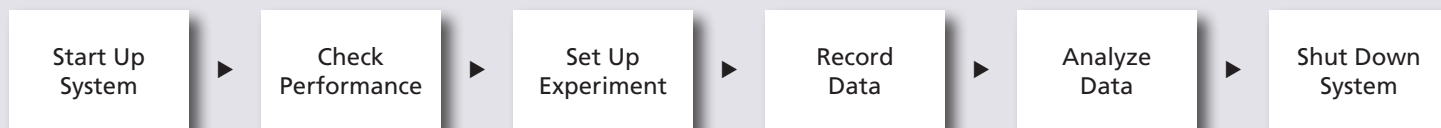


# BD FACSDiva Software Quick Reference Guide for BD FACSCanto Systems with Loader Option

This guide contains instructions for using BD FACSDiva™ software version 6.0 and later with BD FACSCanto and BD FACSCanto II systems equipped with the BD FACS™ Loader option.

## Workflow Overview

The following figure shows the steps for daily workflow using BD FACSDiva software.



Before starting your daily workflow, ensure that your lab's software administrator has performed all the necessary tasks to set up the software for your use. This guide shows a workflow that uses application settings.



## Starting Up the System

- 1 Turn on the cytometer main power.
- 2 Start up the computer, start BD FACSDiva software, and log in.
- 3 Check fluid levels in the Cytometer window.
- 4 Select Cytometer > Fluidics Startup if automatic cleaning is disabled.
- 5 Check the flow cell for air bubbles.
- 6 Check that laser warmup has finished, indicated by a ready status.



## Checking Cytometer Performance

- 1 Select Cytometer > CST.

**Verify the Cytometer Configuration and bead Lot ID.**


**Clear the checkbox.**

**If needed, select a different configuration or bead lot ID.**

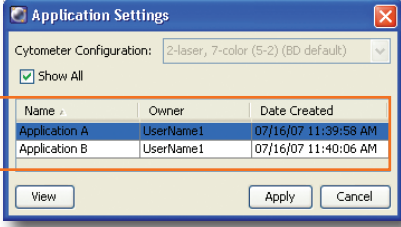
The screenshot shows the 'Cytometer Setup and Tracking' window. The 'System Summary' section shows 'OK' status. The 'Cytometer Configuration' is '2-laser, 6-color (4-2) (BD default)' with 'Lot ID: 68341'. The 'Cytometer Baseline' is dated 'May 23, 2007 12:27 PM'. The 'Cytometer Performance' is dated 'July 13, 2007 02:48 PM'. The 'Cytometer Performance Results' are 'Passed'. The 'Setup Control - Research Use Only' section has a 'Run' button and an 'Abort' button. The 'Load Tube Manually' checkbox is checked. The 'Cytometer Configuration' is '2-laser, 6-color (4-2) (BD default)'. The 'Setup Beads' section shows 'Lot ID: 68341', 'Product: CST Setup Beads', 'Part #: 683991', and 'Expiration Date: 10-10-2007'.

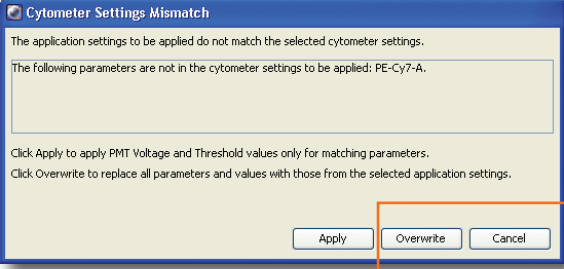
- 2 Place a tube of the BD™ Cytometer Setup and Tracking beads in position 1 on a carousel and run the beads.
- 3 View the Cytometer Performance Report.
- 4 Close the Cytometer Setup and Tracking window.

## Setting Up the Experiment

- 1 Select Edit > User Preferences and verify that selected preferences are appropriate.
- 2 Create an experiment in the Browser.
- 3 Right-click  Cytometer Settings in the Browser. Select Application Settings > Apply.

Select an application setting.

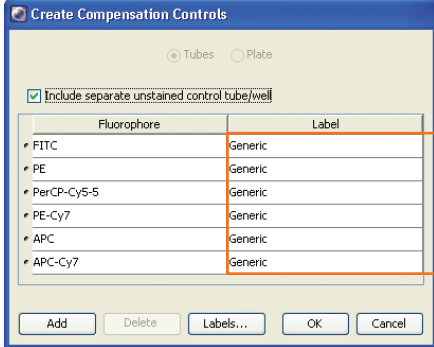




Click Overwrite if necessary.

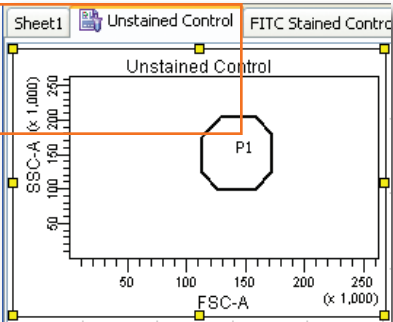
- 4 Select Experiment > Compensation Setup > Create Compensation Controls.

Create label-specific controls as needed.

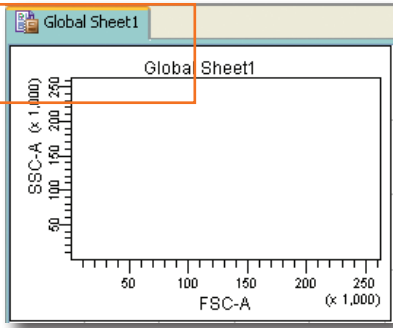


- 5 Copy and paste plots from the Unstained Control normal worksheet to a Global Worksheet.

Select Edit > Select All and then Edit > Copy to copy plots from the normal worksheet.

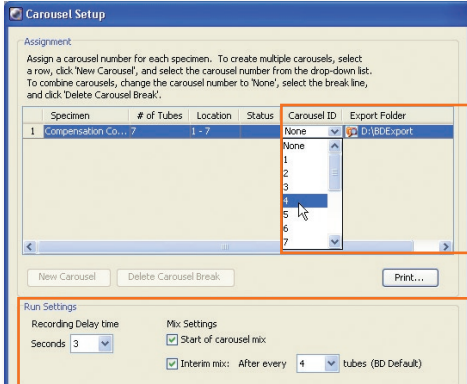


Select Edit > Paste to paste the plots to a global worksheet.

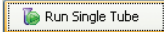


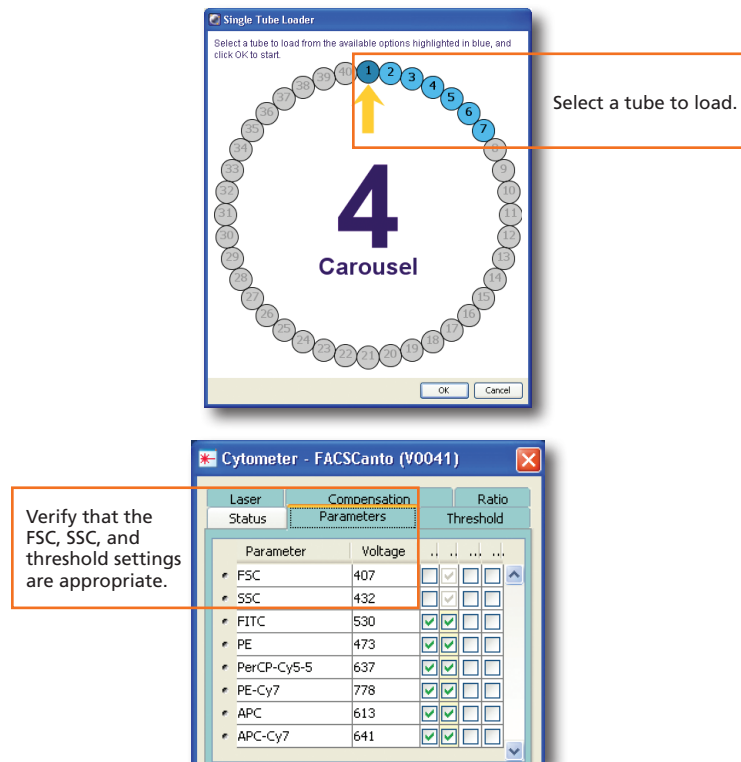
- 6 Specify Carousel Setup settings.

Specify a carousel ID.

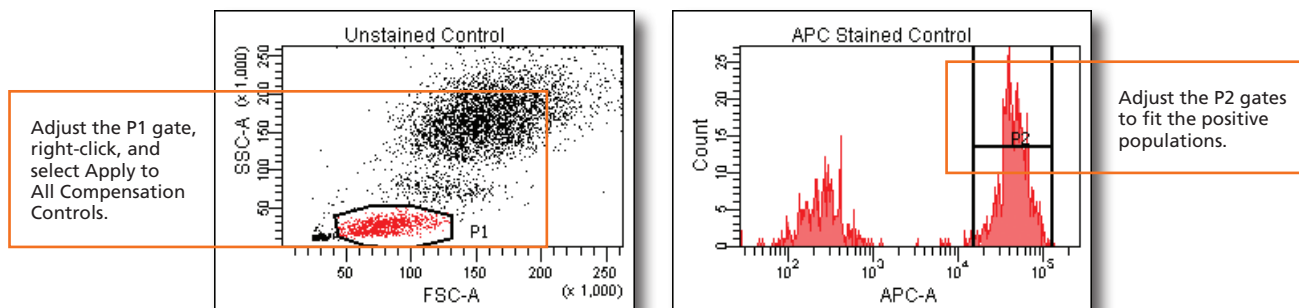


Specify run settings.

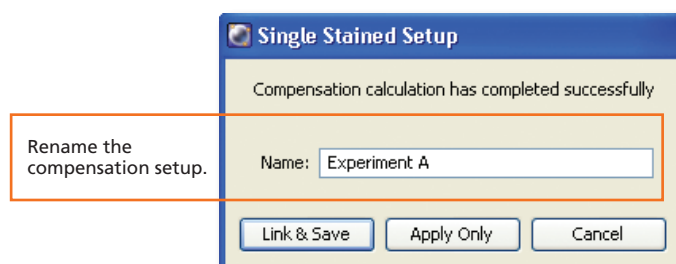
- 7 Verify that the current tube pointer is set to the Unstained Control tube and that a global worksheet is displayed.
- 8 Install compensation control tubes in the carousel in the same order as listed in the Browser and install the carousel on the Loader.
- 9 Verify that the cytometer is configured for automatic loading and Click  .



- 10 Click  and then click  .
- 11 View recorded data in the normal worksheets and gate the positive populations.



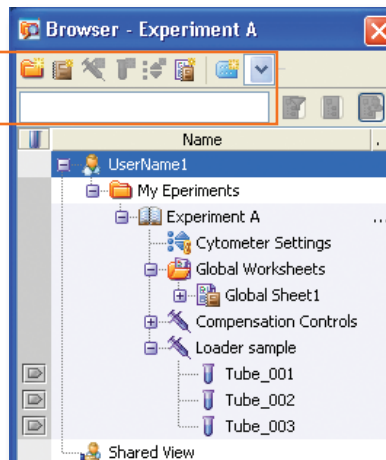
- 12 Select Experiment > Compensation Setup > Calculate Compensation.



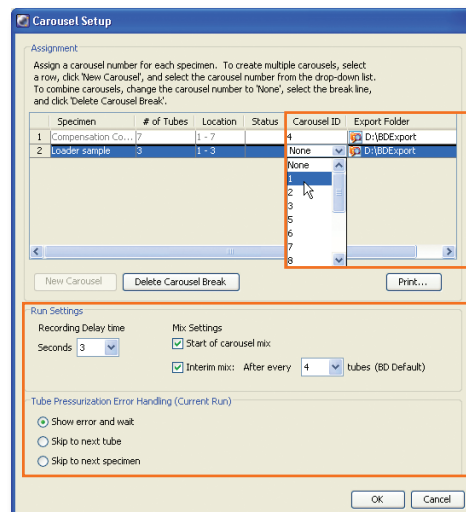
## Recording Specimen Data

- 1 Create Browser elements.

Use the Browser toolbar to add elements.



- 2 Specify Carousel Setup settings.

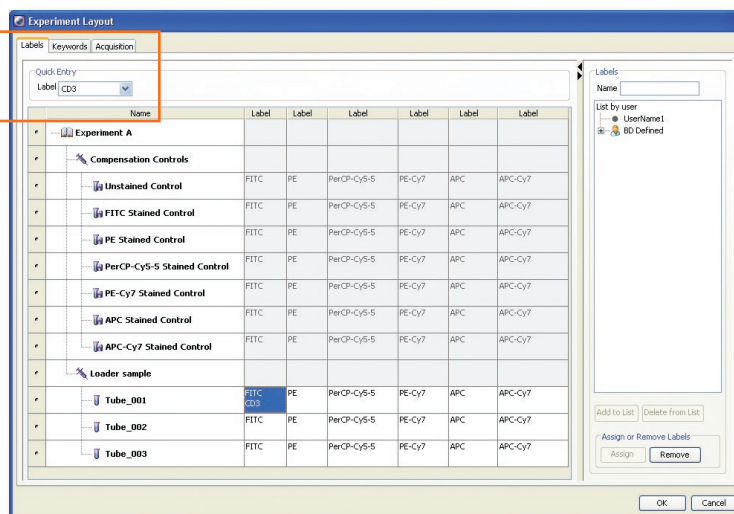


Specify a carousel ID.

Specify run settings and tube pressurization error handling settings.

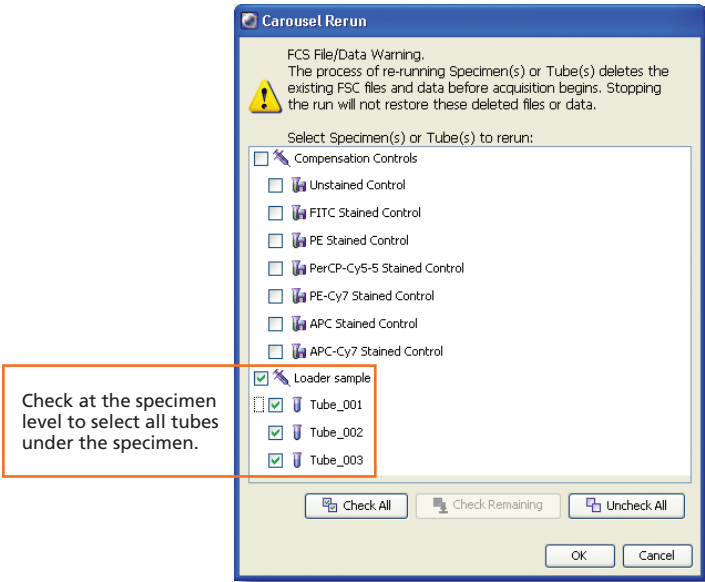
- 3 Make entries in the Experiment Layout.

Specify reagents labels, keywords, and acquisition criteria as needed.



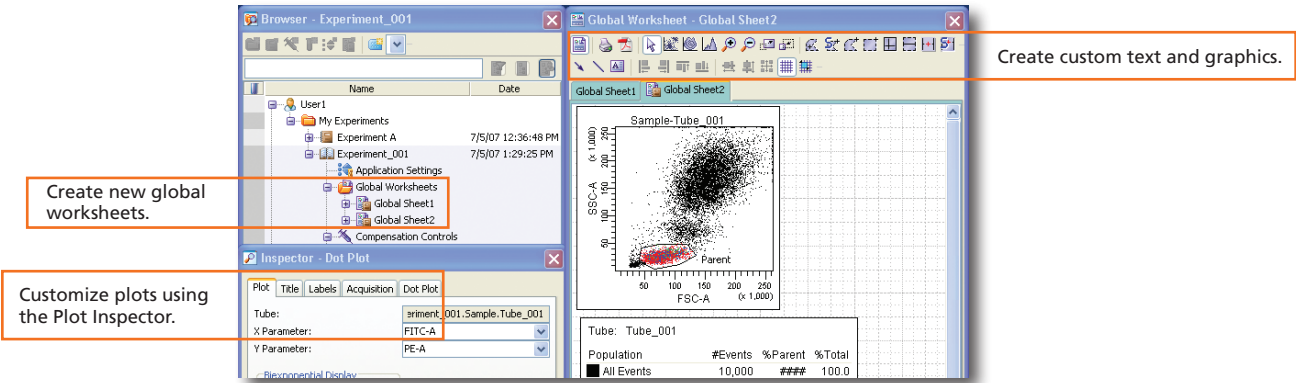
- 4 Install the carousel on the Loader and click .

5 Specify tubes to run.

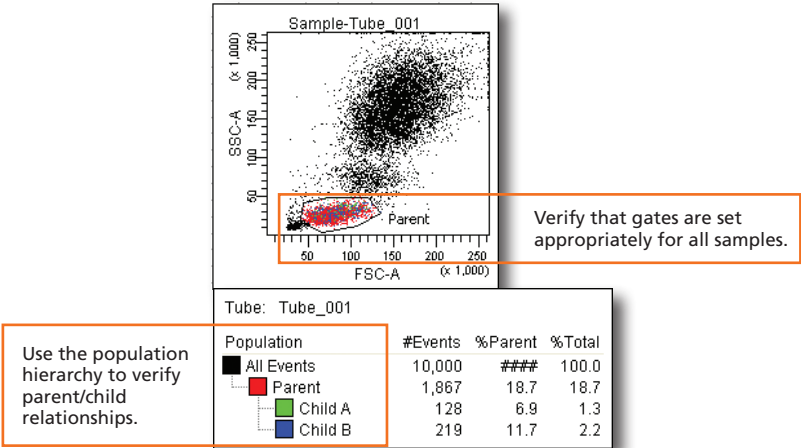


Analyzing Data

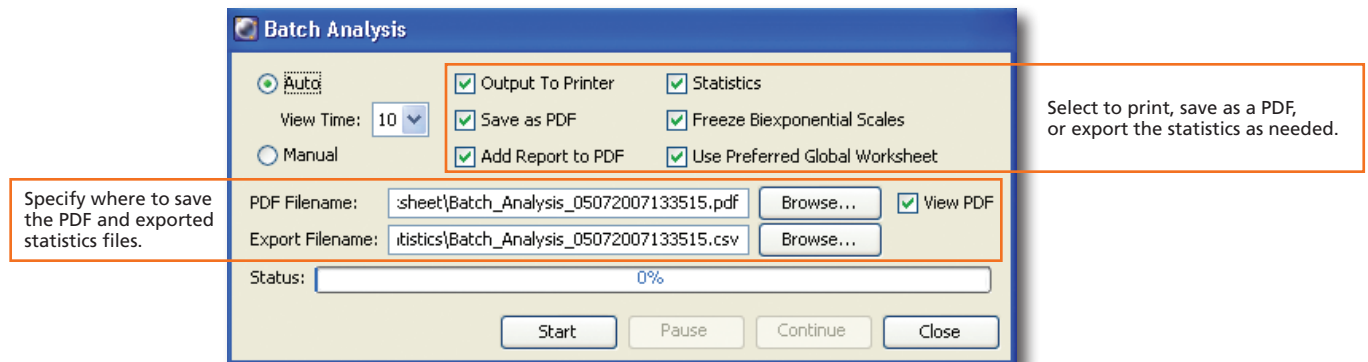
1 Create plots, gates, and statistics needed for analysis.



2 Perform quality control of the analysis.

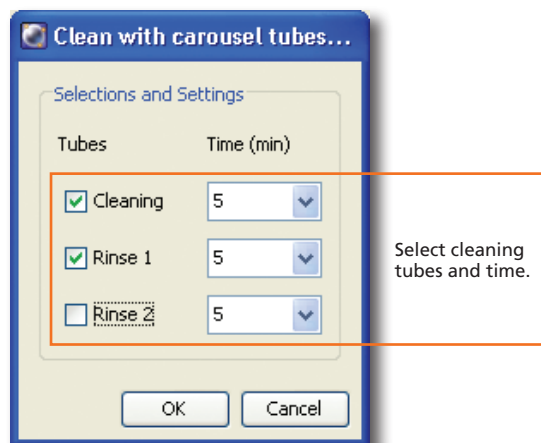


- 3 Do one of the following to print or export the results.
  - Select File > Print to print the active worksheet.
  - Select File > Export to export selected elements.
  - Right-click a specimen or experiment and select Batch Analysis (using a global worksheet).



## Shutting Down the System

- 1 Select Carousel > Clean.



- 2 Install the carousel with the appropriate cleaning tubes and perform the cleaning cycle.
- 3 Perform a fluidics shutdown.
- 4 Empty waste and refill fluids if prompted to do so.
- 5 Turn off the cytometer main power and shut down the computer.