

Barracuda SecureEdge platform

Securing **users, sites, and things** with one easy to deploy platform that connects any device, app, and workload



2003
FOUNDED



225,000
CUSTOMERS WORLDWIDE



1,600+
EMPLOYEES in 15 COUNTRIES



OUR VISION (what we aim to achieve)

To build a safer world.

OUR MISSION (How we intend to achieve our vision)

To deliver innovative security products that are easy to buy, deploy, and use.

Barracuda Solution Framework

Managed Services / XDR

Deployment Choices / Flexible Consumption

Email Protection

Spam, Malware, Threats

Phishing & Impersonation

Account Takeover

Incident Response

Security Awareness

Data Protection

Backup

Archiving

Data Classification

Network Protection

Secure Access Service Edge

Zero Trust Security

Secure SD-WAN

Network Firewalls

IoT/OT Security

Application Protection

OWASP Top 10

Bot Protection

DDoS Protection

Client-side Protection

API Security

Product Platforms

Threat Intelligence Platform

Barracuda Network Security Technology Timeline

Azure Certification

First firewall in Azure marketplace and in Azure Cloud with Microsoft Azure certification



CloudGen Firewall



First Firewall in Azure Virtual WAN



ZTNA proxy on CloudGen Firewall

Cloud based Secure SD-WAN service



Cloud-based IoT security.



Integration CloudGen Firewall:



Intent-based configuration for CloudGen Firewall (Policy Profiles)

2014

2015

2016

2017

2018

2019

2020

2021



2022



2023



ADVANCED THREAT PROTECTION



Reporting & Analytics



Integration CSPM



Next-gen Security, private edge & FMaaS



Integrations:

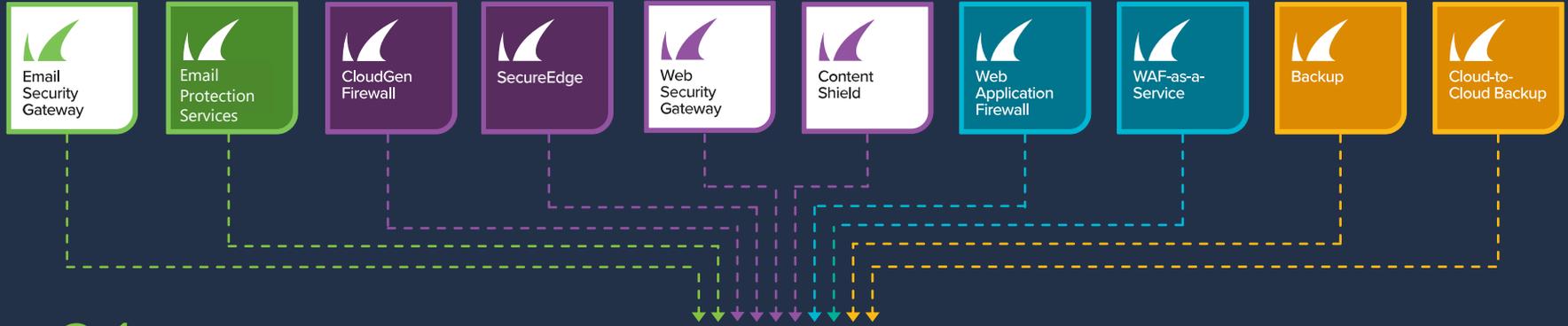


Pragmatic SASE Platform

Expand CloudGen WAN, use existing CloudGen Firewall deployments to provide SSE, ZTNA, SIA, URL Filter at any endpoint



Security built-in

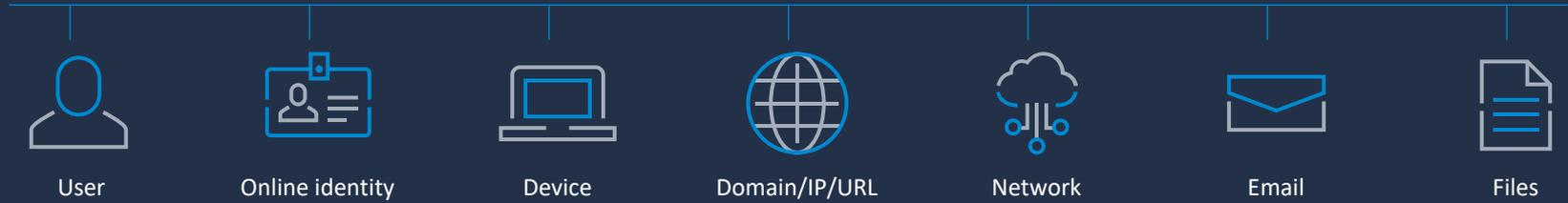


91%
of cyberattacks start with an email



Threat Intelligence Network

53%
of data breaches involve web applications



Today: Security & efficiency top priority

Traditional solutions not ready



Anti-virus



Anti-spam



Firewall



Client-to-Site VPN

Multiple attack surfaces



SaaS apps



Remote users



Hybrid data centers



Multi-site



IoT / Industrial

Lack of security resources

2.7M

Open roles worldwide

57%

Shortage of cyber-security skills impacted org

62%

Shortage results in increased workload on staff

39%

Organizations struggling to fill cloud security roles

Threat landscape requires best in class

>90%

Of attacks begin with email

81%

Hit by a network breach

74%

Attacked by ransomware

Challenging economic environment



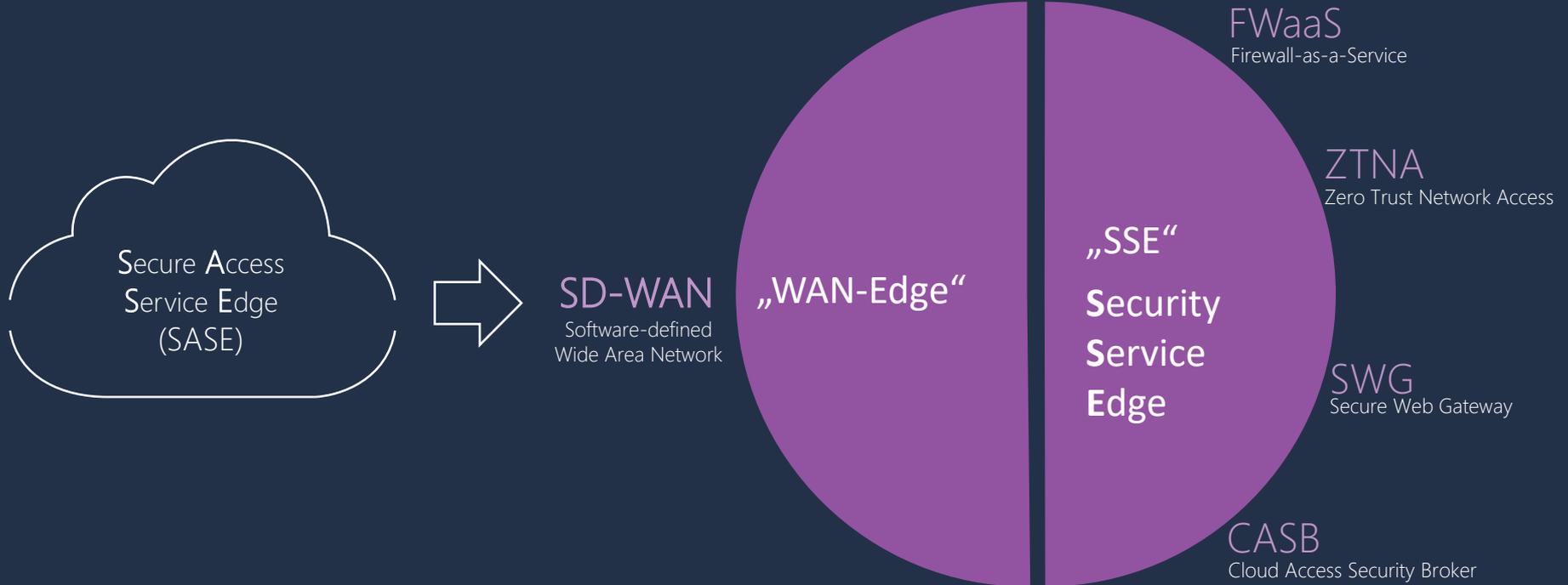
Gartner®

The Future of Network Security Is in the Cloud: Introducing the Secure Access Service Edge

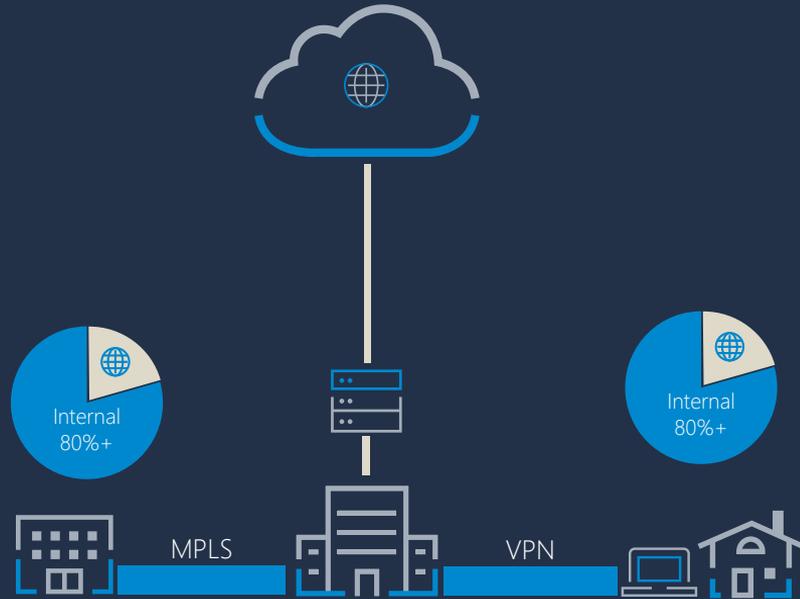
Neil MacDonald



What is SASE?



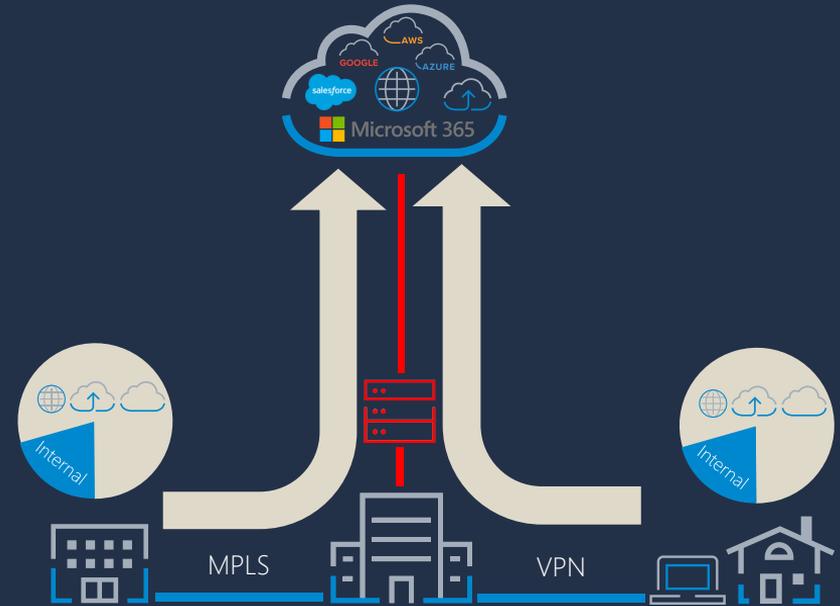
Networking & security transformation (I)



Apps hosted in DC

Users & office traffic backhauled to DC

Network: Security enforcement in DC



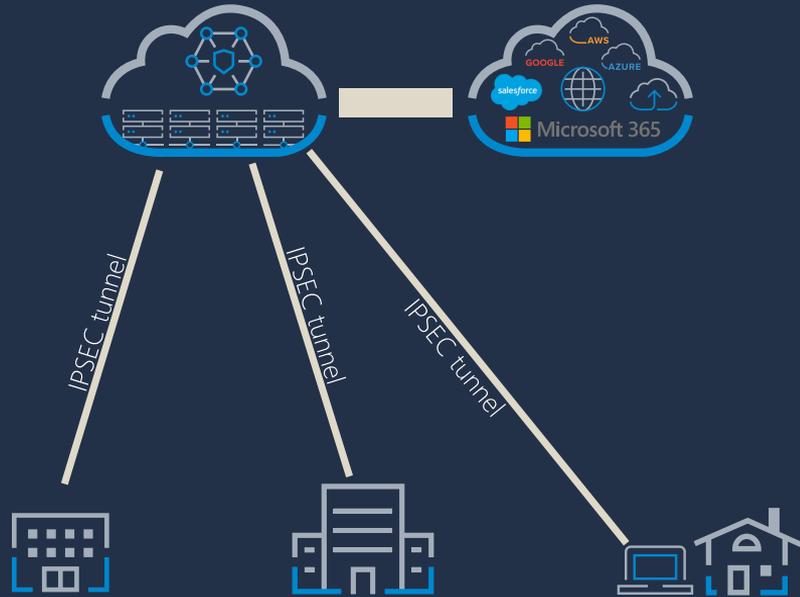
Apps: Mostly hosted in the Cloud or SaaS

Users: Often work off-network

Network: Security gaps in protection

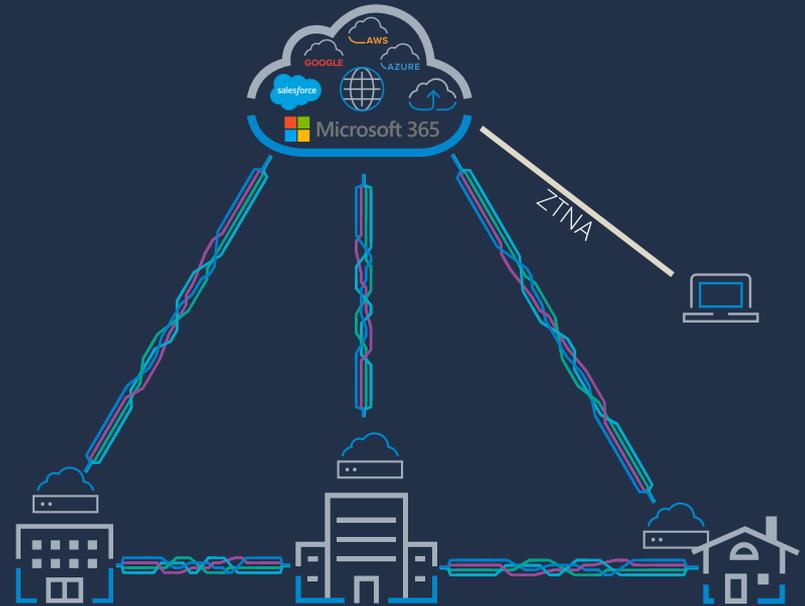


2019: SASE



Office: manual IPSEC or very limited SD-WAN
User: Backhaul everything all the time, no last mile optim.
Data privacy ? Addtl. point of failure? MPLS-like lock-in!
Expensive, complicated to set up

or Firewall Mesh?



Direct break out from everywhere
Security enforcement everywhere
Full data privacy, no central point of failure
Expensive, complicated to set up



2023: Post-WFH mandates , it gets even worse !



Branch is back !



+ employees WFH 2-3 days a week



Branches see MUCH more traffic (+70%)



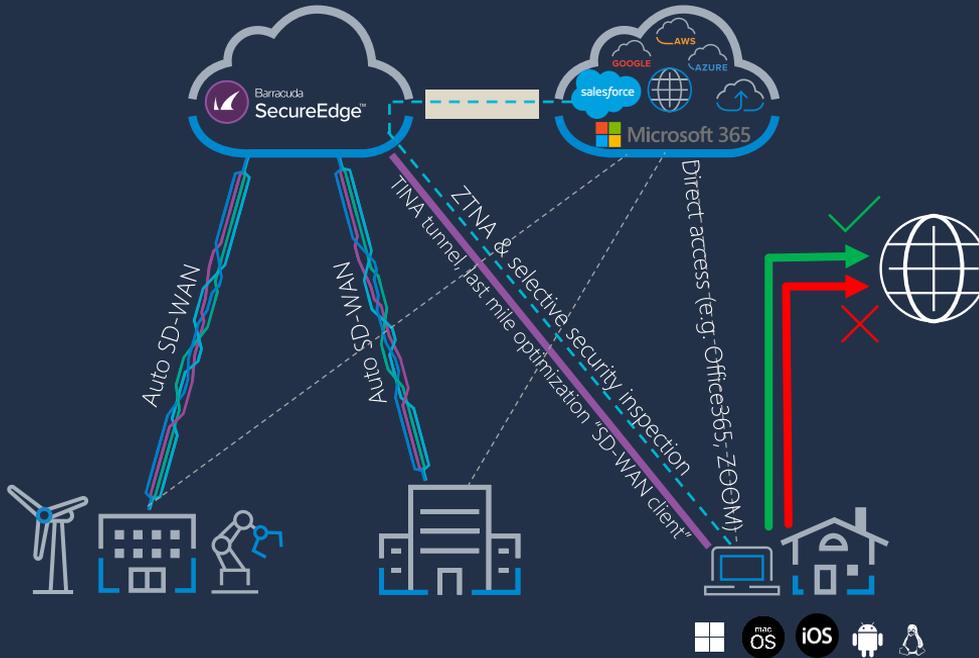
~~ALL IN cloud~~ -> “mostly” cloud,
HYBRID here to stay



understaffed.
under skilled.
under attack.



So we need best of both worlds



- Easy-to-use cloud-based manager
- Highly automated, auto SD-WAN built in
- Security built in, intent based configuration
- Last mile optimization for endpoints
- Must have: All client platforms
- Must have: All office types
- Must have: ZTNA to apps, hosted in ANY cloud
- Simultaneous access to multiple clouds
- Availability:
- Service: SaaS
- Private: (appliance / VM)
- Azure: SecureEdge for Virtual WAN





Must not be rocket science...

Barracuda SecureEdge: SASE made easy

Cloud-delivered Security & Networking



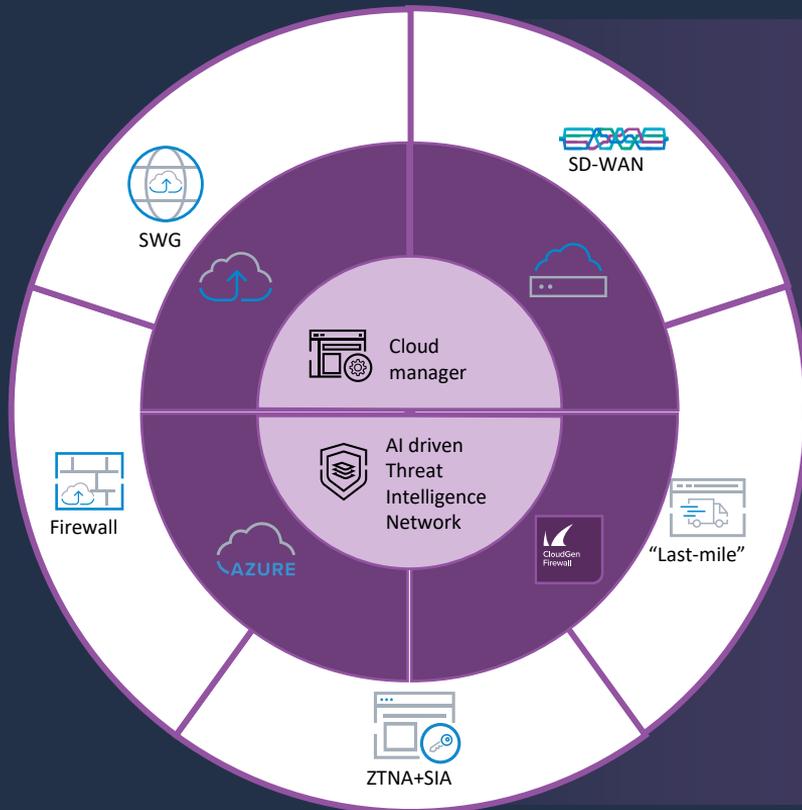
Any remote user on any device



Any office / branch



IoT and Industrial



Secure Internet Access



Secure SaaS Access



Secure Access to Private Apps



Secure Access to Private Apps



Use Cases



Secure Web Gateway, SD-WAN and cloud delivered network security

Customer w. single site



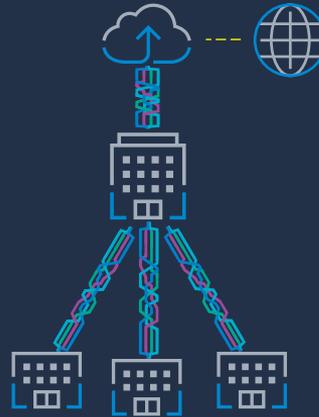
Example: Customer has a single office and needs web security, internet access and security.

Customer w. multiple sites



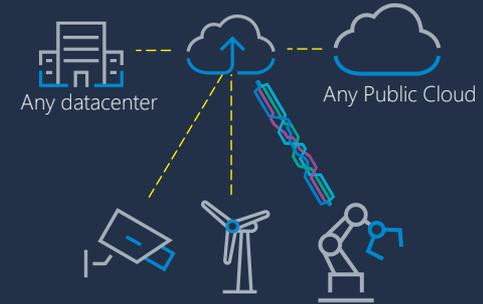
Example: Customer has several retail stores, each needs internet access and security.

Customer with branch sites



Example: Customer has a headquarters and branch sites which need connectivity back to the headquarters.

IoT or Industrial to Cloud

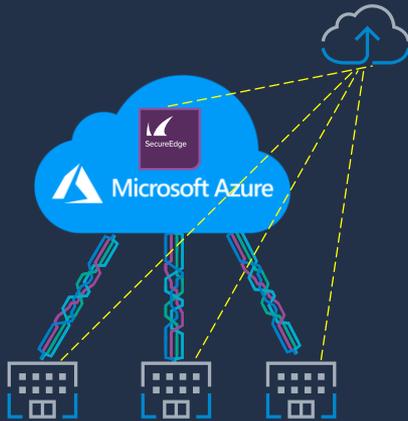


Customer needs to send IoT traffic to public cloud or DC and enable Secure Access (ZTNA) to Industrial Control Systems on the factory floor



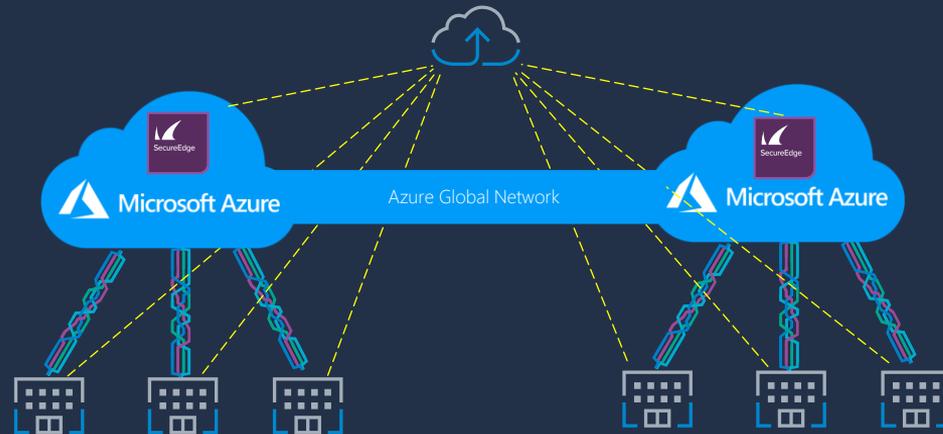
Cloud-on ramp, cloud delivered network security

Customer in Cloud



Example: Customer has servers in Azure and the branch sites need connectivity to those servers.

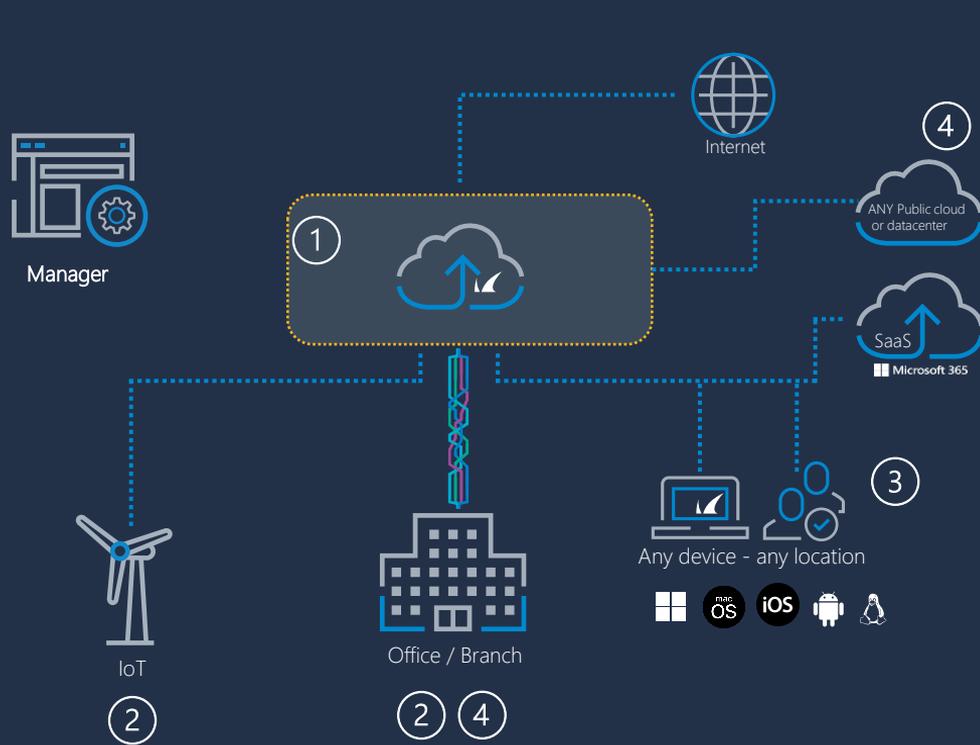
Customer in Cloud, Azure Global Network as backbone



Example: Customer has servers in Azure in different regions and the branch sites need connectivity to those servers.



How it works



① SASE Service

② Site Device / Rugged / IoT

③ SASE Agent

④ SD-WAN Connector

Site devices (IoT)



- SASE combined with mobile devices and cloud service hosted in the cloud and fully managed by Barracuda.
- Zero Trust Network based (ZTD) for Security (SaaS)
- Optional Azure WAN Service
- Filtering for Secure Internet Access (SIA)
- Full security platform available if needed
- Last Mile traffic optimization
- Packet Loss reduction and Gen Firewall to secure ZTNA / SaaS / IoT connectivity
- Secure connector devices for IoT inspection to service



Auto SD-WAN



Auto SD-WAN

Demo Enterprises Inc/Production

Security Policy > SD-WAN > Application Categories Search Applications

CATEGORY	APPLICATIONS	CUSTOM APPLICATIONS	PRIORITY	ACTION	FALLBACK	LOAD BALANCING
Office 365	14	0	High	Optimize	Allow	Auto
SaaS & Business	48	1	High	Optimize	Allow	Auto
Remote Access	26	0	Real Time	Best Latency	Allow	Auto
Voice & Video	21	1	Real Time	Best Latency	Allow	Auto
Network Services	58	5	Medium	Best Bandwidth	Allow	Auto
Network Bulk	361	1	Low	Best Bandwidth	Block	Auto
Web Traffic	33	3	Medium	Best Bandwidth	Block	Auto



Auto SD-WAN

Demo Enterprises Inc/Production

Security Policy > SD-WAN > Application Categories

Microsoft Office 365 Word

CATEGORY	APPLICATIONS	CUSTOM APPLICATIONS	PRIORITY	ACTION	FALLBACK	LOAD BALANCING
Office 365	14	0	High	Optimize	Allow	Auto
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Auto SD-WAN

Demo Enterprises Inc./Production

Security Policy > SD-WAN > Application Categories

Search: SIP

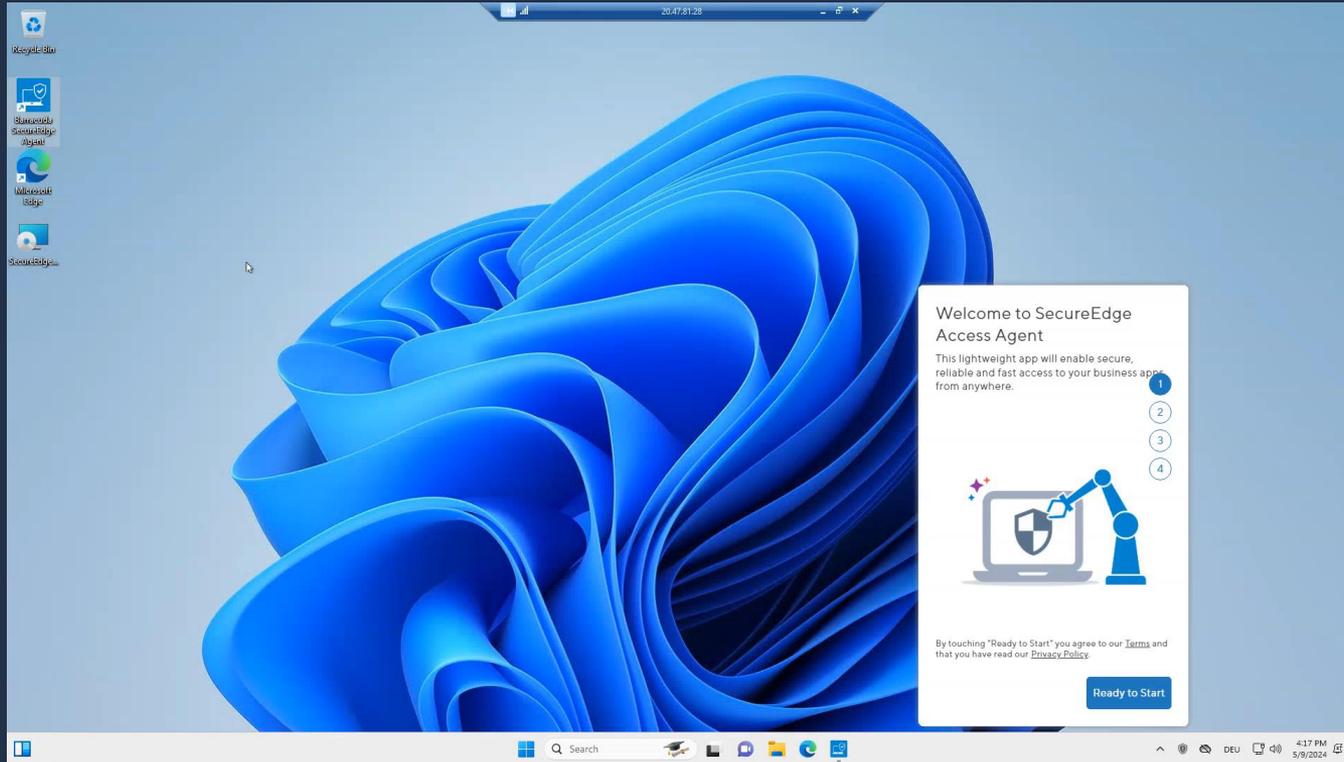
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Network Bulk	361	1	Low	Best Bandwidth	Block	Auto
Web Traffic	33	3	Medium	Best Bandwidth	Block	Auto



The image features a dark blue background with a glowing globe in the center. The globe is partially illuminated from the top, showing city lights and a network of white lines connecting various nodes. The text "SecureEdge Access" is overlaid on the left side of the globe in a white, sans-serif font.

SecureEdge Access

SecureEdge Access enduser experience



SecureEdge Access setup

Barracuda Networks NetSec PM Team/Default
Dashboard > Status

STATUS SECURITY WEB FILTER ZERO TRUST ACCESS TEST

Options Add Dashboard
Edit Dashboard

Timeframe: Last 24 hours
Edge Service/Site: BranchOffice1

Edge Service Status

Total 4

Online	Pending	Degraded	Offline
4	0	0	0

IoT Status

Total 1

Online	Pending	Connecting	Offline
1	0	0	0

Map

Edge Services Sites IoT Standalone Sites

Site Status

Total 4

Online	Pending	Connecting	Degraded	Offline
3	0	1	0	0

Offline Tunnels

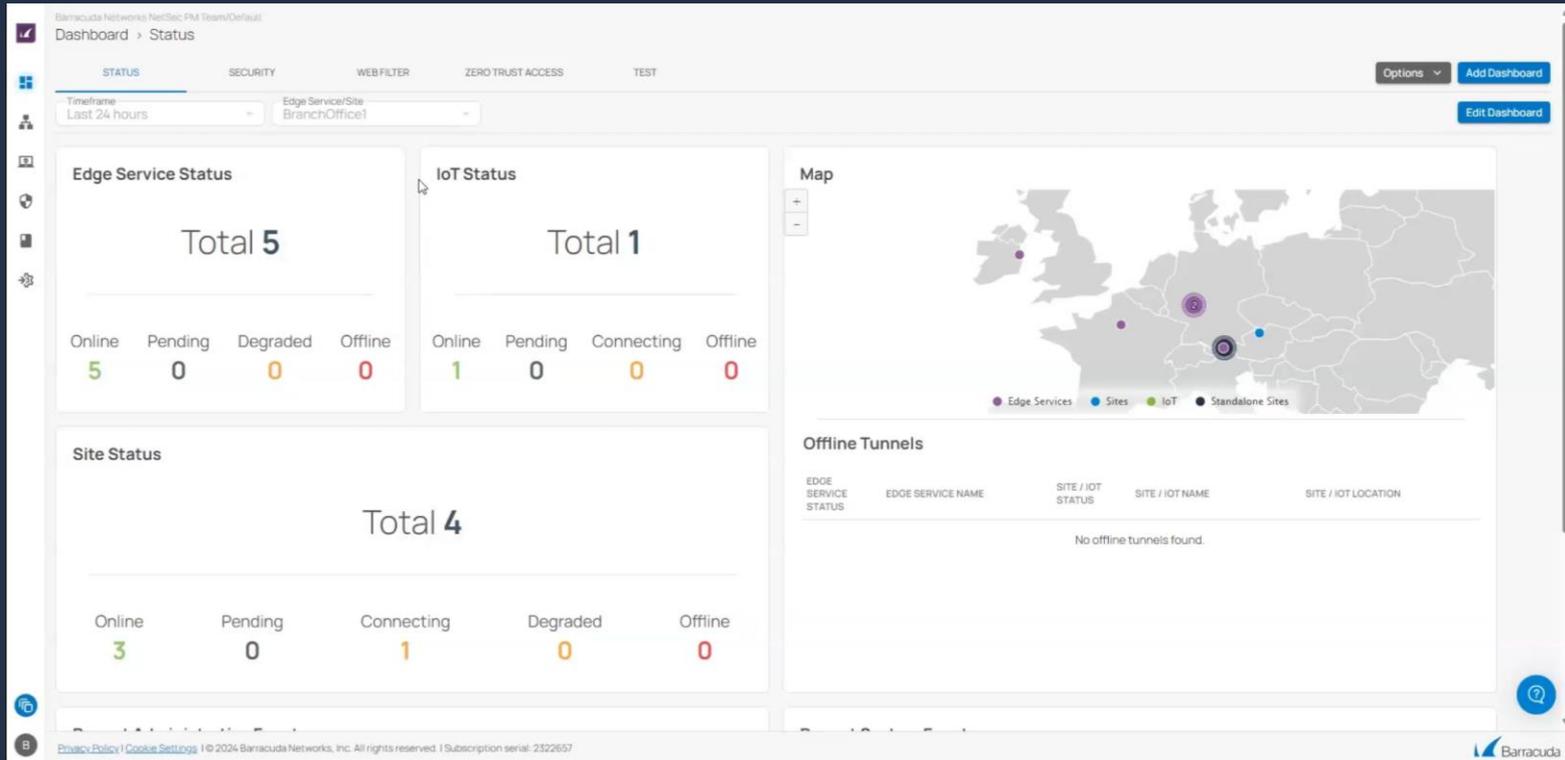
EDGE SERVICE STATUS	EDGE SERVICE NAME	SITE / IOT STATUS	SITE / IOT NAME	SITE / IOT LOCATION
No offline tunnels found.				

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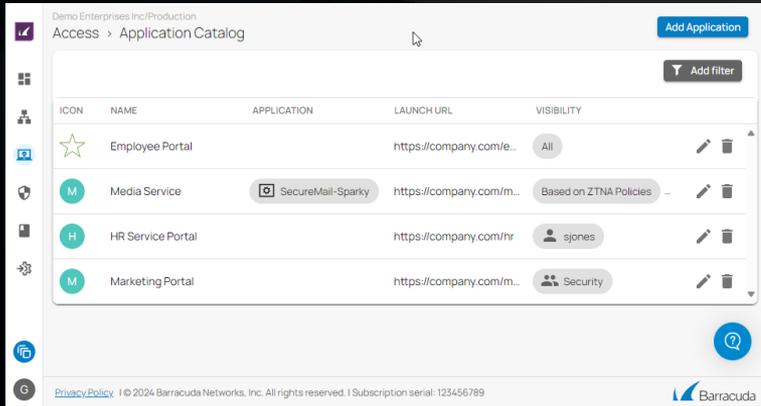
Barracuda



Private and Public Resources



Latest update for ZTNA in 9.0.2



New authentication options

New features

- Mass enrollment
- Tamperproof
- Application catalog
- Configurable device limit
- User overrides
- ZTNA application list improved (conditional access)

ZTNA dashboards

New ZTNA options

Tamperproof

- Users can no longer exit the agent or disable the connection
- MDM required on mobile and macOS to be truly tamperproof

Device limit

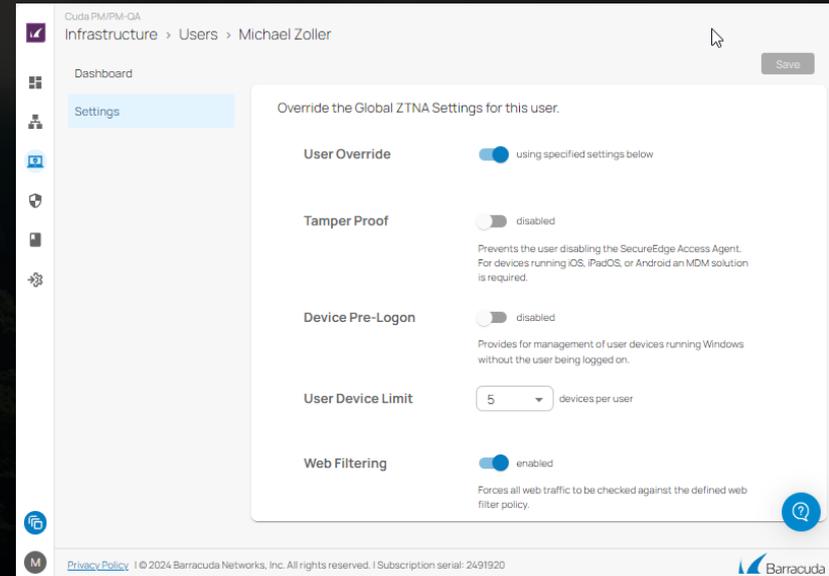
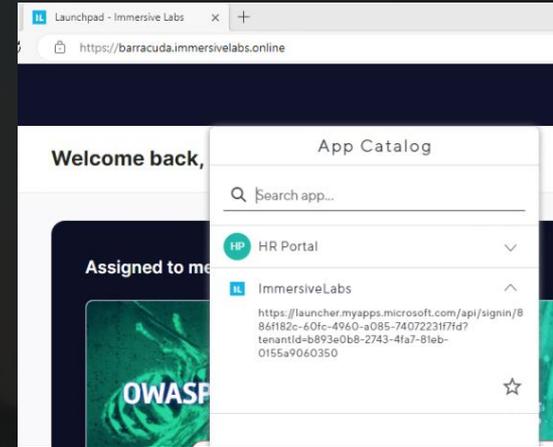
- Configure the number of devices per user.
Default: 5 / Max: 10

User override

- All ZTNA settings can be overridden on a per-user setting.

App Catalog

- Link to internal and external resources
- Visibility per user/group or inherited from Zero Trust Access policy



Identity service

The transition from Barracuda Cloud Control to dedicated identity service

- Support for Entra ID, SAML, Okta, Google Workspaces and OTP tokens (email based)
- Separate IDP and directory sync
- BCC accounts grandfathered in
- Test authentication



Identity service

Cuda PM/Default
Identity > Settings

Identity Providers

Add Identity Provider

NAME	TYPE	STATUS	
Barracuda Cloud Control	Barracuda Cloud Control	Active	
Loading... 			

User Directories

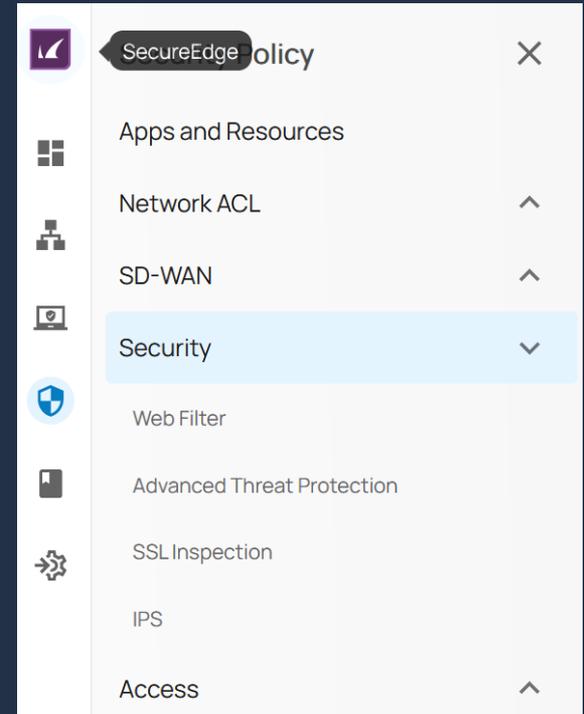
Add User Directory

NAME	TYPE	STATUS	LAST SYNC	SYNC RESULT	
SecureYourEdge	Barracuda Cloud Control	Completed	about 1 hour ago	21 Users, 4 Groups, Synced	
Loading... 					

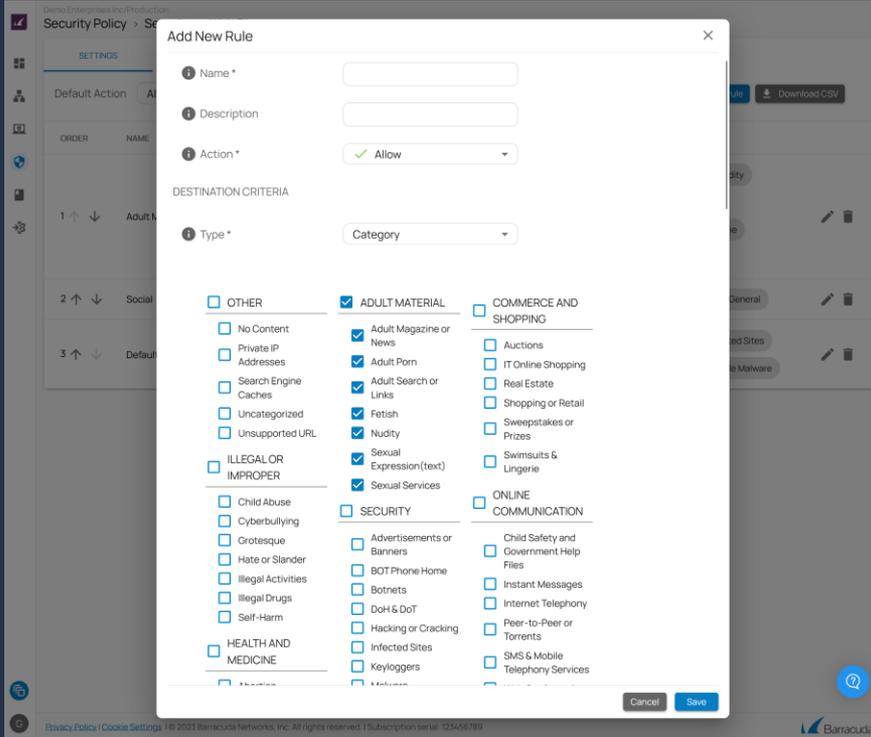


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URL Filter and Security in SecureEdge



Web Filter



More than 200 categories

Enforced by site device and SecureEdge Agent for WFH

Single policy

Settings auto-apply to all sites, services and WFH users

Exceptions available



Web Filter: Exceptions

The screenshot displays a web filter configuration interface. The main window shows a table with columns for 'ORDER' and 'NAME', containing one entry: 'Marketing'. An 'Edit Explicit' dialog box is open, allowing for detailed configuration of the 'Marketing' filter. The dialog is divided into 'SOURCE CRITERIA' and 'DESTINATION CRITERIA' sections.

Source Criteria:

- Name: Marketing
- Description: Allow Marketing access to social
- Action: Allow
- Type: User/Group
- Users: Type to search
- Groups: Type to search

Destination Criteria:

- Type: (dropdown)
- Category: (dropdown)

The destination criteria dropdown menu is open, showing a list of user and group categories:

- 401K Users
- Administrators
- All Team
- Auditors
- Engineering
- Executive Team
- Power Users
- Remote Users
- Security

The dialog also includes a 'Save' button at the bottom right.

Exceptions by Source
IP/Network, site, or
user/group level

For Web Filter Category of
individual domains



Advanced Threat Protection

ORDER	NAME	DESCRIPTION	ACTION	SOURCE	DESTINATION
1 ↑ ↓	DoNotScanM365		Do Not Scan	0.0.0.0/0	Microsoft Office 365
2 ↑ ↓	OnlineOffice	Ignore Online Office	Do Not Scan	0.0.0.0/0	Adobe Online Office
3 ↑ ↓	Security	Ignore Security	Do Not Scan	Security	0.0.0.0/0

Included with Energize Updates

Available for Site device, Private Edge Service, SaaS Edge Service, Edge Service in Azure.

Also applies to traffic backhauled for security inspection



SSL Inspection

The screenshot shows the 'SSL Inspection' configuration page. At the top, it is titled 'Security Policy > Security > SSL Inspection'. Below the title, there are two tabs: 'SETTINGS' and 'CERTIFICATES'. Under 'SETTINGS', there is a toggle for 'Enabled' (turned on), a 'Default Action' dropdown set to 'Inspect', and buttons for 'Add filter', 'Add rule', and 'Download CSV'. Below this is a table with columns: ORDER, NAME, DESCRIPTION, ACTION, SOURCE, and DESTINATION. The table contains three entries:

ORDER	NAME	DESCRIPTION	ACTION	SOURCE	DESTINATION
1	DoNotInspectM365		Do Not Inspect	0.0.0.0/0	Microsoft Office 365
2	HealthAndFinance	Dont inspect health-finance	Do Not Inspect	All Sites	Financial Products, Insurance, Market Rates, Health, Fitness
3	Europe	European traffic exception	Do Not Inspect	Nottingham, Reading-Offline, Basingstoke, Unknown, Vienna	0.0.0.0/0

Included with Energize Updates

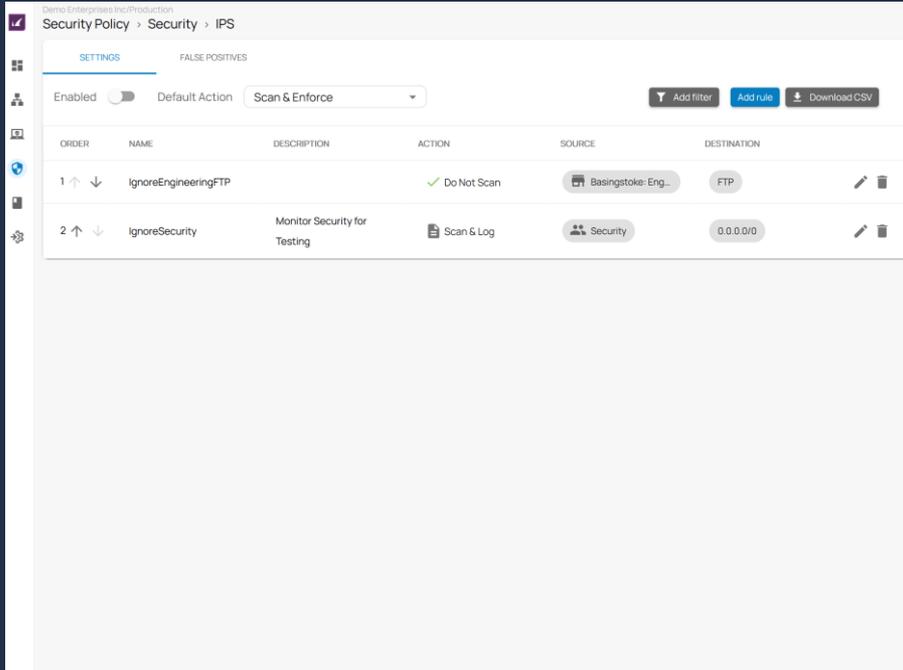
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Also applies to traffic backhauled for security inspection

 Security Inspection



Intrusion Prevention System (IPS)

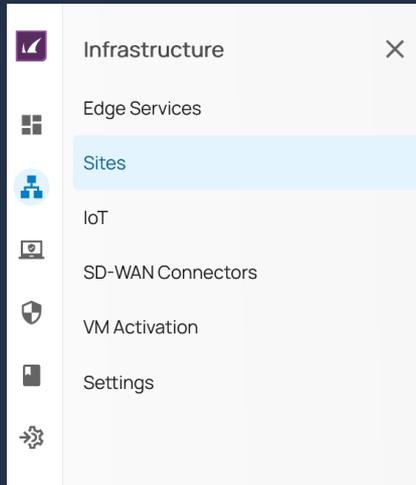


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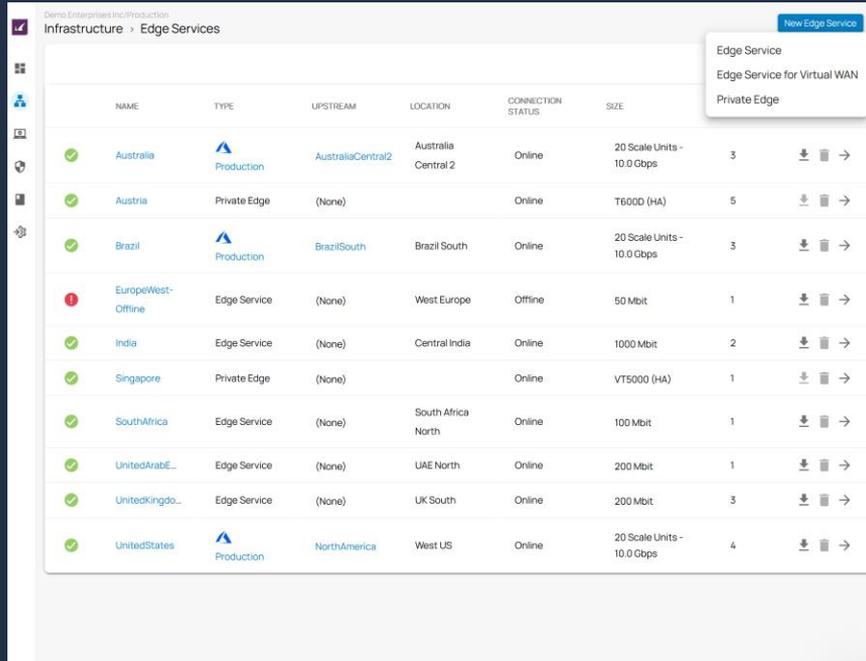




Managing the Infrastructure



Edge Services



The screenshot displays the 'Edge Services' management interface. A 'New Edge Service' dropdown menu is open, showing options for 'Edge Service', 'Edge Service for Virtual WAN', and 'Private Edge'. The main table lists the following services:

NAME	TYPE	UPSTREAM	LOCATION	CONNECTION STATUS	SIZE	
Australia	Production	AustraliaCentral2	Australia Central 2	Online	20 Scale Units - 10.0 Gbps	3
Austria	Private Edge	(None)		Online	T600D (HA)	5
Brazil	Production	BrazilSouth	Brazil South	Online	20 Scale Units - 10.0 Gbps	3
EuropeWest-Offline	Edge Service	(None)	West Europe	Offline	50 Mbit	1
India	Edge Service	(None)	Central India	Online	1000 Mbit	2
Singapore	Private Edge	(None)		Online	VT5000 (HA)	1
SouthAfrica	Edge Service	(None)	South Africa North	Online	100 Mbit	1
UnitedArabE...	Edge Service	(None)	UAE North	Online	200 Mbit	1
UnitedKingdo...	Edge Service	(None)	UK South	Online	200 Mbit	3
UnitedStates	Production	NorthAmerica	West US	Online	20 Scale Units - 10.0 Gbps	4

Available for: SaaS, private HW appliance, private VX, Azure vWAN

Site devices can be “promoted” to private Edge Service

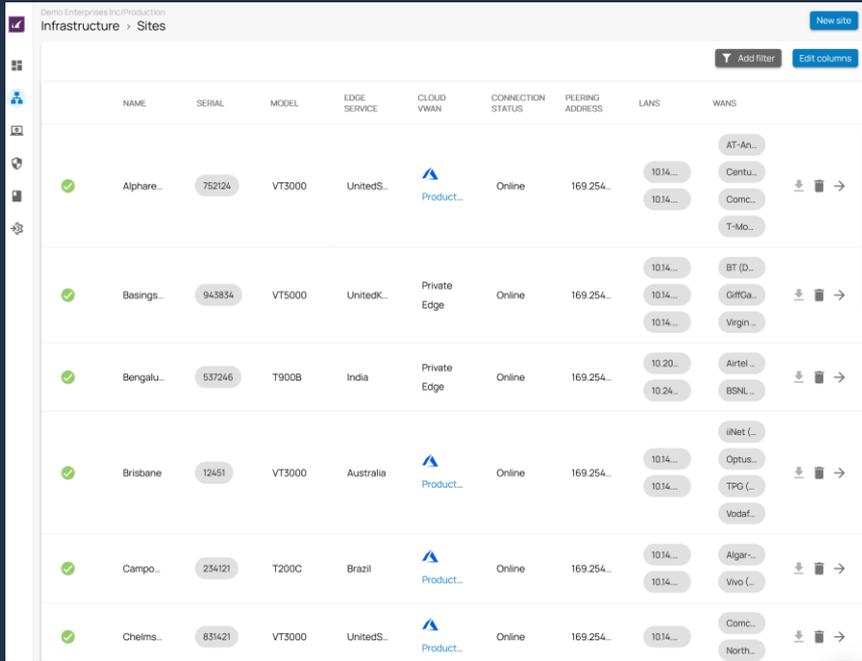
50 Mbps to 40 Gbps

Security & networking for WFH, SD-WAN on-ramp & security for sites (if not done locally)

<https://se-demo.barracudanetworks.com/#/infrastructure/gateways>



Site devices



	NAME	SERIAL	MODEL	EDGE SERVICE	CLOUD VWAN	CONNECTION STATUS	PEERING ADDRESS	LANS	WANS
✓	Alphare...	752124	VT3000	UnitedS...	Product...	Online	169.254...	1014... 1014...	AT-An... Centu... Comc... T-Mo...
✓	Basings...	943834	VT5000	UnitedK...	Private Edge	Online	169.254...	1014... 1014... 1014...	BT (D... DiffGa... Virgin...
✓	Bengalu...	537246	T900B	India	Private Edge	Online	169.254...	10.20... 10.2k...	Airtel... BSNL...
✓	Brisbane	12451	VT3000	Australia	Product...	Online	169.254...	1014... 1014...	ilinet (... Optus... TPG (... Vodaf...
✓	Campo...	234121	T200C	Brazil	Product...	Online	169.254...	1014... 1014...	Algar... Vivo (... Comc... North...
✓	Chelms...	831421	VT3000	UnitedS...	Product...	Online	169.254...	1014...	

Appliance hardware & virtual

Management of unlimited number of devices

Zero Touch Deployment

- P4 listens for DHCP assignment

Auto SD-WAN



IoT devices

The screenshot displays the Barracuda IoT management interface. At the top, it shows 'Demo Enterprise Inc Production' and 'Infrastructure > IoT'. A 'New IoT Device' button is in the top right. Below the header is a table with columns: NAME, SERIAL, MODEL, EDGE SERVICE, CLOUD WMAN, CONNECTION STATUS, LANS, and WANS. Three devices are listed, all with a green checkmark in the NAME column, indicating they are online. Below the table are two images of physical devices: 'Secure Connector 2' and 'Secure Connector 3'. The 'Secure Connector 2' image shows ports for PWR, RST, OTG, USB, LAN1, LAN2, LAN3, WAN, and 12Vdc. The 'Secure Connector 3' image shows ports for USB, CONSOLE, LAN1, LAN2, LAN3, WAN, WiFi, and 12-57Vdc.

NAME	SERIAL	MODEL	EDGE SERVICE	CLOUD WMAN	CONNECTION STATUS	LANS	WANS
Innsbruck...	325555	FSC2.9	Austria	Private Edge	Online	192.168...	Wan1 (D...
Innsbruck...	895556	FSC2.9	Austria	Private Edge	Online	192.168...	Wan1 (D...
Innsbruck...	230111	FSC2.9	Austria	Private Edge	Online	192.168...	Wan1 (D...

Small fanless devices for IoT connectivity

Extended temperature range

WiFi & LTE models available

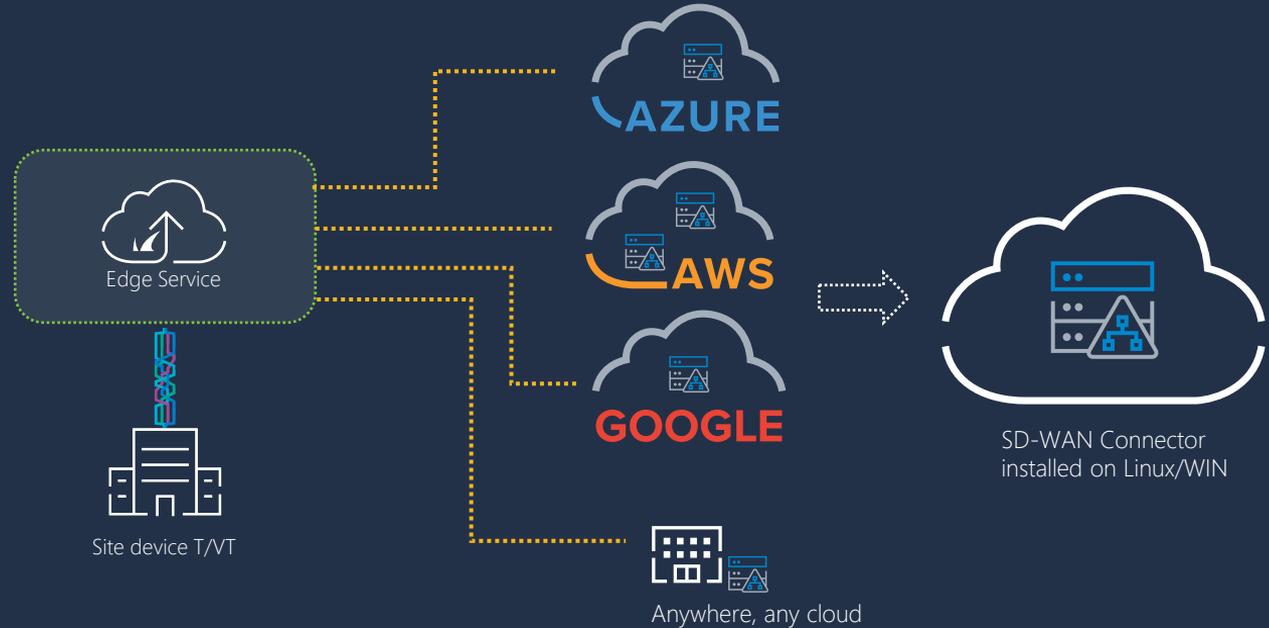
No on-box security functions.



Access to anywhere Apps: SD-WAN Connector

Lightweight SD-WAN connectivity

- Linux + Windows server
- Uses TINA protocol
- Inbound only
- Users access via internal DNS





Questions?

An aerial photograph of a concrete arch bridge spanning a vibrant turquoise river. The bridge has a single lane in each direction with a white car driving on the right side. A small yellow kayak is visible in the water below. The surrounding landscape is lush green forest. The text 'Thank You' is overlaid on the left side of the image.

Thank You

The Barracuda logo consists of a white stylized shape resembling a fish or a wave, positioned to the left of the company name.

Barracuda[®]
Your journey, secured.