

181 – Jaspersoft Reporting for LabVantage

Learn how to design a new report or modify an existing example report using Studio® from TIBCO Jaspersoft. LabVantage offers several different options when it comes to creating your report output. This 2-day developer's class includes instruction for how to configure and use the Studio design tool. You will then deploy your report using LabVantage. Additionally, you will learn some of the concepts surrounding the LabVantage version 8 data model.

Prerequisites and Target Audience

Students need to possess a basic understanding of SQL (structured query language) and know basic relational database theory. A working knowledge of LabVantage LIMS is expected. Completion of *122-Administration* is suggested. This is a developer-level course. Students should be comfortable using developer tools and have access to the System Admin menus in LabVantage.

1. **Installing and Configuring Studio:** Getting started with the Jaspersoft Studio designer tool requires some installation steps. This chapter shows you what is required to install and configure Studio for use with a LabVantage database.
2. **Creating Your First Report Using the Wizard:** With Studio, a basic simple report is easy to create using the wizard.
3. **Basic Report Developer Features:** Looking at the Studio developer interface, the features might not seem obvious at first. But before you know it, this will become second-nature.
4. **Datasets, Queries, Parameters and Variables:** Designing a report means you need to anticipate what the user will want to see as output and what kind of input they will give you to use as a filter.
5. **Report Display Types:** What will be the overall layout for your report? Is it a chart or a graph? Will you include summary data along with the details? Maybe include a subreport? How often will columns wrap on one page?
6. **Elements:** Adding lines, rectangles, barcodes and other report elements increases the usability and acceptance of your design.
7. **Charting:** Learn the tricks to adding pie, bar, line and other charts to your report.
8. **Installing a Report in LabVantage:** Now that your report is perfect, you want people to be able to execute your report. With LabVantage's built in Jasper Reports Server, all you have to do now is register the report in the LabVantage application and your users can see the output in their browser!
9. **Running a Report from a Button:** Executing a report from LabVantage can be as simple as clicking a button. Learn how to add a button using the LabVantage Web Page Designer so that the button will call your report.
10. **Reports with Parameters:** Some reports require input from the user. This establishes the criteria for the data on the report such as a date range or a record identifier. Here, you will learn how to configure the report to accept this input, configure LabVantage to prompt the user for this input, and pass the user's response to your prompt from LabVantage to the reports server.
11. **Report Events:** Some reports generate output that is used to make important business decisions. These types of reports contain data that, if changed, could have an impact on further downstream processes. Learn how LabVantage can track the execution of a report to include a possible reprint.
12. **Advanced Crosstab and Subreports:** Report output is often desired in a grid fashion with column headers and row headers resulting in a datapoint being displayed as an intersection. Subreports are another way to establish a query that uses the data from another query as criteria.

181 – Jaspersoft Reporting for LabVantage (continued)

Typical daily agenda

Day One	Day Two
Installing and Configuring Studio	Charting
Using the Wizard	Installing a Report in LabVantage
Developer Interface	Running a Report from a Button
Datasets, Queries, Parameters, and Variables	Reports with Parameters
Display Types	Report Events
Elements	Crosstab and Subreports

The Materials

LabVantage provides a digital training manual for each student. This allows you to always have your manual with you for reference. The full color student manual is organized into chapters each having a table of contents for your reference. The manual provides a copy of each slide used by the instructor during the presentation, along with prepared notes for your reference after the course. There is an entire page for each slide making it easy for you to print these pages and take notes with the lectures. This workbook includes many exercises leading you through examples of how to make the best use of LabVantage.