

# LIMPT – workshop guide

This guide will help you get to know the LIMPT client – this is the piece of software that communicates between a performer (or other element of a performance) and the system.

The client collects and filters activity and tells the system when something significant has happened (this is known as an event). It also presents messages from the system to the performer, these are usually cues of one sort or another; a spoken command, a piece of text or an image.

#### The LIMPT client - overview

There are three parts of the client programme;

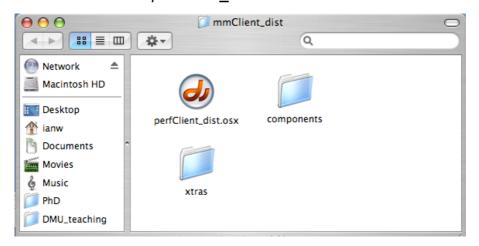
- Client Configuration where you set up the input and output options.
- Prepare where you add or edit the rules that will shape a performance.
- Perform where the client collects various types of input from you
  while you are performing and passes on cues to you from the system.

You move between these 3 sections using the buttons at the top-left-hand side: -

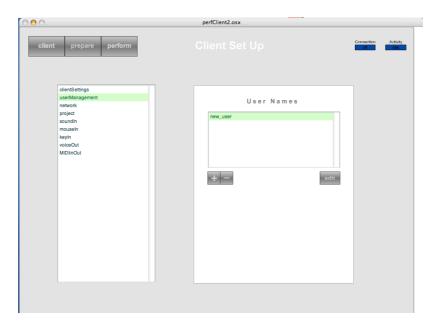


### Getting started - configuring the client

1. Double click the *perfClient\_dist.osx* icon



- 2. If you are using some input plug-ins (sound or MIDI), you may be warned that you using trial version just click *OK*.
- 3. After the client has started up, if this is your first use, you'll see the configuration interface: -



4. Make sure *userManagement* is selected in the left-hand column, and then click on the + button at the bottom of the list of users on the right.



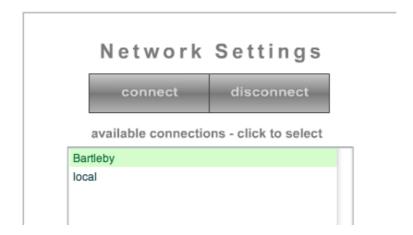
- 5. Enter your name (do not worry about a password) and click the *store* button. You will now be remembered by the client.
- 6. You may want to configure input or output capabilities we will turn on the speech option as an example. Click on the *voiceOut* option in the left-hand menu (you can always come back and change any of these options later): -



7. Click on the check-box in the options panel to turn speech output on. To check the voice, click on the blue button. If you don't hear anything, check that the check box has a blue cross in it and that your computer's audio is turned up.



8. When you are ready, select the *network* item in the configuration panel:



9. This panel is where you select the server which will store and run your project. The chosen server will be highlighted in green. In most cases, you will choose *Bartleby* (this is the name of the LIMPT server at De Montfort university).

- 10. Click the connect button you should see the connection indicator in the top-right hand corner turn green and the activity indicator flash red briefly. If the connection indicator does not turn green, check your computer's Internet connection.
- 11. A LIMPT server can store (and run) many performance projects, you can now choose which one you will work with; select the *project* item in the left-hand list.
- 12. You'll see a list of projects stored on the server you are connected to: -



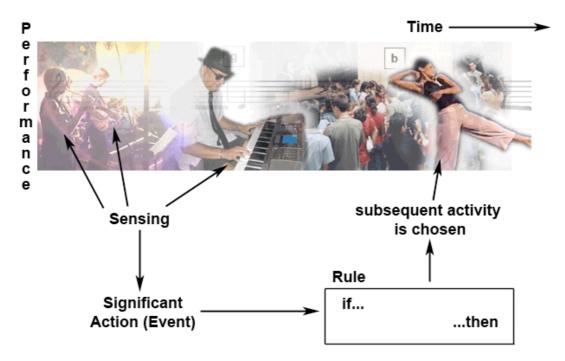
- 13. The project you are working with is highlighted in green. To start with, select *introduction\_to\_LIMPT*; you will see it highlighted. The client will remember which project you are working on, but you can change it at any time by returning to this configuration panel. *Introduction to LIMPT* is a special project which will help you learn about the LIMPT system and how to use it.
- 14. You have now finished the initial client set-up and are now ready to work with the LIMPT system. To start with, you will explore how the client works in a performance. Select the *Perform* button in the top left-hand corner: -
- 15. Press the '1' key on your computer keyboard.

You can set the client (see the clientSettings configuration panel) to automatically use your last settings, connect and then go straight to the *Perform* screen (this is the normal way to use it as a performer).

You will not have to go through the configuration process unless you want to change (e.g. work on another project). To return to the client configuration section, choose the *Client* button in the top, left-hand corner.

# The LIMPT system and performance

The LIMPT system is based on a very simple model of how a live performance unfolds: -



The passing of cues to performers in response to significant actions (events) is governed by *rules*. A Rule can simply be a way of saying that, if a certain performer does something, then send a cue to another performer.

So, a simple rule might be:

(if) ian plays a C# 3 (then) say "start section three" to ruth

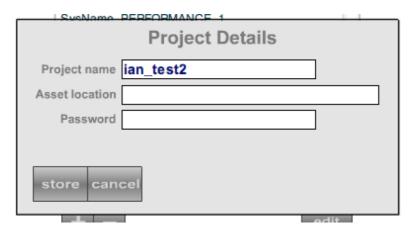
A LIMPT project stores all the rules that govern the generation of cues to performers (or other performance elements such as computers, lighting desks, projection systems etc) for a performance.

These rules are written in a fairly simple language called eMerge.

#### **Creating a LIMPT project**

- 1. Click on the *Client* button in the top left-hand corner.
- 2. Select the *network* entry in the list on the left and check you are connected to *Bartleby* (the name of the server you are connected to is highlighted in green).
- 3. Select the *project* entry in the list on the left. You will now make a new project.

4. Click on the + button at the bottom of the project list, the new project panel appears:-

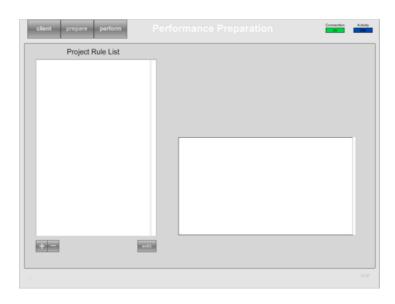


- 5. Give your new project a name that includes your user name (so you'll remember which it is) and then press the *Store* button. You should see your project name added to the list of projects. You do not need to put anything in the other text fields.
- 6. Click on your new project name to select it (it will be highlighted in green). This makes it the project you are now working on:-

available projects - click to select

```
SysName_PERFORMANCE_1
Introduction_to_LIMPT
ian_Test1
ian_test2
```

7. Click on the *Prepare* button in the top left-hand corner, the rule entry and editing screen will show (it will be blank as you have just made a new project):



# **Controlling performances**

In the LIMPT system, the flow of a performance is shaped through a set of rules. These rules are written using the eMerge live performance scripting language. They have two parts; one (or more) *events* to look out for and one (or more) *commands* – things to do when the event(s) happens.

There is a detailed language reference which lists every word and gives examples of how to use them and explains the language's grammar – for now, we will just use a few features to get started.

In rules, performers are referred to by name (e.g. ian, jane etc.). Performers can give signals (e.g. a "1" key signal, a mouse signal) or they can do things (e.g. plays "F# 2", types "start the show"). In the LIMPT system a 'performer' may be a person, another computer programme or piece of equipment.

Cues can be given to performers in a number of ways; for now we will limit ourselves to showing things (e.g. show "Gradually speed up" to ian, show "score\_page3.jpg" to jane) and saying things (e.g. say "start copying the performer to your right" to eric).

#### Adding a Rule to a Project

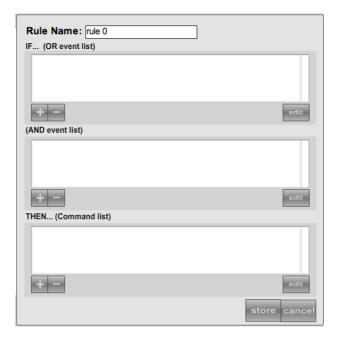
A project may contain many rules, but they are all entered in the same way in the Prepare screen.

For this example, we will write rules that provide cues when a button is pressed on the computer keyboard – but this is only so that you can test your rules easily; the events that trigger rules could also be MIDI signals, sound levels, elapsed time, distance or signals provided by sensors such as floor pads. The basic principle is, if you can work out a way to sense a quality, you will probably be able to use it as an event in the LIMPT system.

1. To add a rule, you click on the + button at the bottom of the rule-list.



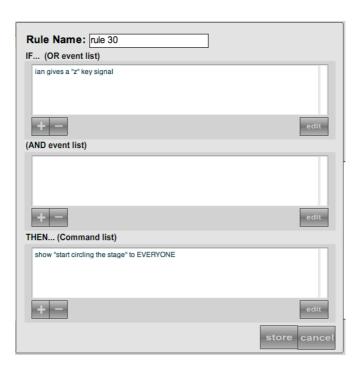
2. The rule edit panel will open:



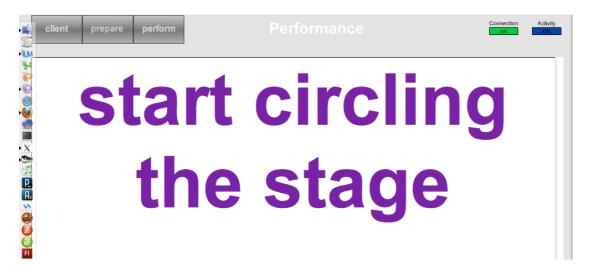
3. Click on the + button underneath the list of *IF...* events. Type your user name followed by *gives a "z" key signal* – here is my version: -



- 4. Click on the *store* button, you will see your text appear in the list of IF... events.
- 5. Click on the + button underneath the *THEN…* list, the entry window opens again
- 6. Type show "start circling the stage" to EVERYONE and then click the Store button. Your rule entry window should look something like this: -



- 7. Click on the store button; your rule is sent to the LIMPT server and stored there. You should see your rule appear in the list of rules and a message from the server saying *INFO Rule Stored*.
- 8. You can now test your rule. Click on the *Perform* button in the top left-hand corner; you will see the perform screen. Press the 'z' key you should get a message from the server telling you to circle the stage!



#### **Editing a Rule**

Often you will want to change rules; the process is very similar to entering a rule. We will change the event that triggers our rule and make it give a spoken as well as visual cue to performers.

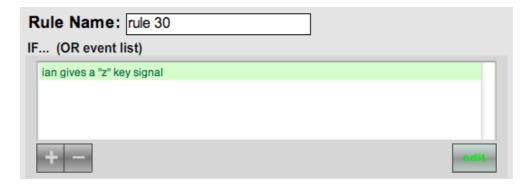
- 1. Click on the *Prepare* button in the top left-hand corner. The rule(s) will be reloaded from the server.
- 2. Select the rule you wish to edit in the rule list, it will be highlighted in green:-



3. Click on the *edit* button at the bottom of the list:-



4. The rule entry panel opens with the rule you wish to edit. We will first change the event the rule is triggered by. Select the event by clicking on it, it will be highlighted in green:-



- 5. Click on the *edit* button just underneath the event listing (see above).
- 6. The text entry panel will open, edit the text so that it is your user name followed by *gives a "x" key signal*. Click the *Store* button. You will see the change in the Rule panel.
- 7. We will now add another item to the commands. Click the + button underneath the *THEN…* listing (the third list in the rule panel).

8. In the text entry box, type say "move on to the next section" to EVERYONE. Click the store button. You should now have 2 items in the command list; one give a visual cue, the other a spoken cue: -

# THEN... (Command list) show "start circling the stage" to EVERYONE say "move on to the next section" to EVERYONE

- 9. Click on the *Store* button at the bottom of the rule panel. You should return to the rule list and get a message from the server confirming the update: info Rule updates stored.
- 10. Click on the *Perform* button in the top left-hand corner.
- 11. Press the 'x' key and you should both see and hear a cue.