



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

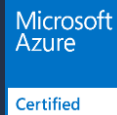
Product Platforms

Threat Intelligence Platform

Barracuda Network Security Technology Timeline

Azure Certification

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



Microsoft Partner of the Year
2016 Winner
Microsoft Azure Certified ISV
Solution Award

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

Gartner
Magic Quadrant

2022

Gartner
Magic Quadrant

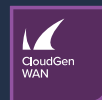
2023



Reporting & Analytics



Next-gen Security, private edge & FMaaS



Pragmatic SASE Platform

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



Integration CSPM



Integrations:



SCADAfence



NOZOMI NETWORKS



Barracuda SecureEdge™



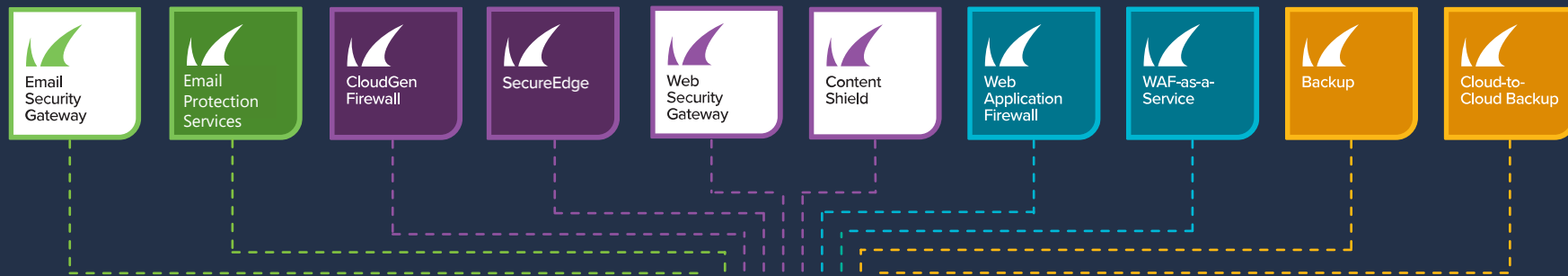
Rhebo
Industrial Network Continuity



crosser
INTELLIGENT EDGE COMPUTING SOLUTIONS



Security built-in



91%

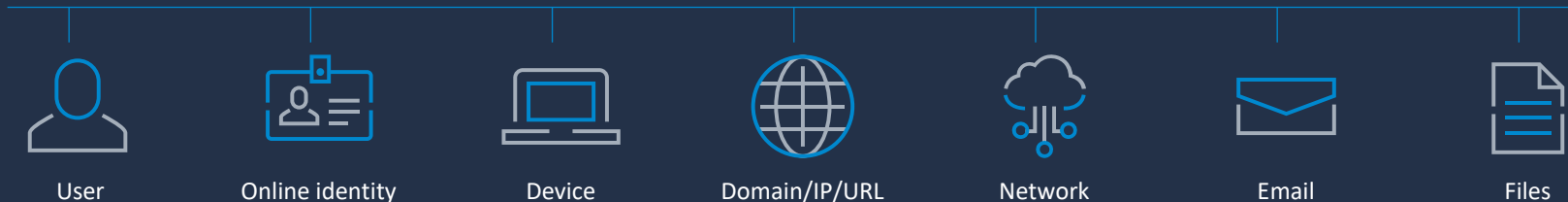
of cyberattacks start with an email



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-2-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



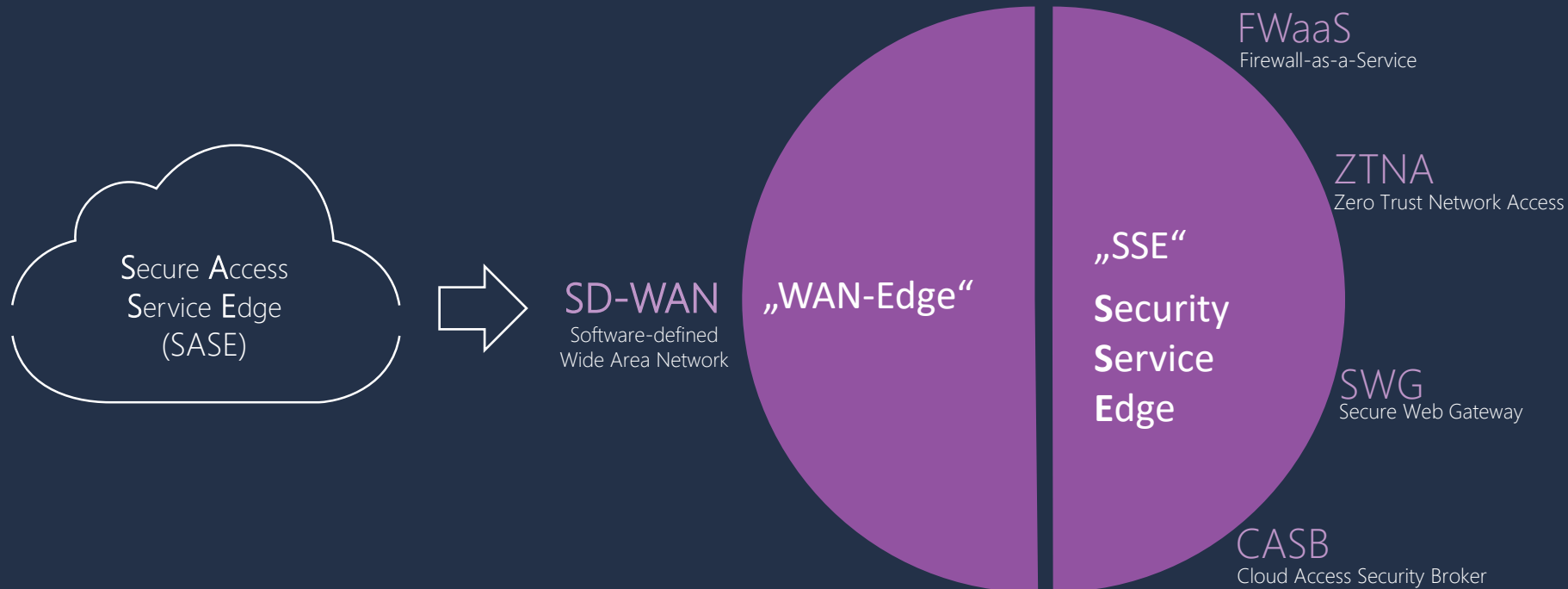


The Future of Network Security Is in the Cloud: Introducing the Secure Access Service Edge

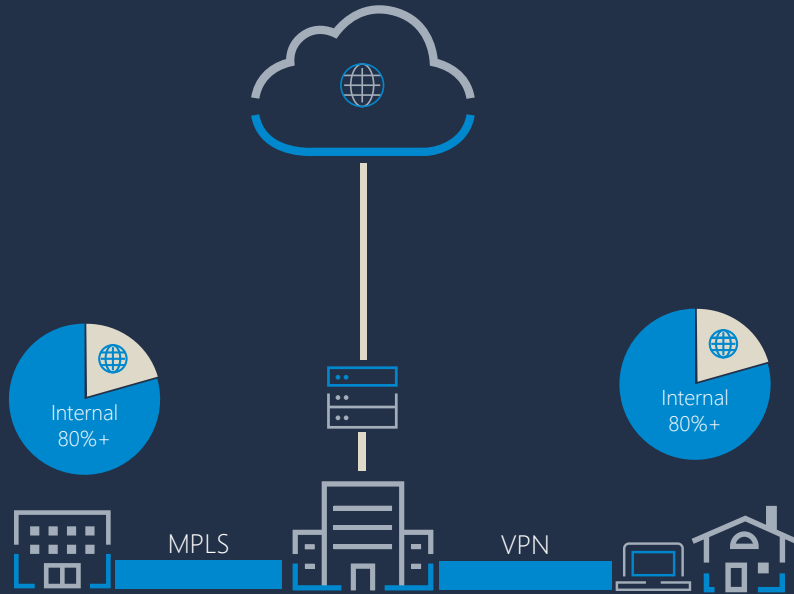
Neil MacDonald



What is SASE?



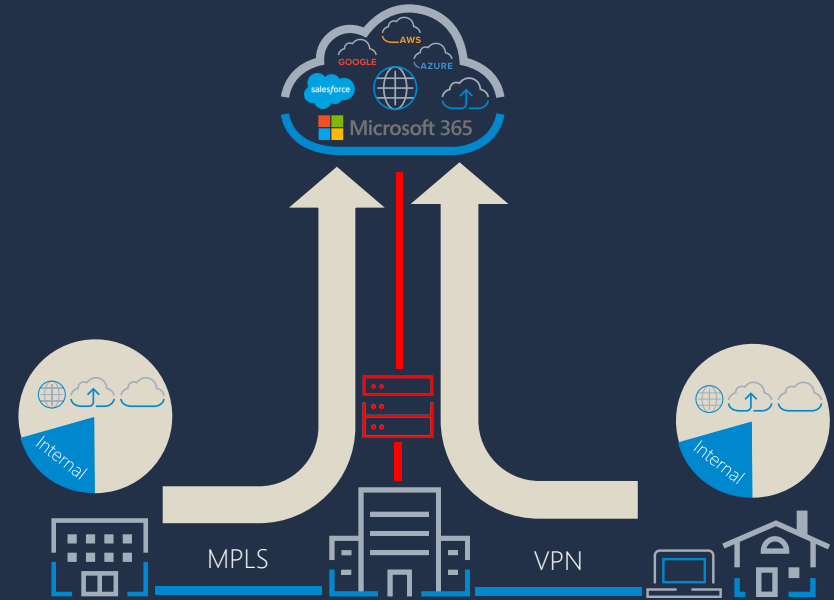
Networking & security transformation (I)



Apps hosted in DC

Users & office traffic backhauled to DC

Network: Security enforcement in DC



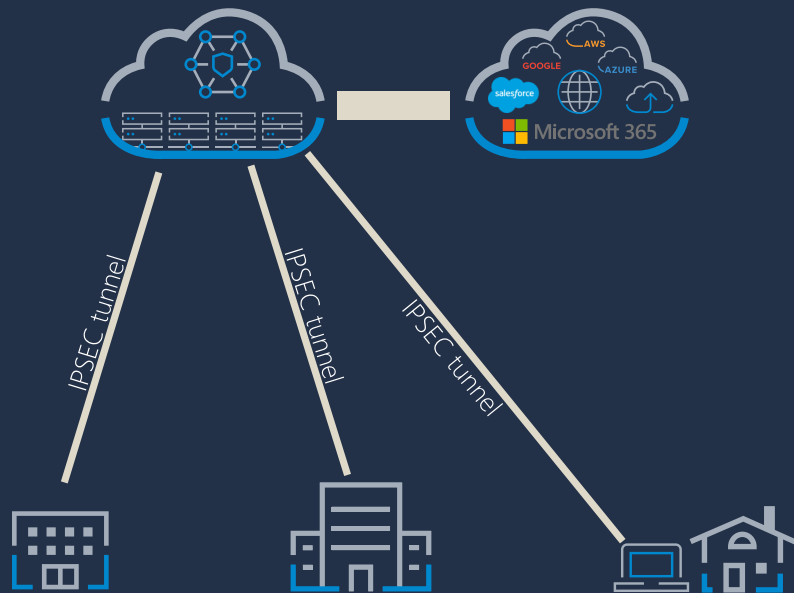
Apps: Mostly hosted in the Cloud or SaaS

Users: Often work off-network

Network: Security gaps in protection



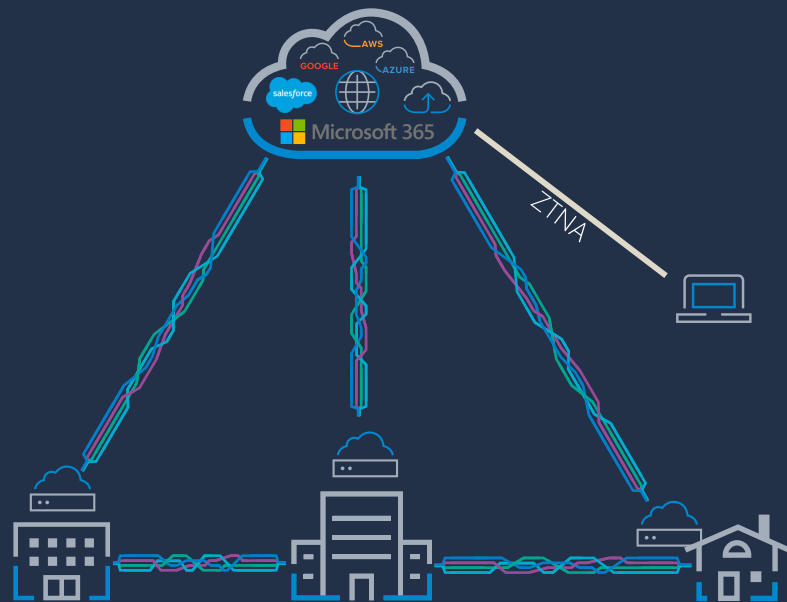
2019: SASE



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%)



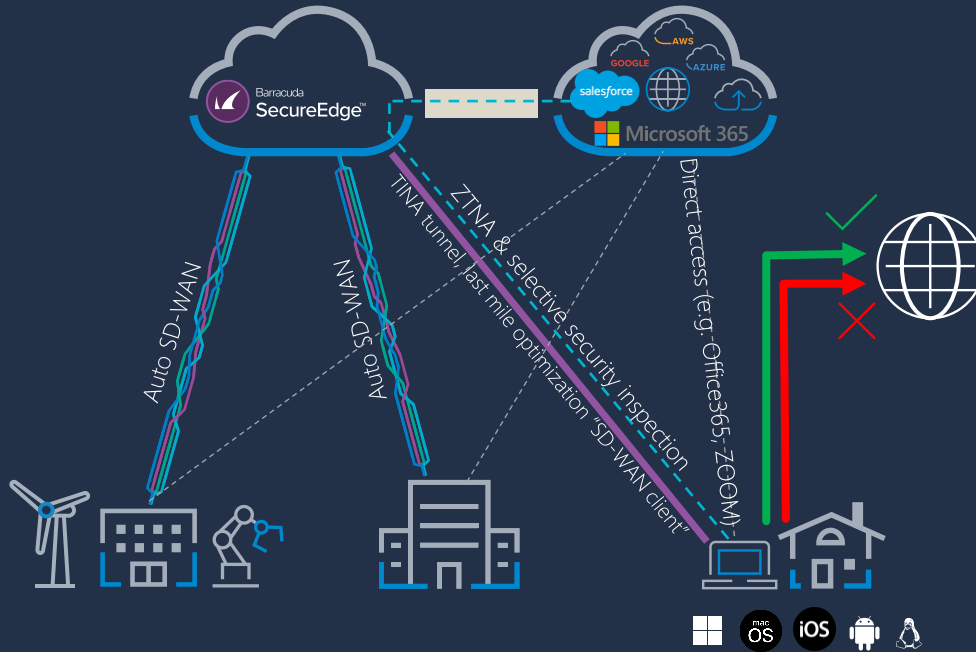
~~ALL IN cloud~~ -> “mostly” cloud,
HYBRID here to stay



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



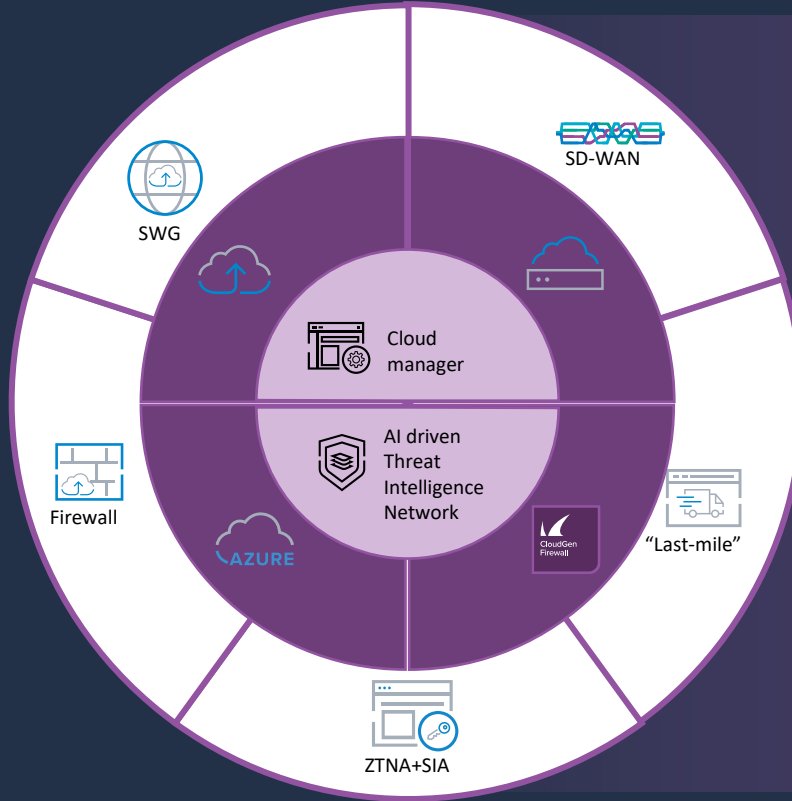
Any remote user on any device



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



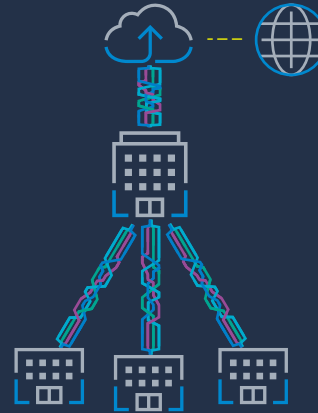
Example: Customer has a single office and needs web security, internet access and security.

Customer w. multiple sites



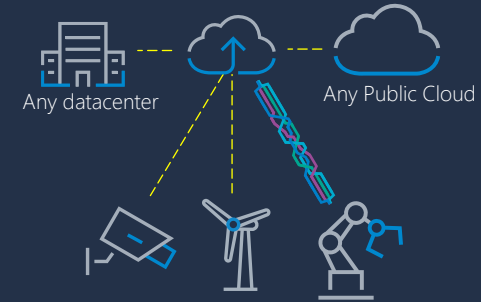
Example: Customer has several retail stores, each needs internet access and security.

Customer with branch sites



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

IoT or Industrial to Cloud

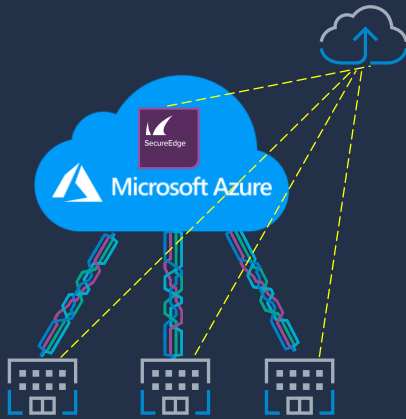


Customer needs to send IoT traffic to public cloud or DC and enable Secure Access (ZTNA) to Industrial Control Systems on the factory floor



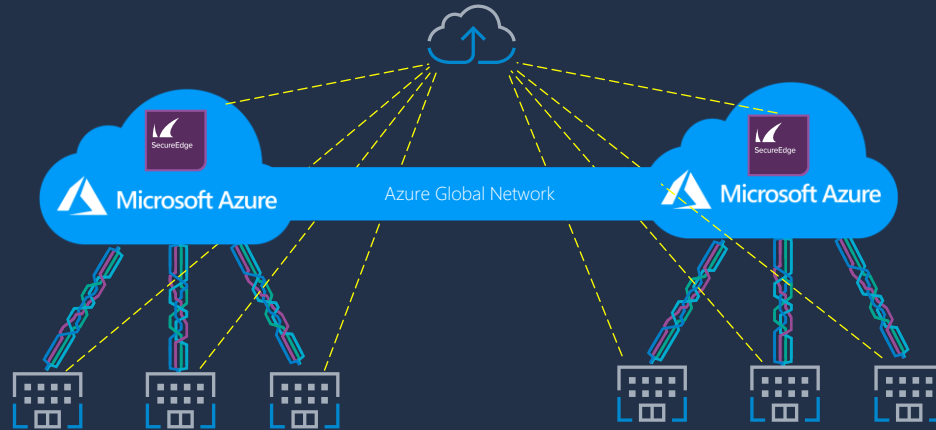
Cloud-on ramp, cloud delivered network security

Customer in Cloud



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

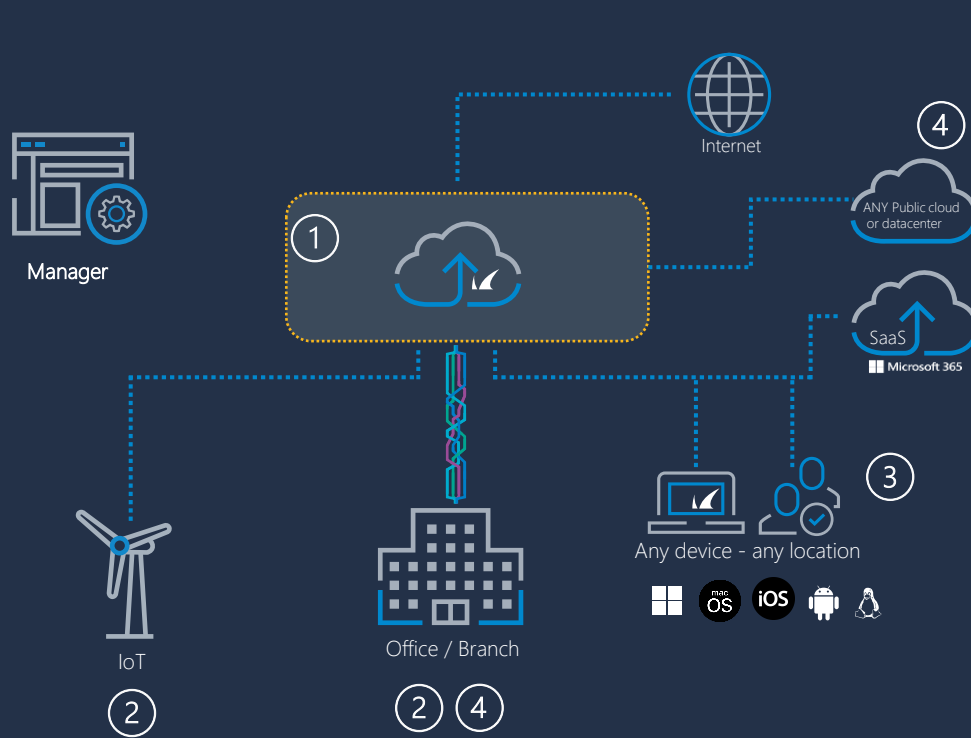
Customer in Cloud, Azure Global Network as backbone



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

Side services (s)



- SASE combined with application and network visibility, managed by Barracuda.
- Cloud service hosted in the cloud and fully managed by Barracuda.
- Zero Trust Network (ZTD) for SaaS service
- Optional Azure / AWS Service
- Filtering for Secure Internet Access (SIA)
- Full security platform for IoT devices
- Last Mile traffic optimization
- (Packet Loss reduction) and Gen Firewall to
- Secure connector devices for IoT
- Secure connectivity 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	
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Auto SD-WAN



Demo Enterprises Inc/Production

Security Policy > SD-WAN > Application Categories

 SIP  

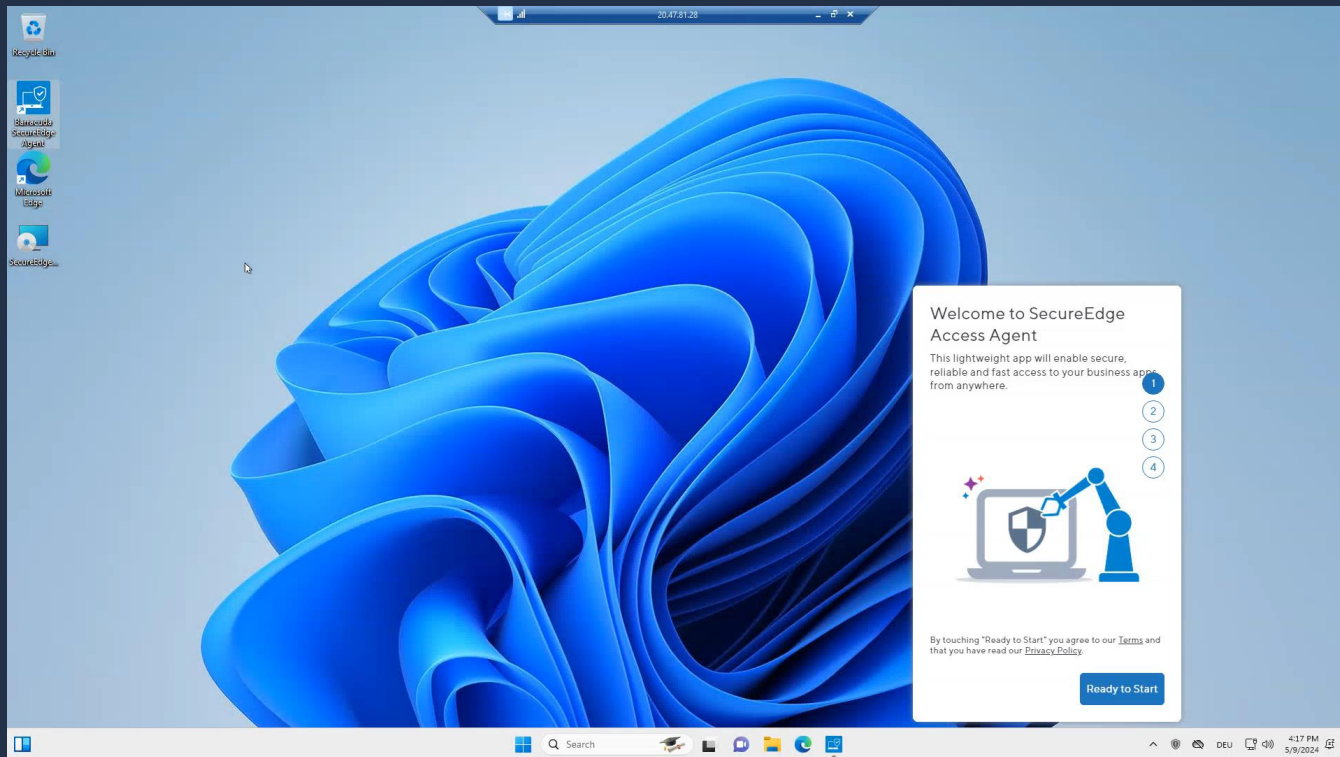
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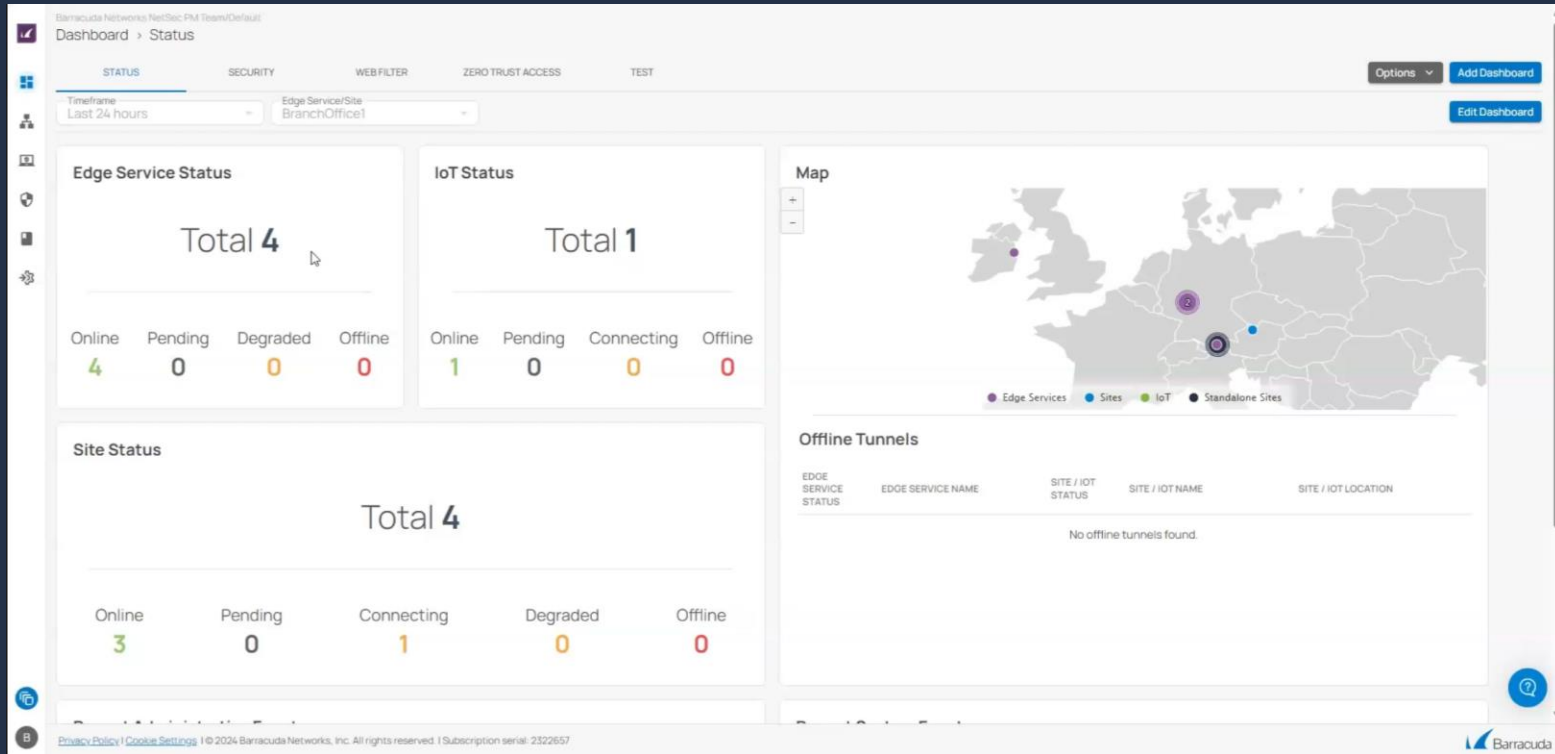


SecureEdge Access

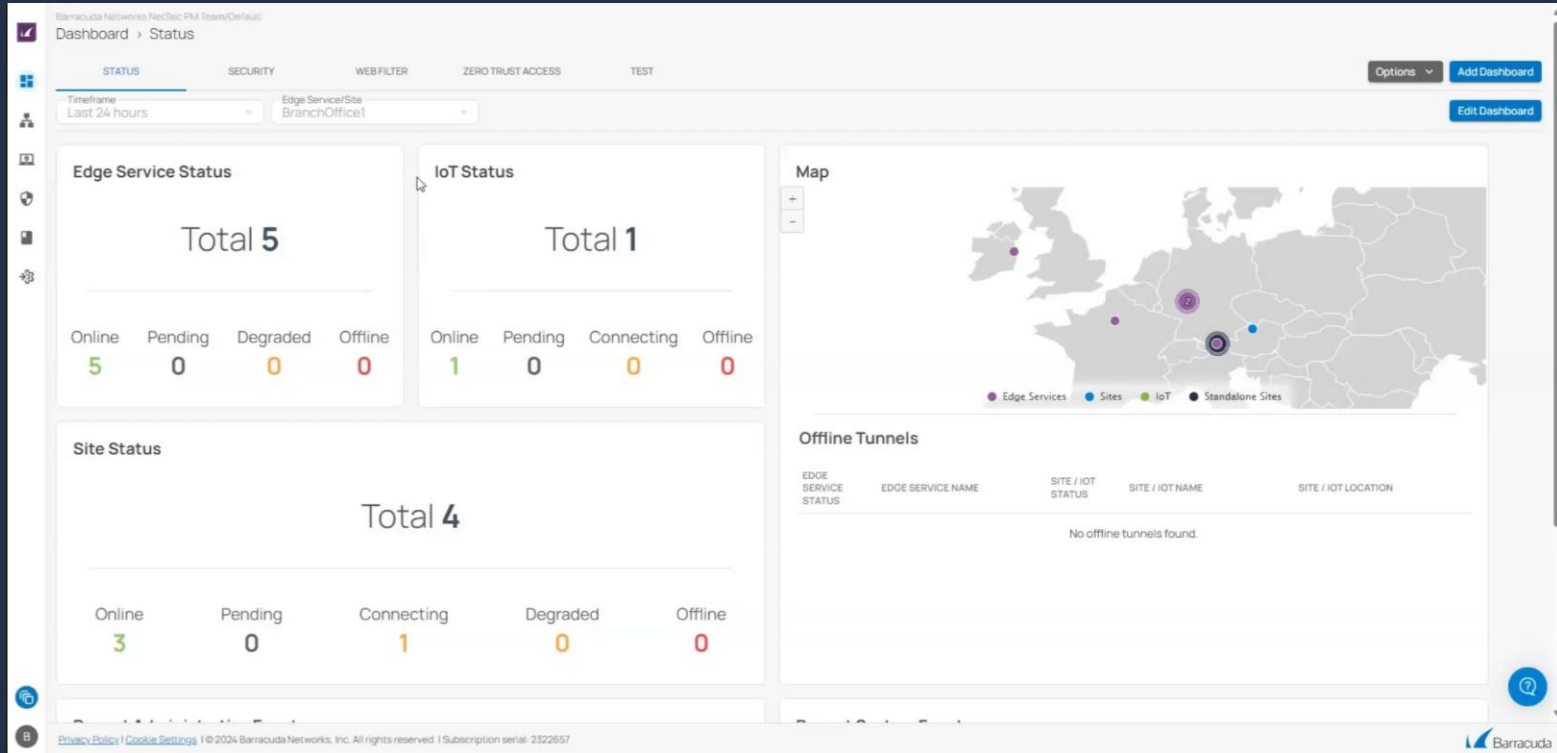
SecureEdge Access enduser experience



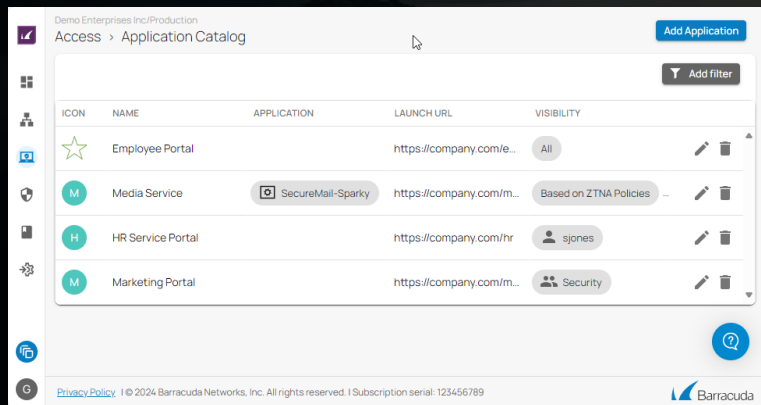
SecureEdge Access setup



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

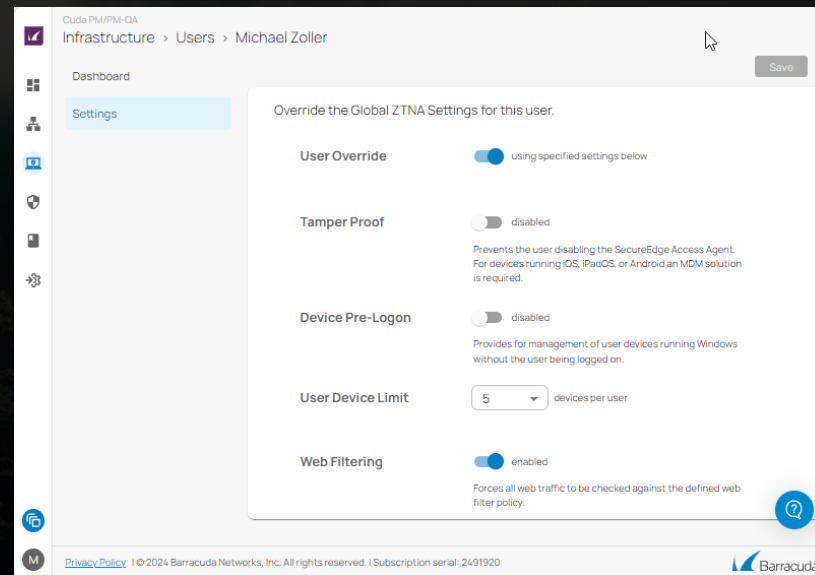
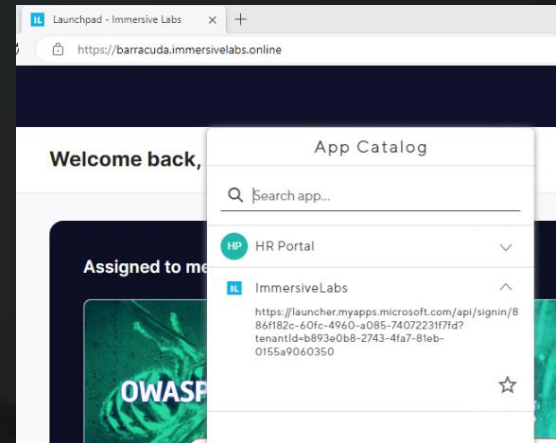
- Configure the number of devices per user.
Default: 5 / Max: 10

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... 🔄					

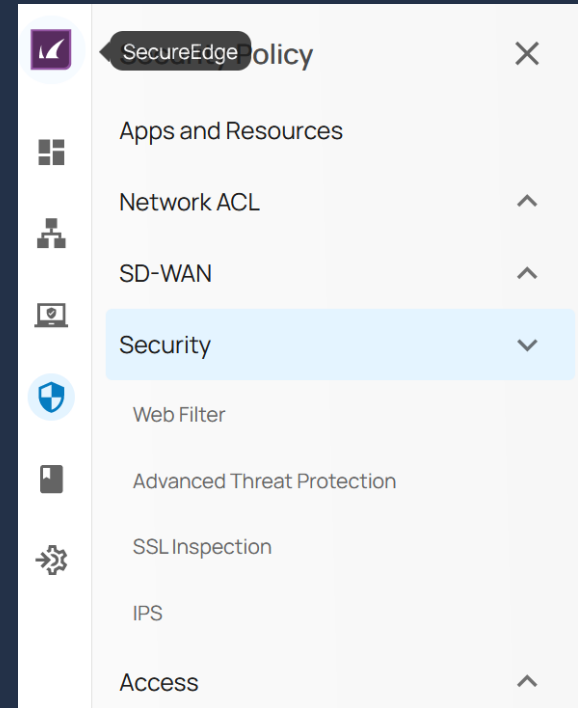
?

Privacy Policy

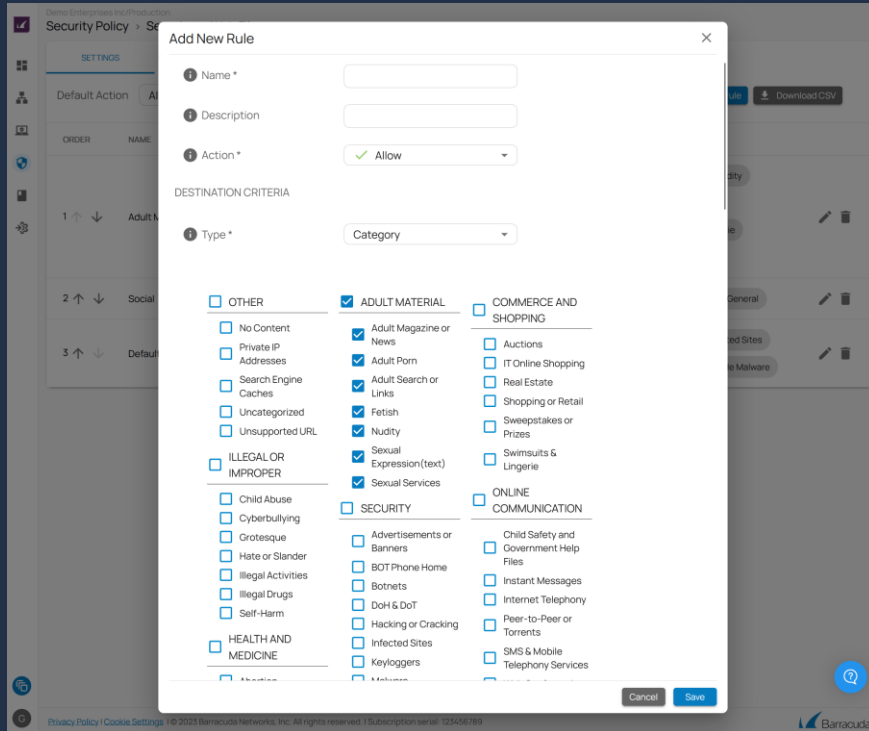
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Barracuda

URL Filter and Security in SecureEdge



Web Filter



More than 200 categories

Enforced by site device and SecureEdge Agent for WFH

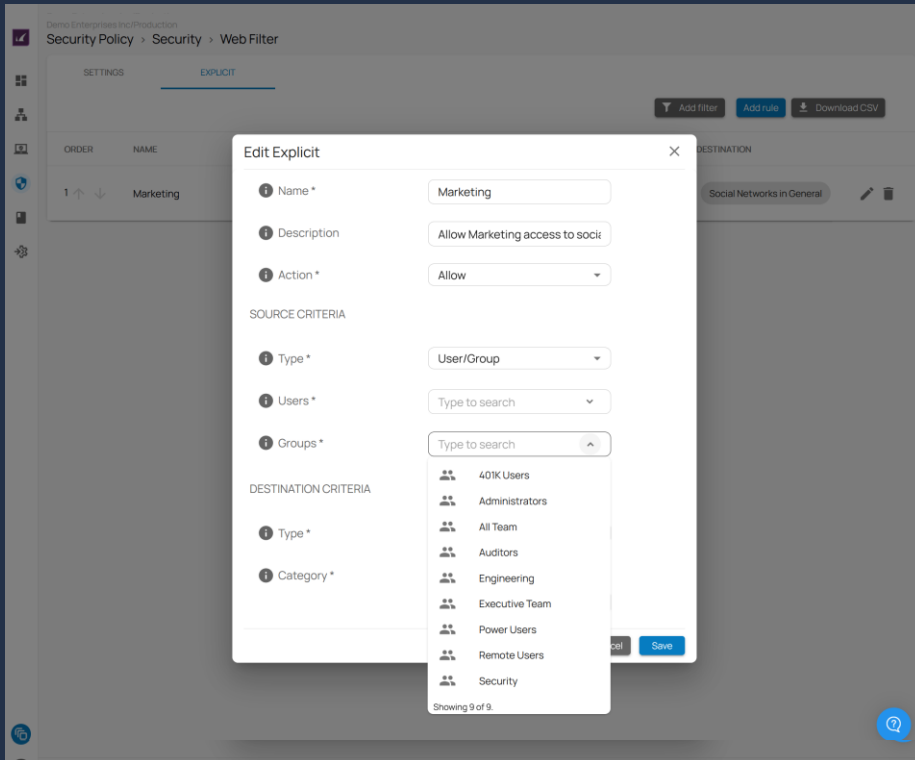
Single policy

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

Exceptions available



Web Filter: Exceptions

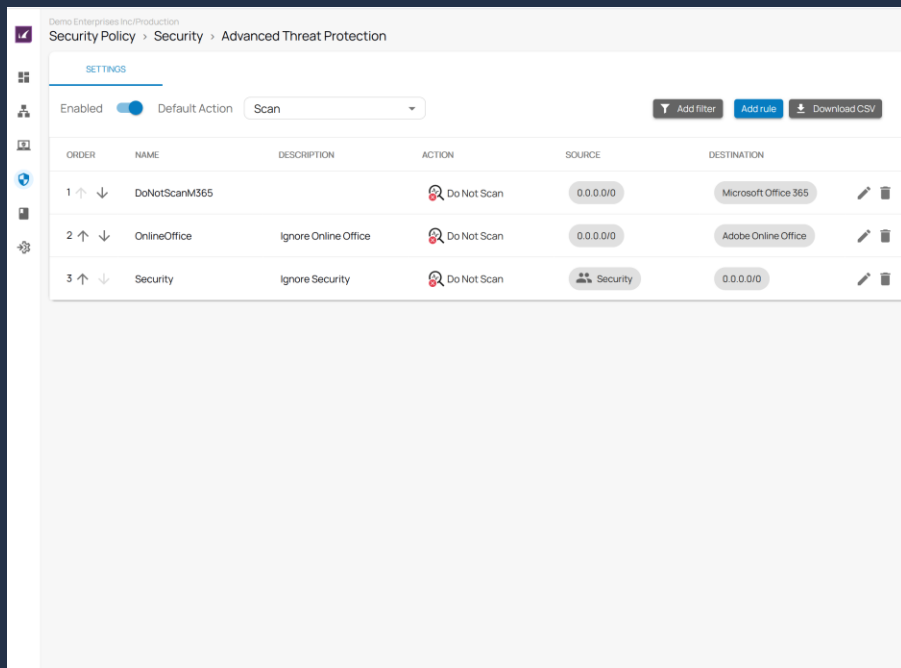


Exceptions by Source
IP/Network, site, or
user/group level

For Web Filter Category of
individual domains



Advanced Threat Protection



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

 Security Inspection



SSL Inspection

Demo Enterprises Inc/Production
Security Policy > Security > SSL Inspection

SETTINGS CERTIFICATES

Enabled ☒ Default Action: Inspect Add filter Add rule Download CSV

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

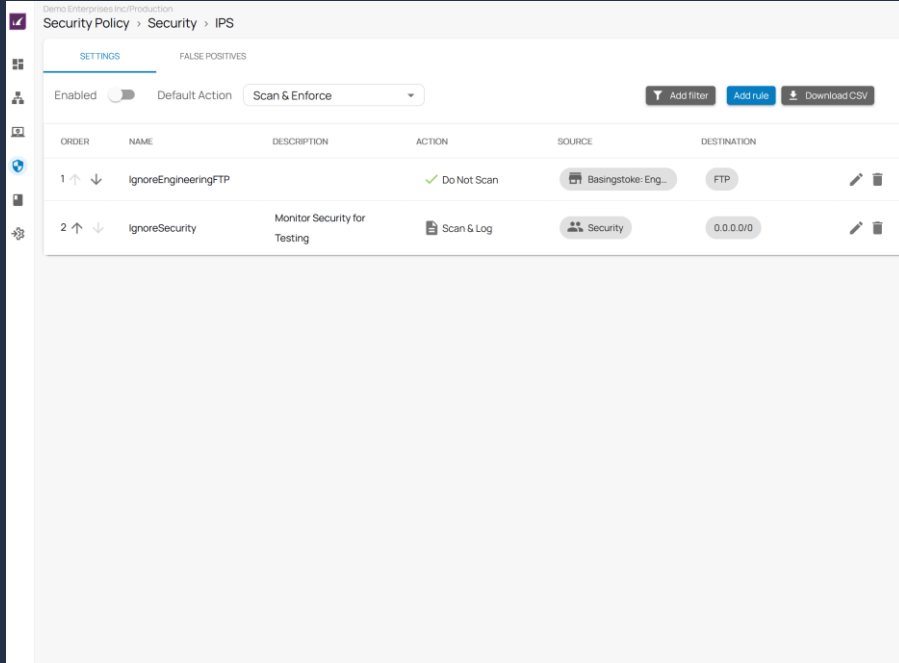
Available for Site device, Private Edge Service, SaaS Edge Service, Edge Service in Azure.

Also applies to traffic backhauled for security inspection

 Security Inspection



Intrusion Prevention System (IPS)

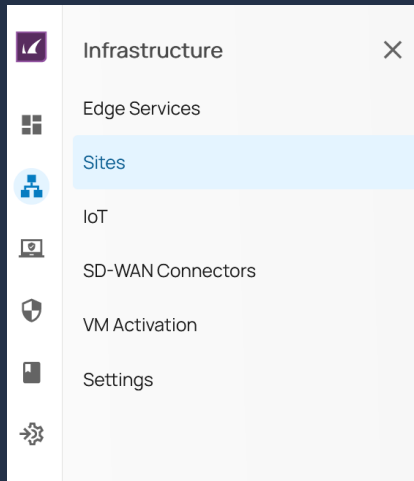


Included with Energize Updates

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

Also applies to traffic backhauled for security inspection





Managing the Infrastructure



Edge Services

Demos Subscriptions Infrastructure

Infrastructure > Edge Services

New Edge Service

Edge Service
Edge Service for Virtual WAN
Private Edge

	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

Seamless Integration for Production

Infrastructure > Sites

New site

Add filter Edit columns

	NAME	SERIAL	MODEL	EDGE SERVICE	CLOUD VWAN	CONNECTION STATUS	PEERING ADDRESS	LANs	WANs
✓	Alphare...	752124	VT3000	UnitedS...	Product...	Online	169.254...	10.14... 10.14...	AT-An... Centu... Comc... T-Mo...
✓	Basings...	943834	VT5000	UnitedK...	Private Edge	Online	169.254...	10.14... 10.14... 10.14...	BT (D... GiffGa... Virgin...
✓	Bengalu...	537246	T900B	India	Private Edge	Online	169.254...	10.20... 10.24...	Airtel... BSNL...
✓	Brisbane	12451	VT3000	Australia	Product...	Online	169.254...	10.14... 10.14...	iNet (... Optus... TPG (... Vodaf...
✓	Campo...	234121	T200C	Brazil	Product...	Online	169.254...	10.14... 10.14...	Algar... Vivo (... Comc... North...
✓	Chelms...	831421	VT3000	UnitedS...	Product...	Online	169.254...	10.14...	

Appliance hardware & virtual

Management of unlimited number of devices

Zero Touch Deployment

- P4 listens for DHCP assignment

Auto SD-WAN



IoT devices

The screenshot shows the Barracuda IoT management interface. At the top, it says 'Demo Enterprises Inc Production Infrastructure > IoT'. There is a 'New IoT Device' button and 'Add filter' and 'Edit columns' buttons. Below is a table with the following data:

	NAME	SERIAL	MODEL	EDGE SERVICE	CLOUD VWAN	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...	🗑️ →

Below the table are two physical device models. The left one is 'Secure Connector 2' and the right one is 'Secure Connector 3'. Both have ports for PWR, RST, OTG, USB, LAN1, LAN2, LAN3, WAN, and 12Vdc. The right model also has a console port and two WiFi ports (WiFi1, WiFi2).

Small fanless devices for IoT connectivity

Extended temperature range

WiFi & LTE models available

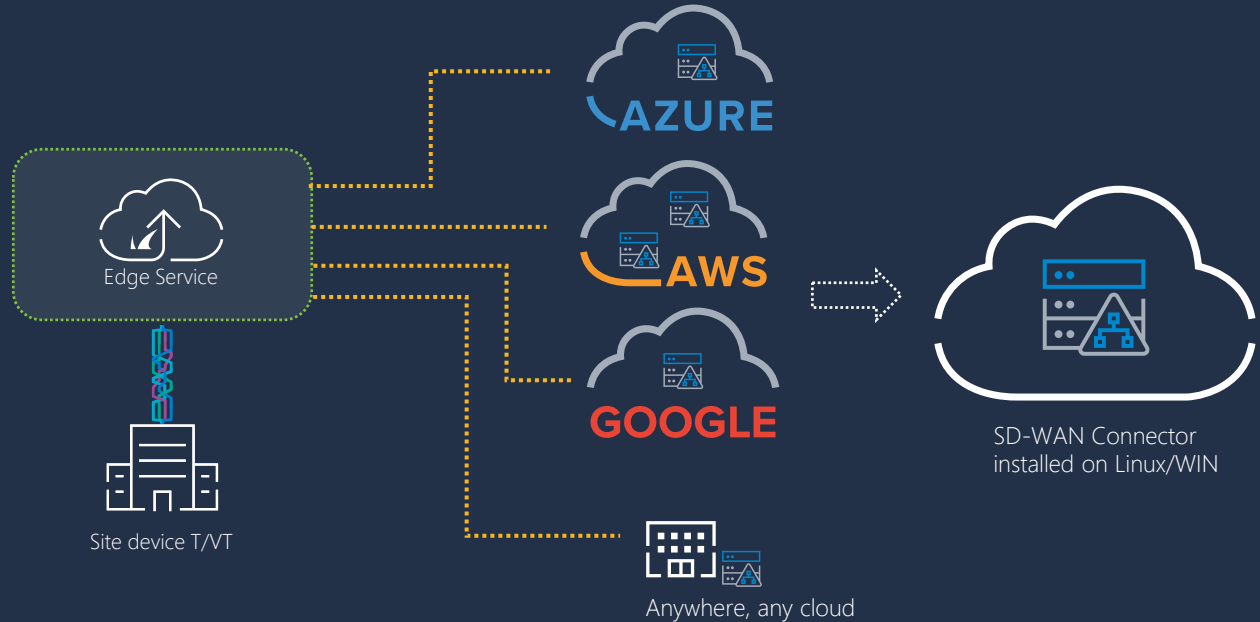
No on-box security functions.



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?



Thank You

