

Programming in Perl Technologies (3 Day)

COURSE DESCRIPTION

This course teaches both the programming interface and the techniques that can be used to write procedures in Perl (Practical Extraction and Report Language). Perl is now available for all system platforms, and is usually provided by the system's distributor (except Windows).

COURSE PREREQUISITES

Completion of the Fundamentals of Unix (or Linux) course is assumed (if working on a Unix / Linux Perl platform. Usage of NOTEPAD for Windows-based Perl is assumed. A knowledge of awk is useful but not mandatory.

COURSE OBJECTIVES

Each student will be able to use Perl techniques and commands to write scripts to perform various user and administrative tasks.

COURSE TOPICS

Overview of Perl

- Purpose of the language
- History of the development of Perl
- Control capabilities:
 - files
 - processes
 - network
 - obtaining Perl and building / installing
 - obtaining modules from CPAN

Writing Perl Scripts

- Layout of a Perl procedure
- Execution methods
- Types of variables
 - scalars
 - lists (arrays)
 - associative arrays (hashes)
- Perl built-ins
 - globals
- Pragmas
 - usage in Perl scripts
 - documentation
 - implementation

COURSE TOPICS

Operators

- precedence
- arithmetic
- increment/decrement pattern matching
- relational
- conditional
- assignment

Perl Programming Constructs

- Looping statements
- Decision statements

Perl Expressions

- Regular expressions review
- Expressions common to Perl/Unix
- Expressions unique to Perl

Perl File I/O

- Using ARGV value(s)
- Using Filehandles

Interfacing Perl with the Operating System

- System calls
- Process control
- File manipulation
- Adding and using (contributed) Perl modules

Subroutines in Perl procedures

- Using as functions
- Passing arguments (scalars)
- Passing arguments (arrays)
- Introduction to References

Using Perl Extension Functions

- Location of procedures
- Types of extensions
- The require statement
- The use statement