



Role-Based Access for the Barracuda WAF REST APIs

API Privilege

The **API Privilege** section allows users to access the Barracuda REST APIs. By default the value is set to **No**. Set the value to **Yes** if you want permissions to use REST APIs. Using the "administrator-roles" API, you can grant READ/WRITE permissions for specific object(s) that this role may need access to. You can refer to the table *List of Supported Objects* to know the list of objects supported in the Barracuda REST APIs and their syntax that should be used in the JSON when granting READ/WRITE permissions.

Create a Role and Grant Permission

The example JSON below describes how to create a new role and grant the required permissions to objects the role is accessing.

```
[POST]
  http://<WAF-IP/WAF-Domain>:8000/restapi/v3/administrator-roles
  (Authorization) => Basic Auth
    a) username
=> {{token}} [ensure that the token ends with a colon ':']
  (Body) => raw
    JSON(application/json)
  Inputs -
  -----
{
  "name": "sample_role",
  "services": [
    "_ALL:read"
  ],
  "security-policies": [
    "_ALL_:read"
  ],
  "service-groups": [
    "_ALL_:read"
  ],
  "vsites": [
    "_ALL_:read"
  ],
  "operations": [
    "certificate-management"
  ],
  "objects": [
    "services:read",
    "security-policies:read",
    "url-profiles:read"
  ]
}
```

URL: /v3/administrator-roles

Method: POST

Description: Creates a new role and grants READ/WRITE permissions to the object the role is accessing



Parameter Name	Data Type	Mandatory	Description
Input Parameters:			
name	Alphanumeric	Yes	A name for the role.
services	Alphanumeric	Conditional	Grants permission to all the services configured in the Barracuda Web Application Firewall. "_ALL: read" will grant READ permission to all the services created in Barracuda WAF.
security-policies	Alphanumeric	Conditional	Grants permission to all the security policies configured in the Barracuda Web Application Firewall. "_ALL: read" will grant READ permission to all the security policies created in Barracuda WAF.
service-groups	Alphanumeric	Conditional	Grants permission to all the service groups configured in the Barracuda Web Application Firewall. "_ALL_:read" will grant READ permission to all the service groups created in Barracuda WAF.
Vsites	Alphanumeric	Conditional	Grants permission to all the Vsites configured in the Barracuda Web Application Firewall. "_ALL_:read" will grant READ permission to all the Vsites created in Barracuda WAF.
operations	Alphanumeric	Conditional	Grants permission to all the operations configured in the Barracuda Web Application Firewall. "_ALL_:read" will grant READ permission to all the operations created in Barracuda WAF.
objects	Alphanumeric	Conditional	Grants permission to the generic objects specified. "services:read" will grant READ permission to the (generic) services object.

RBA differences in UI vs API

- For editing a sub-resource the user role needs
 - Write** permission on that sub-resource and at least a **Read** permission on it's object [via API]
 - Write** permission on that sub-resource and **Write** permission on it's object [via UI]
- Any custom role should have at least **Read** permission on the service the role wants in order to view access or firewall logs, .
- If a user is creating/adding/editing a new object from the UI, the user role needs to have the following.
 - a **Write** access directly on that object
 - accessibility (either **Read/Write**) to it's parent object
 - a **Write Permission** on that tab/screen that the role is creating the object from.
- Granting permissions to an object from the **Administrator-Roles** API, will automatically grant the same permission for the dependent screen(s) of that object and vice-versa. (when done from the UI).

List of Supported Objects

The following table provides a list of objects supported in the Barracuda REST APIs and their syntax that should be used in the JSON when granting READ/WRITE permissions.

Object	Description	Syntax used
ALL	Grants READ/WRITE permission to all objects	_ALL_:read _ALL_:write
access-rules	Grants READ/WRITE permission to the access-rules Object	access-rules:read access-rules:write



access-policies	Grants READ/WRITE permission to the access-policies object	access-policies:read action-policies:write
adaptive-profiling-rules	Grants READ/WRITE permission to the adaptive-profiling-rules object	adaptive-profiling-rules:read adaptive-profiling-rules:write
admin-ip-range	Grants READ/WRITE permission to the admin-ip-range object	admin-ip-range:read admin-ip-range:write
allow-deny-clients	Grants READ/WRITE permission to the allow-deny-clients object	allow-deny-clients:read allow-deny-clients:write
attack-patterns	Grants READ/WRITE permission to the attack-patterns object	attack-patterns:read attack-patterns:write
attack-types	Grants READ/WRITE permission to the attack-types object	attack-types:read attack-types:write
authorization-policies	Grants READ/WRITE permission to the authorization-policies object	authorization-policies:read authorization-policies:write
auto-system-acls	Grants READ/WRITE permission to the auto-system-acls object	auto-system-acls:read auto-system-acls:write
backup	Grants READ/WRITE permission to the backup object	backup:read backup:write
bonds	Grants READ/WRITE permission to the bonds object	bonds:read bonds:write
client-certificate-crl	Grants READ/WRITE permission to the client-certificate-crls object	client-certificate-crls:read client-certificate-crls:write
cluster/nodes	Grants READ/WRITE permission to the cluster/nodes object	cluster/nodes:read cluster/nodes:write
Cluster	Grants READ/WRITE permission to the cluster object	cluster:read cluster:write
Created-certificates	Grants READ/WRITE permission to the created-certificate object	created-certificate:read created-certificate:write
Credential servers	Grants READ/WRITE permission to the credential-servers object	credential-servers:read credential-servers:write
custom-parameter-classes	Grants READ/WRITE permission to the custom-parameter-classes object	custom-parameter-classes:read custom-parameter-classes:write
ddos-policies	Grants READ/WRITE permission to the ddos-policies object	ddos-policies:read ddos-policies:write
destination-nats	Grants READ/WRITE permission to the destination-nats object	destination-nats:read destination-nats:write
geo-pools	Grants READ/WRITE permission to the geo-pools object	geo-pools:read geo-pools:write
geoip-allowed-networks	Grants READ/WRITE permission to the geoip-allowed-networks object	geoip-allowed-networks:read geoip-allowed-networks:write
geoip-blocked-networks	Grants READ/WRITE permission to the geoip-blocked-networks object	geoip-blocked-networks:read geoip-blocked-networks:write
global-acls	Grants READ/WRITE permission to the global-acls object	global-acls:read global-acls:write
header-acls	Grants READ/WRITE permission to the header-acls object	header-acls:read header-acls:write
http-request-rewrite-rules	Grants READ/WRITE permission to the http-request-rewrite-rules object	http-request-rewrite-rules:read http-request-rewrite-rules:write
http-response-rewrite-rules	Grants READ/WRITE permission to the http-response-rewrite-rules object	http-response-rewrite-rules:read http-response-rewrite-rules:write
identity-theft-patterns	Grants READ/WRITE permission to the identity-theft-patterns object	identity-theft-patterns:read identity-theft-patterns:write
identity-types	Grants READ/WRITE permission to the identity-types object	identity-types:read identity-types:write
input-patterns	Grants READ/WRITE permission to the input-patterns object	input-patterns:read input-patterns:write



input-types	Grants READ/WRITE permission to the input-types object	input-types:read input-types:write
interface-routes	Grants READ/WRITE permission to the interface-routes object	interface-routes:read interface-routes:write
	Grants READ/WRITE permission to the attack patterns object	internal-attack-patterns:read internal-attack-patterns:write
json-profiles	Grants READ/WRITE permission to the json-profiles object	json-profiles:read json-profiles:write
json-security-policies	Grants READ/WRITE permission to the json-security-policies object	json-security-policies:read json-security-policies:write
kerberos-services	Grants READ/WRITE permission to the kerberos-services object	kerberos-services:read kerberos-services:write
ldap-services	Grants READ/WRITE permission to the ldap-services object	ldap-services:read ldap-services:write
local-groups	Grants READ/WRITE permission to the local-groups object	local-groups:read local-groups:write
local-hosts	Grants READ/WRITE permission to the local-hosts object	local-hosts:read local-hosts:write
local-users	Grants READ/WRITE permission to the local-users object	local-users:read local-users:write
module-log-levels	Grants READ/WRITE permission to the module-log-levels object	module-log-levels:read module-log-levels:write
network-acls	Grants READ/WRITE permission to the network-acls object	network-acls:read network-acls:write
network-interfaces	Grants READ/WRITE permission to the network-interface object	network-interfaces:read network-interface:write
nodes	Grants READ/WRITE permission to the nodes object	nodes:read nodes:write
ntp-servers	Grants READ/WRITE permission to the ntp-servers object	ntp-servers:read ntp-servers:write
parameter-optimizers	Grants READ/WRITE permission to the parameter-optimizers object	parameter-optimizers:read parameter-optimizers:write
parameter-profiles	Grants READ/WRITE permission to the parameter-profiles object	parameter-profiles:read parameter-profiles:write
preferred-clients	Grants READ/WRITE permission to the preferred-clients object	preferred-clients:read preferred-clients:write
protected-data-types	Grants READ/WRITE permission to the protected-data-types object	protected-data-types:read protected-data-types:write
radius-services	Grants READ/WRITE permission to the radius-services object	radius-services:read radius-services:write
rate-control-pools	Grants READ/WRITE permission to the rate-control-pools object	rate-control-pools:read rate-control-pools:write
reports	Grants READ/WRITE permission to the reports object	reports:read reports:write
response-body-rewrite-rules	Grants READ/WRITE permission to the response-body-rewrite-rules object	response-body-rewrite-rules:read response-body-rewrite-rules:write
response-pages	Grants READ/WRITE permission to the response-pages object	response-pages:read response-pages:write
rsa-securig-services	Grants READ/WRITE permission to the rsa-securig-services object	rsa-securig-services:read rsa-securig-services:write
saml-services	Grants READ/WRITE permission to the saml-services object	saml-services:read saml-services:write
secure-browsing-policies	Grants READ/WRITE permission to the secure-browsing-policies object	secure-browsing-policies:read secure-browsing-policies:write
security-policies/cloaking	Grants READ/WRITE permission to the security-policies/cloaking object	security-policies/cloaking:read security-policies/cloaking:write

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security-policies/cookie-security	Grants READ/WRITE permission to the security-policies/cookie-security object	security-policies/cookie-security:read security-policies/cookie-security:write
security-policies/parameter-protection	Grants READ/WRITE permission to the security-policies/parameter-protection object	security-policies/parameter-protection:read security-policies/parameter-protection:write
security-policies/request-limits	Grants READ/WRITE permission to the security-policies/request-limits object	security-policies/request-limits:read security-policies/request-limits:write
security-policies/url-normalization	Grants READ/WRITE permission to the security-policies/url-normalization object	security-policies/url-normalization:read security-policies/url-normalization:write
security-policies/url-protection	Grants READ/WRITE permission to the security-policies/url-protection object	security-policies/url-protection:read security-policies/url-protection:write
security-policies	Grants READ/WRITE permission to the security-policies object	security-policies:read security-policies:write
service-groups	Grants READ/WRITE permission to the service-groups object	service-groups:read service-groups:write
services/adaptive-profiling	Grants READ/WRITE permission to the services/adaptive-profiling object	services/adaptive-profiling:read services/adaptive-profiling:write
services/authentication	Grants READ/WRITE permission to the services/authentication object	services/authentication:read services/authentication:write
services/basic-security	Grants READ/WRITE permission to the services/basic-security object	services/basic-security:read services/basic-security:write
services/caching	Grants READ/WRITE permission to the services/caching object	services/caching:read services/caching:write
services/clickjacking	Grants READ/WRITE permission to the services/clickjacking object	services/clickjacking:read services/clickjacking:write
services/compression	Grants READ/WRITE permission to the services/compression object	services/compression:read services/compression:write
services/comment-spam	Grants READ/WRITE permission to the services/comment-spam	services/comment-spam:read services/comment-spam:write
services/exception-profiling	Grants READ/WRITE permission to the services/exception-profiling object	services/exception-profiling:read services/exception-profiling:write
services/ftp-security	Grants READ/WRITE permission to the services/ftp-security object	services/ftp-security:read services/ftp-security:write
services/ip-reputation	Grants READ/WRITE permission to the services/ip-reputation object	services/ip-reputation:read services/ip-reputation:write
services/referer-spam	Grants READ/WRITE permission to the services/referer-spam object	services/referer-spam:read services/referer-spam:write
services/sensitive-parameter-names	Grants READ/WRITE permission to the services/sensitive-parameter-names object	services/sensitive-parameter-names:read services/sensitive-parameter-names:write
services/session-tracking	Grants READ/WRITE permission to the services/session-tracking object	services/session-tracking:read services/session-tracking:write
services/slow-client-attack	Grants READ/WRITE permission to the services/slow-client-attack object	services/slow-client-attack:read services/slow-client-attack:write
services/ssl-ocsp	Grants READ/WRITE permission to the services/ssl-ocsp object	services/ssl-ocsp:read services/ssl-ocsp:write
services/url-encryption	Grants READ/WRITE permission to the services/url-encryption object	services/url-encryption:read services/url-encryption:write
services/website-profile	Grants READ/WRITE permission to the services/website-profile object	services/website-profile:read services/website-profile:write
services	Grants READ/WRITE permission to the services object	services:read services:write
session-identifiers	Grants READ/WRITE permission to the session-identifiers object	session-identifiers:read session-identifiers:write
source-nats	Grants READ/WRITE permission to the source-nats object	source-nats:read source-nats:write



static-routes	Grants READ/WRITE permission to the static-routes object	static-routes:read static-routes:write
system/azure-config	Grants READ/WRITE permission to the system/azure-config object	system/azure-config:read system/azure-config:write
syslog-servers	Grants READ/WRITE permission to the syslog-servers object	syslog-servers:read syslog-servers:write
system/advanced-settings	Grants READ/WRITE permission to the system/advanced-settings object	system/advanced-settings:read system/advanced-settings:write
system/appearance	Grants READ/WRITE permission to the system/appearance object	system/appearance:read system/appearance:write
system/cookies-and-parameters	Grants READ/WRITE permission to the system/cookies-and-parameters object	system/cookies-and-parameters:read system/cookies-and-parameters:write
system/custom-headers	Grants READ/WRITE permission to the system/custom-headers object	system/custom-headers:read system/custom-headers:write
system/dns	Grants READ/WRITE permission to the system/dns object	system/dns:read system/dns:write
system/email-notifications	Grants READ/WRITE permission to the system/email-notifications object	system/email-notifications:read system/email-notifications:write
system/encryption-key	Grants READ/WRITE permission to the system/encryption-key object	system/encryption-key:read system/encryption-key:write
system/energize-updates	Grants READ/WRITE permission to the system/energize-updates object	system/energize-updates:read system/energize-updates:write
system/exception- heuristics	Grants READ/WRITE permission to the system/exception- heuristics object	system/exception- heuristics:read system/exception-heuristics:write
system/export-log-filters	Grants READ/WRITE permission to the system/export-log-filters object	system/export-log-filters:read system/export-log-filters:write
	Grants READ/WRITE permission to the attack patterns object	system/export-log-settings:read system/export-log-settings:write
system/export-log-settings	Grants READ/WRITE permission to the system/export-log-settings object	system/ftp-access-logs:read system/ftp-access-logs:write
system/gdpr-compliance	Grants READ/WRITE permission to the system/gdpr-compliance object	system/gdpr-compliance:read system/gdpr-compliance:write
system/lan-configuration	Grants READ/WRITE permission to the system/lan-configuration object	system/lan-configuration:read system/lan-configuration:write
system/location	Grants READ/WRITE permission to the system/location object	system/location:read system/location:write
system/logs-format	Grants READ/WRITE permission to the system/logs-format object	system/logs-format:read system/logs-format:write
system/management-configuration	Grants READ/WRITE permission to the system/management-configuration object	system/management-configuration:read system/management-configuration:write
system/network-configuration	Grants READ/WRITE permission to the system/network-configuration object	system/network-configuration:read system/network-configuration:write
system/network-hsm	Grants READ/WRITE permission to the system/network-hsm object	system/network-hsm:read system/network-hsm:write
system/ng-firewall	Grants READ/WRITE permission to the system/ng-firewall object	system/ng-firewall:read system/ng-firewall:write
system/pattern-mode	Grants READ/WRITE permission to the system/pattern-mode object	system/pattern-mode:read system/pattern-mode:write
system/proxy-server	Grants READ/WRITE permission to the system/proxy-server object	system/proxy-server:read system/proxy-server:write
system/secure-administration	Grants READ/WRITE permission to the system/secure-administration object	system/secure-administration:read system/secure-administration:write
system/snmp	Grants READ/WRITE permission to the system/snmp object	system/snmp:read system/snmp:write
system/syslog-settings	Grants READ/WRITE permission to the system/syslog-settings object	system/syslog-settings:read system/syslog-settings:write



system/wan-configuration	Grants READ/WRITE permission to the system/wan-configuration object	system/wan-configuration:read system/wan-configuration:write
system/web-interface	Grants READ/WRITE permission to the system/web-interface object	system/web-interface:read system/web-interface:write
system	Grants READ/WRITE permission to the system object	system:read system:write
trap-receivers	Grants READ/WRITE permission to the trap-receivers object	trap-receivers:read trap-receivers:write
trusted-ca-certificate	Grants READ/WRITE permission to the trusted-ca-certificate object	trusted-ca-certificate:read trusted-ca-certificate:write
trusted-host-groups	Grants READ/WRITE permission to the trusted-host-groups object	trusted-host-groups:read trusted-host-groups:write
trusted-hosts	Grants READ/WRITE permission to the trusted-hosts object	trusted-hosts:read trusted-hosts:write
trusted-server-certificate	Grants READ/WRITE permission to the trusted-server-certificate object	trusted-server-certificate:read trusted-server-certificate:write
uploaded-certificate	Grants READ/WRITE permission to the uploaded-certificate object	uploaded-certificate:read uploaded-certificate:write
url-acls	Grants READ/WRITE permission to the url-acls object	url-acls:read url-acls:write
url-encryption-rules	Grants READ/WRITE permission to the url-encryption-rules object	url-encryption-rules:read url-encryption-rules:write
url-optimizers	Grants READ/WRITE permission to the url-optimizers object	url-optimizers:read url-optimizers:write
url-policies	Grants READ/WRITE permission to the url-policies object	url-policies:read url-policies:write
url-profiles	Grants READ/WRITE permission to the url-profiles object	url-profiles:read url-profiles:write
url-translations	Grants READ/WRITE permission to the url-translations object	url-translations:read url-translations:write
virtual-interfaces	Grants READ/WRITE permission to the virtual-interfaces object	virtual-interfaces:read virtual-interfaces:write
vlangs	Grants READ/WRITE permission to the vlangs object	vlangs:read vlangs:write
vsites	Grants READ/WRITE permission to the vsites object	vsites:read vsites:write
web-scraping-policies	Grants READ/WRITE permission to the web-scraping-policies object	web-scraping-policies:read web-scraping-policies:write
whitelisted-bots	Grants READ/WRITE permission to the whitelisted-bots object	whitelisted-bots:read whitelisted-bots:write

