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## jTLC

Java Thin Layer Chromatography

User Manual

# Índice general

1	Int	roduction	)	
	1.1	Previous Requirements	2	
	1.2		3	
	1.3	Application Settings	1	
2	Projects 5			
	2.1	Load existent project	3	
	2.2	Explore projects	7	
	2.3	Edit Project	)	
	2.4	Save Project	)	
3	Samples Analysis 10			
	3.1	Image Load	)	
	3.2	Image Crop	L	
	3.3	Image Rotation	2	
	3.4	Samples Selection	3	
	3.5	Samples Special Points	1	
	3.6	Samples Peaks Selection	5	
	3.7	Samples Comparation	3	
	3.8	Analysis Results	7	
	3.9	Analysis Reports	3	
4	Dat	a Export 19	)	
	4.1	Export images	)	
	4.2	Export reports	)	
	4.3	Export data	)	
		4.3.1 Export mean	)	
		4.3.2 Export plain data	)	

### Introduction

#### 1.1. Previous Requirements

the minimum requirements to run properly the application are:

- $\rightarrow$  Operative System: Mac OS X, Windows (XP or newer), Linux, Solaris. 32 or 64 bits architectures.
- $\rightarrow$  Software: Java 8 (mandatory requirement).
- $\rightarrow$  CPU: AMD or Intel > 1Ghz.
- $\rightarrow$  Memory: At least 512Mb availables.
- $\rightarrow$  Graphics Card: AMD/ATI Radeon 9500, NVIDIA GeForce 5 FX, Intel GMA 4500, or better.
- $\rightarrow$  Screen: minimum resolution 1024x768

#### 1.2. Application Run

To run the application it's necessary have installed at least the version 8 of the Java Virtual Machine (http://www.java.com/en/download/). According to the Operative System installed, can run the application directly from the file explorer or through the system console writing: java -jar jtlc.jar over the application folder. When the application start a new file (jtlc.settings.props) is created to store the current settings. In picture 1.1 is detailed the application main window.

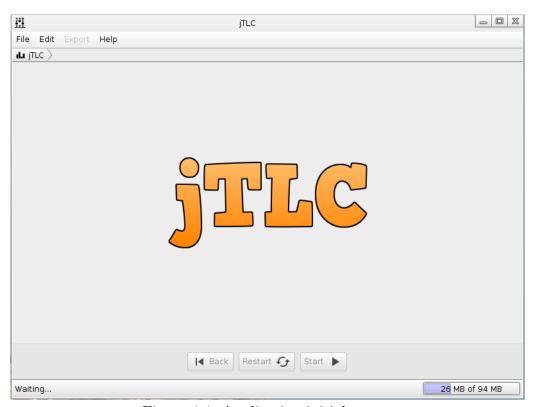


Figura 1.1: Application initial screen.

#### 1.3. Application Settings

The application settings allows to the user change the system language, projects workspace and enable or disable animations (like screen transition between each analysis screen). To access the settings screen go to  $Edit \rightarrow Change\ settings$  on the main menu bar. In the settings screen use  $Directory\ Selector$  to change current workspace, the language select to change the application language, move the animations switch to enable or disable animations. To save current settings click on the button Accept or press Enter key from your keyboard, to discard the current settings click on the button Cancel or press Esc key.

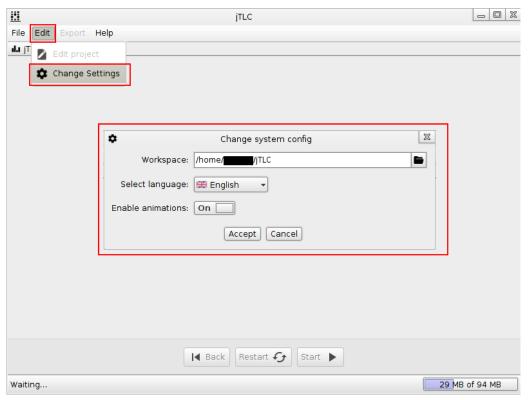


Figura 1.2: Application settings.

# Projects

### Start new project

To start new project...

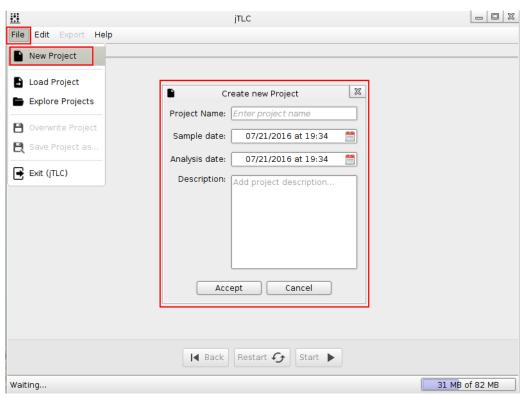


Figura 2.1: New project menu.

### 2.1. Load existent project

To load a previous project...

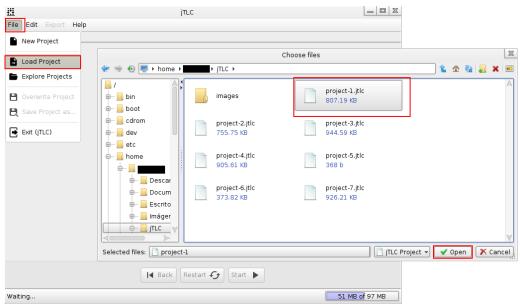


Figura 2.2: New project menu.

### 2.2. Explore projects

To explore old projects...

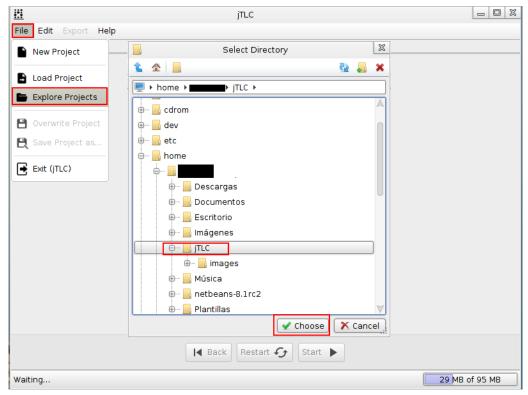


Figura 2.3: Explore projects.

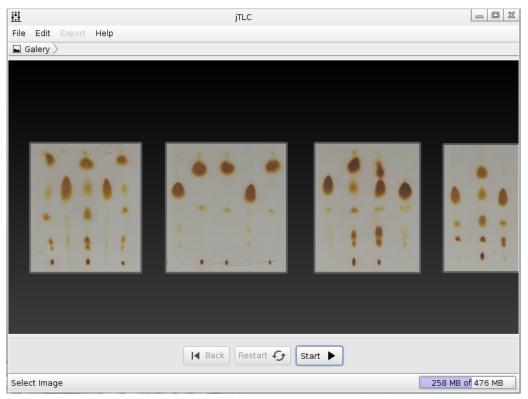


Figura 2.4: Projects gallery.

### 2.3. Edit Project

To edit a project...

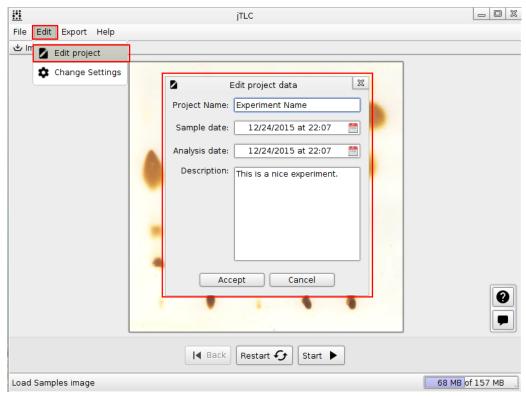


Figura 2.5: Edit project data.

### 2.4. Save Project

To save current project...

# Samples Analysis

### 3.1. Image Load



Figura 3.1: Load experiment image.

### 3.2. Image Crop

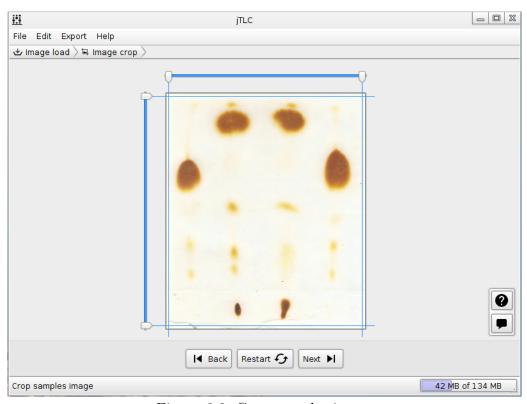


Figura 3.2: Crop samples image.

### 3.3. Image Rotation



Figura 3.3: Rotate and flip samples image.

### 3.4. Samples Selection

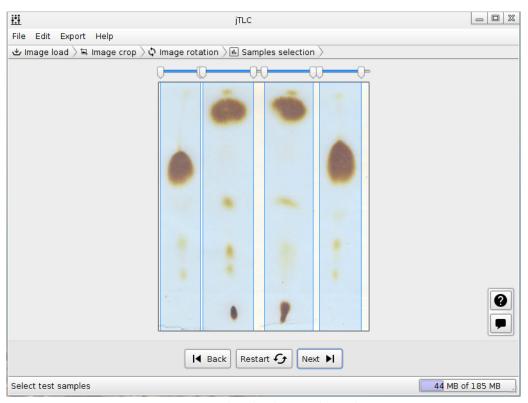


Figura 3.4: Individual samples selection.

### 3.5. Samples Special Points

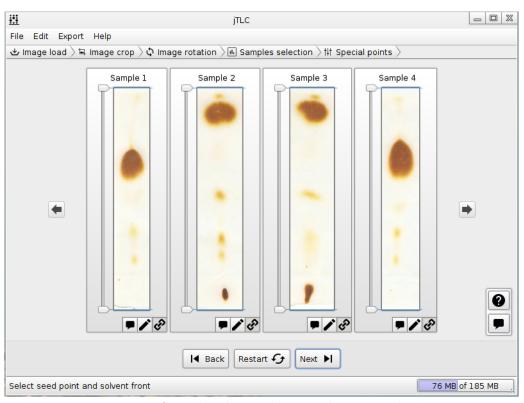


Figura 3.5: Samples data and special points selection.

### 3.6. Samples Peaks Selection

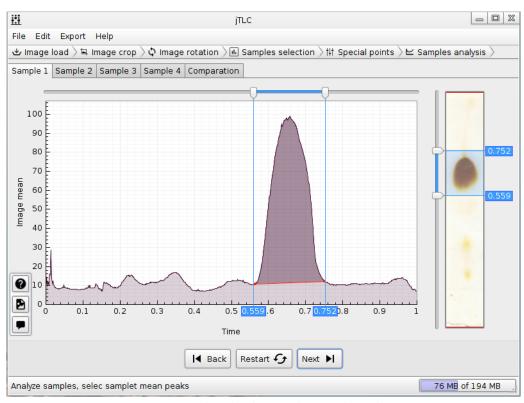


Figura 3.6: Individual samples peaks selection.

### 3.7. Samples Comparation

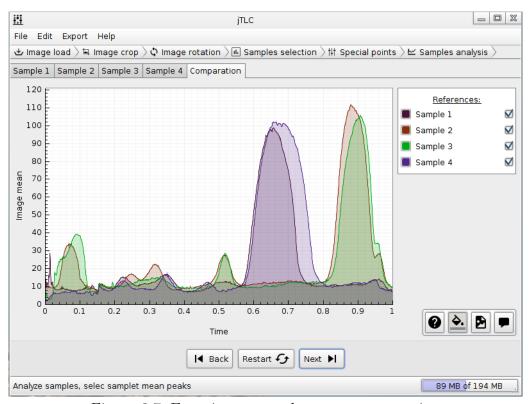


Figura 3.7: Experiment samples mean comparation.

### 3.8. Analysis Results

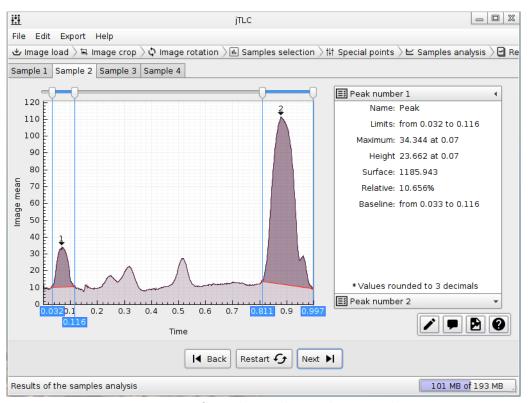


Figura 3.8: Samples peaks analysis results.

### 3.9. Analysis Reports

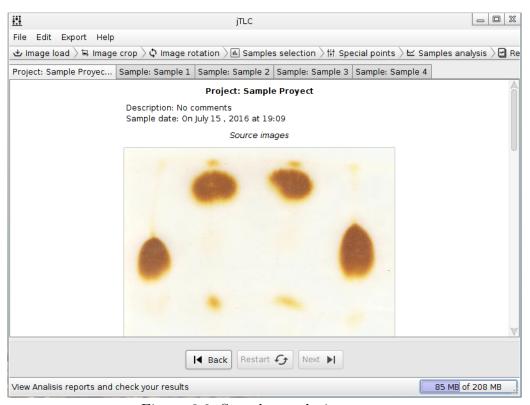


Figura 3.9: Samples analysis reports.

# **Data Export**

#### 4.1. Export images

To export project data...

#### 4.2. Export reports

To export project data...

#### 4.3. Export data

#### 4.3.1. Export mean

To export project data...

#### 4.3.2. Export plain data

To export project data...