Sprint Retrospective Document

Date: 03/04/2019
Project acronym: PENIOT
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Sprint 7 summary

Item ID (from the previous retrospective doc)	Workpackage ID (from the Kick-off doc)	Status	Group's comments
1	7	Complete	We have added packet dumping option for the user to save captured target protocol packets.
2	7	Complete	We try to find what causes errors when we try our tool via the terminal rather than IDEs. We currently solved most of the problems related to source paths of imported files.
3	8	Complete	We prepared a script which includes all modules used in this project. The user can run this script and install all necessary dependencies to run project successfully.
4	4	In Progress	Although we obtained devices from our supervisor's friend, he gave us the devices after the planned date due to his personal issues. Therefore, we could not be able to utilize their usages for BLE protocol. We need some more time for this item.
5	4	In Progress	Since we cannot utilize devices, we could not be able to implement sniffer for BLE.
6	7	Complete	We created a package which is used to store all saved packages. In this

			package, we will have many files whose names are composed of the name of the protocol and the time at which the packets are captured. After sniffing is done, we simply put captured packets to this package.
7	7	Complete	We created a page where the user can see the files which consist of the captured packets. We display the protocol name, the time at which the packets are captured and a download button which enables user to export the packet files to any directory they want.
8	7	Complete	We also updated AMQP related classes. Again, we used the same structure (Protocol class to represent AMQP protocol, Attack class to represent its attacks etc.) to adapt AMQP to GUI. Now, the user can see AMQP as one of the available protocols and test their devices using any of the attacks of AMQP.
-	7	Was not on the initial plan	Initially, we used Kivy framework to create GUI. However, there were some difficulties to create inputs, list adapters etc. Therefore, we decided to use Tkinter framework. We recreate the existing pages using it and use it for the rest of the project.
-	3, 5, 6	Was not on the initial plan	We also added basic unit tests for our new structure for both test their compatibility with our GUI and check whether they still work properly or not.
-	7	Was not on the initial plan	We created Attack Reporting Page which the user can follow the steps of selected attack. In this page, we have a console view so that the user can see the logs. Currently, this page is not complete. We have to integrate the attacks' logs into this console view.

Sprint 8 plan

Item ID	Workpackage ID (from the Kick-off doc)	Description	Status
1	4	Learning how to configure and utilize the hardware that we will use to sniff BLE messages and conduct attacks on BLE devices.	Left over from Sprint 7
2	4	BLE sniffing mechanism	Left over from Sprint 7
3	7	Input validation via compulsory fields and type checking of inputs	New
4	7	Implementing backend side of importing user defined attacks/protocols	New
5	7	Implementing backend side of exporting necessary files to user, creating templates for user	New
6	7	GUI design for import/export pages	New
7	7	Integrate attacks' logs into Attack Reporting Page	New
8	7	Integrate sniff functionality into View Captured Packets page	New

Overall progress

	Sprint 1	Sprint 2	Sprint 3	Sprint 4	Sprint 5	Sprint 6	Sprint 7	Sprint 8	Sprint 9
MF1	0	15	15	15	0	90	100		

MF2	0	0	0	0	0	60	100		
MF3	0	0	100	100	100	100	100		
MF4	0	5	100	100	100	100	100		
MF5	0	0	0	0	100	100	100		
MF6	0	0	0	0	100	100	100		
MF7	0	0	0	10	10	10	10		
MF8	0	5	5	8	8	8	8		
MF9	0	10	10	10	20	30	45		
MF10	0	0	0	0	0	0	15		
MF11	0	0	0	0	0	12	12		