Drive DevOps adoption with GitHub and Visual Studio

Leverage open-source software to deliver fast, efficient product innovation and give your developers the best tools
Visual Studio with GitHub Enterprise

The easiest and most economical way for Visual Studio customers to acquire GitHub Enterprise.

Best-in-class integrated development environment for any developer.

The #1 developer community on the planet.

- **Innovate at scale** and deliver fast by modernizing your tool chain and adopting premier social coding workflows in your organization.
- **Reduce ramp-up time on Git** and be more productive with built-in GitHub extensions in Visual Studio.
- **Plan smarter and ship faster** with native integrations of GitHub Enterprise with Azure DevOps.
Developers are at the core of innovation

It’s not just your traditional competitors who recognize this. There’s a new class of competitors who are starting with disruptive software and working backwards into your industry.
Increase developer velocity

GitHub is the social coding experience trusted by more than 40+ million developers.

Work seamlessly across your organization on a platform designed for collaboration.

Embrace innersource, iterate faster, and ship more frequently using best practices from open-source teams.
Would you choose software created by a handful of isolated developers or software crafted by thousands working collaboratively to make a stronger build?

99% of large enterprise applications leverage open-source software.
Microsoft Azure is the cloud with developer services built-in.

and

GitHub is building on this foundation to become Microsoft’s core DevOps Platform.

and

Visual Studio is a developer environment used for software development to edit, debug, and build code.

Innovate at scale. Deliver with confidence.
**Leverage Microsoft DevOps with GitHub**

to deliver fast, efficient innovation

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<th>Product innovation</th>
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<th>Flexibility &amp; control</th>
<th>Security</th>
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<td>Multilevel collaboration and expertise sharing.</td>
<td>Continuous integration.</td>
<td>Control and support over your entire cloud state.</td>
<td>Automatic governance policy checks &amp; validations, enforced post-deployment.</td>
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<td>Autonomous innovation &amp; project management.</td>
<td>Code tests and staged environment releases.</td>
<td>Management at every stage of app development.</td>
<td>Vulnerability reviews and extended support.</td>
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## Product innovation

Reliable, scalable management tools at every level, with a diverse community behind it all.

<table>
<thead>
<tr>
<th>Improved app performance, scalability, and resiliency</th>
<th>Multilevel collaboration and expertise sharing</th>
<th>Autonomous innovation &amp; project management</th>
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<tr>
<td>Enhance the performance, scalability, and resiliency of your apps by moving them to cloud.</td>
<td>Employ advanced project development with boards, interactive backlogs, and planning tools.</td>
<td>Automate your progress from idea to production with community-powered workflows.</td>
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<tr>
<td>Utilize container jobs to create consistent, reliable builds.</td>
<td>Connect your team by sharing code efficiently and securely.</td>
<td>Identify and address issues to suggest new ideas or track bugs.</td>
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<tr>
<td>Safeguard against code errors and prevent added downtime and data loss if they occur.</td>
<td>Perform more effective code reviews with threaded discussion and continuous integration.</td>
<td>Organize and assign tasks to your team.</td>
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<tr>
<td>Scale agile tools across the entire enterprise.</td>
<td>Track pull requests to evolve projects, propose new features, and discuss implementation.</td>
<td>Use built-in scrum boards and planning tools to help your teams mobilize.</td>
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Delivery speed
In order to innovate, businesses need to move fast.

<table>
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<tr>
<th>Stronger performance with faster build times</th>
<th>Continuous integration</th>
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<tr>
<td>Ensure faster ship times, better collaboration, and smarter planning with modern dev services.</td>
<td>Accommodate for growth, team changes, and technological shifts.</td>
<td>Improve your code quality using planned and exploratory testing services across desktop or web devices.</td>
</tr>
<tr>
<td>Gather new insights with powerful analytics tools and dashboard widgets.</td>
<td>Automate the build and testing of code every time a team member commits changes to version control.</td>
<td>Create environment rings for pre-release testing to scoped users.</td>
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<tr>
<td>Enable improved code reuse and increased velocity.</td>
<td>Leverage modern version control systems such as Git to create short-lived feature branches to isolate work.</td>
<td>Test and ship with confidence using manual and exploratory testing tools.</td>
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**Flexibility & control**
Any developer, any cloud. Use the tools of your choice—just bring code.

<table>
<thead>
<tr>
<th>Any language, any platform, any cloud</th>
<th>Control and support over your entire cloud state</th>
<th>Management at every stage of app development</th>
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<tr>
<td>- Build, test, and deploy in any language, to any cloud—or on-premises.</td>
<td>- Manage your entire cloud security state, what environments exist, and who can access them.</td>
<td>- Use templates, custom images, and formulas to reproduce environments.</td>
</tr>
<tr>
<td>- Use Git and TFVC repositories on Azure Repos with your favorite editor and IDE.</td>
<td>- Find your best deployment strategy by using stages, gates, and approvals.</td>
<td>- Create workflows with tools from Microsoft, open source, or 3rd party tools.</td>
</tr>
<tr>
<td>- Discover new tools for every step of the development process—or just create your own.</td>
<td>- Access native support for containers and Kubernetes.</td>
<td>- Address fewer issues post-deployment, with less downtime and more reliable products.</td>
</tr>
<tr>
<td>Code protection with end-to-end security</td>
<td>Automatic governance policy checks &amp; validations</td>
<td>Vulnerability reviews and extended support</td>
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<tr>
<td>- Unify your code and documentation into one space.</td>
<td>- Apply security and governance checks on the go.</td>
<td>- Review every security vulnerability to identify and alert affected repositories.</td>
</tr>
<tr>
<td>- Manage which collaborators have access to codebases.</td>
<td>- Define specific metrics to drive action and support compliance objectives.</td>
<td>- Access high level support with GitHub Security Advisories and open-source maintainers.</td>
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<tr>
<td>- Employ secret scanning to monitor credentials.</td>
<td>- Analyze and keep an inventory of third-party components.</td>
<td>- Perform threat modeling with a structured approach.</td>
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</table>
Your product needs to reach customers quickly and stay available.

- Shared goals and tooling.
- Collaboration.
- Process automation.
- Continuous delivery and improvement.

Accelerating delivery with DevOps and Visual Studio

Collaborate

Develop

Operate

Deliver
Codespaces
Your instant dev environment.

**Code without compromise**
Code, build, test, debug, and deploy with a complete development environment in your browser.

**Simplify your workflow**
Automatically set up dependencies and SSH keys. Go from code to commit faster on any project.

**Extend and customize**
Configure your editor with dotfiles and VS Code extensions to create a consistent environment in every codespace.
Innovation with control

Top performing DevOps companies spend more time innovating and less time “keeping the lights on.”

Time spent

Source: 2018 State of DevOps Report, presented by DORA
## Deploy continuously and compliantly

Enterprise-grade security, monitoring, and management services built-in.

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<th>Governance</th>
<th>Proactively apply policies and enable compliant releases.</th>
<th>Azure Policy &amp; Blueprints</th>
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<tr>
<td>Security</td>
<td>Industry-leading security with advanced threat protection.</td>
<td>Azure Security Center</td>
</tr>
<tr>
<td>Resiliency</td>
<td>High availability and protection for VMs, apps, and data.</td>
<td>Azure Backup &amp; Site Recovery</td>
</tr>
<tr>
<td>Monitoring</td>
<td>Deep operational insights with rich intelligence.</td>
<td>Azure Monitor</td>
</tr>
<tr>
<td>Automate</td>
<td>Powerful scripting, configuration, and update management.</td>
<td>Azure Automation</td>
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Building a new website using a rich, flexible developer toolset

Chose Visual Studio Code as an IDE to stay as flexible as possible.

Leveraged extensions from the community to make coding even easier.

Incorporated Azure DevOps to have development infrastructure running on a fully-managed service with minimal IT maintenance.

“With a rich toolset, maintaining the company’s web presence will be much easier moving forward. Visual Studio Code provides great productivity—it loads quickly, runs smoothly on Windows computers and Macs, and lets us use the same IDE across different platforms.”

—Mike Smith, Lead Software Developer
Empowering collaboration to accelerate development

Scale without sacrificing performance or resilience.
Collaborate across teams and projects.
Recruit high quality developer talent.

“One of the drivers of GitHub is developer familiarity. You know that anyone you hire will know GitHub.”

—Matthew Seaborn, Architecture Director
Accelerating software development with open source

Committed to an open-source model to build more robust software, faster.

Facilitates code discoverability and reuse throughout the organization.

Inner-sourcing allows Spotify to maintain the benefits of open source in proprietary projects.

“People know what a pull request is because it’s how they contribute to open-source projects. With GitHub Enterprise, no one has to relearn the wheel.”

—Laurent Ploix, Product Manager
Next steps
Let’s get started on your journey...

Identify potential scenarios
Partner
Work together to create your roadmap To implement DevOps
Thank you.