gPROMS Product family

gO:Run

The gPROMS Runtime Object

The gPROMS Runtime object (**gO:Run**) is an execution-only engine that runs a gPROMS simulation, optimisation or parameter estimation model prepared using **gPROMS ModelBuilder**.

gO:Run is often used as a convenient way to provide model-based decision support information to "non-modelling" users – for example, to operators in the control room, or planning personnel or purchasers making feedstock decisions.

gO:Run will execute any model capable of being executed in gPROMS ModelBuilder; all you need to do is export the required model. Models are encrypted during the export process, meaning that the author's confidential information is protected and that the models themselves are protected from unauthorised change.

gO:Run enables multiple return on modelling investment, through re-use of models, and promotes seamless working across different parts of the organisation, with easy transfer of corporate knowledge between departments. [1]

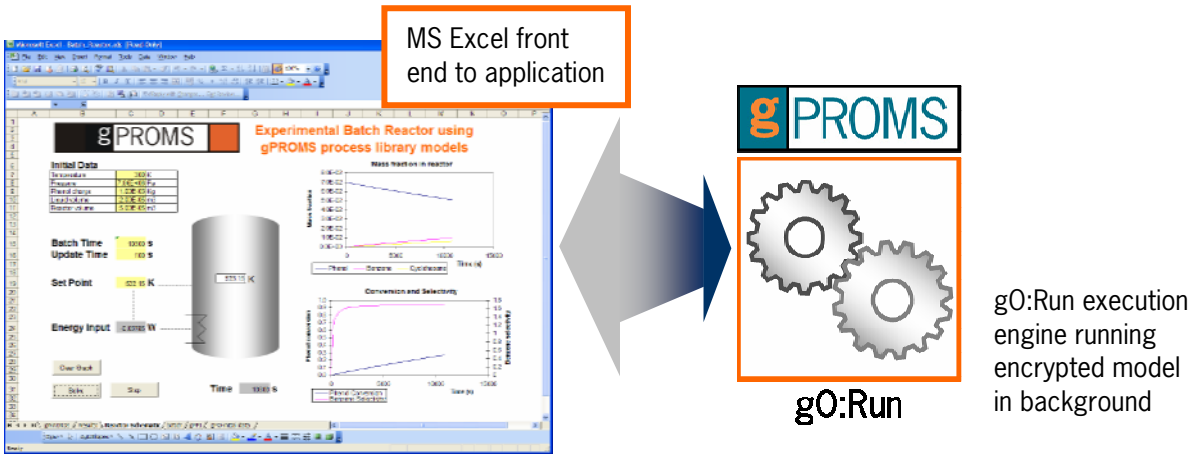
Adding value via gO:Run

- easy re-use of valuable modelling investment
- easy transfer of powerful models between modelling experts and other users
- brings gPROMS model-based decision support to operations or purchasing teams
- easy deployment of models for operator training
- provide custom front-end for presentations to management or clients
- use gPROMS as a powerful modelling and solution engine behind in-house software
- replace core components of legacy software with easy-to-maintain gPROMS models

How gO:Run works

You can execute an exported model within gO:RUN in one of two ways:

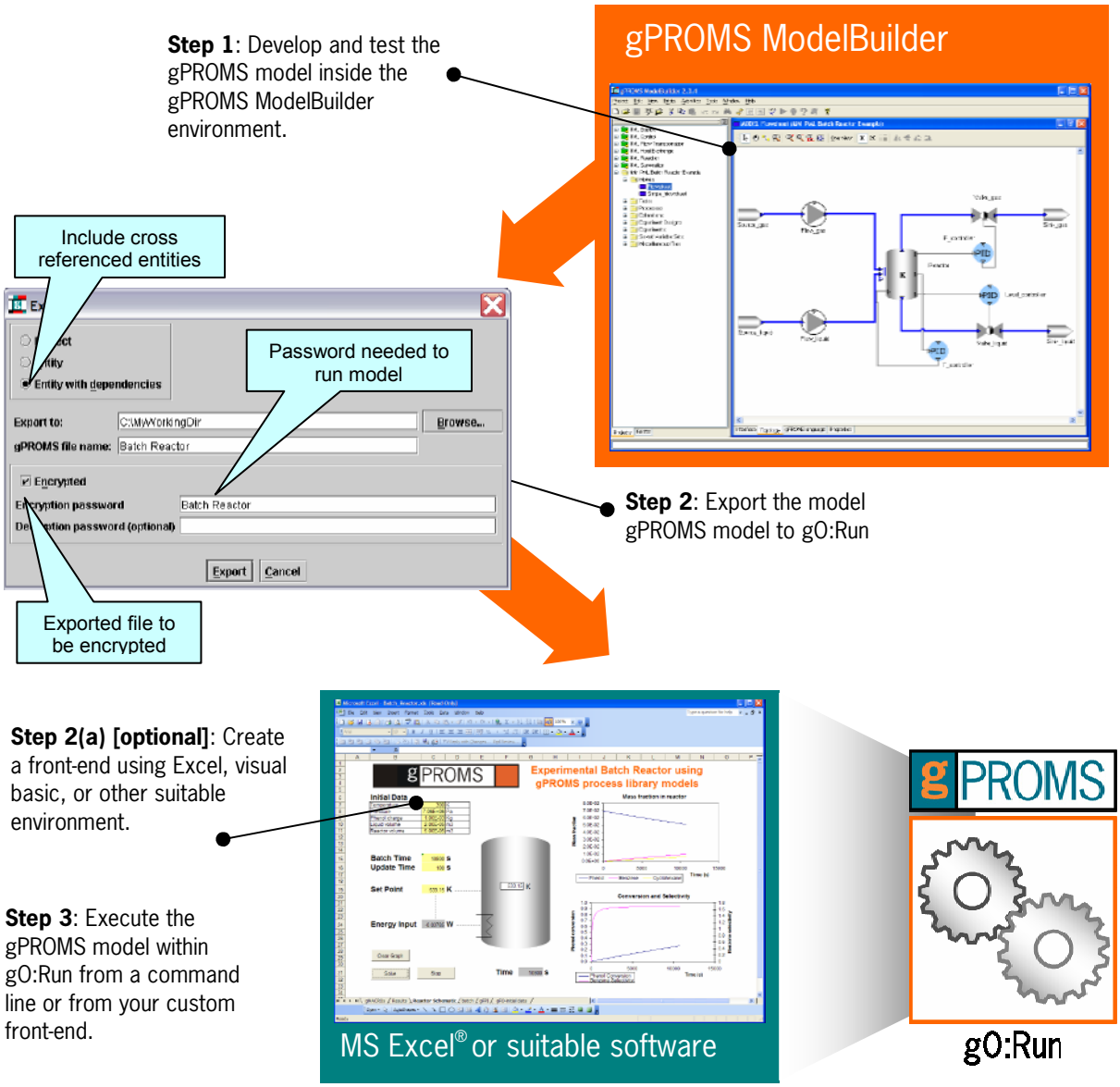
- as a stand-alone application executed from a command window, for running multiple gPROMS executions in batch mode
- from software such as MS Excel, Plant Control System software or a customised interface.



No specific changes are required to a gPROMS model to allow it to be used with gO:RUN. gO:RUN applications executed from external software typically use the gPROMS Foreign Process and Foreign Object Interfaces to exchange data with the external software; gO:RUN can also send results to gRMS, the default gPROMS Results Management System.

[1] For customers who wish to embed models together with the gPROMS solution engine more formally within their own software for internal use or external distribution, PSE offers the concept of gPROMS-Based Applications (gBAs). Please contact us for details.

Using gO:Run – a simple step-by-step guide



In the simple example above, the user can start, stop, pause and resume the application, interact with key variables, and see all results from a simple MS Excel interface. Execution of the gPROMS model is invisible to the user. All the standard functions of Excel can be used. Data used by the application can be stored within Excel.

Licensing, supported platforms and pre-requisites

gO:Run is licensed as an optional component of the gPROMS family. It is normally provided as a single node-locked licence allowing the execution of model-based activities using encrypted models exported from gPROMS ModelBuilder.

Simulation activities are included as standard; optimisation, parameter estimation and experiment design activities are available as optional extras.

A gPROMS ModelBuilder licence is required if you wish to build the gPROMS model that will execute within gO:Run.