

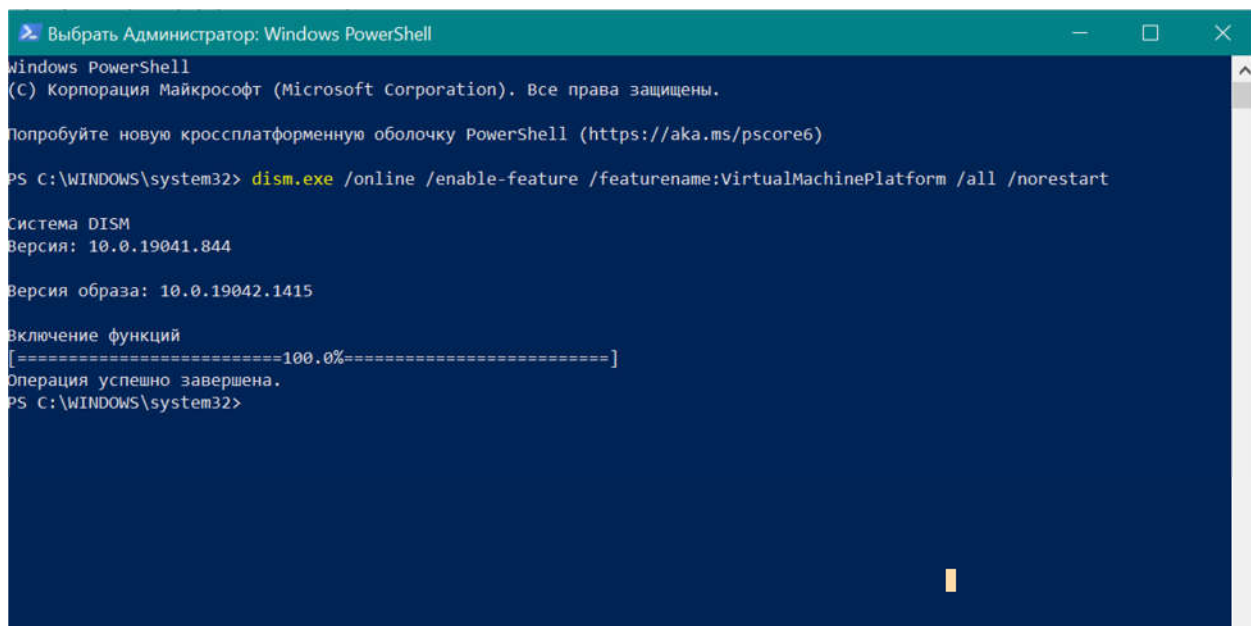
Module 1. WSL installation.

Prerequisites

You must be running Windows 10 version 2004 and higher (Build 19041 and higher) or Windows 11.

To check your Windows version and build number, press Windows logo key + R, type `winver`, select OK. You can update to the latest Windows version by selecting Start > Settings > **Windows Update** > Check for updates.

1. Open PowerShell as Admin;
2. Type `dism.exe /online /enable-feature /featurename:VirtualMachinePlatform /all /norestart`;



```
Выбрать Администратор: Windows PowerShell
Windows PowerShell
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Попробуйте новую кроссплатформенную оболочку PowerShell (https://aka.ms/pscore6)

PS C:\WINDOWS\system32> dism.exe /online /enable-feature /featurename:VirtualMachinePlatform /all /norestart

Система DISM
Версия: 10.0.19041.844

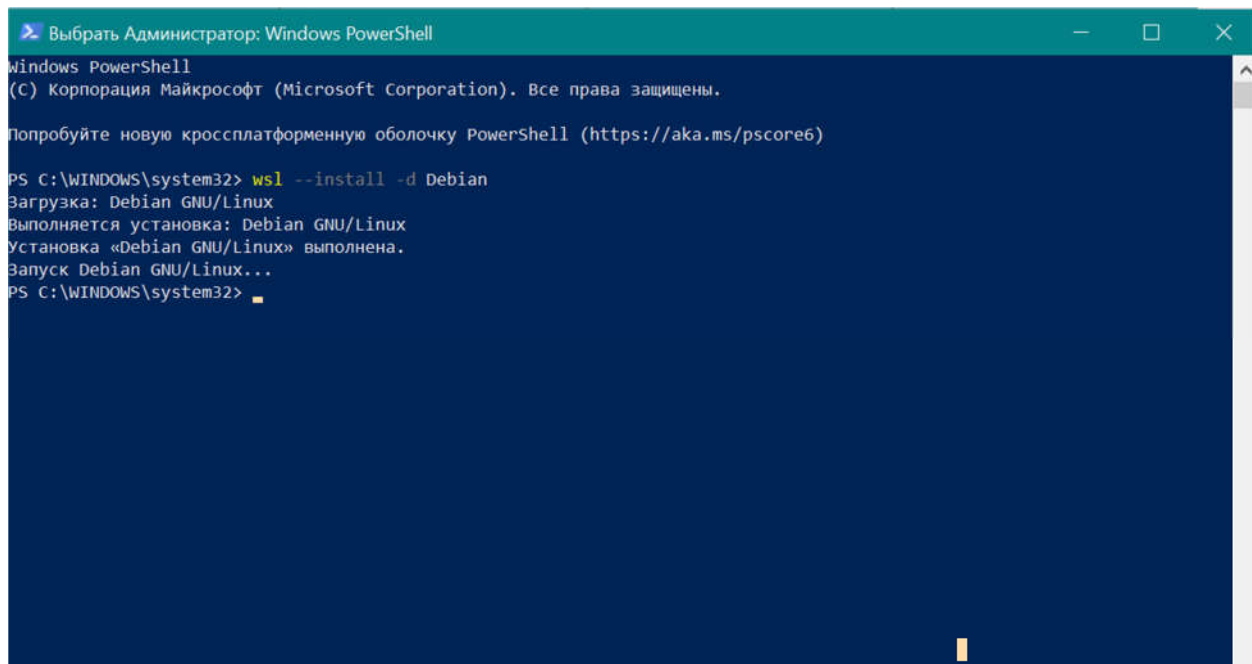
Версия образа: 10.0.19042.1415

Включение функций
[=====100.0%=====]
Операция успешно завершена.
PS C:\WINDOWS\system32>
```

3. Restart your machine.

Step 1. Install Debian.

1. Open PowerShell as Admin;
2. Type `wsl --install -d Debian`; You can also download it from [Microsoft Store](#);
3. Wait till Debian packages download and install on your PC.



```
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Попробуйте новую кроссплатформенную оболочку PowerShell (https://aka.ms/pscore6)

PS C:\WINDOWS\system32> wsl --install -d Debian
Загрузка: Debian GNU/Linux
Выполняется установка: Debian GNU/Linux
Установка «Debian GNU/Linux» выполнена.
Запуск Debian GNU/Linux...
PS C:\WINDOWS\system32>
```

4. Wait until Debian finishes the installation.

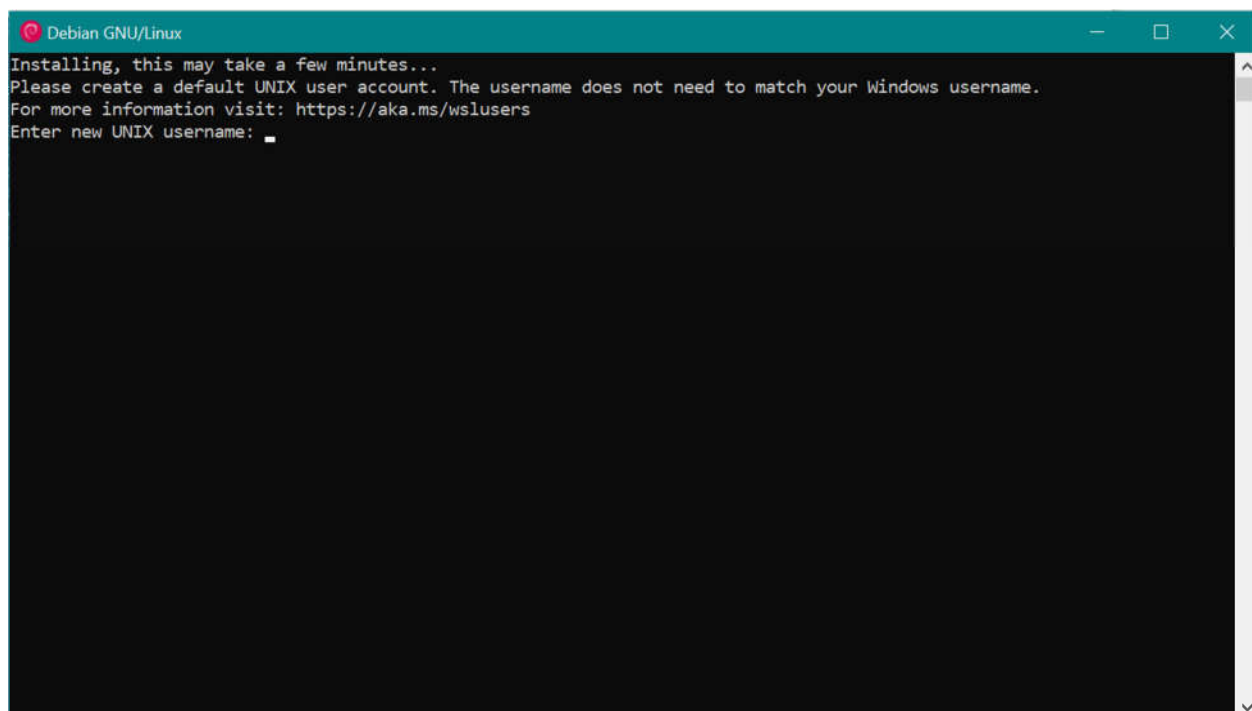


5. Restart your PC.

Step 2. Create a new profile.

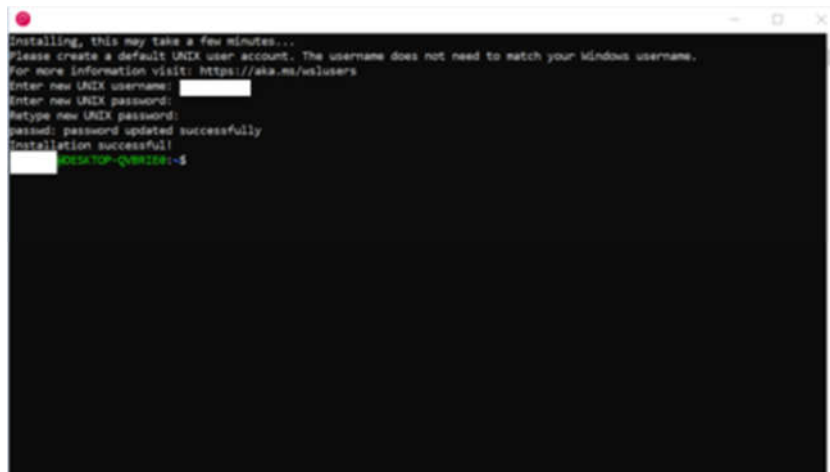
In order to proceed with Debian, you will need to create a new UNIX account (if you haven't used it before).

1. Enter a desired UNIX username.



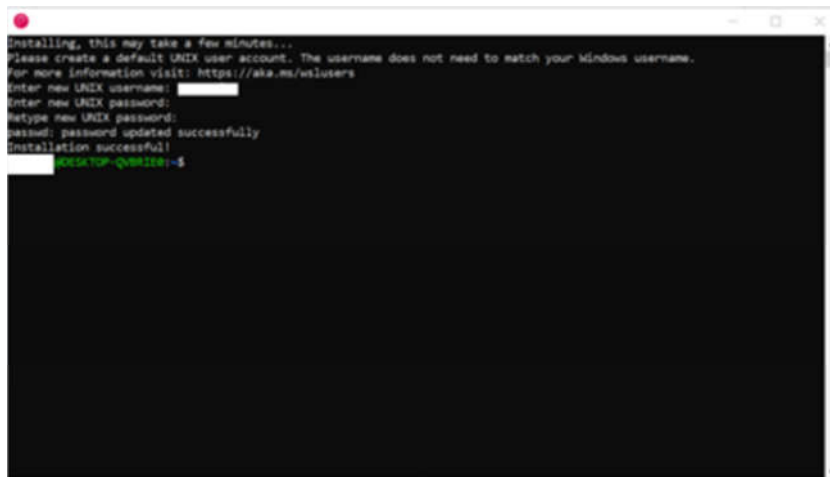
```
Debian GNU/Linux
Installing, this may take a few minutes...
Please create a default UNIX user account. The username does not need to match your Windows username.
For more information visit: https://aka.ms/wslusers
Enter new UNIX username: 
```

2. Enter a UNIX password. Make sure that you do not forget the password for a new UNIX account.



```
Installing, this may take a few minutes...
Please create a default UNIX user account. The username does not need to match your Windows username.
For more information visit: https://aka.ms/wslusers
Enter new UNIX username: [redacted]
Enter new UNIX password: [redacted]
Retype new UNIX password: [redacted]
passwd: password updated successfully
Installation successful!
MINGW64~$
```

3. Retype a new UNIX password.



```
Installing, this may take a few minutes...
Please create a default UNIX user account. The username does not need to match your Windows username.
For more information visit: https://aka.ms/wslusers
Enter new UNIX username: [redacted]
Enter new UNIX password: [redacted]
Retype new UNIX password: [redacted]
passwd: password updated successfully
Installation successful!
MINGW64~$
```

4. Use Debian.

Step 3 (optional). Install Ubuntu.

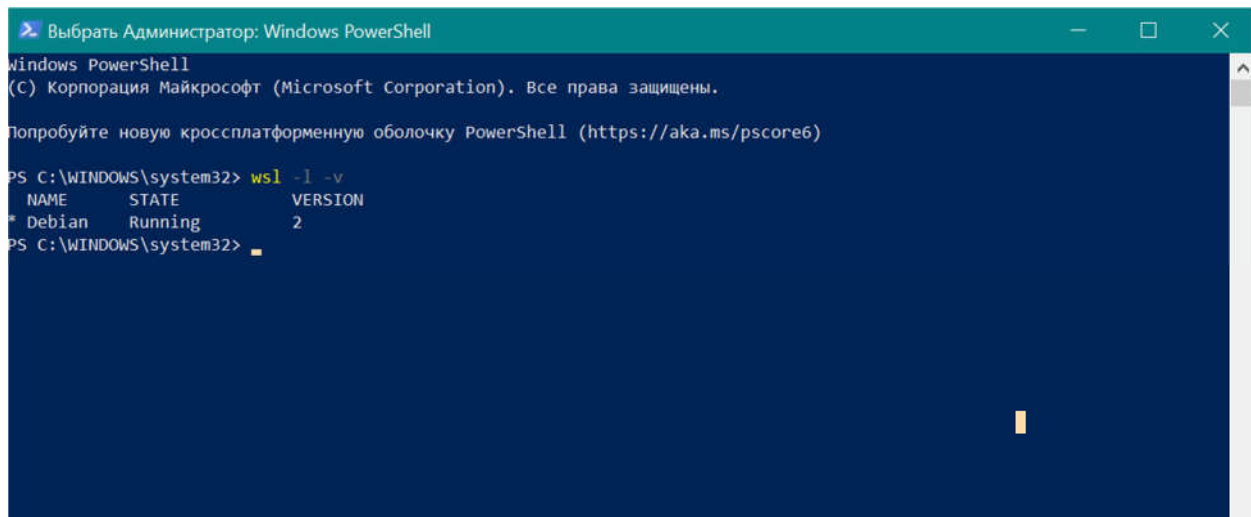
This step is optional and you don't need to have Ubuntu installed on your local PC.

1. Open PowerShell as Admin;
2. Type `wsl --install`;
3. Wait till Ubuntu packages download and install on your PC.

The above command only works if WSL is not installed at all. If you have run `wsl --install` and see WSL help text, try `wsl --list --online` to see a list of available distributions. Then run `wsl --install -d <DistroName>` to install the distribution.

Step 4. Check the WSL version and update if applicable.

1. Open PowerShell as Admin;
2. Type `wsl -l -v` to check which version of WSL is installed on your machine.

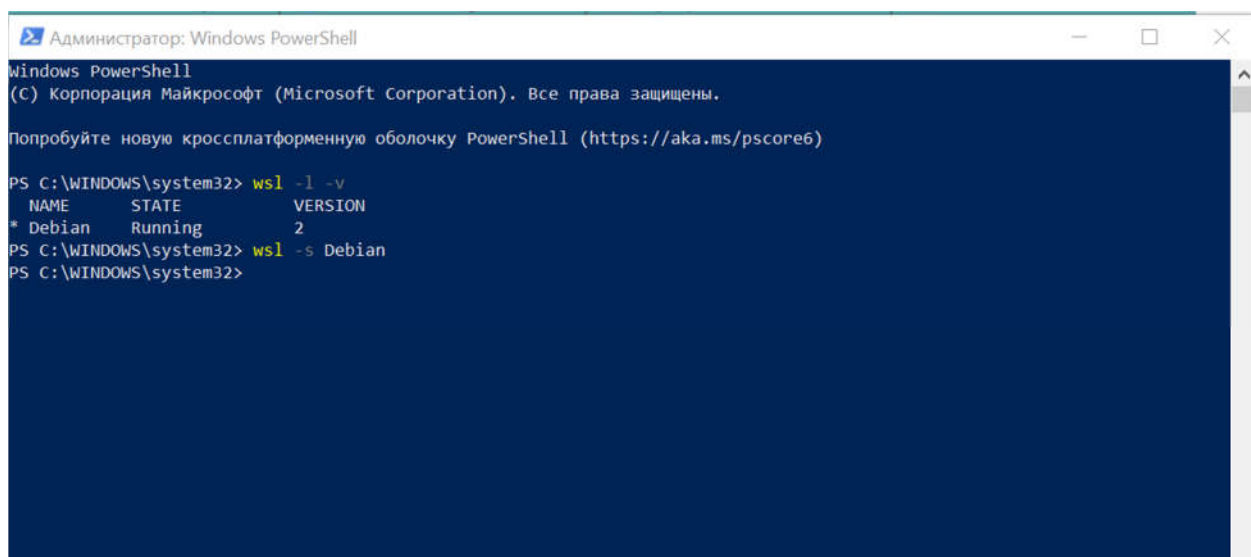
A screenshot of a Windows PowerShell terminal window titled "Выбрать Администратор: Windows PowerShell". The terminal shows the command `wsl -l -v` being executed, which displays a table of installed WSL distributions. The table has three columns: NAME, STATE, and VERSION. It lists one distribution, Debian, which is in the "Running" state and version 2. The prompt is `PS C:\WINDOWS\system32>`.

NAME	STATE	VERSION
* Debian	Running	2

3. In case you have version 1, type `wsl --set-default-version 2` in order to update WSL;

Step 5. Set Debian as the default Linus distribution.

1. Open PowerShell as Admin;
2. Type `wsl -s Debian` or `wsl --setdefault Debian`;

A screenshot of an Administrator Windows PowerShell terminal window. It shows the same `wsl -l -v` command and output as the previous screenshot. Below that, the command `wsl -s Debian` has been entered and executed. The prompt is `PS C:\WINDOWS\system32>`.

NAME	STATE	VERSION
* Debian	Running	2

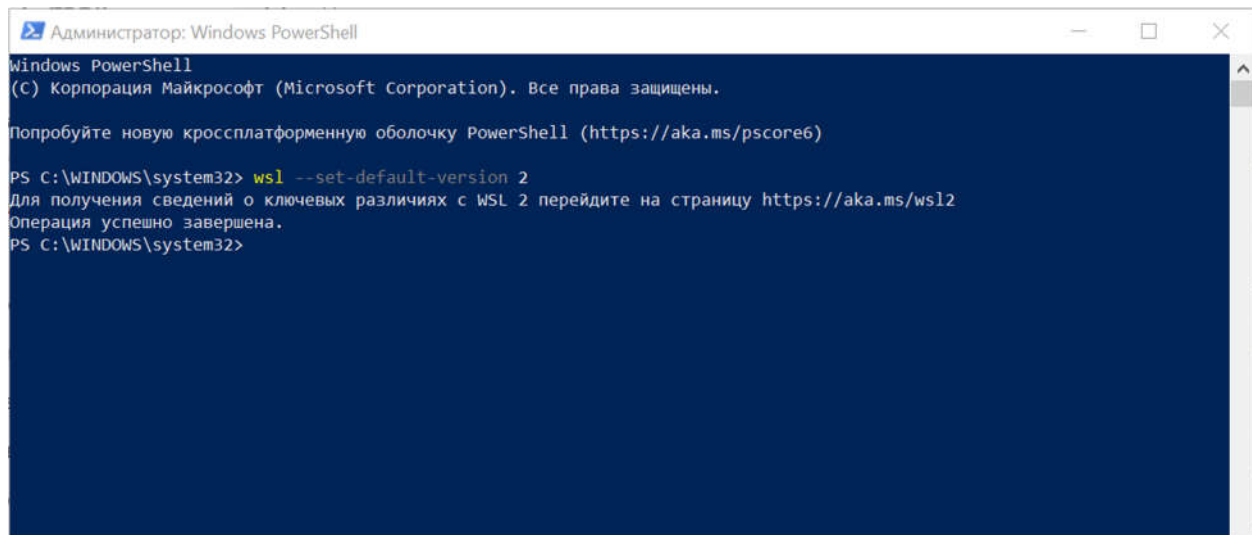
Now running `wsl npm init` from PowerShell will run the `npm init` command in Debian.

Step 6. Update Debian distribution.

1. Open PowerShell as Admin;
2. Type `wsl --set-version Debian 2`.

Step 7. Set WSL 2 as your default version.

1. Open PowerShell as Admin;
2. Type `wsl --set-default-version 2`.



```
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PS C:\WINDOWS\system32> wsl --set-default-version 2
Для получения сведений о ключевых различиях с WSL 2 перейдите на страницу https://aka.ms/wsl2
Операция успешно завершена.
PS C:\WINDOWS\system32>
```

Visit [official documentation](#) in case you are stuck at any step.

Module 2. Docker installation.

Prerequisites

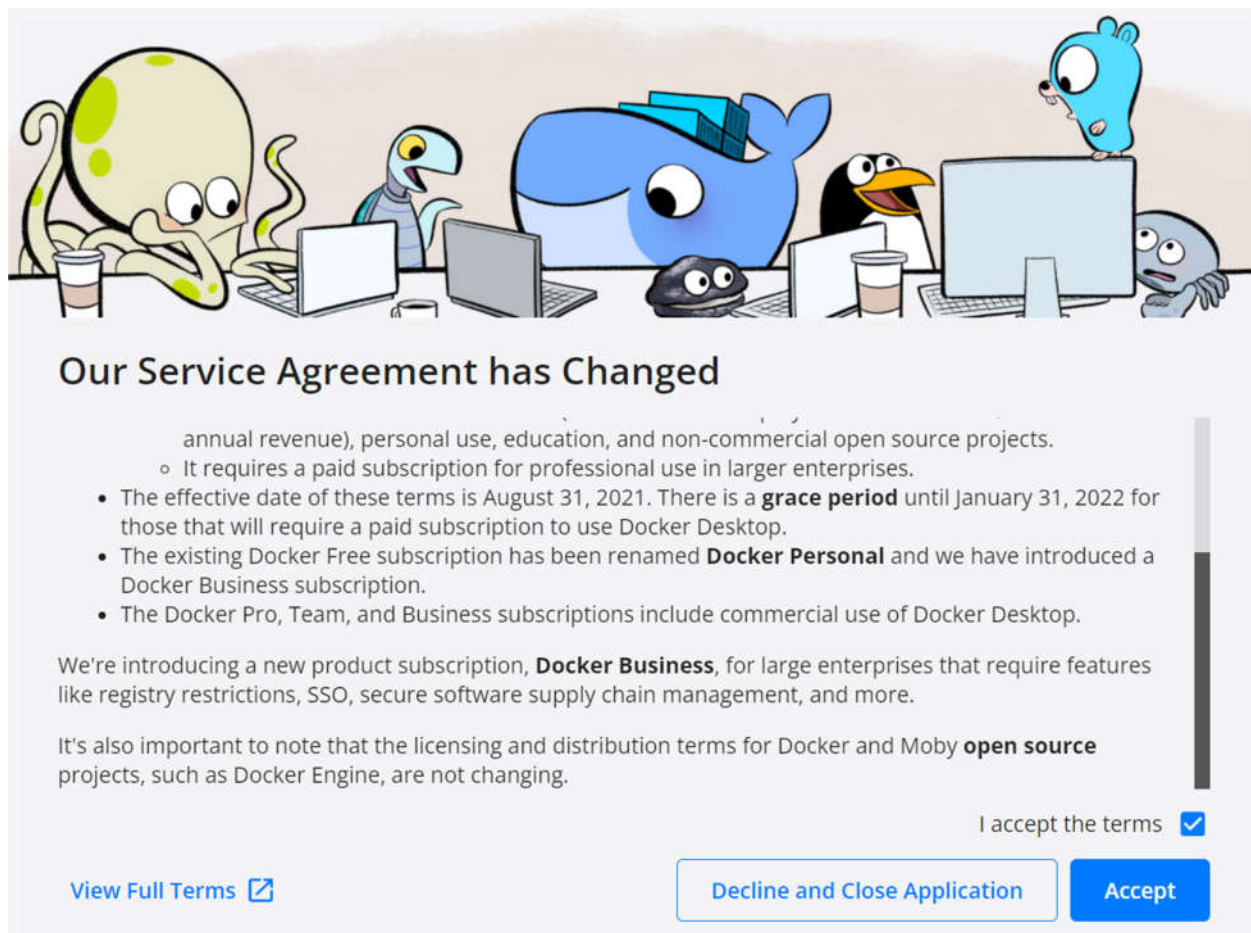
Before you start the installation of Docker, you must be sure that all steps described in the Module 1 are executed.

Step 1. Download Docker.

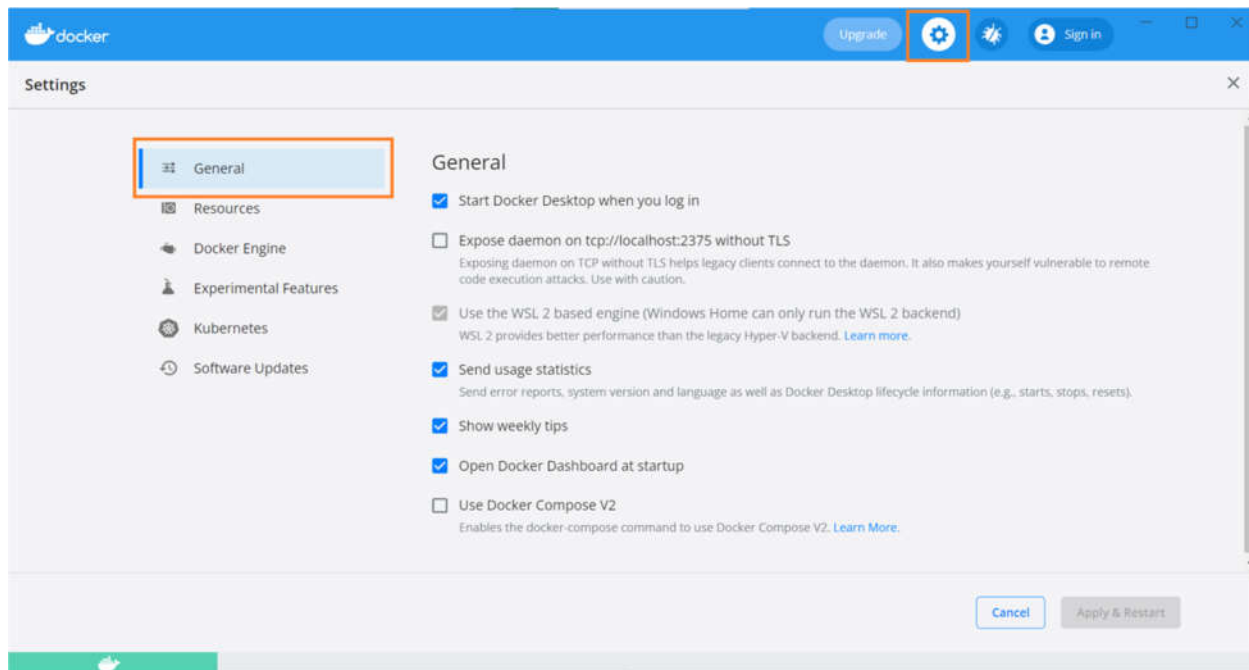
Download [Docker Desktop 2.3.0.2](#) or a later release.

Step 2. Install Docker.

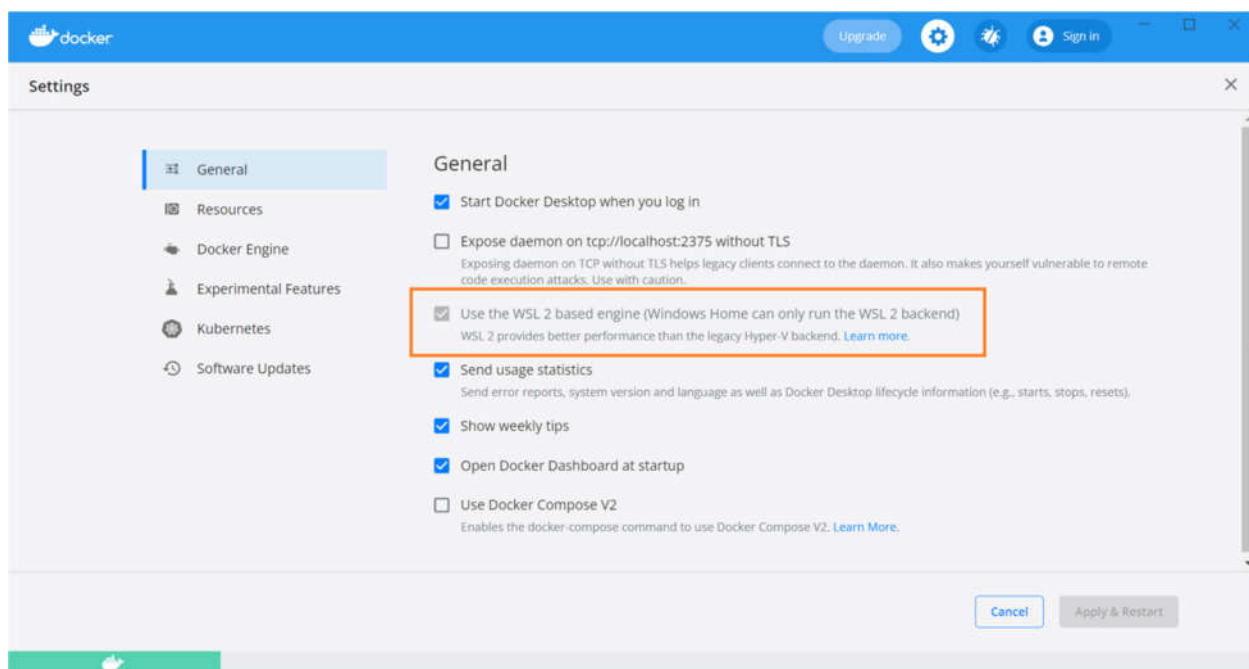
1. If you are running a supported system, Docker Desktop prompts you to enable WSL 2 during installation. Read the information displayed on the screen and enable WSL 2 to continue.
2. Start Docker Desktop from the Windows Start menu. Read and accept Service Agreement.



3. Go to Settings in the top right corner and select the “General“ tab.



4. Select “Use WSL 2 based engine” check box. If you have installed Docker Desktop on a system that supports WSL 2 (after completing Module 1 of this document), this option will be enabled by default.



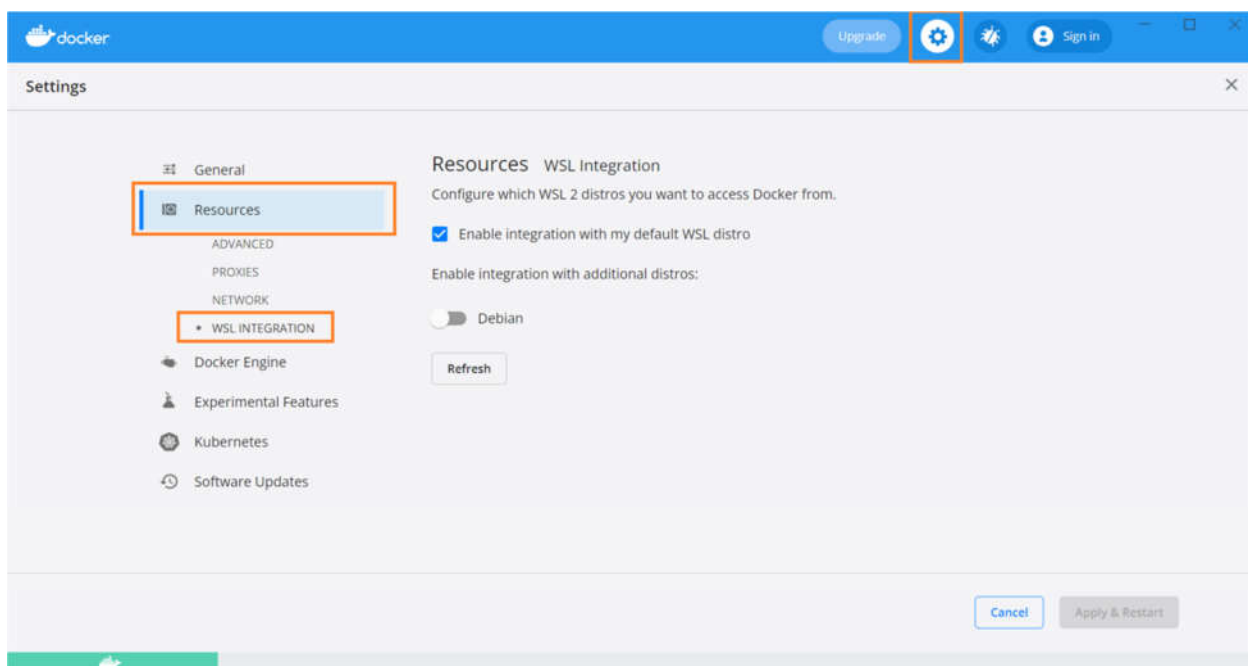
5. Click “Apply & Restart”. If the Module 1 was followed, you can skip this step.
6. Ensure the distribution runs in WSL 2 mode. WSL can run distributions in both v1 or v2 mode. To check the WSL mode, run: `wsl.exe -l -v`. Version 2 should appear. If not, type `wsl.exe --set-version Debian 2` and `wsl.exe --set-default-version 2`.

```
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Попробуйте новую кроссплатформенную оболочку PowerShell (https://aka.ms/pscore6)

PS C:\WINDOWS\system32> wsl.exe -l -v
NAME                STATE      VERSION
* Debian             Running    2
docker-desktop      Running    2
docker-desktop-data Running    2
PS C:\WINDOWS\system32>
```

7. When Docker Desktop restarts, go to Settings > “Resources” > “WSL Integration”.



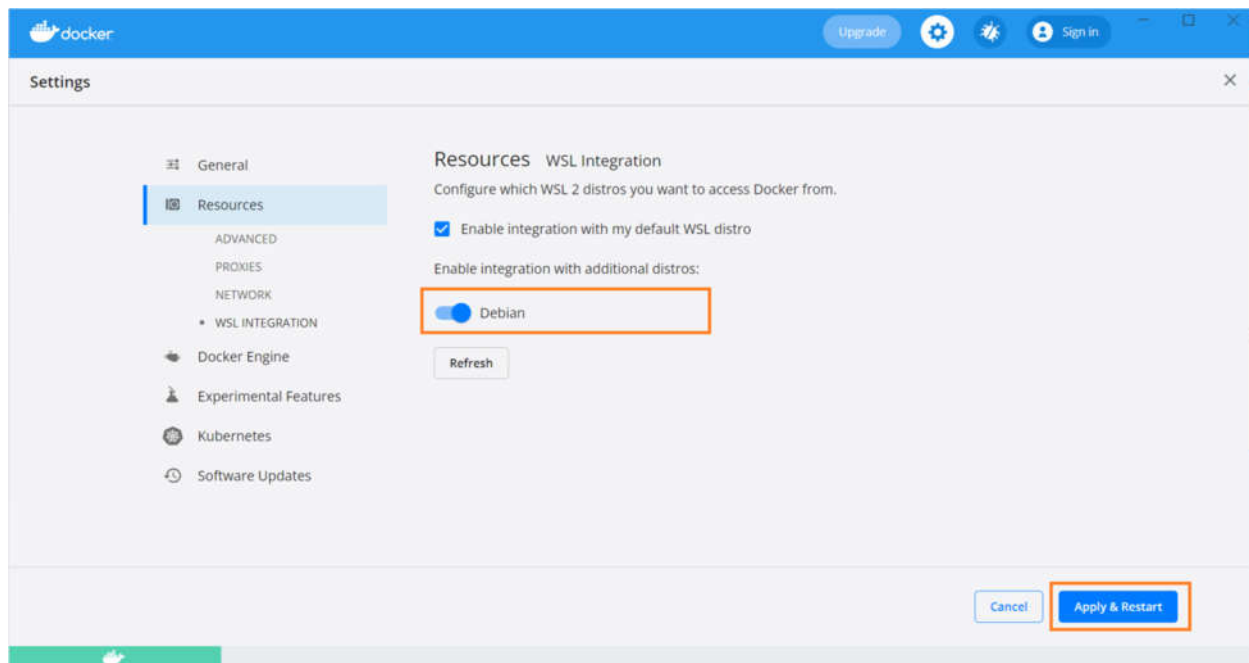
8. Type `wsl --set-default Debian`.

```
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Попробуйте новую кроссплатформенную оболочку PowerShell (https://aka.ms/pscore6)

PS C:\WINDOWS\system32> wsl.exe -l -v
NAME                STATE      VERSION
* Debian             Running    2
docker-desktop      Running    2
docker-desktop-data Running    2
PS C:\WINDOWS\system32> wsl --set-default Debian
PS C:\WINDOWS\system32>
```

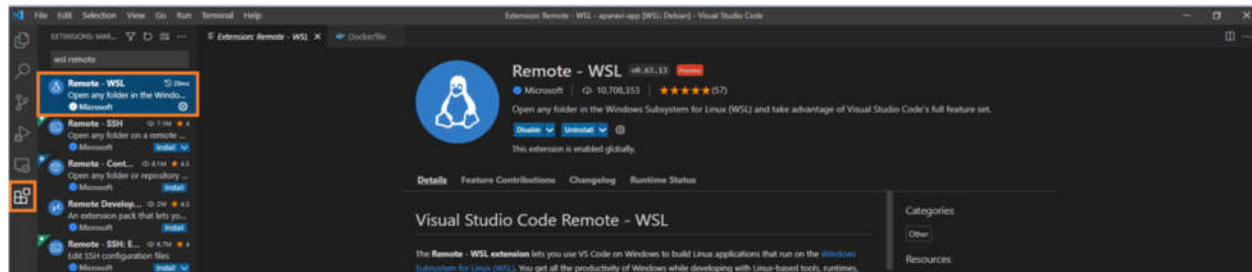

9. Switch the slider button “Enable integration with additional distros:” for the Debian option and click “Apply & Restart” button.



Module 3. VSCode integration.

Step 1. Install Remote - WSL plugin in VSCode.

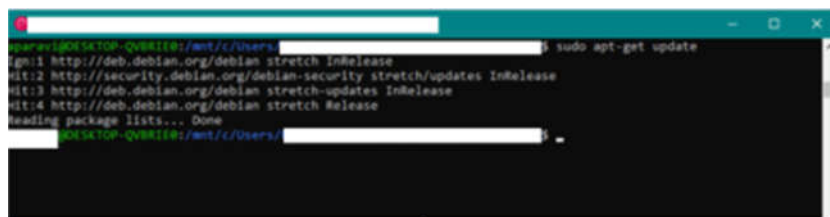
1. Open VSCode.
2. Go to “Extensions“ and find the “WSL - Remote“ plugin.



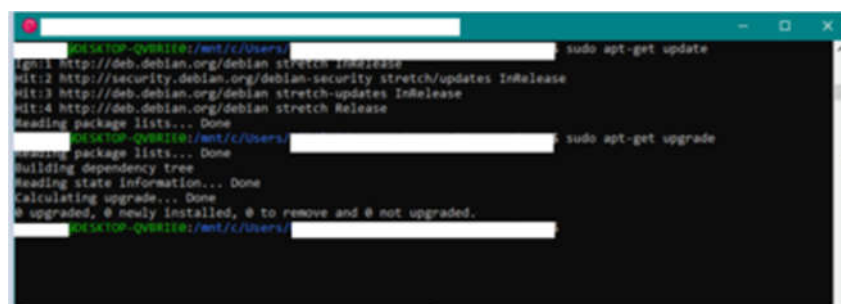
3. Install WSL - Remote plugin.
4. Restart VSCode.

Step 2. Update your Debian dependencies.

1. Open Debian Terminal.
2. Type `sudo apt-get update`. Enter the password (if applicable) and wait till the command is executed.



3. Type `sudo apt-get upgrade`. Enter the password (if applicable) and wait till the command is executed.



4. Navigate to the folder with a project.
5. Type `code .` to launch the VSCode. In the bottom left corner you will observe a green box with the current status of the WSL Server.

