



# NOW YOU CAN

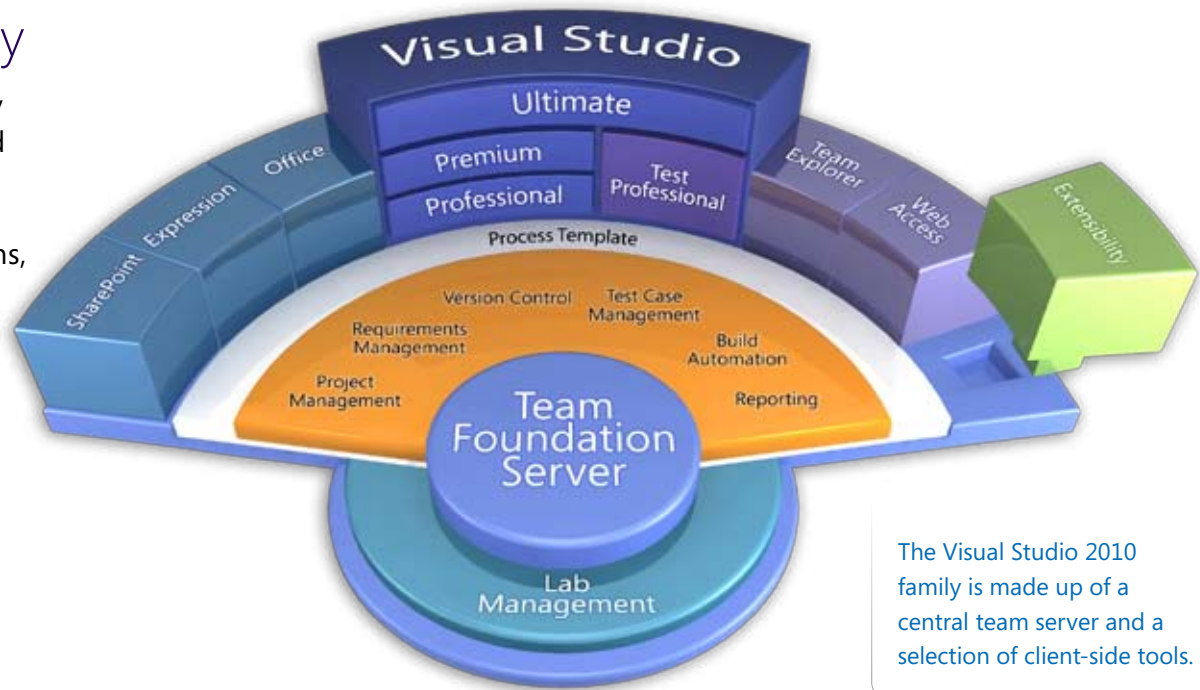
## **Microsoft® Visual Studio® 2010 with MSDN®**

gives your development teams the advanced functionality, superior benefits, and convenient access to the latest tools and resources they need to cost-effectively deliver high-quality, business-driven solutions on the Microsoft platform.



# Visual Studio 2010 Product Family

Microsoft Visual Studio 2010 is an interoperable family of products that help make it easier to create, test, and deliver custom software solutions. Visual Studio 2010 includes products for creating the architecture and code for visual design, for testing code and applications, and for managing the entire project. Visual Studio and the .NET Framework are trusted by businesses and entrepreneurs around the world to create innovative solutions that help companies and organizations meet their needs. Visual Studio 2010 has an extensible architecture, enabling you to select from a wide range of independent, third-party offerings that plug into Visual Studio 2010 products and extend your productivity. Brought together, the Visual Studio 2010 family makes up the Microsoft application life-cycle management (ALM) solution.



## CLIENT PRODUCTS



Microsoft Visual Studio 2010 Professional is an integrated development environment that helps simplify the basic tasks of creating, debugging, and deploying applications.

- **Quickly interpret your code.** The new code editor makes it easy to zoom in on your code, highlight method references, and overlay powerful features.
- **Create rich user experiences.** Use new visual designers for Windows® Presentation Foundation and Microsoft Silverlight® to target Windows 7 and the Web.
- **Customize Visual Studio to fit your style.** Key IDE enhancements, including support for multiple monitors and improved readability, make the familiar environment even more productive.



Microsoft Visual Studio 2010 Premium is an advanced development toolset that simplifies the task of building applications, and contains all the capabilities in Visual Studio 2010 Professional. Powerful coding, debugging, database, and testing tools let individuals and teams deliver scalable, high-quality solutions.

- **Make database development easier.** Apply the same life-cycle tools to your database code that you apply to your application code. This includes offline development of database schema and use of source code control to persist versioned database schema information.
- **Identify test impact from code changes.** Analysis provides a list of recommended tests to run after code changes are made. Developers know immediately which tests are impacted by a given code change, and testers know exactly which tests will verify a given build.
- **Profile application performance.** Measure the performance of your applications and locate performance bottlenecks in CPU utilization, memory consumption, database interactions, JScript/Ajax call patterns, and concurrency synchronization.

## SERVER PRODUCTS



Microsoft Visual Studio Team Foundation Server 2010 is the Microsoft workflow and collaboration solution for ALM. With support for both Microsoft and non-Microsoft tools, Team Foundation Server can be used by all teams to improve how they manage their development projects. Team Foundation Server provides support for build automation, virtualized lab management, version control, reporting, team collaboration, test case management, requirements management, and project management.

- **Streamline data flow across the whole team.** Storing project artifacts in a central repository facilitates collaboration to reduce waste in handoff time between tasks.
- **Reduce risk with real-time visibility.** Powerful reporting and dashboards provide historical trending and real-time visibility into project health.
- **Take advantage of end-to-end traceability.** Define, query, and report on custom relationships between requirements, work items, and test cases, with full traceability to track progress back to business goals and customer requirements.

*Note: Team Foundation Server is now included with select MSDN Subscriptions. See "How to Buy Visual Studio with MSDN" section.*



Microsoft Visual Studio Lab Management 2010 is an integrated development and testing platform that provides end-to-end support for virtual lab management, enabling teams to rapidly provision environments to a known state for test execution and build automation.

- **Reduce waste across the application life cycle.**

Testers take environment snapshots from menus integrated in the testing activity, and developers open and connect to environments directly from within a bug in the Visual Studio IDE, greatly reducing the effort in reproducing the issue.

- **Task-focused user experience.** Optimize user experience for quality assurance professionals, with Lab Center as a separate work area to ensure tight alignment across key quality assurance workflows such as test plan creation, test impact analysis, and overall project health assessment.
- **Built upon Windows Server® with Hyper-V™.** Lab configurations are stored as Hyper-V virtual images. Rather than paying for many underutilized lab machines with each dedicated to a specific testing scenario, server virtualization allows workloads to be consolidated onto a smaller number of more fully utilized machines.



## ADDITIONAL PRODUCT

Microsoft Visual Studio Load Test Virtual User Pack 2010 helps to identify potential issues early in the application life cycle and validate that solutions are ready for customers by simulating real-world application performance, stress, and load conditions.

- **A scalable solution at a lower cost.** Aggregate any number of virtual user packs to arrive at the desired load and scale load testing across your different business projects.
- **Insight into diagnosing performance issues.** Collect performance and utilization data from all application tiers to enable development teams to quickly identify performance bottlenecks.
- **Scenario-based load testing.** Provides you with more control over scenario execution within load tests to enable you to accurately model the load that you are trying to simulate.



Microsoft Visual Studio 2010 Ultimate includes tools for every stage of the life cycle, from design and development through test and deployment. Visual Studio 2010 Ultimate contains all the capabilities in Visual Studio 2010 Professional, Visual Studio 2010 Premium, and Visual Studio Test Professional 2010, increasing your productivity and effectiveness.

- **Eliminate "no repro" with IntelliTrace.** A new debugging tool to help developers easily step through code that was previously executed on the same or another machine in order to identify what happened during the code execution and significantly cut down on time spent reproducing a bug.
- **Understand existing architectures.** The Architecture Explorer and UML sequence diagrams help you explore and understand your existing code assets and their interdependencies.
- **Create, manage, and execute tests.** Microsoft Test Manager 2010 enables you to easily define your testing effort for a specific iteration in your project, run manual tests, and measure your progress.



Microsoft Visual Studio Test Professional 2010\* makes it easier to find and fix bugs. This integrated testing toolset delivers a complete plan-test-track workflow to enable in-context collaboration between you and your developers, greatly increasing your visibility to the overall project.

- **Collaborate effectively across teams.** With development and test processes streamlined through integrated tools, you can focus on delivering value over transitioning information between roles.
- **Rich, actionable bugs for developers.** With diagnostic information like IntelliTrace logs, indexed videos, and screenshots, you can effectively reduce the effort consumed in the endless game of "bug ping-pong," making the "no-repro" discussion a thing of the past.
- **Automate your repetitive tasks.** Focus your energy on high-value tasks by spending less time on repetitive work. Capture data-driven test iterations on your first pass using Microsoft Test Manager. Use Fast Forward for Manual Testing to quickly navigate to the right places within your test cases to continue verification steps in subsequent passes.

# Create, Design, Develop, and Deploy with Visual Studio 2010

Visual Studio 2010 enables you to develop and test in a vast range of scenarios. Whether you're building applications for Windows, the Web, Windows Phone 7 Series, Microsoft SharePoint®, or the cloud, Visual Studio 2010 can help you and your team from the planning and design stages through deployment.

## WEB DEVELOPMENT

Visual Studio 2010 and the Microsoft Web development stack enable you to create, design, develop, and deploy compelling and differentiated Web solutions.

- **Write code faster.** Visual Studio 2010 includes code snippets for HTML, JScript, and ASP.NET controls to help you write and share code faster. You can insert snippets from the Code Snippets Manager or directly from IntelliSense®.
- **Simplify Web deployment.** With Visual Studio 2010, you can package and publish your Web application in one click.
- **Prototype user interface ideas quickly.** By using SketchFlow in Microsoft Expression® Studio, which comes with Visual Studio 2010 Ultimate with MSDN, you can quickly deliver functioning Web application prototypes that look and feel like handwritten mockups.

## DATABASE DEVELOPMENT

Visual Studio 2010 provides the best tools for professional developers using Microsoft SQL Server® to create data-centric solutions across mobile devices and desktops for Web servers, enterprise servers, and the cloud.

- **Improve application flexibility.** Service enabled data, customize reports to meet your business needs, and work with SQL Server–based applications from within Visual Studio 2010.
- **Improve deployment efficiency.** Define deployment intent and bundle disparate schema objects in a single package that can be deployed to SQL Server from within Visual Studio 2010.
- **Improve code quality.** Visual Studio 2010 brings a superior debugging and testing experience for data developers using SQL Server, helping improve application quality.

## SHAREPOINT APPLICATION DEVELOPMENT

With Visual Studio 2010, you can rapidly build solutions on SharePoint 2010—the business collaboration platform for the enterprise and the Web—while utilizing a rich set of out-of-the-box features.

- **Enjoy rich development capabilities.** Focus development on the business problem at hand and let SharePoint handle the common infrastructure challenges of Web development.
- **Experience quicker, easier development.** SharePoint templates and wizards in Visual Studio 2010 enable you to quickly and easily develop custom SharePoint applications.
- **Improve management.** Visual Studio 2010 supports the use of ALM processes when developing and deploying Microsoft SharePoint 2010 solutions.

## DEVELOPING ON THE CLOUD

Cloud computing is a key emerging trend in IT, and with Visual Studio 2010 and the Windows Azure™ platform, developers can quickly deliver highly available, trustworthy, and highly scalable applications.

- **Build in a familiar environment.** Visual Studio 2010 makes it easy to build and deploy for Windows Azure: integrated project templates, seamless debugging experience, one-click publishing.
- **Start using Windows Azure today.** Visual Studio 2010 with MSDN gives you access to Windows Azure platform services at no extra charge in the form of small compute instances, storage, SQL Azure databases, and more.
- **Go-to-market quicker.** Innovate and reduce time to market by focusing on building applications and not worrying about infrastructure. Develop powerful Web applications and services locally in an environment that emulates the Azure cloud.

## REDUCE RISK AND INCREASE REWARD WITH TEST

Take quality assurance to the next level with Visual Studio 2010. This breakthrough tester-developer collaboration experience supports complete plan-test-track workflows and full traceability of requirements and user stories.

- **Breakthrough collaboration experience for all teams.** Focus more on quality by streamlining development and test processes using the integrated experience in Visual Studio 2010. Align test teams with ALM and break down the silos across development and quality assurance.
- **Extensible and integrated tooling support.** The flexible architecture behind Visual Studio 2010 quality offering helps you meet business-critical needs even as it improves the way your development and test teams work together.
- **Increase overall test coverage.** Test Professional 2010 enables you to explore applications without test step guidance, so you can uncover complex bugs and manage more test scenarios.

## APPLICATION LIFE-CYCLE MANAGEMENT

Custom applications are behind or part of most solutions that deliver competitive advantage today. It makes sense to treat the development of those applications as a business process that is just as important and well-managed as the process of invoicing or delivering of your products and services. The Visual Studio ALM solution enables you to realize the strategic value of your custom software investments.

- **Increase efficiency across the life cycle.** Project artifacts are stored in a central repository to facilitate collaboration. This reduces waste in handoff time between tasks and streamlines the development process so team members can focus on delivering value over transitioning information between roles.
- **Manage projects in real time.** Powerful reporting and rich dashboards provide historical trending and real-time visibility into overall project health. Real-time metrics and leading indicators give you early warnings of potential problems and enable you to be proactive and to make data-driven decisions and course corrections.
- **Transparency and traceability.** Visual Studio 2010 provides full traceability and enables you to track progress and quality from code back to business intent and customer requirements.



# MSDN Subscriptions: Efficient, Economical, and Empowering

MSDN Subscriptions are the most convenient way to cost-effectively develop applications on the Microsoft platform with a simple licensing model and broad, high-quality information resources.



- **Manage efficiently.** Simplify software licensing for your development environment with access to virtually every Microsoft product and technology on a simple per-user basis.
- **Save proactively.** Save money on software licensing, Windows Azure, training, and other high-value benefits.
- **Empower your teams.** Enhance the skills and productivity of your development teams by leveraging Microsoft E-Learning and high-quality resources from the MSDN Library.

## HOW TO BUY VISUAL STUDIO WITH MSDN

Visual Studio 2010 client products and MSDN Subscriptions are licensed on a per-user model and available for purchase in two options: through retail channels or through Microsoft Volume Licensing programs. How the products are purchased determines your license agreement terms and specific product options.

### Retail Channels

For a small number of licenses, Visual Studio 2010 client products and MSDN Subscriptions can be purchased through the retail channel in the following ways:

- **Available only *with* an MSDN Subscription:** Visual Studio 2010 Ultimate, Visual Studio 2010 Premium, and Visual Studio Test Professional 2010
- **Available *with* or *without* an MSDN Subscription:** Visual Studio 2010 Professional
- **Other MSDN Subscriptions available with Visual Studio 2010 Professional through retail channels:**
  - > **NEW – MSDN Essentials** gives you a one-year test drive of the latest core Microsoft platforms and enhanced support from a professional community, so you can target more platforms and fix issues fast. MSDN Essentials is automatically included in retail box of Visual Studio Professional purchased without MSDN.
  - > **MSDN Embedded** provides developers of embedded devices with Windows Embedded, toolkits, SDKs, DDKs, two technical support incidents, and one Microsoft E-Learning collection.
- **Available as a standalone subscription (does not include Visual Studio 2010 tools):**
  - > **MSDN Operating Systems** includes all versions of Windows operating systems and Windows Server, toolkits, SDKs, DDKs, two technical support incidents, and one Microsoft E-Learning collection.

### Volume Licensing: The Most Cost-Effective Option

For larger numbers of licenses (five or more), organizations typically purchase through one of several Microsoft Volume Licensing programs. Volume licensing of software makes it easier and more affordable to run software on multiple computers within a single purchasing organization.

Visual Studio 2010 client products and MSDN Subscriptions can be licensed through the various Microsoft Volume Licensing programs in the following ways:

- **Open Value.** All Visual Studio 2010 client edition products licensed in the Open Value program *can only be licensed with an MSDN subscription.*
- **Open License.** All Visual Studio 2010 client edition products can be *licensed with or without an MSDN subscription.*
- **Select.** All Visual Studio 2010 client edition products can be *licensed with or without an MSDN subscription.*
- **Enterprise Agreement.** All Visual Studio 2010 client edition products licensed in the Enterprise Agreement program *can only be licensed with an MSDN subscription.* (The MSDN Operating Systems subscription is not available through an Enterprise Agreement.)

**All Visual Studio 2010 server products are available through Microsoft Volume Licensing programs.**

For more information on how to purchase Visual Studio 2010 licenses with MSDN, download the *Microsoft Visual Studio 2010 Licensing* white paper at: <http://go.microsoft.com/?linkid=9721784>



## TOP 10 REASONS TO INVEST IN MSDN SUBSCRIPTIONS

- 1 Comprehensive software development offering:** Access specified Microsoft software for development and test (dependent on your MSDN Subscription level), and reduce the licensing cost of development and test.
- 2 Simple, cost-effective per-user licensing:** Per-user licensing model simplifies software licensing and reduces your licensing costs.
- 3 One-stop shop:** Find the software, support, and information your developers need, so they can be more productive.
- 4 Past, present, and future:** Access the latest editions of Microsoft products, as well as versions dating back over a decade and prerelease versions.
- 5 Cloud development:** Start creating Web applications and services on the Windows Azure platform with free compute instances included in your MSDN Subscription.
- 6 Training:** Expand your development team's skills while saving money on training with Microsoft E-Learning collections included with MSDN Subscriptions.
- 7 Help and support:** Receive up to four technical support incidents, priority support in MSDN Forums, and access to the Online Concierge to easily find resources and information.
- 8 High-quality information:** Stay ahead of the curve with information from MSDN Magazine, the MSDN Flash newsletter, blogs, webcasts, and the MSDN Library.
- 9 Preferred treatment:** Receive exclusive benefits from partner offers such as discounts on training, hardware, and Visual Studio add-ins.
- 10 Team Foundation Server:** Benefit from ALM through the use of Team Foundation Server included in your MSDN Subscription.

Visual Studio 2010 FEATURE COMPARISON CHART	Visual Studio 2010 Ultimate with MSDN	Visual Studio 2010 Premium with MSDN	Visual Studio 2010 Professional with MSDN	Visual Studio Test Professional 2010 with MSDN
<b>Development Environment</b>				
<b>Development Platform Support</b>				
Windows, Web, and Cloud Development	•	•	•	
Microsoft Office and SharePoint Development	•	•	•	
<b>Architecture and Modeling</b>				
Architecture Explorer, Layer Diagram, and Dependency Validation	•			
Read-Only Diagrams (UML, Layer, DGML Graphs)	•	•		
<b>Database Development</b>				
Deployment, Change Management, Test Data Generation, Unit Testing	•	•		
<b>Debugging, Diagnostics, and Testing</b>				
IntelliTrace (Historical Debugging), Web Performance Testing, Load Testing <sup>1</sup>	•			
Static Code Analysis, Code Metrics, Profiling, Code Coverage, Test Impact Analysis, Coded UI Test	•	•		
Unit Testing	•	•	•	
<b>Test and Lab Management</b>				
Microsoft Test Manager, Test Case Management, Manual Test Execution, Fast Forward for Manual Testing	•			•
Virtual Environment Setup and Teardown, Provision Environment from Template, Checkpoint Environment through Test Manager 2010 (Visual Studio Lab Management 2010 required) <sup>2</sup>	•			•
<b>Team Foundation Server</b>				
Version Control, Work Item Tracking, Build Automation, Team Portal, Reporting and Business Intelligence, Agile Planning Workbook, Team Explorer	•	•	•	•
<b>MSDN Subscription Benefits</b>				
Priority Support in MSDN Forums, MSDN Magazine, Flash Newsletter, Online Concierge	•	•	•	•
Technical Support Incidents	4	4	2	2
Microsoft E-Learning Collections (typically 10 courses or 20 hours)	2	2	1	1
Windows Azure Platform	• <sup>†</sup>	• <sup>†</sup>	• <sup>†</sup>	
<b>MSDN Subscription – Software for Production Use</b>				
Microsoft Visual Studio Team Foundation Server 2010 plus one CAL	•	•	•	•
Microsoft Office Professional Plus 2010, Project Professional 2010, Visio® Premium 2010, Expression Studio 3	•	•		
<b>MSDN Subscription – Software for Development and Test Use<sup>3</sup></b>				
Windows (client and server operating systems), Microsoft SQL Server, Toolkits, Software Development Kits, Driver Development Kits	•	•	•	•
SharePoint, Microsoft Dynamics®, all other servers, Windows Embedded	•	•		

<sup>†</sup> Azure benefits vary by subscription level; see the MSDN Subscription site for details: <http://go.microsoft.com/?linkid=9723404>.  
Subject to change and subject to availability.

<sup>1</sup> May require one or more Microsoft Visual Studio Load Test Virtual User Pack 2010.

<sup>2</sup> Microsoft Visual Studio Lab Management 2010 is not included with Visual Studio 2010 Ultimate or Visual Studio Test Professional 2010.

<sup>3</sup> Per-user license allows unlimited installations and use for designing, developing, testing, and demonstrating applications.