



INSTITUTO POLITÉCNICO NACIONAL
ESCUELA SUPERIOR DE CÓMPUTO



SISTEMAS DISTRIBUIDOS

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Tarea 6: Respaldo y Restauración de una máquina virtual en la nube

Fecha de Entrega: 06/May/2025

INTRODUCCIÓN:

El respaldo y la restauración de máquinas virtuales en la nube, como en Microsoft Azure, son procesos esenciales para garantizar la disponibilidad y protección de datos ante posibles fallos o pérdidas. Según la documentación oficial de Azure, las copias de seguridad permiten recuperar sistemas completos de forma rápida y confiable, lo cual es clave en entornos donde la continuidad operativa es crítica. Esta tarea consistió en explorar y aplicar estos procesos dentro del entorno de Azure para entender cómo se gestionan y qué tan accesibles resultan para los usuarios.

DESARROLLO:

Se deberá crear una máquina virtual con Ubuntu usando la imagen de la tarea 2.

The screenshot shows the Microsoft Azure portal interface for creating a new virtual machine. The top navigation bar includes tabs for 'SISDIS-7CV3: Tarea 6. Respaldo y Recuperación' and 'Create a virtual machine - Microsoft Azure'. The main title is 'Create a virtual machine'. A warning message at the top left states: '⚠️ Changing Basic options may reset selections you have made. Review all options prior to creating the virtual machine.' Below this, there are three buttons: 'Help me create a low cost VM', 'Help me create a VM optimized for high availability', and 'Help me choose the right VM size for my workload'. The 'Resource group' dropdown is set to '(New) T6-2023630338-backup_group' with a 'Create new' link. Under 'Instance details', the 'Virtual machine name' is 'T6-2023630338-backup'. The 'Region' is '(US) East US 2'. Under 'Availability options', the 'Zone options' section is expanded, showing two options: 'Self-selected zone' (selected, with a note: 'Choose up to 3 availability zones, one VM per zone') and 'Azure-selected zone (Preview)' (with a note: 'Let Azure assign the best zone for your needs'). The 'Availability zone' dropdown is set to 'Zone 1'. A note below it says: 'You can now select multiple zones. Selecting multiple zones will create one VM per zone. [Learn more](#)'.

SISDIS-7CV3: Tarea 6. Respaldo y Create a virtual machine - Microsoft Azure

Microsoft Azure Search resources, services, and docs (G+/)

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Home > Create a resource >

Create a virtual machine

⚠️ Changing Basic options may reset selections you have made. Review all options prior to creating the virtual machine.

Help me create a low cost VM Help me create a VM optimized for high availability Help me choose the right VM size for my workload

Image * See all images | Configure VM generation

VM architecture x64 Arm64
⚠️ Arm64 is not supported with the selected image.

Run with Azure Spot discount

Size * See all sizes

Enable Hibernation
⚠️ Hibernate is not supported by the image and size that you have selected. Choose an image and size that is compatible with Hibernate to enable this feature. [Learn more](#)

Administrator account

Authentication type SSH public key Password

< Previous Give feedback



SISDIS-7CV3: Tarea 6. Respaldo y Create a virtual machine - Microsoft Azure

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Home > Create a resource >

Create a virtual machine

Help me create a low cost VM Help me create a VM optimized for high availability Help me choose the right VM size for my workload

Network interface

When creating a virtual machine, a network interface will be created for you.

Virtual network * Create new

Subnet *

Public IP Create new

NIC network security group Basic None Advanced

Public inbound ports * Allow selected ports None

Select inbound ports *

⚠️ This will allow all IP addresses to access your virtual machine. This is only recommended for testing. Use the Advanced controls in the Networking tab to create rules to limit inbound traffic to known IP addresses.

< Previous Give feedback



- Máquina virtual creada

The screenshot shows the Microsoft Azure portal interface. At the top, there are two tabs: "SISDIS-7CV3: Tarea 6. Respaldo y..." and "T6-2023630338-backup - Microsoft...". The main content area displays the details of a virtual machine named "T6-2023630338-backup". The left sidebar has a "Overview" tab selected, along with other options like Activity log, Access control (IAM), Tags, Diagnose and solve problems, Resource visualizer, Connect, Networking, Network settings, Load balancing, Application security groups, and Network manager. The main pane shows the following details:

Virtual machine		Networking	
Computer name	T6-2023630338-backup	Public IP address	128.24.112.93 (Network interface)
Operating system	Linux (ubuntu 24.04)	Public IP address (IPv6)	-
VM generation	V2	Private IP address	10.1.0.4
VM architecture	x64	Private IP address (IPv6)	-
Agent status	Ready	Virtual network/subnet	T6-2023630338-backup-vnet/default
Agent version	2.13.1.1	DNS name	Configure
Hibernation	Disabled	Size	
Host group	-	Size	Standard B2s
Host	-	vCPUs	2
Proximity placement group	-	RAM	4 GiB
Colocation status	N/A	Source image details	
Capacity reservation group	-	Source image publisher	-
Disk controller type	SCSI	Source image offer	-
		Source image plan	-

At the bottom of the main pane, there are several icons for connectivity and monitoring, including "Connect", "Bastion", "Network settings", "Load balancing", "Application security groups", and "Network manager". The status bar at the bottom right shows the date and time as "01/05/2025 01:48 a.m.".

Procedimientos a realizar (tema: *Microsoft Azure Backup*):

1. Habilitar el respaldo de la máquina virtual.

- En el portal de Azure, seleccionar la máquina virtual que se va a respaldar o bien, crear una nueva máquina virtual.
- Seleccionar la opción "Backup".
- Crear un almacén de Recovery Services.
- Seleccionar el grupo de recursos donde se colocará el almacén.
- Seleccionar la política de respaldo, por omisión DailyPolicy, o dar clic en "Crear una nueva directiva" para crear una nueva política de respaldo.
Si se crea una nueva política se puede definir la frecuencia de respaldo (diario o semanal), la hora en la que se realizará el respaldo y el tiempo que se conservarán los puntos de restauración.
- Dar clic en el botón "Habilitar Backup".
- Dar clic en la campana de notificaciones para verificar que se haya realizado la implementación del proceso de respaldo.

- En la siguiente imagen, se ve el grupo de recursos en donde se colocará el almacén (vault), y también se selecciona la política de respaldo, en este caso es estándar para que la política sea DailyPolicy (un backup por día).

Welcome to Azure Backup for Azure VMs

Simple and reliable VM backup to the Azure. [Learn more](#). You are charged an instance fee based on the size of the VM and for backup data retained in Snapshots and the Recovery Services Vault. [Learn more about pricing](#).

Review the following information and click on 'Enable backup' to start protecting your VM.

Recovery Services vault Create new Select existing

Backup vault * vault426

Resource group T6-2023630338-backup_group [Create new](#)

Policy sub type * Enhanced Standard

Enhanced

- ✓ Multiple backups per day
- ✓ Up to 30 days operational tier retention
- ✓ Support for Trusted Launch Azure VM
- ✓ Support for VMs with Ultra Disks and Premium SSD v2

Standard

- ✓ Once-a-day backup
- ✓ Up to 5 days operational tier retention

[Enable backup](#) [Cancel](#)

Choose backup policy * [\(new\) DailyPolicy-ma52mgm4](#) [Edit this policy](#)

The list contains the policies pertaining to the selected policy sub type. [Learn more](#).

Policy Details

Full backup

Backup frequency
Daily at 8:00 AM UTC

Instant restore
Retain instant recovery snapshot(s) for 2 day(s)

Retention of daily backup point
Retain backup taken every day at 8:00 AM for 30 Day(s)

Consistency type Application or file-system consistent

Disk selection

Disks T6-2023630338-backup_disk1_7b35b65699... [Edit](#)

Include future disks

Selective disk backup option allows you to include or exclude specific data disks based on...

[Enable backup](#) [Cancel](#)

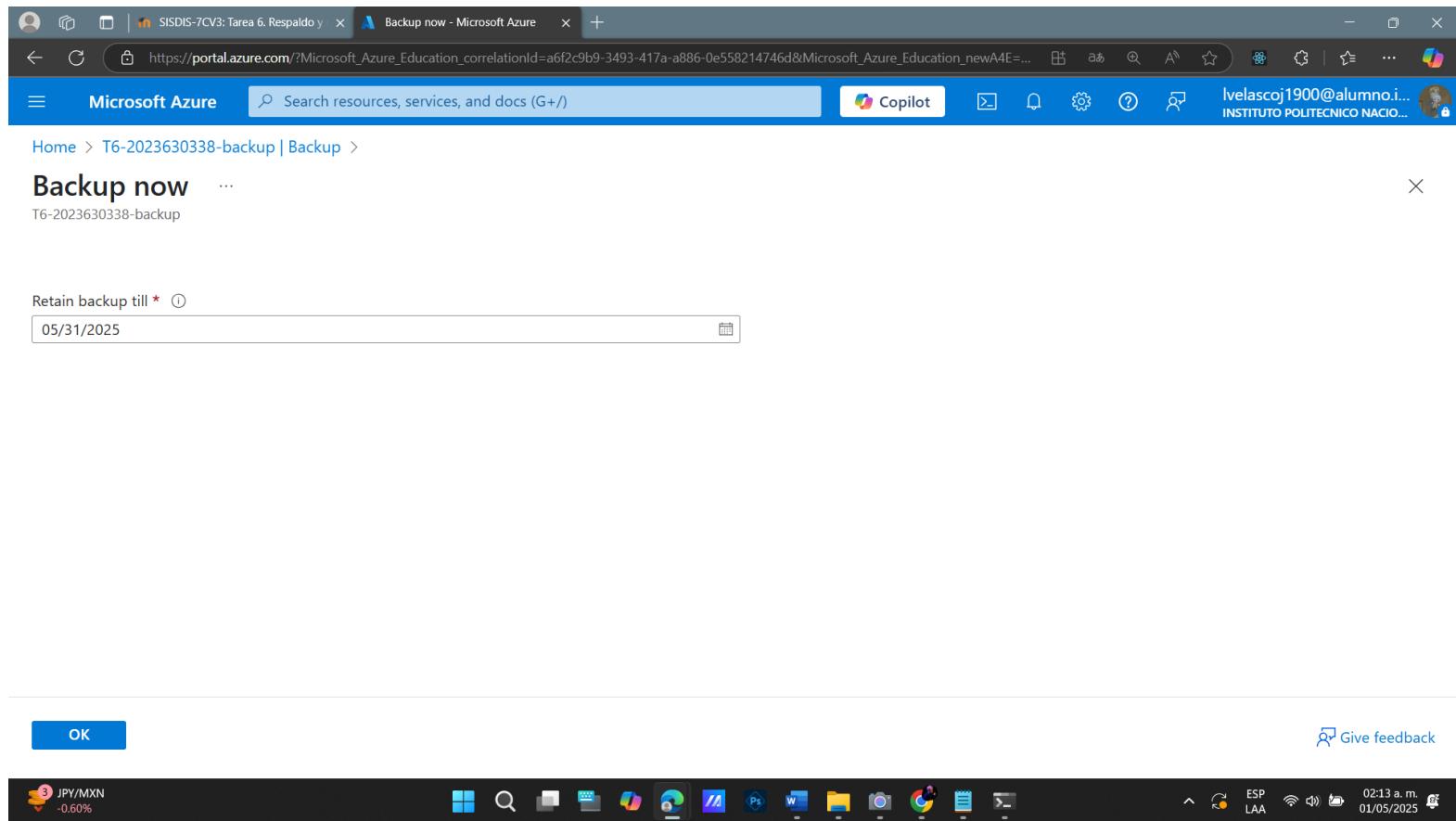
- Habilitando el backup.

The screenshot shows the Microsoft Azure portal interface. The top navigation bar includes the URL https://portal.azure.com/?Microsoft_Azure_Education_correlationId=a6f2c9b9-3493-417a-a886-0e558214746d&Microsoft_Azure_Education_newA4E=..., the title "vault426 - Microsoft Azure", and various Azure icons. The left sidebar is titled "Microsoft Azure" and contains a list of services: Overview, Activity log, Access control (IAM), Tags, Diagnose and solve problems, Resource visualizer, Settings, Getting started, Protected items, Manage, Monitoring, Automation, and Help. The main content area is titled "Overview" and shows a "What's new" section with several bullet points about Azure Site Recovery support for Windows Azure Trusted launch VMs, SAP HANA Database Backup, and Cross Subscription Restore. At the bottom, there is a taskbar with icons for weather, system status, and system information.

2. Iniciar un respaldo completo.

- Seleccionar la máquina virtual en el portal de Azure. Seleccionar "Backup" en el menú de operaciones.
- Seleccionar "Realizar copia de seguridad ahora" para crear el primer respaldo completo de la máquina virtual. Los subsecuentes respaldos automáticos serán incrementales.

- Indicar la fecha de retención de la copia de seguridad o aceptar la fecha establecida en la política de respaldo utilizada (por omisión, 30 días).



- Dar clic en el botón "Aceptar"
- Dar clic en la campana de notificaciones para verificar que se haya iniciado el respaldo de la máquina virtual.

- Para ver el progreso del respaldo seleccionar la opción "Ver todos los trabajos" en la página "Backup" de la máquina virtual. Seleccionar la opción "Actualizar" para refrescar la pantalla que muestra el estado del proceso de respaldo. El respaldo ha terminado cuando se despliega "Completada".

SISDIS-7CV3: Tarea 6. Respaldo y ... Backup Jobs - Microsoft Azure T6-2023630338-backup - Microsoft Azure

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Backup Jobs

Choose columns Filter Export jobs Refresh Feedback

Filtered by: Item Type - All, Operation - All, Status - All, Start Time - 4/30/2025, 2:41:53 AM, End Time - 5/1/2025, 2:41:53 AM

Try our new Business Continuity Center for the at scale BCDR management of your resources protected across Azure Backup and Site Recovery.

All data fetched from the service.

Filter items ...

Workload name ↑↓	Operation	Status	Type	Start time ↑↓	Total Duration ↑↓	Details
T6-2023630338-backup	Backup	Completed	Azure Virtual Machine	5/1/2025, 2:14:09 AM	00:26:09	View details
T6-2023630338-backup	Configure backup	Completed	Azure Virtual Machine	5/1/2025, 2:07:06 AM	00:00:30	View details

< Previous Page 1 of 1 Next >

18°C Despejado

ESP LAA 02:41 a.m. 01/05/2025

- Detalles del backup

SISDIS-7CV3: Tarea 6. Respaldo y ... Backup - Microsoft Azure T6-2023630338-backup - Microsoft Azure

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Home > Backup Jobs >

Backup

T6-2023630338-backup

Refresh Cancel Resume Deploy Create VM Template Deploy Cleanup Template Feedback

Job details

VM Name	T6-2023630338-backup
Recovery Point Expiry Time in UTC	5/31/2025 8:14:08 AM
Backup Size	4101 MB
Activity ID	3886c191-48ac-43d0-a7ab-9b598e6ab006
Start time	5/1/2025, 2:14:09 AM
End time	5/1/2025, 2:40:19 AM

Sub tasks

Name	Status	Duration
Take Snapshot	Completed	00:07:36
Transfer data to vault	Completed	00:18:32

18°C Despejado

ESP LAA 02:42 a.m. 01/05/2025

3. Restaurar la máquina virtual.

- Seleccionar la máquina virtual en el portal de Azure.
- Seleccionar la opción "Backup" en el menú de "Operaciones".
- Seleccionar la opción "Restaurar VM".
- En "Punto de restauración" dar clic en la opción "Seleccionar".
- Seleccionar el punto de restauración y dar clic en el botón "Aceptar".
- En "Tipo de restauración" seleccionar "Crear una nueva máquina virtual".
- Ingresar el nombre de la nueva máquina virtual.
- Seleccionar la red virtual.
- Seleccionar la ubicación del almacenamiento provisional. Esta cuenta de almacenamiento se utilizará temporalmente durante la restauración.

The screenshot shows the Microsoft Azure portal interface for restoring a virtual machine. The top navigation bar includes tabs for 'SISDIS-7CV3: Tarea 6. Respaldo y ...', 'Restore Virtual Machine - Microsoft', and 'T6-2023630338-backup - Microsoft'. The main title is 'Restore Virtual Machine' under the 'T6-2023630338-backup' section. The page content is as follows:

Restore allows you to restore VM/disks from a selected Restore Point.

Restore point *: 5/1/2025, 2:14:13 AM
Select

Data Store: Snapshot and Vault-Standard

Restore configuration:

Restore target:
 Create new
 Replace existing

To create an alternate configuration when restoring your VM (from the following menus), use PowerShell cmdlets.

Restore Type *: Create new virtual machine

Virtual machine name *: T6-2023630338-restore

Subscription *: Azure for Students

Restore button

The bottom of the screen shows the Windows taskbar with various pinned icons and system status indicators.

The screenshot shows the Microsoft Azure portal interface for restoring a virtual machine. The top navigation bar includes tabs for 'SISDIS-7CV3: Tarea 6. Respaldo y ...', 'Restore Virtual Machine - Microsc...', and 'T6-2023630338-backup - Microsc...'. The main title is 'Restore Virtual Machine' under 'T6-2023630338-backup'. The form fields are as follows:

- Restore Type: Create new virtual machine
- Virtual machine name: T6-2023630338-restore
- Subscription: Azure for Students
- Resource group: T6-2023630338-backup_group
- Virtual network: T6-2023630338-backup-vnet (T6-2023630338-backup_group)
- Subnet: default
- Staging Location: Select an option (link to 'Can't find your storage account?')

A note below the form says: "Assign an MSI with the [right permissions](#), for automated cleanup on restore failure. Without an MSI, manual intervention is required." The 'Identities' section is set to 'Disabled'.

At the bottom, there's a 'Restore' button and a 'Give feedback' link. The taskbar at the bottom of the screen shows various icons and the date/time: 02:47 a.m., 01/05/2025.

Si no se encuentra una cuenta de almacenamiento será necesario crearla de la siguiente manera (cerrar la ventana actual "Restauración de la máquina virtual"):

- En la ventana de búsqueda de Azure escribir: cuentas de almacenamiento
 - Dar clic en la opción «Crear»
 - Seleccionar el grupo de recursos de la máquina virtual.
 - Ingresar un nombre para la cuenta de almacenamiento (no debe existir en Azure).
 - Seleccionar la misma ubicación del *vault* (almacén de Recovery Services) en el procedimiento **Habilitar el respaldo de una máquina virtual en Azure**.
 - En "Replicación" seleccionar "Almacenamiento con redundancia local (LRS)".
 - Dar clic en el botón "Revisar y crear".
-
- Dar clic en el botón "Crear".

- Ya que no se encontró una cuenta de almacenamiento, se crea una.

manage your storage account together with other resources.

Subscription * Azure for Students

Resource group * T6-2023630338-backup_group
Create new

Instance details

Storage account name * storageaccountluisvela

Region * (US) East US 2
Deploy to an Azure Extended Zone

Primary service Select a primary service

Performance * Standard: Recommended for most scenarios (general-purpose v2 account)
Premium: Recommended for scenarios that require low latency.

Redundancy * Locally-redundant storage (LRS)

Previous Next Review + create Give feedback

- Cuenta de almacenamiento creada

storageaccountluisvela Storage account

Essentials

Resource group (move) : T6-2023630338-backup_group	Performance : Standard
Location : eastus2	Replication : Locally-redundant storage (LRS)
Subscription (move) : Azure for Students	Account kind : StorageV2 (general purpose v2)
Subscription ID : e1d319c4-9458-4992-b305-fe400976ae65	Provisioning state : Succeeded
Disk state : Available	Created : 1/5/2025, 2:58:14 a.m.
Tags (edit) : Add tags	

Properties Monitoring Capabilities (7) Recommendations (0) Tutorials Tools + SDKs

Blob service

Hierarchical namespace	Disabled
Default access tier	Hot
Blob anonymous access	Disabled
Blob soft delete	Enabled (7 days)
Container soft delete	Enabled (7 days)
Versioning	Disabled
Change feed	Disabled
NFS v3	Disabled

Security

Require secure transfer for REST API operations	Enabled
Storage account key access	Enabled
Minimum TLS version	Version 1.2
Infrastructure encryption	Disabled

Networking

Allow access from	All networks
Private endpoint connections	0

Overview Activity log Tags Diagnose and solve problems Access Control (IAM) Data migration Events Storage browser Storage Mover Partner solutions Resource visualizer Data storage Security + networking Data management Settings

Allow access to your replication

3 GBP/MXN +0.21%

- Ir al primer paso del procedimiento **Restaurar una máquina virtual**.
- Ahora ya se pudo crear la cuenta de almacenamiento

Restore Type * ⓘ Create new virtual machine

Virtual machine name * ⓘ T6-2023630338-restore

Subscription * ⓘ Azure for Students

Resource group * ⓘ T6-2023630338-backup_group

Virtual network * ⓘ T6-2023630338-backup-vnet (T6-2023630338-backup_group)

Subnet * ⓘ default

Staging Location * ⓘ storageaccountluisvela (StandardLRS) [Can't find your storage account?](#)

ⓘ Assign an MSI with the [right permissions](#) for automated cleanup on restore failure. Without an MSI, manual intervention is required.

Identities ⓘ Disabled

Restore

- Dar clic en el botón "Restaurar".
- Dar clic en la campana de notificaciones para verificar que se haya iniciado la restauración de la máquina virtual.

- Para ver el progreso de la restauración seleccionar la opción "Ver todos los trabajos" en la página "Backup" de la máquina virtual. Seleccionar la opción "Actualizar" para refrescar la pantalla que muestra el estado del proceso de restauración.

- En la siguiente imagen, se puede ver el "restore" completado, pero anteriormente aparecen dos procesos con status "completed with warnings", ya que había alcanzado el número máximo de núcleos para mi cuenta por lo que tuve que borrar máquinas virtuales que tenía almacenadas.

The screenshot shows the Microsoft Azure portal with the URL https://portal.azure.com/#Microsoft_Azure_Education_correlationId=a6f2c9b9-3493-417a-a886-0e558214746d&Microsoft_Azure_Education_newA4E=.... The page title is "Backup Jobs". The table below lists five backup operations:

Workload name	Operation	Status	Type	Start time	Total Duration	Details
T6-2023630338-backup	Restore	Completed	Azure Virtual Machine	5/1/2025, 3:37:18 AM	00:02:07	View details
T6-2023630338-backup	Restore	Completed with warnings	Azure Virtual Machine	5/1/2025, 3:29:23 AM	00:02:41	View details
T6-2023630338-backup	Restore	Completed with warnings	Azure Virtual Machine	5/1/2025, 3:04:09 AM	00:02:38	View details
T6-2023630338-backup	Backup	Completed	Azure Virtual Machine	5/1/2025, 2:14:09 AM	00:26:09	View details
T6-2023630338-backup	Configure backup	Completed	Azure Virtual Machine	5/1/2025, 2:07:06 AM	00:00:30	View details

At the bottom left, there are navigation buttons: < Previous, Page 1 of 1, Next >. At the bottom right, there is a toolbar with icons for Windows, search, file explorer, and other applications. The system tray shows the date and time as 03:42 a.m. 01/05/2025.

- Una vez terminada la restauración de la máquina virtual, la nueva máquina virtual aparecerá en la lista de máquinas virtuales en el portal de Azure.
- Se puede ver la nueva VM creada en base a la restauración

The screenshot shows the Microsoft Azure portal with the URL https://portal.azure.com/#resource/subscriptions/e1d319c4-9458-4992-b305-fe400976ae05/resourceGroups/T6-2023630338-backup_group. The page title is "All resources". The table below lists restored resources:

Name	Type	Resource Group	Location	Subscription
T6-2023630338-restore	Virtual machine	T6-2023630338-backup_gr...	East US 2	Azure for St...
T6-2023630338-restore-nic-0e636d2aed2046...	Network Interface	T6-2023630338-backup_gr...	East US 2	Azure for St...
t62023630338restore-osdisk-20250501-093751...	Disk	T6-2023630338-BACKUP_...	East US 2	Azure for St...
vault426	Recovery Services vault	T6-2023630338-backup_gr...	East US 2	Azure for St...

At the bottom left, it says "Showing 11 - 14 of 14. Display count: 10". At the bottom right, there is a "Give feedback" button. The system tray shows the date and time as 03:44 a.m. 01/05/2025.

- Para conectar con la nueva máquina virtual se utilizará las mismas credenciales (usuario y contraseña) definidas para la máquina virtual respaldada.
- Asociando una IP pública a la VM de la restauración para poder conectarnos.

Screenshot of the Microsoft Azure portal showing the "Add IP configuration" dialog for a network interface named "T6-2023630338-restore-nic-0e636d2aed20462a866ad5b0bc43817b".

IP Settings:

- Enable IP forwarding:
- Virtual network: T6-2023630338-backup-vnet
- Subnet: default (10.1.0.0/24) 249 free IP addresses

Add IP configuration:

Name *	ipPublicRestore
IP version	IPv4
Type	Secondary

Private IP address settings:

- Allocation: Dynamic
- Static

Public IP address settings:

- Associate public IP address:
- Public IP address *: (New) pip-t6-2023630338-backup-vnet-...
- [Create a public IP address](#)

Buttons: Add, Cancel, Give feedback.

Screenshot of the Microsoft Azure portal showing the "IP configurations" page for the same network interface.

IP configurations:

Name	IP Version	Type	Private IP Address	Public IP Address
72bb28da63f04a65b68c8b3f5d7...	IPv4	Primary	10.1.0.5 (Dynamic)	-
ipPublicRestore	IPv4	Secondary	10.1.0.6 (Dynamic)	51.8.172.102 (pip-t6-2023630338-b...)

Buttons: Apply, Discard changes, Give feedback.

- Creando un grupo de seguridad para poder crear una regla de entrada y acceder por el puerto 22 por el protocolo ssh

The screenshot shows the Microsoft Azure portal. The user is navigating through the network settings of a virtual machine named "T6-2023630338-restore". On the left, there's a sidebar with various navigation links like Overview, Activity log, Access control (IAM), Tags, Diagnose and solve problems, Resource visualizer, Connect, Networking, and Network settings. The "Network settings" link is currently selected. The main content area displays the "Inbound port rules" section, which contains four entries. One entry is a custom rule named "AllowAnyCustom22Inbound" with port 22. Other entries include "AllowVnetInbound", "AllowAzureLoadBalancerInbound", and "DenyAllInbound". There are also sections for "Outbound port rules" and "Forwarded port rules". At the top of the main content area, there's a message: "This is a new experience. Please provide feedback". The bottom of the screen shows the Windows taskbar with icons for Start, Search, Task View, File Explorer, and other applications.

- Conectando por SSH

```
PS C:\Users\Luis Velasco> ssh luisvela@51.8.172.102
luisvela@51.8.172.102's password:
Welcome to Ubuntu 24.04.2 LTS (GNU/Linux 6.8.0-1021-azure x86_64)

 * Documentation:  https://help.ubuntu.com
 * Management:    https://landscape.canonical.com
 * Support:       https://ubuntu.com/pro

System information as of Thu May  1 10:04:33 UTC 2025

System load: 0.34      Processes:          123
Usage of /: 9.1% of 28.02GB   Users logged in:  0
Memory usage: 16%           IPv4 address for eth0: 10.1.0.6
Swap usage:  0%             IPv4 address for eth0: 10.1.0.5

* Strictly confined Kubernetes makes edge and IoT secure. Learn how MicroK8s
just raised the bar for easy, resilient and secure K8s cluster deployment.

https://ubuntu.com/engage/secure-kubernetes-at-the-edge

Expanded Security Maintenance for Applications is not enabled.

0 updates can be applied immediately.

Enable ESM Apps to receive additional future security updates.
See https://ubuntu.com/esm or run: sudo pro status

The list of available updates is more than a week old.
To check for new updates run: sudo apt update

Last login: Thu May  1 10:04:37 2025 from 201.105.247.195
luisvela@T6-2023630338-backup:~$ ls
Servicio apache-tomcat-8.5.99      jaxrs-ri          mysql-connector-j-9.2.0.zip  usuario_sin_foto.png
Servicio.zip apache-tomcat-8.5.99.zip  jaxrs-ri-2.24.zip  prueba_json.html
WSClient.js gson-2.3.1.jar         mysql-connector-j-9.2.0  prueba_url.html
luisvela@T6-2023630338-backup:~$ |
```

- En la imagen anterior, podemos darnos cuenta de que el nombre de la instancia es el nombre de la instancia desde la que hicimos la restauración, esto debido a que cuando se hace una **restauración desde un backup completo**, se **restaura el disco del sistema operativo** tal como estaba, **incluyendo el hostname (nombre del sistema)** que estaba configurado dentro del SO.

4. Eliminar el proceso de respaldo.

- Seleccionar la máquina virtual en el portal de Azure.
- Seleccionar la opción "Backup" en el menú de "Operaciones".
- Seleccionar "Detener copia de seguridad". Si no se ve la opción presionar los tres puntos...
- Seleccionar la opción "Retener datos de copia de seguridad" o bien "Eliminar datos de copia de seguridad".
- Ingresar el nombre del elemento de copia de seguridad, si este es el nombre de la máquina virtual respaldada.
- Opcionalmente se puede indicar el motivo por el cual se va a eliminar el proceso de respaldo. También es posible escribir algún comentario en la ventana "Comentarios".

The screenshot shows a Microsoft Azure browser-based interface. At the top, there are several tabs: 'SISDIS-7CV3: Tarea 6. Respaldo y' (active), 'T6-2023630338-restore - Microsoft Azure', 'Stop Backup - Microsoft Azure' (selected), and 'T6-2023630338-backup - Microsoft Azure'. Below the tabs is the Microsoft Azure logo and a search bar. On the right side of the header, there's a user profile for 'lvelascoj1900@alumno.i... INSTITUTO POLITECNICO NACIONAL' and a Copilot button.

The main content area displays a 'Stop Backup' dialog for a backup job named 'T6-2023630338-backup'. The dialog has the following fields:

- Stop backup level ***: A dropdown menu set to 'Retain backup data'.
- Reason ***: A dropdown menu set to 'Others'.
- Comment**: An empty text input field.

A note in the dialog states: "This option will stop all scheduled backup jobs but retain backup data. Retention range set in the policy does not apply to the data in this case. It will continue the pricing as is until the data is removed."

At the bottom of the dialog are two buttons: 'Stop backup' (highlighted in blue) and 'Cancel'.

The system tray at the bottom of the screen shows the date and time as '04:14 a.m. 01/05/2025' and includes icons for weather (17°C), battery, signal strength, and network.

- Dar clic en el botón "Detener copia de seguridad".
- Dar clic en la campana de notificaciones para verificar que se haya detenido el proceso de copia de seguridad y en su caso, se haya eliminado los datos.

The screenshot shows the Microsoft Azure portal interface. At the top, there are multiple tabs open, including 'SISDIS-7CV3: Tarea 6. Respaldo y ...', 'T6-2023630338-restore - Microsoft ...', 'T6-2023630338-backup - Microsoft ...', and 'T6-2023630338-backup - Microsoft ...'. The main page title is 'T6-2023630338-backup | Backup'. On the left, a sidebar lists various monitoring and configuration options like 'extensions + applications', 'Operating system', 'Configuration', 'Advisor recommendations', 'Properties', 'Locks', 'Availability + scale', 'Size', 'Availability + scaling', 'Security', 'Identity', and 'Microsoft Defender for ...'. A search bar is at the top left. The main content area shows a summary of the backup status with sections for 'Essentials' and 'Recovery points'. In the 'Essentials' section, it says 'Stopping backup and retaining backup data for T6-2023630338...' with a green checkmark and the message 'Successfully triggered the operation. Please monitor progress in Backup Jobs page.' Below this, it shows 'Passed' for the 'Backup Pre-Check'. The 'Recovery points' section is currently collapsed. On the right side, there is a 'Notifications' panel with a single entry: 'Stopping backup and retaining backup data for T6-2023630338...' with a timestamp 'a few seconds ago'. The bottom of the screen shows the Windows taskbar with icons for Start, Search, File Explorer, Task View, Edge, Power, Task Manager, File History, Photos, Mail, OneDrive, and Google Chrome. The system tray shows the date and time as '01/05/2025 04:17 a.m.'

- Para eliminar el almacén de Recovery Services (*vault*) hacer lo siguiente:

Nota importante: Para eliminar el almacén de Recovery Services es necesario que hayan pasado 14 días desde el último respaldo, ya que la retención de los datos es por dos semanas:

"Recovery Services vault cannot be deleted as there are backup items in soft deleted state in the vault. The soft deleted items are permanently deleted after 14 days of delete operation".

Fuente: Portal de Microsoft Azure.

- Ir al inicio del portal de Azure.

- Seleccionar "Todos los recursos".
 - Seleccionar el *vault* (almacén de Recovery Services) a eliminar (tener la precaución de seleccionar el almacén correcto).
 - Seleccionar también la cuenta de almacenamiento, si se creó la cuenta de almacenamiento en el paso 9 del procedimiento **Restaurar una máquina virtual**.
 - Seleccionar la opción "Eliminar".
 - Marcar la eliminación del almacén dando clic al botón "Sí".
 - Dar clic en la campana de notificaciones para verificar que se haya eliminado el almacén.
- Puesto que el vault no se puede eliminar sino hasta después de 14 días, como evidencia se pone una captura del mensaje que da al tratar de eliminarlo.

You are viewing a new version of Browse experience. Some features may be missing. Click here to access the old experience.

Filter for any field...

Subscription equals all Resource Group equals all Type equals all

Location equals all Add filter

	Resource Name	Type	ID
<input type="checkbox"/>	T6-2023630338-restore-nic-0e636d2aed2046...	Network security group	T6-2023630338-...
<input type="checkbox"/>	t62023630338restore-osdisk-20250501-093751	Disk	T6-2023630338...
<input checked="" type="checkbox"/>	vault426	Recovery Services vault	T6-2023630338...

Showing 11 - 16 of 16. Display count: 10

More events in the activity log →Dismiss all

Executed delete command on 1 selected items

Succeeded: 0, Failed: 1, Canceled: 0.

Error details

vault426: Recovery Services Vault cannot be deleted as there are existing resources within the vault. : T6-2023630338-backup. Please ensure all containers have been unregistered from the vault and all private endpoints associated with the vault have been deleted, and retry operation. For more details, see https://aka.ms/AB-AA4ecq5 (Code: ServiceResourceNotEmptyWithBackendMess

Help me troubleshoot

a few seconds ago

CONCLUSIONES:

Gracias a esta tarea, comprendo ahora la importancia de proteger la información y mantener la continuidad de los servicios. Aprendí que hacer copias de seguridad regularmente no solo es una buena práctica, sino una necesidad en cualquier entorno tecnológico y más en empresas con grandes cantidades de datos. Restaurar una máquina virtual también me mostró lo útil que puede ser en caso de fallos, errores o pérdidas de datos. En general, esta experiencia me ayudó a valorar más la prevención y el manejo adecuado de la infraestructura en la nube.