Policies

https://campus.barracuda.com/doc/93194239/

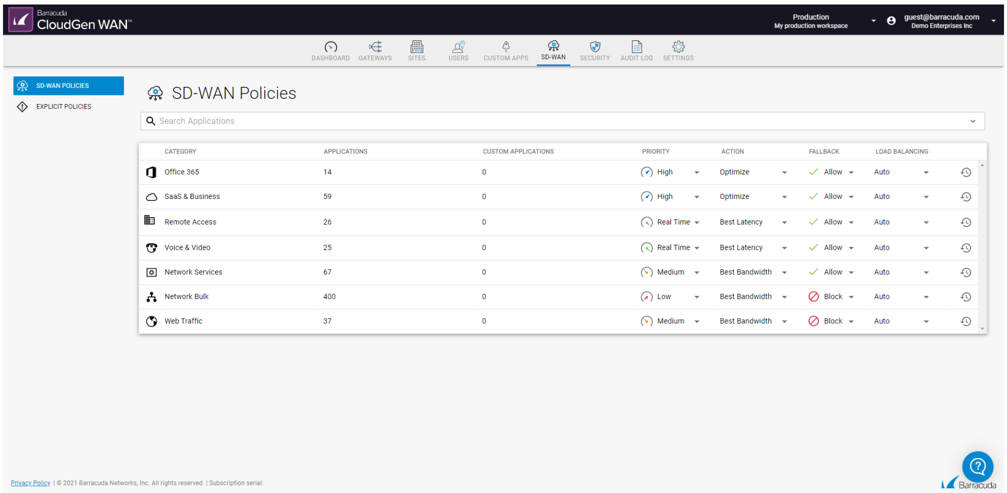
Policies are (pre-)defined rules for handling network traffic and are centrally managed through https://cloudgenwan.barracudanetworks.com. Policies are automatically applied to all site appliances. Since updates are pulled from the site appliances in 1-minute intervals, it might take up to 8 minutes until the updates apply.

SD-WAN Policy

Barracuda CloudGen WAN provides a default configuration for SD-WAN Policies using a predefined application database to cover the most common use cases. For the default configuration, Barracuda Networks has defined an SLA for each application and protocol. The SLA decides how the application is routed according to its needs. You can create explicit policies to change the default behavior, or you can create additional policies specifically matching your requirements. In addition, you can add applications to the database using custom applications, which allow you to extend the predefined application database used by both the SD-WAN policies and security policies.

The matching algorithm works as follows:

1. An application is detected. Custom application definitions take precedence over predefined applications. For more information, see How to Create Custom Applications.
2. If there is an explicit policy for that application, the explicit policy is used. For more information, see How to Create Explicit Policies.
3. Otherwise, the algorithm looks up the SD-WAN category and applies the Quality of Service / intelligent routing defined in the policy.



SD-WAN Policies

CATEGORY	APPLICATIONS	CUSTOM APPLICATIONS	PRIORITY	ACTION	FALLBACK	LOAD BALANCING
Office 365	14	0	High	Optimize	✓ Allow	Auto
SaaS & Business	59	0	High	Optimize	✓ Allow	Auto
Remote Access	26	0	Real Time	Best Latency	✓ Allow	Auto
Voice & Video	25	0	Real Time	Best Latency	✓ Allow	Auto
Network Services	67	0	Medium	Best Bandwidth	✓ Allow	Auto
Network Bulk	400	0	Low	Best Bandwidth	⊘ Block	Auto
Web Traffic	37	0	Medium	Best Bandwidth	⊘ Block	Auto

Privacy Policy | © 2021 Barracuda Networks, Inc. All rights reserved. | Subscription serial:
Barracuda

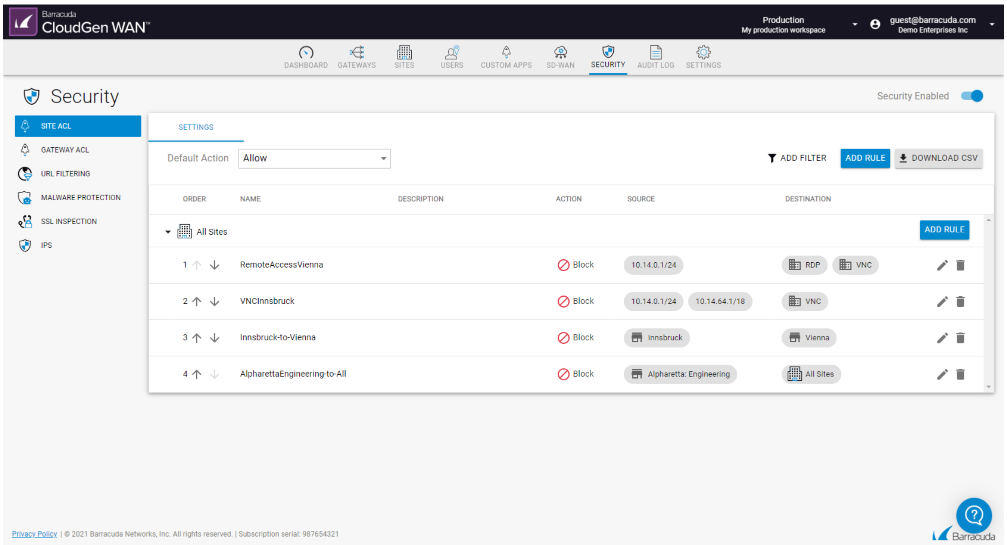
The following SD-WAN options are available:

- **Category** – The name of the category.
- **Applications** – Number of applications where the policy applies.
- **Custom Applications** – Number of custom applications where the policy applies.
- **Priority** – The following options are available:
    - **Real Time** – The highest possible priority for the traffic of this policy with no bandwidth restrictions in place. Use this option with caution: it can lead to excessive package drops if the traffic oversubscribes your ISP connection.
    - **High** – High priority for the traffic of this policy. This option will not oversubscribe your ISP connection.
    - **Medium** – Medium priority for the traffic of this policy. This option will not oversubscribe your ISP connection.
    - **Low** – Low priority for the traffic of this policy. This option will not oversubscribe your ISP connection.
- **Action** – The following options are available:
    - **Optimize** – Based on the probing data, traffic will use the ISP connection with the best bandwidth / latency depending on what the application needs. When applications with different requirements are in the same category, it falls back to the SLA of the individual app.
    - **Best Bandwidth** – Traffic uses ISP connections with the best bandwidth.
    - **Best Latency** – Traffic uses ISP connections with the best latency.
    - **Pin to Group 1** – Traffic will only use ISP connections assigned to this group and, if configured, the fallback link. There must be at least one WAN connection that is not a WWAN in the provider pinning of Group 1.
    - **Pin to Group 2** – Traffic will only use ISP connections assigned to this group and, if configured, the fallback link.
    - **Prefer Group 1** – Traffic uses ISP connections assigned to this group. If no link in the group is available, it will use the other group and then, if configured, the fallback link.
    - **Prefer Group 2** – Traffic uses ISP connections assigned to this group. If no link in the group is available, it will use the other group and then, if configured, the fallback link.
- **Fallback** – Fallback links are only used in case the assigned uplinks are down. The following options are available:
    - **Allow** – Traffic of this policy is allowed to use the fallback link.
    - **Block** – Traffic of this policy is not allowed to use the fallback link.
- **Load Balancing** – The following options are available:
    - **Auto** – VPN traffic uses load balancing, and traffic assigned the option **Optimize** is excluded from load balancing. The load is balanced between two providers in the same provider pinning group.
    - **No** – Load balancing is disabled.
- **Forward Error Correction** – FEC is a method of correcting certain data transmission errors that occur over noisy communication lines, thereby improving data reliability without requiring retransmission. The following options are available:
    - **On** – Forward error correction is enabled.
    - **Off** – Forward error correction is disabled.

Security Policy

The following security policies are available:

- ACL
- URL Filter



Default Action: Allow

ORDER	NAME	DESCRIPTION	ACTION	SOURCE	DESTINATION
All Sites					
1	RemoteAccessVienna		Block	10.14.0.1/24	RDP VNC
2	VNCInnsbruck		Block	10.14.0.1/24 10.14.64.1/18	VNC
3	Innsbruck-to-Vienna		Block	Innsbruck	Vienna
4	AlpharettaEngineering-to-All		Block	Alpharetta: Engineering	All Sites

Privacy Policy | © 2021 Barracuda Networks, Inc. All rights reserved. | Subscription serial: 987654321

The default action of a security policy can be either to block all and define exceptions that are allowed, or to allow all and define exceptions that are blocked. You can change the default action for all security polices individually. For example, URL filtering is set to allow all and define exceptions that are blocked, and ACL is set to block all with exceptions that are allowed.

Some policies come with preconfigured default rules. In this case, explicit rules have precedence over predefined ones.

The matching algorithm of the rules works as follows:

1. All rules (explicit and default) apply top down. That means the first rule in the list that matches applies. Rules below the first match will not apply.
2. First, the explicit rules are searched for matches. If there is an explicit rule that matches, this explicit rule will be used.
3. Otherwise, the default rules are searched, and if there is a rule that matches, this rule will be used.

Further Information

- SD-WAN Policies
- Security Policies

Figures