This guide contains instructions for using BD FACSDiva^m software version 8.0 and later. Use the following table to determine when to perform each administrative task.



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Administrative Task	Function	When Performed
Create custom cytometer configurations	Defines a software configuration map that matches your cytometer setup. Custom configurations can be created for the different filter, mirror, and fluorophore combinations or cytometer-specific information used in your lab.	 Initially for any fluorochromes, mirrors, filters, sheath pressures, or sort setups not defined in the base configuration If your lab uses a new fluorochrome, mirror, filter, sheath pressure, or sort setup not previously defined If you change the physical configuration of your cytometer, ie, add a new detector or laser
Download a new bead lot ID	Downloads the bead lot information from the BD Biosciences website to the appropriate folder on your computer.	When you receive a new bead lot that is not in the default bead lot folder
Import the bead lot ID Bead Lots Setup Beads Lot IDs [00000 (RUO)	Brings bead lot information into the software.	InitiallyWhen you receive a new bead lot
Define the cytometer baseline measurements	Defines the baseline performance of your cytometer by measuring linearity, detector efficiency (Qr), optical background (Br), and electronic noise. Also sets the laser delays and PMT voltages to their optimal values for your cytometer.	 Initially for each cytometer configuration When the baseline expires (by default, every 6 months) After major service is performed
Reset the target values Setup Control </td <td>Normalizes the performance check by resetting the target values of the new lot to the same target values as the existing lot.</td> <td>When you receive a new bead lot and still need to use the current lot</td>	Normalizes the performance check by resetting the target values of the new lot to the same target values as the existing lot.	When you receive a new bead lot and still need to use the current lot
Create a new user account	Adds a new user account to the BD FACSDiva software login. Creating user accounts allows users to manage and protect their own data.	InitiallyAs new users are added in your lab
A B C 1 User Name Full Name Application 2 Administrator BD FACSDiva Soft 3 User2 UserName 2 BD FACSDiva Soft 4 User1 User Name1 BD FACSDiva Soft	Tracks users' time for record-keeping or billing purposes.	As necessary

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Cytometer Setup and Tracking Tasks

To start any of the following tasks, log in to BD FACSDiva software as Administrator or as another account with administrator privileges.

Creating a Custom Cytometer Configuration

1 Select Cytometer > View Configurations.



2 Create custom parameters, filters, and mirrors.

der the Parameters	Configurations Parameters Filters and Mirrors		Under the Filters and	Configurations F	Parameters Filters ar	Mirrors	
o, click Add.	Name		Mirrors tab, click Add.	T IICETS.	L tita vala a atk 🔼	Plan Trees	Lunder
	PE-Alexa 594	. L		Pass Type	wavelength	Pass Type	waveler
	PE-Alexa 610			Band Pass	685/35	Long Pass	755
	PE-Alexa 700			Band Pass	675/20	Long Pass	750
	PE-Cy5			Band Pass	670/14	Long Pass	740
	PE-Cy5.5			Long Pass	670	Long Pass	735
	PE-Cy7			Band Pass	660/20	Long Pass	/10
	PE-mCherry			Band Pass	655/8	Long Pass	685
	PerCP			Band Pass	616/23	Long Pass	675
	PerCP-Cy5-5			Band Pass	610/20	Long Pass	670
	PE-Texas Red			Band Pass	605/40	Long Pass	655
	PI			Band Pass	605/12	Long Pass	635
	Qdot			Band Pass	585/42	Long Pass	630
	Qdot 525			Band Pass	585/15	Long Pass	610
	Qdot 565			Band Pass	576/26	Long Pass	600
	Qdot 585			Band Pass	575/26	Long Pass	595
	Qdot 605			Band Pass	575/25	Long Pass	575
	Qdot 655			Band Pass	560/20	Long Pass	556
	Qdot 700			Band Pass	530/30	Long Pass	550
	Qdot 705			Band Pass	525/50	Long Pass	545
	Qdot 800			Band Pass	510/50	Long Pass	505
	Texas Red			Band Pass	488/10	Long Pass	502
	UV1			Band Pass	485/22	Long Pass	475
	UV2			Band Pass	450/50	Long Pass	450
	¥450			Band Pass	450/40		
	¥500			Band Pass	450/20		
	Violet1			Band Pass	440/40		
	Violet2		Soloct a pass type and	Band Pass	405/20		
Enter a new	2		onter the wavelength	🖉 Band Pass			
parameter name		∼	enter the wavelength.		~		
parameter numer	Add Delete	-		Add	Delete	Add	Delete

2

1 Under the Configurations tab, right-click **Base Configurations** and select New Folder.



A Right-click the base configuration icon () and select Copy.

S Right-click the new folder and select Paste.



6 Right-click the new configuration and select Edit Configuration.

	my cor	nfiguration		Parameters:	
	Blue Laser (498m) FSC	Violet Laser (405nm)	Red Laser (633nm)	Alexa Fluor 350 Alexa Fluor 405 Alexa Fluor 430 Alexa Fluor 430 Alexa Fluor 488 Alexa Fluor 488 Alexa Fluor 680 Alexa Fluor 700 APC or APC O APC O	Click and drag a parameter name to a detector.
lse the tabs to display ach array individually.	SSC PECY7 PECY7 PECY7 PE	HIM I I I I I I I I I I I I I I I I I I	Connects	Filter: Mirror: 780/60 7581.P 730/45 7581.P 710/50 7581.P 710/50 7351.P 710/50 7351.P 710/50 7351.P 710/50 7351.P 675/20 6751.P 675/20 6701.P 6701.P 6351.P 650/20 6301.P 655/8 6101.P	Click and drag a filter or mirror to the appropriate sl

Olick or to save the edits.

8 Click Set Configuration to make the new configuration the current configuration.

Downloading a Lot-Specific File

To obtain a lot-specific file for your current lot of CS&T research beads:

- **1** Go to bdbiosciences.com/CSandT.
- Oownload the file to your workstation or appropriate transport medium, and then save the file to C:\Program Files\BD FACSDiva Software\CST\Bead Lot.

Importing Bead Lot Information

Select Tools > Bead Lots.

	Bead Lots	
Use the tabs to display bead lot information or the bead lot values.	Setup Beads - Lot IDs - 24278 (RUO) 00000 (RUO)	Bead Product: CST Setup Beads
		Part #: [94578 Lot ID: [94278 Expraction Date: [02-20-2014
	New Delete	OK Cancel

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2 Click	Import
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- Select the appropriate bead lot file. Click
- 4 Click OK .

Defining a Baseline

Each cytometer configuration your lab uses needs a baseline defined. Minimally, baseline definitions expire and have to be re-run every 6 months.



2 Select Cytometer > CST.

	Cytometer Setup and Tracking Elie Sytometer Tools Setup Reports Performance Trading		1
Verify the Cytometer Configuration and bead Lot ID.	System Summary: Requires Attention Cytometer Configuration Lot ID: 94278	Setup Control 0 Load a tube with beads and cick Run button to start setup. Characterize: Define Baseline w Define Baseline Abort	
	Cytometer Baseline: No Cytometer Baseline is available for current configuration and bead lot. Cytometer Performance: No Cytometer Performance is available for current configuration and bead lot.	V Load Tube Manually Plate Type: 96 Well U Bottom Cytometer Configuration: Configuration	
		Select Configuration Setup Beads Lot ID: 34278 (RUC)	If needed, select a different configuration or bead lot ID.
		Product: CST Setup Beads Part H: 345678 Expiration Date: 02-20-2014	
		Parameter Value Fluidics Running Plate Loader OK	

3 Click Run .

4 Load the tube of CS&T research beads when prompted to do so.

After a brief pause, the Running Cytometer Baseline window appears.



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5 Click View Report to view the Cytometer Baseline Report. Troubleshoot, if necessary.

Resetting Target Values

- **1** Select Cytometer > CST.
- 2 Select Tools > Bead Lots and import the new bead lot.
- Prepare the existing lot and the new lot of CS&T research beads according to the technical data sheet.

	Setup Control 🛛 🕹 🤻	
	Load a tube with beads and click Run button to start setup.	
	Run Abort	Select Reset Target Values.
	Load Tube Manually Plate Type: 96 Well U Bottom	
	Cytometer Configuration: Application Settings Workshop	Verify the cytometer configuration.
Verify the bead lot ID for the old (existing) lot and the new lot.	Setup Beads Old Lot ID: 00000 (RUO) Product: CST Setup Beads Part #: 123456 Expiration Date: 03-28-2013 New Lot ID: 34278 (RUO) Product: CST Setup Beads Part #: 345678 Expiration Date: 02-20-2014	
4 Click Run		

5 Load the tube of the first lot of the CS&T research beads when prompted to do so.

After a brief pause, the Resetting Target Values window appears.



6 Click View Report to view the Cytometer Baseline Report (Reset Target Values). Troubleshoot, if necessary.

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BD FACSDiva Software Tasks

Creating a New User Account

- Log in to the software as Administrator or as another account with administrator privileges.
- 2 Select File > Administration.

	Account Administration	1
	Administrator JoeSnith JoeSnith User Name: UserName1 Password: Confirm:	Enter the new user information in the fields provided.
Click Add.	Access Type Access Privileges Image: Operator Image: Window Extension Administrator Laser Area Scaling Image: Problem of the second	Set appropriate access privileges and type.
	Custom Field Name: Custom Field Default: Disk Usage Export Import Save Cancel	

3 Click Save

Viewing the User Tracking Log

1 Log in to the software as Administrator.



- 2 Select File > User Tracking Log.
- **3** Select File > Exit to close the log.