DVEs (Distributed Virtual Environments) are systems where many hosts, each usually supporting a single user and connected via a network, all participate in simulating a single virtual environment. Such DVEs have become popular in the last few years, but they generally face the problem of low interactiveness and simple object/world makeup. Currently, most efforts attempt to increase the largest possible size of these DVEs. The interactiveness is not improved, and has not in the last 10 years or so.

To improve interactivity of VEs, optimistic consistency can be and has been used successfully. On the other hand, larger DVEs (more than 100 participants) have to employ partial replication. The combination of optimistic consistency and partial replication proves, however, difficult.