

Inheritance of Occupations

- We use “Occupation” to refer to classes and jobs. An occupation must be either a class or job and a class becomes a job through equipping a soul stone so it is disjoint and full participation. An occupation is distinguished by the following:
- Class is a basic occupation where you only have some basic skills and must become a job to get access to a variety of skills. It is like an apprenticeship to become a master.
- Job is like the master occupation, where you have full access to your skills.

Inheritance of Adventures

- We use “Adventure” to refer to quests and duties. An adventure must be either a quest or duty so it is disjoint and full participation. An adventure is distinguished by the following:
- Quests are a series of steps that the player must execute to get the rewards. These quests will have interactions with objects and non-playable characters.
- Duties are instanced contents where you are matched with other players to challenge the same content.

Inheritance of Companions

- We use “Companion” to refer to mounts and minions. A companion must be either a mount or minion so it is disjoint and full participation. A companion is distinguished by the following:
- Mounts are companions that a player rides and minions are a player’s sidekick. As such mounts have different attributes from minions such as how many players can ride the mount.

Classes become Combat Jobs

- For background: Everyone starts with a base class and by equipping a soul stone, you can change to an associated job. For example, someone in the “Gladiator” class can equip the “Soul of the Paladin” soul stone to become a “Paladin”. To go back to the class associated with that job, you unequip the soul stone. The only jobs that have base classes associated with them are some of the combat jobs.
- Cardinality: **1 to Many** from Classes to Combat Jobs because each class is associated with at least one combat job. The “Arcanist” class can become two jobs while every other class can only become one job.
- Participation:
 - Class is **partial participation** in “become” because a player doesn’t have to equip a soul stone to become a certain job if they don’t want to.
 - Combat Jobs have **partial participation** in “become” because not all combat jobs have an associated base class. For example, the job, “Gunbreaker”, does not have a base class.

Occupation use Occupation Logs

- Cardinality: **1 to Many** from Occupation Logs to Occupation because each log can be associated with many different jobs but each job only uses one kind of occupation log. An example is how the jobs “Botanist” and “Miner” both have gathering logs but “Botanist” and “Miner” only have gathering logs and don’t use any other type of log.
- Participation:
 - Occupation is **partial participation** in “use” because not every occupation has an associated Occupation Log. I.e. Gunbreaker does not use a log.
 - Occupation Logs are full **participation** in “use” because all Occupation Logs are associated with an Occupation.

Occupation perform Actions

- Cardinality: **Many to many** because you have a variety of actions associated to each occupation (i.e. Red mage has the Actions, “Verthunder” and “Veraero”) and you also have actions that are shared between different occupations. i.e. Marauder, Gladiator, Dark Knight, Gunbreaker, Paladin, and Warrior all have the action “Rampart”.
- Participation:
 - Occupations have **full participation** in “perform” because all Occupations have some action by default.
 - Actions have **full participation** in “perform” because every Action you can take in the game will be associated to at least one occupation. There are no occupations that don’t have any Actions.

Players have Occupation

- Cardinality: **Many to many** because each player can have access to multiple occupations. For example, you can have access to both “Red Mage” and “Gunbreaker” occupations at the same time. Additionally, each occupation is going to be available to many players since there are a limited number of jobs and millions of people are playing this game.
- Participation:
 - Players have **full participation** in “have” because every player starts with an occupation. When you’re first creating your character, you have to select which class you belong to. So every player, even the brand new ones, has an occupation.
 - Occupations have **partial participation** in “have” because you only get access to other occupations besides the one you started with through quests. If the player did not do the quests, they do not have the other occupations unlocked.

Quests obtained by Actions

- Cardinality: **1 to 1** because a quest gives out only one Action and each Action can only come from one Quest. If you have a certain Action, you know exactly which Quest it came from because you can only get that Action from that one Quest.
- Participation:

- Quests have **partial participation** in “obtained by” because not all Quests give Actions. There are quests that only advance the story.
- Actions have **partial participation** in “obtained by” because you do not always have to do a Quest to obtain an Action. There are some Actions that come with the occupation you chose at the beginning of the game – you do not have to do a quest to get them. An example is if you start the game as a “Rogue” occupation, you have the action, “Spinning Edge”, automatically.

Quests unlocked by Occupations

- Cardinality: **1 to 1** because each quest only unlocks one specific class and each occupation is unlocked by a single quest. If you want to unlock the “Warrior” occupation, there’s only one quest that gives you that option and doing that quest only unlocks the “Warrior” occupation.
- Participation:
 - Quests have **partial participation** in “unlocked by” because you always have that one default class you chose at the beginning of the game that you didn’t have to do a quest to obtain. Thus, you do not necessarily have to do any quests to unlock a occupation.
 - Occupation has **partial participation** in “unlocked by” because the class you had to choose when you started the game didn’t need a quest to be unlocked. Because of this, not all occupations are unlocked by quests.

Orchestrion Rolls Rewarded by Adventures

- Cardinality: **Many to Many** because you can get many orchestrion rolls from adventure and also different adventures can give out the same orchestrion roll. An example is how you can get the “Return to Oblivion” orchestrion roll from the duties, “Eden’s Refulgence Normal” and “Eden’s Refulgence Savage”. And how the duty, “Delubrum Reginae” gives out the orchestrion rolls “The Queen Awakens” and “Giving Chase (Zodiac Age Version)”.
- Participation
 - Orchestrion Rolls have **partial participation** in “rewarded by” because not every adventure gives you an orchestrion roll.
 - Orchestrion Rolls have **partial participation** in “rewarded by” because not all orchestrion rolls are obtained by an adventure. For example, you can buy orchestrion rolls from the game’s online store.

Companions earned through Adventures

- Cardinality: **Many to many** because different adventures can give you more than one companion and you can get the same companion from many different adventures. For example, you can only obtain the “Nightmare” mount from the duty, “The Navel Extreme”, “The Bowl of Embers Extreme” and “The Howling eye Extreme” and these

duties also give another mount on top of the Nightmare, for example “The Navel Extreme” also gives the Gulfaxi mount.

- Participation:
 - Companions have **partial participation** in “earned through” because not every adventure gives a companion.
 - Adventures have **partial participation** in “earned through” because not all companions are earned through adventures. For example, you get the minion “Allegan Melon” by gardening, which is not an adventure.

Quests open Duties

- Cardinality: **1 to Many** from Quests to Duties because each quest can open many different duties but each duty is only opened by one quest.
- Participation:
 - Quests have **partial participation** in “open” because not all quests open duties.
 - Duties have **full participation** in “open” because a duty is always opened by a quest.

Duties advance Quests

- For background: You can have a quest that has multiple steps in it, and sometimes, in between the steps, you have to do a duty to advance to the next step.
- Cardinality: **1 to Many** from Quests to Duties because the different stages in one quest can be advanced by different duties, but each duty is associated to that one quest. For example, in the “Shadowbringers Quest”, you need to do the duties, “Amaurot” and “Dying Gasp” and both of those duties are only done to advance the “Shadowbringers Quest”, and not any other quest.
- Participation:
 - Duties have **partial participation** in “advance” because although they're initially used to advance a quest, you can do duties just to level up once they've been unlocked.
 - Quests have **partial participation** in “advance” because not all quests are split into stages that require duties to advance them. You don't need duties to complete every quest.

Players from Worlds

- For background: A player can travel to different worlds within the same datacenter, but if they are not in their home world, they have limited functions
- Cardinality: **Many to 1** from Player to Worlds because the each player needs to be from one world, but each world can be associated many different players
- Participation:
 - Player have **total participation** in “from” because they need to choose their home world when they first make their character.

- Worlds have **partial participation** in “from” because a world may not have any players as their home world if they were not chosen by the player. I.e. New worlds are created and no players selected it as their home world.