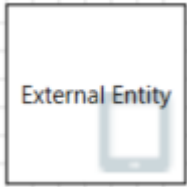




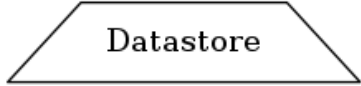
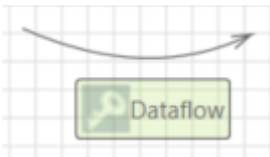
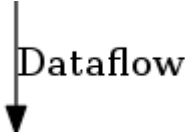
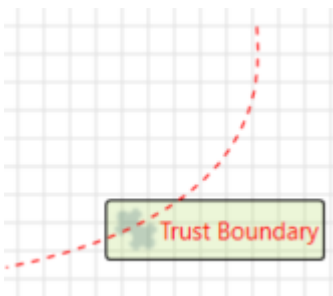
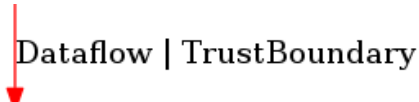


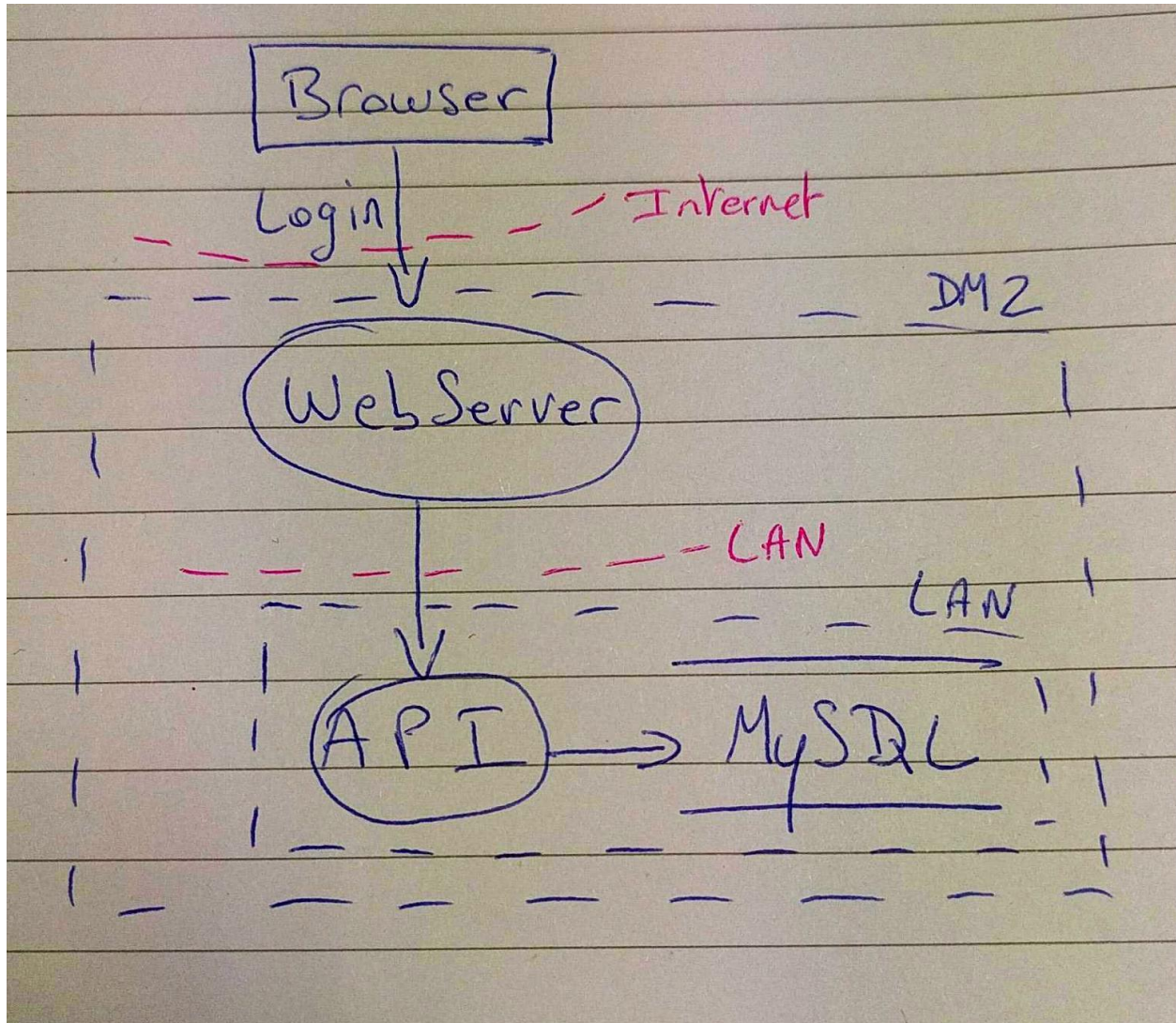
How to use Dot-TM

Dot-Tm is a tool for easily create threat modeling diagram. Additionally, it is able to store all STRIDE analysis performed on the dataflows.

Dataflow diagram basics

Official Symbol	Dot-TM representation	Description
		The external entity shape is used to represent any entity outside the application that interacts with the application via an entry point.
		The process shape represents a task that handles data within the application. The task may process the data or perform an action based on the data.
		The data store shape is used to represent locations where data is stored. Data stores do not modify the data, they only store data.
		The data flow shape represents data movement within the application. The direction of the data movement is represented by the arrow.
	 <p>Crossing a boundary is represented with a red arrow as opposed to the dashed line due to the limitation of GraphViz</p>	The trust boundary shape is used to represent the change of trust levels as the data flows through the application.

Take the following simple scenario: A customer uses his web browser and logs in to a web application. The web application forwards the login request to an API hosted internally which itself interacts with the MySQL database. A hand drawn representation of this scenario would look like the following.



The process to digitize the diagram using dot-tm is the following :

- Identify the Entities : Browser
- Identify the Processes : WebServer, API
- Identify the datastores : MySQL
- Identify the dataflows and trust boundaries:
 - o Browser > WebServer. The dataflow crosses the Internet trust boundary
 - o WebServer > API. The dataflow crosses the LAN trust boundary
 - o API > MySQL

- WebServer is in the DMZ cluster, API and MySQL are in the LAN cluster. LAN is inside the DMZ cluster.

Using the tool, we fill the relevant sections. It should look as follow:

List of Entities

Label

Cluster

Add Entity

Delete Browser
Cluster :

List of Processes

Label

Cluster

Add Process

Delete Webservice
Cluster : DMZ

Delete API
Cluster : LAN

List of Datastores

Label

Cluster

Add Datastore

Delete mySQL
Cluster : LAN

Nested Clusters

Declared clusters : DMZ,LAN,

Clusters group object with each other. They can also be nested. Use the clusters from the declared list. Each cluster needs to be coma separated. Respect the following order : left cluster is the most outside, right cluster is the most nested

NestedCluster : Add cluster

Delete root,DMZ,LAN

List of Edges

From : To : Label : isTrustBoundary? : ☐

Add Edge

Edit

Delete

From : Browser To : WebServer Label : login ☒ isTrustBoundary

Edit

Delete

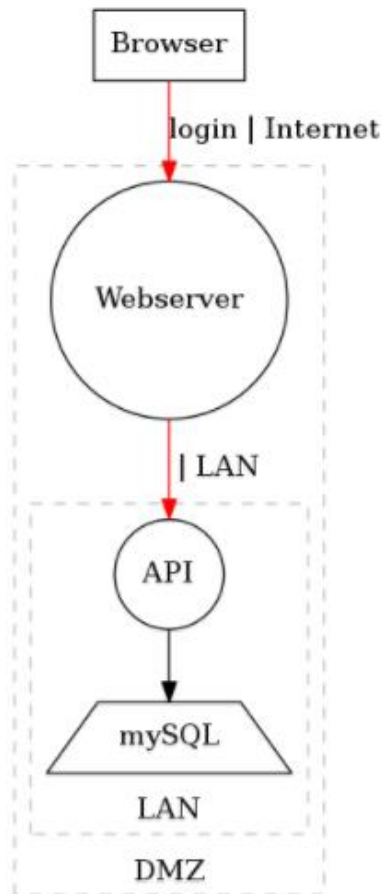
From : WebServer To : API Label : ☒ isTrustBoundary

Edit

Delete

From : API To : MySQL Label :

Once done, click on generate graph and the following should appear on top of the page:



Saving your work

All data is stored in the browser in json format. Use GetJson button to save the file to your hard drive.

You can re-import it by using the upload functionality. **Note that refreshing the page will clear any work you have in progress.**

If you only need the resulting image, simply save the image as..

It is also possible to download the image, json and dot file generated by the tool by using the Get All button.