

## SimEOC 12 Feb 2014 Exercise

On 12 Feb 2014, we conducted an exercise with SimEOC at Notre Dame. This exercise consisted of 12 players. This was the largest exercise to date using SimEOC. The goal of the exercise was to moderately stress the system, to identify minute bugs in the system, to confirm the operation of the system to date, and to validate the design of SimEOC.

The outcome of the exercise was conclusively successful.

### **Moderately stressing the system:**

The system was stressed to the largest degree to date in a several respects. First, the system was stressed in terms of the number of players participating in the exercise. This was the largest number of participants that have ever used the vEOC at one time. This stressed the database and the reverse ajax logic of the vEOC. The system was also stressed in terms of the variety of operating systems used. About half of the participants used the mac operating system and about half used the windows operating system. Within each operating system, a variety of browsers were used as well, including Internet Explorer, Safari, Firefox, and Chrome. Third, the system was stressed in terms of the number of distributed personnel participating in the exercise. Two of the twelve players – the exercise controller and one liaison were offsite. Among the 12 players, the operating system used was split between windows and mac; this was a true, multi-platform distributed exercise of SimEOC. Finally, we also stressed the system in terms of the number of and kind of injects that were sent to each of the twelve players. The system withstood all of the activities of the 12 players in the exercise with no glitches.

### **Identifying minute bugs in the system:**

Before the exercise, there were several dry runs of the system. During the dry runs, several bugs were identified. First, there were some issues with multi-browser compliance. It was discovered that Firefox (on the mac) does not render pdfs or the disaster map. Firefox on windows does not render the disaster map. Additionally, Chrome on the mac does not render the disaster map either. This is not a bug in SimEOC. This is rather a function of the browser not supporting the technology used to implement the disaster map. Another issue that was discovered was the global updates. There is a bug in the global updates for which the global update works at the beginning of the script; however, after an inject is received by a player, then the global updates no longer function. This bug was identified and entered into our bug tracking software (Redmine) for correction.

During the exercise, several additional bugs were identified. The advanced learning tutor has a bug that renders it inoperable. This was identified and entered into Redmine for correction. One minor menu bug and one initial status bug was identified and entered into Redmine. Additionally, minor communication tool bugs and two minor typos were identified and entered into Redmine.

**Confirmation of the operation of the system:**

The operation of the system was confirmed. The player consoles worked as designed. All of the global updates and injects were received. With the exception of minor communication tool bugs, all of the communication tools worked as designed as well.

**Validation of the design of SimEOC:**

The overall experience with the interface was fair to pleasant. Several individuals felt overwhelmed with the pop-up windows. There also were several suggestions for improvement. The primary suggestions include a better mechanism for receiving injects and mission/tasks.