

# Version Control and Git



John Papa

@john\_papa | [www.johnpapa.net](http://www.johnpapa.net)

# Code Integration with Git



Any git provider

Must install git

<http://git-scm.com/download>

Connect to any local or remote repo

Can always use command line, too

# Code and Remote Online Git Providers

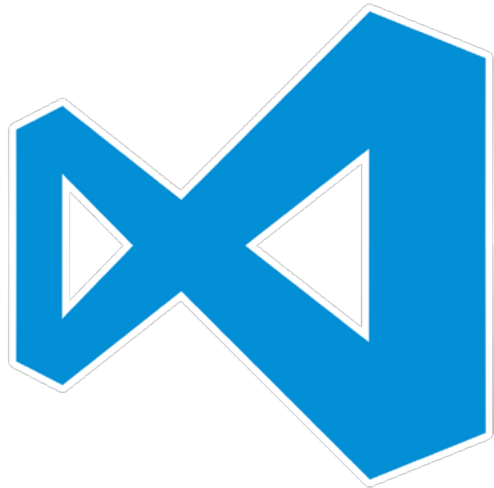
Github

VS Online

Bitbucket

Any git provider

# Touring VS Code's Git Features



Git Viewlet

Status Bar

File gutter indicators

Output



GIT



Message (press Cmd+Enter to commit)

## STAGED CHANGES

1

A jsconfig.json

## CHANGES

3

D app.js

M index.html

U README.MD

Staged new file for commit

Deleted file

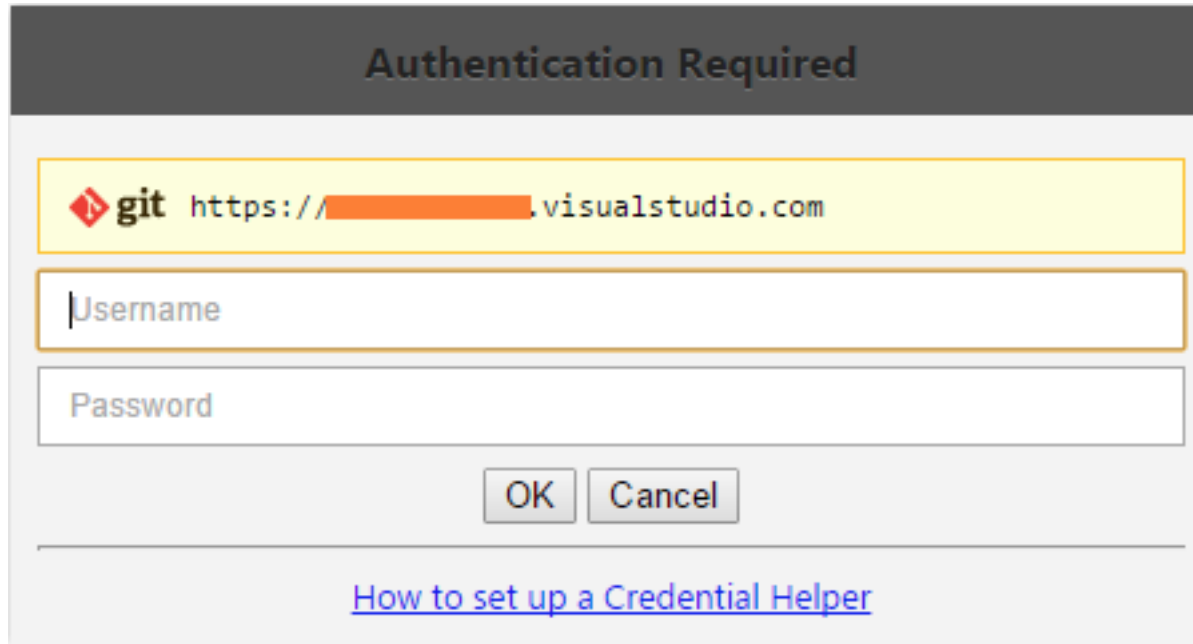
Modified file

Unstaged new file

Changes



# Git Credentials



The image shows a standard Windows-style dialog box titled "Authentication Required". It features a yellow header bar with the Git logo and the text "git https://[redacted].visualstudio.com". Below the header are two text input fields: "Username" and "Password". At the bottom of the dialog are "OK" and "Cancel" buttons. A link labeled "How to set up a Credential Helper" is positioned at the very bottom of the dialog.

**Authentication Required**

git https://[redacted].visualstudio.com

Username

Password

OK Cancel

[How to set up a Credential Helper](#)

<http://jpapa.me/gitcredhelper>

# Diffs

Shows textual changes in a file with red/green







GIT ✓ ↻ ...

Message (press Cmd+Enter)

CHANGES 1

M dashboard.controller.js ...

dashboard.controller.js src/client/app/dashboard - Changes on working tree

## Inline Diffs



```
1 1 (function () {
2 2     'use strict';
3 3
4 4     angular
5 5         .module('app.dashboard')
6 6         .controller('DashboardController', DashboardController);
7 7
8 8     DashboardController.$inject = ['$q', 'dataservice', 'logger'];
9 9     /* @ngInject */
10 10    function DashboardController($q, dataservice, logger) {
11 11        var vm = this;
12 12        vm.news = {
13 13            title: 'codeplay',
13 13            title: 'VS Code',
14 14            description: 'Hot Towel Angular is a SPA template for Angular developers.'
15 15        };
16 16        vm.messageCount = 0;
17 17        vm.people = [];
18 18        vm.title = 'Dashboard';
19
20        activate();
21
22        function activate() {
23            var promises = [getMessageCount(), getPeople()];
24            return $q.all(promises).then(function() {
25                logger.info('Activated Dashboard View');
26            });
27        }
28
29        function getMessageCount() {
30            return dataservice.getMessageCount().then(function (data) {
31                vm.messageCount = data;
32                return vm.messageCount;
33            });
34        }

```

# Frequently Used Git Features



- Staging
- Unstaging
- Added
- Diffs
- Deleted
- Commit
- Push
- Pull
- Sync
- Clean