Game Networking Technical challenges

When working on online features and implementing them there is a significant amount of challenges and considerations to well be considered on the technical side of thigs for example the main thing they need to consider first is the size and scope of the game and whether or not to use a peer to peer system or a server based system if the scope is big enough a server is recommended otherwise it would be preferable to do peer to peer both have unique advantages and disadvantages.

Deciding on what protocol to use is another decision to make UDP is recommended for anything that has many players and positions updating live, it also is recommended to use it when doing projectile spawning from the player so again something that has a position that is moving, in a numbers based game where players would say hit each other without positions , TCP would be used as long as the game itself isn’t fast paced.

Location of the main server is another challenge ideally you’d want it where your main playerbase is located another or somewhere where you can access it actually that’s the other main thing internal servers or external , though this is more so is a business challenge. That said if a problem happened with the server it would be difficult to do anything for it if it wasn’t located near to the company,and maintaining it would be much more difficult if it was external.

Dealing with cheaters is another technical challenge the company may have to invest in existing anti cheat options or decide to make their own either way managing both would take up a lot of time and be a full time focus for the game, and deciding whether it would flag cheaters or instantly ban them is another decision to make.