# **Azure Quotas**

 $\underline{https://docs.microsoft.com/en-us/azure/azure-subscription-service-limits\#app-service-limits}$ 

This document lists some of the most common Microsoft Azure limits, which are also sometimes called quotas.

#### **Subscription limits**

#### **Subscription limits - Azure Service Management (classic deployment model)**

Resource	Default limit	Maximum limit
vCPUs per subscription1	20	10,000
Coadministrators per subscription	200	200
Storage accounts per subscription2	100	100
Cloud services per subscription	20	200
Local networks per subscription	10	500
DNS servers per subscription	9	100
Reserved IPs per subscription	20	100
Affinity groups per subscription	256	256
Subscription name length (characters)	64	64

### **Subscription limits - Azure Resource Manager**

The following limits apply when you use Azure Resource Manager and Azure resource groups. Limits that haven't changed with Azure Resource Manager aren't listed. See the previous table for those limits.

For information about Resource Manager API read and write limits.

Resource	Default limit	Maximum limit
VMs per subscription	25,0001 per region.	25,000 per region.

VM total cores per subscription	201 per region.	Contact support.
VM per series, such as Dv2 and F, cores per subscription	201 per region.	Contact support.
Coadministrators per subscription	Unlimited.	Unlimited.
Storage accounts per region per subscription	250	250
Resource groups per subscription	980	980
Availability sets per subscription	2,000 per region.	2,000 per region.

## **Virtual Machines limits - Azure Resource Manager**

The following limits apply when you use Azure Resource Manager and Azure resource groups.

Resource	Default limit
Virtual machines per availability set	200
Certificates per subscription	Unlimited1

### Virtual machine scale sets limits

Resource	Default limit	Maximum limit
Maximum number of VMs in a scale set	1,000	1,000
Maximum number of VMs based on a custom VM image in a scale set	600	600
Maximum number of scale sets in a region	2,000	2,000

### **Container Instances limits**

Resource	Default limit
Container groups per region per subscription	1001
Number of containers per container	60
group	

Number of volumes per container group	20
Ports per IP	5
Container instance log size - running instance	4 MB
Container instance log size - stopped instance	16 KB or 1,000 lines
Container creates per hour	3001
Container creates per 5 minutes	1001
Container deletes per hour	3001
Container deletes per 5 minutes	1001

## **Networking limits**

Networking limits - Azure Resource Manager The following limits apply only for networking resources managed through **Azure Resource Manager** per region per subscription.

Resource	Default/maximum limit
Virtual networks	1,000
Subnets per virtual network	3,000
Virtual network peerings per virtual network	500
Virtual network gateways (VPN Gateways) per virtual network	30
DNS servers per virtual network	20
Private IP addresses per virtual network	65,536
Private IP addresses per network interface	256
Private IP addresses per virtual machine	256
Public IP addresses per network interface	256
Public IP addresses per virtual machine	256
Concurrent TCP or UDP flows per NIC of a virtual machine or role instance	500,000
Network interface cards	65,536
Network Security Groups	5,000

NSG rules per NSG	1,000
IP addresses and ranges specified for source or destination in a security	4,000
group	
Application security groups	3,000
Application security groups per IP configuration, per NIC	20
IP configurations per application security group	4,000
Application security groups that can be specified within all security rules of a network security group	100
User-defined route tables	200
User-defined routes per route table	400

#### **Public IP address limits**

Resource	Default limit	Maximum limit
Public IP addresses - dynamic	1,000 for Basic.	Contact support.
Public IP addresses - static	1,000 for Basic.	Contact support.
Public IP addresses - static	1,000 for Standard.	Contact support.
Public IP prefix length	/28	Contact support.

### **Load balancer limits**

The following limits apply only for networking resources managed through Azure Resource Manager per region per subscription.

Resource	Default/maximum limit
Load balancers	1,000
Rules per resource, Basic	250
Rules per resource, Standard	1,500

# **ExpressRoute limits**

Resource	Default/maximum limit
ExpressRoute circuits per subscription	10

ExpressRoute circuits per region per subscription, with Azure Resource Manager	10
Maximum number of routes advertised to Azure private peering with ExpressRoute Standard	4,000
Maximum number of routes advertised to Azure private peering with ExpressRoute Premium add-on	10,000
Maximum number of routes advertised from Azure private peering from the VNet address space for an ExpressRoute connection	200
Maximum number of routes advertised to Microsoft peering with ExpressRoute Standard	200
Maximum number of routes advertised to Microsoft peering with ExpressRoute Premium add-on	200
Maximum number of ExpressRoute circuits linked to the same virtual network in the same peering location	4
Maximum number of ExpressRoute circuits linked to the same virtual network in different peering locations	4

# **Application Gateway limits**

The following table applies to v1, v2, Standard, and WAF SKUs unless otherwise stated.

Resource	Default/maximum limit	Note
Azure Application Gateway	1,000 per subscription	
Front-end IP configurations	2	1 public and 1 private
Front-end ports	1001	
Back-end address pools	1001	
Back-end servers per pool	1,200	
HTTP listeners	1001	

HTTP load-balancing	1001	
rules		

#### **Private Link limits**

The following limits apply to Azure private link:

Resource	Limit
Number of private endpoints per virtual network	1000
Number of private endpoints per subscription	64000

## **Traffic Manager limits**

Resource	Default/maximum limit
Profiles per subscription	200
Endpoints per profile	200

#### **Azure Bastion limits**

Resource	Default limit
Concurrent RDP connections	25*
Concurrent SSH connections	More than 50**

### **Azure Firewall limits**

Resource	Default limit
Data throughput	30 Gbps1
Rules	10,000, all rule types combined.
Minimum AzureFirewallSubnet size	/26

### **Storage limits**

The following table describes default limits for Azure general-purpose v1, v2, and Blob storage accounts. The *ingress* limit refers to all data from requests that are sent to a storage account. The *egress* limit refers to all data from responses that are received from a storage account.

Resource	Default limit
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Number of storage accounts per region per subscription, including both standard and premium accounts	250
Maximum storage account capacity	2 PiB for US and Europe, and 500 TiB for all other regions (including the UK)1
Maximum number of blob containers, blobs, file shares, tables, queues, entities, or messages per storage account	No limit
Maximum request rate1 per storage account	20,000 requests per second
Maximum ingress1 per storage account (US, Europe regions)	25 Gbps

### **Azure Files limits**

For more information on Azure Files limits, see <u>Azure Files scalability and performance targets</u>.

Resource	Standard file shares	Premium file shares
Minimum size of a file share	No minimum; pay as you go	100 GiB; provisioned
Maximum size of a file share	100 TiB*, 5 TiB	100 TiB
Maximum size of a file in a file share	1 TiB	1 TiB
Maximum number of files in a file share	No limit	No limit
Maximum IOPS per share	10,000 IOPS*, 1,000 IOPS	100,000 IOPS
Maximum number of stored access policies per file share	5	5

## **Azure Queue storage limits**

Resource	Target
Maximum size of a single queue	500 TiB
Maximum size of a message in a queue	64 KiB
Maximum number of stored access policies per queue	5
Maximum request rate per storage account	20,000 messages per second, which assumes a 1-KiB message size

Target throughput for a single queue	Up to 2,000 messages per second
(1-KiB messages)	

## **Azure Table storage limits**

Resource	Target
Maximum size of a single table	500 TiB
Maximum size of a table entity	1 MiB
Maximum number of properties in a table entity	255, which includes three system properties: PartitionKey, RowKey, and Timestamp
Maximum total size of property values in an entity	1 MiB

## **App Service limits**

The following App Service limits include limits for Web Apps, Mobile Apps, and API Apps.

Resourc e	Free	Shared	Basic	Standar d	Premium (v2)	Isolated
Web, mobile, or API apps per Azure App Service plan1	10	100	Unlimited 2	Unlimited 2	Unlimited 2	Unlimited 2
Арр	10 per	10 per	100 per	100 per	100 per	100 per
Service	region	resource	resource	resource	resource	resource
plan		group	group	group	group	group
Compute instance type	Shared	Shared	Dedicate d3	Dedicate d3	Dedicate d3	Dedicate d3
Scale out (maxi mum instances )	1 shared	1 shared	3 dedicate d3	10 dedicate d3	30 dedicate d3	100 dedicate d4

Custom domains per app	0 (azurewe bsites.ne t subdoma in only)	500	500	500	500	500
Custom domain S SL support	Wildcard *.azurewe bsites.ne t available by default	Wildcard *.azurewe bsites.ne t available by default	Unlimited SNI SSL connecti ons	Unlimited SNI SSL and 1 IP SSL	Unlimited SNI SSL and 1 IP SSL	Unlimited SNI SSL and 1 IP SSL
Hybrid connecti ons per plan			5	25	200	200
Integrate d load balancer		X	X	X	X	X10
Autoscal e				X	X	X
Azure Schedule r support		X	X	X	X	X
Endpoint monitorin g			X	X	X	X
Staging slots				5	20	20
SLA			99.95%	99.95%	99.95%	99.95%

# **Functions limits**

Resource	Consumption plan	Premium plan	App Service plan1
Scale out	Event driven	Event driven	Manual/autoscale
Max instances	200	100	10-20
Default time out duration (min)	5	30	302

# **Content Delivery Network limits**

Resource	Default limit
Azure Content Delivery Network profiles	25
Content Delivery Network endpoints per profile	25
Custom domains per endpoint	25

# **Azure Monitor limits**

## **Alerts**

Resource	Default limit	Maximum limit
Metric alerts (classic)	100 active alert rules per subscription.	Call support.
Metric alerts	1000 active alert rules per subscription in Azure public, Azure China 21Vianet and Azure Government clouds.	Call support.
Activity log alerts	100 active alert rules per subscription.	Same as default.
Log alerts	512	Call support.
Action groups	2,000 action groups per subscription.	Call support.
Autoscale settings	100 per region per subscription.	Same as default.

# **Action groups**

Resource	Default limit	Maximum limit
Azure app push	10 Azure app actions per	Call support.
	action group.	

Email	1,000 email actions in an action group. No more than 100 emails in an hour. Also see the rate limiting information.	Call support.
ITSM	10 ITSM actions in an action group.	Call support.
Logic app	10 logic app actions in an action group.	Call support.
Runbook	10 runbook actions in an action group.	Call support.

### **Notification Hubs limits**

Tier	Free	Basic	Standard
Included pushes	1 million	10 million	10 million
Active devices	500	200,000	10 million

#### **Event Hubs limits**

The following tables provide quotas and limits specific to <u>Azure Event Hubs</u>. For information about Event Hubs pricing, see <u>Event Hubs pricing</u>.

The following limits are common across basic, standard, and dedicated tiers.

Limit	Scope	Notes	Value
Number of Event Hubs namespaces per subscription	Subscription	-	100
Number of event hubs per namespace	Namespace	Subsequent requests for creation of a new event hub are rejected.	10
Number of partitions per event hub	Entity	-	32

### **Event Hubs Basic and Standard - quotas and limits**

nit Scope	Notes	Basic	Standard	
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Maximum size of Event Hubs event	Entity		256 KB	1 MB
Number of consumer groups per event hub	Entity		1	20
Number of AMQP connections per namespace	Namespace	Subsequent requests for additional connections are rejected, and an exception is received by the calling code.	100	5,000
Maximum retention period of event data	Entity		1 day	1-7 days
Apache Kafka enabled namespace	Namespace	Event Hubs namespace streams applications using Kafka protocol	No	Yes
Capture	Entity	When enabled, micro-batches on the same stream	No	Yes

### **Service Bus limits**

The following table lists quota information specific to Azure Service Bus messaging. For information about pricing and other quotas for Service Bus, see <u>Service Bus pricing</u>.

Maximum number of Basic or Standard namespaces per Azure subscription	Namespace	Subsequent requests for additional Basic or Standard namespaces are rejected by the Azure portal.	100
Maximum number of Premium namespaces per Azure subscription	Namespace	Subsequent requests for additional Premium namespaces are rejected by the portal.	100
Queue or topic size	Entity	Defined upon creation of the queue or topic.  Subsequent incoming messages are rejected, and an exception is received by the calling code.	1, 2, 3, 4 GB or 5 GB.  In the Premium SKU, and the Standard SKU with partitioning e nabled, the maximum queue or topic size is 80 GB.
Number of concurrent connections on a namespace	Namespace	Subsequent requests for additional connections are rejected, and an exception is received by the calling code. REST operations don't count toward concurrent TCP connections.	NetMessaging: 1,000. AMQP: 5,000.

Number of	Entity	Subsequent	5,000
concurrent		receive requests	
receive requests		are rejected, and	
on a queue, topic,		an exception is	
or subscription		received by the	
entity		calling code. This	
		quota applies to	
		the combined	
		number of	
		concurrent	
		receive operations	
		across all	
		subscriptions on a	
		topic.	

## **Data Factory limits**

Azure Data Factory is a multitenant service that has the following default limits in place to make sure customer subscriptions are protected from each other's workloads. To raise the limits up to the maximum for your subscription, contact support.

#### Version 2

Resource	Default limit	Maximum limit
Data factories in an Azure subscription	50	Contact support.
Total number of entities, such as pipelines, data sets, triggers, linked services, and integration runtimes, within a data factory	5,000	Contact support.
Total CPU cores for Azure-SSIS Integration Runtimes under one subscription	256	Contact support.
Concurrent pipeline runs per data factory that's shared among all pipelines in the factory	10,000	Contact support.

### **Event Grid limits**

The following limits apply to Azure Event Grid system topics and custom topics, *not* event domains.

Resource	Limit	
Custom topics per Azure subscription	100	
Event subscriptions per topic	500	
Publish rate for a custom topic (ingress)	5,000 events per second per topic	
Publish requests	250 per second	
Event size	Support for 64 KB in General Availability (GA). Support for 1 MB is currently in preview.	