

## Tomorrow Dies Today Application

### Internal Functionality Review (Business Layer)

Note: This is a review of the Business layer and not of the User Interface or Data Service layers. This layer contains the core functionality of the application and how it manages the squads, tiles, and calculations of the application. This review will summarize which Tomorrow Dies Today mechanics/calculations are implemented into the application.

### **Mechanics Covered by Internal Logic:**

#### Squads:

- The player's faced Henchman is recorded. The player can add the faced henchman to a squad along with their unique stats
- The player squads have their units and any items being used to improve that squad's stats. Items include:
  - Hypnotic Spray
  - Explosive rounds
- Squads are limited to having only one item of each item type. For example, a squad cannot equip two Hypnotic sprays.
- Squads are limited to a max of six units per squad including the faced henchman.
- The player has access the other players' squads. They can select squads from other players and themselves when picking a tile. A success or fail is given to the player based on the selected squads.
- A player who is Ugo can use the Ugo's ability to increase one of a single unit's stats. Individual units are limited to one increase from the ability
- A player who is The Node can add their stats to a tile using the Hack the Planet ability

#### Tiles:

- All Tile stats are dynamically adjusted according to different modifiers. Modifier include:
  - The type of mission (Headquarters, resource, doomsday, etc.)
  - Which tile it is in the game (We have all stats recorded in the backend)
  - Alert Tokens increase the difficulty of the mission if the tile is an HQ (alert tokens are multiplied by the HQ's stats)
  - If a tile is flipped, its stats will change to reflect this
  - If the global event "Increased Security" is active, all resource missions will have their stats increased by one
  - If an agent is present, it will increase the difficulty of that tile by the appropriate HQ's stats (HQ stats include any changes made by alert tokens on that HQ)
  - If the tile has been hacked by The Node, the tile's cunning will all increase by two

#### Calculations:

- The internal services can compute the total stats of one or more squads based on the units in the squad, the items being used by the squad, and any abilities that the player has that modify stats
- Tiles are dynamically updated with their modifiers and their calculated stats reflect this.
- A player can select multiple squads and select a tile. The total stats of the squads and all other factors are compared to the tile's stats. The result will be a pass or fail.