



PowerShell Meetup 27.11.2018



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https://www.meetup.com/de-DE/German-PowerShell-Usergroup/events/256169707/

📖

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27
NOV

Dienstag, 27. November 2018

PowerShell Usergroup #region Munich

✓

✕

\$Start = "18:30"

\$Room = "0201 New York"

\$Address = "Walter-Gropius-Str. 5"

🕒 Dienstag, 27. November 2018

18:00 bis 21:00

[Zum Kalender hinzufügen](#)

📍

Microsoft Deutschland GmbH

Walter-Gropius-Str. 5 · München

Solltest du es nicht persönlich schaffen schalte dich gerne in unseren Livestream! Lass uns bitte vorab wissen ob eine remote Teilnahme gewünscht ist.

The Sessions

#####

Speaker: George Kosmidis

<http://georgekosmidis.gr>

What is .NET?

This presentation walks through the basics of what .NET is & what you can build with it. It walks through the platform at a very high level, talks about the open source journey and history, and demonstrates how to get started learning.

Speaker: Sylvio Hellmann

<https://sylvioh.wordpress.com>

Windows Server Installation & Konfiguration

#####



- › Freiberuflicher BI-Projektleiter / -Architekt
- › Mehr als 25 Jahre Berufserfahrung in der IT
 - Arbeit mit PowerShell seit Version 1.0
 - Schwerpunkte: SQL Server und BI Infrastruktur + Softwareentwicklung
 - Tätigkeitsbereiche: Consultant, Softwareentwickler, Architekt, Projektleiter, ...
 - Projekte in Deutschland und International
- › Veröffentlichungen
 - Blog: <http://sylvioh.wordpress.com>
 - Mitglied der Meetup SQL Server München + PowerShell (regelmäßige Vorträge)



visual studio code (vs code)



Visual Studio Code Docs Updates Blog Community Extensions FAQ [Download](#)

Version 1.29 is now available! Read about the new features and fixes from October.

Code editing. Redefined.

Free. Open source. Runs everywhere.

[Download for Windows](#)
Stable Build

		Stable	Insiders
macOS	Package	↓	↓
Windows x64	User Installer	↓	↓
Linux x64	.deb .rpm	↓ ↓	↓ ↓
Other downloads			

File Edit View Goto Help

EXTENSIONS

@popular

- C# 1.2.2 356K ★★★★★
C# for Visual Studio Code (p...
Microsoft [Install](#)
- Python 0... 211K ★★★★★
Linting, Debugging (multi-t...
Don Jayamanne [Install](#)
- Debugger for Chrome 148
Debug your JavaScript code...
Microsoft JS Diagno... [Install](#)
- C/C++ 0.7... 143K ★★★★★
Complete C/C++ language ...
Microsoft [Install](#)
- Go 0.6.39 99K ★★★★★
Rich Go language support f...
lukehoban [Install](#)
- ESLint 0.10... 88K ★★★★★
Integrates ESLint into VS Co...
Dirk Baeumer [Install](#)

app.ts www.ts x package.json README.r

```
1 import app from './app';
2 import debugModule = require('debug');
3 import http = require('http');
4
5 const debug = debugModule('node-express-typescri
6
7 // Get port from environment and store in Express
8 const port = normalizePort(process.env.PORT || '
9 app.set('port', port);
10
11 CSSImportRule
12 CSSSupportsRule
13 export
14 exports
15 importScripts
16 MessagePort
17 normalizePort
18 port const port: number | string | boolean
19 */
20 function normalizePort(val: any): number|string|
21 let port = parseInt(val, 10);
22
```

Ln 9, Col 21 Spaces: 2 UTF-8 LF TypeScript

Nightly Builds from Microsoft – side by side is possible





VS Code - Installation




→ ↻ 🔒 <https://code.visualstudio.com/#alt-downloads> 📖 ☆ ☰

Visual Studio Code Docs Updates Blog Community Extensions FAQ **↓ Download**


↓ Windows
Windows 7, 8, 10


↓ .deb
Debian, Ubuntu

↓ .rpm
Red Hat Enterprise Linux, CentOS


↓ Mac
OS X 10.9+

User Installer	64 bit	32 bit
System Installer	64 bit	32 bit
.zip	64 bit	32 bit

.deb	64 bit
.rpm	64 bit
.tar.gz	64 bit

Want new feature
Get the [Insiders build](#)

→ ↻ 🔒 <https://code.visualstudio.com/insiders/> 📖 ☆ ☰

Visual Studio Code Docs Updates Blog Community Extensions FAQ **↓ Download**

Version 1.29 is now available! Read about the new features and fixes from October.

Download Visual Studio Code Insiders

Get the latest release each day.

Download for Windows
Windows 7, 8, 10


User Installer	64 bit	32 bit
System Installer	64 bit	32 bit
.zip	64 bit	32 bit

Also available on [Mac](#) and [Linux](#)

JAXenter: Hallo Erich. Du arbeitest momentan bei Microsoft an der IDE VS Code. Worum geht es dabei im Kern? Handelt es sich um eine Browser-Variante von Visual Studio?

Erich Gamma: Visual Studio Code ist keine eigentliche Browser-IDE. VS Code wurde zwar mit HTML5 und TypeScript/JavaScript entwickelt, aber VS Code läuft nicht im Browser, sondern auf dem Desktop. Der Benutzer soll nicht merken, dass hinter VS Code Web-Technologien stecken. VS Code soll sich wie eine „gewöhnliche“ Desktop-Applikation verhalten. Auf dem Weg zu Visual Studio Code haben wir unter anderem auch [eine Browser IDE gebaut](#). Als wichtigste Komponente entstand dabei der Monaco Editor, der als universeller Code-Editor im Browser eingesetzt werden kann. Übrigens, seit einer Woche ist dieser [Monaco-Editor auch separat verfügbar](#) und verschiedene Web Sites verwenden den Editor bereits.

Quelle: <https://jaxenter.de/vs-code-interview-gamma-42932>



5.846
Downloads

2.727
Downloads of 1.2

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26.03.2018
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Install-VSCode 1.2

This script can be used to easily install Visual Studio Code and the PowerShell extension on your machine. You may also specify additional extensions to be installed using the `-AdditionalExtensions` parameter. The `-LaunchWhenDone` parameter will cause VS Code to be launched as soon as installation has completed.

Please contribute improvements to this script on GitHub!
[+ Show more](#)

▼ Installation Options

Install Script

Azure Automation

Manual Download

Copy and Paste the following command to install this package using PowerShellGet [More Info](#)

```
PS> Install-Script -Name Install-VSCode
```

Author(s)
Microsoft

Copyright
(c) Microsoft Corporation

> Package Details



VS Code + PowerShell

GitHub, Inc. [US] <https://github.com/PowerShell/vscode-powershell>

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PowerShell / **vscode-powershell** Watch 133 Star 635 Fork 193

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Provides PowerShell language and debugging support for Visual Studio Code <https://marketplace.visualstudio.com/...>

visual-studio-code powershell extensions

829 commits 16 branches 36 releases 59 contributors View license

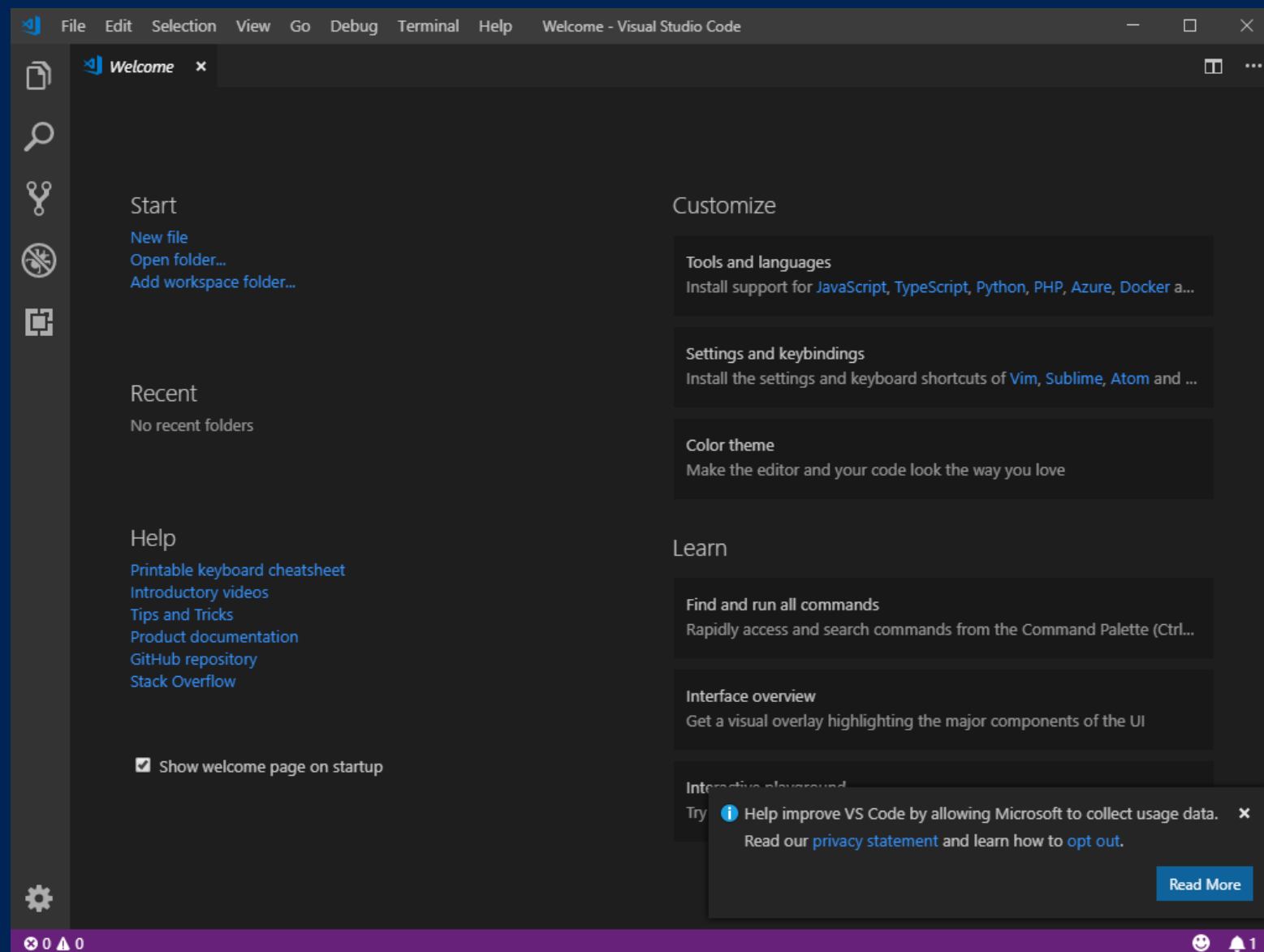
Branch: master New pull request Find file Clone or download

	rkeithhill Fix Pester CodeLens not working for running/debugging tests (#1615) ...	Latest commit 7883879 3 days ago
	[Ignore] Update PSSA bug report template for flexibility (#1588)	a month ago
	Fix markdown syntax (#1382)	5 months ago
	Update Travis to PowerShell Core 6.0.2 (#1373)	5 months ago
	add new snippet: HTML header (#1559)	a month ago
	Updates to Examples PSSA settings file to include more rule config (#...	7 months ago
	Update PowerShell icon	3 years ago

<https://github.com/topics/extensions>



VS Code: User Interface





VS Code: Add PowerShell

File Edit Selection View Go Debug Terminal Help

File Edit Selection View Go Debug Terminal Help

EXTENSIONS: MARKETPLACE

Search: "programming languages" powershell

PowerShell 1.9.0

Develop PowerShell scripts in Visual Studio C...

Microsoft

Install

Code Runner 0.9.5

Run C, C++, Java, JS, PHP, Python, Perl, Ruby, ...

Jun Han

Install

EmPy template syntax support 0.1.1

Language support for EmPy template files

dirk-thomas

Install


Terminal 0.0.10

Terminal for Visual Studio Code

Jun Han

Install

Extension: PowerShell x



PowerShell

ms-vscode.powershell

Microsoft | 4.538.068 | ★★★★★ | Repository | License

Develop PowerShell scripts in Visual Studio Code!

Install

Details Contributions Changelog Dependencies

PowerShell Language Support for Visual Studio Code

Visual Studio Marketplace v1.9.0 installs 4.54M windows build passing linux/macos build passing chat on gitter

This extension provides rich PowerShell language support for [Visual Studio Code](#). Now you can write and debug PowerShell scripts using the excellent IDE-like interface that Visual Studio Code provides.

Platform support

- Windows 7 through 10 with Windows PowerShell v3 and higher, and PowerShell Core
- Linux with PowerShell Core (all PowerShell-supported distributions)
- macOS and OS X with PowerShell Core

Read the [installation instructions](#) to get more details on how to use the extension on these platforms.

Read the [FAQ](#) for answers to common questions.

Features

- Syntax highlighting
- Code snippets

Help improve VS Code by allowing Microsoft to collect usage data. Read our [privacy statement](#) and learn how to [opt out](#).

Read More

VS Code status bar: 0 errors, 0 warnings, 0 info, 1 notification



vs code: Marketplace



←

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↺

https://marketplace.visualstudio.com/search?term=powershell&target=VSCode&category=All%20categories&sortBy=Relevance

📖

☆

⋮

Visual Studio | Marketplace

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Visual StudioVisual Studio CodeAzure DevOpsSubscriptionsBuild your ownPublish extensions


powershell

×


🔍

25 Results


Showing: All categories ▾Sort By: Relevance ▾




PowerShell
Microsoft
📦 4.5M
Develop PowerShell scripts in Visual Studio Code!
★★★★★
FREE




PowerShell Stack Overflow
DougFinke
📦 16.4K
Search for selected text + the PowerShell tag on Stack Overflow
★★★★★
FREE




PowerShell Pro Tools
Ironman Software
📦 4.8K
Powerful extensions for PowerShell development.
★★★★★
FREE




CodeShell
Kipters
📦 20K
Start a new PowerShell window for the project folder
★★★★★
FREE





Code Runner
Jun Han
📦 4.1M
Run C, C++, Java, JS, PHP, Python, Perl, Ruby, Go, Lua, Groovy, PowerShell, CMD, B...
★★★★★
FREE





German Language Pack
Microsoft
📦 548K
Language pack extension for German
★★★★★
FREE
















VS Code: Customize

The screenshot shows the Visual Studio Code interface with the settings editor open. The left sidebar contains the Explorer, Search, and Source Control views. The main editor area displays the 'settings.json' file for the 'User Settings' scope. The search bar at the top of the settings editor is set to 'powershell'. The settings are organized into 'DEFAULT USER SETTINGS' and 'USER SETTINGS (1)'. The 'DEFAULT USER SETTINGS' section contains various configuration options for the PowerShell terminal, including the shell path, bug reporting project, code folding, code formatting, and brace placement. The 'USER SETTINGS (1)' section shows a single custom setting: 'workbench.color'.

settings.json - Visual Studio Code

File Edit Selection View Go Debug Terminal Help

EXPLORER

OPEN EDITORS

Untitled-1.ps1 C:\Users\Sylvio Hellmann\D...

Settings

User Settings C:\Users\Sylvio Hellmann\Ap...

NO FOLDER OPENED

You have not yet opened a folder.

Open Folder

powershell

DEFAULT USER SETTINGS

Place your settings in the right hand side editor to override.

```
// The path of the shell that the terminal uses on Windows. [Read more about configuring the shell]
(https://code.visualstudio.com/docs/editor/integrated-terminal#\_configuration).
"terminal.integrated.shell.windows":
"C:\\WINDOWS\\System32\\WindowsPowerShell\\v1.0\\powershell.exe",

// Specifies the url of the GitHub project in which to generate bug reports.
"powershell.bugReporting.project":
"https://github.com/PowerShell/vscode-powershell",

// Enables syntax based code folding. When disabled, the default indentation based code folding is used.
"powershell.codeFolding.enable": true,

// Align assignment statements in a hashtable or a DSC Configuration.
"powershell.codeFormatting.alignPropertyValuePairs": true,

// Does not reformat one-line code blocks, such as "if (...) {...} else {...}".
"powershell.codeFormatting.ignoreOneLineBlock": true,

// Adds a newline (line break) after a closing brace.
"powershell.codeFormatting.newLineAfterCloseBrace": true,

// Adds a newline (line break) after an open brace.
"powershell.codeFormatting.newLineAfterOpenBrace": true,

// Places open brace on the same line as its associated statement.
"powershell.codeFormatting.openBraceOnSameLine": true,

// Sets the codeformatting options to follow the given indent style in a way that is compatible with PowerShell syntax. For more information about the brace styles please refer to
```

USER SETTINGS (1)

Place your settings here to

```
1 {
2   "workbench.color"
3 }
```

0 0 0



vs Code: Keyboard

Keyboard Shortcuts - Visual Studio Code

EXTENSIONS: MARKETPLACE

@installed

PowerShell 1.9.0
Develop PowerShell scripts in Visual Studio C...
Microsoft

Presentation Mode 1.1.5
Show your code properly in a presentation
Juan Polanco

Type to search in keybindings

For advanced customizations open and edit [keybindings.json](#)

Show Search	Ctrl + Shift + F	Default	!searchViewletVisible
Shrink Select	Shift + Alt + LeftArrow	Default	editorTextFocus
Soft Undo	Ctrl + U	Default	textInputFocus
Split Editor	Ctrl + ^	Default	—
Split Editor Orthogonal	Ctrl + K Ctrl + ^	Default	—
Split Terminal	Ctrl + Shift + 5	Default	terminalFocus
Split Terminal	Ctrl + ^	Default	terminalFocus
Start Debugging	F5	Default	!inDebugMode
Start Debugging and Stop on Entry	F10	Default	!inDebugMode && debugCo
Start Without Debugging	Ctrl + F5	Default	!inDebugMode
Step Into	F11	Default	inDebugMode
Step Out	Shift + F11	Default	inDebugMode
Step Over	F10	Default	inDebugMode
Stop	Shift + F5	Default	inDebugMode
Toggle Block Comment	Shift + Alt + A	Default	editorTextFocus && !edi

PROBLEMS 2 OUTPUT DEBUG CONSOLE TERMINAL

Filter: Eg: text, **/*.ts, !**/node_modules/**

Untitled-1.ps1 C:\Users\Sylvio Hellmann\Documents 2

- [PSScriptAnalyzer] The variable 'x' is assigned but never used. (PSUseDeclaredVarsMoreThanAssignments) [PSScriptAnalyzerdb0ddda2-efd9-4abf-b054]
- [PSScriptAnalyzer] The cmdlet 'do-work' uses an unapproved verb. (PSUseApprovedVerbs) [PSScriptAnalyzerb567ba1-c834-4e11-894c-af928a1f4373]

Command Palette...

Settings

Extensions

Keyboard Shortcuts

User Snippets

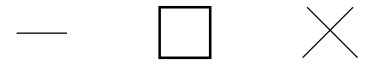
Color Theme

File Icon Theme

Check for Updates...



Short Keys



- › F1 or CTRL-Shift+P → Commands
 - Presentation Mode
 - Insert snippet
- › CTRL-Shift+O → Show variables
- › CTRL-Shift+X → Show installed Extensions
- › CTRL-Shift+C → new command windows
- › CTRL-Shift+N → new Visual Code window
- › CTRL-Shift+M → Show Console
- › CTRL+ö → PowerShell Terminal



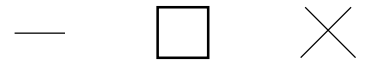
Themes



› default



Best Practices



- › (from PS) Code <folder>
- › F1: interactive playground
- › F1: toggle zen mode



VS Code + PowerShell



DEBUG No Configurations

VARIABLES

\$VerbosePreference: SilentlyContinue

\$WarningPreference: Continue

\$WhatIfPreference: \$false

\$x: 2

Global

WATCH

CALL STACK

PAUSED ON BREAKPOINT

<ScriptBlock> Untitled-1.ps1 8:1

BREAKPOINTS

Untitled-1.ps1 C:\Users\Sylvio Hellman... 8

Untitled-1.ps1 C:\Use

```
1 [int]$x = 2
2
3 0 references
4 function do-work {
5     Write-Verbose -Message 'test'
6     return 12
7 }
8 do-work * $x
```

PROBLEMS 2 OUTPUT DEBUG CONSOLE TERMINAL

1: PowerShell Integrat...

PS C:\Users\Sylvio Hellmann> c:\Users\Sylvio Hellmann\Documents\Untitled-1.ps1

12

PS C:\Users\Sylvio Hellmann> c:\Users\Sylvio Hellmann\Documents\Untitled-1.ps1

Hit Zeilenhaltepunkt bei "C:\Users\Sylvio Hellmann\Documents\Untitled-1.ps1:8"

[DBG]: PS C:\Users\Sylvio Hellmann>



› OS Basics

- Pipe
- File
- Registry
- Loops
- Constraints

› Windows Server Installation + Configuration