

Emulation Cloud

Ciena's Emulation Cloud™ is an open application development environment designed to help customers and third-party developers create, test, and fine-tune customized applications.

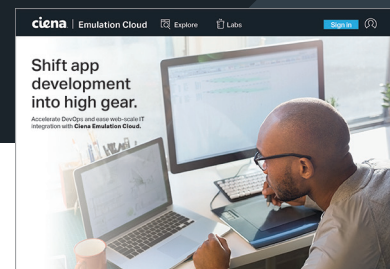
Customer requirements for flexibility and programmability are increasing as networks shift to accommodate new cloud-based services, content distribution, and IT virtualization. To simplify network management, operation, and automation activities, network providers are leveraging new platforms that support modern operational models with high degrees of programmability and open Application Programming Interfaces (APIs).

Emulation Cloud was designed to unlock the full potential of these APIs by providing a development portal where customers can innovate and develop new applications without investing in IT infrastructure. It is a one-stop shop for all of a developer's needs when creating new tools with Ciena's rich and open APIs. Much like a smartphone and its related application development environment, Emulation Cloud can be used to design any application that leverages Ciena's APIs, such as apps for enhanced network visualization, fault and capacity event notification, data center cluster management, or even detailed performance monitoring.

Learn about real network operator
use cases for simplifying integration
efforts with Emulation Cloud



Emulation Cloud also functions as a virtual lab, allowing the emulation of Ciena products so code or scripts can be tested. Users can specify the specific equipment configuration they want to use, including details such as the quantity and types of client pluggables. Users can connect to the emulated network elements through a Ciena-provided Swagger Graphical User Interface (GUI) or directly from the user's developer environment through direct links to the virtual machines.



Features and Benefits

- Accelerate DevOps and webscale IT integration by enabling customers and partners to create, test, and fine-tune applications and scripts via a cloud-based solution
- Access full API definitions and descriptions and tap into Ciena experts for questions regarding APIs and code
- Schedule and use virtual lab time to develop unique operational tools without IT infrastructure investment
- Foster innovation through experimentation and testing

Users access the Emulation Cloud portal by registering for an account and logging in with their credentials. Registration is free, and the online registration form can be accessed by visiting the Emulation Cloud portal (<https://developer.ciena.com>), clicking 'Sign In' and then 'Create an Account.' This will redirect to the Ciena portal to complete the registration form. Once the registration has been approved, users can sign directly into the Emulation Cloud portal to access a variety of tools and capabilities to ease their development efforts (see Table 1).

Feature	Description
API definitions	Full API descriptions and documentation
Code samples	Sample code snippets to provide examples of how to use Ciena APIs
Discussion forums	An area to discuss topics of interest, offer suggestions, and meet other community members
Access to experts	The ability to pose questions directly to Ciena experts
Tutorial access	Access to videos and tutorials
MCP workflow videos	Short how-to videos on specific MCP tasks and features
MCP documentation	Online documentation, accessible without logging into MCP
Resource reservation	The option to schedule virtual lab time and emulated equipment configurations, manage resources
Virtual lab emulation environment	A place to emulate Ciena products and test code or scripts against virtual network elements in the cloud

Table 1. Content and features inside Emulation Cloud

By using the toolset inside Emulation Cloud, developers and IT teams can simplify integration activities. Its scalable virtual environment eases the development and testing of new operational tools without expensive infrastructure investments that stress IT budgets and resources. Emulation Cloud is accessible from anywhere with an internet connection, allowing collaborative development and testing activities from any location. It also allows developers to innovate, experiment, and test new service models on virtual network resources, resulting in a dramatically lower cost of entry and exit. Geographically diverse development teams can access virtual lab resources 24/7 to streamline global development and testing across different time zones. Emulation Cloud also lets users interact with its member community and enables network and data center operators to leverage outside development resources to scale and accelerate the development of their own software application solutions.

Emulation Cloud empowers its users with the tools to emulate specific Ciena product and network configurations, model what-if scenarios, and overlay different information sources to create intelligent and innovative software tools that redefine the operational paradigm.

Technical Information

Ciena software and hardware platform support

- Software: MCP
- Hardware: 6500, Waveserver 5, Waveserver Ai, RLS, 51xx products, 39xx products, SAOS10 portfolio devices

Community Emulation Cloud environment

- Free access for customers, partners, system integrators, and academia
- Up to 10 hours of free access time per day
- Offers fixed virtual lab hardware/software configurations

Managed Emulation Cloud environment

- Yearly or monthly subscription-based service
- Uninterrupted, dedicated Emulation Cloud environment
- Customizable virtual lab environment
- Additional functionality: user lab system backup/restore, fiber cut simulation, circuit pack insertion/removal simulation