# PAYAO: Web community tagging system to SBML models

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## PAYAO: Goal

The Goal is to provide a framework to facilitate tracking and update mechanism for the collaborated model building.

"Payao" system aims to enable a community to work on the same models concurrently, insert tags to the specific parts of the model, exchange comments, search for the relevant publication using text mining technology (PathText), record the discussions so that we can update the models accurately.

## PAYAO: SBML Models Tagging System

"Payao" reads the models in SBML (Systems Biology Markup Language (http://sbml.org)) format,
displays them with CellDesigner, a process diagram editor (http://celldesigner.org), adopting the Systems Biology Graphical Notation (http://sbgn.org),
and provides an interface for adding tags and comments to the models for the community members.

## PAYAO Major Features: (alpha 2)

### Community Management:

- User access control

### Model Management:

- Register SBML models to the system
- View the list of all the registered models
- Manage MyModels, and FavoriteModels
- View SBML models in CellDesigner 3.5 notation
- View "Notes" added by CellDesigner 3.5

### Tagging/Comments:

- Add Tags (keywords, links, pubMed IDs, free text) to the target (Species/Reactions, user-defined components and areas)
- Add comments to the tags

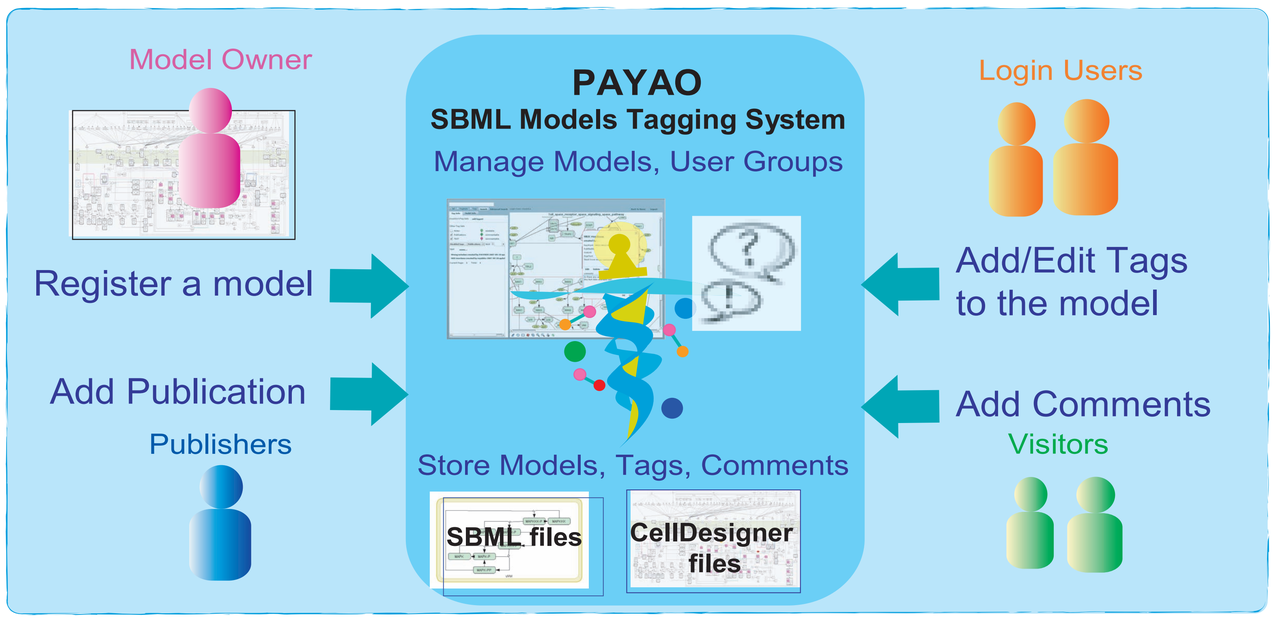
## System Requirement:

- Servlet container: Tomcat 5.5.x, JRE 5.0 and above
- Framework: Seaser 2 (S2Flex2)
- RDBMS: MySQL 5.0 and above
- CellDesigner 3.5 API

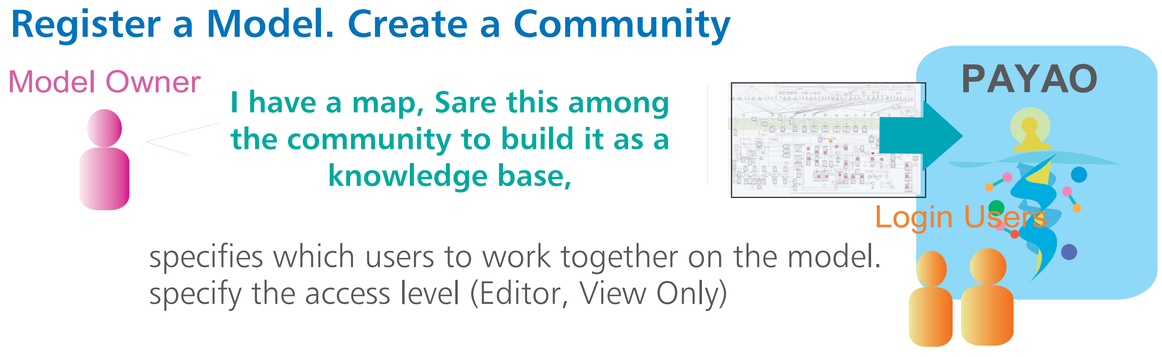
## Future Plan

- alpha2 is available for development and testing only.
- beta-test with public access aiming at May.
- Full Integration with Text Mining System with Univ. Tokyo and Manchester University.
- Adopt CellDesigner 4.0 to be able to display the models in SBGN Level-1 draft graphical notation
- In the long run, we would like to develop this system to be a platform for community model building system to accomodete both computational and experimental data.

## How community uses PAYAO




### 1) Register a Model. Create a Community

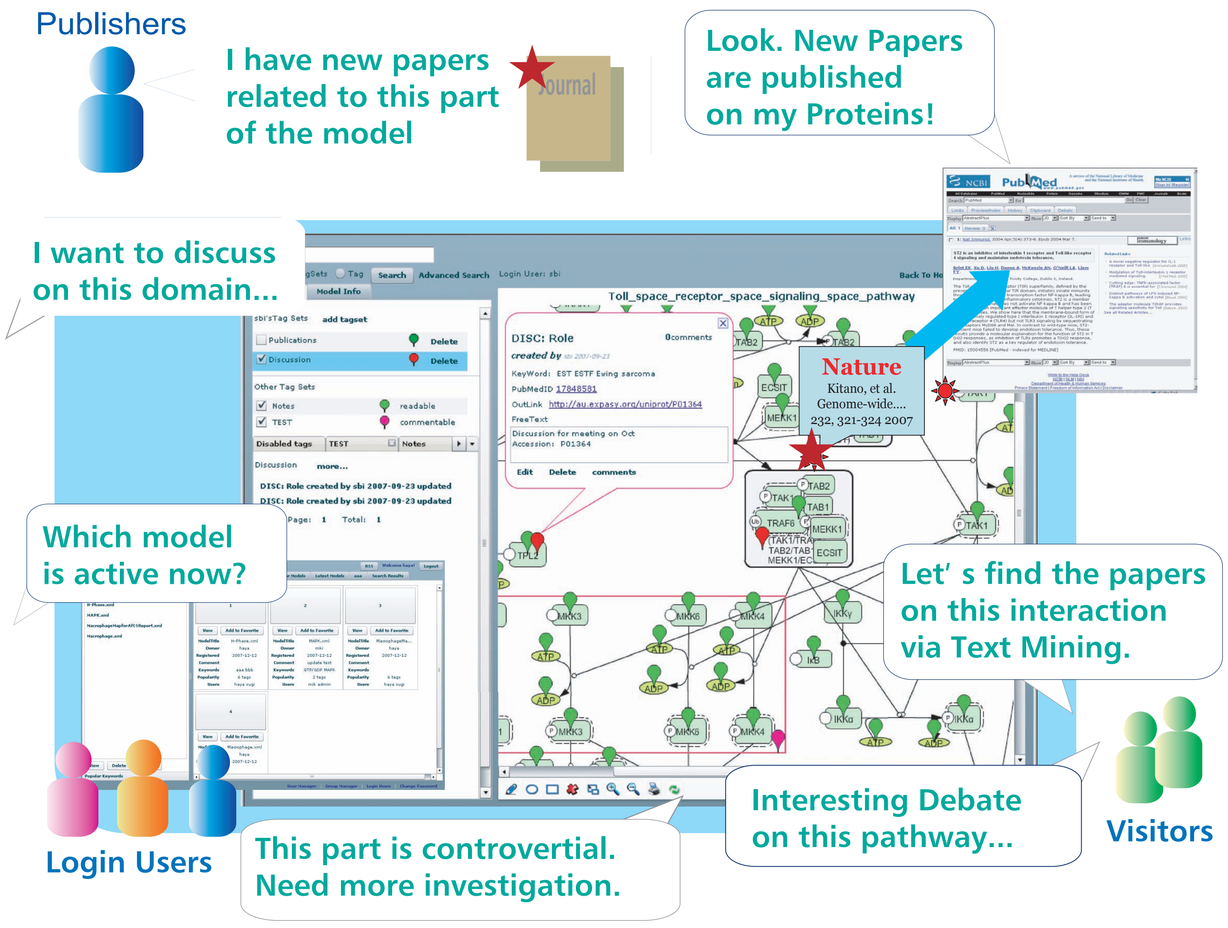



### 2) Tag to the Model

### 3) Add Comment to Tag




### ★Publisher Tag




### "PAYAO"?

"Payao" is a fish aggregating device, an artificial floating raft where fish congregate. It is a popular fishing method in Okinawa area.

### Acknowledgement:

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