

Scoreboard Software

1 Introduction

This is for use in any contest where player VM services are monitored and scored. An administrator adds players and their associated ip addresses to a data base. The scoring is started by the administrator after the database is complete. Probing of services commences and each VM is probed every 20 seconds but this can be changed. For each service that is considered 'up' as a result of a probe the player gets one point but this can be changed. Players may be added or deleted after scoring begins. Probing of an added player begins immediately. Probing of a deleted player ends. Scoring is saved in a player's database file which is named players.db but this name can be changed. A utility exists to read the player's database file. Another utility exists to create a webpage showing scores and rankings from the player's database file. This is intended to be run on a computer's command shell. Some modifications to the scripts are necessary for Windows computers.

2 Before Scoring Begins

From the command line run

```
cdx-interactive.run
```

If there is no player's database file a warning is issued. In any case a prompt appears like this:

```
Command>
```

To add a player to the database run the **AddPlayer** command with the player's name and IP address as arguments. For example, like this:

```
Command> AddPlayer Jonas 192.168.1.1
```

At the command prompt show all the players with their current scores and IP addresses using **ListPlayers**. For example:

```
Command> ListPlayers
player: Jonas    192.168.1.1    0
player: Jake     192.168.1.2    0
```

At the command prompt save the current database in the player's database file using **SavePlayers**. For example:

```
Command> SavePlayers
```

A saved database file can be loaded using **LoadPlayers** like this:

```
Command> LoadPlayers
```

Players can also be deleted from the database at any time (while scoring or not) using **DeletePlayer** like this where only the player's name need be given as an argument:

```
Command> DeletePlayer Jonas
```

3 Scoring

Scoring begins when invoking the **Start** command like this:

```
Command> Start
```

Scoring proceeds as follows. A while loop contains a for loop which starts a **CheckServices** thread for each player in the contest followed by a delay that is determined by a value in a **GameParameters** file (more about this later). The default value is 2 seconds. Each **CheckServices** thread