Powerball

Most setup properties are on the Powerball stone itself. It is recommended that you use only one Powerball stone on a server at a time due to the low odds at winning. There are Powerball Satellite stones that act as the actual Powerball stone in which players should not be able to tell the difference between the two. Double clicking the Powerball stone will bring up the Powerball stats gump, in which gives the option to purchase a Powerball ticket or view current game info, the last 10 picks, and the last 10 jackpots. Each ticket can have up to 10 sets of picks, defined in the PowerBallTicket.cs as the TicketEntry class. Each cycle or game (default 24 hours) will choose 5 white balls and 1 powerball pick.

Integrating a stats bulletin board would be easy if you chose to. In PowerBallStats.cs it records the last 10 jackpots, and the last 10 picks. To keep a larger list of stats, you can modify payout argument in the TrimList(…) function or remove it altogether. I put this in so the lists don’t get too outrageously large.

I designed the ObjectProperty on the Stone to be similar to the CEO Turbo Slots. There are various sounds and effects in the event of a jackpot, winning tickets, similar to winning a progressive jackpot on a Turbo Slot. There are some red white and blue sparkles 30 seconds prior to the numbers being picked.

Default start time is set to 6pm. You can edit the m\_TimeOfDay field in the constructor or change it via props menu. Changing it on the props menu will auto update the next powerball game.

**Properties to edit via props gump**:

**TicketCost**: cost of each ticket purchased from the Powerball stat gump.

**TicketEntryPrice**: The cost per Ticket Entry. Each ticket can have 10 entries or sets of picks.

**PowerBallPrice**: Price to choose a Powerball pick.

**MaxWhiteBalls**: Max amount of white balls picked during each game. The real game has 59 white balls to choose from, obviously way too high for any sized UO Server. Default is 20 balls.

**MaxRedBalls**: Real Powerball picks from 39, Default is 8.

**GuaranteedJackpot:** Guaratees a jackpot after 20 games with no jackpot. If 5 games pass without a jackpot, the odds for a jackpot increase each game. This seemingly randomizes the jackpot odds to the players.

**GameDelay:** Time between Powerball Picks. Default 1 day.

**DeadLine:** Time before picks are made players cannot buy tickets for that current game anymore.

**NoWins:** Consecutive games no jackpot has won. get only.

**GameNumber:** Current game number.

**GoldSink:** The difference between how much gold has been put in and gold won.

**DoJackpot:** Guarantees a jackpot on the next draw. One random ticket entry is chosen. This is for testing purposed and decided to leave it in. Can be triggered as a GM from the stats menu.

**IsActive**: Sets game inactive/Active.

**TimeOfDay:** Time powerball picks are made. Default is set at 1800 hours.

**Announcement:** Jackpot announcements on/off

**ODDS:**

59 white – 39 red = 195,249,054 - Standard US Powerball Game, 1 in every 195,249,054

50 - 25 = 52,969,000

40 - 15 = 9,870,120

30 - 10 = 1,425,060

25 - 10 = 531,300

20 - 8 = 124,032 - Default Odds, 1 in every 124,032

20 - 5 = 77,520

15 - 5 = 15,015

10 - 5 = 1,260

Calculation:

n = # of white ball possible

k = # white balls (5)

r = # of red balls possible

COMBIN(n, k) \* r

COMBIN(N,K) is equal to: FACT(N) / (FACT(K) \* FACT(N-K)

FACT on a calculator is usually N!

**Payout:**

**Profit**: Total gold generated from purchasing tickets and entries during that particular game. Can be accessed via PowerBallGame.cs

**Jackpot**: ( Profit / 2 ) / # of jackpot winners

**PowerBall**: 500; this is on top of any 3 or 4 white match tickets, or by itself

**3 White Matches**: ( Profit / 50 ) / # of tickets with 3 matches

**4 White Matches**: ( Profit / 20 ) / # of tickets with 4 matches

**5 White Matches**: ( Profit / 10 ) / # of tickets with 5 matches

With this system, the payouts should be pretty good as long as there are a lot of tickets/entries being bought. Not including any standalone powerball winnings, the payout should be roughly 67% of the total profit taken in for that particular game. Each time a game goes without a Jackpot, the profit will continue to increase.