Environment Variables

Based on: http://www.digitalcitizen.life/simple-questions-what-are-environment-variables

What are Environment Variables in Windows?

The concept exists in most operating systems, from Linux to MacOS to Windows. In principle they mean the same thing but the way they are implemented and used differs.

Environment variables are, in short, variables that describe the environment in which programs run. They are used by all kinds of programs and scripts to answer questions like: What is the name of the computer? Where I am installed? What is the name of the user running me? What is my current working directory? Where is Windows installed? Where are temporary files stored?

In Windows, **environment variables** have a name and a value. For example, the variable "**windir**" (short for "Windows directory") may have the value "*C:\Windows*" or another path where Windows is installed.

Another common variable is named **"PATH"**. Many programs need to know where to find certain files, and the PATH variable tells them where they can find what they need. Such programs look for a PATH variable automatically so you don't have to type it all in every time you run the program. The PATH variable has a value consisting of many directories. These directories are added to the PATH variable by different programs installed on the computer.

Types of Environment Variables: User and System

There are two types of variables: **user variables**, specific to each user account, and **system variables** that are the same for all user accounts.

User variables have values that differ from user to user. As their name implies, they are specific to your user account and they store user specific data, like the location of your user profile, the folder where temporary files are stored, etc. They can be edited by that user account but not by other user accounts. These variables can be set by the user, by Windows or by different programs working with user specific locations.

System variables are global and cannot be changed by any user. Their values are the same for all user accounts. They generally refer to locations of important system resources, like the folder where Windows is installed, the location for program files, etc. These variables are set by Windows, by different programs and drivers.

Which are the Standard Environment Variables in Windows?

There is a long list of variables existing on each and every computer. You can find the entire list and all their default values on Wikipedia:Environment variables - Default Values on Microsoft Windows.
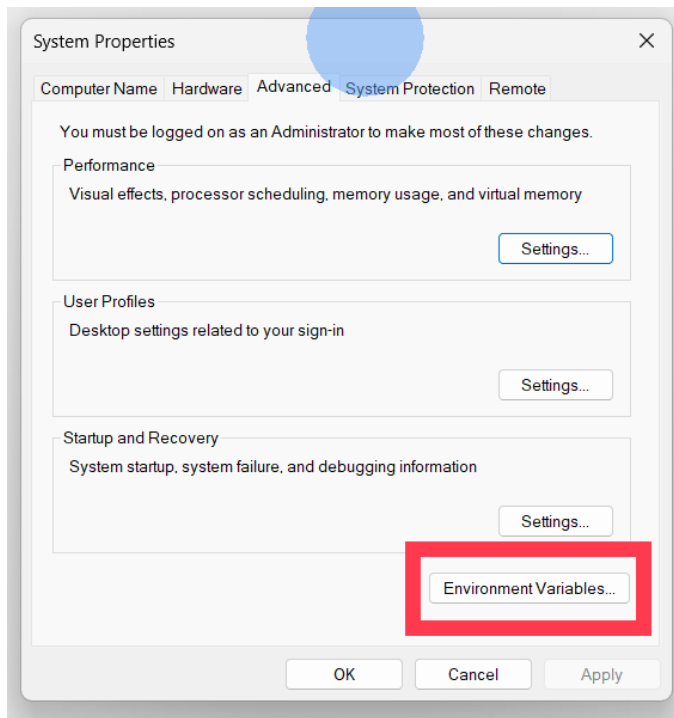
Where to Find the Environment Variables Existing in Windows?

Viewing the environment variables existing in Windows involves quite a few steps. In Windows 11, type the word *environment* while in the *Start*screen, filter by *Settings* and two search results will be displayed: "*Edit environment variables for your account*" and "*Edit the system environment variables*". Click or tap the option *Edit environment variables for your account.*
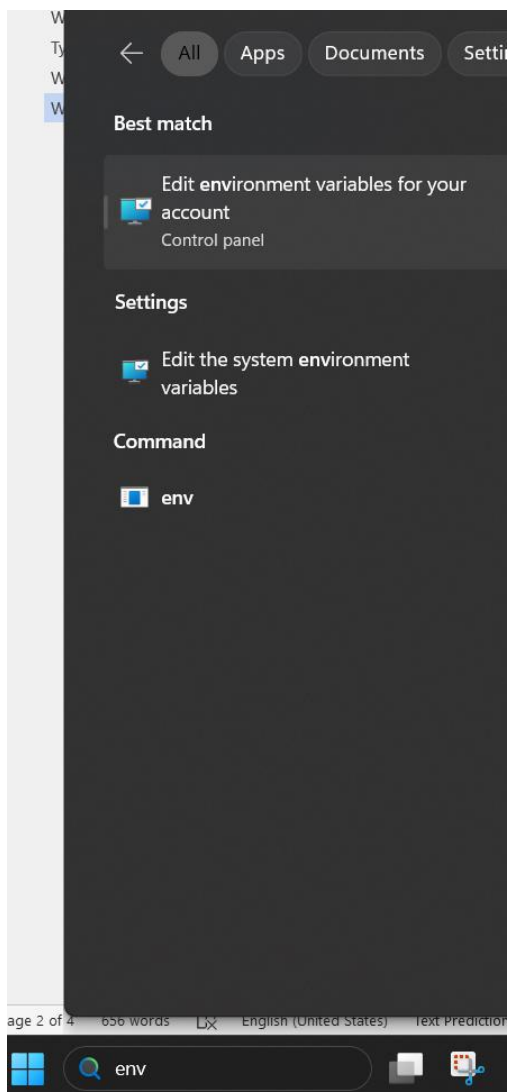
Alternatively, you can access them via Settings:
(WinKey + I) → System → About → Advanced System Settings → Environment
Variables...

Upon displaying the environment variables modal box, on the top, it displays your user's variables and on the bottom, it displays the system variables, valid for all user accounts existing on that machine.
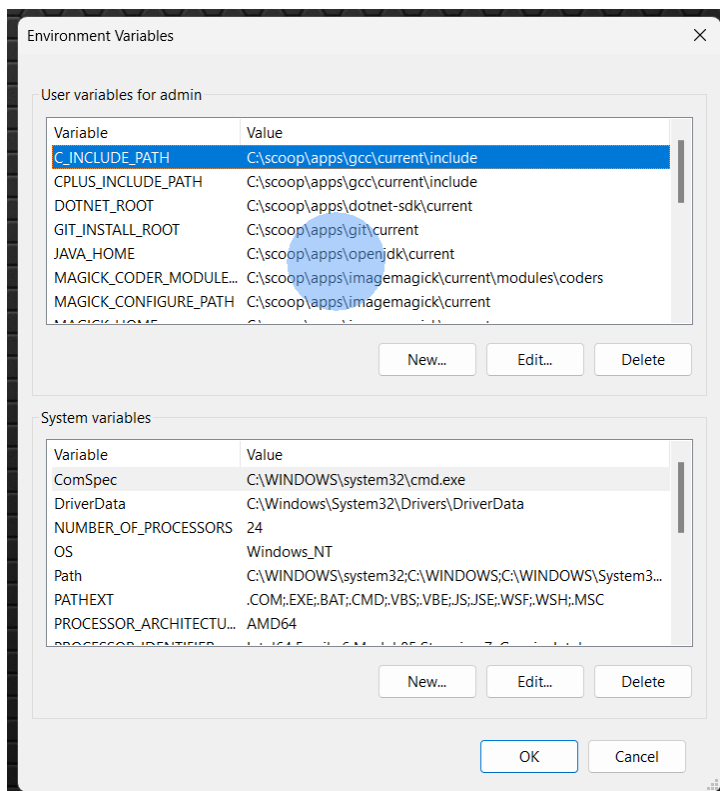
If you are a fan of the *Command Prompt*, you can view all the environment variables by typing the command: **SET**, without any other parameters.

All environment variables are listed, but they are not split depending on their type (user or system variables).

NOTE OF CAUTION:

The fact that you can find them does not mean you should play around with them unless you are sure you know what you are doing.