

PC SIM Activation Guide

This document provides a comprehensive guide on how to connect Dell devices to cellular network services using either a physical SIM card or an eSIM. It covers key processes, including locating and inserting a SIM card, activating an eSIM, and troubleshooting common issues. Additionally, you'll learn about various methods to obtain an eSIM from your carrier, how to manage eSIM profiles, and what happens to your eSIM profile during Windows resets or reinstalls. This guide is designed to help you seamlessly manage mobile connectivity on your Dell device.



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Connecting to a cellular network service

You can connect to the cellular network service using either a SIM placed into the device or an eSIM sent over the Internet into your device. All recent Dell products provide you the choice of both, however, only one may be active at any one time.



Using a SIM to connect to the cellular network service

Finding the SIM Slot

Most of the Dell Precision and Latitude products have a SIM tray located on the back or one of the sides of the product. The Chromebook, Rugged and some Precision products have the SIM slot located inside the device as the SIM is rarely changed in those products, please refer to the Owners Manuals for those devices, noting that the SIM slot is sometimes covered in the Field Replaceable Units (FRUs) section.



Precision 3590 (1 is the SIM Tray)



Latitude 7450 (1 is the SIM Tray)

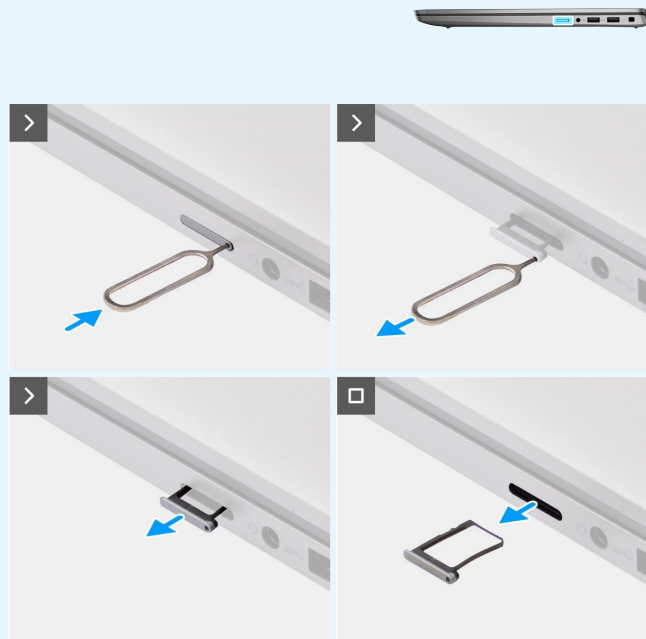
Using a SIM to connect to the cellular network service

Removing the nanoSIM-card tray from the Computer

If the computer has a nanoSIM-card tray you can remove it similarly to that of a SIM tray used in most mobile phones.

Steps:

1. Insert a pin or an unrolled paper clip into the release hole of the nanoSIM-card tray and push inward until the tray is released.
2. Slide the nanoSIM-card tray out of the slot on the computer.
3. Remove the SIM card from the nanoSIM-card tray.

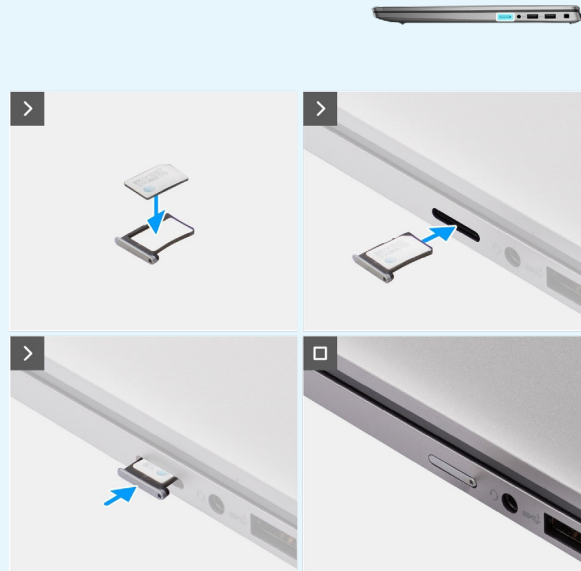


Using a SIM to connect to the cellular network service

Placing the SIM Into the Tray and Reinserting

1. Place the SIM card into the nanoSIM-card tray with the metallic contact facing down and the notch to the back left of the tray.
2. Align the nanoSIM-card tray with the slot on the computer and carefully slide it in.
3. Check the connection to the Carrier using: **Start > Settings > Network & Internet > Mobile** ensuring that Mobile Data is on and Use this SIM for mobile data is on. See the [Troubleshooting Specific](#) for SIMs and eSIMs section if you have a problem.

Note: A firmware download to the modem may be needed to ensure compatibility with the Carriers network. You may see a pop-up message in at the bottom right of the screen while this is happening and you should not reboot, restart or power off the computer during this time. The firmware download may take a few minutes.



Using an eSIM to connect to the cellular network service

4 Ways to Obtain an eSIM from your Carrier using Wi-Fi*



Mobile Plans

- a. Mobile Plans is Windows based application where you choose, pay and download your eSIM.
-



QR or Activation code

- a. The Carrier sends you a QR code or activation code
 - b. Type the activation code or use your camera to read the QR code to download the eSIM
-



Carrier Discovery

- a. The Carrier notifies Windows of a new profile
 - b. Windows automatically checks upon first boot or users check manually
-



Company eSIM

- a. Company buys the eSIM from the Carrier in bulk
 - b. The company then uses a management system to download the eSIMS
-

*Customers will need to contact their Carrier to understand which eSIM options they support.

Mobile Plans

You will need connectivity either using Wi-Fi or a SIM before you can use Mobile Plans to obtain an eSIM.

Use: **Start > All Apps > Mobile Plans** to start the Mobile Plans application

Initially you will see the mobile Carrier available for the country the computer believes it is in. You can use the pull down by the country name to choose another country or “Show all Carriers” to show all mobile Carriers in Mobile Plans.

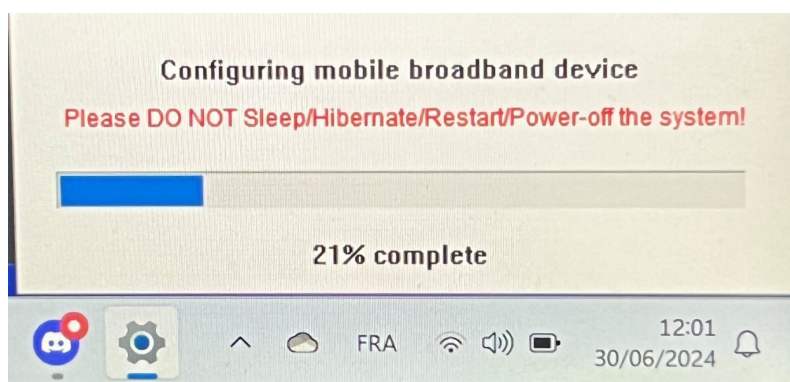
When you select a Carrier you are taken to the website of the Carrier where you will typically:

- Make a new account with the Carrier supplying information such as your name, email and a new password or, if you already have an account on another computer, login. You may have to go through a confirmation via email for a new account.
- Choose the Plan that you want, for example a single country plan or a multiple country plan with the amount of data and length of the plan.
- Pay for the Plan

Once you have paid for the Plan, Mobile Plans will download the eSIM Profile directly to your computer and then update the network settings to connect to the Carriers network.

You can check the connection to the Carrier using: **Start > Settings > Network & Internet > Mobile** ensuring that Mobile Data is on and Use this SIM for mobile data is on eSIM. See the [Troubleshooting Specific](#) for SIMs and eSIMs section if you have a problem.

Note: A firmware download to the modem may be needed to ensure compatibility with the Carriers network. You may see a pop-up message in the bottom right section of the screen while this is happening and you should not reboot, restart or power off the computer during this time. The firmware download may take a few minutes.



QR or Activation Codes Sent by the Carrier

An eSIM Profile can be obtained by a Carrier sending an email with a QR code that gives you a friendly way to download the eSIM Profile without having to type out the lengthy Activation Code. The QR code will be scanned using the computer's camera so either print the code out or display it on your mobile phone's screen.

Example QR Code:

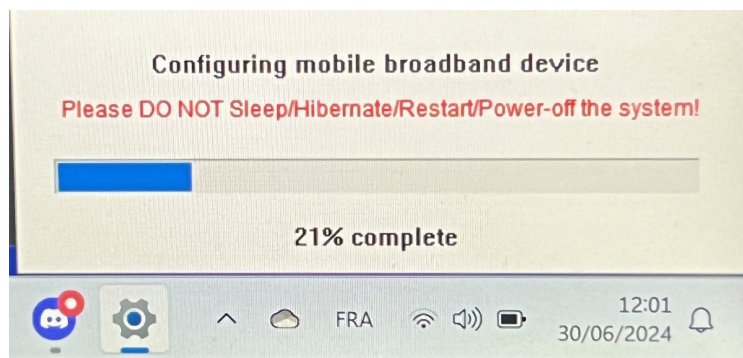


Example Activation Code:
LPA:1\$smgp-plus-0.vb.vd.
kigen.com\$AEBE4387-
0FFB-3720-64EC-
221527C7592D

Steps:

1. Click: **Start > Settings > Network & Internet > Mobile** to ensure the Cellular radio is on
2. Click: **Mobile Data** and check **Use this SIM for mobile data** is set to **eSIM**
3. Scroll down to **eSIM profiles** and click on it.
4. Click: **Add profile**
5. Select: **Let me enter an activation code that I have from my mobile Carrier** and press **Next**
6. The camera will turn on and you need to hold the QR code up to the camera
7. When the QR Code has been read, Microsoft Windows briefly fills in the link prompt, then dependent on the Carrier may put up another screen, then will download the eSIM Profile
8. You then need to select the Profile to use since you may have a few eSIM Profiles to choose from. This is done with **Start > Settings > Network & Internet > Mobile > eSIM Profiles** then Select the eSIM Profile and click the **Use** button.
9. You will see the following message: "This will use cellular data from your data plan and incur charges. Do you want to continue?" to which you click on Yes.
10. You should then check the connection to the Carrier using: **Start > Settings > Network & Internet > Mobile** ensuring that Mobile Data is on and Use this SIM for mobile data is on eSIM. See the Troubleshooting Specific for SIMs and eSIMs section if you have a problem.

Note: A firmware download to the modem may be needed to ensure compatibility with the Carriers network. You may see a pop-up message in the bottom right section of the screen while this is happening and you should not reboot, restart or power off the computer during this time. The firmware download may take a few minutes.



Using a Carriers Discovery Server

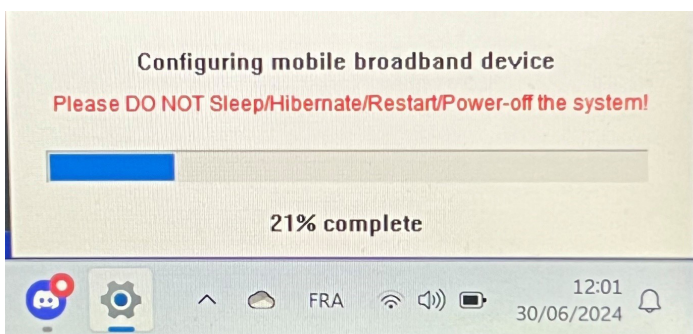
A Carrier can place a notification that an eSIM is ready to download on a Discovery Server. In the Out of the Box Experience (OOBE) when Windows starts up for the first time, Windows will automatically poll this Server after Language, Region and Keyboard Selection at the “Let’s connect you to a network” page, download the eSIM Profile and use the eSIM Profile to connect to the Carriers network.

You can also do this manually:

Steps:

1. Click: **Start > Settings > Network & Internet > Mobile** to ensure the Cellular radio is on
2. Click: **Mobile Data** and check **Use this SIM for mobile data** is set to **eSIM**
3. Scroll down to **eSIM profiles** and click on it.
4. Click: **Add profile**
5. Select: **Search for available profiles**. If no profiles are found, then a generic error message “Something went wrong” will be shown. If a Profile is found, then it will be downloaded.
6. You then need to select the Profile to use since you may have a few eSIM Profiles to choose from. This is done with **Start > Settings > Network & Internet > Mobile > eSIM Profiles** then Select the eSIM Profile and click the **Use** button.
7. You will see the following message “This will use cellular data from your data plan and incur charges. Do you want to continue?” to which you click on **Yes**.
8. You should then check the connection to the Carrier using: **Start > Settings > Network & Internet > Mobile** ensuring that Mobile Data is on and Use this SIM for mobile data is on eSIM. See the Troubleshooting Specific for SIMs and eSIMs section if you have a problem.

Note: A firmware download to the modem may be needed to ensure compatibility with the Carriers network. You may see a pop-up message in the bottom right section of the screen while this is happening and you should not reboot, restart or power off the computer during this time. The firmware download may take a few minutes.



Microsoft Windows is normally set up to use the GSMA Discovery Server which is Internationally recognized and independent of the Carrier. However, some Carriers run their own Discovery Servers, and you may need to manually change the address. You do this by clicking on the **Start > Settings > Network & Internet > Mobile > eSIM Profiles > Default SM-SP server address Edit** button and entering the server address. You then need to manually follow the Steps previously to check the new server address for an eSIM profile.

Company Obtains eSIMs in Bulk from your Carrier

If you are an Enterprise or have many laptops to connect to a Carriers network, then it is usually easier for the Carrier to receive a file with all the information to make the eSIMs for each of the laptops. Typically, this file contains the IMEI and EID for each laptop, which are normally found on the label of the box. If the computer is out of the box and powered on, then you can obtain this information using:

- IMEI from Start > Settings > Network & Internet > Mobile > Carrier Settings
- EID from: Start > Settings > Network & Internet > Mobile > eSIM profiles

If you have bought you laptop directly from Dell you should also receive an email with your IMEI and EID before you receive the device.

Alternately if you have the computer is enrolled into a Mobile Device Manager (MDM) then you can obtain this information from the MDM. For example, in Microsoft Intune you can find this in:

- Devices > All devices > select one of your listed devices to open its details > Hardware

Dell provides a self-service way to find a batch of EIDs and IMEIs for US customers buying hardware directly from Dell. You will receive an email from Dell after devices are built with a link to view and download device details. For other customers, it may be possible that your Dell Sales Representative has access to an internal tool to provide you that information.

Using the eSIM Profile inside your PC

The Start > Settings > Network & Internet > Mobile > eSIM profiles contains a set of buttons for each of the Profiles you have downloaded:

Note: You must have communications using Wi-Fi for Use or Delete to work. You may or may not get an error if they fail due to a communications problem.

The Start > Settings > Network & Internet > Mobile > eSIM profiles contains a set of buttons for each of the Profiles you have downloaded:

- **Use:** If you have an eSIM profile downloaded then it you need to either accept the pop-up or press the **Use** button to enable it after downloading. Ensure you are connected on Wi-Fi before you answer the prompt “This will use mobile data from your plan and may incur charges. Do you want to continue?” to which you answer **Yes** to turn the eSIM on or **No** keep it off but downloaded.
- **Edit name:** If you have an eSIM profile name that is not obvious e.g. TSL_0210 then you can change it to something more sensible like Ubigi at the prompt.
- **Delete:** If you need to delete a downloaded profile, perhaps because your eUICC is getting full, then press the **Delete** button. Ensure you are connected on Wi-Fi before you answer the prompt “This profile will be permanently deleted, and you might need to contact your mobile Carrier to add it again. Continue?” If you press **Yes**, then the profile will be deleted whereas **No** will keep the Profile on your PC.

Using Microsoft Intune to Manage eSIM Profiles

Microsoft Intune has two different ways to add Profiles:

Adding new Profiles into Microsoft Intune by Connecting to the Mobile Carrier

Connect your Microsoft Intune Instance to the mobile Carrier directly or via an Orchestrator like Nokia IMPACT Mobile Device Manager or IDEMIA The Smart Connect Hub. See [eSIM Enterprise Management - Windows Client Management | Microsoft Learn](#)

Adding new Profiles into Microsoft Intune using an eSIM Directory Service

The Enterprise sends a list of EIDs of the computers to the Carrier (see Obtaining eSIMs in Bulk from your Carrier) and the Carrier delivers the profiles by:

Placing them on an eSIM download server (SM-DP+ or SM-DS) which you connect to your Microsoft Intune instance. You need the fully qualified domain name (FQDN of the server but don't need individual activation codes since each computer will pull the correct profile from the eSIM download server. This is managed by the MDM administrator making an eSIM configuration profile with eSIM download server and assigning the configuration profile to the required group(s).

Adding new Profiles into Microsoft Intune by Uploading a File from the Mobile Carrier

The Enterprise sends a list of EIDs and IMEIs of the computers to the Carrier (see Obtaining eSIMs in Bulk from your Carrier) and the Carrier delivers the profiles by sending a CSV file with a set of activation codes and the corresponding EID for up to 1000 computers. This is imported using: **Devices > Manage devices > eSIM cellular profiles > Add** which you then add to a Microsoft Entra Device Group and finally assign to the device using **Devices > Manage devices > eSIM cellular profiles**.

The file format of the CSV file is:

eSIM Download Server FQDN (typically an SM-DP+ address)

ICCID,Activation Code

For example:

smdp.rsp.kigen.com

6798247123401641590, TBQC1B71SSEBCLZU

6798247123401641591, TBQC1B71SSEBCLZV

6798247123401641592, TBQC1B71SSEBCLZW

Note:

1. The activation codes must be unique within the CSV file.
 2. You can only have one list per eSIM Download Server or Carrier so if you need to add new eSIM Activation codes, you either need to add them to the existing one if some of those activation codes remain active or remove the current CSV file and add a new file with the new Activation codes.
 3. If you need more than 1000 activation codes active at one time, we recommend connecting directly to the eSIM Directory Service.
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What Happens to Your eSIM Profile When You Reset or Reinstall Microsoft Windows

In general, if you choose the option resetting or reinstalling Microsoft Windows that preserves your personal data then your eSIM Profile will be kept.

Types of Resetting and Reinstalling

There are three types of reset and reinstall on a Dell PC:

A Reset of Windows 11 is done using one of three methods:

1. Start > Settings > System > Recovery > Reset this PC > Reset PC
2. Restart your PC to get to the sign in screen. Press and hold the “Shift” key while you select the Power icon and then press Restart. You will then see a new screen after your PC restarts instead of the sign on screen where you select Troubleshoot > Reset this PC
3. Select Start then press and hold the “Shift” key while you select the Power icon then with the Shift key still down, select Restart. You will then see a new screen after your PC restarts instead of the sign on screen where you select Troubleshoot > Reset this PC

Note: The Reset PC Wizard has a Settings page that can be reached by clicking on “Change settings” from the “Additional settings” page. The “Additional settings” page normally follows the “How would you like to reinstall Windows?” page.

A Reinstall of Windows 11 is done by downloading the Windows Installation media tool from [the Microsoft software download site](#) and then using the tool to make an Installation media for example, a USB flash drive to then install Windows on your machine.

Where the Dell Support Assist OS Recovery application is supported, you can press F12 while powering on the machine to enter the application.

Note: If you want to delete the user’s files, settings and applications but keep the eSIM Profile because you are e.g. giving the PC to a new employee then you should follow the GUI to:

- Reset Windows 11 for example with Start > Settings > System > Recovery > Reset this PC > Reset PC
- Select: Remove everything
- (Cloud download or Local reinstall doesn’t matter)
- On the Additional settings page, click on “Change settings”
- Turn “Delete eSIM profiles?” to No

eSIM Status for Every Reset and Reinstall Type

The table summarizes whether the eSIM is deleted or preserved for all the different reset and reinstall types:

Reinstall or Reset Type	Reinstall or Reset Option	eSIM Status	Notes
Reset Windows 11	Keep my files	Kept	Independent of the Options for: <ul style="list-style-type: none"> • Cloud download • Local reInstall • Restore preinstalled apps
Reset Windows 11	Remove everything	Deleted	Independent of the Options for: <ul style="list-style-type: none"> • Cloud download • Local reInstall • Restore preinstalled apps
Reset Windows 11	Remove everything/Change Settings/ Delete eSIM profiles? = No	Kept	Whilst you click on "Change settings" the page may have a title of "Choose settings"
Reset Windows 11	Remove everything/Change Settings/ Delete eSIM profiles? = Yes	Deleted	Whilst you click on "Change settings" the page may have a title of "Choose settings"
Reinstall Windows 11 using installation media	Keep Everything (default)	Kept	
Reinstall Windows 11 using installation media	Keep Personal Data	Kept	
Reinstall Windows 11 using installation media	Keep Nothing	Kept	
Clean install by booting from a USB drive with a Windows image	N/A (This deletes and remakes all disk partitions)	Kept	
Using Deployment Image Servicing and Management (DISM.exe)	N/A	Kept	
Dell Support Assist OS Recovery	Reset to Factory Settings	Kept	
Dell Support Assist OS Back Up Files / Disk Cloning	Backup	Not backed up	The eSIM Profile cannot leave the PC so cannot be backed up.

Troubleshooting Specific for SIMs and eSIMs

Dell Mobile Broadband (WWAN) Module not detected on a reimaged Computer

In some cases, when you reimage a Windows computer, the Dell Mobile Broadband (WWAN) is not detected by the Device Manager after being reimaged. Please see: [Dell Mobile Broadband \(WWAN\) Module Not Detected on a Re-imaged Dell Personal Computer | Dell US](#).

Physical SIM Inserted but No Cellular Signal

- Check that you can see Cellular in Start > Settings > Network & Internet. If you cannot then your computer has a SIM slot but no modem hardware (sometimes called WWAN card). You therefore have ordered the computer without a modem but the good news is that it can be field upgraded. Please talk to your Dell Sales representative to do the upgrade.
- Check that the nanoSIM card is installed correctly in the tray (metallic contacts facing down and the notch to the back left of the tray) and that it is fully inserted into the body of the computer.
- Check that the nanoSIM card has been activated by your Carrier.
- If you have a cellular signal but no Internet see later in the section.

Repeated downloading of modem software

It is possible that using a Profile will cause firmware to be downloaded to the modem. This may take a few minutes and may consist of multiple downloaded parts with multiple messages in the bottom right of your screen. If you interrupt the download process then it may have to restart at the beginning so it may feel like you are repeatedly downloading the same software.

Please just wait a few minutes for the software download to happen.

The software to be downloaded to the modem does not require Internet access as it is stored in the modem driver inside Microsoft Windows.

Cellular Signal Shows Connected but no Internet Access

- Check that you have a valid subscription with the mobile Carrier, for example, if the SIM or eSIM has given Microsoft a link to the Carriers account settings then you can use Start > Settings > Network & Internet > Mobile > Connection settings > **View my account** to check the subscription status. Alternatively, you can call, message or check the Carriers website.
- The Mobile Carrier APN (Access Point Name, the way to connect to the Internet over the Carriers network rather than the cellular radio network) may not be known to Windows. This will be true for most Private 5G networks and some MVNOs (mobile virtual network operators) that use eSIM but not Microsoft Windows Mobile Plans.

In this case you'll need to add the APN in Start > Settings > Network & Internet > Mobile > Carrier settings using the button **Add APN**. You will need to ask your Carrier or search the web for "APN Settings" to find the APN, Username (if necessary) and Password (if necessary) and Type of sign-in info (if necessary, otherwise leave as **None**). The Profile name is your choice, and the APN type should be changed from default to **Internet and attach**.

QR Code Problem

- The QR Code scanner in Microsoft Windows requires the QR code to be large and doesn't always read the QR code off a mobile phone screen. You may have to print the code out and hold the paper up to the camera.
- The QR code is simply a pictorial of the Activation Code URL so if you see the Activation Code text box filled in then the issue is not reading the QR code but with the Activation Code URL itself.

Activation Code Problem

- If you type directly into the Activation Code text box note that it is sensitive to spaces so please check carefully that what you typed matches the Activation Code.
- Sometimes the Activation Code URL contains text in [] placed by security products that check URLs for security issues, for example: LPA:1\$smdp-plus-0.nu.ad.asp.kiren.com [smdp-plus-0.nu.ad.asp.kiren.com]\$AVBE4687-1FFB-3120-64EC-55B5F7CA592D has had [smdp-plus-0.nu.ad.asp.kiren.com] inserted into it so won't be a valid Activation Code. The Activation Code is: LPA:1\$smdp-plus-0.nu.ad.asp.kiren.com\$AVBE4687-1FFB-3120-64EC-55B5F7CA592D

Downloading the Profile or Finding the Discover Server Problem

- Finding the Discovery Server or downloading the eSIM Profile relies on the computer being able to reach the Discovery Server and download the Profile over HTTPS.
- Corporate Enterprise Firewalls and other network infrastructure e.g. VPNs need to be made aware of the eSIM Discovery Server (SM-DS and SM-DP+) to allow downloading of the eSIM Profile. If they are not made aware then they will unwillingly block the eSIM Profile download which will result in a strange or vague error message. You may have to download the eSIM Profile outside of the Corporate network.

To explore Dell's PCs with mobile broadband capabilities, visit <https://www.dell.com/en-us/lp/connected-pc>

For further help related to activating your SIM, please reach out to your preferred Carrier.