

SQL Database tutorial: Create a SQL database in minutes using the Azure portal

By Carl Rabeler (<https://github.com/CarlRabeler>)

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Single database

Azure portal

In this tutorial, you'll learn how to use the Azure portal to:

- Create a SQL Database logical server to host SQL databases
- Create a SQL database with no data, with sample data or with data from a SQL database backup.
- Create a server-level firewall rule for a single IP address or for a range of IP addresses.

Use these links to perform these same tasks using either C# ([../sql-database-get-started-csharp/](#)) or PowerShell ([../sql-database-get-started-powershell/](#)).

Connecting to the Microsoft Azure portal with a subscription

To connect to the Microsoft Azure portal, you must have a subscription.

Get a new account

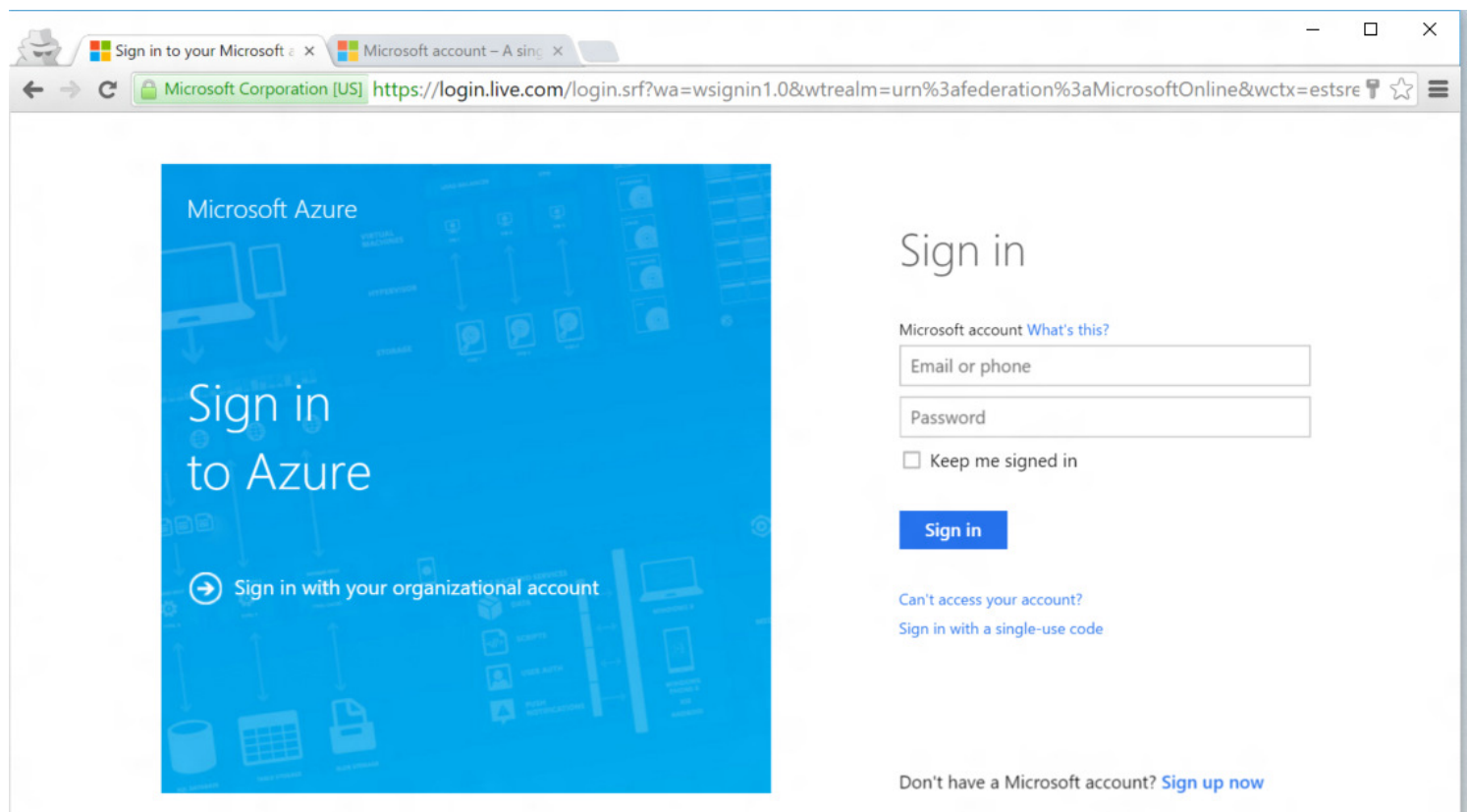
If you do not have an existing Microsoft Azure account, follow one of the links below to obtain an account:

- Get a free account (<https://azure.microsoft.com/get-started/>)
- Use an MSDN subscription (<https://azure.microsoft.com/pricing/member-offers/msdn-benefits/>)

Sign in using your existing account

Using your existing subscription (<https://account.windowsazure.com/Home/Index>), follow the steps below to connect to the Azure portal.

1. Open your browser of choice and connect to the Azure portal (<https://portal.azure.com/>).
2. Sign in to the Azure portal (<https://portal.azure.com/>).
3. When the sign in page appears, provide the credentials for your subscription

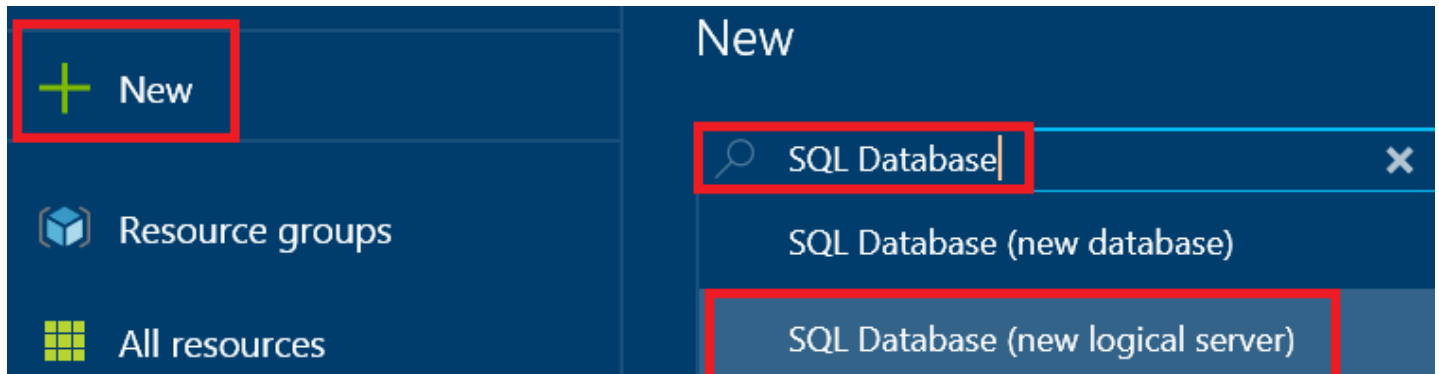


Create an Azure SQL Database logical server

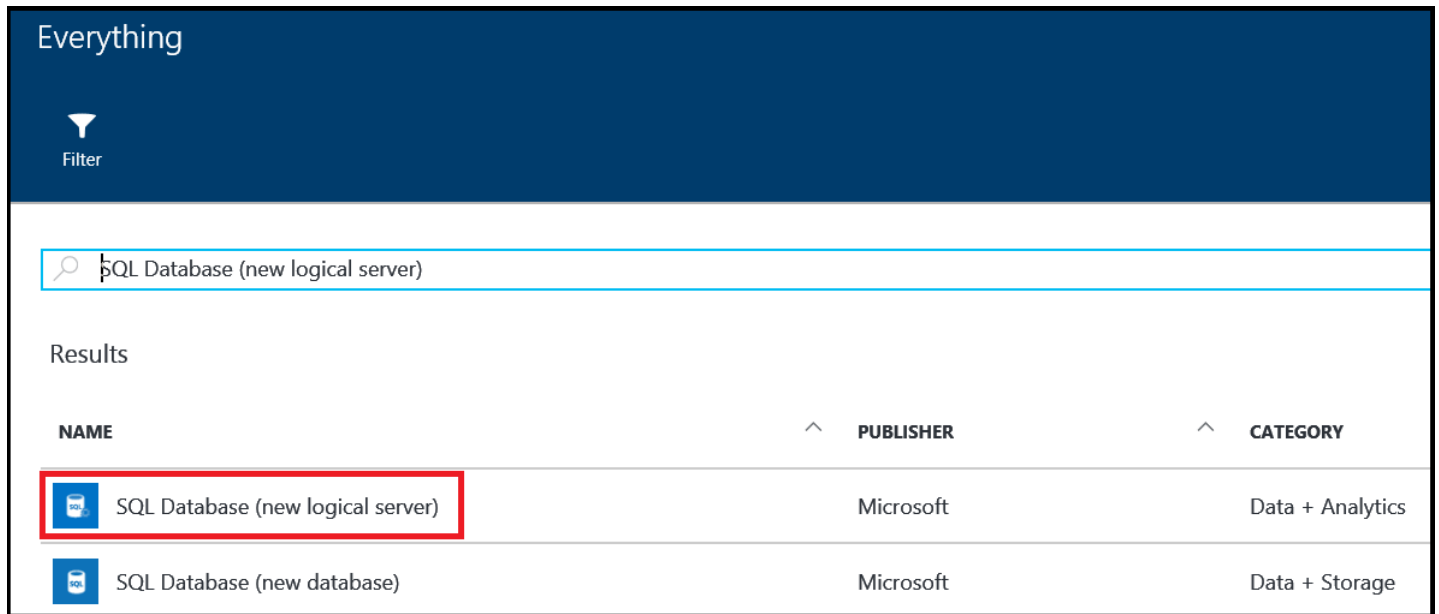
Use the following steps in the Azure portal to create an Azure SQL Database logical server.

1. If not currently connected, connect to the Azure portal (<http://portal.azure.com>).

2. Click **New** , type **SQL Database** and then click **SQL Database (new logical server)**



3. Click **SQL Database (new logical server)**.



4. Click **Create** to open a template to create an empty logical server that can host single databases and elastic database pools.

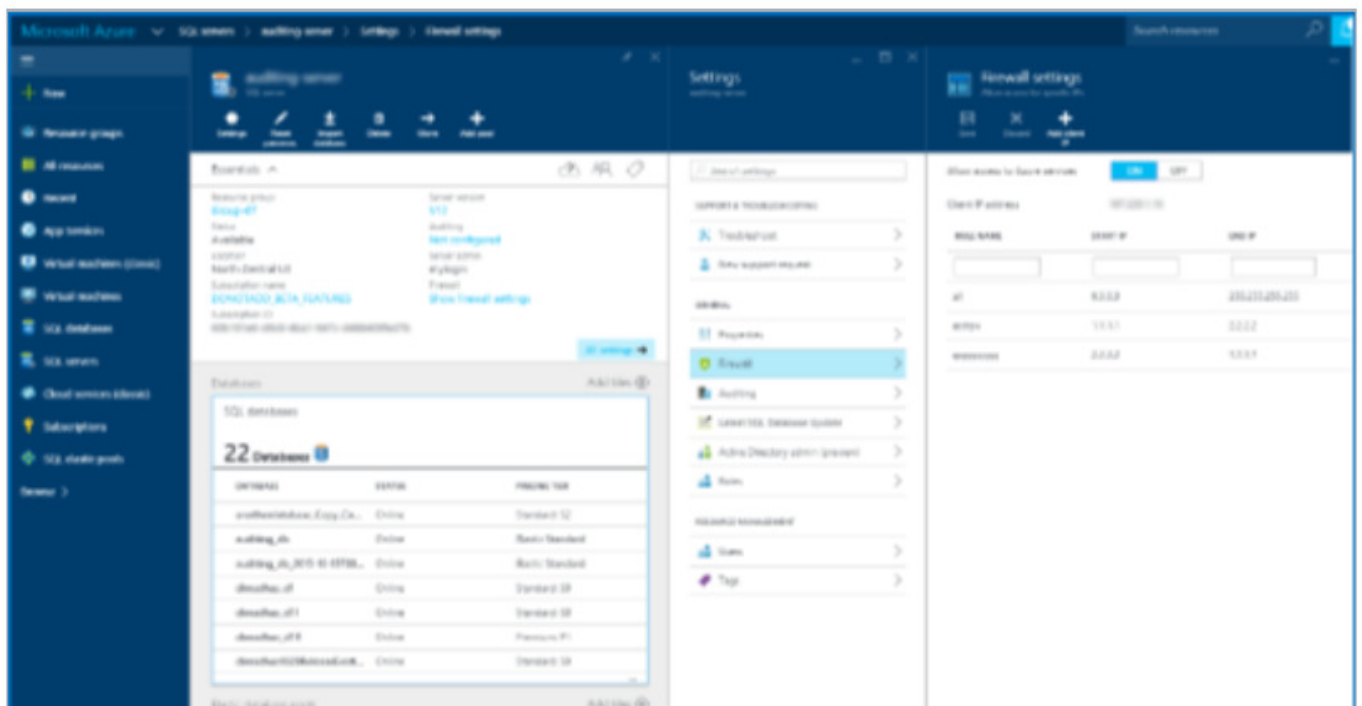


SQL Database (new logical server)

Microsoft

SQL Database is a cloud database service built for application developers that lets you scale on-the-fly without downtime and efficiently deliver your applications. Built-in advisors quickly learn your application's unique characteristics and dynamically adapt to maximize performance, reliability, and data protection.

Use this template to create an empty logical server, which can host databases and elastic database pools for SQL Database, host SQL Data Warehouse databases, or be used as the remote endpoint for a SQL Server stretch database.



Create

5. Provide the values for the following server properties:

- Server name
- Server admin login
- Password
- Subscription (only if have multiple subscriptions)
- Resource group (new or existing)

- Location

SQL Server (logical server only)

* Server name

sqldatabasecarl



.database.windows.net

* Server admin login

carlrabeler



* Password

●●●●●●●●



* Confirm password

●●●●●●●●



* Subscription



* Resource group

sqldatasergcarl



[Select existing](#)

* Location

North Central US



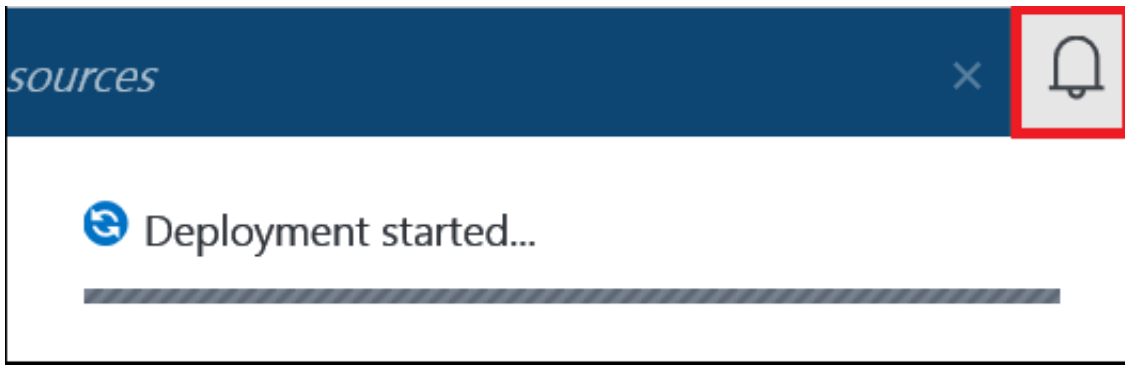
Allow azure services to access server 



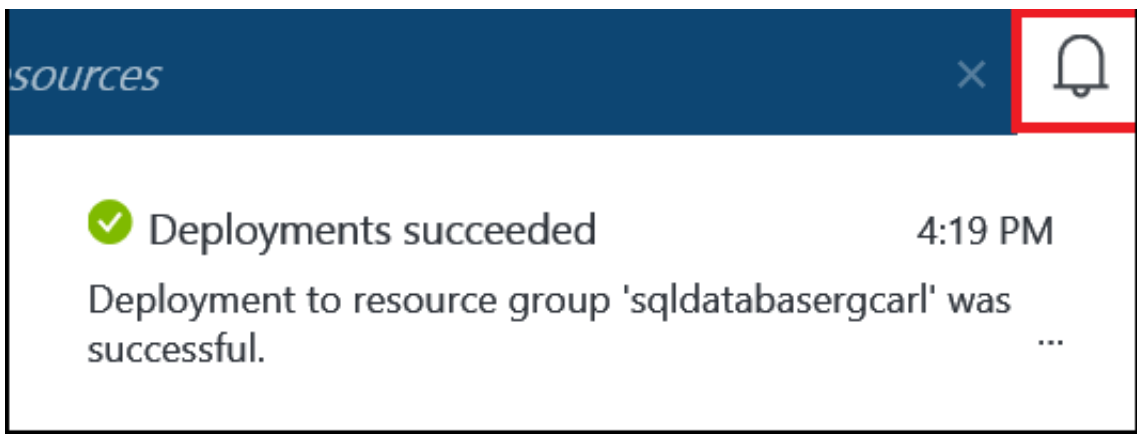
Pin to dashboard

A blue button with the word "Create" in white text, highlighted with a red rectangular border.

6. Click **Create** and in the notification area, you can see that deployment has started.



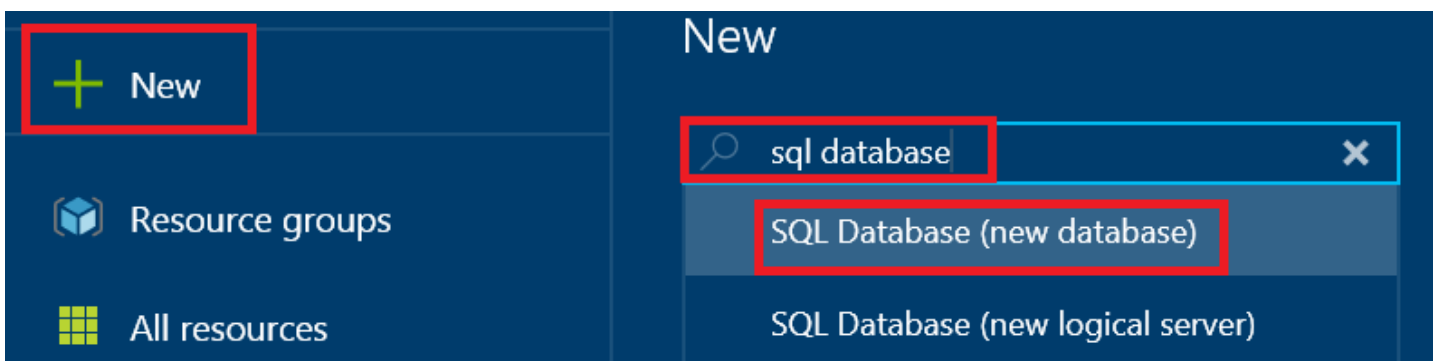
7. Wait for deployment to finish before continuing to the next step.



Create a new Aure SQL database

Use the following steps in the Azure portal to create a new Azure SQL database on a new or existing Azure SQL Database logical server.

1. If not currently connected, connect to the Azure portal (<http://portal.azure.com>).
2. Click **New**, type **SQL Database** and then click **SQL Database (new database)**











3. Click SQL Database (new database).



Filter

Results

NAME	PUBLISHER	CATEGORY
 SQL Database (new database)	Microsoft	Data + Storage
 SQL Database (new logical server)	Microsoft	Data + Analytics
 SQL Data Warehouse (new)	Microsoft	Data + Storage
 SQL Sentry Performance Advisor Evaluation	SQL Sentry	Virtual Machines
 Datadog Agent for Linux	Datadog Inc.	
 Datadog Agent for Windows	Datadog Inc.	
 Datadog Agent for Windows	Datadog Inc.	
 Aras Innovator PLM Suite 11	Aras	Virtual Machines

4. Click **Create** to create a new database in the SQL Database service.

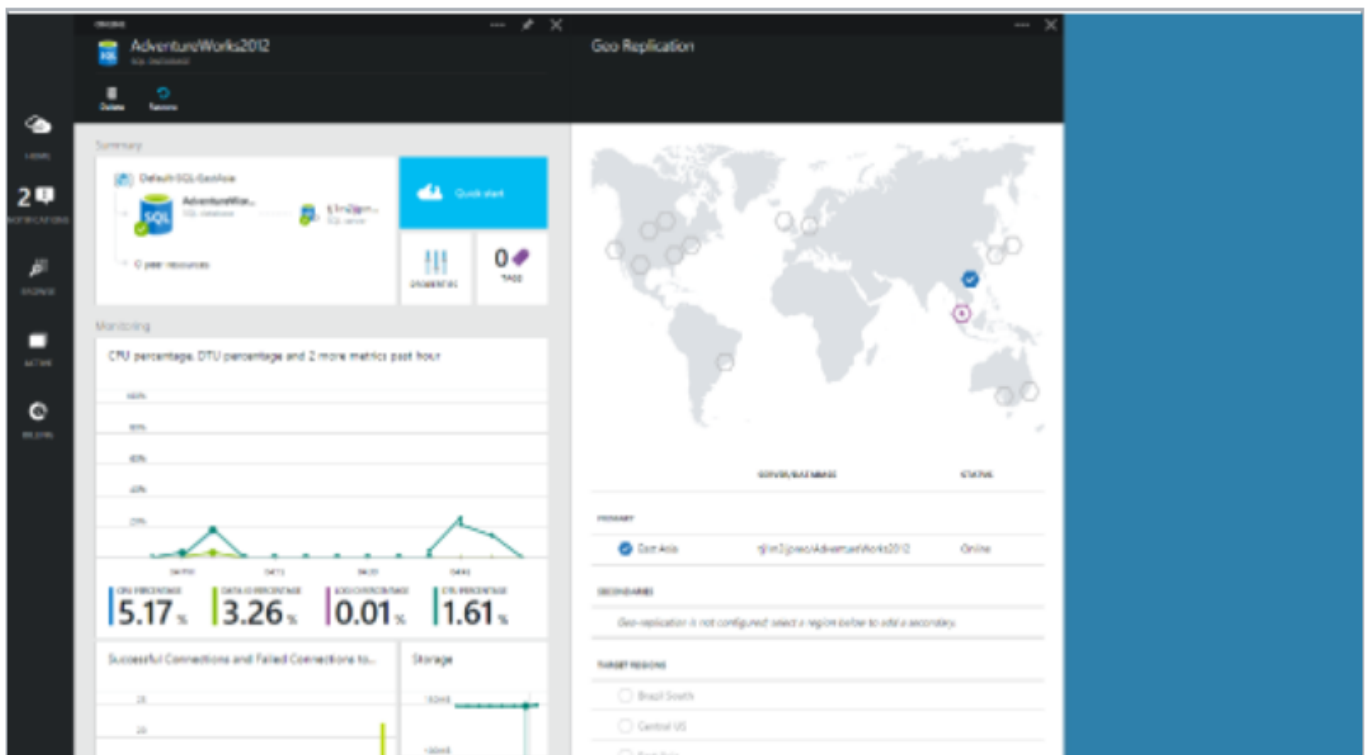


SQL Database (new database)

Microsoft

SQL Database is a cloud database service built for application developers that lets you scale on-the-fly without downtime and efficiently deliver your applications. Built-in advisors quickly learn your application's unique characteristics and dynamically adapt to maximize performance, reliability, and data protection.

Use this template to create a new database in the SQL Database service. You can create the database on a new logical server or on a logical server that already exists in your subscription.



Create

5. Provide the values for the following server properties:

- Database name
- Subscription (only if you have multiple subscriptions)
- Resource group (if just getting started, use the resource group of the logical server)
- Select source (you can choose a blank database, sample data or a database backup)
- Server (a new or existing logical server)

- Server admin password
- Password
- Pricing tier (if just getting started, use the default value S0)
- Collation (only if blank database chosen)

SQL Database

* Database name

database1 ✓

* Subscription

▼

* Resource group

sqldatabasecarl ▼

* Select source ⓘ

Sample ▼

* Select sample ⓘ

AdventureWorksLT [V12] ▼

* Server

sqldatabasecarl (North Central US) >

* Server admin login

carlrolel ✓

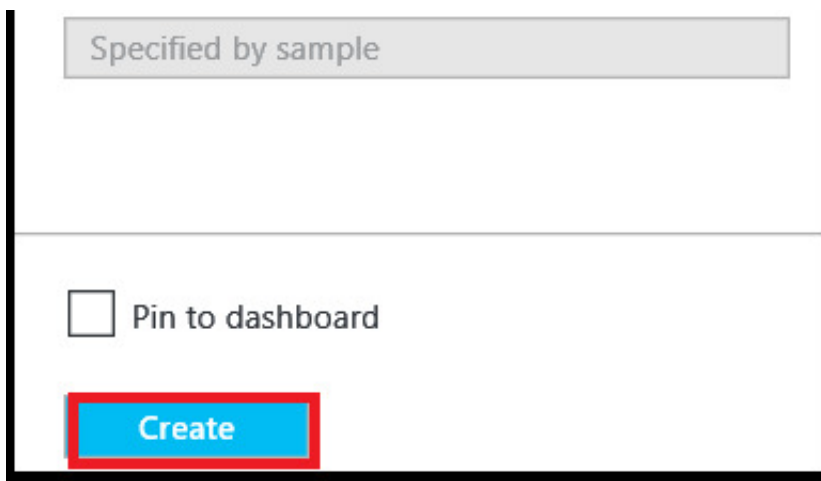
* Password

●●●●●●●● ✓

* Pricing tier ⓘ

S0 Standard >

* Collation ⓘ

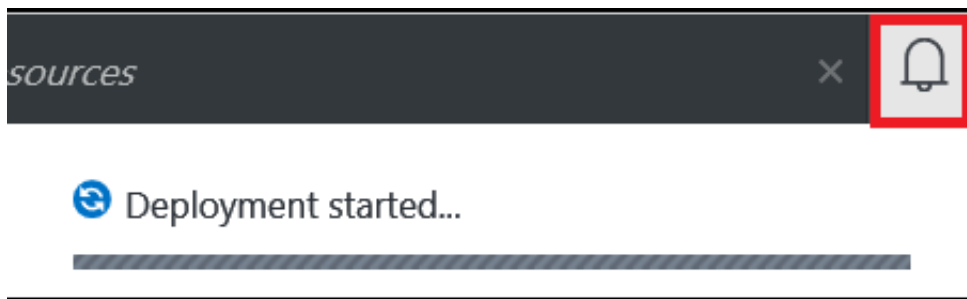


Specified by sample

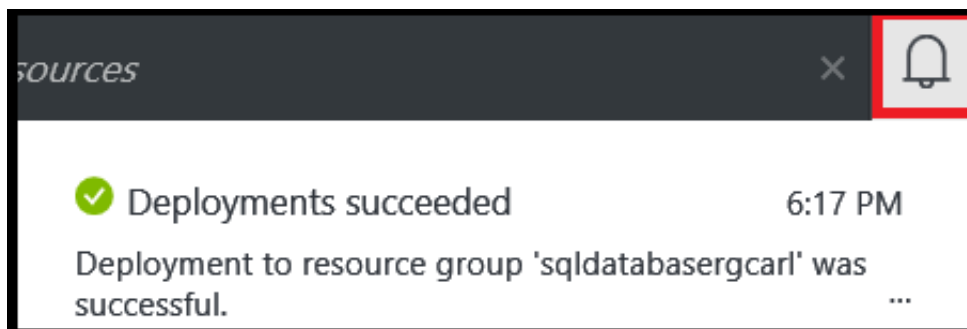
☐ Pin to dashboard

Create

6. Click **Create** and in the notification area, you can see that deployment has started.



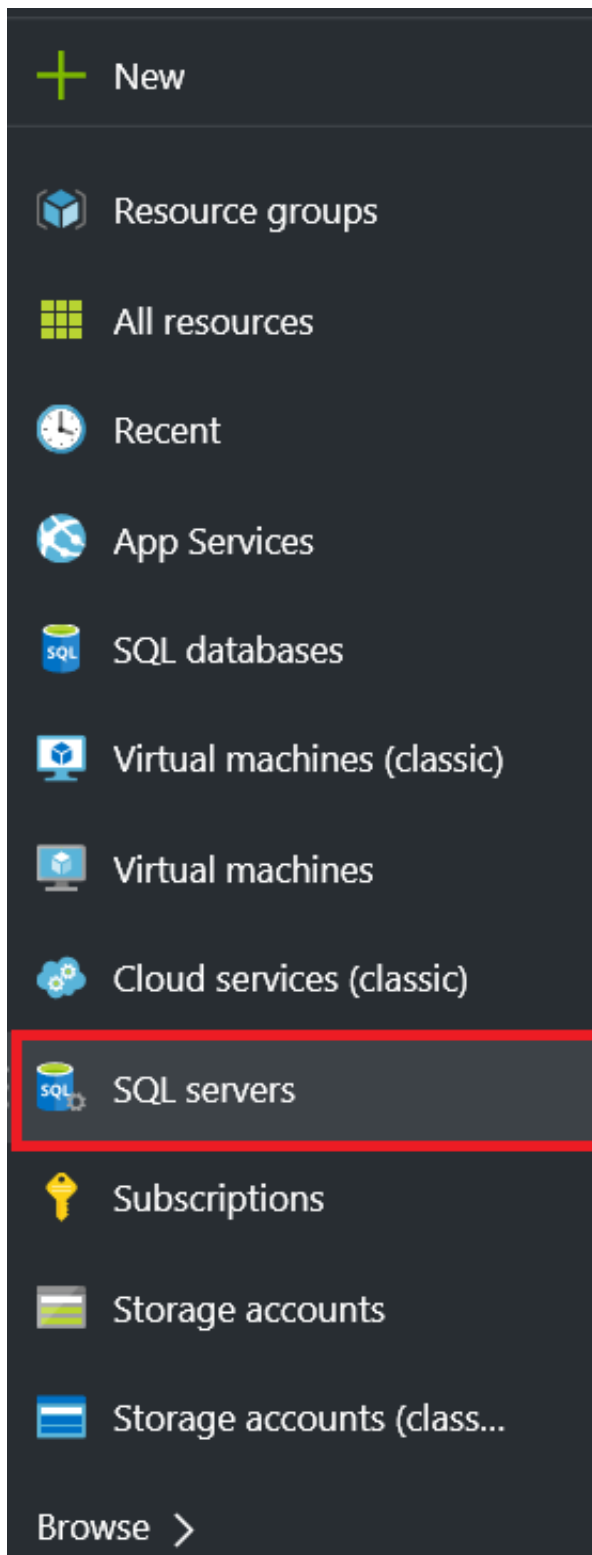
7. Wait for deployment to finish before continuing to the next step.



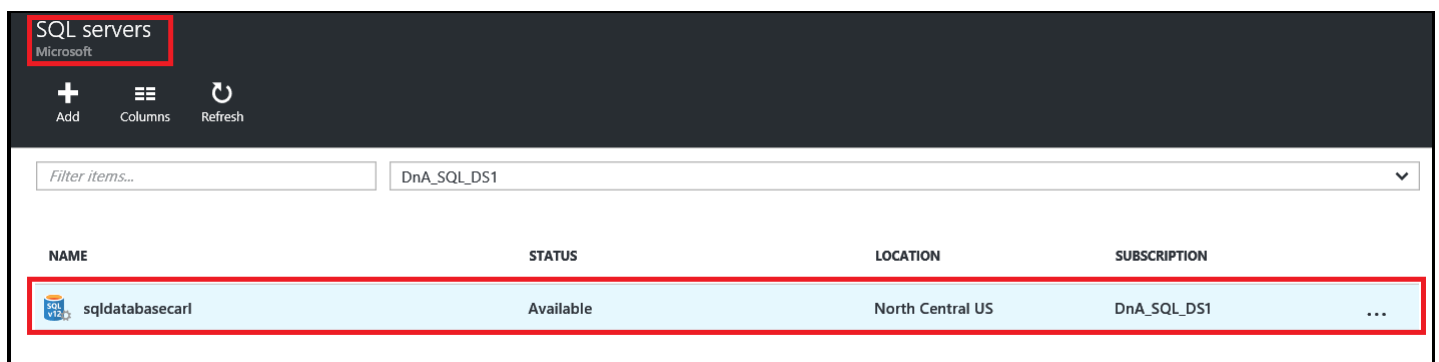
Create a new Aure SQL Database server-level firewall

Use the following steps in the Azure portal to create a server-level firewall rule that allows connections from an individual IP address (your client computer) or an entire IP address range to a SQL Database logical server.


1. If not currently connected, connect to the Azure portal (<http://portal.azure.com>).
2. In the default blade, click **SQL Server**.




3. In the SQL Server blade, click the SQL Database server on which to create the firewall rule.





4. Review the properties of your server.





sqldatabasecarl
SQL server


 Settings

 Reset password

 Import database

 Delete

 Move

 New pool

Essentials Databases Add tiles 

SQL databases

1 Database 

DATABASE	STATUS	PRICING TIER
database1	Online	Standard: S0

Elastic database pools Add tiles 

Elastic database pools

0 Elastic database pools 

NAME	PRICING TIER	POOL EDTU
No elastic pools found		

5. In the Settings blade, click **Firewall**.

 *Filter settings*

SUPPORT + TROUBLESHOOTING

 Troubleshoot >

 Audit logs >

 New support request >

RESOURCE MANAGEMENT


 Users >

 Tags >


GENERAL

 Properties >

 Firewall >


 Auditing & Threat detection >

 Latest SQL Database Update >

 Active Directory admin (preview) >


 Roles >


6. Click **Add Client IP** to have Azure create a rule for your client's IP address.




Firewall settings

Allow access for specific IPs

 Save

 Discard

 Add client IP

Allow access to Azure services

ON

OFF


Client IP address

174.73.16.180

RULE NAME	START IP	END IP	
<input type="text"/>	<input type="text"/>	<input type="text"/>	...


No firewall rules configured.


7. Optionally, click the IP address that was added to edit the firewall address to allow access to a range of IP addresses.




Firewall settings

Allow access for specific IPs

 Save

 Discard

 Add client IP

Allow access to Azure services

ON

OFF

Client IP address

174.73.16.180

RULE NAME	START IP	END IP	
<input type="text"/>	<input type="text"/>	<input type="text"/>	...
ClientIPAddress_2016-3-2_	174.73.16.180 ×	174.73.16.180	...

8. Click **Save** to create the server-level firewall rule.

Firewall settings
Allow access for specific IPs

Save Discard Add client IP

Allow access to Azure services **ON** OFF

Client IP address 174.73.16.180

RULE NAME	START IP	END IP
		...
ClientIPAddress_2016-3-2_	174.73.16.180 ×	174.73.16.180 ...

Important:

Your Client IP address may change from time to time, and you may not be able to access your server until you create a new firewall rule. You can check your IP address using Bing (<http://www.bing.com/search?q=my%20ip%20address>), and then add a single IP address or a range of IP addresses. See [Manage firewall settings \(../sql-database-configure-firewall-settings/#manage-existing-server-level-firewall-rules-through-the-azure-portal\)](#) for details.

Next steps

Now that you've completed this SQL Database tutorial and created a database with some sample data, you're ready to explore using your favorite tools.

- If you're familiar with Transact-SQL and SQL Server Management Studio, learn how to [Connect and query a SQL database with SSMS \(../sql-database-connect-query-ssms/\)](#).
- If you know Excel, learn how to [Connect to SQL database with Excel \(../sql-database-connect-excel/\)](#).
- If you're ready to start coding, see [Connect and query your SQL database with C# \(../sql-database-connect-query/\)](#) and [Using SQL database from .NET \(C#\) \(../sql-database-develop-dotnet-simple/\)](#). See the [Quick start code samples to SQL Database \(../sql-database-develop-quick-start-client-code-samples/\)](#) for Node.js, Python, Ruby, Java, PHP and C++ samples and how-to's in addition to C#.

- If you want to move your on-premises SQL Server databases to Azure, see [Migrating a database to Azure SQL Database \(../sql-database-cloud-migrate/\)](#) to learn more.

Additional resources

[SQL Database Overview \(../sql-database-technical-overview/\)](#)