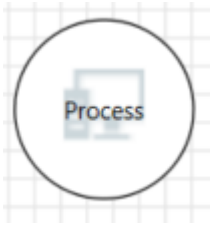
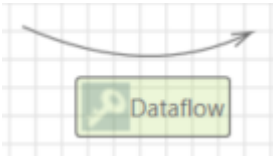
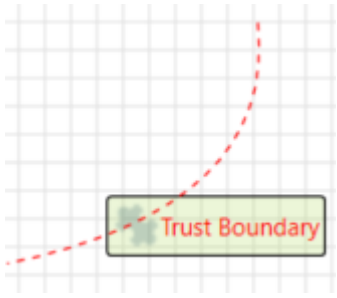
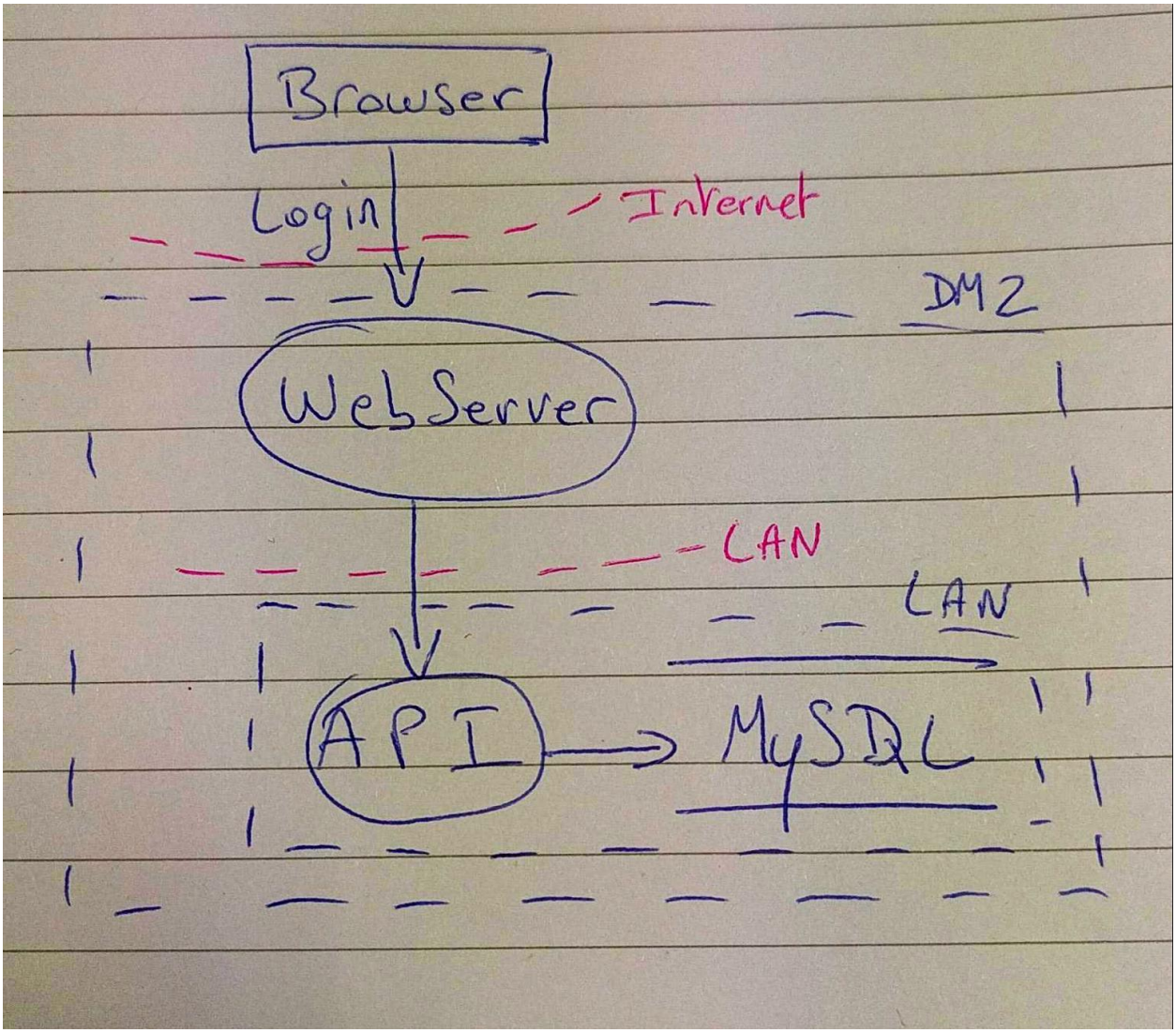
How to use Dot-TM

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
	External Entity	The external entity shape is used to represent any entity outside the application that interacts with the application via an entry point.
	Process	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.
	Datastore	The data store shape is used to represent locations where data is stored. Data stores do not modify the data, they only store data.
	Dataflow	The data flow shape represents data movement within the application. The direction of the data movement is represented by the arrow.
	Dataflow | TrustBoundary Crossing a boundary is represented with a red arrow as opposed to the dashed line due to the limitation of GraphViz	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 logins 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.

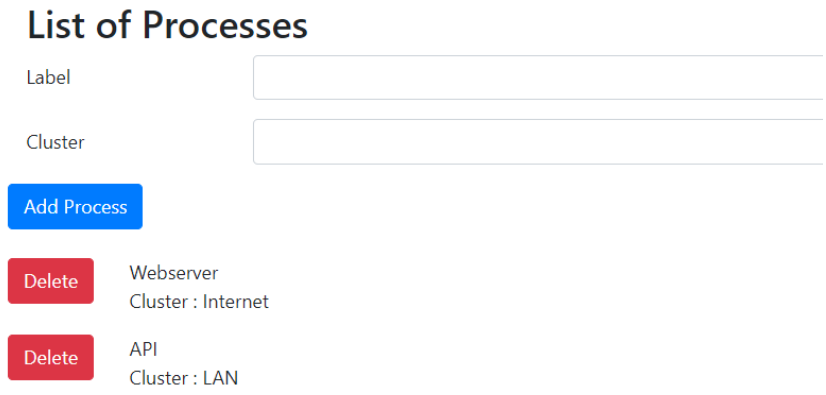


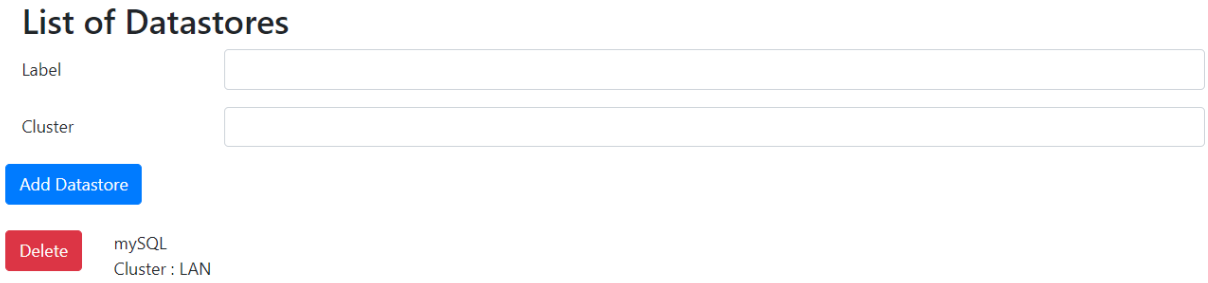
The process to digitize the diagram using dot-tm is the following :

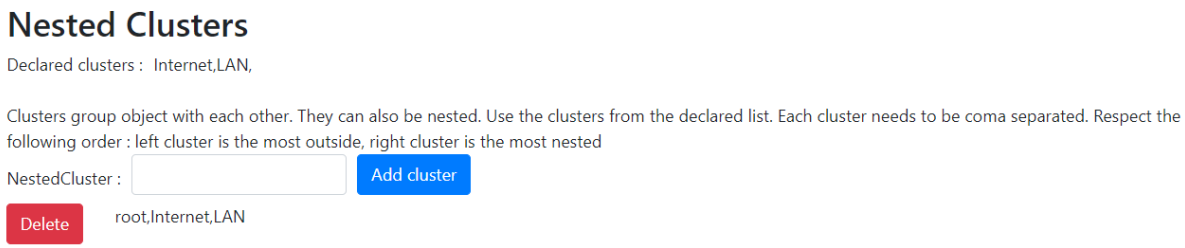
- Identify the Entities : Browser
- Identify the Processes : WebServer, API
- Identify the datastores : mySQL
- Identify the dataflows and trust boundaries:
    - Browser > WebServer. The dataflow crosses the Internet trust boundary
    - WebServer > API. The dataflow crosses the LAN trust boundary
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

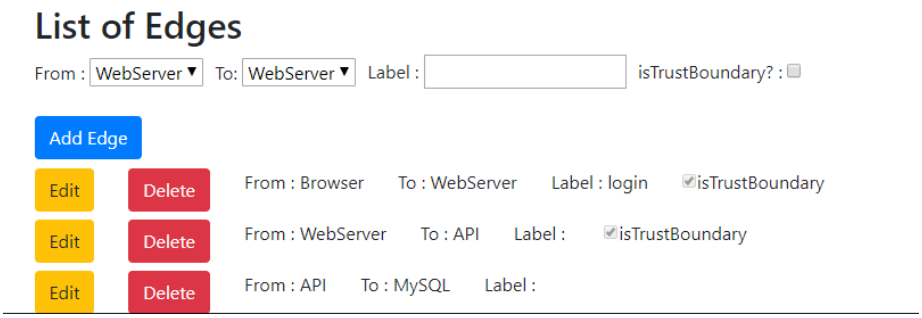
- WebServer is in the DMZ cluster, API and MySQL are in the LAN cluster. LAN is inside the DMZ cluster.

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

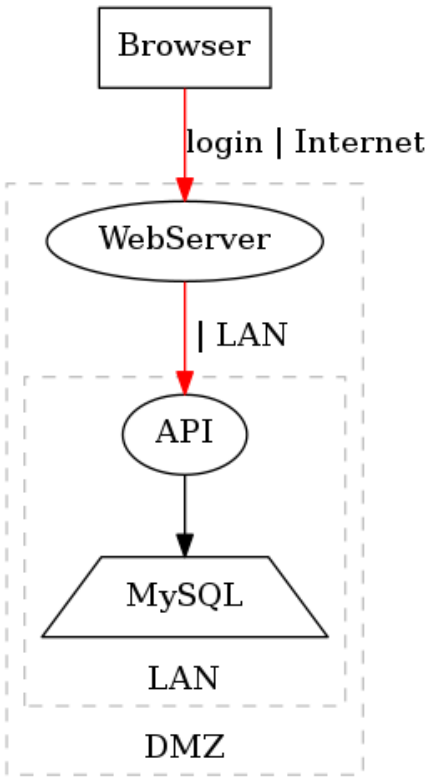








Once done, click on generate graph and the following should appear on top of the page:



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 (soon) to download the image, json and dot file generated by the tool.