

LAB 1: Introduction to Networking

Contents

How to use the lab guides	2
Introduction to LAB 1	2
Exercise 1: Explore, download and install Cisco Packet Tracer	2

How to use the lab guides

The lab guides in this training are designed to be completed in class or at home. This means that depending on your time and availability, you can accomplish the tasks in each lab either during (after) the corresponding lecture, use it as a homework or split it for class/home work as you wish. Important is that you are finished with each lab before the date of the next lecture.

Introduction to LAB 1

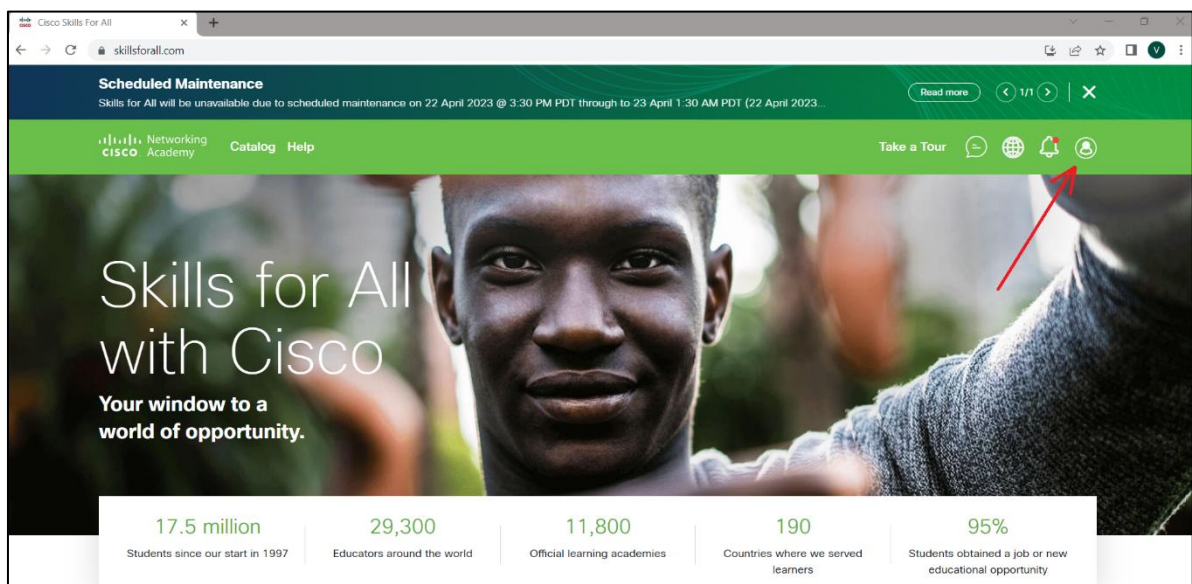
In this first LAB, you will be asked to download and install Cisco Packet Tracer and to spend some time learning how to use it. This simulator will be your primary tool for practicing with network configuration commands, protocols, and configurations.

Exercise 1: Explore, download and install Cisco Packet Tracer

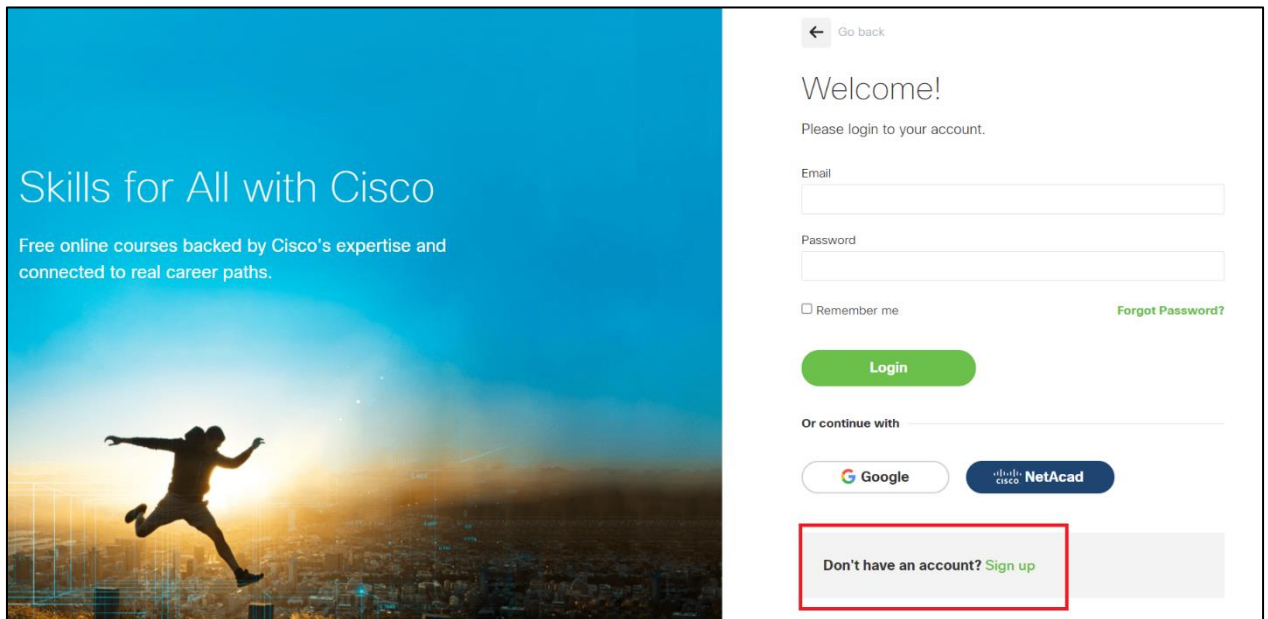
In this exercise, you are going to do the following:

- Register an account at **Skills For All**
- Watch the online course to learn how to work with it
- Download and install the **Cisco Packet Tracer** simulator on your computer

1. Navigate to <https://skillsforall.com/>
2. Click on the **Login/Sign up** button at the top right

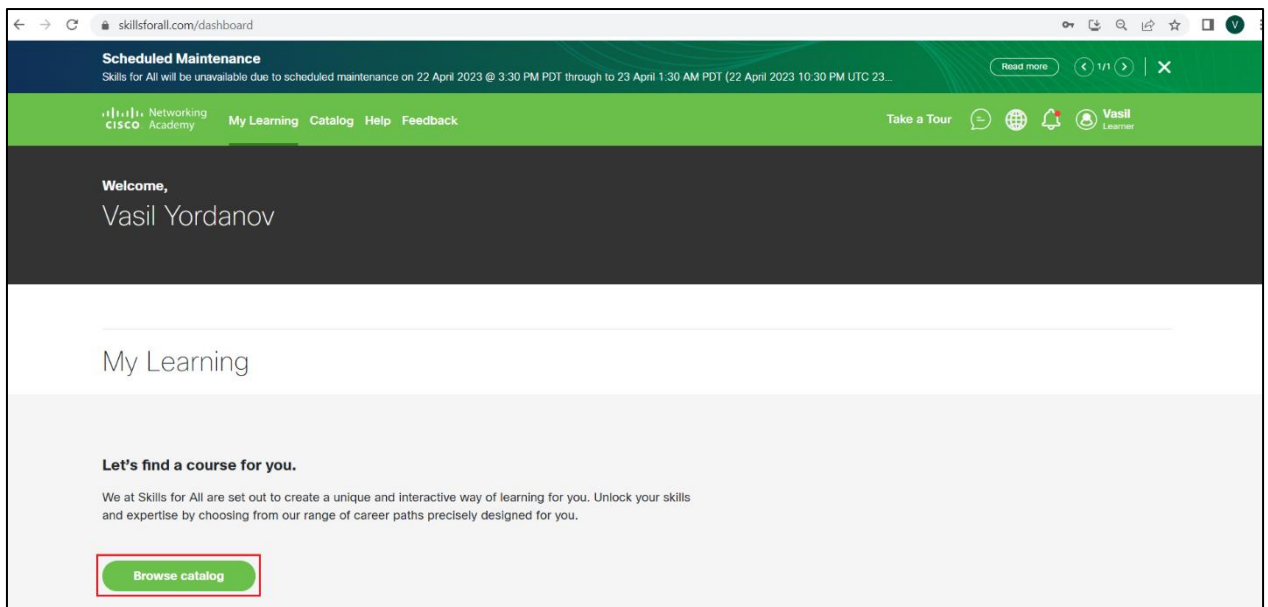


3. Click on **Sign up** and follow the steps to create an account. Accept the Terms & Conditions and click **Accept & Continue**



The image shows the login and sign-up interface for 'Skills for All with Cisco'. On the left, a large banner features a silhouette of a person jumping over a cityscape at sunset, with the text 'Skills for All with Cisco' and 'Free online courses backed by Cisco's expertise and connected to real career paths.' On the right, the login section includes a 'Go back' link, a 'Welcome!' message, and a prompt to 'Please login to your account.' Below this are input fields for 'Email' and 'Password', a 'Remember me' checkbox, and a 'Forgot Password?' link. A green 'Login' button is present. Below the login section, there's a section for 'Or continue with' featuring Google and NetAcad logos. At the bottom, a red box highlights the 'Sign up' link, which is preceded by the text 'Don't have an account?'.

4. When you register and login, you will be presented the **My Learning** page. Click on **Browse catalog**



The image shows the 'My Learning' dashboard for a user named Vasil Yordanov. At the top, there's a 'Scheduled Maintenance' banner. Below it is a navigation bar with 'Networking Academy', 'My Learning', 'Catalog', 'Help', and 'Feedback'. The main content area starts with a 'Welcome, Vasil Yordanov' message. Below this is the 'My Learning' section, which includes a heading 'Let's find a course for you.' and a paragraph about the learning experience. A red box highlights the 'Browse catalog' button at the bottom of this section.

5. In the **Learning Catalog**, you have to find the **Getting Started with Cisco Packet Tracer** course. To make this easier, filter by selecting **Course** in the **Category** section and also select **Beginner** in the **Level** section. When you find the course, click on it to open it

Scheduled Maintenance
Skills for All will be unavailable due to scheduled maintenance on 22 April 2023 @ 3:30 PM PDT through to 23 April 1:30 AM PDT (22 April 2023 10:30 PM UTC 23...)

Networking Academy | My Learning | Catalog | Help | Feedback | Take a Tour | Vasil Learner

Learning Catalog

Category

- ☒ Course
- ☐ Video
- ☐ Resources
- ☐ Career Path
- ☐ Learning Collections

Level

- ☒ Beginner
- ☐ Intermediate

Course
Introduction to Cybersecurity

Languages: English, Español +4

Explore the exciting field of cybersecurity and why cybersecurity is a future-proof career.

6 Hours | Free | Beginner

Course
Getting Started with Cisco Packet Tracer

Languages: English, Español +3

Your on-ramp to Cisco Packet Tracer. Get familiar with the simulation environment and download the latest version.

2 Hours | Free | Beginner

6. Click on **Get Started** to launch the course

Scheduled Maintenance
Skills for All will be unavailable due to scheduled maintenance on 22 April 2023 @ 3:30 PM PDT through to 23 April 1:30 AM PDT (22 April 2023 10:30 PM UTC 23...)

Networking Academy | My Learning | Catalog | Help | Feedback | Take a Tour | Vasil Learner

Catalog > Getting Started with Cisco Packet Tracer

Getting Started with Cisco Packet Tracer

This course is part of the **Learning Collections - Cisco Packet Tracer**

Your on-ramp to Cisco Packet Tracer. Get familiar with the simulation environment and download the latest version.

LANGUAGES AVAILABLE

English

Get Started

Meet our innovative network simulation and visualization tool, Cisco Packet Tracer. This virtual lab is an interactive way to practice networking, IoT, and cybersecurity – no hardware required! This course introduces you to the Cisco Packet Tracer simulation environment. Learn how to use Cisco Packet Tracer to visualize and simulate a network using everyday examples. Practice your skills with interactive virtual lab activities, and hone your problem-solving skills, too. Get valuable tips and best practices and gain confidence to use this powerful tool in later courses or for your own practice.

Enroll to download Cisco Packet Tracer for free and get started today!

Free
No purchase required, anytime.

2 Hours
Estimated time to complete – but finish it in your time.

Beginner

7. Inside the course, navigate to **Download and Use Cisco Packet Tracer** and then **1.0. Install Cisco Packet Tracer**.

The screenshot shows the Cisco Networking Academy interface. At the top, there's a green header with 'Scheduled Maintenance' and a 'Read more' link. Below this is a navigation bar with 'Networking Academy', 'My Learning', 'Catalog', 'Help', and 'Feedback'. On the right, there are icons for 'Take a Tour', a search icon, a globe, a bell, and a user profile 'Vasil Learner'. The main content area is titled 'Getting Started with Cisco Packet Tracer' and includes a sub-header 'Download and Use Cisco Packet Tracer'. A sidebar on the left shows a list of steps: 'Getting Started with Cisco Packet Tracer', 'Download and Use Cisco Packet Tracer' (highlighted with a red box), 'Create a Cisco Packet Tracer Network', and 'Course Completion Assessment & Survey'. The main content area has a heading 'Module 1: Download and Use Cisco Packet Tracer' and a sub-heading '1.0. Install Cisco Packet Tracer' (also highlighted with a red box). It includes instructions to 'Scroll down and select "Install Cisco Packet Tracer" to begin.' and a 'Trouble Viewing Content?' link.

8. Scroll down until you find the download link

The screenshot shows a section titled '1.0.3 Download Cisco Packet Tracer'. On the left, there is a large green circular icon with a white downward arrow. To the right of the icon, the text reads: 'To obtain and install your copy of Cisco Packet Tracer, please follow the instructions from the link below:'. Below this text, a red box highlights the URL: <https://skillsforall.com/resources/lab-downloads>.

9. Click on the link from the screenshot above (it is [this one](#), but you have to be logged in) and you will see the links for downloads

To obtain and install your copy of Cisco Packet Tracer, please follow these simple steps:

Step 1. Download the version of Packet Tracer you require.

[Packet Tracer 8.2.1 MacOS 64bit](#)
[Packet Tracer 8.2.1 Ubuntu 64bit](#)
[Packet Tracer 8.2.1 Windows 64bit](#)

Step 2. Launch the Packet Tracer install program.

Step 3. Launch Cisco Packet Tracer by selecting the appropriate icon.

Step 4. When prompted, click on Skills For All green button to authenticate.

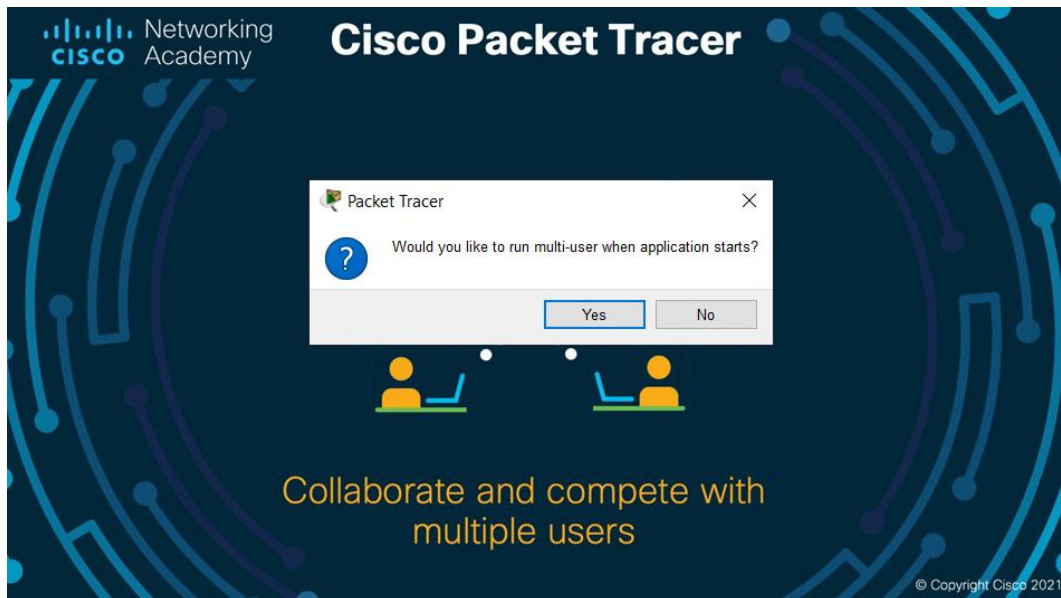
Step 5. Cisco Packet Tracer will launch and you are ready to explore its features.

If you need more guidance, please follow the [Cisco Packet Tracer Download and Installation Instructions](#).

System Requirements:

Computer with either Windows (10, 11), MacOS (10.14 or newer) or Ubuntu (20.04, 22.04) LTS operating system, amd64(x86-64) CPU, 4 GB of free RAM, 1.4 GB of free disk space

10. Download the appropriate version for you (we recommend the Windows version, if you have multiple platforms) and install it on your computer
11. If you receive a firewall security alert (for the Windows installations), click on **Allow access**
12. First time you run the simulator, you may receive a **Would you like to run multi-user when application starts?** question. We are not going to use this feature, so you can answer with **No**



Note: Although you have already downloaded a copy of the software and installed it locally, you still need to login with your **Skills For All** account when you use it. That is why having an account is not optional.

13. You should now have installed and logged in to Cisco Packet Tracer. Please have a look around and play with it by adding devices and connecting them. In the next lab, we will start building topologies and explore different protocols for communication.
14. [Optional] Return to the **Getting Started with Cisco Packet Tracer** course and review the materials (text and video) to get familiar with the simulator
15. [Optional] You may want to also register an account in [Cisco Networking Academy](#). The idea is that this account can be used as a backup authentication method in the cases when **Skills For All** site is unavailable, for example due to scheduled maintenance. To do this, go to **Log In** -> **Login** in the top right and then select **Sign up**

You have completed LAB 1.