How to test Bonuses

There are a huge number of bonuses for players in the game. In fact, the game is all about receiving bonuses from different entities of the game. Every type of bonus and penalty can be either permanent or temporary and work both ways. Bonus affects a specific entity (e.g. a specific unit) or a whole group (e.g., bonus to defending fighters, bonus to trap production speed). Almost all bonuses for certain essences are summed, and only then applied to the base value. Almost nowhere is there such a thing as a bonus being applied to a value already under the effect of another bonus. Conventionally, bonuses can be divided into several large groups:

- Bonuses of timing decrease
- Resources production bonuses
- Resources collection bonus
- Cost reduction bonuses
- Bonuses that reduce the chance of getting something
- Battle bonuses

It's easy to use Balance Editor values to check the bonus changes.

Bonuses of timing decrease

Note: "march acceleration" item is called acceleration, but in fact just cuts off a percentage of time. Example: the march goes to the place of 1 minute, when you apply expendable item "march speed +50%" march will just go 30s instead of a minute, if you apply it again, then 15s, etc.

Resources production bonuses

Resources collection bonus

There are two options:

1. percentage increase to the resource received, e.g, 10% more resources from the outpost;
2. numerical increase, e,.g., +1 free key to open chests.

The percentage increase is calculated as follows:

Cost reduction bonuses

Bonuses that reduce the chance to get something

It's easy to check the chance using 0, 50, and 100%. You can get something with 100% chance when the bonus is active. At 50%, you need to do several iterations to judge whether the chance is realistic or not.

Battle bonuses

Battle bonuses are calculated as a direct percentage of the sum of all bonuses to the original value. Game formulas page shows how the resulting parameter value is used to calculate battle characteristics.
Battle bonuses are also written into the log on each battle. How to test pvp-system.