This readme file describes the structure of the input files to your visualization tool.

Your visualization tool will take these files:

1 - *app-\*.xml files* where \* is the package name for each app in the analyzed system. This means that you will receive file for each app in the studied Android system. To understand the structure of this file, please take a look at app-package.name.xml file

2 - *analysisResuls-N.xml file* which shows the analysis results for Intent Spoofing, Unauthorized Intent Receipt, and Privilege Escalation attacks. To understand the structure of this file, please take a look at analysisResults-0.xml

* Don't worry about the number (-N). This number is just to distinguish various Android systems, i.e., referred to as bundle in the paper.

3 - *domain-\*-N.csv files* are a set of comma separated files that show the generated LP architecture as a Multiple-Domain Matrix (MDM). Each file is a domain.

* Currently, the system generates two communication domains (Explicit Communication Domain and Implicit Communication Domain) and three permission domains (Permission Granted Domain, Permission Usage Domain, and Permission Enforcement Domain). In the future, the system may generate more than these domains so your tool should be flexible to support more domains
* Each line in the domain file contains information about a component in the studied Android system. Each line shows the component’s package name, component name, component index, a relationship value which is either “0” or “1”
* In the communication domains, the columns are components. In the permission domains, the columns are permissions
* Don't worry about the number (-N). This number is just to distinguish various Android systems, i.e., referred to as bundle in the paper.

To test your tool for visualizing the LP architecture for the Android system describe in the DELDroid paper, use:

* app-edu.uci.seal.messaging.xml
* app-edu.uci.seal.fungame.xml
* analysisResults-1.xml
* domain-explicit-communication-1.csv
* domain-implicit-communication-1.csv
* domain-permission-enforcement-1.csv
* domain-permission-granted-1.csv
* domain-permission-usage-1.csv

Note: another files related to a more complicated system will be provided later. Your tool should work on any system regardless to the number of apps in the studied Android system.

Please feel free to contact Mahmoud Hammad at hammadm@uci.edu for questions related to this project.

Thanks!