**Daily Scrum Meeting Minutes:**

Attendees: Joannier Pinales, Steven Caceres

Date: 01/18/2018

Start time: 8:10

End time: 8:25

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 2
* What was done since the last scrum meeting?
  + Going through cryptdb documentation
* What is planned to be done until the next scrum meeting?
  + Keep reading documentation
* What are the hurdles?
  + none

Steven Caceres:

* How many hours did I work since the last meeting?
  + 2.
* What was done since the last scrum meeting?
  + Virtual Machine with Ubuntu 13 LTS was set up, and updated.
* What is planned to be done until the next scrum meeting?
  + Install CryptDB onto the virtual machine.
* What are the hurdles?
  + None

Attendees: Joannier Pinales, Steven Caceres

Date: 01/19/2018

Start time: 8:30

End time: 8:45

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 5
* What was done since the last scrum meeting?
  + Went over CryptDB documentation and explanation by Popa
* What is planned to be done until the next scrum meeting?
  + Keep reading CryptDB documentation
* What are the hurdles?
  + none

Steven Caceres:

* How many hours did I work since the last meeting?
  + 4.
* What was done since the last scrum meeting?
  + CryptDB was set up on the virtual machine.
* What is planned to be done until the next scrum meeting?
  + Try to install CryptDB on Ubuntu 16.04 LTS per PO request
* What are the hurdles?
  + Packages were not being found because Ubuntu 13.04 is no longer supported.

Attendees: Joannier Pinales, Steven Caceres

Date: 01/22/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 3.
* What was done since the last scrum meeting?
  + Found an updated version of CryptDB that can run on Ubuntu 16.04, and a docker file with everything already installed.
* What is planned to be done until the next scrum meeting?
  + Synthesize data to populate our database with.
* What are the hurdles?
  + None

Steven Caceres:

* How many hours did I work since the last meeting?
  + 6.
* What was done since the last scrum meeting?
  + CryptDB was not able to install on Ubuntu 16.04 due to it relying on older versions of MySQL and Bison. Was able to get the MySQL component working by switching CLIENT\_SECURE\_CONNECTION to CLIENT\_RESERVED2 in the CryptDB code, but the compile fails after 85% due to macros being changed in Bison3 from Bison2.
* What is planned to be done until the next scrum meeting?
  + Finish installing CryptDB on Ubuntu 16.04 LTS.
* What are the hurdles?
  + Refactoring code to work with updated packages.

Attendees: Joannier Pinales, Steven Caceres

Date: 01/23/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 6.
* What was done since the last scrum meeting?
  + Wrote a program to generate data for the database, and generated two .csv files.
  + Created bash script to auto-run the database and clean up docker containers afterwards
* What is planned to be done until the next scrum meeting?
  + Populate the database with the generated data in the .csv files.
* What are the hurdles?
  + Finding a way to import the data through CryptDB into our database.

Steven Caceres:

* How many hours did I work since the last meeting?
  + 3.
* What was done since the last scrum meeting?
  + Using the provided links by Joannier, was able to install a version of CryptDB onto Ubuntu 16.04.
* What is planned to be done until the next scrum meeting?
  + Populate the database through CryptDB proxy, and get accustomed to working with the program.
* What are the hurdles?
  + Getting familiar with the limitations of CryptDB’s functionality.

Attendees: Joannier Pinales, Steven Caceres

Date: 01/24/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 2
* What was done since the last scrum meeting?
  + Working on importing data
* What is planned to be done until the next scrum meeting?
  + Import data into the database
* What are the hurdles?
  + Cryptdb import from csv is tricky

Steven Caceres:

* How many hours did I work since the last meeting?
  + 4.
* What was done since the last scrum meeting?
  + Imported the .csv file into a MySQL database and exported the table into a .sql file. Was able to import some data into CryptDB.
* What is planned to be done until the next scrum meeting?
  + Successfully import all data into the database through CryptDB.
* What are the hurdles?
  + CryptDB is picky about what queries it can run, and the size of the queries seems to depend from machine to machine.

Attendees: Joannier Pinales, Steven Caceres

Date: 01/25/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 5
* What was done since the last scrum meeting?
  + Updating dockerfile to import data volumes
* What is planned to be done until the next scrum meeting?
  + Create python script to import data into the database
* What are the hurdles?
  + Cryptdb does not support csv import directly.

Steven Caceres:

* How many hours did I work since the last meeting?
  + 3.
* What was done since the last scrum meeting?
  + Created the .sql file and edited it to break the queries into smaller queries. Imported all data (500001 rows) into the database through CryptDB.
* What is planned to be done until the next scrum meeting?
  + Analyze how CryptDB is storing the data.
* What are the hurdles?
  + CryptDB, depending on the machine, can only successfully execute an import query of a certain size without throwing an error.

Attendees: Joannier Pinales, Steven Caceres

Date: 01/26/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 6 hours
* What was done since the last scrum meeting?
  + Python script to insert data
* What is planned to be done until the next scrum meeting?
  + Finish fixing all docker bugs
* What are the hurdles?
  + Python version getting mixed up with dependencies

Steven Caceres:

* How many hours did I work since the last meeting?
  + 4.
* What was done since the last scrum meeting?
  + Noted some things I noticed that CryptDB does to the database
* What is planned to be done until the next scrum meeting?
  + Continue analyzing the data in the database
* What are the hurdles?
  + None

Attendees: Joannier Pinales, Steven Caceres

Date: 01/29/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 4
* What was done since the last scrum meeting?
  + Fixed the python script to not time out
* What is planned to be done until the next scrum meeting?
  + Go over the guidelines to from cryptdb to import data properly
* What are the hurdles?
  + None

Steven Caceres:

* How many hours did I work since the last meeting?
  + 4.
* What was done since the last scrum meeting?
  + Looked at documentation and differences from the original version of CryptDB. Noting patterns in the data tables.
* What is planned to be done until the next scrum meeting?
  + Continue analyzing the encrypted data and look for patterns that could be exploited.
* What are the hurdles?
  + None.

Attendees: Joannier Pinales, Steven Caceres

Date: 01/30/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 6
* What was done since the last scrum meeting?
  + Fixed docker dependency errors, created bash script run setup cryptdb
* What is planned to be done until the next scrum meeting?
  + Work on the insert data python script
* What are the hurdles?
  + Cryptdb requires python 2.7 but the script is in python 3

Steven Caceres:

* How many hours did I work since the last meeting?
  + 3.
* What was done since the last scrum meeting?
  + Exported the data from the table into a txt file to look for patterns.
* What is planned to be done until the next scrum meeting?
  + Write a simple program to calculate the number of times certain strings occur in each column.
* What are the hurdles?
  + Some of the characters are tricky, and may not be recognized.

Attendees: Joannier Pinales, Steven Caceres

Date: 01/31/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 4
* What was done since the last scrum meeting?
  + Working on python script to insert data
* What is planned to be done until the next scrum meeting?
  + Read documentation and work on inserting data properly
* What are the hurdles?
  + There’s not a clear documentation of cryptdb

Steven Caceres:

* How many hours did I work since the last meeting?
  + 5.
* What was done since the last scrum meeting?
  + Wrote a python program to analyze strings from a txt file, and the number of occurrences of that string.
* What is planned to be done until the next scrum meeting?
  + Improve upon the program.
* What are the hurdles?
  + A lot of the data seems to be non-ascii characters.

Attendees: Joannier Pinales, Steven Caceres

Date: 02/01/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 5
* What was done since the last scrum meeting?
  + Going over the research papers to create the proper database structure
* What is planned to be done until the next scrum meeting?
  + Keep working on database structure
* What are the hurdles?
  + Not a clear cryptdb documentation

Steven Caceres:

* How many hours did I work since the last meeting?
  + 6.
* What was done since the last scrum meeting?
  + Improved upon program to be able to navigate the database, and pull data directly from the database.
* What is planned to be done until the next scrum meeting?
  + Look over documentation
* What are the hurdles?
  + Encrypted data includes some troublesome characters such as ctrl-e

Attendees: Joannier Pinales, Steven Caceres

Date: 02/02/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 2
* What was done since the last scrum meeting?
  + Read papers research about cryptdb security guidelines
* What is planned to be done until the next scrum meeting?
  + Work on inserting the data properly
* What are the hurdles?
  + Lack of documentation of cryptdb

Steven Caceres:

* How many hours did I work since the last meeting?
  + 2.
* What was done since the last scrum meeting?
  + Read some papers regarding attacks on CryptDB.
* What is planned to be done until the next scrum meeting?
  + Look at the main differences between the original CryptDB and the version we are currently using.
* What are the hurdles?
  + Little documentation regarding the changes made.

Attendees: Joannier Pinales, Steven Caceres

Date: 02/05/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 3
* What was done since the last scrum meeting?
  + Properly setup the database according to popas guideline
* What is planned to be done until the next scrum meeting?
  + Go through diff and analyse differences
* What are the hurdles?
  + Little documentation

Steven Caceres:

* How many hours did I work since the last meeting?
  + 4.
* What was done since the last scrum meeting?
  + Ran a diff on the two versions of CryptDB we are working with.
* What is planned to be done until the next scrum meeting?
  + Analyze the major differences between the two.
* What are the hurdles?
  + Little documentation regarding the changes made.

Attendees: Joannier Pinales, Steven Caceres

Date: 02/06/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 4
* What was done since the last scrum meeting?
  + Went over the diff to see the differences and read most of Cryptdb documents and forked two cryptdb repos to merge them
* What is planned to be done until the next scrum meeting?
  + Implement onion layer
* What are the hurdles?
  + The cryptdb in docker does not have the onion web installation

Steven Caceres:

* How many hours did I work since the last meeting?
  + 3.
* What was done since the last scrum meeting?
  + Still trying to analyze the major differences between the two versions of CryptDB.
* What is planned to be done until the next scrum meeting?
  + Go through some documentation and papers regarding CryptDB.
* What are the hurdles?
  + Little documentation regarding the changes made.

Attendees: Joannier Pinales, Steven Caceres

Date: 02/07/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 3
* What was done since the last scrum meeting?
  + Went over the original cryptdb repo and merge together
* What is planned to be done until the next scrum meeting?
  + Merge some stuff from the old repo
* What are the hurdles?
  + Lack of documentation on Cryptdb

Steven Caceres:

* How many hours did I work since the last meeting?
  + 5.
* What was done since the last scrum meeting?
  + Read through proposed guidelines of how to properly secure the data in CryptDB, and why Naveed’s attack on CryptDB would not have been successful.
* What is planned to be done until the next scrum meeting?
  + Read up on the different encryptions and how to go about decrypting or extracting data from them.
* What are the hurdles?
  + Guidelines were made for the original version of CryptDB.

Attendees: Joannier Pinales, Steven Caceres

Date: 02/08/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 3
* What was done since the last scrum meeting?
  + Still merging practical cryptdb with the original cryptdb
* What is planned to be done until the next scrum meeting?
  + Install onion layer web view
* What are the hurdles?
  + Little docs

Steven Caceres:

* How many hours did I work since the last meeting?
  + 3.
* What was done since the last scrum meeting?
  + Researched the different types of encryption being used in CryptDB, and learning what type of information they would leak.
* What is planned to be done until the next scrum meeting?
  + Think of ways to extract data from these types of encryptions, if at all.
* What are the hurdles?
  + Some forms of encryption, called strong encryption, leak little to no information.

Attendees: Joannier Pinales, Steven Caceres

Date: 02/09/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 2
* What was done since the last scrum meeting?
  + Finished merging everything together
* What is planned to be done until the next scrum meeting?
  + Install onion web view
* What are the hurdles?
  + None.

Steven Caceres:

* How many hours did I work since the last meeting?
  + 2.
* What was done since the last scrum meeting?
  + Looked into some basic frequency attacks, which would be effective against deterministic encryption, assuming that the columns have duplicate rows.
* What is planned to be done until the next scrum meeting?
  + Look further into different classes of attacks.
* What are the hurdles?
  + None.

Attendees: Joannier Pinales, Steven Caceres

Date: 02/12/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 2
* What was done since the last scrum meeting?
  + Started installing onion web view
* What is planned to be done until the next scrum meeting?
  + Install onion web view
* What are the hurdles?
  + Dependencies not specified

Steven Caceres:

* How many hours did I work since the last meeting?
  + 5.
* What was done since the last scrum meeting?
  + Looked into how to peel off the different layers of encryption used in CryptDB.
* What is planned to be done until the next scrum meeting?
  + Analyze how queries affect the layers of encryption in the database.
* What are the hurdles?
  + None.

Attendees: Joannier Pinales, Steven Caceres

Date: 02/13/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 2.5
* What was done since the last scrum meeting?
  + installing onion web view
* What is planned to be done until the next scrum meeting?
  + Install onion web view
* What are the hurdles?
  + Onion web view installed on ubuntu 12, now we have to migrate it to 16

Steven Caceres:

* How many hours did I work since the last meeting?
  + 4.
* What was done since the last scrum meeting?
  + Running different queries through the cryptDB client to see which layers are being removed.
* What is planned to be done until the next scrum meeting?
  + Perform a basic frequency attack on the deterministic layer of encryption of the database.
* What are the hurdles?
  + Removing layers of encryption until the deterministic layer is left.

Attendees: Joannier Pinales, Steven Caceres

Date: 02/14/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 2
* What was done since the last scrum meeting?
  + Perform attack on frequency analysis
* What is planned to be done until the next scrum meeting?
  + Review diff, review security annotations
* What are the hurdles?
  + none

Steven Caceres:

* How many hours did I work since the last meeting?
  + 4.
* What was done since the last scrum meeting?
  + Ran a basic frequency attack on the database.
* What is planned to be done until the next scrum meeting?
  + Continue running frequency attacks to see what information we can get.
* What are the hurdles?
  + Following guidelines to insert data as sensitive to prevent decryption.

Attendees: Joannier Pinales, Steven Caceres

Date: 02/15/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 3
* What was done since the last scrum meeting?
  + Review frequency attack, make sure database was set up correctly
* What is planned to be done until the next scrum meeting?
  + Keep reviewing frequency attack
* What are the hurdles?
  + No cryptdb db confirmation for annotations

Steven Caceres:

* How many hours did I work since the last meeting?
  + 5.
* What was done since the last scrum meeting?
  + Successfully executed a basic frequency analysis attack on non-unique data that were peeled down to deterministic layer of encryption.
* What is planned to be done until the next scrum meeting?
  + Continue running frequency attacks to see if we can successfully match distributions of data from the database using an auxiliary data set.
* What are the hurdles?
  + Following guidelines to insert data as sensitive to prevent decryption.

Attendees: Joannier Pinales, Steven Caceres

Date: 02/16/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 4
* What was done since the last scrum meeting?
  + Reviewed diff and frequency attack
* What is planned to be done until the next scrum meeting?
  + Re-install the orignal database on ubuntu 14.04 and re-run the attack
* What are the hurdles?
  + Diff is hard to read, ~10k lines difference

Steven Caceres:

* How many hours did I work since the last meeting?
  + 6.
* What was done since the last scrum meeting?
  + Were able to match distribution numbers of the encrypted data set with our distribution numbers.
* What is planned to be done until the next scrum meeting?
  + Comb through the diff and see if the annotations for secure data inserts are still supported for the databases.
* What are the hurdles?
  + Changelogs and documentation of current Variation are in Chinese.

Attendees: Joannier Pinales, Steven Caceres

Date: 02/19/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 4
* What was done since the last scrum meeting?
  + Swapping practical Cryptdb for original cryptdb, since annotations are not being used on the new one.
* What is planned to be done until the next scrum meeting?
  + Ran the attacks
* What are the hurdles?
  + Original cryptdb is ran in ubuntu 12

Steven Caceres:

* How many hours did I work since the last meeting?
  + 6.
* What was done since the last scrum meeting?
  + Found that annotations for the databases attributes are not supported for this version of Cryptdb.
* What is planned to be done until the next scrum meeting?
  + Install original MIT CryptDB on a VM running Ubuntu16, and if not, Ubuntu14.
* What are the hurdles?
  + Documentation of how CryptDB was altered to work on Ubuntu16.

Attendees: Joannier Pinales, Steven Caceres

Date: 02/20/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 5
* What was done since the last scrum meeting?
  + Installed Cryptdb on ubuntu 14.04
* What is planned to be done until the next scrum meeting?
  + Work on the onion web view
* What are the hurdles?
  + Lack o the documentation for the onion web view

Steven Caceres:

* How many hours did I work since the last meeting?
  + 6.
* What was done since the last scrum meeting?
  + Have CryptDB running on Ubuntu16, replaced the Bison version with 2.7, and MySQL Proxy with v0.8.5, but am having trouble connecting to the server through the proxy with the client.
* What is planned to be done until the next scrum meeting?
  + Look into why the wrapper.lua file is giving problems, and install CryptDB on Ubuntu14 if the problem cannot be resolved.
* What are the hurdles?
  + No previous experience with .lua files or wrappers.

Attendees: Joannier Pinales, Steven Caceres

Date: 02/21/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 4
* What was done since the last scrum meeting?
  + Working on onion web view PHP not running issue
* What is planned to be done until the next scrum meeting?
  + Fix onion web view
* What are the hurdles?
  + Lack of the documentation for the web view

Steven Caceres:

* How many hours did I work since the last meeting?
  + 4.
* What was done since the last scrum meeting?
  + Unable to resolve wrapper problem, moved CryptDB installation to Ubuntu14 VM to continue with testing.
* What is planned to be done until the next scrum meeting?
  + Attempt to install web view for the CryptDB, which will allow for viewing the attributes of tables and selecting their encryption type.
* What are the hurdles?
  + Scarce resources and documentation on the web view.

Attendees: Joannier Pinales, Steven Caceres

Date: 02/22/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 4
* What was done since the last scrum meeting?
  + Still debugging Onion Web View
* What is planned to be done until the next scrum meeting?
  + Re-run the attack
* What are the hurdles?
  + Lack of documentation for onion web view and cryptdb in general

Steven Caceres:

* How many hours did I work since the last meeting?
  + 4.
* What was done since the last scrum meeting?
  + Install script that comes with web view did not work. Went throguh install script and manually did what the script was supposed to do. Moved the php files to the directoryroot of apache2 server.
* What is planned to be done until the next scrum meeting?
  + Run the web view and see if it is correctly working.
* What are the hurdles?
  + Scarce resources and documentation on the web view.

Attendees: Joannier Pinales, Steven Caceres

Date: 02/23/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 5
* What was done since the last scrum meeting?
  + Finished debugging onion web view
* What is planned to be done until the next scrum meeting?
  + Run the annotations script and re-do the attack
* What are the hurdles?
  + None

Steven Caceres:

* How many hours did I work since the last meeting?
  + 5.
* What was done since the last scrum meeting?
  + Able to get the web view to work with the server and see the encrypted attributes and data. Not able to see unencrypted data due to CryptDB not supporting the SHOW COLUMNS, or DESCRIBE <table> queries.
* What is planned to be done until the next scrum meeting?
  + Attempt to fix web view.
* What are the hurdles?
  + Scarce resources and documentation on the web view.

Attendees: Joannier Pinales, Steven Caceres

Date: 02/26/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 4
* What was done since the last scrum meeting?
  + Read up on annotations
* What is planned to be done until the next scrum meeting?
  + Try to insert using annotations
* What are the hurdles?
  + Annotations not working with the examples, lack of docs

Steven Caceres:

* How many hours did I work since the last meeting?
  + .
* What was done since the last scrum meeting?
  + .
* What is planned to be done until the next scrum meeting?
  + .
* What are the hurdles?
  + .

Attendees: Joannier Pinales, Steven Caceres

Date: 02/27/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 5
* What was done since the last scrum meeting?
  + Found a newer version of cryptdb that might have the annotations
* What is planned to be done until the next scrum meeting?
  + Finish installing the newer version and test the annotations
* What are the hurdles?
  + Lack of docs on the annotations

Steven Caceres:

* How many hours did I work since the last meeting?
  + 6.
* What was done since the last scrum meeting?
  + Installed cryptdb on multiple versions of Ubuntu to see which one it would be able to run on. Only able to get it running on 13, and 14, but not 16.
* What is planned to be done until the next scrum meeting?
  + After the data has been put into the database, re-run the frequency analysis attack to see if it is still successful.
* What are the hurdles?
  + Attack on data without annotations first, then on data with annotations implemented.

Attendees: Joannier Pinales, Steven Caceres

Date: 02/28/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 5
* What was done since the last scrum meeting?
  + Installed the newer cryptdb
* What is planned to be done until the next scrum meeting?
  + Implement annotations
* What are the hurdles?
  + Lack of docs on the annotations

Steven Caceres:

* How many hours did I work since the last meeting?
  + 4.
* What was done since the last scrum meeting?
  + Ran the frequency analysis on columns with deterministic encryption layer, and was successful in getting the distribution of the data.
* What is planned to be done until the next scrum meeting?
  + Insert the data into the database with the annotations implemented, and run the frequency attack on that data.
* What are the hurdles?
  + Implementing the annotations seems to be a difficult task due to little documentation.

Attendees: Joannier Pinales, Steven Caceres

Date: 03/1/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 5
* What was done since the last scrum meeting?
  + Trying to get annotations to work
* What is planned to be done until the next scrum meeting?
  + Keep working on annotations
* What are the hurdles?
  + Lack of docs on the annotations

Steven Caceres:

* How many hours did I work since the last meeting?
  + 4.
* What was done since the last scrum meeting?
  + Searched through a lot of the code base for some information on how to implement annotations.
* What is planned to be done until the next scrum meeting?
  + Continue to research implementing the annotations.
* What are the hurdles?
  + Little documentation regarding annotations.

Attendees: Joannier Pinales, Steven Caceres

Date: 03/02/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 4
* What was done since the last scrum meeting?
  + Trying to get annotations to work, debug any code that is not working for annotations on the core
* What is planned to be done until the next scrum meeting?
  + Keep working on annotations
* What are the hurdles?
  + Lack of docs on the annotations

Steven Caceres:

* How many hours did I work since the last meeting?
  + 3.
* What was done since the last scrum meeting?
  + Looked through the CryptDBwiki on github for annotation documentation.
* What is planned to be done until the next scrum meeting?
  + Play around with annotations, see what can work or not.
* What are the hurdles?
  + Lack of documentation.

Attendees: Joannier Pinales, Steven Caceres

Date: 03/05/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 4
* What was done since the last scrum meeting?
  + Debugging annotations
* What is planned to be done until the next scrum meeting?
  + Keep debugging the code to get annotations working
* What are the hurdles?
  + N/A

Steven Caceres:

* How many hours did I work since the last meeting?
  + 3.
* What was done since the last scrum meeting?
  + Tried running the queries in the test.cc file provided in the repo, but the annotations do not work.
* What is planned to be done until the next scrum meeting?
  + Attempt to get annotation to work.
* What are the hurdles?
  + Lack of documentation.

Attendees: Joannier Pinales, Steven Caceres

Date: 03/06/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 4
* What was done since the last scrum meeting?
  + Debugged annotations, the database now runs the annotations
* What is planned to be done until the next scrum meeting?
  + Re-run the attack with the annotations
* What are the hurdles?
  + We do not know if the annotations are working properly

Steven Caceres:

* How many hours did I work since the last meeting?
  + 4.
* What was done since the last scrum meeting?
  + Installed web view on the newer cryptdb.
* What is planned to be done until the next scrum meeting?
  + See what works, and if we are able to manipulate the database through it.
* What are the hurdles?
  + Web view install script did not work properly

Attendees: Joannier Pinales, Steven Caceres

Date: 03/07/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 4
* What was done since the last scrum meeting?
  + Re-ran the frequency attack, it still successful
* What is planned to be done until the next scrum meeting?
  + Make sure annotations are working properly
* What are the hurdles?
  + N/A

Steven Caceres:

* How many hours did I work since the last meeting?
  + 6.
* What was done since the last scrum meeting?
  + Looked through the web view to see what worked.
* What is planned to be done until the next scrum meeting?
  + Look into documentation and code base to see why web view is not working as specified.
* What are the hurdles?
  + Little mention about the web view. It might have been a concept instead of a fully fleshed out feature.

Attendees: Joannier Pinales, Steven Caceres

Date: 03/08/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 3
* What was done since the last scrum meeting?
  + Going through cryptdb code base to see if annotations work properly
* What is planned to be done until the next scrum meeting?
  + Look into different reasons why the annotations do not protect the database properly
* What are the hurdles?
  + N/A

Steven Caceres:

* How many hours did I work since the last meeting?
  + 4.
* What was done since the last scrum meeting?
  + Went through documentation and code base. Code shows that nothing is executed when selects are made, and connecting to the proxy accomplishes nothing because describe <table> is not supported.
* What is planned to be done until the next scrum meeting?
  + Focus on developing ideas to counter frequency analysis attacks
* What are the hurdles?
  + N/A

Attendees: Joannier Pinales, Steven Caceres

Date: 03/09/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 4
* What was done since the last scrum meeting?
  + Looked up different reasons as to why the annotations dont work how they should.
* What is planned to be done until the next scrum meeting?
  + Design the fake insertion data counter measurement.
* What are the hurdles?
  + Lack of knowledge of the cryptdb codebase

Steven Caceres:

* How many hours did I work since the last meeting?
  + 3.
* What was done since the last scrum meeting?
  + Discussed ways to counter frequency analysis attacks.
* What is planned to be done until the next scrum meeting?
  + Look into possibly implementing our own annotations.
* What are the hurdles?
  + Limited documentation for the amount of code that cryptdb utilizes.

Attendees: Joannier Pinales, Steven Caceres

Date: 03/19/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + N/A
* What was done since the last scrum meeting?
  + N/A
* What is planned to be done until the next scrum meeting?
  + Plan the user stories for counter measures
* What are the hurdles?
  + N/A

Steven Caceres:

* How many hours did I work since the last meeting?
  + 6.
* What was done since the last scrum meeting?
  + Continue to look into implementing annotations to mark columns for frequency tracking/smoothing.
* What is planned to be done until the next scrum meeting?
  + Test code and track down where annotations can be implemented.
* What are the hurdles?
  + The little documentation that references annotations are inaccurate.

Attendees: Joannier Pinales, Steven Caceres

Date: 03/20/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 4
* What was done since the last scrum meeting?
  + Researched the different counter measures that can be implemented
* What is planned to be done until the next scrum meeting?
  + Keep researching counter measures
* What are the hurdles?
  + N/A

Steven Caceres:

* How many hours did I work since the last meeting?
  + 5.
* What was done since the last scrum meeting?
  + Annotation implementation would require more work than we have time for, we need to look at other directions of countering frequency analysis.
* What is planned to be done until the next scrum meeting?
  + Plan out a schematic of how to go about doing the counter measure.
* What are the hurdles?
  + Running cryptDB through a debugger doesn’t process all the code.

Attendees: Joannier Pinales, Steven Caceres

Date: 03/21/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 3
* What was done since the last scrum meeting?
  + Researched the different counter measures that can be implemented
* What is planned to be done until the next scrum meeting?
  + Keep researching counter measures
* What are the hurdles?
  + N/A

Steven Caceres:

* How many hours did I work since the last meeting?
  + 4.
* What was done since the last scrum meeting?
  + Thought out a few ways to counter frequency analysis, most promising way is smoothing frequencies.
* What is planned to be done until the next scrum meeting?
  + Design a way to smooth the frequencies.
* What are the hurdles?
  + Code base is big.

Attendees: Joannier Pinales, Steven Caceres

Date: 03/22/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 2
* What was done since the last scrum meeting?
  + We decided to work on fake data insertion counter measure
* What is planned to be done until the next scrum meeting?
  + Research how can the fake data insertion be implemented in cryptdb
* What are the hurdles?
  + N/A

Steven Caceres:

* How many hours did I work since the last meeting?
  + 3.
* What was done since the last scrum meeting?
  + Came up with some ways to implement fake data insertion.
* What is planned to be done until the next scrum meeting?
  + Need to finalize the schema or design for fake data insertion.
* What are the hurdles?
  + Finding where to implement this in the code base.

Attendees: Joannier Pinales, Steven Caceres

Date: 03/23/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 3
* What was done since the last scrum meeting?
  + Created the diagrams of how the data insertion implementation is going to work
* What is planned to be done until the next scrum meeting?
  + Go through cryptdb code base and understand it
* What are the hurdles?
  + Lack of documentation for the cryptdb source code

Steven Caceres:

* How many hours did I work since the last meeting?
  + 3.
* What was done since the last scrum meeting?
  + Finalized the schema for fake data insertion.
* What is planned to be done until the next scrum meeting?
  + Start looking at the code base to see where we can implement the changes.
* What are the hurdles?
  + Lots of code to comb through.

Attendees: Joannier Pinales, Steven Caceres

Date: 03/26/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 3
* What was done since the last scrum meeting?
  + Started looking into cryptdb C++ source code
* What is planned to be done until the next scrum meeting?
  + Keep going through cryptdb source code
* What are the hurdles?
  + Lack of documentation for the cryptdb source code

Steven Caceres:

* How many hours did I work since the last meeting?
  + 8.
* What was done since the last scrum meeting?
  + Looked at the source code of cryptdb, see where we will be able to implement our code with least modification possible.
* What is planned to be done until the next scrum meeting?
  + Continue looking through the code base to see where to implement countermeasures.
* What are the hurdles?
  + Lots and lots of code.

Attendees: Joannier Pinales, Steven Caceres

Date: 03/27/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 3
* What was done since the last scrum meeting?
  + Kept looking into cryptdb C++ source code
* What is planned to be done until the next scrum meeting?
  + Keep going through cryptdb source code
* What are the hurdles?
  + Lack of documentation for the cryptdb source code

Steven Caceres:

* How many hours did I work since the last meeting?
  + 5.
* What was done since the last scrum meeting?
  + Try to intercept queries from the client before it gets to the proxy.
* What is planned to be done until the next scrum meeting?
  + Continue to see where we can intercept queries to inject our own.
* What are the hurdles?
  + Lots, and lots of code.

Attendees: Joannier Pinales, Steven Caceres

Date: 03/28/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 3
* What was done since the last scrum meeting?
  + Attempted to run debugger to see which lines of code are being ran
* What is planned to be done until the next scrum meeting?
  + Keep trying to run debugger
* What are the hurdles?
  + The cryptdb code is called from a wrapper that is called from another script so the debugger cannot access the code

Steven Caceres:

* How many hours did I work since the last meeting?
  + 4.
* What was done since the last scrum meeting?
  + Intercepting queries from the client before hitting the proxy would just require another proxy.
* What is planned to be done until the next scrum meeting?
  + See if we can intercept the queries at the proxy instead of at the client.
* What are the hurdles?
  + N/A

Attendees: Joannier Pinales, Steven Caceres

Date: 03/29/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 4
* What was done since the last scrum meeting?
  + Kept attempting to run debugger to see which lines of code are being ran
* What is planned to be done until the next scrum meeting?
  + Keep trying to run debugger
* What are the hurdles?
  + The cryptdb code is called from a wrapper that is called from another script so the debugger cannot access the code

Steven Caceres:

* How many hours did I work since the last meeting?
  + 3.
* What was done since the last scrum meeting?
  + Looked through the proxy with a debugger, but it does not show everything that runs.
* What is planned to be done until the next scrum meeting?
  + Continue looking into the proxy.
* What are the hurdles?
  + Unfamiliar with C++

Attendees: Joannier Pinales, Steven Caceres

Date: 03/30/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 4
* What was done since the last scrum meeting?
  + Kept attempting to run debugger with no success
* What is planned to be done until the next scrum meeting?
  + Keep trying to run debugger or look for other ways to implement countermeasures
* What are the hurdles?
  + The cryptdb code is called from a wrapper that is called from another script so the debugger cannot access the code

Steven Caceres:

* How many hours did I work since the last meeting?
  + 3.
* What was done since the last scrum meeting?
  + Kept playing around with the proxy source code.
* What is planned to be done until the next scrum meeting?
  + Look into another way of intercepting the queries.
* What are the hurdles?
  + A lot of different source files making calls to each other to track.

Attendees: Joannier Pinales, Steven Caceres

Date: 04/02/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 3
* What was done since the last scrum meeting?
  + Found a different way to implement the counter measure through the wrapper
* What is planned to be done until the next scrum meeting?
  + Implement the parser and freq analyser in the lua wrapper
* What are the hurdles?
  + N/A

Steven Caceres:

* How many hours did I work since the last meeting?
  + 4.
* What was done since the last scrum meeting?
  + Proxy calls the wrapper, and the wrapper reads and sends the queries. Tested some code in the wrapper.
* What is planned to be done until the next scrum meeting?
  + Continue to test in the wrapper and see if we can implement the counter measures there.
* What are the hurdles?
  + Unfamiliar with LUA language.

Attendees: Joannier Pinales, Steven Caceres

Date: 04/03/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 7
* What was done since the last scrum meeting?
  + Implemented query parser for insert queries and fake data insertion
* What is planned to be done until the next scrum meeting?
  + Make the insertion create equal number of values in the whole column, keep track of different columns not just one, save the frequencies in a file
* What are the hurdles?
  + N/A

Steven Caceres:

* How many hours did I work since the last meeting?
  + 5.
* What was done since the last scrum meeting?
  + Implemented a basic query parser in the wrapper to split the query between spaces.
* What is planned to be done until the next scrum meeting?
  + Try to locate certain key commands in the query.
* What are the hurdles?
  + We still need to keep track of the calls being made to different files.

Attendees: Joannier Pinales, Steven Caceres

Date: 04/04/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 4
* What was done since the last scrum meeting?
  + Making insertion equal for all values in the same column
* What is planned to be done until the next scrum meeting?
  + Keep track of different columns not just one, save the frequencies in a file
* What are the hurdles?
  + N/A

Steven Caceres:

* How many hours did I work since the last meeting?
  + 4.
* What was done since the last scrum meeting?
  + Able to locate the create and table commands from the query (case-insensitive).
* What is planned to be done until the next scrum meeting?
  + Think out how to rewrite query before sending it to be executed.
* What are the hurdles?
  + Unsure of what files are making calls and where/how the queries are being sent out through.

Attendees: Joannier Pinales, Steven Caceres

Date: 04/05/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 3
* What was done since the last scrum meeting?
  + Extracted frequencies for all the values in the column
* What is planned to be done until the next scrum meeting?
  + Rewrite the query with fake data
* What are the hurdles?
  + n/a

Steven Caceres:

* How many hours did I work since the last meeting?
  + 3.
* What was done since the last scrum meeting?
  + Still looking into what cases, and how to rewrite the query.
* What is planned to be done until the next scrum meeting?
  + Come up with a way to rewrite the column.
* What are the hurdles?
  + Unsure of what files are making calls and where/how the queries are being sent out through.

Attendees: Joannier Pinales, Steven Caceres

Date: 04/06/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 3
* What was done since the last scrum meeting?
  + Rewrote the query with fake data
* What is planned to be done until the next scrum meeting?
  + Debug the frequency calculator, since it’s not giving a flat histogram
* What are the hurdles?
  + N/A

Steven Caceres:

* How many hours did I work since the last meeting?
  + 4.
* What was done since the last scrum meeting?
  + Thought about how to alter the query to include an extra column.
* What is planned to be done until the next scrum meeting?
  + See if i can actually alter the query to add the extra column.
* What are the hurdles?
  + Unsure of what files are making calls and where/how the queries are being sent out through.

Attendees: Joannier Pinales, Steven Caceres

Date: 04/09/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 3
* What was done since the last scrum meeting?
  + Debugged the frequencies calculator
* What is planned to be done until the next scrum meeting?
  + Save and load the frequencies to a file
* What are the hurdles?
  + N/A

Steven Caceres:

* How many hours did I work since the last meeting?
  + 8.
* What was done since the last scrum meeting?
  + Able to detect create table queries and attach an extra column to the queries before they are executed.
* What is planned to be done until the next scrum meeting?
  + Look into how to filter through the results to only include real data.
* What are the hurdles?
  + Resultset is returned as encrypted.

Attendees: Joannier Pinales, Steven Caceres

Date: 04/10/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 4
* What was done since the last scrum meeting?
  + Saved and loaded frequencies from a file
* What is planned to be done until the next scrum meeting?
  + Test frequency attack against the modified insertion
* What are the hurdles?
  + N/A

Steven Caceres:

* How many hours did I work since the last meeting?
  + 6.
* What was done since the last scrum meeting?
  + Able to filter resultset by modifying the query, but it brings the encryption layer down.
* What is planned to be done until the next scrum meeting?
  + See if we can filter without having lower the encryption layer.
* What are the hurdles?
  + N/A

Attendees: Joannier Pinales, Steven Caceres

Date: 04/11/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 3
* What was done since the last scrum meeting?
  + Tested the frequency attack, it didn’t work
* What is planned to be done until the next scrum meeting?
  + Debug the code, there’s still not a perfect histogram
* What are the hurdles?
  + N/A

Steven Caceres:

* How many hours did I work since the last meeting?
  + 7.
* What was done since the last scrum meeting?
  + Able to filter without lowering encryption layer on fake attribute. Filtering is now done within the wrapper instead of through a query.
* What is planned to be done until the next scrum meeting?
  + Make a basic web app for CryptDB
* What are the hurdles?
  + N/A

Attendees: Joannier Pinales, Steven Caceres

Date: 04/12/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 4
* What was done since the last scrum meeting?
  + Debugging code
* What is planned to be done until the next scrum meeting?
  + Look into inserting the other values that are not currently being inserted
* What are the hurdles?
  + N/A

Steven Caceres:

* How many hours did I work since the last meeting?
  + 4.
* What was done since the last scrum meeting?
  + Web app created and can connect to CryptDB
* What is planned to be done until the next scrum meeting?
  + Add features to the web app
* What are the hurdles?
  + N/A

Attendees: Joannier Pinales, Steven Caceres

Date: 04/13/2018

Start time: 9:00

End time: 9:15

Joannier Pinales:

* How many hours did I work since the last meeting?
  + 4
* What was done since the last scrum meeting?
  + Finished fixing the algorithm to adjust all values correctly. Also tested the frequency analysis and it gives a perfect histogram
* What is planned to be done until the next scrum meeting?
  + N/A
* What are the hurdles?
  + N/A

Steven Caceres:

* How many hours did I work since the last meeting?
  + 4.
* What was done since the last scrum meeting?
  + Web app can now view databases, tables, and value. Create and drop functionality is available, and we are able to view the layers of encryption on all of the encrypted columns.
* What is planned to be done until the next scrum meeting?
  + Fix some of the UI elements.
* What are the hurdles?
  + Nothing