

Cisco Connected Analytics for Events



Cisco[®] Connected Analytics for Events (CAE) is a solution that mines relevant data from the network, applications, and social media and presents it in a set of easy-to-understand dashboards and reports delivering new insights into who customers are, what they are doing, and where they are located. These insights reveal a number of opportunities to improve business operations and customers' experiences, including the creation of new services.

Cisco CAE is subscription-based software that is tailored for event-based businesses such as sports and entertainment. Cisco CAE is one in a suite of analytics solutions, each tailored to a particular market segment and powered by the same underlying analytics engine, which is capable of collecting and processing both real-time and historical data. Cisco CAE uses Cisco network technologies, such as Cisco Next Generation Network-Based Application Recognition (NBAR2) protocol classification, Cisco Mobility Services Engine (MSE) for location-based data, Cisco Wireless LAN Controller Simple Network Management Protocol (SNMP) traps to perform deep network data analysis and correlation, and authentication, authorization, and accounting (AAA) records for specific account-based data analysis. Cisco CAE correlates data from the network, applications, and social media, building a more holistic and real-time picture of activities that occur before, during, and after an event.

Customized Solutions to Transform the Fan Experience

More and more, fans are opting to watch events from the comfort of their homes. To drive attendance, venue owners must create an exceptional fan experience. Additionally, venue owners must be able to demonstrate measurable ROI to drive advertiser, sponsor, and shareholder value. Cisco CAE uses network data to build fan profiles as a basis for targeted advertising, merchandising, and sales. Unlike our competitors who have point solutions and lack infrastructure depth and expertise, Cisco Connected Analytics for Events:

- Helps improve performance at the venue through tight operational control to proactively identify bottlenecks, streamline processes, and enhance service

- Drives revenue growth through a deep understanding of customers that enables more impactful advertising and increased fan engagement
- Accelerates sponsor investment by measuring brand impact, and quantifying and communicating the value and effectiveness of sponsor spending
- Provides information about Wi-Fi network performance and utilization that assists in deployment, maintenance, troubleshooting, optimization, and network planning

Features and Benefits

Cisco CAE delivers business and operational insights through a number of key performance indicators (KPIs), which are available using a web browser. Table 1 lists network profile KPIs and their descriptions. Table 2 lists user profile KPIs.

Table 1. Network Profile Key Performance Indicators

KPI	Description
Access point detail report	Daily and hourly rollup of statistics per access point. Provides statistics for device associations, authentication per radio channel, and total traffic per access point.
Wi-Fi summary report	Daily and hourly rollup of the session, traffic, and user statistics of a group of access points present in a certain location or group of locations.
Access point first sign-of-life report	Details the time at which traffic flow started on the access point: how long the access point has been up, access point location, access point name, IP address, MAC address, SSID on which traffic has started, time at which traffic started, associated Cisco Wireless LAN Controller (WLC), time of first association.
Total active access points	Top active access points in the network with respect to client associations.
Top 10 access points by data volume	Distribution chart of top 10 access points with respect to transfer of data volume.
Average sessions and time per access point	Trend chart of average sessions and time per access point.
Average data transferred per access point	Trend chart of average data transferred per access point in the network.
Total traffic usage	Total bandwidth used graphed over a specified time period.
Average data and minutes per user	Trend chart of average usage of data and minutes per user.
Average data per session and average data per minute	Trend chart of average data per session and per minute.

Table 2. User Profile Key Performance Indicators

KPI	Description
Hot zones and dwell times	Reports where users are spending their time, number of users, and the average time spent here.
New versus existing customers	Total number of new customers and the total number of returning customers for past three years.
Daily total users connected	Total users report with date and time.
URLs browsed by users	Top 10 websites visited and the number of visitors; can specify a particular URL.
Users and associated MAC addresses	How many users are connecting more than one device to the network.
Daily new users	Trend chart of new users registered to the Wi-Fi service. The chart reflects the new users that connected to the network.
Stadium heat maps	Heat map overlaid on the venue floor plan to show density of users throughout the venue.
Social media trends	Track social media behavior of users by device location. Note that this feature is available with the optional Social Media Analytics subscription (see Table 3).
Wi-Fi devices in venue	Reports the mix of device types and operating systems (for example, Apple, Samsung, Android) in the venue. Limited to the top 10 devices.
Wi-Fi devices connected	Graph the number of connected Wi-Fi devices as a function of time over a specified period.
Unique device details report	For a given user account, reports the number of devices used and Wi-Fi stats on total devices.

KPI	Description
Associated sessions and devices	Trends the number of devices that get connected to the number of sessions to which the network is catering.
Wi-Fi devices present	Graphs the number of probing Wi-Fi devices as a function of time over a specified period.
Daily unique client connected	Total number of unique devices connected to the network on a daily basis.
Application usage by category	Display of user application usage by category for a specified time period. (All applications are grouped by category). For example, Facebook, Twitter, and Instagram may be categorized into a social media group and displayed proportionally to other groups
Most popular application	Shows the most popular applications used during a specified time period, how many users are using a particular application, and the peak number of users concurrently using the application.
Top bandwidth-consuming applications	Shows which applications are consuming the most bandwidth. Charts bandwidth consumption over a specified period of time for each application and reports peak application consumption for each application.
Application performance	Average and peak performance over a specified time for selected applications. The user automatically reports on the most popular applications and allows the user to select additional applications from the total list available from the data source.
Application usage as a function of a time	Number of applications in use as a function of time.

System Requirements

Cisco CAE uses Cisco networking technologies to provide relevant data for analysis. The following network hardware and software are required for deploying and using Cisco CAE.

- [Cisco Prime Infrastructure](#): Version 2.1 or higher
- [Cisco Mobility Services Engine](#): Version 8.0.100.0 or higher with [Cisco Connected Mobile Experiences](#) (CMX) license
- [Cisco Wireless LAN Controller](#): Version 8.0.100.0 or higher
- (Optional) Cisco ASR 1000 Series Aggregation Services Routers Version 3.13S and 15.4(2)T. If RADIUS records are used in reporting, they can be collected from Cisco Intelligent Services Gateway (ISG).

Cisco CAE provides user access to view analytics data using a web browser. Supported browsers include:

- Google Chrome 21 and higher (recommended option for optimal viewing)
- Internet Explorer 11 and higher
- Mozilla Firefox 22 and higher
- Opera 15 and higher
- Safari 6.1 and higher

Ordering Information

Cisco CAE offers a required subscription and an upgrade option (see Table 3).

Table 3. Cisco CAE Ordering Information

Package	Optional or Required	Description	Prerequisites
Connected Analytics for Mobility (Wi-Fi) Software	Required	Provides Wi-Fi usage analytics; software package based on number of APs in customer's network	Connected Stadium Wi-Fi
Social Media Analytics	Optional	Provides social medial analytics about Wi-Fi users	Connected Analytics for Mobility software

For More Information

Read more about [Cisco Connected Analytics for Events](#), or contact your local account representative.



Americas Headquarters
Cisco Systems, Inc.
San Jose, CA

Asia Pacific Headquarters
Cisco Systems (USA) Pte. Ltd.
Singapore

Europe Headquarters
Cisco Systems International BV Amsterdam,
The Netherlands

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