



Perl Fundamentals

Course Length: Four Days

Prerequisites: Experience in a high-level programming language, such as C, C++, or Java is strongly recommended.

Lesson 1: Getting Started

- History of Perl
- Purpose
- Availability
- Basic Concepts
- Hands-on Lab

Lesson 2: Scalar Data

- What is Scalar Data?
- Numbers
- Strings
- Scalar Operators
- Conversion (numbers and strings)
- Scalar Variables
- Operators and Functions
- <STDIN> as a Scalar
- Output with print
- Hands-on Lab

Lesson 3: Arrays and List Data

- What Is a List and an Array?
- Literal Representation
- Array Variables
- Operators and Functions
- Scalar and List Context
- <STDIN> as an Array
- Variable Interpolation of Arrays
- Hands-on Lab

Lesson 4: Control Structures

- Statement Blocks
- if / unless Statements
- while / until Statements
- for Statement
- for each Statement
- Misc. Control Structures
- Hands-on Lab

Lesson 5: Associative Arrays (Hashes)

- What Is an Associative Array?
- Associative Array Variables
- Associative Array Functions
- Associative Array Slices

Hands-on Lab

Lesson 6: Basic I/O

Input From STDIN

Input from the Diamond Operator

Output to STDOUT

Hands-on Lab

Lesson 7: Pattern Matching

Matching and Substitution

The split Function

The join Function

Hands-on Lab

Lesson 8: Regular Expressions

Single Character Patterns

Multipliers (are greedy)

Anchoring

Precedence

Hands-on Lab

Lesson 9: Functions

Defining a User Function

Invoking a User Function

Return Values

Passing Arguments

Private Variables in Functions

Using strict Variables

Hands-on Lab

Lesson 10: Modules

Modules

The require Statement

The use Statement

Creating Your Own Modules

Hands-on Lab

Lesson 11: Filehandles and File Tests

What Is a Filehandle?

Opening and Closing a Filehandle

The die Function

Using Filehandles

File Tests

The stat and lstat Functions

Hands-on Lab

Lesson 12: Directory Access

Changing Directories

Globbering

Directory Handles

Hands-on Lab

Lesson 13: File / Directory Manipulation

Removing a File (rm)

Renaming a File (mv)

Creating Alternate Names for a File: Linking

Making and Removing Directories (mkdir)

Modifying Permissions (chmod)

Modifying Ownership (chown)

Modifying Time-stamps (touch)

Hands-on Lab

CGI and the Web

Anchoring perl to HTML

CGI.pm



Creating a Simple Form
Processing Forms
Hands-on Lab
Tips & Tricks & Gotcha's