Integration of online and web based help in the CAPRI system

Wolfgang Britz

Institute for food and resource economics

University of Bonn

- preliminary version, do not cite -

Bonn, June 2006

The author

Dr. Wolfgang Britz is a senior researcher and lecturer with the Institute for Food and Resource Economics at the University of Bonn, and has co-ordinated since several years the activities based on the CAPRI modelling system. Its responsibilities further on include the methodological concept of CAPRI and , to a larger extent, its software implementation.

Contact:

Dr. Wolfgang Britz
 Institute for Food and Resource Economics, University Bonn
Nussallee 21
D-53115 Bonn

Tel.: ++49-(0)-228-732502

Wolfgang.Britz@ilr.uni-bonn.de

Content

Background

Since the first version of the Java based GUI, the software did not longer feature a help system, and even before, the help system was quite outdated and never specific to CAPRI. Albeit the fact that there were little complaints from the user side, it seems appropriate to provide some minimal support to the user at run time via a normal help system. The document discusses how the very same HTML based information to support the user can be embedded both in the CAPRI GUI and the CAPRI web page. The content is stored in short HTML pages describing the major functionality of the CAPRI GUI along with the concepts behind. The aim is to reduce learning costs and to increase the application of CAPRI.

Technical Realization

Online help

The realization is based on the JavaHelp package (see http://java.sun.com/javase/technologies/desktop/javahelp/) which provides a JAVA conform portable way to embed online help in an application. Its core is based on HTML pages and related indices stored in XML files. In order to avoid manual creation of the indices, the free-ware tool JHelpDev (http://jhelpdev.sourceforge.net/) is used. That package generates *HelpIdStrings* from the HTML pages such that for a HTML page named "CoCo1.html" a *HelpIpString* of "CoCo1" is generated.

In the code of the Java GUI, components may then register themselves to the help system with a call:

> *agpCapriIniFile.addHelpKey(contentPanel,helpIDString);*

Once a HelpID is registered for a component, the user can access the help system via the "F1" key. The *AgpTask objects* and the work steps have methods to question their *helpIDString*.

The aim of the system is not to exhaustively describe any control in the CAPRI GUI. Rather, the user should be provided with the basic information to support basic application of the GUI. The CAPRI documentation already comprises a lengthy discussion especially of the exploitation tools, and that document should be used as a tool for self-training and reference.

A second way to open the on-line help consists in using the newly created "Help" menu item as seen below. It allows additionally opening different pieces of information on the CAPRI web page, to send a mail to the CAPRI user list. Alternatively to use the Java based online help, the user can also open its browser to access the help content.

Screen Shot: The Help menu item
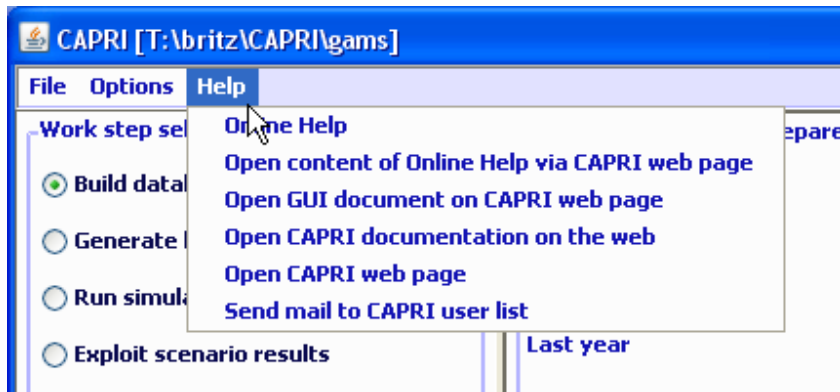
**Screen Shot: The Help System at work**
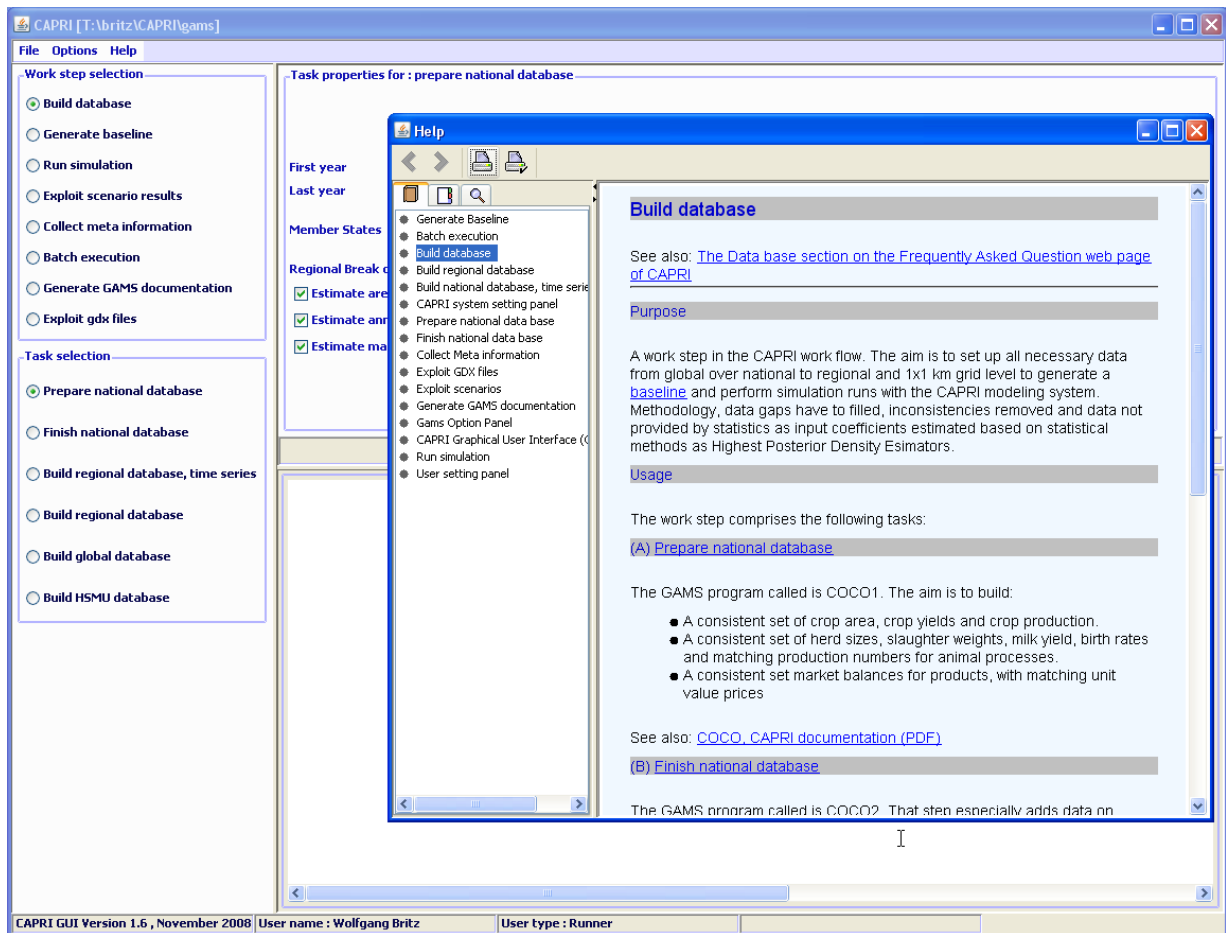
Online help information on the web page

One may ask why it makes sense to show online help information for an application on web page. The reason is at least twofold. Firstly, in order to access the online information, the user must first successfully

install the application and get it running on its computer. Given the requirements for a CAPRI installation namely at least a Java run time engine, tortoise and successful checkout, there may be cases where users need information about what to do without being able to access the on-line help system. Secondly, as the help system comprises links to external web pages, especially the CAPRI web page itself, user may prefer to have the help system open in their browser. And thirdly, the help system also comprises a lot of short conceptual information which is useful even without using the CAPRI GUI.

In order to allow access to the help via the CAPRI web page, the code of JHelpDev was slightly expanded to output additionally information to a HTML format. Using so-called internal frames <IFRAME>, the very same HTML files are embedded into the normal layout of the CAPRI web page as seen below:

Screen Shot: The content of the Help System seen from the CAPRI web page
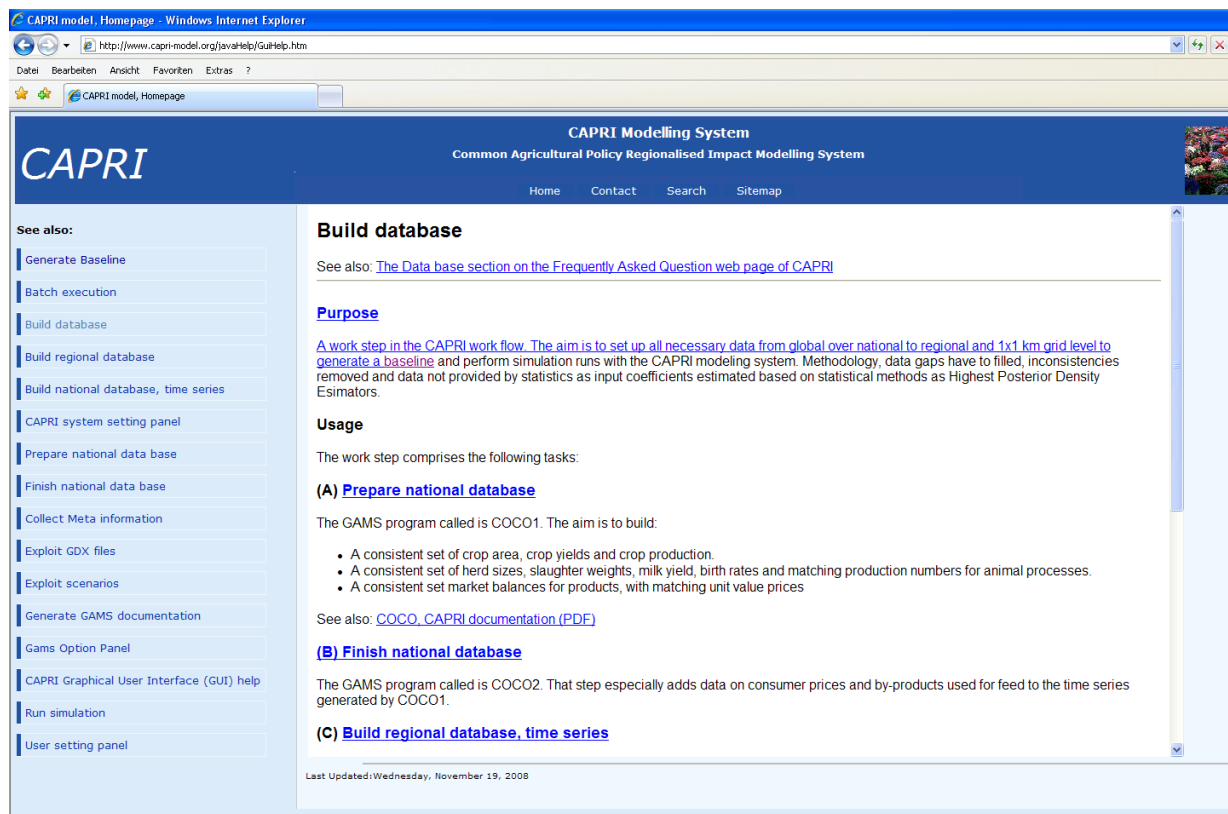
In order to synchronize the content, the HTML files are under version control.

Content of the help system

The help system is not thought to replace the CAPRI documentation or a user manual. Rather, it should provide very some short information plus links to the CAPRI web pages or to documents with detailed information. Accordingly, it is solely planned to add in future a few files for the major components of the

exploitation tools. The reason is the fact that it is much more efficient to write documentation including screenshots of examples in a work processor then edit the same information in HTML code and store all screen shots in separate named images.