

A Platform-Based Design Tool for the Development of Synthetic Biological Systems

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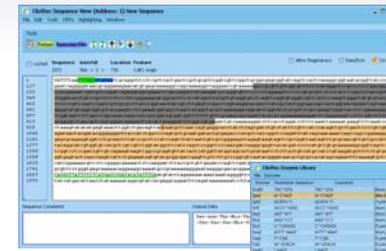
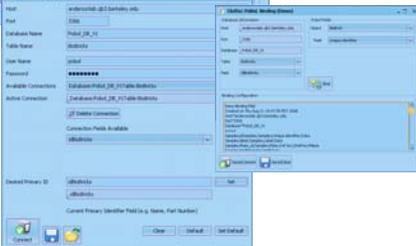
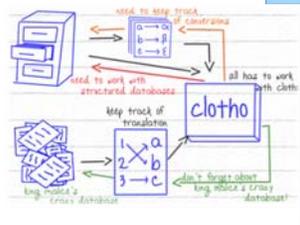
Nade, Matt, Doug, Anne

What is Clotho?

Clotho is an **open-source** BioCAD software **platform** that provides a **multi-purpose integrated toolbox**: it can act as design tool, a database communication program, a tool for sequence analysis, and more. Each part of Clotho is **interconnected** and 'talks' to other parts, enabling them to share sequences and data, in order to maximize productivity. **Clotho is aimed at every variety of synthetic biologist**, providing functionality whether you are researching alternative fuels, novel medical treatments, or exploring entirely new applications. It can be tailored to each user's needs through use of custom plug-ins and algorithms. **Clotho is built with the community in mind** to foster sharing and collaboration between synthetic biology labs around the world.

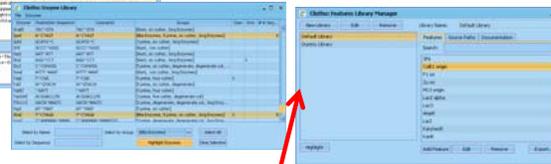
Clotho Connectors

mysql/PoBoL Connections: allows Clotho to **interact with mysql databases**, either directly or through the translation provided by the **Clotho Data Model**.



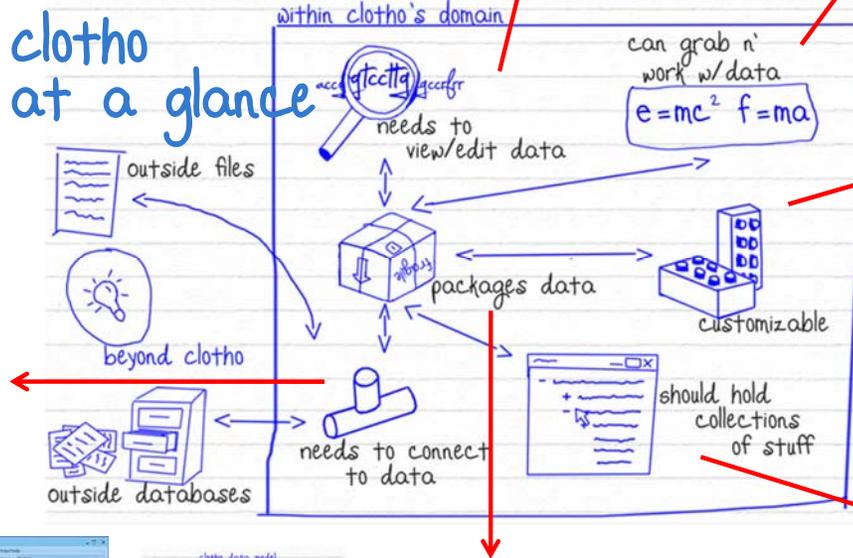
Clotho Views/Functions

Sequence View: the primary **ApE-inspired** design view for Clotho, letting the user directly interact with sequences while providing essential analysis and annotation tools.

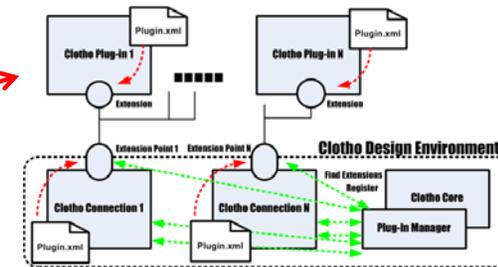


Clotho Algorithms

Algorithm Manager: provides an environment to run user-specified algorithms in Clotho. Takes in an arbitrary input and provides an output based upon those specifications.



Clotho Plug-Ins



Enables users to **write their own code for Clotho**. Java code can be added to the Clotho directory, requiring only a short XML script for it to be recognized and added to the program.

Clotho Interfaces

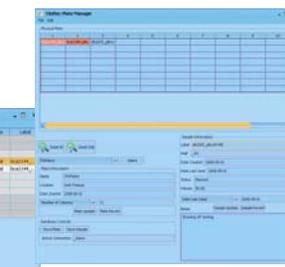
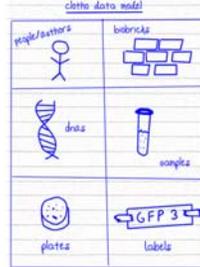


Plate Manager: acts as a link between a BioBrick database and a physical laboratory environment. Virtually represents plates present in the lab.

Clotho Data Model

Provides a way to 'translate' differently formatted databases back and forth from a common standard.



Parts Manager: lets the user view parts from and **add parts to any database**, using the **Clotho data model**

For more info and downloads, visit:
http://2008.igem.org/Team:UC_Berkeley_Tools

