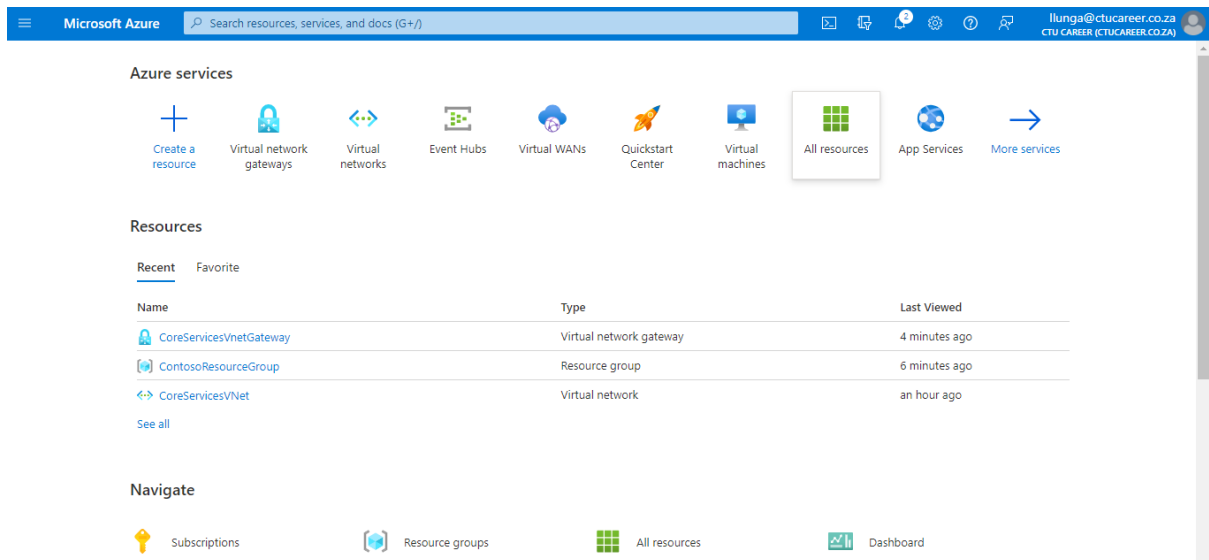


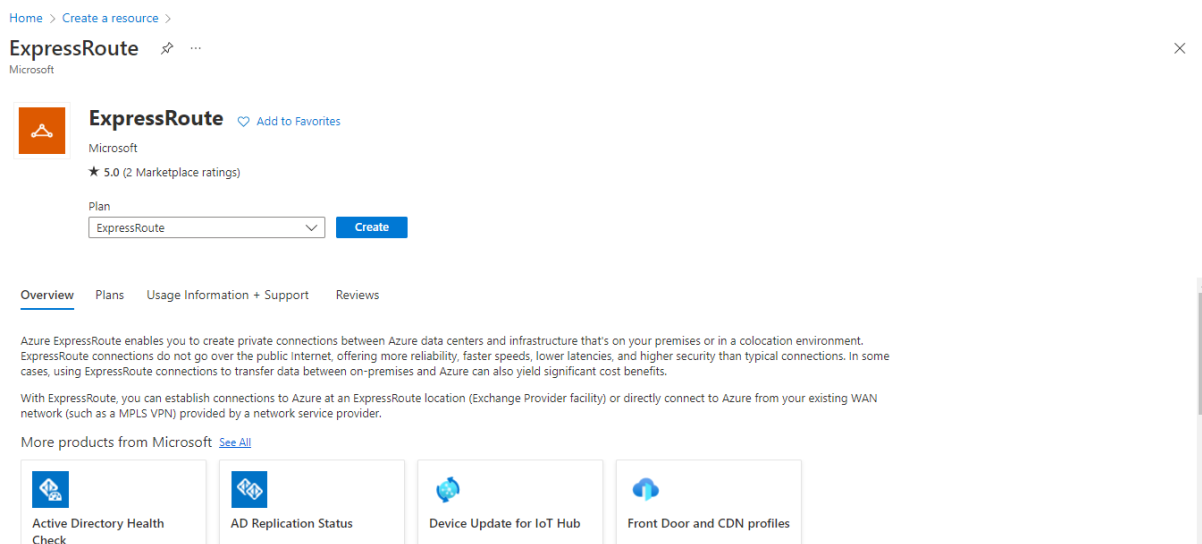
M03-Unit 5 Provision an ExpressRoute circuit

Task 1: Create and provision an ExpressRoute circuit

1. From a browser, navigate to the Azure portal and sign in with your Azure account.



2. On the Azure portal menu, select + Create a resource. Select Networking, and then select ExpressRoute, as shown in the following image. If ExpressRoute does not appear in the list, use Search the marketplace to search for it:



- On the Create ExpressRoute page, provide the Resource Group, Region, and Name for the circuit with the following: ExpressRouteResourceGroup, East US 2, TestERCircuit. Then select Next: Configuration >.

Home > Create a resource > ExpressRoute >

Create ExpressRoute

basics Configuration tags review + create

Use Azure ExpressRoute to create private connections between Azure datacenters and infrastructure on your premises or in a colocation environment. Establish connections to Azure at an ExpressRoute location, such as an Exchange provider facility, or directly connect to Azure from your existing WAN network, such as a multiprotocol label switching (MPLS) VPN, provided by a network service provider.
[Learn more about Express Route circuits](#)

Project details

Select the subscription to manage deployed resources and costs. Use resource groups like folders to organize and manage all your resources.

Subscription * ⓘ Azure for Students

Resource group * ⓘ (New) ExpressRouteResourceGroup
[Create new](#)

Instance details

Region * ⓘ East US 2

Name * ⓘ TestERCircuit

[Review + create](#) < Previous Next : Configuration >

- When you are filling in the values on this page, make sure that you specify the correct SKU tier (Local, Standard, or Premium) and data metering billing model (Unlimited or Metered).

Home > Create a resource > ExpressRoute >

Create ExpressRoute

ExpressRoute circuits can connect to Azure through a service provider or directly to Azure at a global peering location.
[Learn more about circuit types](#)

Port type * ⓘ ☒ Provider ☐ Direct

Create new or import from classic * ⓘ ☒ Create new ☐ Import

Provider * ⓘ

SKU * ⓘ ☐ Local ☒ Standard ☐ Premium

Billing model * ⓘ ☒ Metered ☐ Unlimited

Allow classic operations ⓘ ☐ Yes ☒ No

[Review + create](#) < Previous Next : Tags >

5. Select Review + Create.

Home > Create a resource > ExpressRoute >

Create ExpressRoute ...

Validation Passed

Basics Configuration Tags Review + create

TERMS

By clicking "Create", I (a) agree to the legal terms and privacy statement(s) associated with the Marketplace offering(s) listed above; (b) authorize Microsoft to bill my current payment method for the fees associated with the offering(s), with the same billing frequency as my Azure subscription; and (c) agree that Microsoft may share my contact, usage and transactional information with the provider(s) of the offering(s) for support, billing and other transactional activities. Microsoft does not provide rights for third-party offerings. See the [Azure Marketplace Terms](#) for additional details.

Basics

Subscription	Azure for Students
Resource group	ExpressRouteResourceGroup
Region	East US 2
Name	TestERCircuit

Create

< Previous

Next

Download a template for automation

6. Confirm that the ExpressRoute configuration passes validation and then select Create

Home > Create a resource > ExpressRoute >

Create ExpressRoute ...

ExpressRoute circuits can connect to Azure through a service provider or directly to Azure at a global peering location. [Learn more about circuit types](#)

Port type * ⓘ

Provider

Direct

Create new or import from classic * ⓘ

Create new

Import

Provider * ⓘ

Equinix

Peering location * ⓘ

Seattle

Bandwidth * ⓘ

50Mbps

SKU * ⓘ

Standard

Premium

Billing model * ⓘ

Metered

Unlimited

Allow classic operations ⓘ

Yes

Review + create

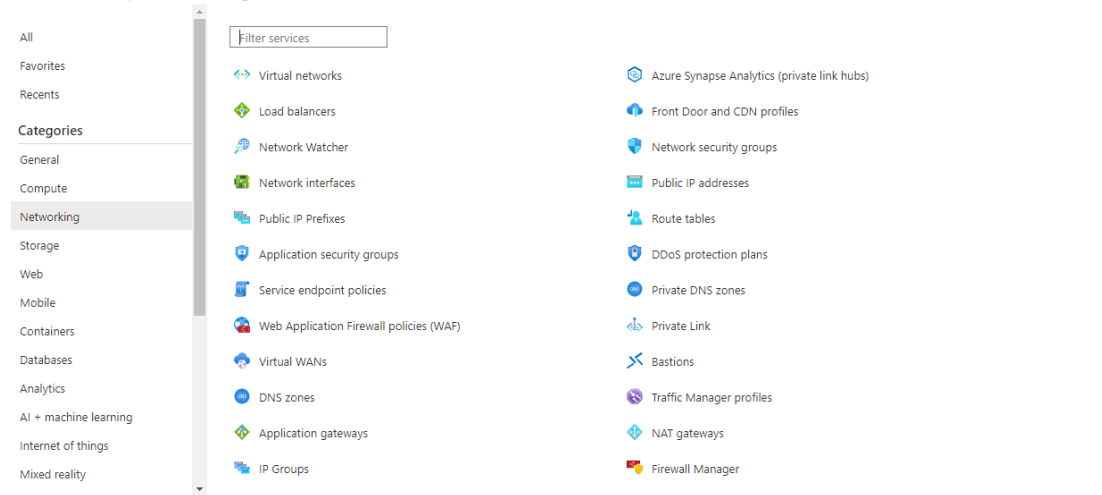
< Previous

Next : Tags >

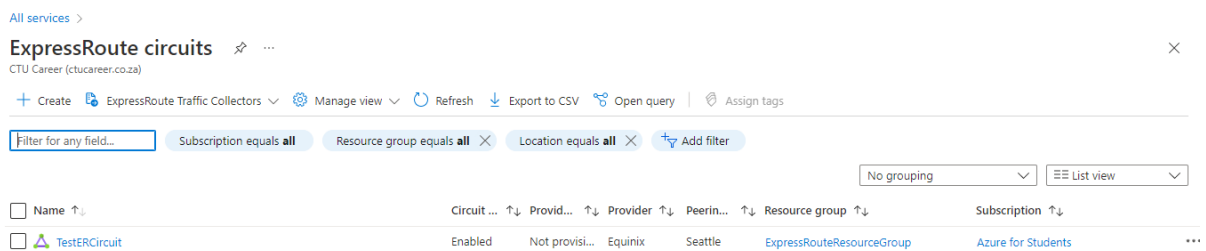
Task 2: Retrieve your Service key

1. You can view all the circuits that you created by selecting All services > Networking > ExpressRoute circuits.

All services | Networking



2. All ExpressRoute circuits created in the subscription will appear here.



3. The circuit page displays the properties of the circuit. The service key appears in the service key field. Your service provider will need the Service Key to complete the provisioning process. The service key is specific to your circuit. You must send the service key to your connectivity provider for provisioning.

The screenshot shows the Azure portal interface for an ExpressRoute circuit named 'TestERCircuit'. The left sidebar contains navigation options like Overview, Activity log, Access control (IAM), Tags, Diagnose and solve problems, Settings, Configuration, Connections, Authorizations, Peerings, Properties, Locks, Monitoring, and Insights. The main content area displays the circuit's details under the 'Essentials' section. A table at the bottom lists the peering connections.

Type	Status	Primary subnet	Secondary subnet	Last modified by
Azure private	Not provisioned	-	-	-
Azure public	Not provisioned	-	-	-

4.- 5. When you create a new ExpressRoute circuit, the circuit is in the following state

This screenshot is identical to the one above, showing the Azure portal interface for the 'TestERCircuit' ExpressRoute circuit. It displays the circuit's details under the 'Essentials' section and a table of peering connections.

Type	Status	Primary subnet	Secondary subnet	Last modified by
Azure private	Not provisioned	-	-	-
Azure public	Not provisioned	-	-	-

Task 3: Deprovisioning an ExpressRoute circuit

Task 4: Clean up resources

All services > ExpressRoute circuits >

ExpressRoute circu...
CTU Career (ctucareer.co.za)

+ Create ...

Filter for any field...

Name ↑

TestERCircuit ...

< Page 1 of 1 >

TestERCircuit
ExpressRoute circuit

Search (Ctrl+/)

Delete Refresh

Deleting

Essentials

Resource group (move)
ExpressRouteResourceGroup

Provider
Equinix

Circuit status
Enabled

Provider status
Not provisioned

Location
East US 2

Peering location
Seattle

Subscription (move)
Azure for Students

Bandwidth
50 Mbps

Subscription ID
d49079e0-b13c-4413-8b03-36b4ad43ffd0

Service key
0a4962ca-c235-4c86-9b79-5782cf6a2a66

Tags (edit)
Click here to add tags

Peerings

Type	Status	Primary subnet	Secondary subnet	Last modified by
Azure private	Not provisioned	-	-	-
Azure public	Not provisioned	-	-	-

All services >

ExpressRoute circuits
CTU Career (ctucareer.co.za)

+ Create ExpressRoute Traffic Collectors Manage view Refresh Export to CSV Open query Assign tags

Filter for any field... Subscription equals all Resource group equals all Location equals all Add filter

No grouping List view

Name Circuit ... Provid... Provider Peerin... Resource group Subscription

No ExpressRoute circuits to display

Use ExpressRoute to set up a fast, private connection to Microsoft cloud services from your on-premises infrastructure or co-location facility. You can create a connection between your on-premises network and the Microsoft cloud in three different ways, CloudExchange Co-location, Point-to-point Ethernet Connection, and Any-to-any (IPVPN) Connection. Connectivity providers can offer one or more connectivity models. You can work with your connectivity provider to pick the model that works best for you.

Create ExpressRoute circuit

Give feedback

1. In the Azure portal, open the PowerShell session within the Cloud Shell pane.

A screenshot of a Windows PowerShell terminal window. The title bar at the top reads "PowerShell" followed by standard window controls (minimize, maximize, close) and several icons representing different file types or functions. The terminal output shows the following sequence of events:
1. A green status message: "Requesting a Cloud Shell..Succeeded."
2. A grey status message: "Connecting terminal..."
3. A white welcome message: "Welcome to Azure Cloud Shell"
4. Two instructions in white text: "Type \"az\" to use Azure CLI" and "Type \"help\" to learn about Cloud Shell"
5. A white informational message: "MOTD: Scripts installed with 'Install-Script' can be run from the shell"
6. Two verbose messages in yellow/green text: "VERBOSE: Authenticating to Azure ..." and "VERBOSE: Building your Azure drive ..."
7. A prompt in white text: "PS /home/ilungatshasuma>" followed by a black cursor.
The background of the terminal is dark blue.

- 2.Delete all resource groups you created throughout the labs of this module by running the following command:

```
PowerShell v | ? [ ] { }
Requesting a Cloud Shell..Succeeded.
Connecting terminal...

Welcome to Azure Cloud Shell

Type "az" to use Azure CLI
Type "help" to learn about Cloud Shell

MOTD: Scripts installed with 'Install-Script' can be run from the shell

VERBOSE: Authenticating to Azure ...
VERBOSE: Building your AzRemove-AzResourceGroup -Name 'ExpressRouteResourceGroup' -Force -AsJob
PS /home/ilungatshasuma> R

Id      Name                PSJobTypeName    State             HasMoreData       Location          Command
--      ---                -
2       Long Running O...   AzureLongRunni... Running           True              localhost         Remove-AzResourceGroup

PS /home/ilungatshasuma> Remove-AzResourceGroup -Name 'ExpressRouteResourceGroup' -Fo
```