

# Course : Regular expressions, mastering RegExp under Unix/Linux

*Practical course - 1d - 07h - Ref. EXQ*

*Price : 870 CHF E.T.*

This highly practical course is deliberately free of conceptual aspects. It presents a rigorous yet comprehensive selection of essential knowledge on the possibilities and use of regular expressions.

## Teaching objectives

At the end of the training, the participant will be able to:

- ✓ RegExp characteristics
- ✓ Create a RegExp
- ✓ Search for simple patterns in log files
- ✓ Extract structured information from a text stream
- ✓ Discover the possibilities of regular expressions (RegExp)

## Intended audience

The course is aimed at anyone who wants to discover or master the essential skills of regular expressions.

## Prerequisites

Basic knowledge of using a Linux or Unix system. Comfortable using the command line.

## Course schedule

### PARTICIPANTS

The course is aimed at anyone who wants to discover or master the essential skills of regular expressions.

### PREREQUISITES

Basic knowledge of using a Linux or Unix system. Comfortable using the command line.

### TRAINER QUALIFICATIONS

The experts leading the training are specialists in the covered subjects. They have been approved by our instructional teams for both their professional knowledge and their teaching ability, for each course they teach. They have at least five to ten years of experience in their field and hold (or have held) decision-making positions in companies.

### ASSESSMENT TERMS

The trainer evaluates each participant's academic progress throughout the training using multiple choice, scenarios, hands-on work and more. Participants also complete a placement test before and after the course to measure the skills they've developed.

## 1 RegExp characters

- Regular expressions (abbreviated to ExpReg). How to access regular expressions.
- RegExp characters: utility and use.
- The different RegExp families: BRE, ERE, PCRE.
- RegExp management tools: POSIX, grep, egrep, grep -P, sed, vi, others.
- Literal characters.
- RegExp metacharacters.
- Wildcards, character lists, character intervals, character negations.
- Metacharacters in lists, pre-programmed sets.

### Hands-on work

Installing tools and basic operations. Simple RegExp interpretation. Searching for simple patterns in log files. Manipulating RegExp metacharacters.

## 2 The positions

- Know how to search for data beginning or ending with the characters ^ and \$.
- Multi-line operation.
- Word boundaries.

### Hands-on work

Interpretation of simple RegExps with positional variants. Create RegExp to extract structured information from a text stream.

## 3 Pattern repeats

- The use of: \*,+,?.
- Quantified repetitions.
- The expression greedy or lazy.
- Interpretation of RegExp with positional variations and different repetitions.
- Grouping: use of () characters, alternatives.
- Interpretation of RegExp with basic and complex groupings.

### Hands-on work

Interpretation of RegExp with positional variants and different repetitions. Create complex RegExp with different repetitions. Creation of RegExp with and without groupings.

## 4 Memories

- Expressions and sub-expressions: usefulness and usage.
- References to expressions.
- Presentation of the benefits of dissertations in real-life research.

### Hands-on work

Examples of uses. Creating and using briefs in practical research.

### TEACHING AIDS AND TECHNICAL RESOURCES

- The main teaching aids and instructional methods used in the training are audiovisual aids, documentation and course material, hands-on application exercises and corrected exercises for practical training courses, case studies and coverage of real cases for training seminars.
- At the end of each course or seminar, ORSYS provides participants with a course evaluation questionnaire that is analysed by our instructional teams.
- A check-in sheet for each half-day of attendance is provided at the end of the training, along with a course completion certificate if the trainee attended the entire session.

### TERMS AND DEADLINES

Registration must be completed 24 hours before the start of the training.

### ACCESSIBILITY FOR PEOPLE WITH DISABILITIES

Do you need special accessibility accommodations? Contact Mrs. Fosse, Disability Manager, at psh-accueil@orsys.fr to review your request and its feasibility.