

Introduction to Microsoft Azure

Features of Free Tier Account

- i) For Windows & Linux Machines – 750 hours are free.
- ii) Virtual machine type recommended for Free tier account **B1S VM**.
- iii) Disks Management
 - a) Blob Storage – 5 GB free (Local Redundant Storage)
 - b) File Storage – 5 GB Free
 - c) SQL – 250 GB Free
 - d) Bandwidth Usage – 15 GB Free
- iv) Deployment Models
 - a) Classic Deployment Models
In this model each resource existed independently.
 - b) Resource manager
Resource Manager which added the concept of resource group in 2014.

Resource Manager Terminology

A manageable item that is available through Azure

Ex: Virtual machine, Storage, account, web apps.

Resource Group:

A container that holds related resources for an Azure solution

- **Azure Access Platform**

- **Azure Portal**

- It is used to view and manage all of your applications in one unified hub. It including web apps, databases, virtual machines, virtual networks, storage, and Visual Studio team projects.

- **Azure CLI**

- Azure Bash Shell
 - Azure Power shell

- **Azure SDK**

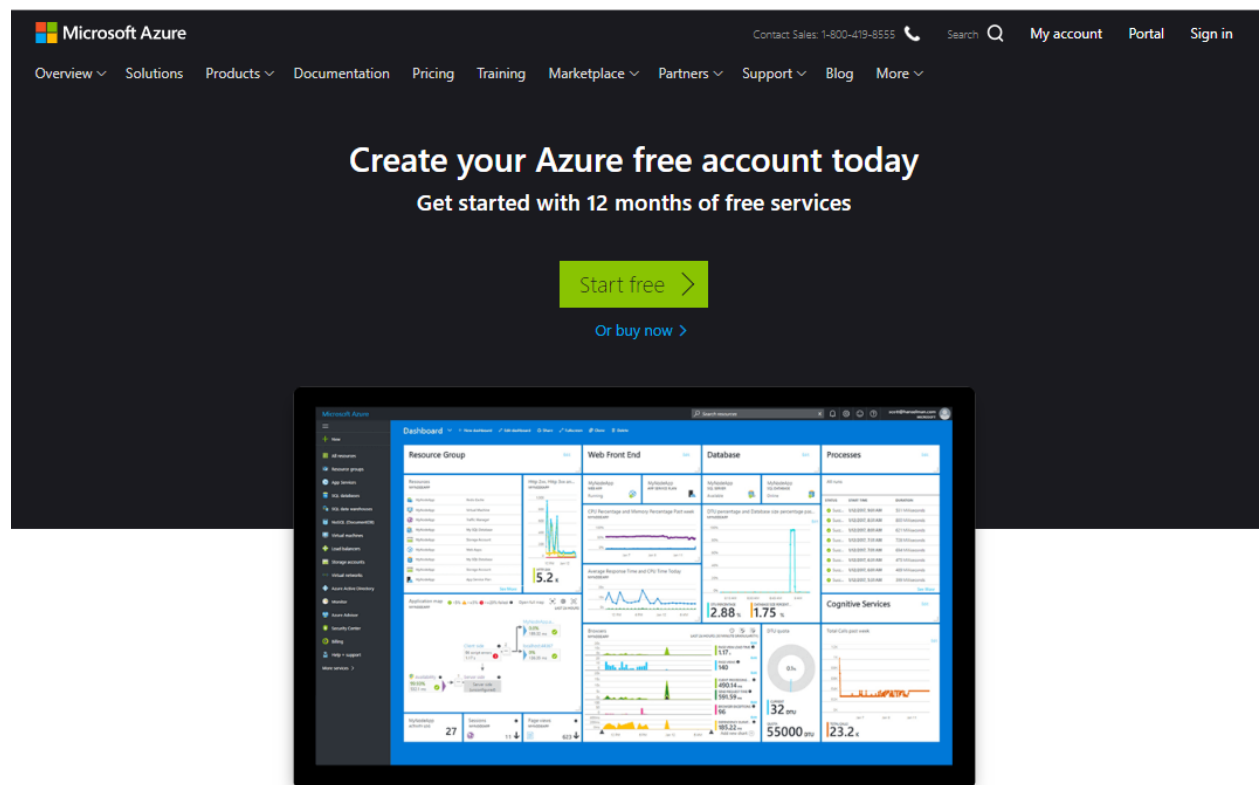
- Azure Free Account**

Products	Period of free Avail
750hr of B1s VM for Win Server	12 months
750hr of B1s VM for Linux Server	12 months
128 GB of Managed Disks as a combination of two 64GB	12 months
SSD storage, plus 1GB snapshot and 2 million I/O operations.	12 months
5GB of LRS-Hot Blob storage with 2 million reads, 2 million write Operations.	12 months
250 GB of SQL Database standard	12 months
5GB of bandwidth for outbound data transfer with free unlimited inbound transfer	Always Free
More Services	Always Free

Prerequisite to create Azure Free trial account

- i) You should have email id on outlook.com
- ii) Credit Card (if you have already created Azure account by using existing credit card please try with another credit card to get Free Trial)
- iii) Mobile Number (if you have already created Azure account by using existing mobile number please try with another credit card to get Free Trial)
- iv) Need to register for Free Trial account by using below mentioned URL
<https://azure.microsoft.com/en-us/free/>

Create Azure Free Account today and you will get **Rs.13,300/- credit in your Free trial account to utilize the features of Azure for 30 days**. After 30 days of free trial period it will be expired. Then you need the subscription as **Pay-As-You-Go**



The screenshot shows the Microsoft Azure website's landing page. At the top, there's a navigation bar with links like Overview, Solutions, Products, Documentation, Pricing, Training, Marketplace, Partners, Support, Blog, and More. The main heading is 'Create your Azure free account today' with a subtext 'Get started with 12 months of free services'. Below this is a large green 'Start free' button and a smaller 'Or buy now' link. At the bottom of the banner, there's a preview of the Azure dashboard, which displays various metrics and charts for a resource group, including CPU usage, memory usage, and network activity.

What do I get?









With your Azure free account, you get all of this—and you won't be charged until you choose to upgrade.

12 months + **\$200 credit** + **Always free**
of popular free services to explore any Azure service for 30 days 25+ services

List of Products are free for 12 months.

Which products are free for 12 months?










These popular products are free each month for 12 months

 Linux Virtual Machines COMPUTE	 Windows Virtual Machines COMPUTE	 Managed Disks STORAGE
750 Hours B1S VM Create Linux virtual machines with on-demand capacity in seconds.	750 Hours B1S VM Create Windows virtual machines with on-demand capacity in seconds.	64 GB X 2 2 P6 SDDs Get premium, secured disk storage for Azure Virtual Machines with simplified management.
 Blob Storage STORAGE	 File Storage STORAGE	 SQL Database DATABASES
5 GB LRS hot block Use massively scalable object storage for any type of unstructured data.	5 GB LRS File Storage Migrate to simple, distributed, cross-platform file storage without changing code.	250 GB Create a SQL Database that delivers intelligence built-in.
 Azure Cosmos DB DATABASES	 Bandwidth (Data Transfer) NETWORKING	
5 GB 400 requests units Build and scale your application with a globally distributed, multi-model database service.	15 GB outbound Transfer data inbound and outbound through our robust network of global data centers.	










Below mentioned products are always free

Which products are always free?









These products—including serverless, containers, and artificial intelligence—are always free

 App Service COMPUTE	 Functions COMPUTE	 Azure Kubernetes Service (AKS) CONTAINERS
10 web, mobile, or API apps Quickly create powerful apps for any platform or device using your choice of tools including Node.js and PHP.	1,000,000 requests per month Process events with a serverless code architecture.	Free Deploy and manage containers using the tools you choose.
 Face API AI + MACHINE LEARNING	 DevTest Labs DEVELOPER TOOLS	 Active Directory IDENTITY
30,000 transactions per month Enable natural and contextual interaction with tools that augment users' experiences.	Free Enable fast, easy, and lean dev-test environments.	500,000 objects Enable one-click sign-in to any cloud or on-premises web app for secured identity and access management.
 Active Directory B2C IDENTITY	 Service Fabric CONTAINERS	 Azure DevOps DEVELOPER TOOLS
50,000 monthly stored users Enable customer identity and access management in the cloud.	Free Build and operate always-on, scalable, distributed apps.	5 users (with unlimited private Git repos) Build apps in any language using our DevOps service - git repos, CI/CD, build and release automation.

Below mentioned products are always free

 Machine Learning Studio ANALYTICS	 Security Center SECURITY	 Advisor MANAGEMENT AND GOVERNANCE
100 modules per experiment Build powerful, cloud-based machine learning applications.	Free policy assessment and recommendations Prevent, detect, and respond to threats with increased visibility and control over the security of your Azure resources.	Unlimited Get personalized recommendations to Azure best practices.
 Microsoft IoT Hub INTERNET OF THINGS	 Load Balancer NETWORKING	 Data Factory DATABASES
8,000 messages per day Connect, monitor, and manage billions of IoT assets.	Free public load balanced IP (VIP) Add scale, availability, and network performance to your applications instantly.	5 activities low frequency Compose and manage data services at scale.
 Search CONTAINERS	 Notification Hubs CONTAINERS	 Batch COMPUTE
10,000 documents Include a cloud search service in your web and mobile application.	1,000,000 push notifications Send push notifications to any platform from any back end.	Free Scale your application in the cloud with job orchestration and scheduling for HPC applications.

Below mentioned products are always free

 Automation MANAGEMENT AND GOVERNANCE <p>500 Minutes of job runtime</p> <hr/> <p>Simplify cloud management with process automation.</p>	 Data Catalog ANALYTICS <p>Unlimited users</p> <hr/> <p>Get more value from your enterprise data assets.</p>	 Translator Text API AI + MACHINE LEARNING <p>2,000,000 characters included</p> <hr/> <p>Easily conduct real-time speech translation with simple REST API call.</p>
 Scheduler MANAGEMENT AND GOVERNANCE <p>1 job collection (5 jobs per collection)</p> <hr/> <p>Run your jobs on simple or complex recurring schedules.</p>	 Virtual Network NETWORKING <p>50 virtual networks</p> <hr/> <p>Provision private networks and connect to on-premises datacenters.</p>	 Inter-VNET data transfer NETWORKING <p>Inbound only</p> <hr/>
 Bandwidth (Data Transfer) NETWORKING <p>5 GB outbound</p> <hr/> <p>Transfer data inbound and outbound through our robust network of global data centers.</p>	 Machine Learning Service AI + MACHINE LEARNING <p>Free Workspaces</p> <hr/> <p>Get started with a free workspace. Only pay for the Azure resources you consume when training your models.</p>	