berqnet

The SASE Platform

Build the cybersecurity of the future and seamlessly manage your entire network via a single platform!

Overview

Today, we are reimagining the office and work life as we transition rapidly to a new structure in which most of the enterprise applications we use at the office or when working remotely are now provided by the Cloud.

This new structure means we have to adapt the way we work to:

• **Establish, manage and scale multi-branch distributed networks**

• **Manage network traffic, internet line usage and access quality**

• **Create and manage a consistent branch security policy**

• **Scale up remote employee access and manage security risks**

• **Access next-generation solutions such as the Multiprotocol Label Switching**

(MPLS) as an alternative to traditional connection methods

Berqnet SASE Platform is the perfect solution for improving operational efficiency. It provides network management and next-generation security solutions that adapt firms to the new environment seamlessly through the use of a single platform.

Berqnet SASE Platform's Key Features

Berqnet SASE platform's four main components are its Secure Internet Access, SD-WAN, Zero Trust Security Model (ZTNA) and its Centralized Management.

Secure Internet Access

Each and every branch or user can be provided with internet access from a central point. This enables the consistent use by all sources and targets of security services such as Firewall, Web Filter, IPS and Gateway Anti-Virus to name a few. This means that your organisation's network is protected against cyber attacks and malicious software.
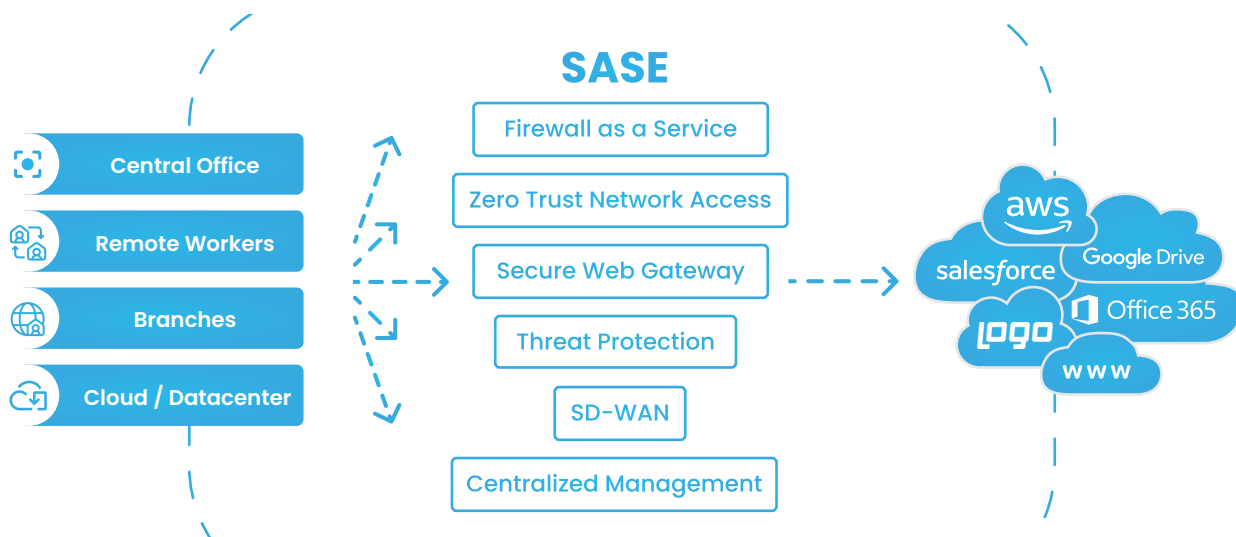
The Zero Trust Security Model (ZTNA)

ZTNA is based on the rather sensible premise that every device that is attempting to access the network is unreliable. Its primary function is to authenticate users and verify the resources they can access at a micro level.

Software Defined Wide Area Network (SD-WAN)

The SD-WAN approach was originally designed to optimize the use of internet lines. It's a network solution which uses standard internet lines safely and efficiently, as an alternative to MPLS solutions. It provides secure connections between branches in multi-branch structures.

Centralized Administration

The management and monitoring of the entire system is carried out from a centralized interface. By virtue of its legal record keeping feature, all records of internet usage throughout the corporate network are stored centrally in keeping with Law No. 5651, and the accuracy of the records is verified by legally approved time stamps.

SASE

Central Office
Remote Workers
Branches
Cloud / Datacenter

Firewall as a Service
Zero Trust Network Access
Secure Web Gateway
Threat Protection
SD-WAN
Centralized Management

aws
salesforce
Google Drive
logo
Office 365
www

Berqnet SASE Platform's Key Advantages

Streamlined Management and Operations

• Combines network management and security features in a single platform.
• Managed and monitored from a single interface.
• Automates the installation and management of branch networks.

Uniform Security Policies and Reduced Risks

Berqnet SASE platform offers a consistently high layer of security wherever users are located.

Scaling and Performance

It takes advantage of cloud architecture to support flexible scaling for branches and remote employees.

Flexible Cost Structure

• Hardware requirements are minimized depending on installation architecture.
• Provides savings on equipment, human capital and financial resources.

Berqnet SASE

| Easy to Manage | | Risks |
| Scalable | | Costs |

Berqnet SASE Security Services

Internet access for all branches and users can be provided from a central point on Berqnet SASE platform. All sources and targets are able to benefit on a consistent basis from security services such as Firewall, Web Filter, Gateway Anti-Virus, Intrusion Prevention Systems (IPS). This means that your organization's network is protected against cyber attacks and malicious software.

Dynamic Firewall

Berqnet SASE Platform's dynamic firewall blocks unauthorized access to the network at the entrance and exit ports. Thanks to its specialized design, it allows users without advanced expertise to create rules with ease. The firewall's dynamic structure allows it to automatically track the addresses of the sources and targets in the rules and initiates necessary changes by itself.

Web Filtering

The website filtering rule-configuration interface lets you create rules, which are as sweeping or as granular as you require. Rules can be created on a per-user basis, allowing you to control exactly which websites certain people can or cannot visit. You can also disable or enable a rule as required at any time.

Gateway Anti-Virus

Gateway Anti-Virus allows applications across the enterprise to scan files for viruses; malware is recognized and blocked before it can enter the system.

Intrusion Prevention System (IPS)

The intrusion prevention system (IPS) is a form of corporate network security that works to detect and prevent identified internal and external threats such as cyber attacks.

# Securing the Future for Remote Work!

Berqnet SASE Zero Trust Approach

In order for an enterprise network to be identified as truly secure, users and devices must be verified at various points before being granted access to the network. Berqnet SASE Zero-Trust approach is to add an extra layer of user identification authentication in order to ensure that only only trusted users and devices are connecting to the network. In addition to pre-determined controls such as user names, passwords and one-time passwords, behavior-based data such as connection times, operating systems, screen sizes and the location of connected device are also used to enhance the authentication process. In each connection attempt, the user's behavior-based data at that time is compared with the data over a certain period of time and a risk score is generated using artificial intelligence. When the risk score exceeds a defined level, the user is not allowed access to network resources. Included in Berqnet SASE platform's firewall, a micro-segmentation capability means that user and device permissions can determined in great detail to give access to critical resources as needed. This allows sensitive resources that need extra protection to be placed under high-level security.

Leading IT research and consultancy Gartner forecasts that by 2023, 60 percent of business will switch from using Virtual Private Networks (VPN) to ZTNA technology to benefit from its checkpoint functionality in which all logins and logouts to the corporate network are more strictly verified.

Berqnet SASE offers unbeatable remote working technology that is far superior to existing VPNs

• Provides an extra layer of security compared to traditional VPN technology
• Recognizes and verifies users using behavioral analysis
• Offers user-based network management
• Provides access to control and segmentation at a granular level
• Isolates unidentified devices
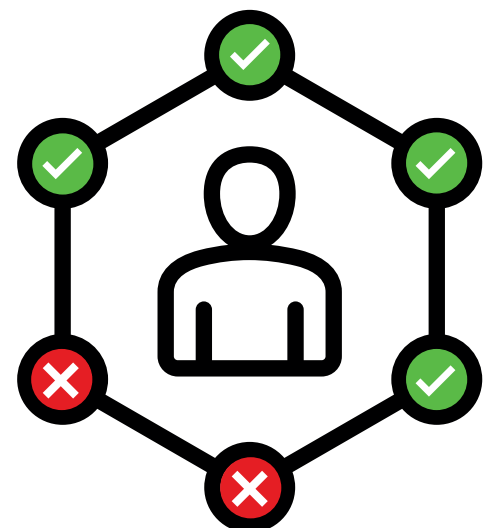
Remote Employees Can Connect Securely

Remote employees use Berqnet Connect client application to connect securely to their corporate network using a zero trust approach.

Berqnet Connect application is easy to use: It runs on Windows, macOS, Linux, iOS and Android operating systems by automatically downloading settings from the server without needing users to make setting adjustments.

Its double-factor authentication (2FA) feature provides data needed for the behavior analysis that is the basis of the zero trust approach.

Automatically updating its own software, Berqnet Connect self-installs the server certificate to the device using it in order to enable HTTPS scanning to come into effect.

User   **Verification**   **Berqnet AI**   **Network Access**
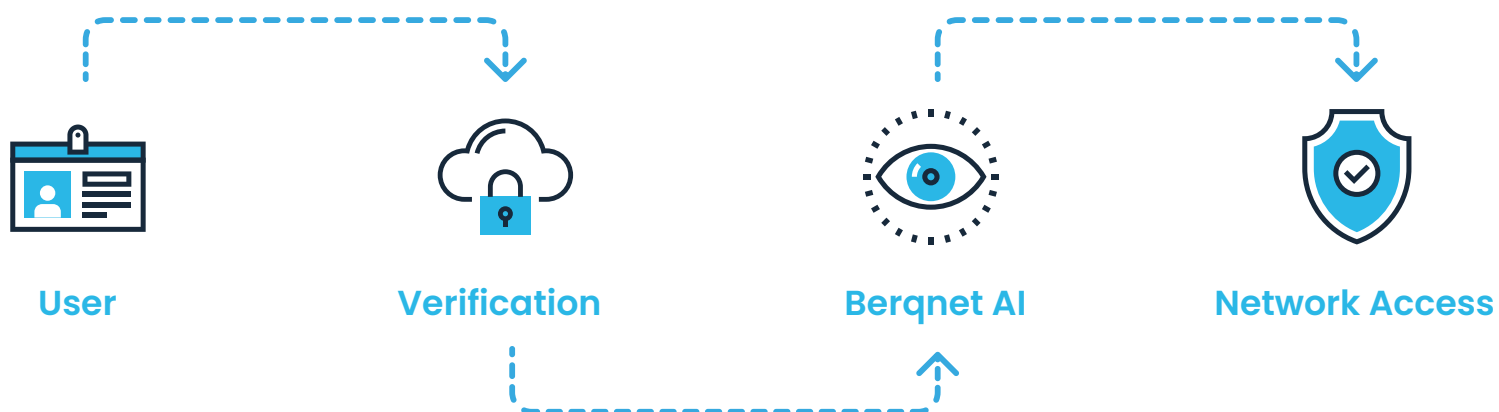
Connect Your Offices Efficiently and Securely!

Berqnet SASE SD-WAN

The SD-WAN approach was originally designed to optimize the use of internet lines. It's a network solution which uses standard internet lines safely and efficiently, as an alternative to MPLS solutions. It provides secure connections between branches in multi-branch structures. Multi-branch businesses must provide all their employees with access to their corporate network from different locations. Berqnet SASE ensures that VPN tunnels are established between branches to ensure secure connections.

The Benefits of SD-WAN Technology for Your Business
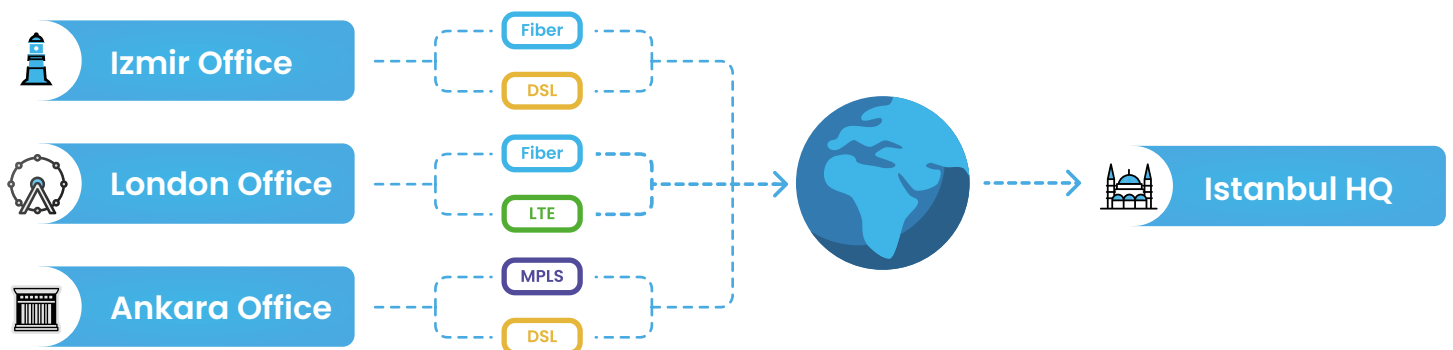
Higher Connection Speed

Devices in branches benefit from Multipath TCP technology when connecting to the center. In this way, users get bandwidth equal to the sum of the lines.

Optimized Line Usage

In order to minimize loss during connecting, data on line quality, packet losses and transfer speeds are constantly monitored to assure line optimization.

Secure Connections

Installing VPN tunnels between branches ensures secure connections. All connections can be monitored with ease using the management interface.

Giving Branches Higher Bandwidth Using Multipath TCP

Connection data on line quality, packet losses, delays and transfer speeds are constantly monitored and line optimization is performed according to these values. In order to minimize connection losses, internet lines that have minimal latency and are of the highest quality are prioritized for sending packets.

Berqnet SASE devices installed at branches use Multipath Transmission Control Protocol (TCP) technology allowing multiple internet line functionality simultaneously when connecting to the center. This means users get as much bandwidth as the sum of the lines and line usage is thus maximized.

| Optimal Connection Merging | Packet Loss Prevention | Optimal Connection Merging |
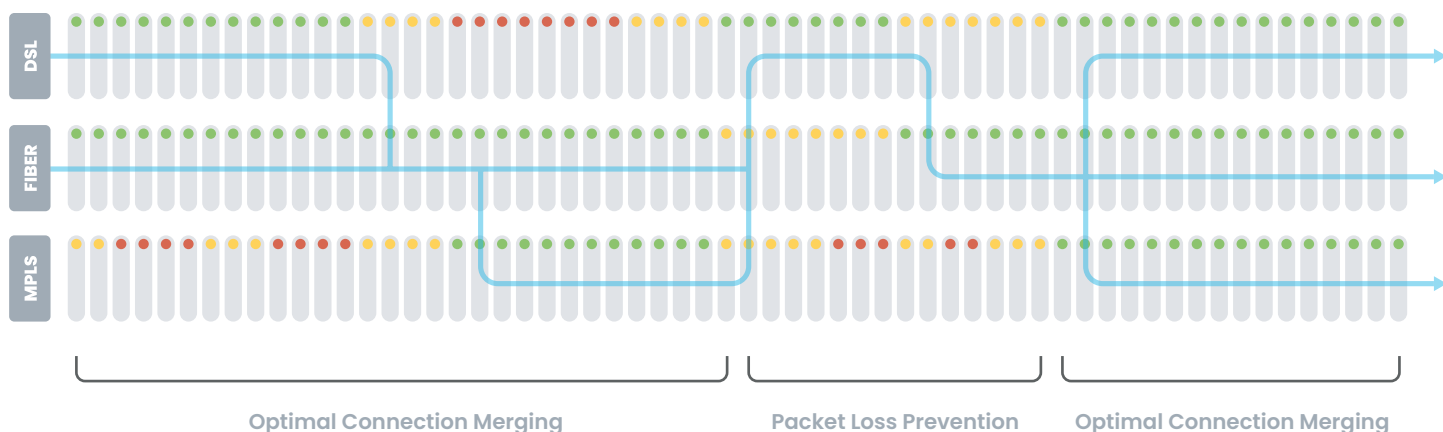
Record Keeping for Legal Purposes

Berqnet SASE platform's legal record keeping feature stores all internet access records in the corporate network centrally, tagged with user IDs in accordance with Law No. 5651. Records are imprinted with a time stamp, ensuring their legal validity. Records can be transferred to another storage area as needed.

Network Management Automation

Single-code branch device activation

A single-code allows devices installed in a branch to be activated smoothly and settings can be downloaded automatically from the server.

Berqnet Connect's easy configuration

Users can use the Berqnet Connect client application without needing to adapt their settings. Berqnet Connect's easy to use application automatically downloads the necessary settings from the server. Automatically updating its own software, Berqnet Connect self-installs the server certificate to the device using it in order to enable HTTPS scanning to come into effect.

Smart device labeling

To provide advanced network automation, devices can be automatically tagged according to their behavior on the network, and network security can be dynamically ensured by the rules defined on these tags.

Disaster recovery

In order to ensure connection continuity, central applications located in different locations can automatically back up to each other. Thanks to this geographical redundancy, backup is provided for a natural or human-induced disaster.
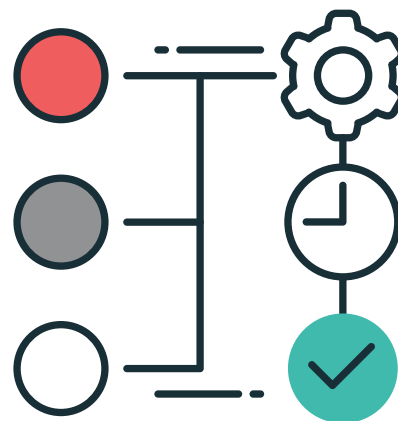
Berqnet SASE Platform's Main Components

Controller | Central Control Application

Berqnet SASE Controller application is a central control component that collects all traffic on the customer network, performs detailed security checks, and applies access controls on the network. This component manages centralized control processes that ensure that all branches and remote employees in the customer network can communicate with each other and securely access the Internet.

Branch Applications

Berqnet SASE Branch application is a component that allows network traffic in branches to be transferred to the central controller component and for local network rules to be applied in branches. All network events occuring on the branch network are instantly transferred to the central controller component, and thus all branches continue to work as if they were in the same location.

Connect | Client Application

Berqnet Connect application is a connection and control component that allows remote employees to securely connect to their corporate network which operates on all common operating systems.

### Manager | Central Management Application

Berqnet SASE platform is a centrally managed platform. The Manager application is a Cloud-based centralized management application in which all the functions necessary for regulating firewall rules and network management can be controlled from the center.
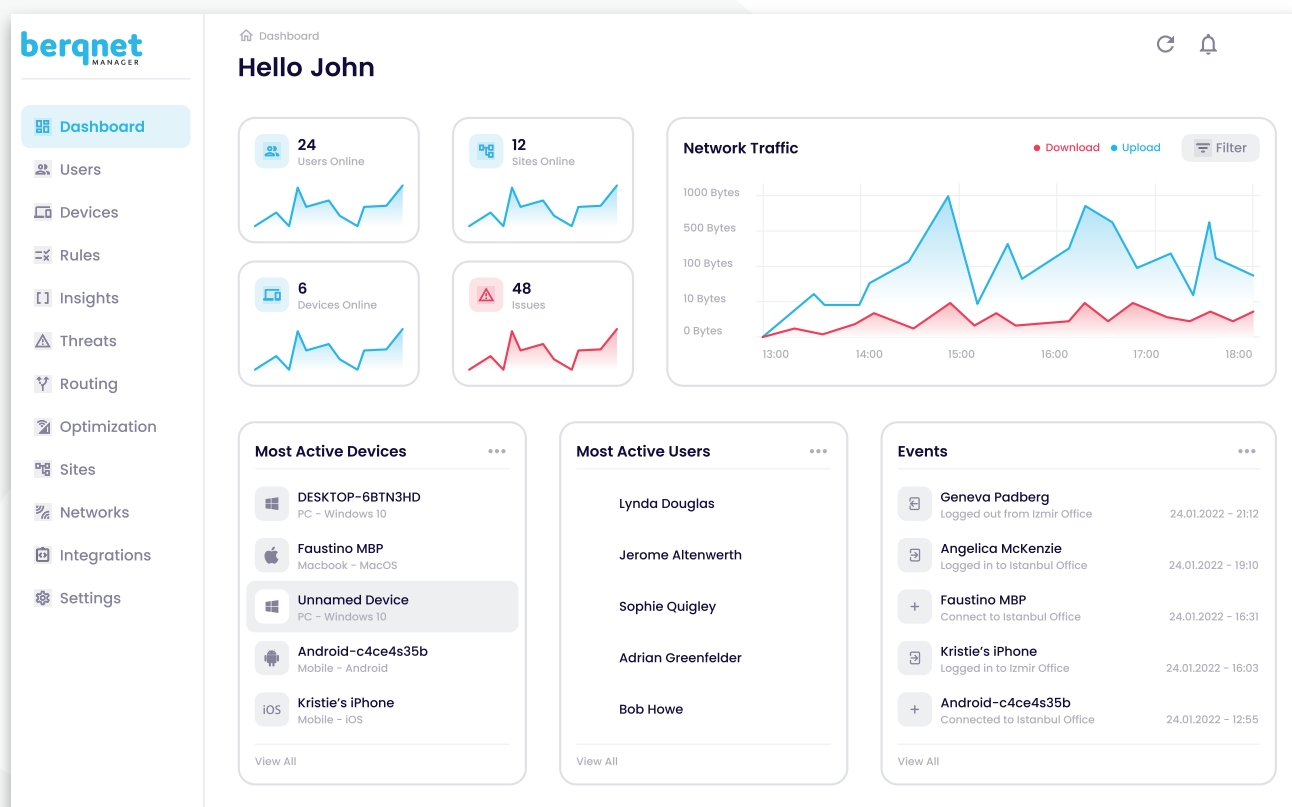
Orchestra | Business Partner Application

The Orchestra application has been developed for business partners. It is a cloud-based management component where partners can view their customers and the status of their networks, and where they can manage their memberships.

An Example of the Network Topology
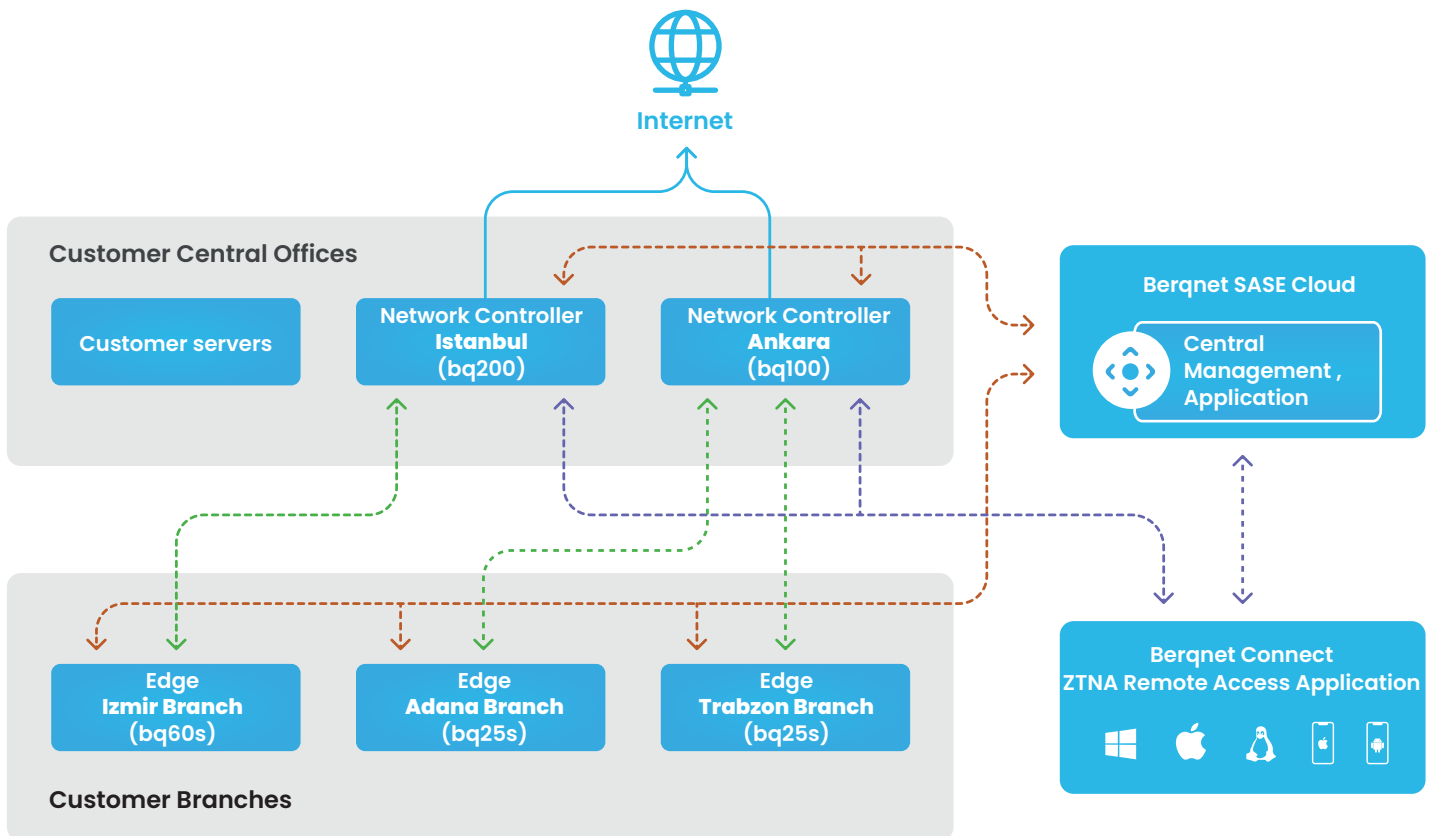
Technical Specifications

The Firewall

• Layer 3 and Layer 7 Firewall
• Stateful Packet Monitoring
• Source, Destination, Service, Time-Based Rules
• Static, Source, Destination Based Port Forwarding
• Network Address Translation (NAT)
• Support for Multiple External IP Addresses in One Interface
• Bridge Support

Network Services

• DNS Proxy
• Ability to enter a static DNS record
• DNS Enforcement
• DHCP Client, Server and Fingerprinting
• Policy-based Routing (PBR)
• VLAN Support

SD-WAN Management

• Settings-Free Installation
• Monitoring and Visualization
• Redundancy Operations (High Availability)
• Application-Based Smart Redirects
• Virtual and Physical Branch Application Options
• Higher Bandwidth with MultiPath TCP
• Support for Multiple Internet Lines
• Connection Balancing
• Connection Backup (Failover)

Security Services

• Virus, Worm, Trojan, Malware Blocking
• Automatic signature database updates
• Attack detection and blocking

Web Filtering

• URL filtering
• HTTPS filtering
• Filtering by category and word
• List of private secure addresses
• Customizable blocking page

VPN

• SSL VPN
• Wireguard

Service Quality Management

• Bandwidth limitation
• Connection prioritization

Authentication

• Local database
• Active directory
• Two-Factor authentication (2FA)

User and Device Management

• Identity-based management
• Dynamic client management
• Static and dynamic IP identification
• Intelligent tagging

Logging and Analytics

• HTTP/S and application logging
• Graphic and data formatted reports
• Time-based filtering
• Instant network usage monitoring
• Ability to download records to a computer
• Traffic records transferal to a network area
• Alarm mechanism
• Legally valid time stamp
• Full compliance with local regulations (KVKK & 5651)

Systems Management

• English and Turkish web management interface
• Ease of drag and drop configuration
• Role-based administrative powers
• Administrative transaction records
• 2-Factor authenticated access to management interfaces (2FA)
• Centralized software update
• Event notifications
• Modern REST API

Why Choose Berqnet SASE Platform?

Effective protection against cyber threats

With today's technology, an integrated and preventive cybersecurity system is needed to ensure that vulnerabilities and victimization do not occur. Berqnet SASE Platform provides powerful protection to businesses from cyber attacks. It prevents unwanted outcomes using modern cyber protection features that deploy a zero-trust approach.

Secure remote access

In businesses with multiple branches, employees should have secure access to their corporate network. Berqnet SASE provides a secure solution by installing sheltered tunnels between branches. Remote employees are securely connected to the corporate network via their computers and mobile devices using Berqnet Connect application.

Efficient use of branch internet lines

The SD-WAN approach was originally designed to optimize the use of internet lines. It's a network solution which uses standard internet lines safely and efficiently, as an alternative to MPLS solutions. Berqnet SASE devices installed at branches use Multipath Transmission Control Protocol (TCP) technology allowing multiple internet line functionality simultaneously when connecting to the center. This means users get as much bandwidth as the sum of the lines and line usage is thus maximized.

Efficient use of the internet at work

Research shows that 21% of employees use the internet for non-work related reasons for at least 5 hours each week when they are in the office. This gives rise to risks arising both from a productivity as well as an illegal use of the internet by employees. Thanks to Berqnet SASE advanced web and application filtering features, internet access can be limited via group or individual rules, thereby blocking access to unwanted sites with ease - either completely or at pre-determined intervals.

Easy one-stop installation and simple management

Who wouldn't want a network management and security system that can be installed in just a few minutes and that doesn't require advanced expertise? Berqnet SASE provides a centralized interface that provides the smoothest management experience, while also helping you save time thanks to its automation features. Managing Berqnet products is exceptionally easy and enjoyable for all users, whatever their level of expertise.

Compliance with GDPR and Law No. 5651

Berqnet has been developed in accordance with the General Data Protection Regulation (GDPR) and in accordance with Law No. 5651. It guarantees the accuracy of records with legally approved time stamps. Those failing to comply with Law No. 5651 on the use of the internet face serious fines of up to 15 thousand TL and a jail sentence. Businesses that do not protect their data as specified by the GDPR may face fines and administrative penalties.

Almost 10 years at R&D

Berqnet has been active in Research and Development since 2013 to produce cyber security solutions that cater to the needs of enterprises of all sizes with its team of R&D experts.

Turkish Lira prices

Berqnet is a product developed with home-grown R&D and local capital in our country and its sales prices are determined and quoted in Turkish Lira. It provides protection against losses that may occur due to variable exchange rates during Active Protection Membership renewals, by providing its products and services in Turkish Lira to provide budgetary assurance to our clients.

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About Berqnet

Berqnet is a registered trademark of LOGO Cyber Security and Network Technologies Inc, which was established in 2013 to provide cyber security solutions to businesses. It offers the SASE and Firewall product suites, which have been developed by its local, in-house research and development team. In serving its clients with agility and determination, it strives to remain responsive to rapidly changing customer and market needs.