**HQSync User Documentation**

HQSync is a PHP command line utility to synchronize forms from CommCare HQ domains to a mysql database. The utility consists of 2 code files (sync.php, HqSync.inc.php) and 3 database tables (hqsync, hqsync\_table, hqsync\_log). Execution creates an additional log file and stores data files fetched from the CommCare HQ server. sync.php is the executable and is typically run with a command like this:

php sync.php –v >> hqsync.log 2>&1

This runs sync.php in verbose mode and appends both the standard and error outputs to hqsync.log. During normal usage, a script command like above would be stored in a bash script and set as an automated cron job (i.e. hourly). **sync.sh** is provided as an example of this. For additional commands, use:

php sync.php –help

There are 3 database tables, but only **hqsync** should be edited manually. Each record in **hqsync** corresponds with a single form or report in an HQ domain to be imported. CommCare HQ exports are returned as zip archives of zero or more comma-separated value (CSV) files. If a token is used during a fetch (default behavior), then only records submitted since the token will be returned. Some exports, such as the user/case/referral export, do not use tokens because they are not longitudinal, but rather represent the current state of the user/case/referral tables. In this case, set **use\_token** = 0 and **purge\_before\_import** = 1. The other tables are updated automatically by sync.php in the following manner:

* **hqsync\_table** – This table is used to map the individual CSV files contained in the zip exports to database tables that contain the imported data.
* **hqsync\_log** – One record is created for each record in **hqsync** for each execution of the script to log one of 3 possible results: 100 (SUCCESS), 200 (EMPTY\_EXPORT), -100 (ERROR). The table also records the input token used to fetch the result and the export token returned in the export header. If an error occurs, the error message is saved to the comments field.

**Maintenance**

If a log file is used (e.g. hqsync.log) it should be archived regularly using an automated cron job. **archivelogs.sh** is provided as an example script and contains the following:

FILENAME=hqsynclog\_$(date +%Y%m%d)

zip /root/hqsync/logs/$FILENAME.zip /root/hqsync/hqsync.log

rm /root/hqsync/hqsync.log

The **hqsync\_log** database table should also be archived periodically to save space and improve performance. A third script is under development for just this purpose that should be run when appropriate (possibly every 3-6 months).