation or PC you're using to connect to your vCenter server with the entries provided in your welcome emails. Refer to your operating system instructions on how to update your host file.

You can access the vCenter via the vSphere web client from your Next IP network service.

3. Open your internet browser and type in your vCenter IP address/host name, which was provided in your welcome emails.
4. Type in your vCenter username and password, also provided via previous emails

Note: we recommend using the vSphere web client, which offers all the necessary functionality that may not be available on the thick client.

You can now **create virtual server(s)** using the VMware vCenter.

CREATE A VIRTUAL SERVER USING VMWARE vCENTER

Note: steps below are based on VMware Web Client

Ensure you're connecting from a location where your firewall rules permit a connection to your vCenter Server. Refer to the [Network and Security Gen2 User Guide](#) for general instructions on how to configure firewall rules.

1. Prepare to run vSphere web client

Find the IP address, username and password of your vCenter Server from the welcome email we sent for your service.

2. Open and log in to your vSphere Web Client

Open your internet browser and in the address field at the top of the screen type `https://` followed by the IP address of your vCenter Server.

Enter your vCenter username and password in the login dialog box. Click *Login*.

A security alert will appear on your screen, warning you about trusting the SSL certificate. To proceed, select *Continue to this website*.

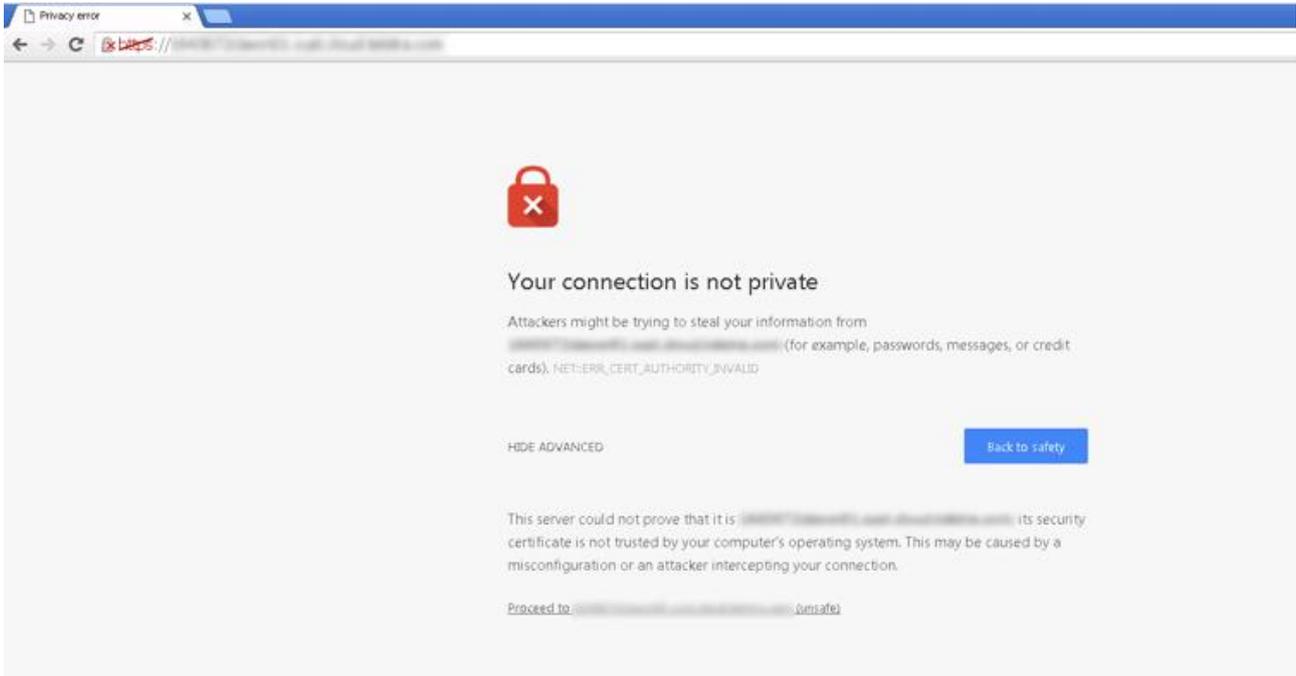


Figure 6: SSL Security Alert

Log in to vSphere web client.

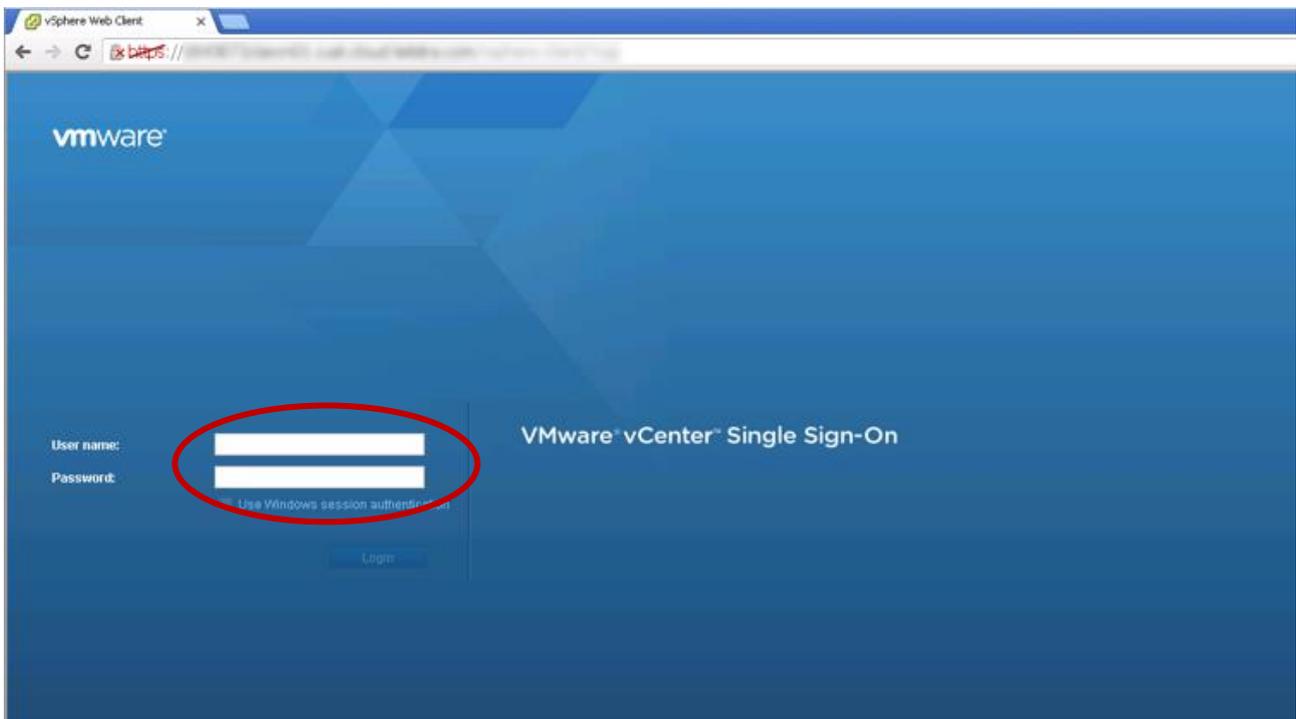


Figure 7: VMware vSphere Web Client login dialog box

3. Create a virtual server

In your vSphere Client, select the cluster in the left-hand menu in which you wish to create your virtual server. If you can't see the cluster you need, expand or shrink the objects in the menu by clicking on the plus or minus sign next to the object. To get started click *Create new virtual machine* from the main screen.

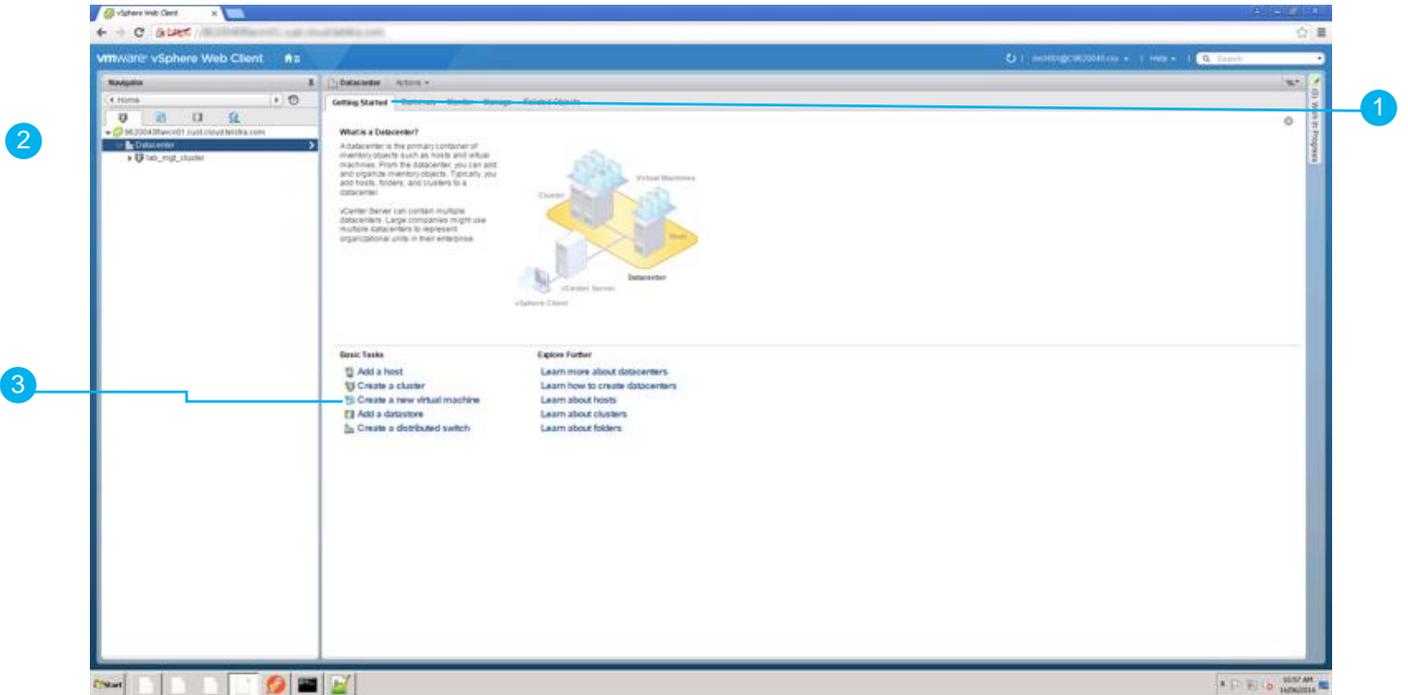


Figure 8: vSphere web client

1. *Getting Started* tab, where you can access this screen
2. Shows the clusters where you can add a virtual machine
3. Click on *Create new virtual machine*

From the *Create New Virtual Machine* dialog box select *Typical* or *Custom*. Follow the instructions then click *Next*.

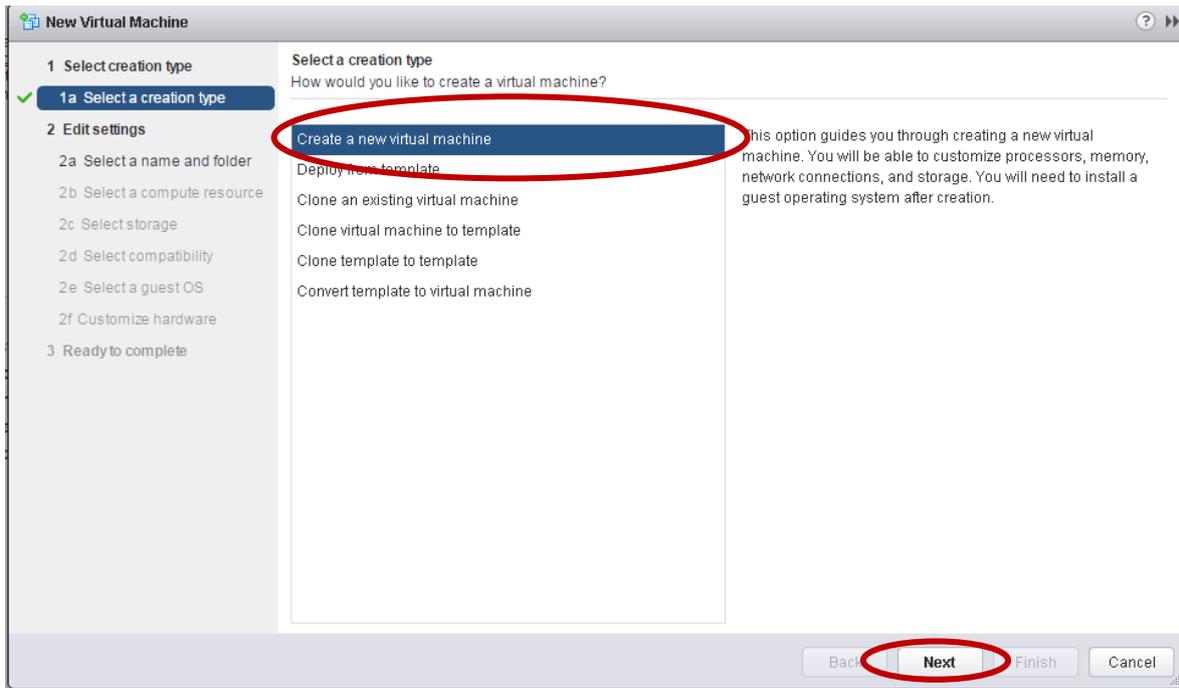
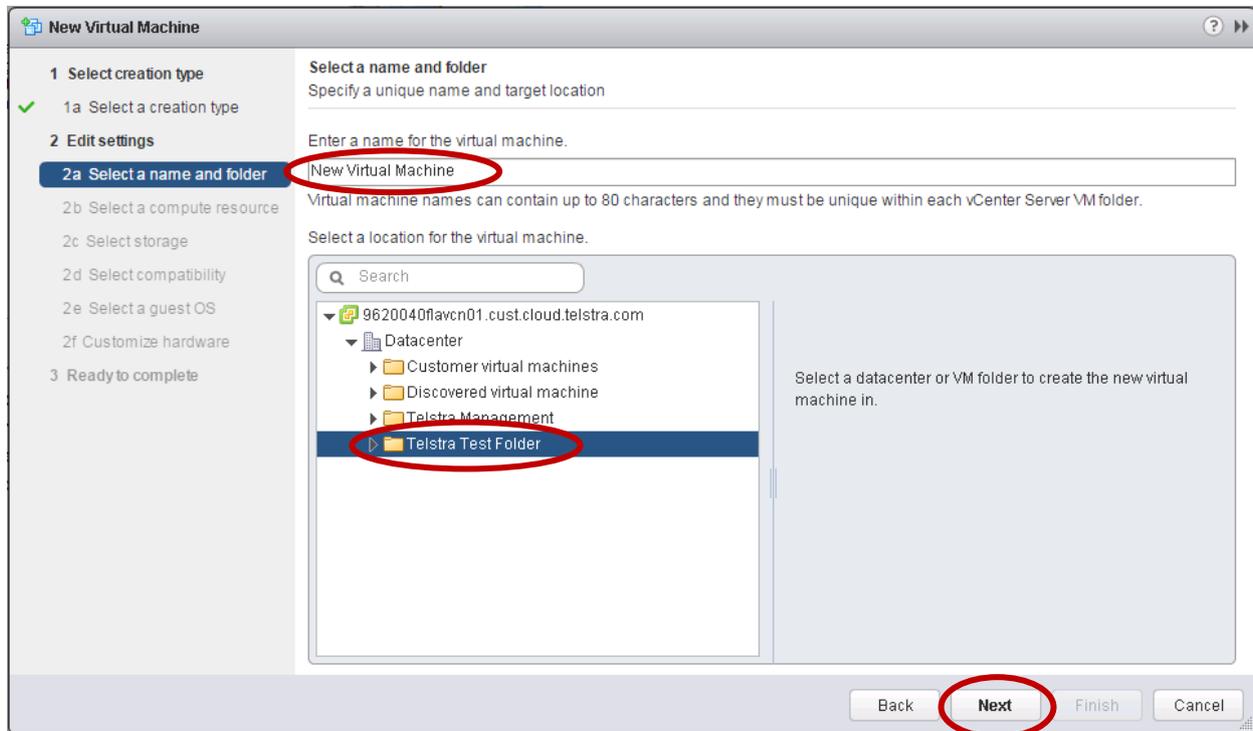


Figure 9: New Virtual Machine dialog box

Create a name and select a folder location for your virtual server, ensuring you locate it within the *Customer virtual machines* folder.

Note: if you need increased privileges, make sure you create your virtual servers within the *Customer virtual machines* folder. Permissions are inherited down the structure if you create subfolders in your virtual machines folder.



Select the cluster where you want to locate the virtual server; click *Next*.

Select the tier of storage you require from your chosen datastore and click *Next*. Information on your storage can be found by logging into the [Cloud Services management console](#).

Select your preferred operating system and version and click *Next*.

Configure the network connections for your virtual server as desired. Once complete, click *Next*.

CREATE A DISK FOR YOUR VIRTUAL SERVER AND CONFIGURE IT, THEN CLICK *NEXT*.

You're now ready to complete the creation of a new virtual server. Check your configuration and click *Finish*. If you want to change the virtual server settings go *Back*. A task pane will appear at the bottom of the screen to show the progress of the virtual server being created. Once complete your virtual server will be ready. You'll need to mount an ISO file on it to install your operating system. Your vSphere Client will now look like this:

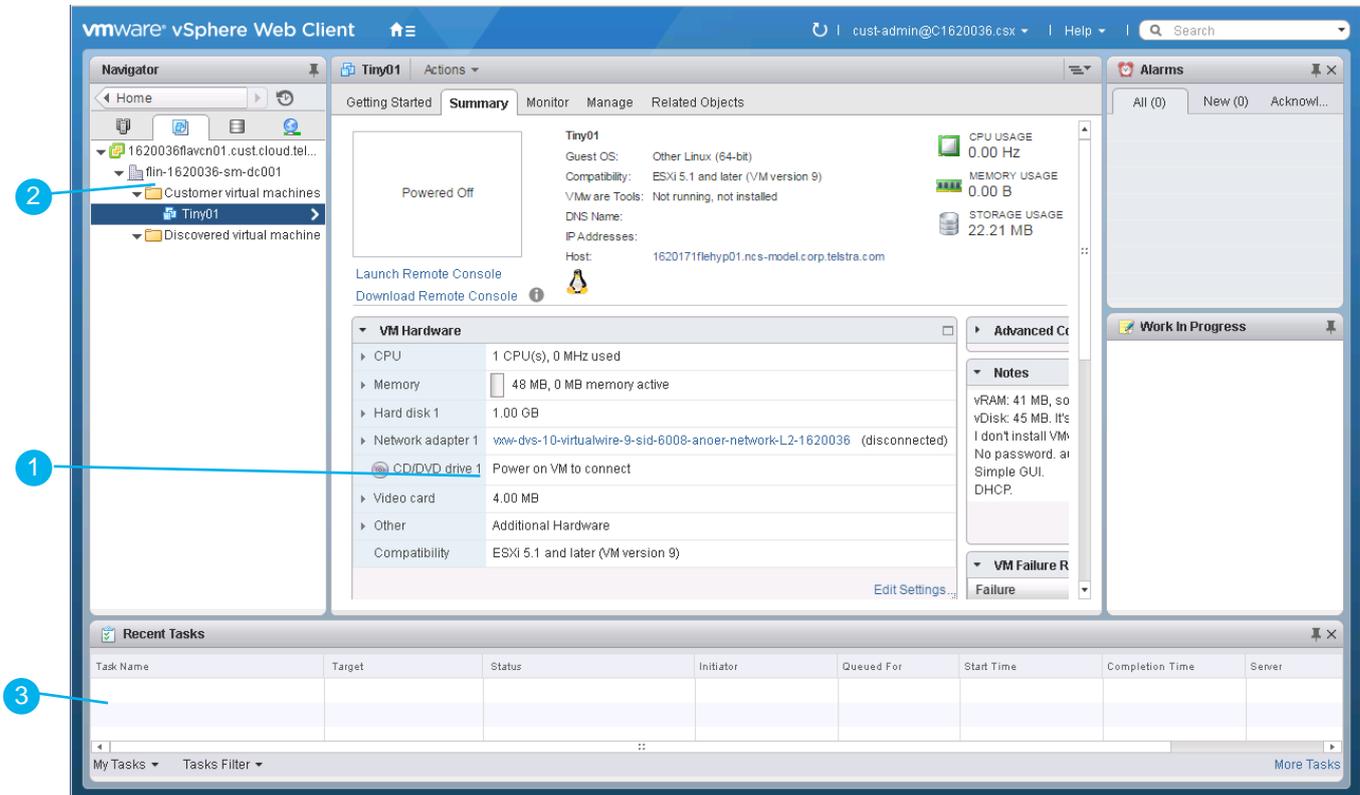


Figure 20: vSphere Client with a newly created virtual server

1. Run VM
2. New VM
3. Task pane

ACCESS

NETWORK CONFIGURATION

Virtual servers on dedicated compute are available in all our data centres globally on cloud infrastructure. The service uses a distributed switch.

The following vSwitch settings are restricted as they are not supported by us or present a risk to our shared Cloud Services network:

- Promiscuous mode
- MAC address and IP changes on public and management networks
- Port mirroring

CHAPTER 5

IP MANAGEMENT

To acquire a public IP address, you need to submit a request to us via the Cloud Services management console. Note that public dedicated subnets are available. Refer to the Network and Security user guide*.

You need a public IP address to connect to the public network and communicate with the internet.

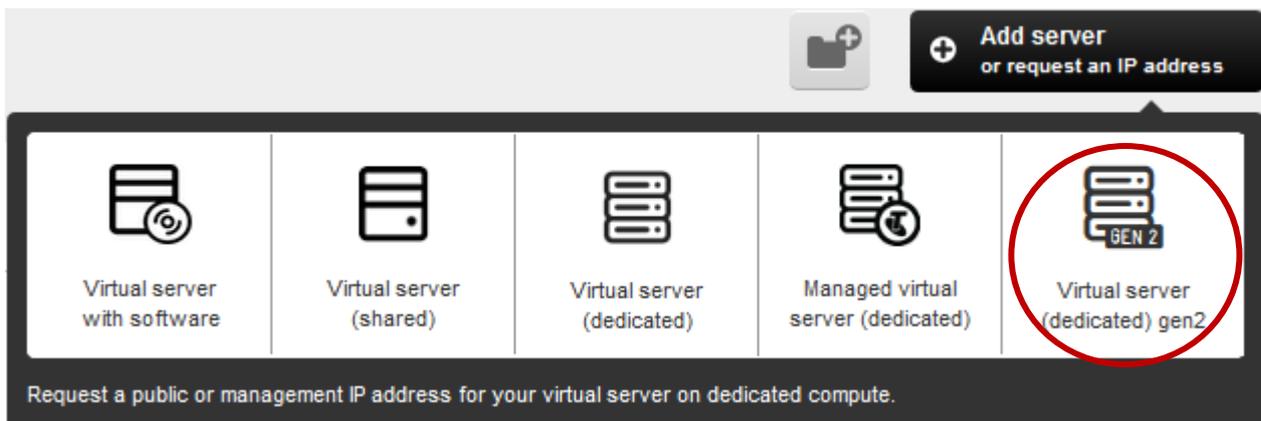
All private IP addresses on this service are managed by you.

*See the [Network and Security Gen2 User Guide](#) for more details.

REQUEST AN IP ADDRESS

Log in to the [Cloud Services management console](#).

Go to the *Servers* page, select *Add server or request an IP address*. Select the Virtual Server (Dedicated) Gen2 service



CONNECTING TO YOUR VIRTUAL SERVERS

CONNECT TO A VIRTUAL SERVER IN YOUR PUBLIC NETWORK

1. In vCenter Server, create a virtual server and attach it to the correct port group. You'll find the public port group (specified by us) on the *Request IP address* page in the Cloud Services management console.
2. Log in to the Cloud Services management console and request a public IP address. We'll process your request as soon as we can and let you know when it's ready.
3. From your virtual server, configure the vNIC with the IP address specified in the Cloud Services management console.

CONNECT TO A VIRTUAL SERVER IN YOUR PRIVATE NETWORK

1. Make sure you've set up a private network as you'll need to provide an IP subnet (see the [Network and Security Gen2 User Guide](#)).
2. In vCenter Server, create the virtual server and assign it to the private network.
3. Give the virtual server an IP address from the IP subnet range of your private network.

CHAPTER 6

VIEW SERVERS

VCENTER SERVER

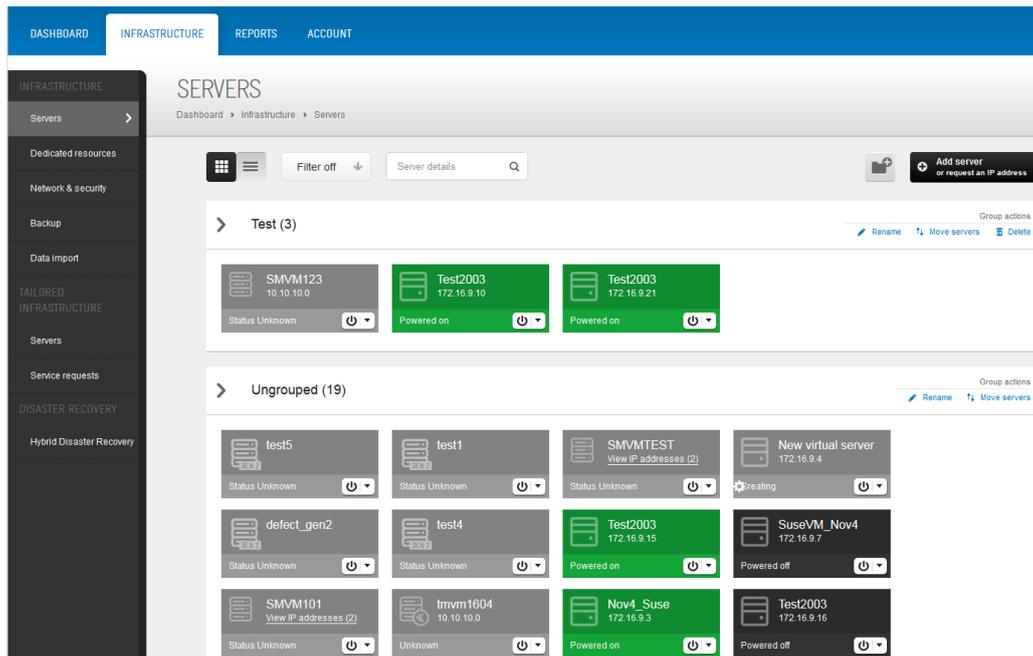
This is the primary platform to view the details of all the virtual servers you've created with this service.

CLOUD SERVICES MANAGEMENT CONSOLE

While the *Servers* page (below) on the *Cloud Services management console* summarises the virtual servers on any of the cloud infrastructure products you're subscribed to (shared and dedicated compute), it will only display the virtual servers (dedicated) Gen2 with a management and public IP address (requested via the console). The remainder of your virtual servers are viewable in vCenter Server (see above).

The console *Servers* page also features details of servers in any of your data centre locations (Australia and globally).

This page does not display the dedicated resources of your service. See the *Blades and Storage* chapter for details on viewing and managing blade and storage assets.



In the Cloud Services management console, each of your virtual servers (dedicated) with a public IP address displays with this icon:



Virtual server
(dedicated) gen2

Plus:

- The virtual server name
- The port group and management IP address attached to vNIC1. You'll also see the server's IP address when you click on the server tile. Some servers may have multiple IP addresses, in which case a *View IP addresses* link on the tile will take you to a *Server details* page that lists all IP addresses.

CPU, RAM AND DISK SPACE

To modify CPU, RAM and virtual server data storage (disk space) on your virtual servers for this service, you need to log in to vCenter Server.

CHAPTER 7

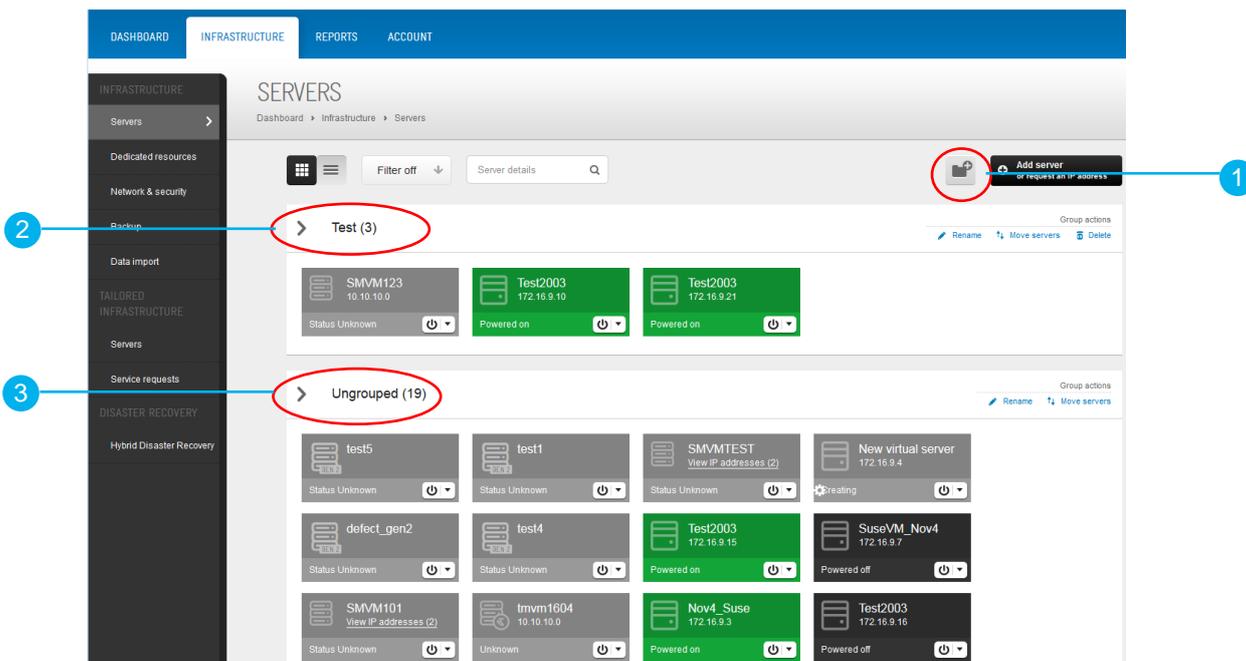
GROUP VIRTUAL SERVERS

VIEW AND MANAGE GROUPS

Here, 'groups' and 'grouping' relate solely to the activities and view in the Cloud Services management console. They do not relate to grouping in vCenter Server, networking groups or group operations.

Creating groups in the Cloud Services management console allows you to organise your servers by function such as development, test or production.

You can create and manage your own groups from the *Servers* section. A group can include servers on any of the cloud infrastructure services you're subscribed to, though of the virtual servers (dedicated) you've created in vCenter Server, you'll only see here the ones with a management IP address. Any other virtual servers (compute) you've created using vCenter Server can only be viewed in vCenter Server.



1. Create a group icon at top right
2. Server group names (e.g. Test servers), defined by you
3. Ungrouped servers

Find out how to:

- [Create a group](#)
- [Move servers to groups](#)
- [Rename a group](#)
- [Delete a group](#)

CREATE A GROUP

Initially, all of your virtual servers are in *Ungrouped*.

From the *Servers* page, select the *Create group*  icon to create a new group. Make sure you enter a unique name (i.e. not the same as an existing group).



A form for creating a new group. It features a dropdown menu with a downward arrow and the placeholder text "Enter a group name (must be unique)". To the right of the input field are two buttons: "Create group" and "Cancel".

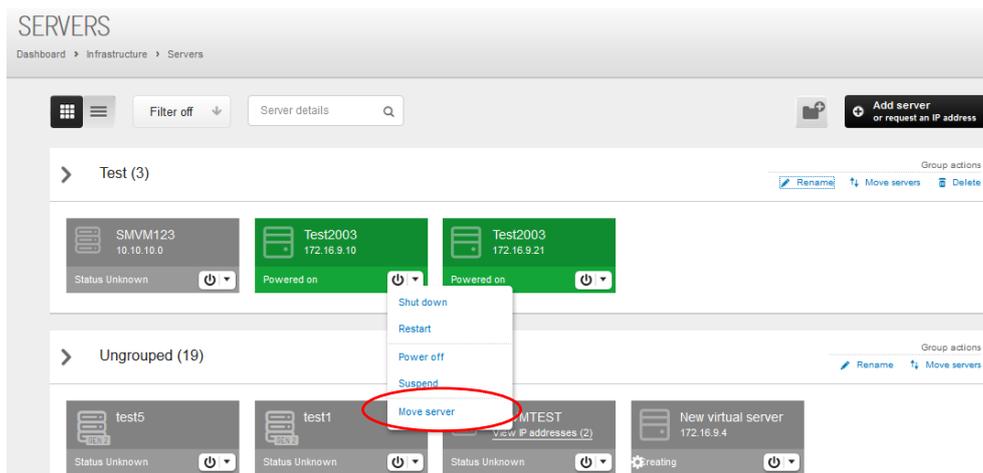
A new empty group is created – ready for you to move your servers into it.

MOVE SERVERS TO A GROUP

Move individual or multiple servers to an existing group.

Individual servers

Select the arrow next to the power button on the server you'd like moved. Select *Move to...* from the menu to display the next *Move server to group* window (the *Move* link only displays if you've created more than one group).



Multiple servers

You can select multiple servers in *list* and *grid* view.



In *grid* view, select *Move servers* (the link displays if you've created more than one group).

A tick box displays next to the server names. Select one for each server you want to move.



A dialog box for moving servers. It contains the text "Move selected servers to:" followed by a dropdown menu currently set to "Windows". Below the dropdown is a "Select all servers" link. To the right of the dropdown are two buttons: "Move servers" and "Cancel".

Select a group from the *Move selected servers to* menu, then click *Move servers*.

In list view, select the tick box next to each server you want to move.



Move selected servers to: [Select all servers](#) Windows [Cancel](#)

Select the *Move servers* link.

RENAME A GROUP

Select *Rename*. Enter a new name for the group, then select *Rename group*.

DELETE A GROUP

Select *Delete* link. A message displays asking you to confirm that you want to delete the group. Servers in a deleted group are moved back to *Ungrouped* (the ungrouped section can't be deleted or renamed).

POWER STATES

Log in to vCenter to power on, suspend or power-off your server(s). The change takes place immediately.

CHAPTER 8

SNAPSHOTS

SNAPSHOTS

A snapshot is a full system image copy of a virtual server, made at any time by you through vCenter Server. Refer to the [VMware Knowledge Base](#) for best practices for virtual server snapshots in the VMware environment.

To confirm the snapshot compatibility of your servers, check your operating system's specifications directly with the vendor of your operating system and from the vendor(s) of any software running on your virtual system.

CHAPTER 9

YOUR PRIVILEGES

This is an overview of privileges granted for your customer access roles. You'll find a detailed breakdown of privileges by role in [Appendix A](#).

PRIVILEGES AVAILABLE

Privilege	definition
ALARMS	Alarm privileges control your ability to set and respond to alarms on the inventory objects. With your VM level customer access role you can create, modify and respond to alarms for all your inventory objects. Alarms are managed through your vCenter Server.
DATSTORE	Datastore privileges control the ability to browse, manage and allocate space on datastores. Both your customer access roles are granted many of the datastore privileges to the vCenter Server and host clusters. Where datastore privileges are not granted, contact us to raise a service request..
FOLDER	Folder permissions control the ability for you to create and manage folders and mainly apply to virtual machines in the VMs and Templates view of vCenter Server. Both your customer access roles are granted these permissions.
GLOBAL	Global privileges enable you to control global tasks, scripts and extensions. Both your customer access roles are granted limited Global privileges to the vCenter and/or host clusters. Where Global privileges are not granted you can raise a service inquiry with our customer service team to determine if the modification can be made.
NETWORK	Network privileges enable you to control tasks related to the management of your network. Both your customer access roles have privileges to assign a network to a virtual server, however for other modifications, you can make a service inquiry with our customer service team to see if they are possible.
RESOURCE	Resource privileges enable you to control the creation and management of your resource pools and the migration of your virtual servers. Both of your customer access roles are granted full resource privileges.
SCHEDULED TASK	Scheduled task privileges enable you to control creation, editing and removal of scheduled tasks through vCenter Server. Full privileges are granted to both your customer access roles.
STORAGE VIEWS	Storage views privileges provide the ability for you to configure and use the storage views on your vCenter Server. You can access the user interface views; contact our team if you have questions about modifications.
TASKS	Task privileges enable you to control the ability of extensions to create and update tasks on your vCenter Server. Privileges for tasks are provided to both of your customer access roles.

VAPP	vApp privileges enable you to control operations related to deploying and configuring a vApp. These privileges are granted to both of your customer access roles. vApps that require root access to the ESXi host are not supported.
VIRTUAL MACHINE CONFIGURATION	Virtual Machine Configuration privileges enable you to configure your virtual server options and devices. Most of these privileges are granted to both customer access roles.
VIRTUAL MACHINE GUEST OPERATIONS	Virtual Machine Guest Operations privileges allow you to interact with files and programs inside a virtual server's guest operating system. Both your customer access roles have been granted these privileges; access this functionality through the VMware vSphere API. For information on this API visit www.vmware.com .
VIRTUAL MACHINE INTERACTION	With Virtual Machine Interaction privileges you can interact with a virtual server console, configure media, perform power operations and install VMware tools. Many of these access privileges are granted for both your customer access roles. For a full breakdown of the privileges refer to Appendix A .
VIRTUAL MACHINE INVENTORY	Your customer access roles are granted full Virtual Machine Inventory privileges so you can control the adding, moving and removing of your virtual servers.
VIRTUAL MACHINE PROVISIONING	Virtual Machine Provisioning privileges enable you to control activities related to deploying and customising your virtual servers. These privileges are granted to both your customer access roles.
VIRTUAL MACHINE STATE	We provide both your access roles with Virtual Machine State privileges that enable you to take a snapshot of your virtual server's current state. This privilege provides you with the ability to take, delete, rename and restore your snapshots.

Note: you're granted a greater **level of access** to VM level privileges so you can manage your virtual servers.

RESTRICTED PRIVILEGES

A number of privileges are not granted for either of your customer access roles. This is to ensure compliance to our security best practice and so we can provide assurance for the infrastructure that supports your virtual servers.

The following privileges are restricted, however you can contact us to find out if they can be carried out. In some cases an assessment may be needed to determine the viability and risk associated with your requested modification:

- Host Configuration
- Host Inventory and Cluster
- Host Inventory
- Performance
- Sessions

The following privileges are restricted for your service and modifications cannot be made:

- Datacenter
- Datastore Cluster
- Distributed Virtual Port Group
- ESX Agent Manager
- Extension
- Host CIM
- Host Local Operations
- Host vSphere Replication
- Host Profile
- Permissions
- Profile-Driven Storage
- Virtual Machine vSphere Replication
- vServices
- vSphere Distribution Switch
- Virtual Rights Management Policy

CHAPTER 10

REPORTS

VIRTUAL SERVERS

To view performance statistics of the virtual servers running on your clusters, log in to vCenter Server.

OTHER SERVICE USAGE

Log in to the *Reports* section of the **Cloud Services management console** to view usage for other services you might have activated, including:

- Backups
- Network and security (public IP addresses, IPsec VPN tunnels)
- Internet (including SMTP email relay)

Refer to the *Reports* section of the **Account Management Guide** for more details, including instructions on viewing the Cloud Services management console *Activity log*.

CHAPTER 11

SOFTWARE

We only provide software licences to cover the operation of vCenter Server and vSphere/ESXi hosts. To use other software products in this environment, you must install them and acquire the licences yourself.

To find out what software is compatible with your service, contact your Telstra representative.

CHAPTER 12

APPENDIX A: VSPHERE CLIENT FEATURES

The following table provides a detailed breakdown of privileges by Customer Access Role.

ALARMS

NAME	VCENTER ACCESS ROLE	VM ACCESS ROLE
Alarms.Acknowledge alarm	NO	YES
Alarms.Create alarm	NO	YES
Alarms.Disable alarm action	NO	YES
Alarms.Edit alarm	NO	YES
Alarms.Delete alarm	NO	YES
Alarms.Set alarm status	NO	YES

DATACENTER

NAME	VCENTER ACCESS ROLE	VM ACCESS ROLE
Datacenter.Create datacenter	NO	NO
Datacenter.IpPoolConfig IP pool configuration	NO	NO
Datacenter.IpPoolQueryAllocations	NO	NO
Datacenter.IpPoolReleaseIp	NO	NO
Datacenter.Move datacenter	NO	NO
Datacenter.Delete datacenter	NO	NO
Datacenter.Reconfigure datacenter	NO	NO
Datacenter.Rename datacenter	NO	NO

DATASTORE

NAME*	VCENTER ACCESS ROLE	VM ACCESS ROLE
Datastore.Allocate space	YES	YES
Datastore.Browse datastore	YES	YES
Datastore.config Configure datastore*	NO	NO
Datastore.FileManagementOperations	YES	YES
Datastore.Move datastore*	NO	NO
Datastore.Delete datastore*	NO	NO
Datastore.DeleteFile	NO	NO
Datastore.Rename datastore*	NO	NO
Datastore.UpdateVirtualMachineFiles	YES	YES
Datastore.UpdateVirtualMachineMetadata	NO	NO

To determine if this request can be performed, [contact us](#).

DISTRIBUTED VIRTUAL PORT GROUP

NAME	VCENTER SERVER ACCESS ROLE	VM ACCESS ROLE
dvPort group.Create	NO	NO
dvPort group.Delete	NO	NO
dvPort group.Modify	NO	NO
dvPort group.PolicyOp policy operation	NO	NO
dvPort group.ScopeOp scope operation	NO	NO

EXTENSION

NAME	VCENTER SERVER ACCESS ROLE	VM ACCESS ROLE
Extension.Register extension	NO	NO
Extension.Unregister extension	NO	NO
Extension.Update extension	NO	NO

FOLDER

NAME	VCENTER SERVER ACCESS ROLE	VM ACCESS ROLE
Folder.Create folder	YES	YES
Folder.Delete folder	YES	YES
Folder.Move folder	YES	YES
Folder.Rename folder	YES	YES

GLOBAL

NAME	VCENTER SERVER ACCESS ROLE	VM ACCESS ROLE
Global.Act as vCenter Server	NO	NO
Global.Cancel task	YES	YES
Global.Capacity planning*	NO	NO
Global.Diagnostics*	NO	NO
Global.Disable methods	NO	NO
Global.Enable methods	NO	NO
Global.Global tag	NO	NO
Global.Health	YES	YES
Global.Licenses	NO	NO
Global.Log event	YES	YES
Global.Manage custom attributes*	NO	NO
Global.Proxy	NO	NO
Global.Script action	NO	NO
Global.Service managers	NO	NO
Global.Set custom attribute	NO	YES

NAME	VCENTER SERVER ACCESS ROLE	VM ACCESS ROLE
Global.Settings	NO	NO
Global.System tag	NO	NO

***Contact us** to find out if this request can be performed with your service.

HOST CIM

NAME	VCENTER SERVER ACCESS ROLE	VM ACCESS ROLE
Host.CIM.CIM Interaction	NO	NO

HOST CONFIGURATION

NAME	VCENTER SERVER ACCESS ROLE	VM ACCESS ROLE
Host.Config.AdvancedConfig	NO	NO
Host.Config.AuthenticationStore	NO	NO
Host.Config.AutoStart	NO	NO
Host.Config.Connection	NO	NO
Host.Config.DateTime	NO	NO
Host.Config.Firmware	NO	NO
Host.Config.HyperThreading	NO	NO
Host.Config.Image	NO	NO
Host.Config.Maintenance	NO	NO
Host.Config.Memory	NO	NO
Host.Config.NetService	NO	NO
Host.Config.Network	NO	NO
Host.Config.Patch	NO	NO
Host.Config.PciPassthru	NO	NO
Host.Config.Power	NO	NO
Host.Config.Resources	NO	NO
Host.Config.Settings	NO	NO
Host.Config.Snmp	NO	NO

NAME	VCENTER SERVER ACCESS ROLE	VM ACCESS ROLE
Host.Config.Storage	NO	NO
Host.Config.SystemManagement	NO	NO

***Contact us** to find out if this request can be performed with your service.

HOST INVENTORY

The following do not have a vCenter Server or VM access role. To determine if any of the following can be performed, **contact us**.

- Host.Inventory.Add host to cluster
- Host.Inventory.Add standalone host
- Host.Inventory.Create cluster
- Host.Inventory.Modify cluster
- Host.Inventory.Move cluster or standalone host
- Host.Inventory.Move host
- Host.Inventory.Remove cluster
- Host.Inventory.Remove host
- Host.Inventory.Rename cluster

HOST LOCAL OPERATIONS

The following do not have a vCenter Server or VM access role. To determine if any of the following can be performed, **contact us**.

- Host.Local operations.Add host to vCenter
- Host.Local operations.Create virtual machine
- Host.Local operations.Delete virtual machine
- Host.Local operations.Manage user groups
- Host.Local operations.Reconfigure virtual machine
- Host.Local operations.Relayout snapshots
- Host.Local Extract NVRAM content

HOST VSPHERE REPLICATION

Host.vSphere Replication.Manage vSphere Replication – this does not have a vCenter Server or VM access role. To determine if any of the following can be performed, **contact us**.

HOST PROFILE

The following do not have a vCenter Server or VM access role. To determine if any of the following can be performed, **contact us**.

- Host profile.Clear

Host profile.Create
 Host profile.Delete
 Host profile.Edit
 Host profile.Export
 Host profile.View

NETWORK

*To determine if those listed as *No* below can be performed, [contact us](#).

NAME	VCENTER SERVER ACCESS ROLE	VM ACCESS ROLE
Network.Assign network	YES	YES
Network.Configure*	NO	NO
Network.Move network*	NO	NO
Network.Delete	NO	NO

PERFORMANCE

NAME	VCENTER SERVER ACCESS ROLE	VM ACCESS ROLE
Performance.ModifyIntervals*	NO	NO

*To determine if this request can be performed, [contact us](#).

PROFILE DRIVEN STORAGE

NAME	VCENTER SERVER ACCESS ROLE	VM ACCESS ROLE
Profile-driven storage.Profile-driven storage update	NO	NO
Profile-driven storage.Profile-driven storage view	NO	NO

RESOURCE

NAME	VCENTER SERVER ACCESS ROLE	VM ACCESS ROLE
Resource.Apply recommendation	YES	YES
Resource.Assign vApp to resource pool	YES	YES
Resource.Assign virtual machine to resource pool	YES	YES
Resource.Create resource pool	YES	YES
Resource.ColdMigrate	YES	YES
Resource.HotMigrate	YES	YES
Resource.Edit resource pool	YES	YES
Resource.Move resource pool	YES	YES
Resource.Query vMotion	YES	YES
Resource.Delete resource pool	YES	YES
Resource.Rename resource pool	YES	YES

SCHEDULED TASK

NAME	VCENTER SERVER ACCESS ROLE	VM ACCESS ROLE
Scheduled task.Create tasks	YES	YES
Scheduled task.Edit task	YES	YES

Scheduled task.Delete task	YES	YES
Scheduled task.Run task	YES	YES

SESSIONS

NAME	VCENTER SERVER ACCESS ROLE	VM ACCESS ROLE
Sessions.Impersonate user	NO	NO
Sessions.GlobalMessage*	NO	NO
Sessions.Validate session	NO	NO
Sessions.View and stop sessions*	NO	NO

*To determine if this request can be performed, [contact us](#).

STORAGE VIEWS

NAME	VCENTER SERVER ACCESS ROLE	VM ACCESS ROLE
Storage views.Configure service*	NO	NO
Storage views.View	YES	YES

*To determine if this request can be performed, [contact us](#).

SYSTEM

NAME	VCENTER SERVER ACCESS ROLE	VM ACCESS ROLE
System.Anonymous	YES	YES
System.Read	YES	YES
System.View	YES	YES

TASKS

NAME	VCENTER SERVER ACCESS ROLE	VM ACCESS ROLE
Tasks.Create task	YES	YES
Tasks.Update task	YES	YES

VAPP

NAME	VCENTER SERVER ACCESS ROLE	VM ACCESS ROLE
vApp.Add virtual machine	YES	YES
vApp.Assign resource pool	YES	YES
vApp.Assign vApp	YES	YES
vApp.Clone	YES	YES
vApp.Create	YES	YES
vApp.Delete	YES	YES
vApp.Export	YES	YES
vApp.Import	YES	YES
vApp.Move	YES	YES
vApp.Power Off	YES	YES
vApp.Power On	YES	YES

NAME	VCENTER SERVER ACCESS ROLE	VM ACCESS ROLE
vApp.Rename	YES	YES
vApp.Suspend	YES	YES
vApp.Unregister	YES	YES
vApp.vApp application configuration	YES	YES
vApp.vApp instance configuration	YES	YES
vApp.vApp managedBy configuration	YES	YES
vApp.vApp resource configuration	YES	YES
vApp.View OVF Environment	YES	YES

VIRTUAL MACHINE CONFIGURATION

NAME	VCENTER SERVER ACCESS ROLE	VM ACCESS ROLE
Virtual machine.Configuration.Add existing disk	YES	YES
Virtual machine.Configuration.Add new disk	YES	YES
Virtual machine.Configuration.Add or remove device	YES	YES
Virtual machine.Configuration.AdvancedConfig	YES	YES
Virtual machine.Configuration.Change CPU count	YES	YES

NAME	VCENTER SERVER ACCESS ROLE	VM ACCESS ROLE
Virtual machine.Configuration.Change resource	YES	YES
Virtual machine.Configuration.Configure managedBy	YES	YES
Virtual machine.Configuration.Disk change tracking	YES	YES
Virtual machine.Configuration.Disk lease	YES	YES
Virtual machine.Configuration.Display connection settings	YES	YES
Virtual machine.Configuration.Extend virtual disk	YES	YES
Virtual machine.Configuration.Host USB device	NO	NO
Virtual machine.Configuration.Memory	YES	YES
Virtual machine.Configuration.Modify device settings	YES	YES
Virtual machine.Configuration.Query Fault Tolerance compatibility	NO	NO
Virtual machine.Configuration.Query unowned files	YES	YES
Virtual machine.Configuration.Raw device	YES	YES
Virtual machine.Configuration.Reload from path	YES	YES
Virtual machine.Configuration.Remove disk	YES	YES
Virtual machine.Configuration.Rename	YES	YES

NAME	VCENTER SERVER ACCESS ROLE	VM ACCESS ROLE
Virtual machine.Configuration.Reset guest information	YES	YES
Virtual machine.Configuration.Set annotation	YES	YES
Virtual machine.Configuration.Settings	YES	YES
Virtual machine.Configuration.Swapfile placement	YES	YES
Virtual machine.Configuration.Unlock	YES	YES
Virtual machine.Configuration.Upgrade virtual hardware	YES	YES
VirtualMachine.Config.ToggleForkParent	NO	NO

VIRTUAL MACHINE GUEST OPERATIONS

NAME	VCENTER SERVER ACCESS ROLE	VM ACCESS ROLE
Virtual machine.Guest Operations.Guest Operation Modifications	YES	YES
Virtual machine.Guest Operations.Guest Operation Program Execution	YES	YES
Virtual machine.Guest Operations.Guest Operation Queries	YES	YES
VirtualMachine.GuestOperations.ModifyAliases	NO	NO
VirtualMachine.GuestOperations.QueryAliases	NO	NO

VIRTUAL MACHINE INTERACTIONS

NAME	VCENTER SERVER ACCESS ROLE	VM ACCESS ROLE
Virtual machine.Interaction.Guest control	YES	YES
Virtual machine.Interaction.Answer question	YES	YES
Virtual machine.Interaction.Backup operation on virtual machine	YES	YES
Virtual machine.Interaction.Configure CD media	YES	YES
Virtual machine.Interaction.Configure floppy media	YES	YES
Virtual machine.Interaction.Console interaction	YES	YES
Virtual machine.Interaction.Create screenshot	YES	YES
Virtual machine.Interaction.Defragment all disks	YES	YES
Virtual machine.Interaction.Device connection	YES	YES
Virtual machine.Interaction.Suspend Fault Tolerance	NO	NO
Virtual machine.Interaction.Enable Fault Tolerance	NO	NO
Virtual machine.Interaction.Resume Fault Tolerance	NO	NO
Virtual machine.Interaction.Power Off	YES	YES
Virtual machine.Interaction.Power On	YES	YES
Virtual machine.Interaction.Record session on Virtual Machine	YES	YES

NAME	VCENTER SERVER ACCESS ROLE	VM ACCESS ROLE
Virtual machine.Interaction.Replay session on Virtual Machine	YES	YES
Virtual machine.Interaction.Reset	YES	YES
Virtual machine.Interaction.Suspend	YES	YES
Virtual machine.Interaction.Test failover	NO	NO
Virtual machine.Interaction.Test restart Secondary VM	NO	NO
Virtual machine.Interaction.Turn Off Fault Tolerance	NO	NO
Virtual machine.Interaction.Turn On Fault Tolerance	NO	NO
Virtual machine.Interaction.VMware Tools install	YES	YES
Virtual machine.Interaction.Drag and Drop	NO	NO
Virtual machine.Interaction.Pause or Unpause	NO	NO
Virtual machine.Interaction. Inject USB HID scan codes	NO	NO
Virtual machine.Interact.SESparseMaintenance	NO	NO

VIRTUAL MACHINE INVENTORY

NAME	VCENTER SERVER ACCESS ROLE	VM ACCESS ROLE
Virtual machine.Inventory.Create from existing	YES	YES
Virtual machine.Inventory.Create new	YES	YES

Virtual machine.Inventory.Move	YES	YES
Virtual machine.Inventory.Register	YES	YES
Virtual machine.Inventory.Delete	YES	YES
Virtual machine.Inventory.Unregister	YES	YES

VIRTUAL MACHINE PROVISIONING

NAME	VCENTER SERVER ACCESS ROLE	VM ACCESS ROLE
Virtual machine.Provisioning.Allow disk access	YES	YES
Virtual machine.Provisioning.Allow read-only disk access	YES	YES
Virtual machine.Provisioning.Allow virtual machine download	YES	YES
Virtual machine.Provisioning.Allow virtual machine files upload	YES	YES
Virtual machine.Provisioning.Clone template	YES	YES
Virtual machine.Provisioning.Clone virtual machine	YES	YES
Virtual machine.Provisioning.Create template from virtual machine	YES	YES
Virtual machine.Provisioning.Customize	YES	YES
Virtual machine.Provisioning.Deploy template	YES	YES
Virtual machine.Provisioning.Mark as template	YES	YES

NAME	VCENTER SERVER ACCESS ROLE	VM ACCESS ROLE
Virtual machine.Provisioning.Mark as virtual machine	YES	YES
Virtual machine.Provisioning.Modify customization specification	YES	YES
Virtual machine.Provisioning.Promote disks	YES	YES
Virtual machine.Provisioning.Read customization specification	YES	YES

VIRTUAL MACHINE STATE

NAME	VCENTER SERVER ACCESS ROLE	VM ACCESS ROLE
Virtual machine.State.Create snapshot	YES	YES
Virtual machine.State.Remove snapshot	YES	YES
Virtual machine.State.Rename snapshot	YES	YES
Virtual machine.State.Revert to snapshot	YES	YES

VSERVICES

NAME	VCENTER SERVER ACCESS ROLE	VM ACCESS ROLE
vService.Create dependency	NO	NO
vService.Destroy dependency	NO	NO
vService.Reconfigure dependency configuration	NO	NO
vService.Update dependency	NO	NO

vSPHERE DISTRIBUTION SWITCH

NAME	VCENTER SERVER ACCESS ROLE	VM ACCESS ROLE
vSphere Distributed Switch.Create	NO	NO
vSphere Distributed Switch.Delete	NO	NO
vSphere Distributed Switch.Host operation	NO	NO
vSphere Distributed Switch.Modify	NO	NO
vSphere Distributed Switch.Move	NO	NO
vSphere Distributed Switch.Network I/O control operation	NO	NO
vSphere Distributed Switch.Policy operation	NO	NO
vSphere Distributed Switch.Port configuration operation	NO	NO
vSphere Distributed Switch.Port setting operation	NO	NO
vSphere Distributed Switch.VSPAN operation	NO	NO

VIRTUAL RIGHTS MANAGEMENT POLICY

NAME	VCENTER SERVER ACCESS ROLE	VM ACCESS ROLE
VRMPolicy.Query VRMPolicy	NO	NO
VRMPolicy.Update VRMPolicy	NO	NO

CHAPTER 13

APPENDIX B: VIRTUALISATION RESPONSIBILITIES

NOT SUPPORTED

Microsoft Cluster Server (MSCS)

Root access to ESXi

Windows load balancing

VMware Data Recovery (VDR)

vSphere Replication (VR)

Virtual Rights Management (VRM) policy

vService

Host USB devices

ESX agent manager

Extensions

Direct ESXi host access

Direct ESXi host access

Root access to ESXi

Profile driven storage

Microsoft clustering

Microsoft network load balancing

TELSTRA'S RESPONSIBILITY

Management resource pool, vCenter and NSX

Permissions and privileges

vCenter server settings

Datacenter configuration

Cluster configuration

Host configuration

Network configuration

Storage configuration

Manage host, network, storage and management virtual server alarming

Modify VM auto-restart

HA configuration

DRS configuration

Rename datastores and folders in datastores

VMware vSphere update manager

vCenter sessions

Configure storage views service

Log collection and bundling

Notes for infrastructure

Custom attribute annotations on hosts and management virtual servers

Common Information Model (CIM) interaction

vCenter collected performance statistics for infrastructure components

Modify vCenter statistics interval levels

Modify vCenter statistics interval levels

Put host into maintenance mode

CUSTOMER'S RESPONSIBILITY

Virtual server configuration

Attach virtual server to network/portgroup

Use provided storage for virtual servers, storage vMotion, browse datastore

vMotion and cold migration of virtual servers

Manage Customer VM Alarming within VM Folders
(contingent on VMs being placed in the *Customer virtual machines* folder)

View only access to vCenter, host, network, storage and management virtual server alarming

Guest customisation manager
Place virtual servers in cluster
Create object folders
Create and manage resource pools
Create and manage vApps
Create scheduled tasks (task limited by permissions)
Manage VMDK snapshots
View storage views
View historical events and tasks
View virtual server, host and datastore maps
Annotation notes for customer virtual servers
vCenter collected performance statistics
Read access, of the virtualisation infrastructure configuration
View hardware status