

PRODUCT BROCHURE / 1.0.0





PRODUCT OVERVIEW

SD-WAN for Branch Offices & Work-From-Home

An SD-WAN Edge Controller (EC) is a physical device that is deployed in a branch office, regional office, retail location, satellite facility or home office. The zWAN EC is Software Defined and is managed by the SD-WAN Director in the Cloud. It enables employees to stay securely connected to apps, data and services whether they are at the office or working from home. The zWAN EC provides powerful features and tools to substantially enhance user productivity. In today's post-Covid environment, employees are increasingly working remotely and from their homes. Employers face the challenge of making sure that remote workers' home networks and devices are secured while also ensuring that user's productivity levels are maintained. The zWAN EC was designed from the ground up to provide secure and reliable access for all corporate users no matter their location.



Figure 1: zWAN EC in a Home Environment

Remote Users Connectivity - Always Online & Secure

To keep remote users productive, it's important to have a reliable internet connection. As we all know, home internet connections can be prone to outages, routers and modems fail, and users are left disconnected and unable to work. These failures lead to loss of productivity and lost revenue for the organization. The zWAN EC prevents these failures by providing a dual path internet connection using a backup LTE service that automatically takes over in the event of a failure or internet outage. This allows remote users to stay online, productive and continue to work while keeping the network and devices secure.

Features of AmZetta zWAN SD-WAN

zWAN Director - Cloud Management

Once installed, the zWAN EC will automatically onboard to the zWAN Director in the Cloud. The Director is responsible for provisioning and managing the zWAN EC. Alerts from zWAN EC are routed to the Director for action. Similarly, the Director collects activity logs and network traffic related data from all zWAN ECs to generate dashboard displays for each zWAN EC. The administrator can review alerts, view the dashboard, and review logs through the Director.

Multipath Connectivity

zWAN EC utilizes the network port connections to set up multipath connectivity over the underlay network, generally comprising of broadband or LTE. Fig. 2 shows a system with just a single communication link. Fig. 3 shows a setup with multipath communication links. zWAN EC can be configured to preferentially utilize one path over the other, i.e., in the event of a failure of the preferred path, a dynamic switch is made to the available path, for high availability.

Having multiple paths ensures that in the event of a path failure, an alternate path is available for transmission to continue uninterrupted.



Load Balancing

Using Load Balancing, the load can be transmitted over multiple paths. The load distribution can be symmetric, when the load is equally distributed, or can be asymmetric when the load may be unequally distributed. Fig. 3 shows symmetric load on the two paths, whereas Fig. 4 shows asymmetric load balancing.



Autoflow Control

zWAN EC can be configured to make path selection based on underlay network characteristics such as latency, jitter, or packet loss. This means the network flow can be steered to go over the path with the least latency. The network characteristics are measured periodically so that in the event of a change, the flow will be routed through the best available path, avoiding latency, jitter and packet loss.



Zero-Touch Provisioning

The zWAN EC supports a secure true zero-touch provisioning. In order to onboard a zWAN EC in a remote location the only skill required is the ability to connect the power and network cables. The zWAN EC is automatically provisioned and configured to operational status. The network administrator can setup rules and policies that will be automatically applied when a zWAN EC is onboarded.

Deep Packet Inspection (DPI)

zWAN EC analyzes encrypted network traffic through a process called deep packet inspection (DPI), and classifies the packets to identify the application transmitted through the network and the category the application belongs to. Each category can be either blacklisted (block) or whitelisted (allow). If an application falls in the blacklisted category, it will be denied network access and the flow will terminate. The path selection can also be based on the application or the category of application.

Application Prioritization

When bandwidth constraints exist, zWAN EC can prioritize applications for transmission, thereby ensuring higher priority applications are transmitted and lower priority applications are transmitted only after the needs of the higher priority applications are met.

Bandwidth Augmentation

The available bandwidth can be augmented using network bonding, by combining more than one path to increase available bandwidth.

Report Generation

The zWAN EC sends IPFIX data relating to the network traffic and syslog to the Director for further analysis and for dashboard display. Dashboard charts provide invaluable insights into user activities with zWAN EC. The dashboard can show the number of packets by application transmitted over the network for a predefined period (i.e., 1-minute). display. Dashboard charts provide invaluable insights into user activities with zWAN EC.

SaaS Breakout

The zWAN EC can identify SaaS traffic deemed to be reputed and categorize it as such by using DPI and packet categorization techniques. zWAN EC transmits such SaaS traffic directly to SaaS websites by the shortest available path, without sending the network traffic to the data center, thereby avoiding backhauling. In traditional networks, generally all network traffic gets sent to the data center for security reasons. With zWAN EC, this unnecessary backhauling can be avoided.

Internet Breakout

The zWAN EC can identify general internet traffic and categorize it. Such traffic is normally sent to the data center for security scans. This means that SaaS traffic, which in today's environment constitutes the bulk of the traffic for most enterprises, does not have to be subjected to deep security scans, thereby reducing security costs.



Figure 6: zWAN EC SaaS Breakout / Internet Breakout



AmZetta zWAN Solution

The AmZetta zWAN SD-WAN solution provides organizations the following components:



zWAN EC (Edge Controller)

The zWAN EC integrates with existing routers and modems to allow for a quick and simple installation into the network fabric. Once connected to router, the EC's zero-touch provisioning means there is no setup to be done after connecting.



The zWAN Director is the centralized manager for all the zWAN EC devices. IT Teams can onboard, manage and monitor all remote workers and their devices via the Director.

zWAN Report Generator

View live dashboard and reports that visualize the productivity of the remote users. View the applications, websites and activities performed by the remote users.

Conclusion

SD-WAN enhances application performance, user performance, reduces network expenses, unifies network connectivity and enables orchestration of application delivery across your network while enhancing network security. With the zWAN EC all users can have a secure and reliable connection from their branch or remote location to the needed applications, data and services within the organization. Fast, secure, and being always connected are the key functions helping employees stay engaged, productive, and collaborating effectively.

How to Get Started?

AmZetta offers free 30-day evaluation with no obligation to purchase. Simply visit https://AmZetta.com/Eval and complete the Evaluation Form. An AmZetta Solutions Engineer will contact you to get started in your evaluation.



AmZetta Technologies 5555 Oakbrook Parkway, Suite 280 Norcross GA 30093

Sales & Product Information sales@AmZetta.com 1-877.991.1809

Technical Support support@AmZetta.com 1-800.892.6625