

BayesiaLab WebSimulator

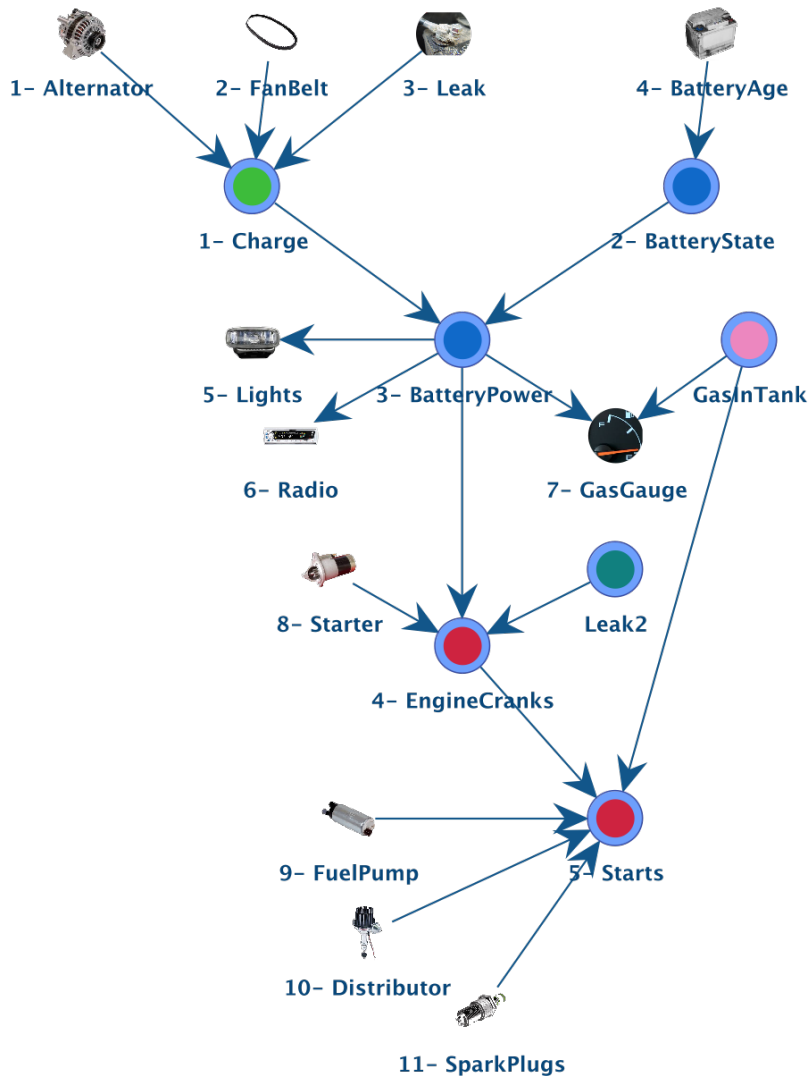
Overview

The **BayesiaLab WebSimulator** is a new solution which allows you to share interactive models with your audience, without having to install any software on their computer.

The **BayesiaLab WebSimulator** uses your .xbl file to create a web page that is specific to your network. You can designate which nodes are accessible as **Input Nodes** and **Output Nodes**. Once the network is published, the **BayesiaLab WebSimulator** utilizes the **Bayesia Engine API** to perform inference in your network. This allows anyone to enter observations/evidence for the nodes in your network via the web. The BayesiaLab Simulator's web interface is responsive, thus allowing even tablet or smartphone users to work dynamically with your published network. Whenever evidence is set, the user will immediately see updated probability distributions of the **Output Nodes**.

Example

Here is a Bayesian network that shows links between numerous vehicle components that are implicated with regard to engine start. Individual components can either be causes or symptoms related to engine start.




The BayesiaLab network file (in **XBL** format) contains the following:

- The Bayesian network that will be used for probabilistic inference.
- The definition of **Input Nodes** and **Output Nodes**, along with the type of **Monitor** to use (gauge, slider, text).
- Images to be associated with **Monitors**.
- Comments describing the network model.

Bayesia Simulator CarStarts


1- Alternator



Ok
Faulted

Observed


2- FanBelt



Ok
Slipping
Broken

Observed


3- Leak



NoLeak
Leak

Observed

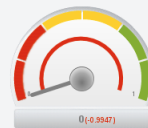
4- BatteryAge



New
Old


Observed

1- Charge




0 (-0.3947)

2- BatteryState



0.99 (0.6571)


5- Lights



Work
NoLight

Observed


6- Radio



Works
Dead

Observed


7- GasGauge



Gas
NoGas

Observed

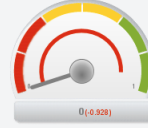
8- Starter



Ok
Faulted

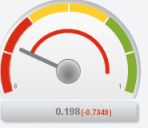
Observed

3- BatteryPower




0 (-0.928)

4- EngineCrank



0.198 (-0.7348)


9- FuelPump



Ok
Faulted

Observed


10- Distributor



Ok
Faulted

Observed


11- SparkPlugs



Ok
Bad

Observed

5- Starts



0.1975 (-0.2678)

Input Variables

Output Variables

i Please note that models can be published *publicly* or *privately*. Public means that anyone can potentially access your simulator and experiment with it. Private means that you can restrict access to designated users who require a model-specific ID and password.

You can publish a number of public models with your BayesiaLab license free of charge. To publish private and password-protected networks, you need to [purchase an add-on license](#), which is available for annual rental in quantities of 5, 10, 25, 50, or 100 concurrent models.