

RTMaps first try

Magical tour...

Summary:

- » Will you find the bird ?
- » Select a DataBase, connect Components and play back Data.

RTMaps Software:

RTMaps is a Real Time data acquisition and processing Software. Many components and functionalities allow to easily develop any type of Real Time Multisensor Application (Robotics, Automatism, Automotive, Ergonomics, Sports...)

Duration: 5 minutes



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Objectives:

- » Discover the RTMaps Studio
- » Handle the Graphical Interface
- » Connect some components
- » Play back Video and Audio Data

Keywords:

- » RTMaps Studio
- » Component
- » Input/Output
- » Database

Prerequisite:

- » This tutorial does not require any particular knowledge.

Used components:

- » Player
- » Image Viewer
- » Sound Renderer

Install ^{RT}Maps

The Software

An ^{RT}Maps Demo Version (30 days) is available on the Intempora web site. You can download it or ask us for a CD. Don't hesitate to contact us for more information. Launch the standard setup procedure and follow the steps. By default, ^{RT}Maps is installed in the *Program Files\Intempora\RTMaps 3.2* folder.

NB : The downloadable version is for Windows. Note that ^{RT}Maps is also available under Linux.

Once the installation has successfully completed, you can just launch the ^{RT}Maps Studio, either via the desktop icon, or via the Start Menu of Windows (All programs -> Intempora -> RTMaps 3.2 -> RTMaps Studio).



Diagram & DataBase

Select a DataBase

From the Components list window on the left, select the Player component in section *Players/Recorders*, then drag and drop it onto the current empty diagram. Right click on the newly created component and choose *Properties* (or just double-click on the component). In the *Player's* properties form, specify the database (STDB) to open in the *File* field. For this, browse for the «.rec» file located in the Magical Tour database (available for download on the Intempora tutorials webpage).



Input & output

The created green spots that have just been created on the Player represent data outputs. Four data flows are available in this database. Three of them are videos, the fourth one is an audio stream. (Check this by dragging the mouse over them and reading the tooltips). Save your diagram. The associated extension is *rtf*.

The STDB:

When recorded, Information is stored in *Synchronize Timestamped DataBases*. When played back, the sequence is reproduced identically thanks to the data timestamps. An STDB is made of several files. The main file (the synchronisation file) has a «.rec» extension.

Component:

They constitute the functional blocks that will be used to build any ^{RT}Maps application. They represent sensors, algorithms, actuators... They are symbolized by «blue boxes» and their interconnections by «wires».

The Player Component:

The Player can play back ^{RT}Maps STDB. Each flow recorded and available in the Data Base is represented by a green square which indicate the type of information by dragging the mouse over.

Data Display

Play Video Data


To display a video flow, use an *Image viewer* component. You'll find it in the *Viewers* library's Section. Place three *image viewers* on the diagram and connect each image output of the *Player* to an *Image viewer* input.

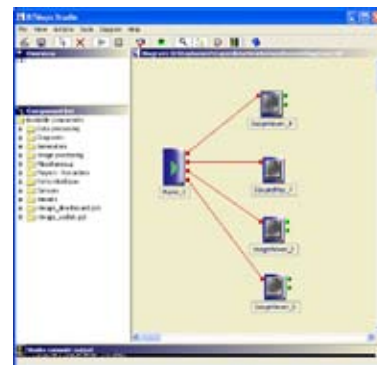
Play Audio Data

In order to handle the audio data (and output it on the speakers), you will need a new set of components within an RTMaps package.

Package & Library:

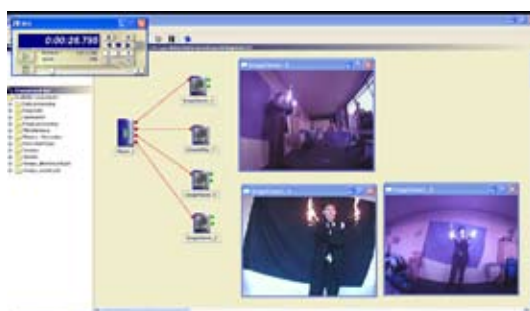
The RTMaps standard components library is made of the whole set of provided packages. The extension corresponding to a package file is «.pck».

In the RTMaps Studio toolbar, click on the "Register package" button (), or via the menu "Actions| Register/Unregister package", then "Add...". Browse for the package file called `rmaps_audio.pck` located in `.../Intempora/RTMaps 3.2/packages`. The new package is now available in the components list. Place a *Sound player* component on the diagram and connect it to the Audio Output of the *Player*.



Run Diagram

Run the diagram by pressing the *Run* button, either from the RTMaps Studio toolbar or at the left of the *VCR*, then re-arrange the positions of the display windows created by each *Image Viewer* component as you like. Use the *VCR* window in order to control the time flow. Your diagram could look like this:



The VCR:

Use the different VCR functionalities to manipulate play back speed, direction and position.

This is the first step to use the RTMaps Studio.

Connect algorithms in the next tutorial !

Contact us or leave a question in the forum.

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