



Cantata++ Training Course Schedule

This is the Cantata++ Standard training course which looks at using the Cantata++ Test Harness and IDE to develop test scripts, primarily for unit testing 'C' code. The standard training course is delivered over 2 days in a classroom format, using the tool in a supplied Linux Virtual Machine. Please contact Techtrust for availability and prices.

Day 1

- **Welcome** 09:30 IST
- **Unit Testing Theory** 09:40 am
Covers some of the theory of unit testing and the processes you can use to identify test cases.
- **Break** 10:40 am
- **Cantata++ Test Harness** 10:50 am
Introduces the basic directives from the Test Harness and describes how they can be used to write a test script to implement the unit testing theory. Includes: Demo - Writing a Test Script; Exercise 1 - Test Harness Basics.
- **Lunch** 12:30 pm
- **Stubbing External Units** 1:30 pm
This module looks at how to provide simulated versions of external units in order to test software in isolation. Includes: Exercise 2 - Stubbing External Units.
- **Break** 2:30 pm
- **Introduction to the IDE** 2:40 pm
Introduces the Cantata++ IDE which is used to help test script developers write test scripts. Includes: Demo - Cantata++ IDE views; Exercise 3 - Introduction to the IDE; Exercise 4 - Further IDE exercise; Exercise 5 - Negative Testing.
- **Conclude** 4:30 pm

Day 2

- **Wrapping Function Calls** 09:30 IST
This module looks at the Wrapping mechanism used by Cantata++ to allow the test script developer to intercept function calls. Includes Exercise 6 - Wrapping.
- **Break** 10:30 am
- **Coverage Analysis Theory** 10:40 am
Looks at the theory of coverage analysis and how this is used in the test development process.
- **Coverage Analysis in Cantata++** 11:15 am
Introduces the coverage analysis components of Cantata++ and demonstrates how they can be easily added to test scripts. Includes Exercise 7 - Coverage Analysis.
- **Lunch** 12:30 pm
- **Integration Testing** 1:30 pm
Discusses how Cantata++ can be used in higher-level testing such as Integration Testing. Includes Exercise 8 - Integration Testing.
- **Break** 2:40 pm
- **Integration Testing continued** 2:50 pm
Exercise 9 - Table Driven Tests
- **Questions/Recap** 3:45 pm
- **Conclude training course** 4:30 pm

Exercises

- We use a Linux "virtual machine" (VM) to deliver the exercises contained in this course
- This allows us to ensure that the example source code is correctly setup for the day
- Instructions for the exercises are all contained in the Help system within the Cantata++ IDE of the Linux VM.
- We also use cheatsheets (integrated within Cantata++ IDE Help) to guide you through the exercises

Requirements

- Attendees proficient in C.
- Installation of Virtual Machine requires 8GB hard disk space and 1GB RAM
- 1 computer per 2 attendees
- Suitable classroom with data projector
- Catering for attendees and instructor

Availability

- Courses can be delivered for up to 10 attendees.
- Techtrust requires a minimum of 2-3 weeks notice for this training course.