

Hell Let Loose - RCON V2

Request Json Formatting

```
HEADER_ID,  
HEADER_CONTENT_LENGTH,  
{  
  "AuthToken": "bc711e97-e32e-4033-bf97-a8028a10cb94",  
  "Version": 2,  
  "Name": "command_name",  
  "ContentBody": "command__data"  
}
```

Request Parameters

Name	Type	Description
AuthToken	string	The AuthToken is a GUID which is created and retrieved from the Login request. The token must be sent with any server requests, except for ServerConnect and Login. The token is verified against the sever and will return a 401 status if no token is sent or the token is invalid.
Version	integer	As RCON tools are expanded commands may need updating.
Name	string	Name of the command to execute on the server.
ContentBody	string	Any data requirements for the request.

Response Json Format

```
HEADER_ID,  
HEADER_CONTENT_LENGTH,  
{  
  "StatusCode": 200,  
  "StatusMessage": "Successfully performed request.",  
  "Version": 2,  
  "Name": "command_name",  
  "ContentBody": "command_response_data"  
}
```

Fixed Packet Header

The header is an 8-byte fixed header that includes an ID and the content length of the Json package.

Name	Type	Description
ID	unsigned integer	Each response has its own ID. This ID is returned in the response.
Content Length	unsigned integer	This is the length of the Json package, excluding the fixed header.

Response Parameters

Name	Type	Description
StatusCode	integer	The status of the server response whilst executing commands.
StatusMessage	string	Description of the status response
Version	integer	Version of the command that was processed.
Name	string	Name of the command that was processed.
ContentBody	string	Any response data from the server will be assigned in the body.

Status Codes

Server responses contain a status code, the status depends on whether the command was successfully executed on the server or if the command encountered an error.

Code	Description
200	OK
401	Unauthorized
400	Bad Request
500	Internal Error

Connecting to RCON V2

The server connect command will allow the server to start processing RCON V2 commands. Included in the server response body will be the XOR key used for encrypting/decrypting request and responses. The server connect command is currently the only non-encrypted command.

Request Example

```
{
  "AuthToken": "",
  "Version": 2,
  "Name": "ServerConnect",
  "ContentBody": ""
}
```

Response Example

```
{
  "statusCode": 200,
  "StatusMessage": "Successfully performed request.",
  "version": 2,
  "name": "ServerConnect",
  "contentBody": "OlguIHEAa4arqoOcaT0GbA\u003d\u003d "
}
```

XOR

XOR is the method in which messages are encrypted between the server, client and visa versa. When sending requests to the server the byte data must be encoded with the XOR key before sending and any responses received must be decoded before it is read, the exception to this is the **ServerConnect** command where the XOR is retrieved. **Note:** The XOR key is formatted as Base64 when retrieved from the server and will need converting from Base64 before being used to encrypt requests.

C# Example

```
public static byte[] XORCipher(byte[] bytes)
{
    for (int i = 0; i < bytes.Length; i++)
    {
        bytes[i] ^= m_XORKey[i % m_XORKey.Length];
    }

    return bytes;
}
```

Logging in to RCON

Most commands require authentication before they can be executed. Calling the login command with a corresponding password will authenticate the server and generate a authentication token which is included in the response body.

Request Example

```
{
  "AuthToken": "",
  "Version": 2,
  "Name": "Login",
  "ContentBody": "[PASSWORD]"
}
```

Response Example

```
{
  "statusCode": 200,
  "StatusMessage": "Successfully performed request.",
  "version": 2,
  "name": "Login",
  "contentBody": "F95C9BC14AA1D8AE8BC328BEF230DF52"
}
```

RCON Commands

Name	ID	Description
Add Admin	AddAdmin	Add a player to the admin list.
Remove Admin	RemoveAdmin	Remove player from admin privileges.
Get Admin Log	GetAdminLog	Retrieve admin log.
Change Map	ChangeMap	Select a map to change the server map.
Set Sector Layout	SetSectorLayout	Configure the active sector layout
Add Map to Rotation	AddMapToRotation	Add a new map to the map rotation at an index.
Remove Map From Rotation	RemoveMapFromRotation	Remove map from the map rotation at an index.
Add Map to Sequence	AddMapToSequence	Add map to server map sequence.
Set Map Shuffle Enabled	SetMapShuffleEnabled	Randomises the server map queue.
Remove Map From Sequence	RemoveMapFromSequence	Remove map from the server map sequence.
Move Map in Sequence	MoveMapInSequence	Change the position on a map in the server queue
Server Connect	ServerConnect	Establishes an Rcon V2 connection with the server.
Login	Login	Authenticates a client to access the user.
Get Displayable Commands	GetDisplayableCommands	Retrieves the list of RCON commands.
Get Admin Groups	GetAdminGroups	Retrieves a list of all admin groups.
Get Admin Users	GetAdminUsers	Retrieves a list of all admin user details.
Get Permanent Bans	GetPermanentBans	Retrieves a list of all permanently enforced bans.
Get Temporary Bans	GetTemporaryBans	Retrieves a list of all temporary enforced bans.
Force Team Switch	ForceTeamSwitch	Forces a player to switch teams.
Set Team Switch Cooldown	SetTeamSwitchCooldown	Set cooldown time for team switching.

Set Max Queued Players	SetMaxQueuedPlayers	Set the maximum number of queued players.
Set Idle Kick Duration	SetIdleKickDuration	Set how long a player can be idle before being kicked.
Set Welcome Message	SetWelcomeMessage	Send a message to the server.
Get Server Information	GetServerInformation	Retrieves various server information.
Server Broadcast	ServerBroadcast	Create a message to broadcast to the server.
Set High Ping Threshold	SetHighPingThreshold	Set the ping (in ms) that is considered too high for smooth gameplay.
Get Client Reference Data	GetClientReferenceData	Retrieves argument details for a specific command.
Message Player	MessagePlayer	Create a message to send to a player in game.
Punish Player	PunishPlayer	Select a player to punish by killing.
Kick Player	KickPlayer	Select player to kick and add a reason.
Temporary Ban Player	TemporaryBanPlayer	Temporary ban a player from the server
Remove Temporary Ban	RemoveTemporaryBan	Remove a temporary ban from a player.
Permanent Ban Player	PermanentBanPlayer	Permanently ban a player from the server.
Remove Permanent Ban	RemovePermanentBan	Remove permanent ban on a player
Set Auto Balance Enabled	SetAutoBalanceEnabled	Enable or disable the auto balance.
Set Auto Balance Threshold	SetAutoBalanceThreshold	Set the threshold value for teams when using auto balance.

Reset Vote to Kick Threshold	ResetVoteKickThreshold	Remove custom vote to kick thresholds and revert to default.
Set Vote Kick Enabled	SetVoteKickEnabled	Enable or disable the vote to kick functionality.
Set Vote to Kick Threshold	SetVoteKickThreshold	Set the vote to kick threshold.
Add Banned Words	AddBannedWords	Adds words to the custom profanity list.
Remove Banned Words	RemoveBannedWords	Removes words from the custom profanity list.
Add VIP	AddVip	Give a player VIP status.
Remove VIP	RemoveVip	Remove VIP status from a player.
Set VIP Slot Count	SetVipSlotCount	Set the VIP slot count for the server.
Set Match Timer	SetMatchTimer	Sets the match timer for a specific game mode.
Remove Match Timer	RemoveMatchTimer	Removes the custom match timer for a specific map.
Set Match Warmup Timer	SetWarmupTimer	Sets the warmup timer for a specific game mode.
Remove Match Warmup Timer	RemoveWarmupTimer	Removes the warmup timer for a specific game mode.
Set Dynamic Weather Enabled	SetDynamicWeatherEnabled	Enables or disables dynamic weather for a certain map.
Get Server Changelist	GetServerChangelist	Retrieves the change list number for the server.
Remove Player From Platoon	RemovePlayerFromPlatoon	Removes a player from their platoon.
Disband Platoon	DisbandPlatoon	Disbands a platoon and removes all players.

Add Admin

Adds a player to an admin group.

Arguments

Parameter	Type
PlayerId	string
AdminGroup	string
Comment	string

Remove Admin

Removes the admin privileges from a player.

Arguments

Parameter	Type
PlayerId	string

Get Admin Log

Retrieves the admin log for the specified interval time (seconds).

Arguments

Parameter	Type
LogBackTrackTime	Int32
Filters	string

Change Map

Triggers a map change on the server.

Arguments

Parameter	Type
MapName	string

Set Sector Layout

Triggers a map restart and sets the objectives to the specified sectors.

Arguments

Parameter	Type
Sector_1	string
Sector_2	string
Sector_3	string
Sector_4	string
Sector_5	string

Add Map to Rotation

Adds a map to the map rotation at a specified index.

Arguments

Parameter	Type
MapName	string
Index	Int32

Remove Map from Rotation

Removes a map from the rotation list at a specified index.

Arguments

Parameter	Type
Index	Int32

Add Map to Sequence

Adds a map to the map sequence at a specified index.

Arguments

Parameter	Type
MapName	string
Index	Int32

Remove Map from Sequence

Remove a map from the map sequence at a specified index.

Arguments

Parameter	Type
Index	Int32

Set Map Shuffle Enabled

Randomises the map sequence.

Arguments

Parameter	Type
Enable	boolean

Move Map in Sequence

Moves a current map in the sequence to another location.

Arguments

Parameter	Type
CurrentIndex	Int32
NewIndex	Int32

Server Connect

Establishes connection with server and creates an RCON V2 session.

Response

Returns the XOR Key in the content body.

Login

Authenticates the RCON client with the server.

Arguments

Password is passed directly in the content body.

Get Displayable Commands

Retrieves a list of all commands in RCON V2.

Response

Name	Type	Description
Entries	array	List of commands available in V2.

Command Entry

Name	Type	Description
Id	string	ID of the command.
FriendlyName	string	Friendly name of the command.
IsClientSupported	boolean	Whether or not ClientReferenceData is supported for this command.

Get Admin Groups

Retrieves a list of all admin groups.

Response

Name	Type	Description
GroupNames	String array	List of admin group names.

Get Admin Users

Retrieves a list of all admin users.

Response

Name	Type	Description
AdminUsers	array	List of admin user details.

Command Entry

Name	Type	Description
UserId	string	ID of the admin user.
Group	string	Group the admin belongs to.
Comment	string	User comment.

Get Permanent Bans

Retrieves a list of all permanent player bans.

Response

Name	Type	Description
BanList	array	List of permanent banned players.

Command Entry

Name	Type	Description
UserId	String	Player ID.
UserName	String	Username for the banned player.
TimeOfBanning	String	Time of the ban.
DurationHours	Int32	Duration of the ban.
BanReason	String	Reason for the ban.
AdminName	String	Name of admin who set ban.

Get Temporary Bans

Retrieves a list of all temporary player bans.

Response

Name	Type	Description
BanList	array	List of permanent banned players.

Command Entry

Name	Type	Description
UserId	String	Player ID.
UserName	String	Username for the banned player.
TimeOfBanning	String	Time of the ban.
DurationHours	Int32	Duration of the ban.
BanReason	String	Reason for the ban.
AdminName	String	Name of admin who set ban.

Force Team Switch

Forces a player to switch team. Can force a player to switch either on death or immediately.

Arguments

Parameter	Type	Description
PlayerId	String	
ForceMode	UInt8	0 = Force switch on death. 1 = Force switch immediately.

Set Team Switch Cooldown

Sets the cooldown time for allowing players to switch teams.

Arguments

Parameter	Type
TeamSwitchTimer	Int32

Set Max Queued Players

Sets the max number of players allowed to queue for the server.

Arguments

Parameter	Type
MaxQueuedPlayers	Int32

Set Idle Kick Duration

Sets the duration for kicking players for idling.

Arguments

Parameter	Type
IdleTimeoutMinutes	Int32

Send Server Message

Displays a message to all players on the server.

Arguments

Parameter	Type
Message	string

Get Server Information

Retrieves various information from the server.

Arguments

Parameter	Type
Name	string
Value	string

Request Example

```
{
  "AuthToken": "f95c9bc1-4aa1-d8ae-8bc3-28bef230df52",
  "Version": 2,
  "Name": "ServerInformation",
  "ContentBody": {
    "Name": "players"
    "Value": ""
  }
}
```

Response Example

```
{
  "statusCode": 200,
  "StatusMessage": "Successfully performed request."
  "version": 2,
  "name": "ServerInformation",
  "contentBody": "{
    "players": [
      {
        "name": "John Doe",
        "iD": "76561197960287930",
        "platform": "steam"
      }
    ]
  }
}
```

Information Requests

Name	Value	Description
players	N/A	Retrieves a list of players in the server.
player	Player ID	Retrieves detailed information about a player.
maprotation	N/A	Retrieved a list of the maps in rotation.
mapsequence	N/A	Retrieved a list of the maps in the sequence.
session	N/A	Retrieves information about the current server session.
serverconfig	N/A	Retrieves information about the server.
bannedwords	N/A	Retrieves all custom profanity words.
vipplayers	N/A	Retrieves a list of VIP players.

Player Information

Name	Type	Description
Name	string	Platform name of player.
ClanTag	string	Players clan tag.
Id	string	Platform ID of the player.
Platform	string	Platform of the player.
EosId	string	EOS ID of the player.
Level	Int32	Players career level.
Team	Int32	Players current team.
Role	Int32	Players current role.
Platoon	string	Players current platoon.
Kills	Int32	Players current kill count.
Deaths	Int32	Players current death count.
ScoreData	PlayerScoreData	Players current score.
Loadout	string	Players current loadout.
WorldPosition	vector	Players current world position.

Map Information

Name	Type	Description
Name	string	Name of the map.
GameMode	string	Name of the game mode.
TimeOfDay	string	Time variant of the map.
Id	string	ID of the map.
Position	Int32	Position in the rotation or sequence.

Session Information

Name	Type	Description
ServerName	string	Name of the server.
MapName	string	Current map playing on the server.
GameMode	string	Current game mode playing on the server.
RemainingMatchTime	Int32	Remaining timer left for the match.
MatchTime	Int32	Total match time duration.
AlliedFaction	Int32	Allied faction index.
AxisFaction	Int32	Axis faction Index.
MaxPlayerCount	Int32	Max players allowed on the server.
AlliedScore	Int32	Current score for the allies team.
AxisScore	Int32	Current score for the axis team.
PlayerCount	Int32	Current player count on the server.
AlliedPlayerCount	Int32	Current player count for the allies team.
AxisPlayerCount	Int32	Current player count for the axis team.
MaxQueueCount	Int32	Max players allowed to queue.

QueueCount	Int32	Current players queued for the server.
MaxVipQueueCount	Int32	Max VIP count allowed to queue.
VipQueueCount	Int32	Current queued VIP player count.

Server Configuration Information

Name	Type	Description
ServerName	string	Name of the server.
BuildNumber	string	Current build number for the server.
BuildRevision	string	Current build revision for the server.
SupportedPlatforms	Array<string>	Supported platforms on the server.
PasswordProtected	boolean	Determines if a server is password protected.

Banned Words Information

Name	Type	Description
BannedWords	Array<string>	List of custom banned words.

VIP Players Information

Name	Type	Description
VipPlayerIds	Array<string>	List of VIP player IDs.

Server Broadcast

Broadcasts a message to the server.

Arguments

Parameter	Type
Message	string

Set High Ping Threshold

Sets the threshold for players with high ping.

Arguments

Parameter	Type
HighPingThresholdMs	Int32

Get Client Reference Data

Gets the data for creating dialogue options for commands that are client supported.

Request Example

```
{
  "AuthToken": "f95c9bc1-4aa1-d8ae-8bc3-28bef230df52",
  "Version": 2,
  "Name": "ClientReferenceData",
  "ContentBody": "[Command ID]"
}
```

Response Content Body

Name	Type	Description
Name	string	ID of the command requested.
Text	string	Friendly name of the command requested.
Description	string	Description text of the command requested.
DialogueParameters	array	Retrieves parameter information about a specified command.

Dialogue Parameter

Name	Type	Description
Type	string	Type of dialogue the parameter is meant for. Can either be: Combo, MultiSelect, Text or Number
Name	string	Name of the parameter.
Id	string	ID for the parameter. Used for creating request data for the server.
DisplayMember	string	Dialogue options for the parameter. Meant for client view.
ValueMember	string	Dialogue options for the parameter. Meant for server requests.

Message Player

Sends a message to a specific player.

Arguments

Parameter	Type
Message	string
PlayerId	string

Punish Player

Punishes a player by killing their character.

Arguments

Parameter	Type
PlayerId	string
Reason	string

Kick Player

Kicks a player from the server.

Arguments

Parameter	Type
PlayerId	string
Reason	string

Temporary Ban Player

Bans a player from the server for a certain duration.

Arguments

Parameter	Type
PlayerId	string
Duration	Int32
Reason	string
AdminName	string

Remove Temporary Ban

Removes a temporary ban from a player.

Arguments

Parameter	Type
PlayerId	string

Permanent Ban Player

Bans a player from a server permanently.

Arguments

Parameter	Type
PlayerId	string
Reason	string
AdminName	string

Remove Permanent Ban

Removes a permanent ban from a player.

Arguments

Parameter	Type
PlayerId	string

Set Auto Balance Enabled

Enables or disables team auto balancing for the sever.

Arguments

Parameter	Type
Enable	boolean

Set Auto Balance Threshold

Sets the player threshold number for team auto balancing.

Arguments

Parameter	Type
AutoBalanceThreshold	Int32

Set Vote Kick Enabled

Enables or disables the vote to kick functionality.

Arguments

Parameter	Type
Enable	boolean

Reset Vote to Kick Threshold

Resets the vote to kick threshold.

Arguments

This command does not take any arguments.

Set Vote to Kick Threshold

Sets the vote to kick threshold.

Arguments

Parameter	Type
ThresholdValue	string

Add Banned Words

Adds words to the custom profanity filter. Words should be separated with a comma.

Arguments

Parameter	Type
BannedWords	string

Remove Banned Words

Removes words from the custom profanity filter. Words should be separated with a comma.

Arguments

Parameter	Type
BannedWords	string

Add VIP

Gives a player VIP status.

Arguments

Parameter	Type
PlayerId	string
Comment	string

Remove VIP

Removes VIP status from a player.

Arguments

Parameter	Type
PlayerId	string

Set VIP Slot Count

Set the VIP slot count for the server.

Arguments

Parameter	Type
VipSlotCount	Int32

Set Match Timer

Sets the match time of a specified game mode in minutes. For offensive the match timer is the length of each control point phase. Match timers are limited to the following ranges:

Warfare: 30 – 180 minutes

Offensive: 10 – 60 minutes

Skirmish: 10 – 60 minutes

Arguments

Parameter	Type
GameMode	string
MatchLength	Int32

Remove Match Timer

Removes the custom match timers for the specified game mode.

Arguments

Parameter	Type
GameMode	string

Set Warmup Timer

Sets the warmup timer for a specified game mode in minutes. Only supports Warfare and Skirmish. Warmup timers are limited to the following ranges:

1 – 10 Minutes

Arguments

Parameter	Type
GameMode	string
WarmupLength	Int32

Remove Warmup Timer

Removes the custom warmup timer for a specified game mode.

Arguments

Parameter	Type
GameMode	string

Set Dynamic Weather Enabled

Enables or disabled dynamic weather for a specific map. Command only functions for maps that use the dynamic weather system.

Arguments

Parameter	Type
MapId	string
Enable	boolean

Get Server Changelist

Retrieves the change list build number for the server.

Response

Parameter	Type
Changelist	string

Remove Player From Platoon

Finds and removes a player from their platoon (Squad).

Arguments

Parameter	Type
PlayerId	string
Reason	string

Disband Platoon

Finds and removes all players from a platoon (Squad).

Arguments

Parameter	Type
TeamIndex	uint8
SquadIndex	Int32
Reason	string