Memory and Storage Management

First, a game needs to allocate a reasonable amount of memory. If the memory overflows, the game will run slower. If the memory is not used enough, it means that the performance of the game is not good enough. In general, the game should occupy 1/4-1/2 of the system's memory. Secondly, there are about 200 high-definition images to choose from in this game. There will be repeated images during the game. To avoid repeated importing and deleting of images from memory, we can pre-import high-usage images in the memory and reuse them when needed to reduce memory usage. Third, we can reduce memory usage by optimizing materials. Because the resolution of mobile devices is lower than that of desktop computers, for mobile clients, we can reduce the image resolution to improve memory usage efficiency. Fourth, at the end of the game, release the memory in time and release all temporarily stored images and scenes. There is a game, "Warcraft rumble", which is an excellent mobile client game. But I think its memory usage is too high. The phone starts to heat up after the game runs for 10 minutes. It may be because it uses many high-definition 3D models, resulting in too much memory overflow.

About storage, the total storage capacity of this game is about 1600MB, which is a very low number for modern hardware conditions, but it does not mean that we must use 1600MB. For mobile devices, we can reduce the hard disk usage by compressing images. In addition, some data can be placed on the server side through cloud storage, and then reloaded when the client side runs. Make storage management more flexible and more efficient.

If we want to pursue the speed and quality of the game, we must increase the hardware requirements, which will lose some customers. If we consider the hardware requirements, we must reduce the quality and speed of the game, and we will lose another part of the customers. So, the most important thing is how to find a balance to run the game efficiently and smoothly in the smallest hardware required to maximize customer satisfaction.