Director 3D is a multiplayer environment for Unreal Tournament 2004 which allows for real time camera control during a live action session. Director 3D consists of two parts, an Unreal Tournament backend that allows the user to set in world cameras in real time, as well as a tablet PC frontend that allows for touchscreen control of these cameras and the ability to move and cut to these cameras at any time.

In order to use Director 3D, the player first sets up an Unreal Tournament 2004 multiplayer game session using the Director 3D gametype. After the game is started clients can join the game, and the first person who joins is designated the camera controller. This person can make themselves a spectator and fly around setting cameras that can be used by the director. The director is not using Unreal Tournament, but instead a tablet PC connected to the Unreal server by a TCP connection. As the camera player sets in world cameras, these cameras are shown on the director’s tablet PC, and he has full control over them via his interface. The director can move cameras, rotate them, or ‘cut’ to them and make them the current view. When the director cuts to a different camera, the camera controller’s player view is switched to that of the camera the director chooses.

![Diagram of Director 3D architecture](image)

The Director3D architecture consists of a server running a UT2004 game, a director using the tablet pc, and the camera operator and clients running UT2004.

More information about Director 3D and other DWIG projects can be found at: http://dwig.lcc.gatech.edu

The tablet PC interface allows for easy control of the in-game cameras.