

Microsoft Azure (formerly **Windows Azure** /'æʒər/) is a [cloud computing](#) service created by [Microsoft](#) for building, testing, deploying, and managing applications and services through Microsoft-managed [data centers](#). It provides [software as a service \(SaaS\)](#), [platform as a service \(PaaS\)](#) and [infrastructure as a service \(IaaS\)](#) and supports many different [programming languages](#), tools, and frameworks, including both Microsoft-specific and third-party software and systems.

Azure was announced in October 2008, started with codename "Project Red Dog", and released on February 1, 2010, as "Windows Azure" before being renamed "Microsoft Azure" on March 25, 2014.

Computer services

- Virtual machines, [infrastructure as a service \(IaaS\)](#) allowing users to launch general-purpose [Microsoft Windows](#) and [Linux](#) virtual machines, as well as preconfigured machine images for popular software packages.
 - Most users run Linux on Azure, some of the many [Linux distributions](#) offered, including Microsoft's own [Linux-based Azure Sphere](#).^[6]
- App services, [platform as a service \(PaaS\)](#) environment letting developers easily publish and manage websites.
- [Websites](#), high density hosting of websites allows developers to build sites using [ASP.NET](#), [PHP](#), [Node.js](#), or [Python](#) and can be deployed using [FTP](#), [Git](#), [Mercurial](#), [Team Foundation Server](#) or uploaded through the user portal. This feature was announced in preview form in June 2012 at the Meet Microsoft Azure event. Customers can create websites in PHP, ASP.NET, Node.js, or Python, or select from several open source applications from a gallery to deploy. This comprises one aspect of the [platform as a service \(PaaS\)](#) offerings for the Microsoft Azure Platform. It was renamed to Web Apps in April 2015
- WebJobs, applications that can be deployed to an App Service environment to implement background processing that can be invoked on a schedule, on demand, or run continuously. The Blob, Table and Queue services can be used to communicate between WebApps and WebJobs and to provide state.

Mobile services

- Mobile Engagement collects real-time analytics that highlight users' behavior. It also provides push notifications to mobile devices.
- HockeyApp can be used to develop, distribute, and beta-test mobile apps.

Storage services

- Storage Services provides [REST](#) and [SDK APIs](#) for storing and accessing data on the cloud.
- Table Service lets programs store structured text in partitioned collections of entities that are accessed by partition key and primary key. It's a NoSQL non-relational database.
- Blob Service allows programs to store unstructured text and binary data as blobs that can be accessed by an HTTP(S) path. Blob service also provides security mechanisms to control access to data.
- Queue Service lets programs communicate asynchronously by message using queues.
- File Service allows storing and access of data on the cloud using the [REST APIs](#) or the [SMB protocol](#).