CISCO

Cisco DNA Assurance

Combine deep insights with rich context to deliver a consistent experience and proactively optimize your network.

Your network is more strategic to your business than ever. This means that your IT resources need to manage—more than ever—a growing, complex network. More clients, both wired and wireless, more bandwidth-demanding applications, and more services depend on reliable, consistent, and secure network systems. Your organization has its IT resources stretched to their limits in transforming your operations to support the new digitally connected world. Finding time for these new IT projects that are key to your core business is the biggest challenge that IT departments are facing today.

With Cisco DNA Assurance the days of time-consuming network troubleshooting tasks are over. Whether it is wired or wireless, Cisco DNA Assurance enables every point on the network to become a sensor, sending continuous streaming telemetry on application performance and user connectivity in real time. The clean and simple dashboard shows overall status and flags issues. And guided remediation automates resolution to keep your network performing at its optimal with less mundane troubleshooting work. With Cisco DNA Assurance, your staff can grow your network and still have time to take on the new IT projects that set your company apart from your competitors.

Benefits of Cisco DNA Assurance

- **Increases visibility:** Complete network status at a glance, on a single screen.

- **Saves time:** Automatically detect and prioritize network issues.

- **Reduces work:** Receive instant guided remediation for quick issue resolution.

- **Helps you excel:** Increase your network's performance and spend less time running it.

- Cisco DNA Assurance is an integral element for true intent-based networking.

> **"Cisco DNA Assurance allows us to flip the model. We now spend 20% of our time on network troubleshooting, and 80% on innovation."**

Seth Price
Sr. Network Engineer,
Durham County Government,
Durham, N.C.

What makes Cisco DNA Assurance different?

Cisco DNA Assurance provides insights from every device, application, service, and client on your network, and from more angles and contexts. Until now, functionality this complete could only be achieved through the purchase and operation of multiple third-party software tools. The advantages of having all these tools integrated into a single software platform are compelling.

Increased visibility: More data from more sources. Cisco DNA Assurance collects data from a total of sixteen different source types, including NetFlow, traceroute, IPSLA, syslog, WSA, radius, DHCP, AD/Users, CLI/SSH, netconfig, PxGrid, DNS, AXVC, SNMP, CMX, and Apple iOS. No other current network analytics and assurance software looks at this many sources for insight. More sources means more points-of-view as well as more ways to view an event or issue. It also allows Cisco to offer a much more complete roadmap of future features and functionality.

Better guidance: Correlation of data with context. Only Cisco DNA Assurance evaluates the context of where, when, and how data was collected before recommending a course of action for remediation. This is important because two identical events collected under different network conditions, or from different sources, will usually require different courses of action.

Saves time: Clear and concise display of insights with details and guided remediation. This results in an intuitive interface requiring little or no training by your IT team.

Features and benefits provided only by Cisco

Aironet® Active Sensor: A compact wireless sensor that simulates real-world client experiences, so IT can validate wireless performance in Cisco DNA Assurance for critical venues like conferences or for VIP clients and ensure there are no surprises. It provides high-fidelity insight at ground level.

Wi-Fi Analytics for iOS: This exclusive partnership with Apple allows a Cisco network to get the client's point of view of the network, what access points it sees, the reasons for disconnections, and the current state of the user experience; all of these provided through Cisco DNA Assurance.

Third-party integration through the Cisco DNA Center platform allows extended use of analytics insight in other areas of your operation, connecting business goals with network outcomes.

Cisco DNA Assurance offers more insights from more areas of your network and provides more ways to apply these insights.

atialiti
CISCO

Getting started with Cisco DNA Assurance

Getting started with Cisco DNA Assurance is as simple as installing the Cisco DNA Center appliance and licensing the devices where assurance capabilities are desired (for example, Wireless Access Points and Wireless Access Controllers (WACs)). Cisco DNA Assurance capabilities are delivered through three subscription offers: Cisco DNA Premier, which is Software-Defined Access (SD) and Assurance ready; Cisco DNA Advantage, which is Software-Defined Access and Assurance capable; and Cisco DNA Essentials, for basic monitoring, and automation. The most value-rich offer, Cisco DNA Premier, delivers all of the Cisco DNA Assurance features in this overview as well as Stealthwatch® security enhancements. Take advantage of our latest promotions to help you get started. Learn more.

Customer success stories

Cisco customers in every industry are changing the way they manage their network with Cisco DNA Assurance. Read the latest customer case studies to learn how customers are deploying Cisco DNA Assurance and how it is aligning their network operations with their business goals. Learn more.

Network telemetry and contextual data	Complex event processing	Correlated insights	Guided remediation
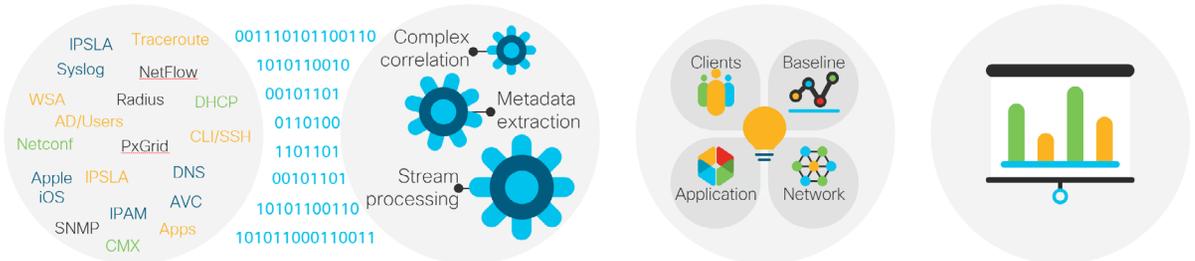
Cisco DNA Assurance allows users to define a set of policies that ensure optimal network performance for the applications and services they rely on. Four complex and complete processes in Cisco DNA Assurance manage the baseline for each user experience:

- **Network telemetry and contextual data:** Data is collected from sixteen sources in the network in real time. Collecting from so many different points allows Cisco DNA Assurance to view issues from many different angles and contexts. You can compare this to having multiple cameras in a football game; offering more detailed information on critical plays. Moreover, offering more than just multiple angles, these sixteen sources also provide context for the many different conditions under which any event occurs.

- **Complex event processing:** A series of analytics engines divide the event processing between critical metrics, which need instantaneous action, and noncritical metrics. Distributed on-device analytics located on select Cisco® switches, routers, and wireless

controllers handle critical decisions in real-time and at the source of the incident. Cisco DNA Center's centralized analytics engine can collect and process the full set of data coming from all areas of the network.

- **Correlated insights:** Cisco DNA Center's analytics engine uses the information collected to compare the performance of each user and device against a baseline performance parameter. This baseline is prescribed in the user's policy. If the performance is substandard, insights are given to alert administrators that action is required. Cisco DNA Assurance evaluates the context of these events before categorizing the type of insight displayed.

- **Suggested remediation:** Cisco DNA Assurance offers a number of suggested actions for the remediation of any event. Context is also important for these recommendations, and for the order in which they are listed. Clicking on the action link for any suggested remediation will execute that network change. It's fast, simple, and intuitive.

Cisco Services

Accelerate your intent-based networking journey with Cisco Services. With proven experience, best practices, and innovative tools, our experts help you achieve extraordinary business outcomes and anticipate change so you can pivot quickly, securely, and confidently. Our comprehensive lifecycle of advisory, implementation, optimization, managed, technical, and IT training services help you move to an open, secure, and automated intent-based network with ease and confidence. We'll help build your in-house expertise with training for your staff and provide centralized Cisco Solution Support with a single point of contact from first call to resolution. Our experts will also help you improve performance, efficiency, and operational excellence while extracting maximum value from your resources.

The Cisco DNA Center Advise and Implement Service extends the capabilities of the Cisco DNA Center platform to ensure rapid and secure deployment of Cisco DNA Center for simplified control of wired and wireless environments across campus, branches, and WAN. Our experts help you extend the value of Cisco DNA Center with cross-domain and third-party software integration and customized feature enhancements. Using an architectural approach to policy automation and assurance, this service enables you to manage, scale, and securely integrate Cisco DNA Center with IT and business systems for greater IT efficiency.

Table 1. Cisco DNA Center features

Feature	Description	Benefit
Network Health Dashboard and Client Health Dashboard	The main Cisco DNA Assurance dashboard, which gives a quick overview of the health of every network device and client on the network, wired and wireless, Cisco and Meraki®.	General overview of the operational status for every network device provisioned from Cisco DNA Center. Any poorly connected devices will be highlighted, with a suggested remediation for each.
Device 360 Client 360	A drill-down feature that lets an operator view a device or client connection from any angle or context. Provides information on topology, throughput, and latency from different times and applications.	Gives a detailed view of any device or client performance over time and from any application context. Provides for very granular troubleshooting in seconds.
Path Trace	A drill-down feature that lets an operator see the path of an application or service from a client through all devices to the server.	A common, and critical, troubleshooting task that normally requires 6 to 10 minutes is displayed instantly upon clicking on a client or application.
Network Time Travel	A drill-down feature that provides a timeline of device or client performance and information on the network state when an issue occurred.	Allows an operator to go back in time up to 14 days and see the cause of a network issue, instead of trying to recreate the issue in a lab.
Aironet Active Sensor	A compact network sensor designed to be placed anywhere in your operation and monitor your wired or wireless network.	Operator can simulate real-world client experiences so that it can validate wireless performance for critical venues and high-value locations, such as conference halls and meeting rooms.
Intelligent Capture	Intelligent Capture uses network sensors within the Aironet Active Sensor and the Aironet 4800 Access Point to provide advanced troubleshooting for wireless issues. Includes anomaly-based packet captures, on-demand RF scanning, real-time client location, and Wi-Fi application analytics.	Offers an unprecedented level of wireless-service facilitation based on detailed and proactive analysis of wireless performance per access point or per Wi-Fi client. Allows system administrators to prepare for special events, VIP visits, or simply to troubleshoot a stubborn wireless issue.

Why Cisco?

You need a network that is constantly learning, constantly adapting, constantly protecting. This is the future of networking: the network, intuitive.

With our deep understanding of technology and relationships with IT, Cisco can help bring your IT and the boardroom together to work effectively toward better outcomes for IT and the business. With Cisco DNA, we can help you create revenue opportunities, lower costs, reduce, risks and ensure regulatory compliance. And we can help you simplify your network operations and accelerate your response to changing IT and business needs.

Together with our partners, we help our clients innovate, manage market transitions, and turn technology into business advantage.

Next steps

For more information, visit the Cisco DNA Analytics and Assurance website: https://www.cisco.com/go/dnaassurance.

Feature	Description	Benefit
On-Device Analytics	Assurance and analytics are performed on a Cisco switch, router, or wireless controller where the anomaly is discovered.	Critical metrics can be identified and immediately acted on before an incident occurs. Key Performance Indicators (KPIs) that are core to business operations can be maintained in real time and close to the users that rely on them.
Apple iOS Analytics	A joint development with Apple, iOS Analytics offers Cisco DNA Assurance insights into the performance and experience of iOS clients (iPhone/iPad) on the wireless network.	Allows an administrator to view wireless performance from the perspective of the iOS client.
Application Experience	Tracks performance of predefined "Critical Business Applications." Shows user experience and performance metrics. Provides specialized rapid troubleshooting per app and per client.	Provides unparalleled visibility and performance control of the applications critical to your core business, on a per-user basis. Allows users the performance they need on the applications that are key to their company role.
Cisco DNA Center Open Platform	A broad set of APIs, SDKs, and adapters that extends the capabilities of Cisco DNA Center to external applications, systems, and processes.	This platform allows Cisco DNA Center to share network insights that can provide important intelligence related to business and IT operations, security, compliance, and worker and customer experience.

Cisco DNA Assurance allows you to run the network with maximum performance, reliability, security, and open interfaces. Unlock the power of data by starting your journey with Cisco DNA Assurance today.

Cisco Capital

Financing to help you achieve your objectives

Cisco Capital® can help you acquire the technology you need to achieve your objectives and stay competitive. We can help you reduce capital expenditures, accelerate your growth, and optimize your investment dollars and ROI. Cisco Capital financing gives you flexibility in acquiring hardware, software, services, and complementary third-party equipment. And you have just one predictable payment.

Cisco Capital is available in more than 100 countries. Learn more.