Internet Chat:

## Creating a Custom Protocol using Sockets

The Internet Chat application is a simple client and server application that allows you to do live Internet chat. It comes in two parts. The Chat Client stack contains the scripts for the client, and would be distributed to each person on the network. The Chat Server stack contains the scripts for the chat server. This Video Tutorial shows you how to use this Sample Project, and how to take it apart to understand how it works or copy portions of it for use in your own applications. We recommend that you have explored the introductory video tutorials first, so you have a basic understanding of how Revolution works before you start on the Sample Projects.

Key topics covered in this tutorial

- A walk through the Internet chat client and server applications
- How to view the scripts and examine the object properties

Let's start by trying the chat client and server running on one computer to see how they work. To do this we need to open both the Chat Server and Chat Client stacks.
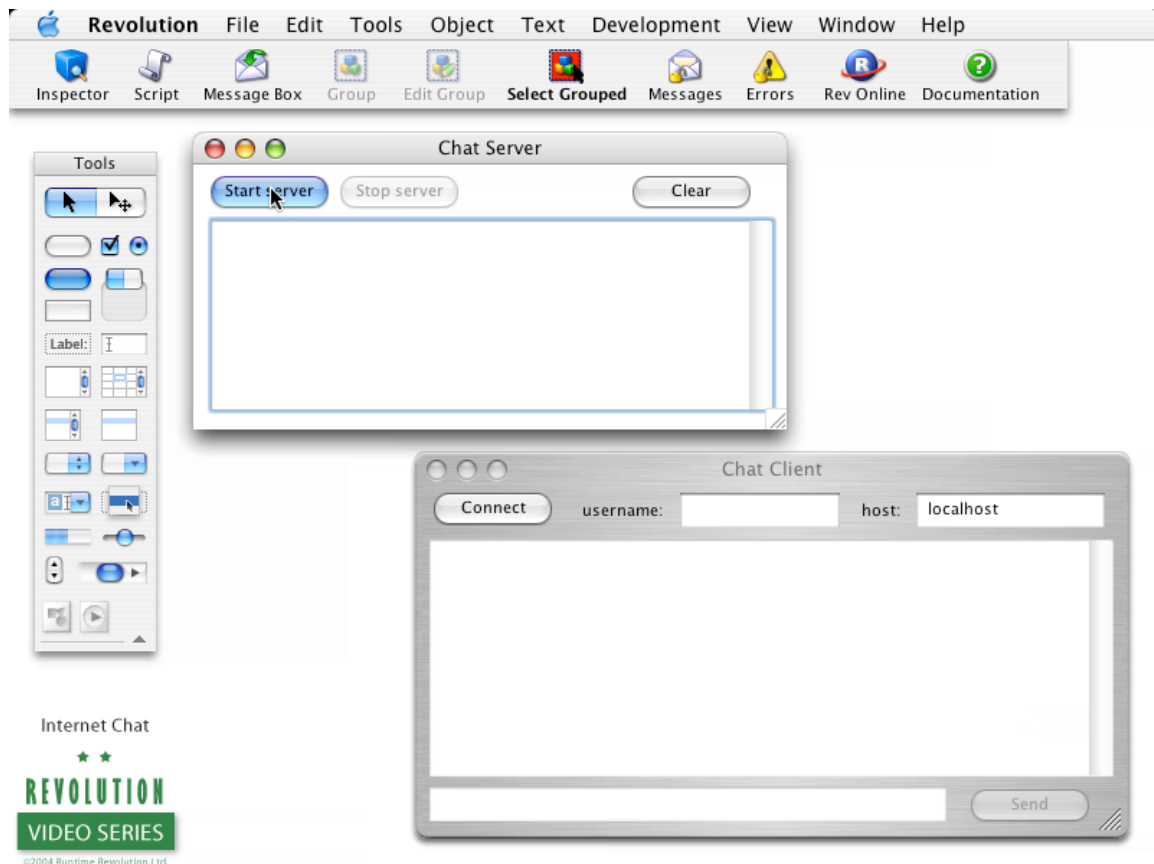
We need to start the chat server by clicking the 'Start Server' button. Now, if we switch back to the chat client you can see we have the options for user name, and host. Enter your name and the host name or address that the chat server is located on. This can be in the form of either an IP address or a host name. As we are trying the chat server out on the same computer we will leave the default: 'localhost'.

Next, we need to connect to the chat server by clicking the connect button. Let's try typing a message and pressing return: you can see that the message has appeared both in the client and in the server:
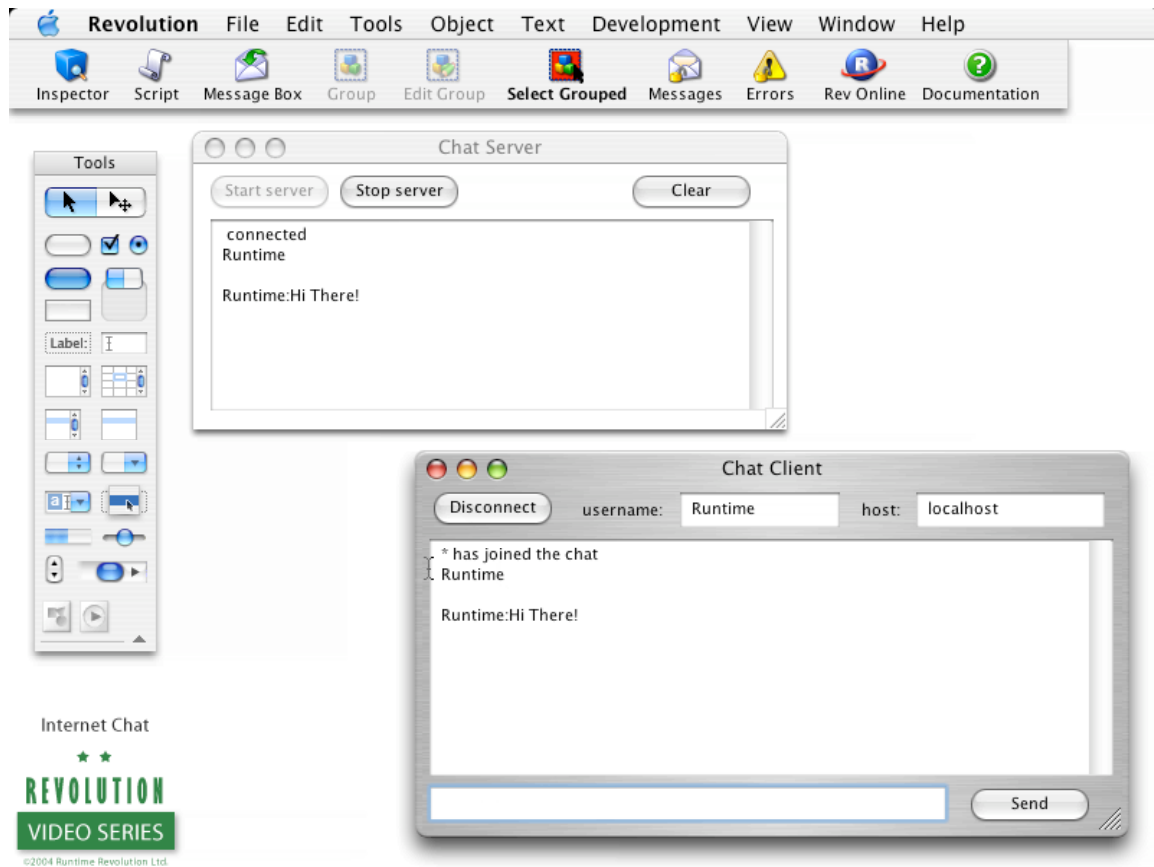

If you have access to a network where you can install the chat server, you can place the client and server applications on different machines and inputting the IP address of the machine with the server into each client.

To see the scripts that make these stacks work we first open the Application Browser. If we select the chat server card you can see that the scripts are contained in three buttons:
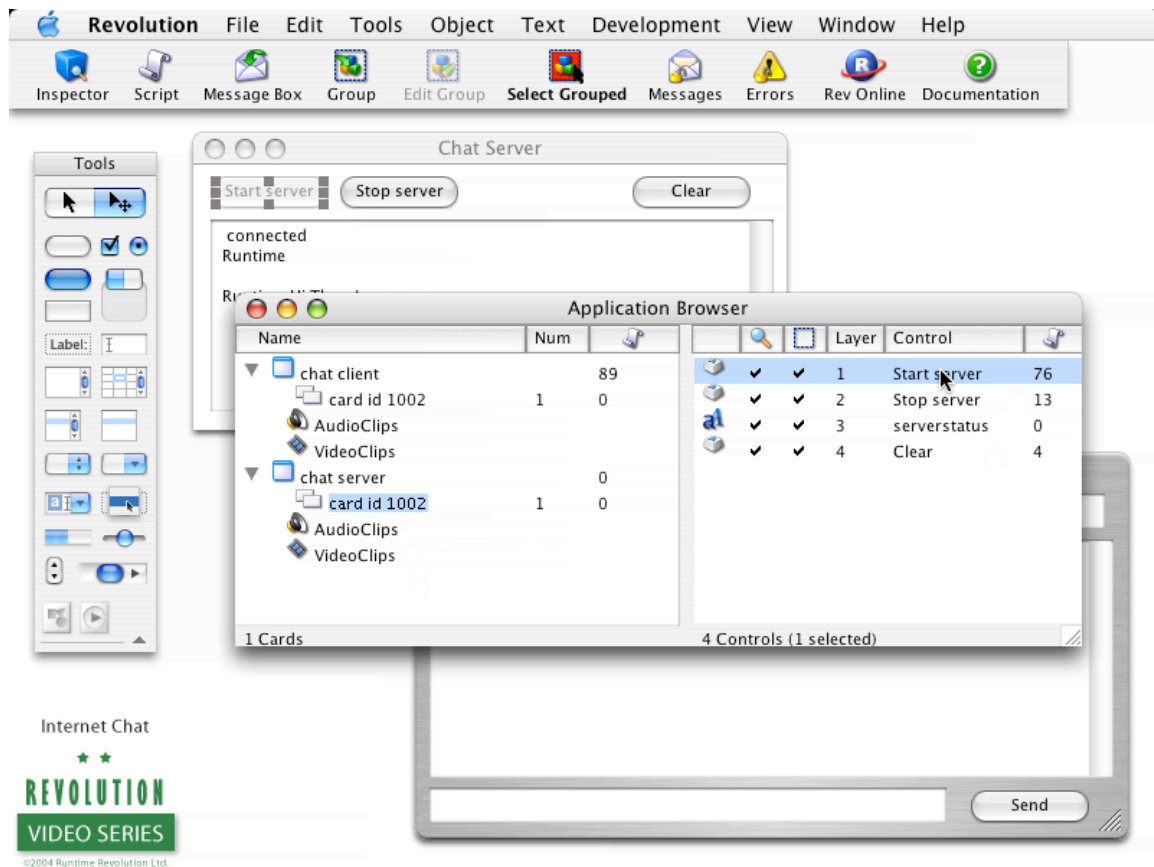
Most of the scripts in the chat client are contained in the stack script and some are contained in the individual objects on the card too. Because a lot of the functionality of this application is contained in the stack script, with scripts in the objects on the card calling those handlers, its important to copy the handlers contained in the stack if you want to modify and use this functionality in your own application.

Note that as with all the Sample Projects, the majority of the script is made up of comments that explain what each line does, these lines are marked by double dashes at the start and colored purple.
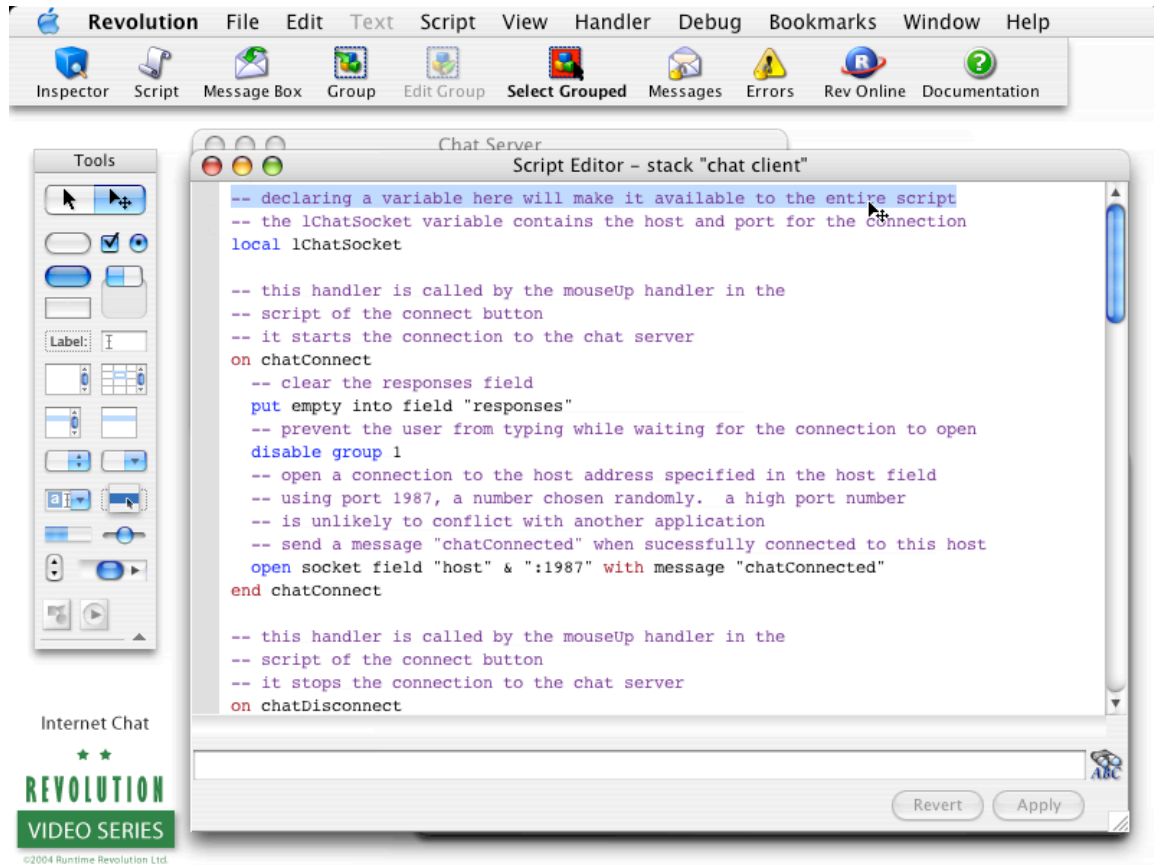
Finally, it is worth examining the individual objects to see the properties that have been set on them. Some of the fields have the tab on return property, and some of the objects have Geometry set to specify how they should resize when the stack is resized.