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Sign up

Slurm training

2 days (14 hours)

Presentation

Slurm (Simple Linux Utility for Resource Management) is an open-source software package for scheduling tasks within a computing grid. It is an alternative to IBM's lsf or Oracle's gridengine.

This 2-day training course will introduce you to Slurm software in a highly practical way, using a virtual laboratory. You'll learn how to install, configure and manage this indispensable tool for distributing your tasks simply and freely on a calculation grid.

This course, aimed primarily at administrators, but also at grid users wishing to make the most of the resources available, provides an overview of the possibilities offered by Slurm.

As with all our training courses, this one will introduce you to the latest version (**Slurm 24** at the time of writing).

Objectives

- Take the most practical approach possible to Slurm
- How to install and use Slurm
- Making the most of documentation
- Using Slurm with openmp and openmpi
- Deploy Slurm in production in a demanding environment

Target audience

Systems administrators, architects, developers

Prerequisites

Basic knowledge of a Unix system

Technical requirements

Depending on your hardware, various plugins may be required install Slurm. Find out more on the [dedicated page](#).

Slurm training program

Overview of global principles

- What is a cluster
- Nodes
- Sheet music
- Jobs
- Steps and jobs array

Laboratory set-up

- Areas not covered by the laboratory

User Slurm: the basics

- How can I find out the status of a particular cluster or machine?
- How do I submit my work?

Slurm administrator: the basics

- Configuration files in detail
- Log files

Slurm and High Availability

- Setting up a second master's degree

Account and user management

- Rights management
- Authorization management

- Group management

Reports and statistics Slurm and

parallel computing

- Openmp
- Openmpi

Companies concerned

This course is aimed at both individuals and companies, large or small, wishing to train their teams in a new advanced computer technology, or to acquire specific business knowledge or modern methods.

Positioning on entry to training

Positioning at the start of training complies with Qualiopi quality criteria. As soon as registration is finalized, the learner receives a self-assessment questionnaire which enables us to assess his or her estimated level of proficiency in different types of technology, as well as his or her expectations and personal objectives for the training to come, within the limits imposed by the selected format. This questionnaire also enables us to anticipate any connection or security difficulties within the company (intra-company or virtual classroom) which could be problematic for the follow-up and smooth running of the training session.

Teaching methods

Practical course: 60% Practical, 40% Theory. Training material distributed in digital format to all participants.

Organization

The course alternates theoretical input from the trainer, supported by examples, brainstorming sessions and group work.

Validation

At the end of the session, a multiple-choice questionnaire verifies the correct acquisition of skills.

Sanction

A certificate will be issued to each trainee who completes the course.