

AZURE CLOUD SHELL ZA POČETNIKE



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PS> WHOAMI

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WHAT PROBLEMS DO WE TRY TO SOLVE?

Installation of our tools

Authentication to Azure

Access to our tools

WHAT IS CLOUD SHELL?

An interactive, browser-based shell for managing Azure resources

Automatically authenticated with each session

Preconfigured with commonly used CLI tools and programming languages

Accessible from a laptop, a tablet, and **a mobile app**

“A jumpbox for managing Azure resources”

REQUIREMENTS

Cloud Shell supports the latest versions of Microsoft Edge, Internet Explorer, Google Chrome, Mozilla Firefox, and Apple Safari.

An Azure subscription capable of creating storage resources

Cloud Shell requires a file share to be mounted

Azure Files supports locally redundant storage (LRS), geo-redundant storage (GRS), and zone-redundant storage (ZRS) accounts.

HOW DOES IT WORK?

Terminal emulator

Based on open source xterm.js project

<https://github.com/sourcelair/xterm.js>

Azure Container Instances (ACI) container

Connection over a web socket

The background is a solid blue color. It features several white line-art geometric shapes. In the top right, there is a small cube-like shape. In the bottom center, there is a small cube-like shape. On the right side, there is a large, complex structure made of many interconnected cubes, creating a 3D effect.

Demo

AZURE CLOUD SHELL: USER EXPERIENCE

CONCEPTS

Runs on a temporary machine

Assigned one machine per user account

Times out after 20 minutes without interactive activity

Can only be accessed with a file share attached

Uses the same Azure file share for both Bash and PowerShell

Persists \$HOME using a 5GB image in your file share

Permissions are set as a regular Linux user in Bash

FIRST START

×

You have no storage mounted

* Subscription

Windows Azure MSDN - Visual Studio

* Cloud Shell region

West Europe

Hide advanced settings

* Resource group

☒ Create new

☐ Use existing

psconfeu-rg

* Storage account

☒ Create new

☐ Use existing

psconfeusa

* File share

☒ Create new

☐ Use existing

psconfeushare

Storage accounts are filtered for your selected Cloud Shell region and *LRS/GRS/ZRS* account types.

Create storage

Close

PERSISTING STORAGE (1)

On initial start, Cloud Shell prompts you to associate a new or existing file share to persist files across sessions.

Cloud Shell creates three resources on your behalf in the supported region that's nearest to you:

Resource group: cloud-shell-storage-<region>

Storage account: cs<uniqueGuid>

File share: cs-<user>-<domain>-com-<uniqueGuid>

PERSISTING STORAGE (2)

Cloud Shell persists files through both of the following methods:

Creating a disk image of your \$HOME directory to persist all contents within the directory. The disk image is saved in your specified file share as `acc_<User>.img` `storageshare.file.core.windows.net/fileshare/.cloudconsole/acc_<User>.img`, and it automatically syncs changes.

Mounting your specified file share as `clouddrive` in your \$HOME directory for direct file share interaction. `/Home/<User>/clouddrive` is mapped to `storageshare.file.core.windows.net/fileshare`.

The background is a solid blue color. It features several white wireframe cubes of varying sizes and orientations. One cube is at the top center, another at the bottom center, and a large, complex cluster of interconnected cubes is on the right side.

Demo

AZURE CLOUD SHELL:
WHERE ARE MY FILES?

LANGUAGES

Pre-configured, without the overhead of installing, versioning, and maintaining a machine yourself

Language	Version
.NET	2.0.0
Go	1.9.4
Java	1.8
Node.js	8.9.4
PowerShell	6.1.2
Python	2.7 and 3.5.2 (default)

TOOLS

Category	Name	Category	Name
Linux shell interpreter	bash	Build tools	make
	zsh, sh		maven
	tmux		npm
	dig		pip
Azure tools	Azure CLI	Containers	Docker CLI/Docker Machine
	AzCopy		Kubectl
	Batch Shipyard		Helm
	Service Fabric CLI		DC/OS CLI
Text editors	blobxfer	Databases	MySQL client
	vim		PostgreSql client
	nano		sqlcmd Utility
	emacs		mssql-scripter
Source control	code	Other	iPython Client
	git		Cloud Foundry CLI
			Terraform, Ansible, Chef

POWERSHELL IN CLOUD SHELL

Additionally, the PowerShell experience will provide:

Azure namespace capability to let you easily discover and navigate all Azure resources.

Interaction with VMs to enable seamless management into the guest VMs.

Extensible model to import additional cmdlets and ability to run any executable.

The background is a solid blue color. It features several white line-art geometric shapes. In the top right, there is a small cube-like shape. On the right side, there is a larger, more complex structure made of interconnected cubes, resembling a staircase or a cluster. In the bottom center, there is a small cube-like shape. In the bottom right, there is another small cube-like shape.

Demo

AZURE CLOUD SHELL:
BASH
AND
POWERSHELL

CLOUD SHELL IN DOCS

<https://docs.microsoft.com/en-us/cli/azure/azure-cli-vm-tutorial?view=azure-cli-latest>

<https://docs.microsoft.com/en-us/azure/virtual-machines/windows/quick-create-powershell>

Filter

- Linux Virtual Machines
- Windows Virtual Machines
- Linux VMs using classic deployment
- Windows VMs using classic deployment
- > Resources

Sample script

Azure PowerShell

```
New-AzVM -Name myVM `
-VirtualNetworkName myVNet `
-Location westeurope `
-SecurityGroupName myNSG `
-PublicIpAddressName myPIP
```

Copy Try It

Azure Cloud Shell

```
Requesting a Cloud Shell...Succeeded.
Connecting terminal...

Welcome to Azure Cloud Shell (Preview)

Type "dir" to see your Azure resources
Type "help" to learn about Cloud Shell

VERBOSE: Authenticating to Azure ...
VERBOSE: Building your Azure drive ...
PS Azure:\>
```

CLOUD SHELL IN MICROSOFT LEARN

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Exercise - Create an Azure Resource using scripts in Azure PowerShell

[Sign in](#)

Exercise - Create an Azure Resource using scripts in Azure PowerShell

✓ 100 XP

🕒 15 minutes

This unit requires a sandbox to complete

The sandbox will give you free access to the Azure resources needed to complete this unit. Your Azure subscription will not be charged.

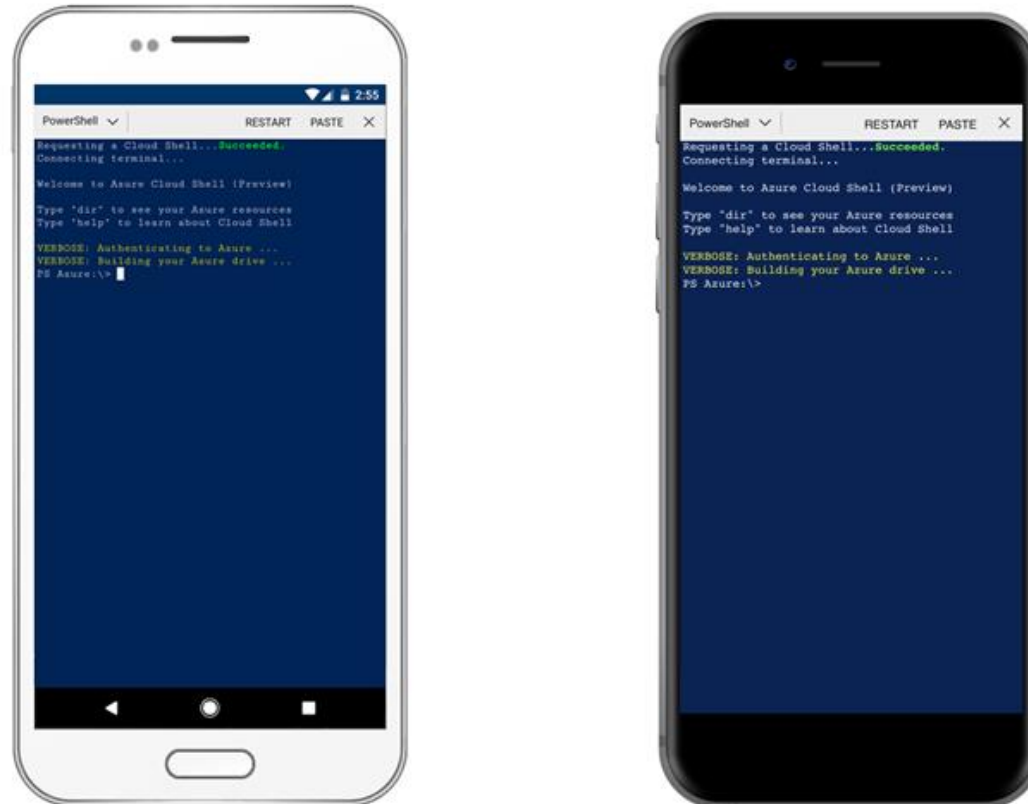
[Sign in to activate sandbox](#)

Azure Cloud Shell

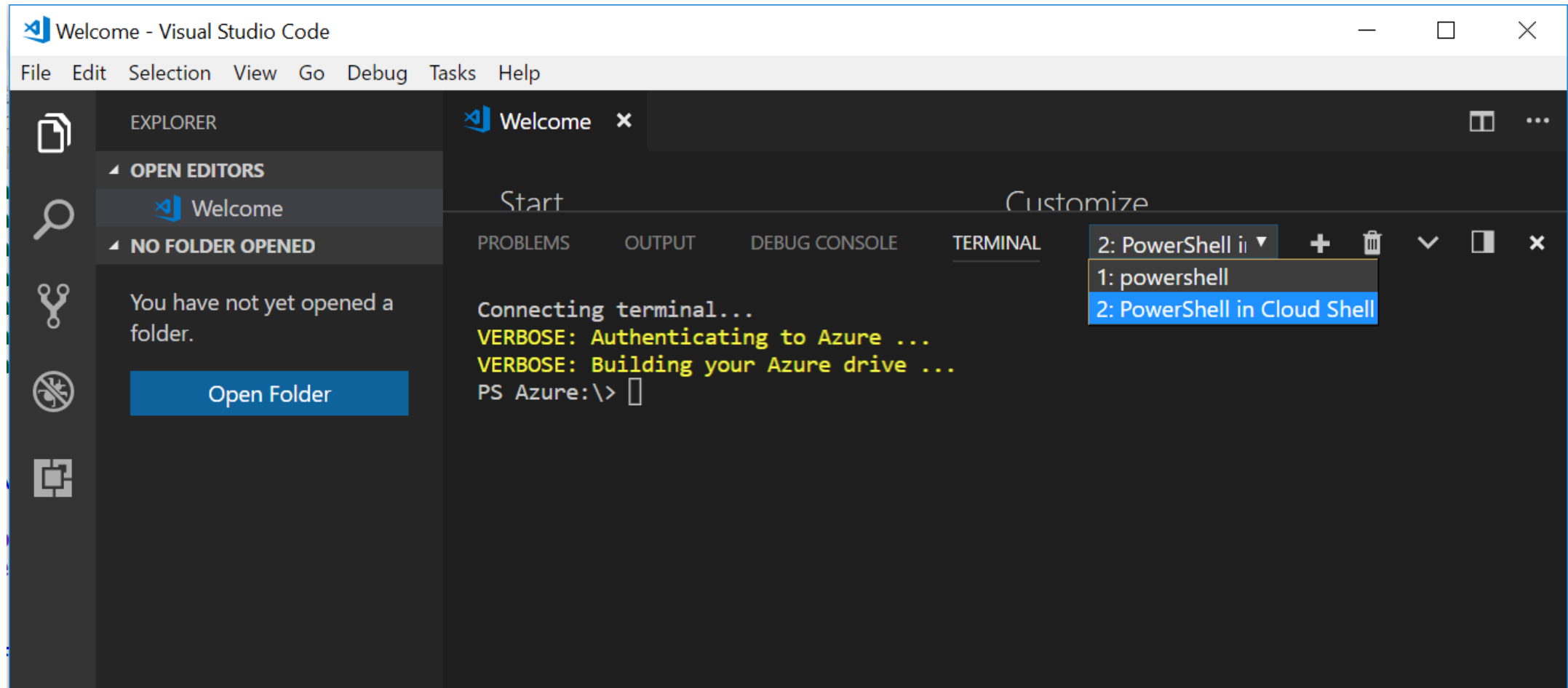
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CLOUD SHELL IN AZURE APP

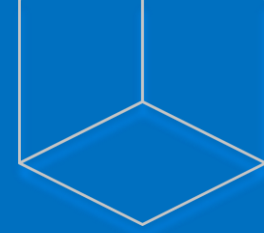


CLOUD SHELL IN VISUAL STUDIO CODE



Demo

AZURE CLOUD SHELL IN VISUAL STUDIO CODE



RESOURCES

<https://azure.microsoft.com/en-us/blog/pscloudshellrefresh/>

Start here: <https://azure.microsoft.com/features/cloud-shell/>

UserVoice: <https://aka.ms/cloudshellfeedback>

<http://vimsheet.com/>

<https://github.com/PowerShell/AzurePSDrive>