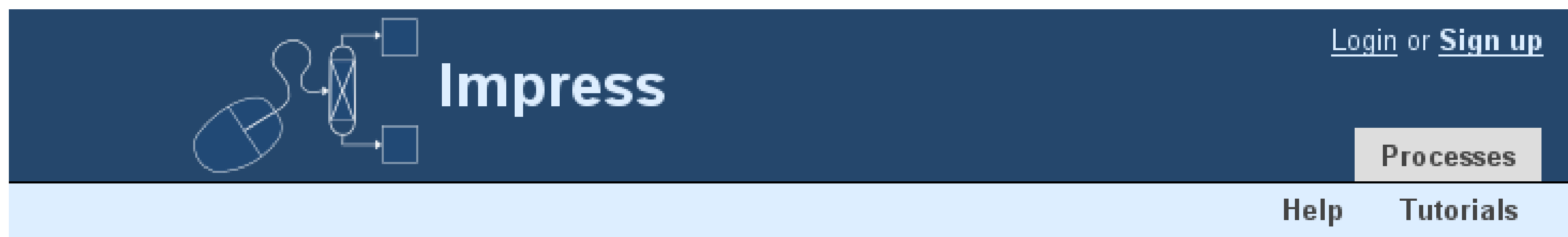# A web based process simulator

## Alistair Marshall
### Professor Jack Ponton
### Academic Year 2008 / 2009
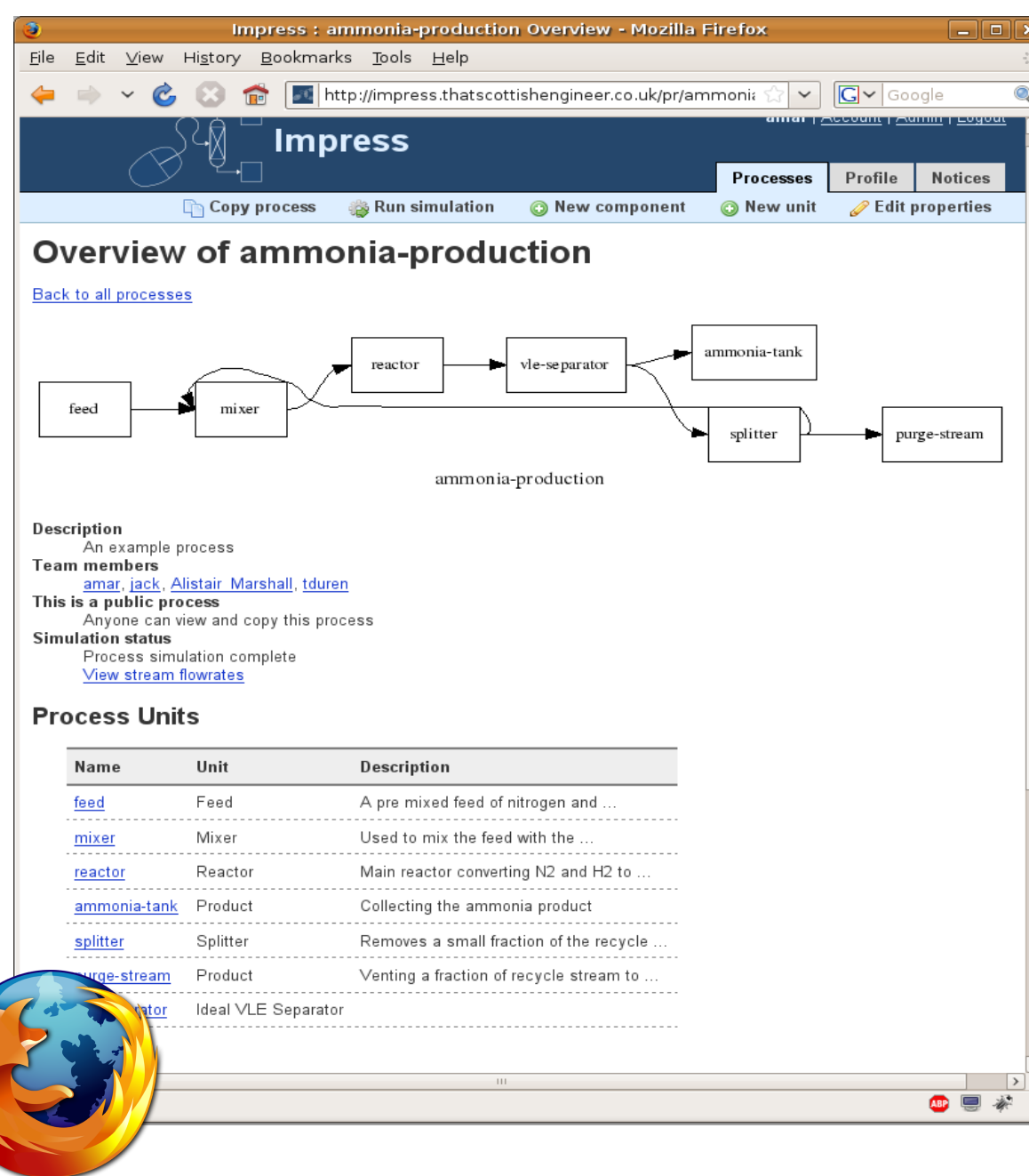
http://impress.thatscottishengineer.co.uk

**Impress**

Login or Sign up

Processes

Help     Tutorials

## Welcome to Impress

Impress is the Interactive Multi-user Process Engineering Simulation Suite:

• A process simulation tool for chemical engineers that produces mass and molar balances.

• Accessed from a web browser.

• All processing and storage on a central server.

• Multiple users can cooperate simultaneously.

## Implementation

• Written in Python using the Django web framework.

• Makes use of additional data from external resources like the NIST website.

• Produces and solves linear equations.

• Program generates a concept process flow diagram.

• Export final data as spreadsheet.

## Advantages

• **No installation**
All you need is a web browser.

• **Platform Independent**

Works on any browser including the iPhone!

• **Automatic saving**
No lost work! Will save work to server at every stage.

• **Instant updates**
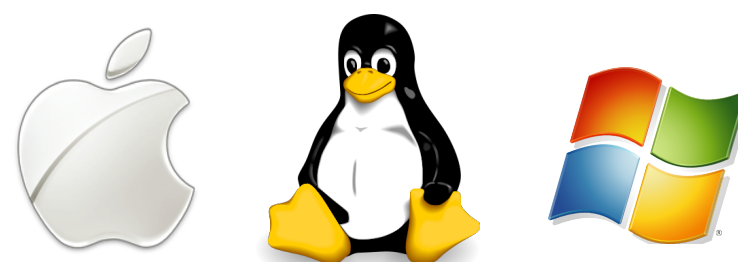Work is made available to all other team members simultaneously.

## Disadvantages

• **Security**
Some companies may have issues with storing data on outsourced servers.

• **No off-line access**
Internet connection is required to create and edit processes.

## Future work

This system may be improved in the following areas:

• Import/Export of files to other applications.

• Examine alternative, faster methods for data entry.

• Add simple energy balance.

chemical engineering @ edinburgh