

.NET Training: Converting VB Applications to VB .NET (VBNETMIG, 4 jours)

Description

The course Converting VB Applications to VB .NET (.NET Training) covers every aspect of the migration process from a previous version of VB to a .NET v4 application. We begin with an overview of the major functional differences between traditional VB applications and .NET v4 applications. Included in the discussion are all the basic code elements together with a comprehensive exploration of refactoring as an art and a science. The course presents fixes for the major code smells and discusses the essential concepts of class hierarchies and polymorphism. Having mastered the basic tools of migration, our attention shifts to the migration considerations associated with the use of .NET Entity Models, ASP .NET MVC and WCF. The course concludes with a discussion of the major differences in the areas of configuration and deployment.

Tarifs

- Tarification: \$3,750/person
- Rabais de 10% lorsque vous inscrivez 3 personnes.

Plan de cours

.NET Versioning and Capabilities

Exploring the .NET Version History: from v1 to v4
Version to Version Comparison: VB .NET Code Capabilities
Version to Version Comparison: Database Access
Version to Version Comparison: XML
Version to Version Comparison: Web Services
Version to Version Comparison: Web Programming
Version to Version Comparison: Windows Programming
Version to Version Comparison: Security
Version to Version Comparison: Documentation
Version to Version Comparison: Compilation and Deployment

An Object Oriented Programming Refresher

Best Practices for Creating Solutions and Projects
About Managing Namespaces and Assemblies
Setting the Environment for Automatic Documentation
Best Practices for Creating Classes
Ensuring Class Cohesion
About .NET Collection Classes
Using Inheritance in a Meaningful Way
Best Practices for Inheritance
Using Polymorphism in a Meaningful Way
Best Practices for Polymorphism
The Nature and Use of Abstract Classes and Methods
The Nature and Use of Interfaces
The Nature and Use of Generics

The Art of Refactoring

What is Refactoring?
An Introduction to Test Drive Development
The Refactoring Process from A to Z
Introducing Code Smells

- Common Code Smells and How to Fix Them
 - Identifying and Resolving Duplicate Code
 - Identifying and Resolving Large Classes and Functions
 - Identifying and Resolving Primitive Obsession
 - Identifying and Resolving Long Parameter Lists
 - Identifying and Resolving Divergent Change
 - Putting it all Together

Migrating the Procedural Code

- Migrating Variable Declarations
- Migrating Variable Assignment: Making use of += and other similar expressions
- Migrating Function and Procedure Declarations
- A Note on Function Parameters and Return Values
- About Anonymous and Optional Parameters
- Migrating Arrays and Collections
- Migrating Boolean Expressions: AndAlso and OrElse
- Migrating Conditional Expressions
- Migrating Repeating Statements
- Other Migration Considerations

Migrating Classes

- Migrating Class Declarations and Attributes
- Migrating Class Members
- Migrating Class Constructors and Finalizers
- Migrating Class Methods
- Refactoring Notes: Creating, Deleting and Exploding Existing Classes

Migrating Class Hierarchies

- A Look at Inheritance: Migrating Sub-Classes
- About Creating a New Class Hierarchy: When to Choose this Path
- Adding Base Class Methods: When is it Justified?
- A Look at Interfaces: Migrating Interfaces and their Implementations
- About Creating a New Interface: When to Choose this Path
- Implementing a New Interface: How to do it.

Migrating Data Access

- Overview of .NET v4 Data Access Technologies
- Comparing .NET Entity Models to Common ORM Implementations
- Implementing a .NET Entity Model
- Using the .NET Entity Model in your Code
- Migrating Data Access Code to an Entity Model Implementation
- Best Practices and Common Missteps

Migrating Web Applications

- Overview of .NET v4 Web Application Technologies
- About ASP .NET MVC: Technology and Concepts
- Creating a Simple ASP .NET MVC 3 Based Web Application
- Migrating ASP .NET Web Applications to ASP .NET MVC: An Overview
- Migrating the Interface: HTML
- Migrating the Logic: from Code Behind to ASP .NET MVC
- Integrating .NET Entity Model Implementations
- Best Practices and Common Missteps

Migrating Services

- Overview of .NET v4 Web Service Technologies
- About WCF: Technology and Concepts

Creating a Simple WCF Based Service

Migrating Web Services to WCF: An Overview

Migrating the Service Class and its Behaviours

About Channels and Behaviours

Migrating the Web Service Client: Calling the Web Service

Integrating .NET Entity Model Implementations

Best Practices and Common Missteps

Migrating the Configuration

Overview of Configuration Differences

Configuring Applications with web.config

Adding and Working with Configuration Parameters

Working with Encrypted Configuration Sets

Securing the Application

Other Migration Considerations

Preparing for Deployment

A Special Note about Deploying ASP .NET MVC Applications

Performing a Deployment

Verifying the Deployment