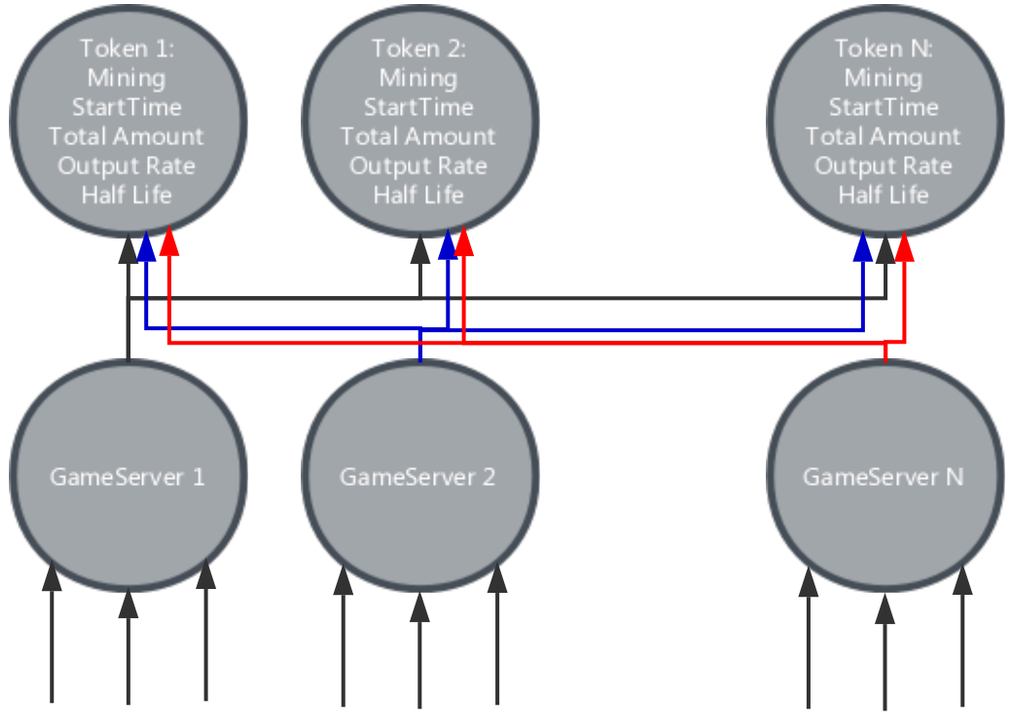

TOKEN(Token1, Token2, ..., TokenN) DISTRIBUTION REQUESTS

For token distribution, it is splitted into two parts, game-login distribution & game-play distribution.
The algorithm can be described below:

Firstly, assumingly, for Token N, the token output amount in the first day when the token was launched is MiningOutputFirstDay, the timestamp when launching is MiningStartTime, then, the formula of Quota in DurationSeconds can be worked out as below:
NumOfHalfLifeCycles = diff_days(NowTimestamp, MiningStartTime) div HalfLifeDays,
Quota = (MiningOutputFirstDay / 86400) * DurationSeconds * Proportion * math:pow(0.5, NumOfHalfLifeCycles) / NumOfGameServers
For Proportion, if the Proportion is for game-login, then Quota is for game-login, similarly for game-play part.

algorithm for game-play part:
Each GameServer will collect token distribution requests into one queue individually, and will process them every 5 seconds. Take one request for example, if one request is originated from one game, which game id is GameId, and the requested token in the request is TokenAmount0 of TokenN, then the final token amount TokenAmount for this request is determined by the following formulas:
the total request amount for TokenN is RequestSum = SumOf(TokenAmount0 * HardCoef(GameId) + ...),
the quota: Quota = Quota(game-play, TokenN, 5-seconds),
TokenAmount = TokenAmount0 * HardCoef(GameId), when RequestSum <= Quota
= TokenAmount0 * HardCoef(GameId) * Quota / RequestSum, when RequestSum > Quota

algorithm for game-login part:
Assuming that, the elapsed seconds between one player's last login and this login is N seconds, then the token amount he will get is:
N' = min(N, 2 * 24 * 3600), which means the maximum duration will be clamped into 2 days
Quota = Quota(game-login, BGX, N'-seconds),
TokenAmount = Quota / NumOfAllPlayers