RGi Token

System Overview

Service Overview

The RGI.Token.WebAPI is a .NET Core Web API application, deployed as linux docker container, on the environment's linux application servers. It acts as a micro-service for supplying and validating tokens generated by SharpGaming, and allows for security and session control.

The gateway runs on port 5092 (blue)/5093(green)

Swagger contains detailed information on the available operations, data-types and payloads https://prod0 1-rgi-token.gib.prod.sharpgaming.ltd/swagger

Information on docker commands can be found here.

Production Details

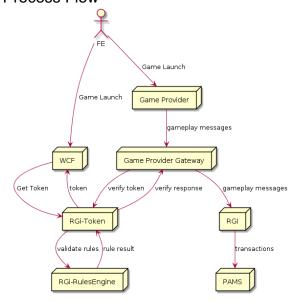
See Production Details

Contributing Applications and OS services

The service requires access to a rgitokendb on the database server, tokens are registered and validated in the token table.

Rgi-token also relies on decisions from rgi-rulesengine, using the RTS14C.json rules. Decisions are formed based upon the transaction type, whether the token is deleted, whether it exists and whether it has expired through age. The outcome of the decision for Stake (withdrawal) requests, is to invalid all other player tokens. NonStake (deposit) requests are permitted to be processed by the rest of rgi, to prevent blocking a player's payout.

Process Flow



Environmental Variances

RGi-Token is deployed as the same docker service across all environments. The only variance is between game providers. Netent, RGS, DWG and Inspired are currently the only providers using this service, until the other game providers are migrated to this way of working.

Hours of Operation (scheduled or 24/7)

24/7. The RGi-Token will need to have an SLO of 99.999 uptime (6 second per week downtime). It's critical that if this service is disrupted, either during deployments or when downstream services are impacted, we can automatically manage and report on the performance before we incur downtime.

Expected traffic & load

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Request per second: Weekday: 120 Weekend: 156

Royal Ascot, Cheltenham, Grand National: 250

See Games Performance Testing Requirements

Resilience / High Availability

Availability: 24/7

Resilience: The component is clustered across the RGiApps linux boxes.

Infrastructure

See RGI Components - Production Details and Gaming Components Runbooks

System Configuration

Logging

Uses Serilog. See here https://github.com/serilog/serilog-settings-configuration

Key items are

Setting	Description	
SplunkHost	Splunk URL to log to	
EventCollectorToken	Http Collector token value, used for identifying requests and indexing in splunk	
MinimumLevel.Default	The current log level	

TokenConfigurations

Array of settings, one per company/franchise, since the settings can/will be different per franchise.

Name	Friendly name for this group of settings - i.e. OddsKing
Company	Company Id
Franchise	Franchise Id
ProviderConfigurations.Provider	The Provider name for these settings i.e NetEnt
ProviderConfigurations:SessionExpiryMinutes	How long the token is lasts before being rejected
ProviderConfigurations:SessionMaxAgeMinutes	How long the token will last before being "soft" deleted

Monitoring & Alerting

Splunk

In Splunk data from rgi-token can be found using the query term

Splunk query term	
index = "rgi-token"	

New Relic

The service can be configured to log to New Relic for performance monitoring. This is enabled via a container environment variable, which is set from cmdb. Setting rgi-token.newrelic.enabled = 1 will enable new relic output.

Health Checks

The service has asp dot net core health check ability, performing a GET https://prod01-rgi-token.gib.prod.sharpgaming.ltd/health/all will return information and the status of memory, version info, the current configuration settings and timing (cpu) information.

Operational Tasks

Repositories

Repositories

https://bitbucket.org/sharpgaming/rgi-token/

Deployment

Component	Pipeline	Notes
Deployment	DevOps/CMDB/Backend-Deploy/Rgi-Token-Docker-Deploy master * prod01-blue	Blue/green possible
RGi Token DbMigrations	DevOps/CMDB/Backend-Deploy/RGi-Token-DbMigrations-Deploy master * prod01	

Troubleshooting

Each game provider may differ slightly, but in general a token is issued during game launch, within the WCF. This sends a URL back to the game provider. The game provider then sends game play messages to the game provider gateway. i.e. rgi-netent which then interogates rgi-token to determine if the token is still valid.

DWG, RGS and Inspired send an initialisation (init) message, that is used to initialise the token, which marks it as being used. If someone tries to launch a game using the same url, the fact it has been initialised already prevents and secures the game launch process.

Netent, don't have a unique initialisation message, so the token is initialised at the same time it is created.

To view the container logs use docker logs <container id> which you would have got from docker ps. You can use the -n switch to view the last n lines. I.e. docker log <container id> -n 100.

Maintenance Tasks

No maintenance tasks are required.

Failover & Recovery procedures

No recovery process is required.

Contact Details

- Games Team
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Document Control

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