IAGE User Reference Guide

14th March, 2002

About IAGE

IAGE or "Internet Adventure Game Engine" is an authoring system for adventure games (more commonly called "Interactive Fiction" nowadays). The difference between IAGE and most authoring systems is that in addition to single player games, it also allows you to create multi-user adventure games (often referred to as MUDs, MOOs or MUVEs) and host them yourself.

IAGE is distributed with a comprehensive dictionary and compiler libraries allowing you to quickly implement behaviour to your world.

IAGE has been in development now for around 3 years, starting with a prototype which used Microsoft ActiveX technologies before settling in it's final incarnation in Java (a cross-platform, portable language which uses a virtual machine to bridge platforms).

IAGE is completely free to use and distribute and contains features comparable to that of most adventure authoring systems - with a lot more besides.

To use IAGE you will need a Java Virtual Machine for your platform and the appropriate Java Foundation Classes - DON'T PANIC! This is not as frightening as it sounds! - you can download the appropriate virtual machine and libraries in one self-installing package for your platform called the JRE (Java Runtime Environment) at http://java.sun.com/. Go do it now!

What this Document Contains

This document explains:

1. How to start the IAGE Server program.
2. How to load a game file into the IAGE Server.
3. How to set an IAGE Server running.
4. How to connect a client to an IAGE Server and play a game.
5. How to use the IAGE Java Applet to let users play on your IAGE Server without downloading an IAGE Client or the Java Runtime Environment.

IAGE Components

IAGE consists primarily of three main components:

- A server package, allowing you to host your own multi or single player game files.
- An compiler package, allowing you to create your own game files.
- A client package, allowing you to connect to the server and play the games.

These three packages are implemented in Java - a cross-platform language allowing users of Windows, Unix, MacOS, etc. to all connect and play adventures together.

In addition to these "core" packages, IAGE also features:

- A client package implemented as a Java applet, to allow you to not only host your own adventures, but to allow users to join and play on your server from a webpage without downloading anything.

- A single-player package implemented as a Java applet, to allow users to play games as single-player adventures from your webpage without downloading anything.

Installations

There are all-in-one installers available for the following platforms:

Microsoft Windows
Linux
Solaris
HP-UX
AIX
UNIX
All Other UNIX Variants
MacOS Classic 8.1+
MacOS X

The all-in-one installers include the server, the client, the compiler, the compiler libraries and some sample games and source code to get started with.

The IAGE Server Package

The IAGE server is the most important part of IAGE since it contains the actual game engine that interprets and executes your game files.

To Start IAGE Server

Click the IAGE Launchpad icon created by the installer. You will then be presesnted with a list of three applications you may use - the IAGE server, the IAGE client and the IAGE compiler.

Press the IAGE Server button to start the server up.
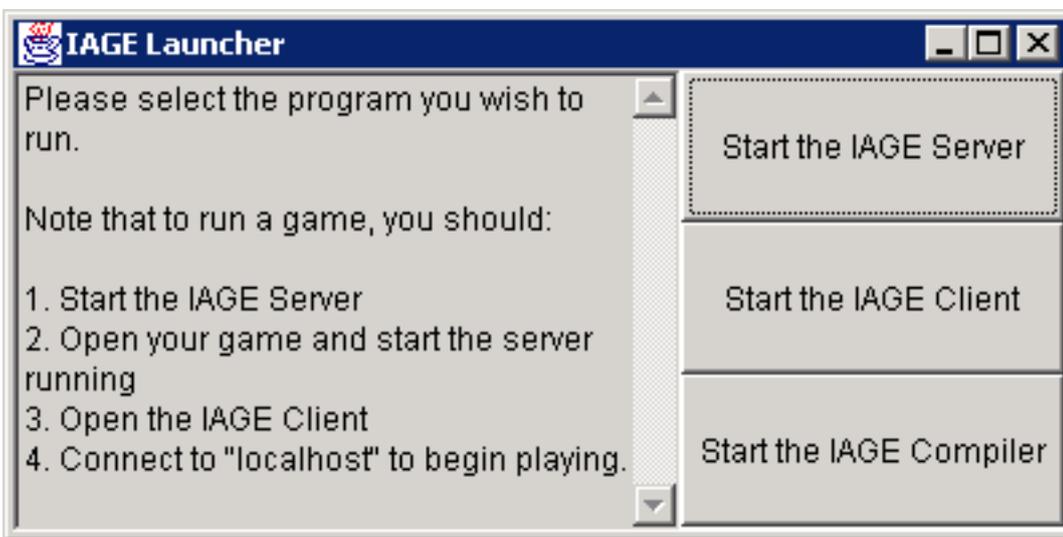
Loading a Game

To load a game into the server, select "Load IAGE Game File" from the File menu.
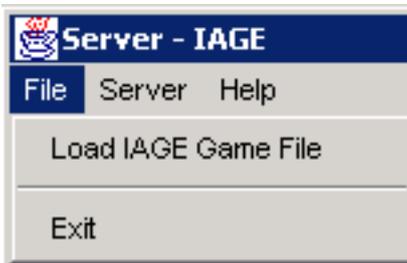
Load Game File Menu option.

You will then be prompted to select the IAGE game file you wish to load. Note that all IAGE game files have the extension ".iage".

Once the game is loaded, the output window will show various statistics about the loaded game.
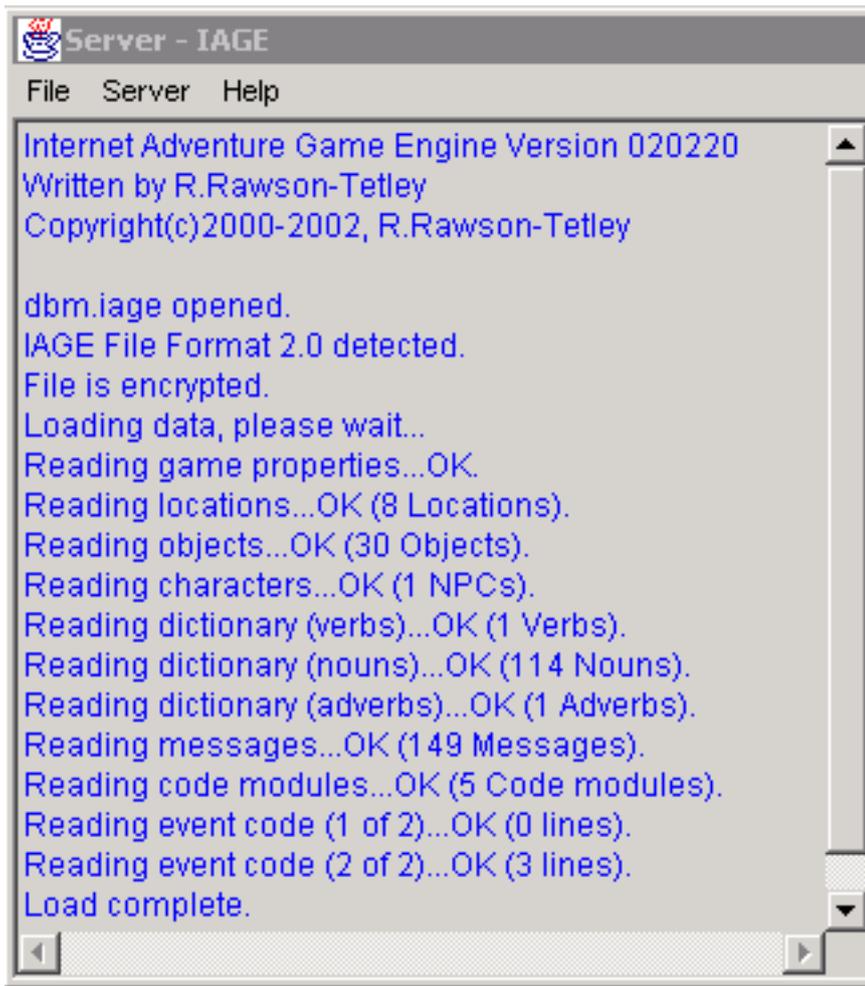
Server output window showing game statistics

Now that the game file has been loaded, you can start the server listening for player connections by selecting "Start Server" from the Server menu.

Monitoring Connections

Once the server has been started, you can monitor the connected players in the connections window.
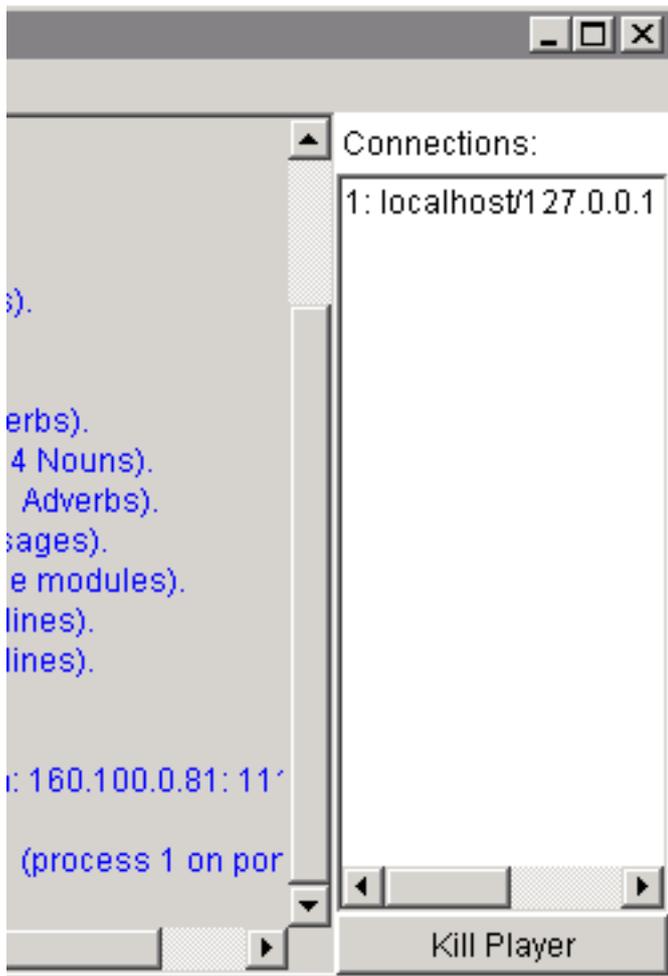
The connections pane

You can kill a player's connection by highlighting their name in the list and clicking the "Kill Player" button.

Stopping the Server

Finally, selecting the "Stop Server" option from the Server menu will stop the server and destroy all connected players' connections.

The IAGE Portable Client Package

The IAGE client packages allow you to connect to IAGE servers and play the game they are running.

To start the IAGE portable client, press its button in the IAGE launchpad.

On startup, you will be presented with the client connect screen:

You will be prompted to enter your name. This is the alias you wish to be known as whilst in the game on the server you intend to connect to.

Secondly, you will be prompted for the IP/Host of the server you wish to connect to. The IP/Host address is the globally unique address assigned to each machine on the internet to uniqely identify it. If you are unsure about this, I would recommend you read tutorials on the TCP/IP protocol and in particular, how web (and indeed other internet) servers operate, since IAGE is exactly the same principle.

Notice that when the client starts up, it defaults in the word "localhost" in the host box to connect to. Localhost is known as the "loopback" address. Localhost also has an IP address of 127.0.0.1 which you may also use.

What is the loopback address? Simply put, regardless of whether your machine is actually connected to the internet or not, localhost is a way of identifying YOUR machine. So if you are running an IAGE server, connecting to localhost in the client will actually connect to your own machine (whether you are connected to the internet or not).

Once you are happy with your alias and the server you wish to connect to, click the large "Connect to IP/Host" button to start your game.

Once the connect button has been pressed, the client will spawn a game window, with the word "Connecting..." in it's title bar.

Once the connection to the server is made, you will find things then start to look like a traditional text adventure. The game window has a small entry field at the bottom for you to enter your commands (followed by the ENTER key), a large output window in the centre of the screen where the server output is placed and a status bar at the top, which displays pertinent details about your character in the game you are playing.

The IAGE Client Applet

The IAGE Client Applet allows you to host a small site along with your IAGE Server, allowing you to have visitors to your site connect to your IAGE Server from within their web browser and play.

In order to make use of the IAGE client applet you will need to be hosting an IAGE server and you will need to host a web server. To host, you really should have cable or some form of permanent internet connection.

Why a webserver? The simple reason is that applets are only allowed to connect to the host/IP of the server that the page containing them lives on. So you will need to be running a web server to allow users to connect to your IAGE server with the client applet.

This really isn't as bad as it seems, since you will have to be running the IAGE server anyway. If you do not have a webserver, I would recommend that you use Apache (www.apache.org) - it is one of the most stable and robust webservers around (it is also the most popular webserver on the internet - and it's free).

To use the applet, simply unzip the contents of clientapplet.zip (downloadable from the IAGE website and a mere 6k) to your published web directory.

You will then need to edit the index.html page which unzips with the client applet and change the parameter value from "localhost" to either your IP address or domain name (if you have one).

Once you have done this, you are ready to go! Start an IAGE server and then point your browser to http://localhost to test the applet.

The IAGE client applet