Overview of DevNet

In this Learning Lab you will learn how to use DevNet to access information, tools, and community support for network programming and application development.

Objective

Completion Time: 15 minutes

• Understand the features of DevNet.
• Learn how to access support.
• How to join the community and conversations.

Prerequisites

• You are ready to learn and ready to ask questions.

How to Join the DevNet Community

About DevNet

DevNet is Cisco's resource and professional community for network engineers and application software developers working with Cisco APIs and platforms. Joining the community is free of charge and carries no requirements or obligations. And what you get is pretty awesome. Like the ability to follow and participate in technical support forums where you can get answers quickly to questions from fellow community members who may be a few steps further along the same path that you are on. Plus, you'll be able to create your own DevNet profile, so you can receive information about events and opportunities specific to your area of interest. There's more of course, but let's get started...

Step 1: Create Account

Go to https://developer.cisco.com/site/devnet/overview and complete the steps to becoming a DevNet member. You'll be asked to create a Cisco ID first. If you already have a Cisco ID, you can go directly to Step 2 to create your DevNet account.

cisco DevNet   Discover   Technologies   Community   Support
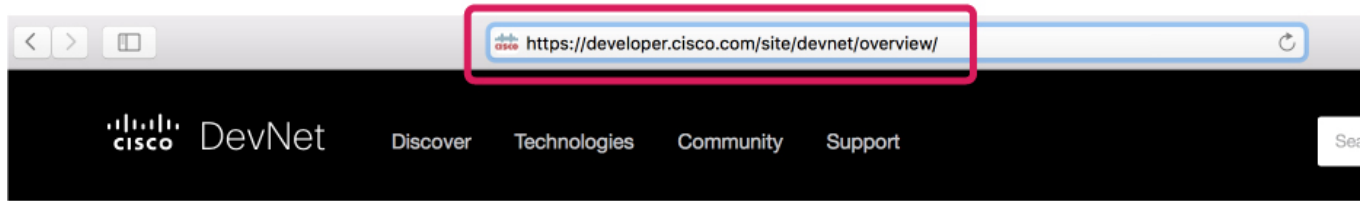
Overview

3 simple steps to becoming a DevNet member

Becoming a member of the DevNet Community is free, easy, and gives you access to useful resources and tools.

Step 1	Step 2	Step 3
Create a Cisco ID › (if you don't already have one)	Log in to DevNet and create your account ›	Complete your profile (at any time) and earn points towards Cisco DevNet badges.

What's DevNet all about?

We're all about providing developers with the tools, the resources, and the code you need to build innovative, network-enabled solutions.

Whether you're automating network management or hooking up a zillion devices in an IoT app, DevNet aims to get your questions answered so you can keep your project moving.

Update Profile

★ denotes required fields

Work Areas

Who are you? *

Other

# Step 2: Find your area of interest on DevNet

DevNet has information, tools and services for a wide range of Cisco technologies, ranging from SDN and network programming to Data Center, Cloud, Collaboration, Security, and IoT.
Go to the DevNet home page. Click on "Technologies" in the top navigation. Use the left hand navigation in the pull down mega

menu to explore the many Cisco technologies for which tools and learning tracks are available to you.

Step 3: Explore Cisco's DNA

Select "Networking" from the left side mega menu, then click on "Go to the Dev Center." Here you can explore and learn about Cisco DNA (Digital Network Architecture) building blocks and programmable interfaces.
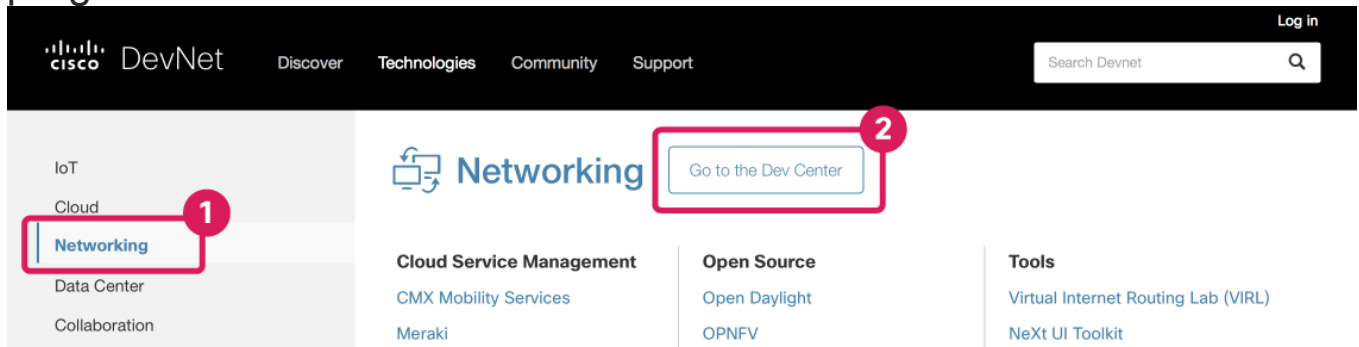
Step 4: Explore Other Technologies

Click the Cisco DevNet logo in the upper left corner to return to the DevNet homepage. Then return to the "Technologies" menu from the top navigation to explore the tools and learning tracks in other Cisco technologies. (Hint: you can take a shortcut to a Dev Center page by clicking on the color icons under the homepage main banner.)

Dive deeper. Explore the Documents, Downloads, Learnings, Videos for One of the APIs

There are hundreds of APIs (Application Programming Interfaces)

available via DevNet. APIs open up new opportunities for coders to create network aware applications, and network engineers to set policy for those applications in the network. In this learning lab we'll take a look at just one of those APIs -- APIC-EM -- so you can see the scope of learning tools available. APIC-EM is an SDN controller for policy based automation of the network infrastructure, simplifying deployment and network operations. All the capabilities are exposed via a REST API.

Step 1: Go to the DevNet home page.

Click on "Technologies" in the top navigation. Using the left hand navigation in the pull down mega menu, select "Networking" from the left side mega menu, find APIC-EM in the menu and click on it.
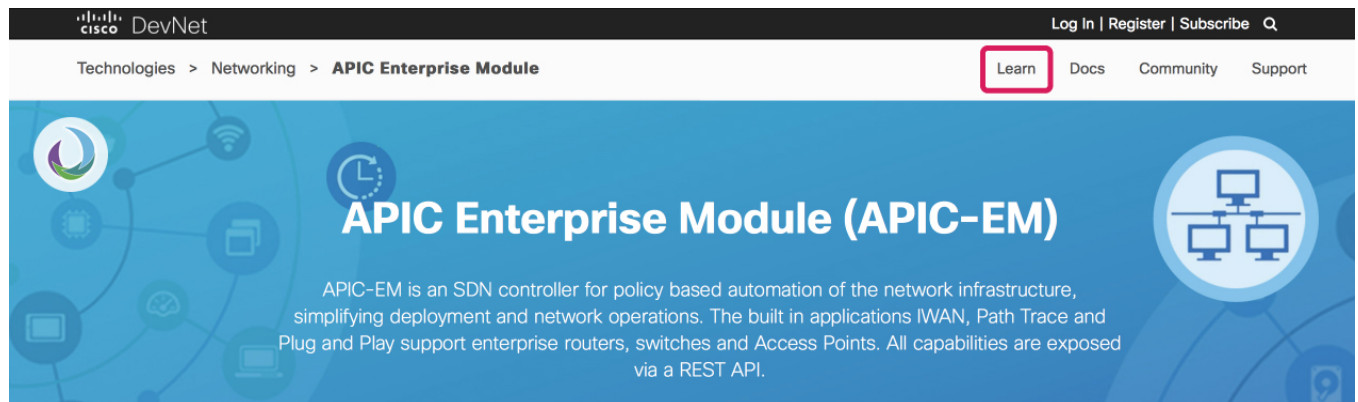
Step 2: Click on "Docs"

Welcome to the APIC-EM site on DevNet. In the upper right navigation, click on "Docs."
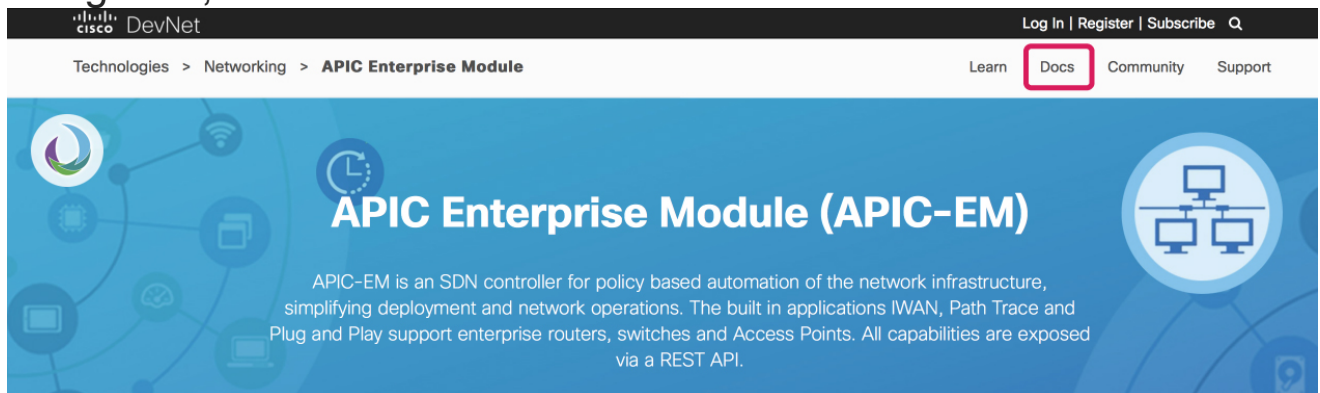
In the left hand navigation on the Docs page you'll find Guides, Reference Docs, Downloads, and Resources that will help you learn more about APIC-EM. There are also video tutorials for you to watch.

Step 3: Click on "Learn"

Click on "Learn" in the upper right hand navigation.

Here you'll find labs that will help you learn how to automate and simplify network operations by using Python to implement the APIC-EM policy based controller REST API.

Feeling adventurous? Give one of the modules a try, or keep going to the next step.

Explore More of DevNet

Finding Cisco DevNet events near you

DevNet participates in and sponsors events around the world. Some are live, some virtual. Some are huge, like our DevNet Zones at Cisco Live. Some are small meet-ups. DevNet provides you with opportunities to find and attend coding camps, hackathons, workshops, and conferences to further develop your skills, make professional connections, and grow your career.

Step 1: Go to Events Page

From the DevNet home page. Click on "Discover" in the top navigation. This will open the Discover mega menu. In the mega menu, right column, under "Connect," click on "Events".

cisco DevNet | Discover | Technologies   Community   Support
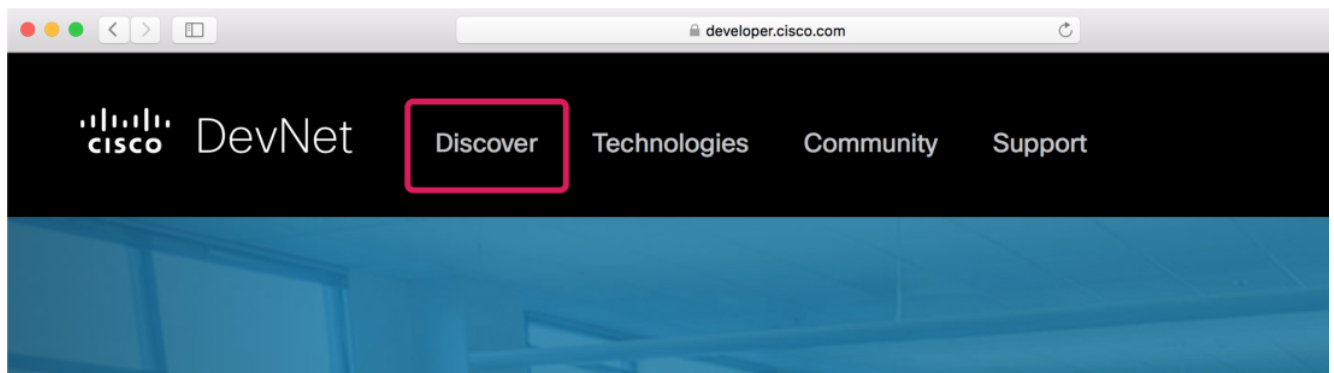
Step 2: Find Events Near You

Browse the list of upcoming and past events. Perhaps you'll find an event near or important to you. Click on any event to find out more.

Exploring DevNet Learning Tracks

Learning Tracks provide a guided path to learn selected Cisco technologies. Based on DevNet Learning Labs, a track is made up of modules, which in turn are composed of learning labs. Some modules also focus on general knowledge in programming, networking, and related topics.

Step 3: Click on "Learning Tracks"

From the DevNet home page. Click on "Discover" in the top navigation. This will open the Discover mega menu. In the mega menu, left hand column under "Learn," click on "Learning Tracks."

Step 4: Explore Other Tracks

Browse the many different Learning Tracks on the page. Click on any track to further explore the modules and labs in each track.

DevNet Developer Sandbox

Whether you want to be a coder yourself or work on the IT operation/DevOps side of the business, you'll either be working with code, or working with coders. Either way, you need to know

about code. You've seen where DevNet provides learning labs and events to help you learn about code. DevNet also provides live sample code on GitHub to help you get started with Cisco APIs, and development lab environments called "Sandboxes" for integrating and testing code with live, hosted infrastructure.

Step 5: Click on "Sandbox Remote Labs"

From the DevNet home page. Click on "Discover" in the top navigation. This will open the Discover mega menu. In the mega menu, second column under "Code," click on "Sandbox Remote Labs".

Step 6: Explore Other Sandbox Labs

Check out the different Sandbox development labs that DevNet offers. Click on any of these to see the full range of available labs.
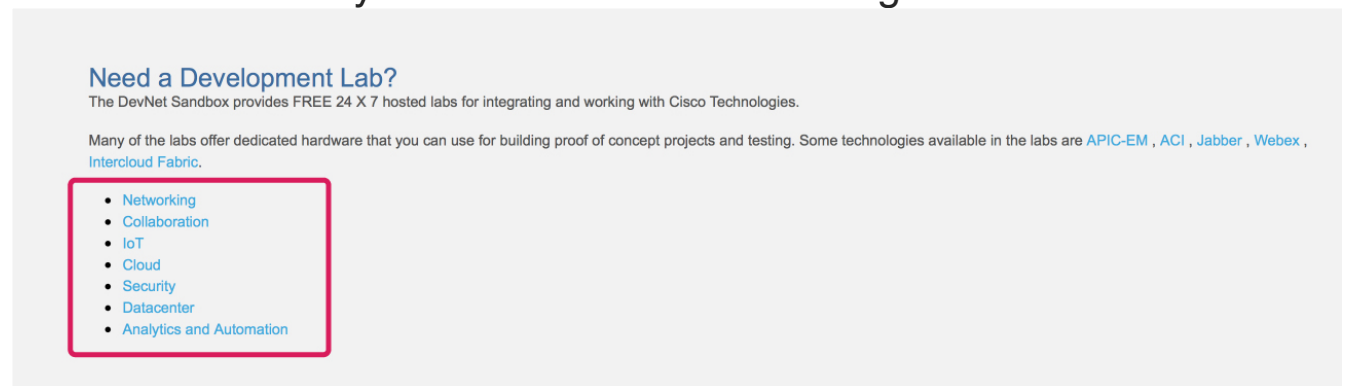
DevNet Creations

DevNet Creations is a platform for ideas, innovations, and inspiration. It's a place where you can connect with peers, get involved in projects, and showcase your own innovations.

Step 7: Click on "DevNet Creations"

From the DevNet home page. Click on "Discover" in the top navigation. In the mega menu, third column under "Inspire," click on "DevNet Creations" to see some of the latest innovations from DevNet community members.

Perhaps you'll be back here soon with a project of your own!

Support: Just ask... DevNet is here for you

DevNet offers two types of support for developers and network engineers creating solutions with Cisco APIs – Live support via chat, and interactive support via moderated technical forums.

Step 1: Get Started

From the DevNet home page. Click on "Support" in the top navigation. In the left column under "Overview" click the "Get Started" button.
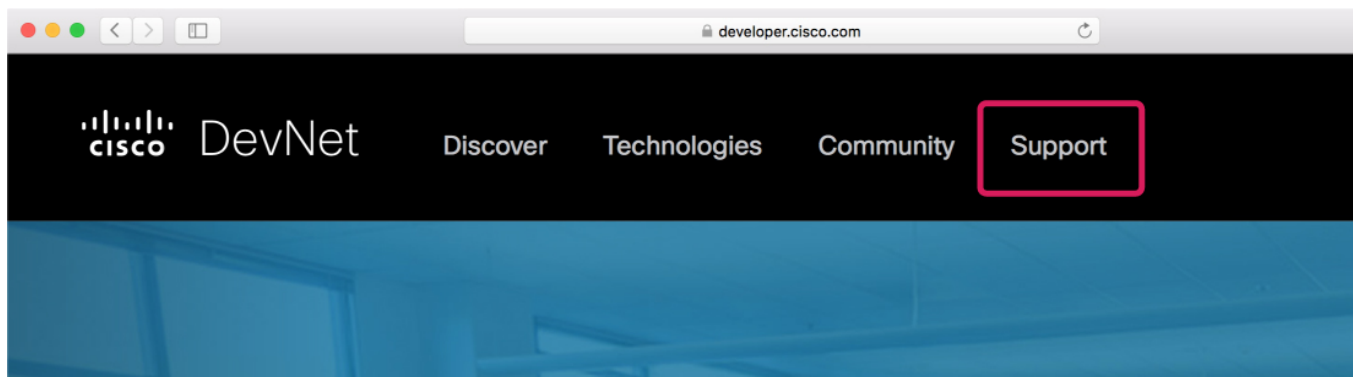
On the "Developer Support from DevNet" page you'll see options for:
- Live Chat Support via Spark
- Forum Support
- Support Tickets
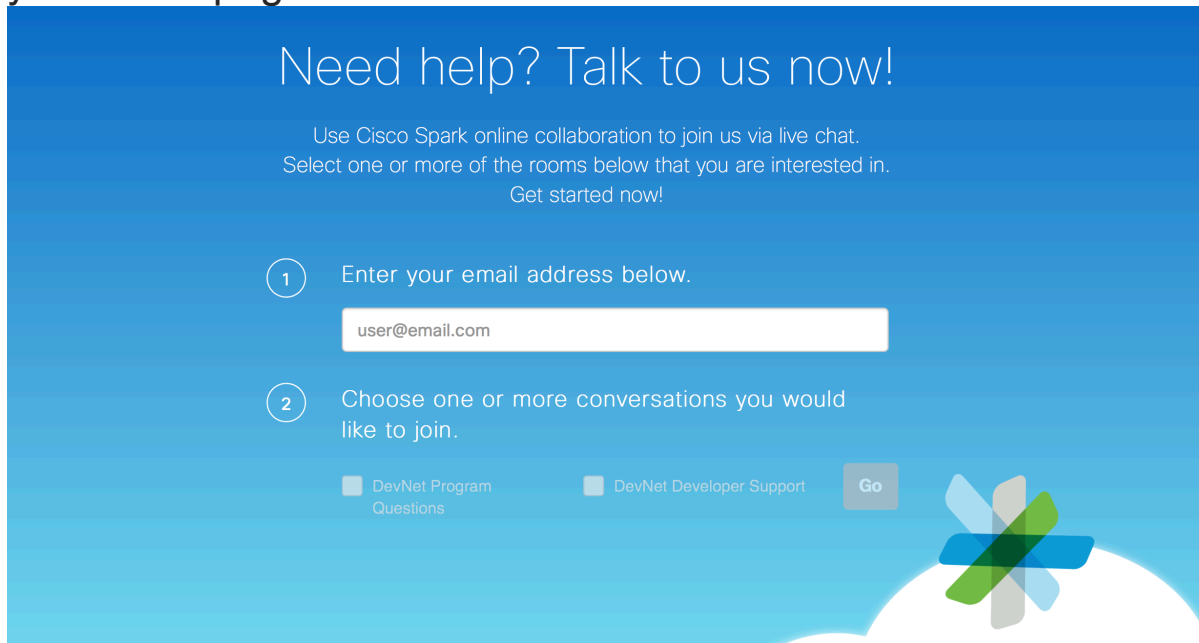
Step 2: Live Chat

Give support a try. Send us a live chat message via Spark. Click the green button "Live Chat Support via Spark". That will bring you to this page:

Step 3: Enter Email

Enter your email address... click the "DevNet Program Question" box... click "Go"

Join a Community of Interest

DevNet has several focused "Communities of Interest" within the larger DevNet Community. The Communities of Interest each have dedicated Community Managers who can help you explore the community, and make connections with other community members who may be working to solve problems or working on a project similar to you.

Step 4: View Communities

From the DevNet home page. Click on "Community" in the top navigation. In the second column under "Communities of Interest" click "View all".

## Step 5: Join the Conversation

Click on the "join the conversation" link in whatever community

title appeals to you, and follow instruction on that page to join the conversation!

Explore the DevNet Discussion Forums
Step 6: Forum Support

Go back to the Developer Support page. Under "Forum Support" click the "post your question" link. This will take you to the DevNet Communities page. Find the gray toolbar showing the different DevNet Community options. Hover your mouse over the "DevNet" option at the far right of the toolbar and then select the community discussion you'd like to view.
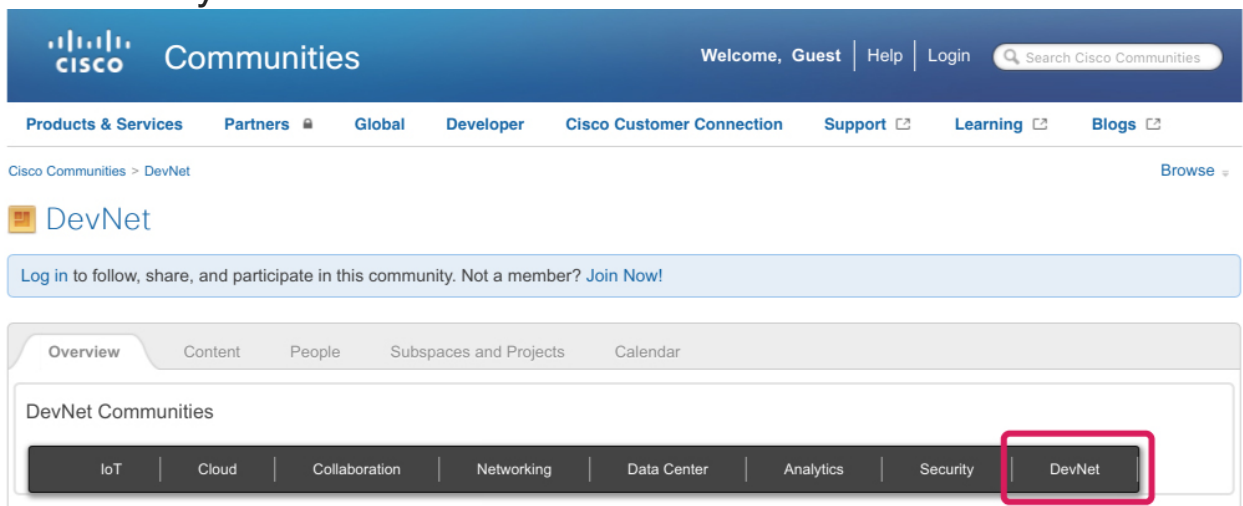
Get Involved

Connect with us!

Go to *My Account* > Edit "Account Complete", scroll down and under Connect with us...select the **DNA** community

Need answers?

We're here to help: post your DNA questions

Overview of DevNet Express for DNA Track

In this Learning Lab you will learn a little about the modules in this learning track.

Objective

Completion Time: 5 minutes
• Learn about what's covered in the DevNet Express for DNA Track
• Understand a bit about Network Programmability

Prerequisites

• You are ready to learn, to get your hands dirty and to ask questions.

Learning Modules in this Track

• What to Expect from the Learning Track: Describes DevNet features along with how to join. Introduces the other

upcoming modules and explains the importance of Network Programmability.

- DNA Explained: Discusses the foundation and building blocks of Cisco's Digital Network Architecture (DNA).
- Let's get set up: Describes how to get set up to use the lab environment.
- REST APIs and Python: Teaches REST APIs along with how to code in Python. Some coding examples use the Spark API.
- APIC-EM and REST APIs: Explains the features and use of the APIC-EM controller User Interface and Northbound REST APIs. Shows how to access the UI and call the REST APIs.
- RESTCONF, NETCONF, and YANG: Educates on RESTCONF, NETCONF and YANG along with data modeling.
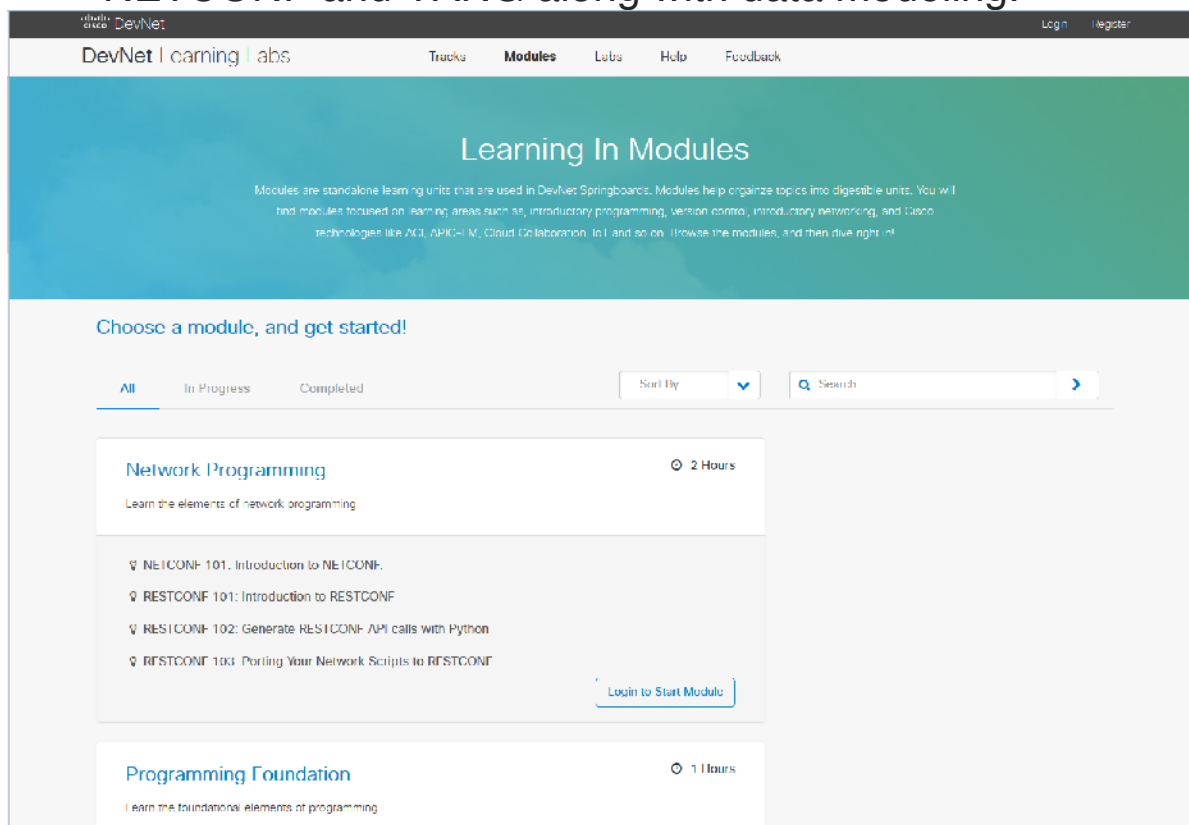
Get Started with Cisco's Digital Network Architecture (DNA)

The next module introduces the building blocks of Cisco's Digital Network Architecture (DNA).