

Network visualisation of synthetic biology designs

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Network Visualisation in a nutshell

- The process of visually presenting networks of connected entities as links and nodes.

Data	Visualisation
pTet is a Promoter	<p>The diagram illustrates a network of biological entities and their interactions. Nodes are represented by teal circles, and relationships are shown as directed arrows with labels. The entities and their connections are as follows:</p> <ul style="list-style-type: none">pTet (Promoter) is connected to promoter (type) and Repression (repressed).promoter is connected to Repression (type).Repression is connected to TetR (repressor) and Process (type).TetR is connected to Protein (type).Process is connected to Inhibition (Inhibited).Inhibition is connected to Tetracycline (inhibitor).Tetracycline is connected to Small Molecule (type).pTet is connected to ON (constitutively).
pTet is constitutive	
pTet repressed by TetR	
Tetracycline inhibits TetR.	

Why Network Visualisation?



Dynamic

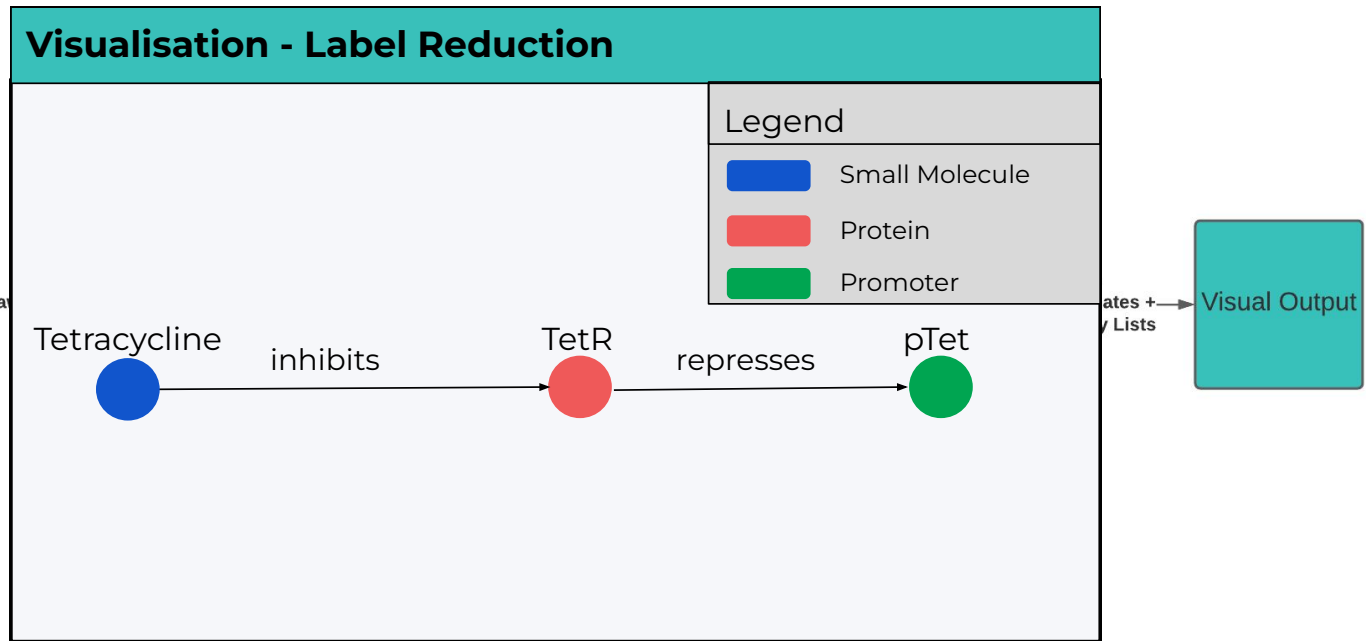


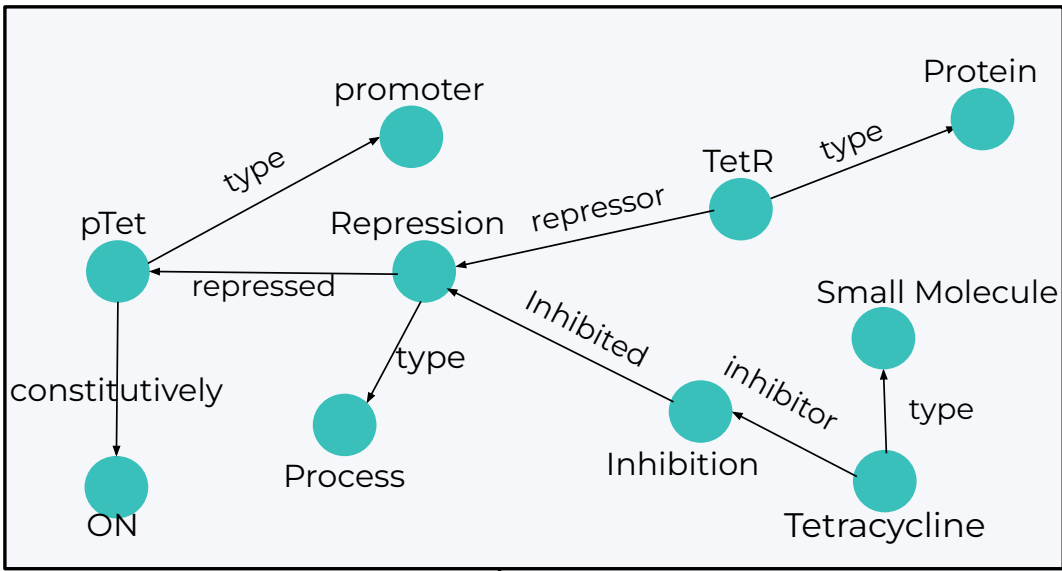
Scalable






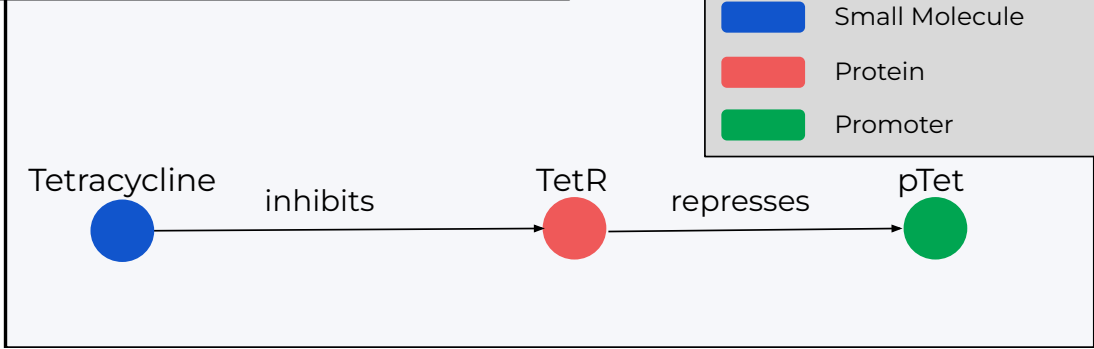
Affinity with Automation

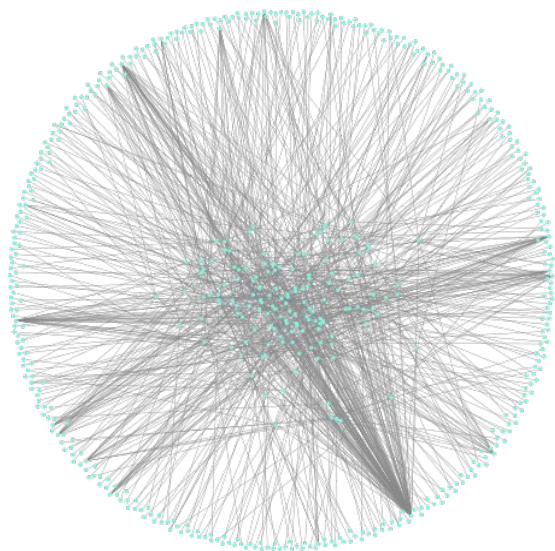
Our Solution Overview



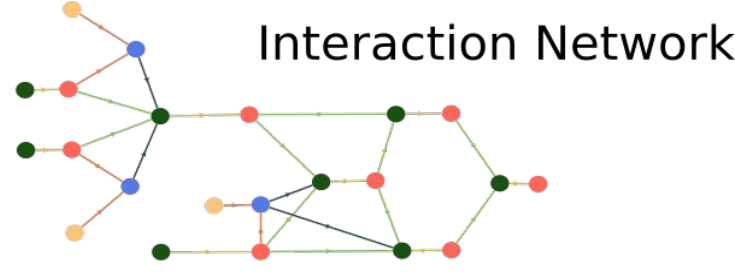
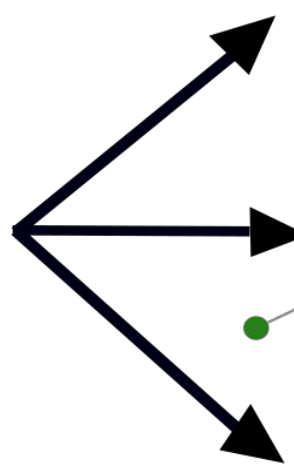


Legend	
	Small Molecule
	Protein
	Promoter

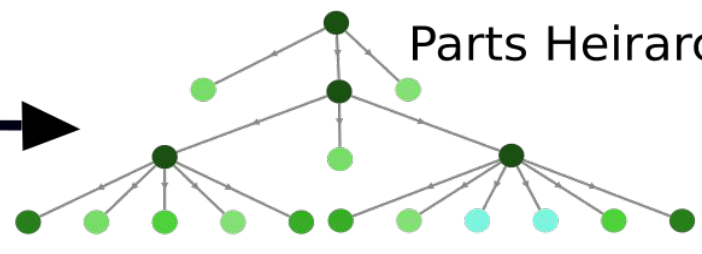




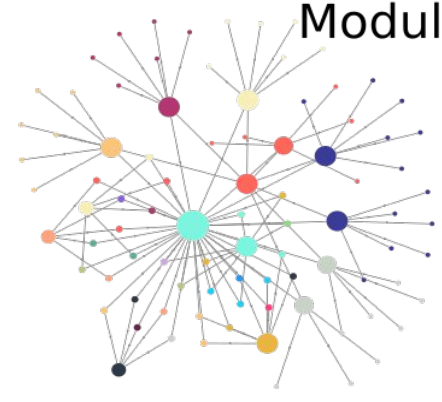
Full Graph



Interaction Network



Parts Hierarchy



Module Mapping

Closing Statements

Conclusion

Dynamic

Scalable

Automatable

Future

Project Visualisation

Larger Designs

Different Data

EPSRC
