[Course Overview](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=2d68adc0-b92f-4800-813a-e1cd93eb7e7d&clip=0&mode=live)

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[Hi, my name is Janani Ravi, and welcome to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=2d68adc0-b92f-4800-813a-e1cd93eb7e7d&clip=0&mode=live&start=0) [this course on Creating and Administering](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=2d68adc0-b92f-4800-813a-e1cd93eb7e7d&clip=0&mode=live&start=6.078214285714286" \t "psplayer) [Google Cloud SQL Instances. A little about](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=2d68adc0-b92f-4800-813a-e1cd93eb7e7d&clip=0&mode=live&start=9.974666666666666) [myself. I have a masters degree in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=2d68adc0-b92f-4800-813a-e1cd93eb7e7d&clip=0&mode=live&start=13.612333333333327) [electrical engineering from Stanford, and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=2d68adc0-b92f-4800-813a-e1cd93eb7e7d&clip=0&mode=live&start=15.765799999999997) [I've worked at companies such as](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=2d68adc0-b92f-4800-813a-e1cd93eb7e7d&clip=0&mode=live&start=17.244545454545456) [Microsoft, Google, and Flipkart. At](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=2d68adc0-b92f-4800-813a-e1cd93eb7e7d&clip=0&mode=live&start=19.58181818181819) [Google, I was one of the first engineers](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=2d68adc0-b92f-4800-813a-e1cd93eb7e7d&clip=0&mode=live&start=21.423833333333334) [working on real-time collaborative editing](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=2d68adc0-b92f-4800-813a-e1cd93eb7e7d&clip=0&mode=live&start=23.694500000000005) [in Google Docs, and I hold four patents](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=2d68adc0-b92f-4800-813a-e1cd93eb7e7d&clip=0&mode=live&start=25.35557142857143) [for its underlying technologies. I](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=2d68adc0-b92f-4800-813a-e1cd93eb7e7d&clip=0&mode=live&start=28.593857142857154) [currently work on my own startup,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=2d68adc0-b92f-4800-813a-e1cd93eb7e7d&clip=0&mode=live&start=30.562636363636365) [Loonycorn, a studio for high-quality video](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=2d68adc0-b92f-4800-813a-e1cd93eb7e7d&clip=0&mode=live&start=32.66045454545455) [content. In this course, you will learn](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=2d68adc0-b92f-4800-813a-e1cd93eb7e7d&clip=0&mode=live&start=35.361666666666665) [how to create, work with, and manage Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=2d68adc0-b92f-4800-813a-e1cd93eb7e7d&clip=0&mode=live&start=37.74372727272729) [SQL instances on the GCP. We start off by](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=2d68adc0-b92f-4800-813a-e1cd93eb7e7d&clip=0&mode=live&start=40.553250000000006) [assessing the range of data storage](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=2d68adc0-b92f-4800-813a-e1cd93eb7e7d&clip=0&mode=live&start=43.79280000000001) [services on the GCP and understand when](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=2d68adc0-b92f-4800-813a-e1cd93eb7e7d&clip=0&mode=live&start=45.545692307692306) [you would choose to use Cloud SQL over](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=2d68adc0-b92f-4800-813a-e1cd93eb7e7d&clip=0&mode=live&start=47.66346153846153) [other technologies. We'll also understand](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=2d68adc0-b92f-4800-813a-e1cd93eb7e7d&clip=0&mode=live&start=50.736444444444466) [the pricing structure for Cloud SQL. We'll](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=2d68adc0-b92f-4800-813a-e1cd93eb7e7d&clip=0&mode=live&start=52.332) [then create Cloud SQL instances and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=2d68adc0-b92f-4800-813a-e1cd93eb7e7d&clip=0&mode=live&start=54.81127272727275)[connect to it using a simple MySQL client.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=2d68adc0-b92f-4800-813a-e1cd93eb7e7d&clip=0&mode=live&start=57.08820000000001) [We'll understand how we can configure and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=2d68adc0-b92f-4800-813a-e1cd93eb7e7d&clip=0&mode=live&start=60.529) [administer these instances using the web](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=2d68adc0-b92f-4800-813a-e1cd93eb7e7d&clip=0&mode=live&start=62.43375) [console, as well as the gcloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=2d68adc0-b92f-4800-813a-e1cd93eb7e7d&clip=0&mode=live&start=64.41225000000003) [command-line utility. We'll also see how](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=2d68adc0-b92f-4800-813a-e1cd93eb7e7d&clip=0&mode=live&start=66.54892307692309) [we can work with PostgreSQL instances.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=2d68adc0-b92f-4800-813a-e1cd93eb7e7d&clip=0&mode=live&start=69.47646153846158) [We'll then focus on how Cloud SQL can work](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=2d68adc0-b92f-4800-813a-e1cd93eb7e7d&clip=0&mode=live&start=72.404) [in high-availability mode. We'll configure](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=2d68adc0-b92f-4800-813a-e1cd93eb7e7d&clip=0&mode=live&start=75.49850000000002) [failover replicas for high-availably and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=2d68adc0-b92f-4800-813a-e1cd93eb7e7d&clip=0&mode=live&start=77.40444444444444) [simulate an outage event to see how the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=2d68adc0-b92f-4800-813a-e1cd93eb7e7d&clip=0&mode=live&start=79.59055555555553) [failover replica kicks in. We'll also see](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=2d68adc0-b92f-4800-813a-e1cd93eb7e7d&clip=0&mode=live&start=82.73239999999998) [how we can use read replicas for increased](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=2d68adc0-b92f-4800-813a-e1cd93eb7e7d&clip=0&mode=live&start=85.13450000000002) [read throughput and see how data can be](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=2d68adc0-b92f-4800-813a-e1cd93eb7e7d&clip=0&mode=live&start=87.50916666666673) [migrated into Cloud SQL instances using](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=2d68adc0-b92f-4800-813a-e1cd93eb7e7d&clip=0&mode=live&start=90.08975000000001) [either a SQL dump file or from CSV files.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=2d68adc0-b92f-4800-813a-e1cd93eb7e7d&clip=0&mode=live&start=92.1378) [At the end of this course, you should be](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=2d68adc0-b92f-4800-813a-e1cd93eb7e7d&clip=0&mode=live&start=95.889) [comfortable creating, connecting to, and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=2d68adc0-b92f-4800-813a-e1cd93eb7e7d&clip=0&mode=live&start=98.97354545454546) [administering Google Cloud SQL instances to manage relational databases on the GCP.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=2d68adc0-b92f-4800-813a-e1cd93eb7e7d&clip=0&mode=live&start=100.9265)

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[Hi, and welcome to this course on Creating](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=0&mode=live&start=0) [and Administering Google Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=0&mode=live&start=4.866909090909091) [Instances. We'll start this module off by](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=0&mode=live&start=7.4239999999999995) [understanding Cloud SQL in the GCP service](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=0&mode=live&start=10.410636363636362) [taxonomy. Cloud SQL is a fully-managed](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=0&mode=live&start=13.96345454545454) [database service that Google offers that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=0&mode=live&start=16.372818181818182) [makes it very easy to set up, maintain,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=0&mode=live&start=18.655)[manage, and administer your relational](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=0&mode=live&start=21.57499999999999) [database on the Google Cloud Platform.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=0&mode=live&start=23.555857142857143) [Cloud SQL has support for both MySQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=0&mode=live&start=26.681) [databases, as well as PostgreSQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=0&mode=live&start=30.13523076923077) [databases. When you need a vertically](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=0&mode=live&start=32.60253846153846) [scaled relational database management](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=0&mode=live&start=34.89544444444444) [system and you do not want to set one up](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=0&mode=live&start=36.335) [on-premise, that's when you'll use Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=0&mode=live&start=39.418636363636374) [SQL. Cloud SQL works very well when your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=0&mode=live&start=41.55283333333333) [data storage requirements do not exceed 10](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=0&mode=live&start=44.51172727272728) [TB and your input/output QPS does not](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=0&mode=live&start=47.33081818181821) [exceed 40, 000. Setting up and managing](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=0&mode=live&start=50.56918181818183) [databases on your on-premise data center](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=0&mode=live&start=54.122) [can be time consuming. Cloud SQL offers](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=0&mode=live&start=57.25399999999999)[managed install, backup, and replication,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=0&mode=live&start=60.898999999999994) [making it extremely easy for](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=0&mode=live&start=63.494) [administrators and developers to get up](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=0&mode=live&start=65.34081818181816) [and running with the relational database](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=0&mode=live&start=67.557) [on the cloud. Cloud SQL offers vertical](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=0&mode=live&start=69.53699999999999) [scaling. That means you can move your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=0&mode=live&start=72.07099999999998) [database to a more powerful machine in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=0&mode=live&start=74.773) [order to get lower latencies with greater](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=0&mode=live&start=76.99316666666665) [storage requirements. It's also possible](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=0&mode=live&start=79.425) [to configure your Cloud SQL instances for](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=0&mode=live&start=81.54) [high availability using failover replicas.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=0&mode=live&start=84.88650000000001) [You can add in read replicas for greater read throughput.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=0&mode=live&start=87.387)

[Prerequisites and Course Outline](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live)

[There are a few prereqs that you are to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=2.391) [have completed in order to make the most](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=4.474499999999999) [of this course. You need to make sure that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=6.285) [your MySQL fundamentals are strong, and if](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=9.561000000000003) [they are not, the MySQL Fundamentals](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=12.034999999999998) [course on Pluralsight can help you out](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=14.107999999999995) [here. Another good course for you to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=16.278583333333334) [complete before you start on this course](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=18.35) [is the Google Cloud Platform Fundamentals.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=21.183923076923083) [This will give you a basic understanding](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=23.613) [of the GCP. This course assumes that you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=25.850900000000006) [have a basic understanding of how cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=28.30218181818182) [computing works. We'll work directly with](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=30.773818181818182) [the Google Cloud Platform without walking](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=32.6616) [through the basics of creating VM](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=34.434) [instances and other resources on the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=36.85753846153847) [cloud. You need to be very comfortable](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=39.28107692307694) [with RDBMS concepts because this course](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=41.75445454545455) [focuses on administering your MySQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=43.9245) [database on the cloud. You also need to be](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=46.152000000000015) [comfortable with MySQL or PostgreSQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=50.39081818181818)[administration. The demos in this course](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=52.84763636363637) [primarily focus on MySQL databases on the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=55.43399999999998) [GCP; however, they can be extended very](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=58.36699999999996) [easily to apply to PostgreSQL as well. We](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=61.281538461538474) [start this course off by first](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=64.5884) [understanding how Cloud SQL works on the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=66.96079999999996) [GCP. We'll see the various Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=69.72859999999993) [features available and limitations. We'll](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=72.72019999999998) [then see how pricing works for your SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=74.82579999999999) [instances, and we'll compare Cloud SQL to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=77.82419999999993) [other GCP storage technologies. This will](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=81.15880000000003) [allow you to choose the right storage](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=83.72984615384615) [system for your needs. We'll then move on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=85.82230769230767) [to creating Cloud SQL instances. We'll](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=88.50866666666664) [start off at the very basic level. We'll](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=90.625) [see how we can create, start, and stop new](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=92.649) [instances. We'll then see how we can](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=95.20200000000001) [connect to these instances with and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=97.45600000000003) [without SSL. We'll then move on to using](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=99.47661538461537) [the Cloud SQL Proxy to manage external](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=102.22984615384613) [connections. The next module will cover](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=105.77628571428569) [advanced features on Google's Cloud SQL,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=108.37363636363634) [specifically focused on replication and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=110.85) [data management. We'll see how we can set](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=113.14999999999996) [up high-availability configurations using](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=116.41830769230765) [the failover replica. We'll also see how](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=117.98384615384609) [we can create and manage read replicas.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=120.61072727272726) [We'll then cover how we can import data](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=123.153) [into Cloud SQL and export data from Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=126.1832857142857) [SQL. These will help with migration](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=129.44444444444443) [scenarios. All the demos in this course](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=132.40977777777775) [assume that we are working in an](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=134.43215384615377)[organization called SpikySales. com. This](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=136.215) [is a hypothetical online retailor and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=138.96388888888896) [e-commerce site that sets up flash sales.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=142.11833333333334) [Any trending product is available for sale](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=145.462) [on SpikySales. com. Flash sales require](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=148.47619999999998) [high-computing capacity on demand, whereas](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=151.3875714285714) [at other times the resources may not be](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=153.87058333333334)[used very much, which makes it a perfect](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=156.4592500000001) [candidate to use the GCP. SpikySales](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=159.35949999999997) [primarily runs on the Google Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=161.69725) [Platform, which offers you cloud computing](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=164.14675000000005) [pay as you go. SpikySales uses a setup](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=167.0194444444445) [where there is no idle capacity during the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=170.48466666666664) [off-sale period, and when a sale is on, it](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=173.472) [uses huge computing resources on the GCP.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=176.66625000000002) [All the demos in this course focus on the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=179.13069230769236) [relational database management system used](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=182.28) [by the reviews and ratings team in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=184.23350000000005) [SpikySales. com. This e-commerce site has](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=187.07336363636364) [reviews and ratings for all of its](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=189.73245454545452) [products, and these are set up in one](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=192.5172) [relational database table. This relational](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=195.42759999999998) [database table contains the ratings\_id,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=197.38042857142858) [the product\_id, the customer\_id, the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=199.534) [display\_name for every customer, the date](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=202.2206666666666) [at which that rating or review was](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=204.99919999999997) [written, the actual rating, and the text](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=207.20139999999986) [of the review. This RDBMS needs to have](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=210.16266666666658) [vertical scaling so that storage grows as](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=213.27974999999992) [data grows, it needs to be highly](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=215.791) [available with failover replicas, and it](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=218.4586363636364) [needs to be accessible to various teams](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=220.87083333333334) [across the organization. Teams such as the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=223.97825) [search team, the recommendations team, all](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=226.64833333333337) [of them run applications which access review and ratings data.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=1&mode=live&start=228.65583333333342)

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[Cloud SQL is the Google Cloud Platform's](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=2.455) [fully-managed MySQL and PostgreSQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=5.569428571428571) [database service. Initially, Cloud SQL was](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=8.791142857142857) [only available for MySQL databases, but it](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=12.090444444444442) [has been recently extended to include](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=14.992090909090908) [PostgreSQL as well, which means Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=17.36536363636364) [supports all of the standard connection](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=20.29418181818182) [drivers and migration tools that are](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=22.90745454545455) [supported by MySQL, as well as PostgreSQL.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=25.793416666666673) [Cloud SQL works on a platform as a service](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=29.224) [model where it offers database features as](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=32.26184615384615) [a service. That means there is platform](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=34.61181818181819) [support for creating databases, deleting](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=36.944727272727285) [databases, vertically scaling databases,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=39.74439999999999) [automated backups, replication,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=42.629999999999995) [high-availability configuration. All of](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=44.899) [these are very easy to set up. All cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=46.60918181818181) [platforms offer databases as a service](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=50.571666666666665) [with direct AWS equivalent. For Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=53.48066666666667) [on the GCP is the Amazon RDS, or](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=56.89814285714286) [Relational Database Service. At this point](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=60.83985714285714) [in time, Cloud SQL just supports MySQL and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=63.46446153846154) [PostgreSQL services. AWS supports many](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=66.52169230769228) [more database engines such as Oracle, MS](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=68.57050000000001) [SQL Server, and so on. If you want support](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=71.5676666666667) [for Oracle and MS SQL Server on the GCP,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=74.75718750000004) [you need to explicitly create a virtual](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=77.757) [machine and install the software yourself](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=80.0059090909091) [on that VM. Only MySQL databases and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=82.49539999999999) [PostgreSQL databases are available on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=86.71079999999996) [Cloud SQL at this point in time. For more](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=88.6119090909091) [advanced cases where you want your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=91.58266666666667) [database to be globally distributed and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=93.67566666666666) [strongly consistent, you will use Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=96.06122222222223) [Spanner instead of Cloud SQL on the GCP.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=99.03188888888891) [Cloud Spanner is an enterprise-grade](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=102.21091666666663) [relational database that allows horizontal](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=104.128) [scaling on the cloud along with](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=106.25449999999998) [transactional consistency. The Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=108.887) [equivalent on the Azure platform from](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=111.417) [Microsoft is the SQL Database, the SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=114.51849999999999) [Server Database Engine. The relational](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=118.28974999999994) [database service on AWS, SQL Database on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=120.79454545454547) [Azure and Cloud SQL on the Google Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=123.9044545454546) [Platform, are all competitors. When you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=127.36760000000004) [use Cloud SQL, you can choose the kind of](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=129.7788)[machine you want hosting your database.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=132.62100000000007) [Your machine type can range from 500 GB to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=134.421) [10 TB of storage, and it can have up to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=137.86176923076934) [416 GB of RAM. With just a few checkboxes,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=141.6878) [you can configure automatic backups which](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=145.133) [will occur at the same time every day. You](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=147.25571428571433) [can also set up your instance for high](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=150.4344) [availability. GCP offers built-in security](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=153.2216) [for your Cloud SQL instances by setting up](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=155.08672727272727) [firewalls and allowing only authorized](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=158.19845454545455) [networks and IP addresses to access your database.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=2&mode=live&start=160.48572727272725)

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[Let's quickly take a look at what features](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=2.152) [are available for MySQL databases on Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=5.112000000000001) [SQL. Cloud SQL runs MySQL's Community](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=7.982833333333334) [Edition, and you will find when you use](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=11.04533333333333) [Cloud SQL that your MySQL databases are](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=14.401153846153843) [divided into First and Second Generation](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=16.70092307692307) [instances. Cloud SQL Second Generation is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=19.314000000000004) [the latest version for Cloud SQL for](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=22.248) [MySQL. The Second Generation instances](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=25.07075) [support most of the features of First](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=26.6444) [Generation instances, but they offer](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=28.814999999999998) [higher performance and storage capacity at](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=30.889999999999993) [a lower cost. Cloud SQL instances are](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=33.576363636363645) [secure. Data stored here will be encrypted](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=36.93954545454549) [when at rest and in transit. You can use](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=39.45200000000001) [SSL to connect to your Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=42.70745454545454) [instances. Logging and monitoring on the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=45.56218181818179) [GCP is available via Stackdriver tools.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=48.015909090909105) [Stackdriver also allows you to monitor](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=50.471) [your Cloud SQL instances and set up alerts](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=52.847) [and other policies. Cloud SQL allows a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=56.03392307692308)[variety of features which you can access](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=58.85007692307694) [very easily to keep your data backed up](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=61.305285714285716) [and secure. You can import data from](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=63.801857142857145) [external instances into Cloud SQL. This](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=66.63100000000001) [allows for easy migration. You can export](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=69.146) [data from Cloud SQL elsewhere as well.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=71.31600000000002) [Imports and exports can use. sql, as well](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=73.97007142857143) [as. csv files. Cloud SQL offers two kinds](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=77.74092857142858) [of backups, automated, as well as](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=81.68961538461537) [on-demand backups. The automated backups](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=84.7311538461538) [for your Second Generation MySQL instances](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=87.11570000000002) [are incremental, which means you also save](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=89.85710000000005) [on storage costs for your backups. Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=93.01150000000001) [SQL instances which run the MySQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=96.2045)[Database, also allow point-in-time](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=99.17749999999995) [recovery, which means you can roll back](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=100.9739090909091) [your database to a very specific operation](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=104.00936363636367) [or a point in time. You can also clone](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=106.85718181818179) [your instance before you perform any major](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=110.30800000000002) [change or migration of data. The first](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=112.82625000000006) [thing you'll see when you use MySQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=116.01628571428571) [databases on the GCP is the First and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=118.02978571428571) [Second Generation instances. The Second](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=120.9485) [Generation instances are basically the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=123.3124) [latest MySQL versions. As you can see,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=125.52089999999998)[version 5. 7 is available in the Second](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=128.27984615384617) [Generation. First Generation instances](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=131.1475384615385) [tend to be smaller. They allow 16 GB of](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=132.7175714285714) [RAM and 500 GB of storage. Second](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=136.04481818181821) [Generation instances can hold much more](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=138.5215) [data. You can have up to 416 GB of RAM and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=141.05650000000009) [10 TB of storage, so they are far larger.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=145.11321052631567) [Second Generation MySQL databases have](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=148.384) [built-in support for read replicas. This](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=150.9145) [is not available in First Generation](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=153.889375) [instances. In the First Generation MySQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=156.55562500000005) [instances, the high-availability](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=159.28375) [configuration is enabled by default. In](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=160.654) [Second Generation instances, the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=163.5626666666666) [high-availability configuration is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=165.51659999999998)[available, but is not the default. This](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=167.01539999999994) [allows you to save on costs up front. Both](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=170.40800000000002) [First Generation and Second Generation](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=174.0198888888889) [instances have automated backup and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=176.27933333333326) [maintenance windows; however, these](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=178.53750000000002) [windows are system-defined for the First](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=180.3425000000001) [Generation, but can be configured based on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=182.8098) [your needs for the Second Generation](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=185.614375) [instances. When you use First Generation](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=188.35862500000007) [MySQL instances on the Google Cloud, you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=190.5173636363636) [have no Cloud Proxy support, which makes](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=193.01163636363637) [these instances less secure when you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=196.18009090909098) [connect to them. In the Second Generation,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=198.35490000000001) [you can use the Cloud SQL Proxy to manage](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=200.261) [external connections, which makes](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=203.4928181818183) [connecting to these instances simpler and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=205.17400000000004) [more secure. The First Generation MySQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=208.0630000000001) [instance supports multiple database](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=210.93) [engines, the InnoDB, as well as MyISAM.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=212.834) [The Second Generation instances support](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=215.90080000000006) [only InnoDB. Overall, the Google Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=218.16844444444442)[Platform recommends that you use Second](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=221.411111111111) [Generation Cloud SQL instances rather than](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=224.1846666666667) [First Generation. You get up to 7 times](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=226.72366666666673) [the throughput and 20 times the storage](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=229.63528571428571) [capacity in Second Generation instances as](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=232.04478571428572) [compared with the First, they are much](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=234.35788888888894) [faster and more efficient, and Second](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=237.1351) [Generation instances usually work out to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=239.5393) [be cheaper than First Gen. So when you're](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=241.901) [using MySQL databases on Cloud SQL,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=244.71175000000002) [Google's recommendation is that you stick](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=247.045) [to using Second Generation instances.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=249.71133333333333) [Google offers a wide variety of ways in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=252.793) [which you can connect to MySQL instances](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=255.55066666666661) [on Cloud SQL. You can use any mysql](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=258.23960000000005) [client, you can use the SQL Workbench, you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=261.0174166666667) [can use App Engine, Compute Engine,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=263.7175555555556) [Kubernetes Engine, Cloud Functions, as](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=266.264888888889) [well as Apps Script. There are some MySQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=268.58571428571435) [features which are not yet supported on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=272.01692307692315) [Cloud SQL. So if you have use for UDFs,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=274.58753846153866) [the FEDERATED engine, InnoDB memcached](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=278.22700000000015) [plugin, or the SUPER privilege, you may](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=280.30200000000025) [not be able to use Cloud SQL directly.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=282.9065714285713) [There are also certain SQL statements that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=285.826) [are not yet supported on Cloud SQL. These](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=288.1125000000001) [are examples of unsupported statements. If](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=291.00666666666666) [these SQL queries are important to you,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=294.3279285714286) [you may find that you can't use MySQL on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=296.30842857142846) [the GCP as of now. Cloud SQL is constantly](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=299.5626249999999) [evolving, and at this point in time, there](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=303.4028181818181)[are certain client features that remain](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=306.003375) [unsupported. There are restrictions on the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=308.5256249999999) [mysqlimport and the mysqldump commands,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=311.15749999999997) [and there are also some MySQL flags that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=313.369) [are unsupported. When you use the web](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=316.7321999999998) [console to configure your MySQL database,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=319.2452727272727) [you'll see a list of flags that are](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=321.252)[currently available. You also cannot](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=324.0904000000001) [import or export triggers, stored](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=326.45699999999994) [procedures, and views from your database.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=329.2186666666665) [If you're migrating from an on-premise](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=331.91372727272716) [MySQL database that uses triggers, stored](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=334.485) [procedures, or views, you have to set](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=337.3803333333334) [these up manually. All of the remaining](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=340.0394285714285) [data can be imported in an automated manner.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=3&mode=live&start=342.15942857142846)

[PostgreSQL on Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=4&mode=live)

[Cloud SQL recently added support for](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=4&mode=live&start=1.78) [PostgreSQL as well. So if you want to run](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=4&mode=live&start=4.582) [a PostgreSQL database, you can do so on a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=4&mode=live&start=7.628500000000002) [Cloud SQL instance. The PostgreSQL version](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=4&mode=live&start=10.838400000000002) [is 9. 6, and it's based on Second](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=4&mode=live&start=13.275249999999998) [Generation MySQL instances, and it has up](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=4&mode=live&start=16.731916666666663) [to 10 TB of storage, which means your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=4&mode=live&start=19.597)[relational database can be pretty huge.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=4&mode=live&start=22.841) [You can connect to the PostgreSQL database](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=4&mode=live&start=25.101666666666674) [on the cloud in all of the usual ways. All](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=4&mode=live&start=27.566769230769225) [of the ways that are available for a MySQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=4&mode=live&start=30.882923076923078) [database are available for PostgreSQL as](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=4&mode=live&start=33.69923076923077) [well. You can use any psql client, any](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=4&mode=live&start=35.782799999999995) [tools supporting standard client-server](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=4&mode=live&start=39.0175)[protocol. You can connect from App Engine,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=4&mode=live&start=41.27149999999999) [Compute Engine, Kubernetes Engine, and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=4&mode=live&start=44.023199999999996) [Cloud Functions. PostgreSQL connections](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=4&mode=live&start=46.05608333333333) [from Apps Script are not yet supported. As](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=4&mode=live&start=48.35241666666667) [we saw in the case of MySQL databases on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=4&mode=live&start=52.507666666666665) [Cloud SQL, there are certain features on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=4&mode=live&start=54.85790909090909) [PostgreSQL that are not yet supported by](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=4&mode=live&start=57.775) [the Cloud SQL instance such as](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=4&mode=live&start=60.78208333333333) [point-in-time recovery, CSV import and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=4&mode=live&start=63.422) [export using gcloud or the console. Both](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=4&mode=live&start=65.882) [of these are features which are available](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=4&mode=live&start=69.25309090909091) [for MySQL databases. PostgreSQL on Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=4&mode=live&start=72.1867272727273) [SQL does not support superuser privileges](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=4&mode=live&start=74.81710000000001) [or operations that require reconnecting to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=4&mode=live&start=77.56330000000003) [the database, and there are also several](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=4&mode=live&start=80.07099999999998) [flags that are unavailable for this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=4&mode=live&start=82.96249999999999) [database on the cloud. All of these are](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=4&mode=live&start=85.48699999999998) [things which you need to explore before you move to PostgreSQL on the GCP.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=4&mode=live&start=88.23142857142857)

[MySQL 2nd Generation Pricing](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live)

[In this clip, we'll understand how pricing](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=2.303) [works for Cloud SQL instances on the GCP.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=4.392499999999998) [We'll consider three different kinds of](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=7.172000000000001) [instances. The first is the MySQL Second](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=9.746000000000002) [Generation, that's the one that's most](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=12.213500000000003) [commonly used; we'll look at PostgreSQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=14.252) [instances; and then we'll look at MySQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=16.71363636363636) [First Generation instances. If you're](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=19.65809090909091) [planning to use MySQL on the Google Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=21.89081818181818) [Platform, Google recommends that you use](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=24.968600000000002) [MySQL Second Generation instances. There](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=26.906) [are three basic components to pricing your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=29.538222222222217) [MySQL instance on the cloud. The total](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=32.910375) [price that you'll pay is the instance](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=35.6862)[price, the storage price, and the network](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=38.014399999999995) [price, and there are subtleties to each of](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=40.34050000000001) [these. Instance price refers to the price](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=42.98661538461539) [that you pay for the virtual machine where](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=45.27076923076925) [you're running your MySQL database. This](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=48.37822222222221) [is per-minute billing for the time period](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=50.965666666666664) [for which your instance is up and running.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=53.30833333333331) [The instance price that you pay depends on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=56.11284615384614) [the tier of your machine. It depends on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=59.04453846153843) [how powerful your machine is. The more](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=61.857499999999995) [powerful your machine, the higher the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=64.3086) [instance price. The instance price also](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=66.41939999999998) [varies by region. So if you are in a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=68.171) [region which has a lot of machines of this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=70.52900000000001)[particular kind, the instance price will](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=73.17739999999998) [be lower. If you're in a region such as](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=74.81171428571429) [Asia or Australia, it's possible that your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=77.14657142857143) [instance price will be higher. If you've](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=79.59000000000003) [worked on the GCP before, you know that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=81.95246153846153) [Google offers some pretty nifty sustained](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=84.12230769230769) [use discounts. These sustained use](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=86.36733333333335) [discounts are automatically applied to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=88.75288888888892) [your instance price. The longer you use](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=90.766) [your instance, the greater your discount,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=93.4468) [lower the rate that you pay per minute for](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=95.74) [the instance. If you're using your Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=98.64127272727269) [SQL instance the high-availability mode,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=101.17499999999997) [it's possible that you have additional](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=103.064) [read replicas and failover replicas. These](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=105.56763636363638) [are separate instances for MySQL Second](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=108.02136363636363) [Generation, and they are charged](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=110.22554545454544) [additionally as stand-alone instances. The](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=112.4708) [storage price is the price you pay for the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=115.81614285714285) [persistent disk that is associated with](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=117.99542857142852) [your instance. Your storage price depends](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=119.80019999999999) [on whether you choose to use SSDs,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=122.30879999999996) [solid-state drives, to store your data or](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=125.12208333333331) [HDDs, hard disk drives, to store your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=127.89) [data. HDDs are cheaper than SSDs, but SSDs](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=130.52987500000003) [have lower latencies and faster reads, so](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=134.18084615384623) [they are preferred choice. Remember, when](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=137.49790909090908) [you're working with storage, persistent](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=140.56336363636356) [disks are pay as you allocate, not pay as](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=143.003) [you use. Your instance price depends on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=146.56700000000012) [how long you use a particular VM.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=149.0098333333333) [Persistent disks are based on allocation.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=151.321) [Once you've allocated a 20 GB SSD, you pay](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=153.5914) [for the entire 20 GB, even if you use up](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=156.86950000000002) [just 1 GB of storage. SSDs typically cost](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=160.39850000000007) [around 22 cents per GB per month. HDDs](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=163.41400000000002) [cost 12 cents per GB per month. HDDs are](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=166.69664285714285) [cheaper, but as you might already know,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=169.9694285714285) [they are also slower. If you back up the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=172.47261538461538) [data that you stored in your Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=175.6184615384615) [instance, that takes up additional storage](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=178.51050000000004) [space. They are charged separately on a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=180.6897857142858) [pay-as-you-use basis at 10 cents per GB](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=183.32150000000001) [per month. Second generation MySQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=186.0685) [instances allow for incremental backup of](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=188.46099999999998) [your data, which means the storage used](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=191.10776923076924) [for backup will be lower than in the case](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=193.67246153846156) [of First Generation MySQL instances. The](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=197.13400000000004) [third component of the price that you pay](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=199.42742857142858) [for a Cloud SQL instance is the network](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=201.80685714285724) [price. All ingress traffic into your Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=204.34536363636363) [SQL instance is free; however, if the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=206.7985454545454) [source of the traffic is within the GCP,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=208.83776923076925) [the egress price from the source still](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=211.28333333333333) [applies. For data that is retrieved from](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=214.6106666666667) [your Cloud SQL instance and sent back to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=216.9981538461539) [the user, egress pricing applies. This is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=219.58200000000002) [the usual network pricing for egress. If](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=222.05300000000008)[you configured a static IP address, these](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=224.86439999999996) [IP addresses cost 1. 5 cents an hour when](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=227.8506923076923) [they are idle, when they are not being](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=231.06992307692303) [used. At this point in time, we understand](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=233.89050000000003) [what components affect the price of a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=236.40766666666661) [Cloud SQL instance; however, we have no](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=238.55214285714285) [feel for how much Cloud SQL actually](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=240.63864285714288) [costs. Let's consider a few scenarios here](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=242.8733333333333) [so that we understand how much we might](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=245.4784999999999) [need to pay. If you set up a MySQL Second](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=247.98392857142863) [Generation test instance on an f1-micro](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=250.88354545454547) [machine with a shared CPU and just 10 GB](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=253.28081818181823) [of storage, you pay just $9 per month,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=256.9647692307692) [assuming that you never stop this test](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=260.302)[instance, it's always up and running. If](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=262.83330769230776) [you stop this test instance when it's not](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=265.27063636363636) [being used, assuming that you just run 4](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=267.4117272727273) [hours a day for 5 days a week, the amount](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=269.5074285714287) [that you pay falls to $3 a month. Notice](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=272.45120000000003) [that these are for Cloud SQL instances set](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=276.3462857142857) [up in the us-central1 region. Test](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=279.8845714285716) [instances are cheap. If you're running a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=282.45763636363637) [production instance of the MySQL Second](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=284.9890909090909) [Generation, and if you're using a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=287.29090909090905) [high-memory machine with 32 dedicated CPUs](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=289.72472727272714) [with 208 GB of memory and a storage](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=292.27942857142847) [capacity of 10 TB, this will cost you $7,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=295.7662857142854) [670 per month. This is a production](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=301.02419999999995) [instance that serves traffic 24 hours a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=304.0160000000001) [day, 7 days a week, and is configured for high availability.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=5&mode=live&start=305.9620000000002)

[PostgreSQL Pricing](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live)

[Let's now see how pricing works for a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=2.21) [PostgreSQL instance running on Cloud SQL.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=5.490000000000001) [We'll consider the same three components](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=7.95) [of pricing. These are the same components](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=10.112249999999998) [which apply to a MySQL Second Generation](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=12.701846153846153) [instance. The total price is calculated by](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=15.318230769230768) [taking the total of the instance price,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=17.309230769230776)[the storage price, and the network price.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=19.196) [There are two important differences](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=21.765000000000008) [between MySQL Second Generation pricing](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=23.86188888888889) [and PostgreSQL pricing. If you use](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=27.006333333333327) [dedicated core instances, the memory and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=29.936538461538458) [the CPUs for your virtual machine are](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=32.023615384615375) [charged separately when you use](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=35.041333333333334) [PostgreSQL. If you're using shared core](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=37.75188888888889) [instances and not dedicated cores, the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=40.289) [pricing is very similar to MySQL Second](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=42.70477777777778) [Generation. PostgreSQL instances can also](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=45.65022222222223) [be configured for high availability, but](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=48.264777777777766) [the charges for high-availability storage](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=51.48441666666666) [are higher than just regular storage.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=53.87150000000001) [That's not the case with MySQL Second](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=56.736) [Generation where the high-availability](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=59.003999999999984) [failover replica is just considered](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=60.6195) [another Cloud SQL instance. These are the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=63.83700000000002) [only differences from how the GCP prices](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=67.74300000000001) [MySQL Second Generation; however, you'll](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=70.85100000000003) [see that these differences are minor, and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=72.95333333333333) [they don't change the pricing scenarios](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=75.2376666666667)[that we saw earlier. If you're running a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=77.36533333333335) [test instance that never stops, you'll](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=80.29566666666666) [roughly be charged $9 a month. If your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=82.22416666666665) [test instance runs 4 hours a day, 5 days a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=85.03807692307696) [week, you'll be charged roughly $3 a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=88.56164285714287) [month, exactly the same as the MySQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=90.87314285714291) [Second Generation. If you're running a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=93.31989999999999) [production instance as powerful as the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=95.57169999999996) [production instance that we saw for the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=97.52658333333333) [MySQL scenario earlier, you'll find that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=99.738) [the costs are very similar. A production](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=101.96290909090908)[instance will cost you $7, 613 a month](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=104.90063636363637) [roughly. If you see the parameters of the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=109.23518181818186) [PostgreSQL machine here, they are very](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=111.75659999999996) [similar to the MySQL Second Generation production instance that we saw earlier.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=6&mode=live&start=113.58569999999999)

[MySQL 1st Generation Pricing](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=7&mode=live)

[MySQL First Generation instances are no](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=7&mode=live&start=2.284) [longer recommended by Google and are not](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=7&mode=live&start=4.672) [often used, especially if you're starting](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=7&mode=live&start=7.267) [up. Their pricing is also far more](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=7&mode=live&start=9.541999999999998) [complicated. This is what I got from the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=7&mode=live&start=12.509999999999994) [GCP's documentation. Google offers two](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=7&mode=live&start=15.146777777777775) [billing plans, packages and pay per use.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=7&mode=live&start=17.140700000000002) [If you're planning to use your First](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=7&mode=live&start=20.318) [Generation instance for more than 450](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=7&mode=live&start=22.044666666666664) [hours a month, you should use the package](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=7&mode=live&start=23.7245) [plan. That will work out to be cheaper.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=7&mode=live&start=27.2965) [Now if it was TL;DR for you, you should](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=7&mode=live&start=29.724) [know that pricing is complicated, and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=7&mode=live&start=33.19221428571429) [First Generation instances tend to be](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=7&mode=live&start=35.48163636363636) [somewhat more expensive than Second Generation MySQL instances.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=7&mode=live&start=37.657454545454534)

[Cloud SQL vs. Other GCP Storage Technologies](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live)

[GCP offers a number of different storage](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=1.718) [services. Cloud SQL is just one of amongst](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=4.699125) [these. How do you know when you have to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=6.894599999999998) [choose Cloud SQL over other storage](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=9.273833333333332) [services on the Google Cloud. If you're](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=11.356833333333332) [making a choice to move to the Google](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=13.44866666666666) [Cloud Platform, it's possible that you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=15.770666666666665) [want to migrate already existing data.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=17.460666666666665) [Let's say you already use an RDBMS on your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=19.65566666666666) [on-premise data center or in a competing](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=23.3369) [cloud platform. One use case is when you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=26.262199999999996) [want to move your data to the Google](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=28.426800000000007) [Cloud. This is a migration scenario. Or it](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=30.19853333333335) [might be the case that your organization](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=32.33046153846155) [is starting afresh. This is a cloud-first](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=34.47077777777778) [scenario. You're starting with a clean](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=37.99022222222224) [slate on the Google Cloud Platform. You](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=39.88981818181817) [don't have any existing data yet. Let's](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=41.89053846153846) [see when you would choose Cloud SQL in the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=44.16230769230768) [migration scenario. Let's look at the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=47.86166666666665) [storage service that you might want to use](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=49.79628571428571) [on the Google Cloud Platform based on your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=51.58885714285713) [use case. On the left here are a variety](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=54.279500000000006) [of use cases that might be your current](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=57.17993750000002) [scenario. Let's see the choice of](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=59.64043750000005) [technology that you'll make in each of](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=61.45335714285713) [these cases. Let's say you currently have](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=63.56085714285711) [an on-premise data center where you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=65.53481818181815) [already have the MySQL database or a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=67.181)[PostgreSQL database running. You will](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=70.95470000000003) [choose Cloud SQL. Cloud SQL offers MySQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=73.4425) [and PostgreSQL out of the box. If you're](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=76.48924999999997) [using a relational database management](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=79.64818181818183) [system on a competing cloud platform, you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=81.50136363636365) [can choose to use Cloud SQL provided your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=83.95350000000003) [data is less than 10 TB. Cloud SQL works](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=86.75566666666666) [well for up to 10 TB of storage. If your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=89.99866666666662) [database of choice is Microsoft SQL Server](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=94.04492307692308) [and you want to migrate to the Google](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=97.084) [Cloud, you'll have to instantiate a GCE](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=99.10266666666661) [virtual machine with the MS-SQL image.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=101.80633333333333) [Cloud SQL is not for you in this case. The](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=105.195) [same thing holds true if you want to use](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=108.19233333333335) [the Oracle database on the Google Cloud.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=110.85681818181817) [You have to set up a special VM with a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=112.897) [custom image for Oracle. If your site or](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=116.75057142857146) [organization has a number of users, most](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=119.32828571428573) [of whom are concentrated in one region](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=121.14178571428575) [such as the US, Europe, Australia, or](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=123.77999999999999) [Asia, you will use Cloud SQL, which is a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=127.03674999999997) [regional database. It's confined to a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=130.2836) [particular region. Cloud SQL instances](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=132.4840909090909) [cannot be distributed across regions.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=134.3654545454545) [Cloud SQL is not global. If you have a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=136.62737500000003)[relational database and you have your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=140.28023076923077) [users located all around the world, you'll](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=141.98607692307692) [want to use Cloud Spanner, which can be](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=144.1753333333333) [horizontally scaled and is available](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=146.848) [globally. Cloud Spanner instances can span](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=149.71633333333335) [multiple regions. If your requirements are](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=152.44357142857143) [such that vertical scaling works just](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=154.7471818181818) [fine, that is you just use a bigger](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=156.91045454545446) [machine for lower latency, greater](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=159.53390909090905) [storage, and greater performance, then](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=161.19681818181817) [Cloud SQL is for you. If you need](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=163.04590909090905) [horizontal scaling with a relational](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=165.95181818181817) [database management system, you'll need to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=167.71318181818177) [use Cloud Spanner. These were migration](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=169.98399999999998) [scenarios. Let's look at cloud-first](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=172.4623333333333)[scenarios and see when you would choose to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=174.56955555555547) [use Cloud SQL. In a cloud-first scenario,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=177.51590000000007) [let's first ask ourselves whether we need](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=179.84033333333338) [a relational database management system at](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=182.01441666666676) [all. Is relational data the kind of data](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=184.7525) [that we want to store, or is our data of a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=187.15023529411758) [different kind? Let's see how Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=190.28141666666667) [works versus other GCP storage](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=193.07733333333334) [technologies, such as Cloud Spanner. Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=195.18800000000002) [Spanner is a relational database with](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=198.23355555555554) [horizontal scaling. Adding more nodes to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=201.11688888888887) [Cloud Spanner will improve your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=203.5712) [performance, throughput, and storage. Or](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=205.4377) [you might really want an OLAP system, an](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=207.82554545454545) [Online Analytic Processing system, not an](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=211.8208888888889) [Online Transaction Processing system, in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=214.64022222222232) [which case, you'll choose to use BigQuery.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=216.64890000000003) [BigQuery is Google's very popular data](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=219.143) [warehousing system. If you want a NoSQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=222.56449999999995) [database with very fast lookup for keys](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=225.36428571428567) [and very fast scans, you'll choose to use](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=227.6872857142856) [Bigtable, which is very similar to HBase.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=230.91669230769236) [If you want a NoSQL document database with](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=233.91) [order of one lookups and very low storage](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=236.66938461538453) [requirements, you'll choose to use](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=239.89700000000002) [Google's Datastore. If you're looking for](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=242.40200000000004) [globally distributed blob storage for](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=244.81799999999998) [media, video, and other kinds of files,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=246.58549999999997) [you'll choose to use Cloud Storage](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=249.67638461538453) [buckets. Of all of these storage](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=252.41376923076908) [technologies, Cloud Storage buckets is the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=254.3995454545455) [only one for blobs or unstructured data.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=256.235) [All of the other technologies work with](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=259.1062727272726) [structured or semi-structured data. In all](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=262.25300000000004) [of the other cases, let's see a quick](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=264.80157142857144) [comparison of when we would choose to use](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=266.9638571428571) [Cloud SQL versus any of the other](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=269.5603333333333) [technologies. For example, we'll start off](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=272.2121666666665) [with Cloud SQL versus Cloud Spanner here.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=274.1709999999999) [We'll choose Cloud SQL when we want a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=276.7887692307693) [relational database with ACID support,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=279.966) [atomicity, consistency, isolation, and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=283.20742857142847) [durability. Cloud Spanner is also a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=285.5366) [relational database, and it provides](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=288.6344) [ACID++ support, ACID support on a global](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=291.1626363636364) [scale. If your users are restricted to a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=294.65245454545476) [specific region, you can choose Cloud SQL.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=297.36949999999985) [Cloud SQL is regional only. Cloud Spanner](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=299.588) [can be regional or global, distributed](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=302.60091666666654) [across multiple regions. Cloud SQL scales](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=305.317125) [vertically. That means you can increase](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=308.7018749999999) [your performance and storage by taking a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=311.19778571428577) [bigger instance. Cloud Spanner scales](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=313.9022857142858) [horizontally. You simply add nodes for](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=316.03490000000005)[higher performance and more storage. If](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=318.7547000000001) [your storage and QPS requirements are not](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=321.4485000000001) [very high, Cloud SQL is a good option.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=324.3318) [Cloud Spanner scales to any size and any](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=326.903) [QPS. Cloud SQL works with open](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=331.1936666666668) [technologies that are widely available](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=333.48909090909103) [such as MySQL and PostgreSQL. Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=335.24818181818205) [Spanner is Google proprietary. Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=338.5055555555556) [is relatively cheap, of the order of $7500](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=341.6755) [a month for a production instance. Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=345.05750000000006) [Spanner is very expensive because of its](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=348.0401) [distributed nature, global asset](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=351.1628) [properties, and Google proprietary](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=353.4615714285714) [technology. Between Cloud SQL and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=356.2747142857142) [BigQuery, you'll choose to go with](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=358.26466666666664) [BigQuery if you have analytical processing](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=360.1946666666666) [or data warehousing requirements. Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=362.92699999999996) [SQL is a SQL RDBMS. BigQuery is a SQL data](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=365.58816666666667)[warehouse. If your data is less than 10 TB](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=371.30983333333313) [and you have strict ACID requirements,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=374.6860000000001) [Cloud SQL is a good choice. BigQuery](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=376.789) [scales to petabytes of data. If you want](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=379.71675) [to instantiate a single instance as a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=382.8757272727273) [server, then you'll use Cloud SQL.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=385.3670909090911) [BigQuery is a serverless technology](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=387.58650000000006) [offered by Google. BigQuery, once again,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=389.45) [is a proprietary technology offered by](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=392.37139999999994) [Google, and the cool thing is BigQuery is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=395.21681818181816) [relatively cheaper than using Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=398.8080909090907)[instances. So if you have petabytes of](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=401.00199999999995) [data at global scale with no ACID](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=403.445) [requirements, you'll choose to go with](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=406.80249999999984) [BigQuery. You'll choose to use the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=409.68035714285685)[Bigtable storage technology as opposed to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=411.90136363636367) [Cloud SQL if you have analytical](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=413.991) [processing requirements with a NoSQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=417.1485) [database. Bigtable is often described as](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=419.77975000000004) [very similar to HBase, a columnar](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=421.9387777777778) [database, with very wide columns. With](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=424.43528571428567) [scales to petabytes of data, it provides](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=427.7859230769231) [horizontal scaling by adding nodes. It's a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=430.41038461538477) [Google proprietary technology, which](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=433.32620000000003) [allows very high QPS. Bigtable is not a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=435.40860000000004) [serverless technology. It requires you to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=438.86400000000003) [set up instances, and it can get expensive](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=440.9235000000001) [very quickly. If you're looking for a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=444.84625000000005) [NoSQL document database, then Datastore is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=447.9829166666667) [the choice for you, and you might choose](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=450.45241666666675) [to go with it over Cloud SQL. Datastore](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=452.84999999999985) [works in two modes, one of which has](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=455.2008181818182) [transaction support. It scales well, but](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=458.11936363636363) [the data that it can store is limited.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=460.1033333333333) [It's best for data in terabytes. It has](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=462.612) [serverless autoscaling and works on a Google proprietary technology.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=8&mode=live&start=466.31018181818166)

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A zone is an](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=15.332142857142856) [availability zone, similar to a data](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=18.034714285714283) [center in one location. A number of zones](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=20.134285714285706) [or data centers make up a single region,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=22.994999999999997) [and a region is one area within the United](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=25.917) [States which holds multiple data centers.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=29.546400000000006) [All of these zones are connected using](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=31.966) [high-speed network links. You can use](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=35.208400000000005) [resources on the Google Cloud Platform in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=37.4855) [multiple regions around the world. Regions](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=39.55633333333334) [are available in the US, Europe,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=42.14584615384616) [Australia, and Asia. A network on the GCP](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=45.14261538461539) [is a virtual private cloud. Multiple IP](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=48.6305) [addresses reside on a network which are](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=51.44907692307692) [logically grouped into subnets. Firewalls](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=54.35084615384616) [can be configured to allow or deny traffic](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=56.37408333333333) [from and to resources which live on a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=59.29474999999998) [particular network. An example of a zone](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=62.7942857142857) [on the GCP is us-central1-a. A zone is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=65.86750000000004) [typically suffixed by an alphabet. The](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=69.14375) [region is us-central1, that is one area of](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=71.47864285714286) [data centers in the US, and the default](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=74.62778571428566) [network that is configured whenever we](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=77.5475) [create a Google Cloud Platform account is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=79.45049999999999) [called default. Even if you don't](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=82.22679999999998) [explicitly set up a VPC, when you log into](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=84.964) [the Google Cloud, any resources you create](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=87.94375000000005) [belong to this default network. Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=91.16677777777777) [essentially refers to a Compute Engine](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=94.8774) [virtual machine, which is an instance](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=97.64760000000004) [running either the MySQL database or the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=100.48146153846156) [PostgreSQL database. This is the database](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=103.82476923076929) [as a service option that the Google Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=106.34200000000001) [Platform provides. When you configure a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=109.46600000000004) [single Cloud SQL instance, this is a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=111.29599999999998) [virtual machine that is associated with a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=113.13174999999994) [specific zone. One Cloud SQL instance lies](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=116.2245) [in one zone. It's not distributed across](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=119.64621428571428) [multiple zones. So if there is a failure](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=123.11571428571426) [in that particular data center, your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=125.50609090909091) [database will be unavailable, which means](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=127.11627272727273) [a single instance does not have high](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=129.78190909090912) [availability. If you're interested in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=133.0152857142857)[making your Cloud SQL instance highly](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=135.28972727272728) [available, there is something called the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=137.28609090909097) [high-availability configuration. The](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=140.018) [high-availability configuration replicates](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=142.07666666666668) [your Cloud SQL single instance, so we have](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=144.0496666666667) [an original instance which serves as the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=148.24618181818184) [master, and the replicated instance is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=150.3652727272728) [called the failover replica. The addition](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=153.09855555555558) [of a failover replica, which mimics all of](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=155.7266666666667) [the data that's present in the master, is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=158.4613333333334) [your high-availability configuration. The](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=162.17566666666673) [high-availability configuration ensures](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=164.1172) [that even if a single zone fails, your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=165.39579999999998) [data will still be available because your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=168.7108181818182) [failover replica will be present in a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=171.36318181818194) [different zone from the original master](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=174.26475000000005) [instance. The master and the failover](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=176.8372500000001) [replica will be in the same region. Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=178.8618333333333) [SQL is a regional resource, but they'll be](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=181.4232) [in different zones in that region. Just](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=184.04080000000005) [like other virtual machines which you can](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=186.3489) [connect to, Cloud SQL instances are also](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=188.76319999999996)[vulnerable to security threats, which](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=191.74577777777782) [means GCP configures firewalls in order to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=193.98572727272727) [restrict access to your Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=196.8258181818181) [instances. Because of this restricted](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=199.05263636363634) [access to your Cloud SQL instance, there](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=200.73536363636356) [are three explicit things that you can do](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=203.197) [in order to gain access to your database.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=206.101) [You can whitelist the IP of the client](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=208.64315384615375) [machine which you're using to connect to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=211.0911818181818) [your database, you can configure SSL so](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=213.12181818181816) [that the client and the server trust each](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=215.3437857142858) [other, or you can choose to use a Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=217.97064285714305) [SQL Proxy. We'll see how to work with all](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=220.74219999999994) [of these three ways of connecting in the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=223.20000000000005) [next module. Cloud SQL instances scale](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=225.645) [vertically, which means in order to get](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=228.09481818181814) [better performance and more storage](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=230.289) [capacity, you need to get a bigger and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=232.22150000000005)[better machine. If the number of queries](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=235.21853846153846) [per second you make to your Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=237.25930769230771) [instance goes beyond 10, 000, you'll find](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=239.67675000000003) [that your performance will suffer, and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=241.91616666666673) [your instance will become a bottleneck. In](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=244.22559999999996) [order to mitigate this, you can use](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=247.07833333333332) [something called read replicas. Read](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=249.51666666666662) [replicas are a complete copy of your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=251.34336363636362) [master database instance which allow just](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=254.37690909090898) [reads. All writes to your database will be](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=256.63174999999995) [performed to the master instance. All of](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=259.1777499999998) [the changes to your master will be](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=261.2410769230768) [replicated to your read replica with a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=263.277) [little lag. This is the replication lag.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=265.91133333333323) [The replication to read replicas are close](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=268.4171818181817) [to real time on Cloud SQL, which means you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=270.82446153846155) [can quickly improve read performance by adding read replicas.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=9&mode=live&start=273.55561538461535)

[The Web Console and Cloud Shell](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live)

[In this demo, we'll get hands on. We'll](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=2.378) [log into the Google Cloud Platform](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=4.6696923076923085) [console, and we'll learn how to use the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=6.588461538461539) [Cloud Shell terminal window. You can](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=10.480153846153849) [access the Google Cloud Platform at](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=13.373333333333333) [console. cloud. google. com. Just type](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=16.215333333333334) [this in on any window, and you can use](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=18.75270588235294) [your Gmail account to log in. I'm using](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=21.64488235294118) [the Gmail account that belongs to my](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=24.117200000000004) [organization, cloud. user@loonycorn. com.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=26.021900000000016) [Specify the password, and you're logged](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=28.037599999999998) [in. Now Google gives you some free trial](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=31.524799999999992) [credits that you can use. You](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=34.27891666666668) [automatically have those available if](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=36.167307692307695) [you're logging in for the first time.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=37.848846153846154) [However, setting up Cloud SQL instances](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=40.203) [and some of the other operations that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=42.375000000000014) [we'll performed in demos in this course](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=44.86718181818182) [might require you to enable billing on the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=47.25481818181818) [GCP, so I recommend that you set up a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=49.78579999999998) [billing account and associate your credit](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=52.559) [card. As long as you turn down your Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=55.01642857142859) [SQL instances after you create and use](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=57.6545714285714) [them within these demos, your bill should](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=59.71476923076923) [not exceed a few dollars. All GCP](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=62.43615384615382) [resources lie within a specific project. A](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=65.25575)[project is a billing unit for your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=68.20766666666667) [organization. So let's say you have](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=70.48033333333338) [different teams within your organization.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=72.49699999999997) [Each team will have its own project to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=74.189)[work on. For the purposes of the demos in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=76.84579999999997) [this course, I'm going to create two](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=79.64587500000003) [separate projects. One project that's](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=81.78175000000006) [associated with my reviews and ratings](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=83.54369999999999) [team. This project is going to be called](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=85.84709999999997) [spikey-reviews. I've clicked on the CREATE](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=88.835) [button and created the spikey-reviews](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=91.22741666666666) [project here. The spikey-reviews project](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=93.24783333333332) [is where I'm going to create my Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=94.99549999999998) [instances that will hold my reviews and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=97.814) [ratings data. I'm now going to use the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=101.13822222222218) [drop-down at the top in order to create a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=103.70058823529408) [second project. This project will be](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=106.1194705882352) [called spikey-developers. Click on the NEW](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=108.64966666666665) [PROJECT button here, and set up the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=111.07276923076925) [spikey-developers project. This is a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=113.56961538461545) [general project that all developers within](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=115.3319090909091) [the SpikySales organization use to test](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=117.42972727272728) [out their prototypes. Go ahead and click](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=120.05928571428574) [on the CREATE button here, and get this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=123.00886666666668) [project set up. So we have two projects,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=126.01260000000002) [and make sure you look at the blue bar at](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=128.5199375) [the very top to know which project you're](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=131.28181249999992) [working on at any point in time. We are](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=133.96499999999992) [currently in the spikey-reviews project.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=137.21828571428574) [You can click on the drop-down there in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=139.334) [order to change the project that you're](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=141.50384615384627) [working on. So you can switch over to the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=143.3310909090909) [spikey-developers project using this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=145.451)[pop-up, and now we are in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=147.03780000000003) [spikey-developers as you can see from the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=149.418) [top bar. I'm going to pop up this dialog](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=152.95377777777784) [and switch back to the spikey-reviews](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=156.03250000000003) [project. And within spikey-reviews, I'm](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=157.80550000000005) [going to activate the Cloud Shell. This I](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=160.00019999999995) [can do by clicking on the Cloud Shell icon](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=163.48926666666665) [on the top right. When you use the Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=166.37046666666663) [Shell on the GCP, it creates an ephemeral](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=169.20253846153852) [virtual machine and allows you to log into](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=171.685) [that virtual machine to use as your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=174.38653846153835)[terminal prompt. At the time this course](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=176.78681818181815) [was recorded, the Cloud Shell was](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=179.2781818181817) [exclusively on an ephemeral VM. That means](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=181.47488888888893) [any files that you download, any settings](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=183.93453846153844) [that you set up here will not be](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=186.046923076923) [permanently saved, so beware. Don't use it](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=189.2055) [like your laptop or your local machine.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=192.2223) [It's an ephemeral VM. Notice from the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=194.708) [prompt on this Cloud Shell VM that we are](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=197.10092307692304) [in the spikey-reviews project. If you're](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=200.24914285714286) [confused at any point in time during the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=202.286) [demos that we perform which project we are](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=204.58200000000005) [working on, you can always look at the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=206.81069230769234) [prompt of your Cloud Shell terminal. And](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=208.999) [on this note, we come to the very end of](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=212.4517142857143) [this introductory module on Cloud SQL on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=214.9788571428572) [the GCP. Cloud SQL is the MySQL or](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=217.86407692307696) [PostgreSQL database running on the Google](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=222.1182307692309) [Cloud Platform. It's capable of storing up](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=224.73285714285709) [to 10 TB of data and supporting 40, 000](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=227.33528571428576) [queries per second. Cloud SQL is Google's](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=230.52)[relational database on the cloud,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=233.5084166666667) [comparable to Amazon's Relational Database](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=235.643) [Service or Azure's SQL Database. Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=238.66049999999998) [allows managed install, backup, and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=242.44) [replication and is very easy to set up and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=244.345) [use. Cloud SQL instances are regional](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=247.9878461538462) [resources on the GCP, which means Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=250.53046153846162) [SQL instances cannot span multiple](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=253.8739090909091) [regions. Cloud SQL is easy to scale](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=256.36981818181823) [vertically. You simply use a bigger and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=258.85269230769234) [better machine for better performance and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=261.167) [higher storage requirements. You can also](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=263.5843333333332) [configure Cloud SQL in a high-availability](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=266.1810769230769) [mode using failover replicas. In this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=268.95723076923065) [module, we got started on the Google Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=271.4951666666667) [Platform console. The next module will be](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=274.24383333333355) [very hands on. You'll see how you can](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=276.2020714285714) [create, edit, start, and stop Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=278.23578571428567) [instances and connect to them by](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=280.69949999999994) [whitelisting your IP address using SSL or configuring the Google Cloud SQL proxy.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=9d1170fc-d3f7-430c-b5b0-db3f7186b87e&clip=10&mode=live&start=282.909)

[Creating Cloud SQL Instances](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=0&mode=live)

[Module Overview](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=0&mode=live)

[Hi, and welcome to this module where we'll](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=0&mode=live&start=0) [get very hands on. In this module, we'll](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=0&mode=live&start=3.8500000000000005) [study how you can create, edit,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=0&mode=live&start=7.077666666666667) [administer, and work with Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=0&mode=live&start=9.22475) [instances. We'll start off by seeing how](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=0&mode=live&start=12.337250000000004) [we can create and edit instances using the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=0&mode=live&start=14.62507692307692) [web console, as well as the gcloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=0&mode=live&start=17.1317) [command-line utility. We'll see how you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=0&mode=live&start=20.23059999999999) [can clone, start, and stop instances and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=0&mode=live&start=22.457230769230776) [connect to instances with and without SSL.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=0&mode=live&start=24.804384615384635) [Cloud SQL also allows you to configure the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=0&mode=live&start=27.789090909090913) [database flags that you set when you start](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=0&mode=live&start=31.297692307692305) [up your MySQL or PostgreSQL instance. The](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=0&mode=live&start=34.224461538461554) [Google Cloud Platform offers a very useful](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=0&mode=live&start=37.04079999999999)[facility that allows you to label or tag](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=0&mode=live&start=40.02690909090909) [your resources. This is useful for billing](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=0&mode=live&start=43.29018181818184) [or any other purpose. We'll see how we can](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=0&mode=live&start=45.95155555555555) [use instance labels with Cloud SQL, and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=0&mode=live&start=48.7905) [we'll see how we can connect to these](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=0&mode=live&start=50.69800000000001) [Cloud SQL instances using the Cloud Proxy,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=0&mode=live&start=53.5373076923077) [which mitigates the need to whitelist your IP address.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=0&mode=live&start=56.214)

[Creating a Cloud SQL Instance](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live)

[In this demo, you'll see how you can use](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=2.235) [the web console in order to create a Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=4.545000000000001) [SQL instance. We start off at the Google](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=7.397200000000001) [Cloud Platform dashboard. The one thing](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=10.480666666666663) [for you to notice here is that I'm on the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=12.395) [spikey-reviews project, as you can see](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=15.094999999999995) [from the top blue bar. The spikey-reviews](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=17.028)[project is where we'll be creating our](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=19.535166666666665) [Cloud SQL instances. Click on the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=22.489749999999997) [hamburger icon on the top left, and this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=24.6665) [will give you access to the Navigation](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=27.094499999999996) [menu that brings up all of the features](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=28.981615384615385) [and services that the GCP provides. Here,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=30.934846153846156) [under STORAGE, you will choose SQL. I'm](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=33.960499999999996) [going to click on the pin right next to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=37.027562499999995) [the SQL option in order to pin it to the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=39.59762499999997) [very top. We'll be navigating to this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=42.502) [often. The option to get to Cloud SQL is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=44.58625000000001)[now available at the very top of the menu](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=46.81150000000001) [just under Home, and that's where I'll](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=49.11866666666666) [navigate to to create my first instance.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=51.77633333333332) [This button takes you to a menu where you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=54.434) [have two options. You can create a MySQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=57.09349999999997) [instance on the cloud or a PostgreSQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=59.794999999999995) [instance on the cloud. I'm going to work](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=62.33599999999999) [with MySQL Second Generation. You can see](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=65.33927272727274) [that the option to create First Generation](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=67.71000000000001) [instances is also present here. But almost](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=69.72133333333336) [all of the demos in this course will be](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=71.81635714285717) [using the MySQL option. So click on MySQL,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=74.553) [and you'll see that you have three options](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=77.56100000000004) [here, a Development environment, a Staging](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=80.90800000000002) [environment, and a Production environment.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=83.79485714285715) [Now all three of these options lead to the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=86.122) [same configuration page, but the default](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=89.00800000000001)[configuration that will be checked will be](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=90.86974999999998) [based on the kind of environment that you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=92.96916666666661) [want. Notice that the MySQL Development](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=95.60954545454543) [environment does not have the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=97.829875) [Automatically increase storage and High](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=100.42925) [availability options checked. The Staging](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=102.91699999999997) [environment, on the other hand, comes with](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=104.9834) [the Automatically increase storage](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=107.14780000000003) [configuration enabled, but High](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=109.72739999999999) [availability is not enabled by default.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=112.0765) [And finally, the recommended Production](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=114.583)[environment is to have Automatic patches &](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=116.73300000000003) [maintenance, Automatic backups,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=119.8555) [Automatically increase storage, as well as](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=121.258) [High availability. Remember that these are](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=124.70274999999997) [the default settings. Once you get onto](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=127.65557142857142) [the Instance Configuration page, all of](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=130.4686923076923) [these are configurable. Click on MySQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=132.65823076923076)[Development, and we can navigate to the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=134.8954545454545) [configuration page and see that these](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=137.5611818181817) [options remain unchecked. Notice that the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=140.478875) [Create failover replica check button there](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=143.13336363636367) [is unchecked. That is what sets up high](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=145.398090909091) [availability on Cloud SQL. This is the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=148.17380000000006) [option available under Enable auto backups](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=150.93474999999998) [and high availability. However, had you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=153.76224999999997) [chosen the MySQL Production environment](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=156.36400000000003) [from the previous page, you would have](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=158.3440000000001) [found that the Create failover replica](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=160.82327272727267) [checkbox would come prechecked. I'm going](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=162.848) [to set up an instance here using this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=165.15350000000007) [configuration page, and I'm going to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=168.1340909090909) [configure the settings as I want it be. My](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=170.1593636363636) [Instance ID is reviews-prod. I want it to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=173.75979999999996) [be a production instance, but I'll be](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=176.663) [enabling high-availability configuration](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=178.7245)[later on in this course, not right away.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=179.902) [The Cloud SQL Instance ID should be](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=183.434) [unique, and you should not have created an](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=185.47530769230778) [instance with the same name within the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=188.0897272727273) [last week. It's always good practice to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=191.11627272727281) [specify a root password for your instance.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=193.57266666666663) [You can choose to leave it blank if you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=195.801) [want to, but generally, for good security,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=198.23861538461534) [you need to have a root password. Now you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=200.2154) [need to specify a region and maybe a zone](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=203.0344705882353) [where you want this instance located. Your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=206.33958823529414) [choice of region is permanent. Once you've](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=208.87300000000002) [configured the region, you can't edit the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=211.1830000000001) [region for a particular instance. The zone](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=213.5001111111111) [can be changed at any point in time. My](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=215.774) [region is us-central1, and I'm going to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=218.53692857142858) [allow the GCP to locate my instance in any](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=220.65742857142854) [zone within this region. I want my MySQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=223.5866153846154) [database to use the latest version](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=226.5509230769232) [available at the time of this recording,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=228.4003636363636) [that is version 5. 7, and I want to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=230.34) [configure the machine type and storage](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=233.24828571428583) [requirements for my instance. You can see](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=235.24836363636365) [that for a development instance the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=237.93890909090916) [machine type chosen is one of the smaller](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=240.0858181818182) [ones, db-f1-micro, with just 1 vCPU and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=242.736) [just 614. 4 MB of memory. You can, of](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=246.8740769230769) [course, change this by clicking on the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=251.1546153846154) [Change button that you see on screen, but](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=252.86638461538467) [however, because this is for demo](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=255.28333333333336) [purposes, I'm going to leave it as is. I'm](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=257.3033333333333) [also going to go with the default SSD](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=259.8725333333333)[recommendation because I want lower](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=262.42100000000005) [latency with higher QPS. You can choose](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=265.3960000000002) [how much storage capacity your Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=268.86075) [instance has. I'm going to increase it to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=271.3918333333333) [20 GB. Notice that when you make a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=273.7260000000001) [configuration change to your instance on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=275.874) [the right you have the exact configuration](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=278.1410000000001) [of your instance as you're creating it.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=280.81712500000003) [It'll immediately update to show you that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=283.681) [your SSD storage is 20 GB. I'm going to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=286.2543076923075) [set it back to 10 GB here. I don't really](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=289.13668750000005) [need this much, even for my demo, and I'm](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=291.3923125000003) [going to enable automatic storage](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=294.5035000000001) [increases. One thing to watch out for here](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=296.53225000000015) [is that let's say the data that your Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=298.8373333333335) [SQL instance stores exceeds 10 GB, the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=301.4298181818182) [storage capacity will automatically be](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=304.38254545454555) [increased, but in case you delete data,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=306.4122222222222)[the storage capacity will not be](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=309.087) [automatically shrunk. You can see the fine](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=311.86199999999985) [print just below that checkbox, All](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=314.80699999999996) [increases are permanent. In the next](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=317.23099999999994)[option to Enable auto backups and high](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=319.7910909090908) [availability, I'm going to leave Automate](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=322.9366363636361) [backups and binary logging checked;](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=325.61300000000006) [however, I'm not going to create a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=327.84) [failover replica at this point in time.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=330.118) [We'll be talking a lot more about](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=332.396) [high-availability configuration settings](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=334.92066666666653) [and failover replicas in the module after](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=336.0451) [this one. At this point, I'm pretty happy](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=338.86679999999996) [with the current settings of my Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=341.34259999999983) [instance. Click on the Create button. Your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=343.56873333333294) [instance will be created. Now this might](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=346.0544000000001) [take a while depending on how long it](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=348.2856) [takes for the VM to spin up in that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=350.31119999999993) [particular region and zone. You can click](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=353.3306666666668)[on the SQL button at the top left, and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=355.7201999999999) [that will take you to the page that you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=358.07279999999975) [currently see on screen. You might have to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=360.357) [wait anywhere between 2 to 7 minutes for](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=362.47453846153854) [your instance to spin up. Once the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=364.7096153846156) [instance has been created, as you can see](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=366.6177692307693) [by the green checkbox here, you can click](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=368.87769230769226) [on reviews-prod in order to view the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=371.75523076923054) [details of your instance. This is the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=374.3000769230769) [OVERVIEW page of the instance, and there](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=376.880923076923) [are a number of other details available](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=379.267) [here in the form of tabs such as USERS,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=381.50699999999995) [DATABASES that have been configured in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=384.769) [this instance, and so on. If you scroll](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=386.8158461538461) [down this page, you'll find a lot of](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=389.1192307692305) [useful details available right here on the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=391.63992307692297) [screen. You can take a brief look at the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=393.9596153846151) [configuration of your instance. You can](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=396.85499999999985)[immediately see here that this instance is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=398.92733333333337) [not highly available. We haven't](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=401.69350000000014) [configured it as such. There are ways to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=403.5318571428571) [connect to this instance, suggestion](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=406.1432857142855) [actions, and logs at the very bottom. This](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=407.923) [is a quick way to get to the logs for your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=411.4796923076923) [instance. The logs just have one bit of](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=414.10530769230763) [information at this point in time. Our](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=416.0600769230771) [instance creation has been done. Now it](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=417.91976923076925) [might take a while for the graphs](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=420.64115384615394) [associated with your instance to be](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=423.31255555555555) [updated. You can see that there is a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=425.49522222222225) [variety of information that you can view](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=428.00099999999986) [graphically here. This will give you a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=430.14299999999974) [quick idea of the utilization for this particular MySQL instance on the cloud.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=1&mode=live&start=432.29230769230776)

[Editing an Instance Using the Web Console](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live)

[In this clip, you'll see how you can edit](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=2) [an already existing Cloud SQL instance](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=4.1182727272727275) [using the web console. Click on the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=6.369999999999999) [reviews-prod instance. That's the one that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=9.264923076923075) [we want to edit. This will immediately](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=11.492769230769227) [take us to the OVERVIEW page, which you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=13.784749999999997) [can think of as the dashboard for the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=15.936083333333324) [instance as a whole. Click on the EDIT](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=18.525818181818188) [button at the very top here, and this will](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=20.96693333333334) [allow you to edit the configuration](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=23.475533333333356) [settings of the instance. Now when you go](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=25.677000000000007) [to the Edit instance page, you'll](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=28.36961538461539) [immediately see that certain portions are](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=29.942538461538472) [grayed out. This is the Instance ID and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=31.904538461538458) [the Region. These are permanent settings](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=35.03930769230768) [and cannot be changed once the instance](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=37.08845454545453) [has been created. However, within the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=39.303) [us-central1 region, I can change the zone](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=42.48825000000001) [where my instance is located. I'll leave](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=45.196) [it the same for now. And then I'm going to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=47.35385714285714) [change the storage for my machine type.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=49.91314285714283) [I'm going to change it from 10 GB to 20](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=52.13406250000001) [GB. This is what I had set up earlier, but](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=55.552187500000045) [I'd switched it back to 10. Go ahead and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=57.72339999999998) [click on the Close button here, and then](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=59.81685714285714) [scroll to the bottom and click on Save.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=62.147142857142846) [This will cause the instance to be updated](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=65.01792307692308) [and will trigger a restart if it's needed.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=68.213) [The only user that you're prompted to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=72.062) [create when you're setting up your Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=73.61483333333335) [SQL instance is the root user. If you want](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=75.318) [to add additional users, you can do so](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=77.99099999999997) [using the USERS tab. This will show you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=81.02040000000001) [all of the existing users for your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=83.77633333333335) [database, and you can create a new user](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=85.75791666666672) [account by clicking on the button there.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=88.1445) [This will bring up a dialog where you can](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=90.248) [specify the username and password. Our](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=93.10164285714282) [user is the developer, and the password is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=95.02321428571429) [any password that you assign. I want](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=97.71292857142862)[developers to be able to connect from any](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=99.99542857142859) [machine, which is why I allow any host](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=102.40114285714293) [that is the %. Go ahead and click on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=104.99973333333334) [CREATE to create a new user for this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=108.14013333333335) [instance. Notice that for every action](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=110.78850000000003) [that you perform the screen is updated,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=112.739) [and you get a message at the bottom left.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=115.14218749999998) [You have all of the databases available](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=118.232) [within your Cloud SQL instance when you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=120.88500000000003) [click on the DATABASES tab. You can also](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=123.36028571428571) [use this tab to create a new database](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=125.68142857142854) [here. The reviews team in my SpikySales](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=128.38636363636363) [organization uses a database called](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=131.089) [spikey\_db, and that's what I want to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=133.08536363636358) [create here. There are a number of options](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=135.74221428571428) [that I can specify when I set up the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=137.8319285714286) [database. You can explore the options](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=140.4321538461538) [available here to configure the database](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=142.37338461538448) [how you want it to look. Go ahead and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=144.297) [click on CREATE, and that will create a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=147.08157142857144) [new database here, right here, using the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=149.4244285714286) [web console UI. Notice that creating a new](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=151.8223333333333) [database within Cloud SQL does not restart](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=154.861) [the instance, which makes sense. Go back](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=158.15625000000006) [to the OVERVIEW page, and scroll to the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=161.13706666666667) [very bottom of this page. Notice the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=163.64533333333338) [Operations and logs section. You can see](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=165.81733333333332) [that logs have been updated to reflect all](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=167.93249999999998) [the actions that you've performed. Click](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=171.04100000000005) [on View all operations, and that'll take](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=173.56015384615384) [you to the OPERATIONS tab. Now it's not](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=175.78023076923074) [necessary for you to create and edit your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=178.42869230769236) [Cloud SQL instance only using the web](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=181.2625384615386) [console. There are equivalent operations](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=184.15349999999998) [available using the gcloud command-line](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=186.336) [utility. A systems administrator would](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=189.36350000000004) [ideally like to script or automate all of](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=191.39481818181815) [these mechanical tasks, and he or she can](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=194.28246153846152) [do this using gcloud. Let's activate the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=197.42215384615378) [Cloud Shell using the icon on the top](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=199.94340000000003) [right of your screen, and let's see how we](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=202.48046666666679) [can use the command line to run gcloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=205.73935714285713) [commands. The Cloud Shell opens up a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=208.92392857142855)[terminal window to an ephemeral VM on your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=211.50640000000004) [GCP, and running gcloud sql instances](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=214.41893333333343) [patch allows you to edit a Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=216.68684615384615) [instance that has already been created.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=219.733) [The --help option will show you all the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=222.38445454545456) [options that are available with your patch](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=225.71299999999997) [command. The demos that we perform in this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=228.3239999999999) [course will give you a mix of using the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=230.36906666666667) [web console and the gcloud command-line](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=232.63090909090909) [utility so that you're familiar with both.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=234.7363636363636) [Remember that almost all options on the web console can be scripted using gcloud.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=2&mode=live&start=237.2731818181818)

[Cloning, Starting, Stopping, and Deleting Instances](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live)

[In this clip, we'll see how we can perform](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=2.813) [a number of simple operations on your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=4.619230769230768) [Cloud SQL instance such cloning, starting,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=6.888333333333334) [stopping, and restarting your instance.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=9.821) [We'll start off in the OVERVIEW page of](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=12.473) [our reviews-prod instance within our](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=15.926818181818179) [spikey-reviews project. Click on the CLONE](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=18.096200000000003)[button that's available on the top right](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=20.71880000000001) [of your screen. This allows you to create](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=22.903000000000002) [a clone of your instance. Now why might](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=25.320999999999998) [you need to create a clone? Cloning an](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=27.788500000000003) [instance is one way for you to create an](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=30.01650000000001) [exact copy of the current state of your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=32.7556) [instance, which can assist in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=35.29373333333335) [point-in-time recovery. The GCP gives you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=37.56433333333332) [other ways to back up your Cloud SQL data](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=39.62313333333333) [as well. Cloning an instance is one of](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=42.057933333333324) [options available. I'm going to simply](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=45.15949999999999) [click on Create clone and create an](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=47.180692307692304) [instance with the ID reviews-prod-clone.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=49.22415384615384) [It'll take some time for the new instance](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=51.22263636363637) [VM to spin up. You can watch the progress](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=54.995) [on your SQL Instances page. My clone has](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=57.905857142857144) [been created, and the clone is present in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=60.84925000000001) [us-central1. If you click on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=64.3859166666667) [reviews-prod-clone and explore the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=66.66577777777778) [instance, you'll find that its](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=68.50355555555555) [configuration and setup is exactly the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=70.25399999999999) [same as the reviews-prod instance that you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=72.19049999999999) [had created earlier. You can see that the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=74.75974999999998) [same users are present here. The developer](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=77.30200000000002) [user that you had added to your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=79.25266666666667) [reviews-prod is present in the clone as](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=81.22200000000002) [well. The databases that are present in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=83.39000000000001) [your clone are the same. The spikey\_db](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=85.70700000000004) [that you'd created for your team is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=88.36792857142856) [present here. Click on the icon on the top](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=91.16642857142855) [right to activate your Cloud Shell](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=94.26946666666663) [terminal window. We are going to perform](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=96.2438666666666) [the rest of the actions for this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=98.14930769230766) [particular clip using the gcloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=99.89553846153838) [command-line utility. If you want to stop](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=103.09566666666667) [an instance using the command line, you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=106.04099999999998) [can use the gcloud sql instances patch](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=108.09899999999996) [command. Stopping a Cloud SQL instance](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=111.33790909090908) [requires that you set the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=114.519) [activation-policy of your instance to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=116.62536363636362) [NEVER. The instance will then be stopped.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=118.73172727272723) [Our reviews-prod-clone is the instance](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=121.2896) [that I want to stop here. Stopping an](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=123.05541666666667) [instance requires that all connections to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=125.78675000000007) [that instance be closed and the instance](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=127.65307692307692) [be shut down, so it might take a couple of](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=129.61792307692306) [minutes. You can go to the list of](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=132.19786666666667) [instances in your SQL Instances page, and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=134.184) [you can see that the reviews-prod-clone](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=136.13874999999993) [instance has now been stopped. You can see](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=138.03016666666667) [by the stop icon to its left. If you click](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=141.31639999999996) [on the instance here, the OVERVIEW page](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=144.01773333333315) [will give you a message on top indicating](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=145.92716666666664) [that the instance is stopped. You can](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=148.24) [start it once again, and you can do so](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=151.0120000000001) [either by using the START button on the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=153.70818750000007) [top of your screen or by using the gcloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=155.48768750000016) [command-line utility. When you want to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=159.15350000000004) [start a Cloud SQL instance using the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=161.31269230769234)[command line, you'll use the patch command](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=163.34215384615396) [as before, and you'll set the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=165.4847272727272) [activation-policy of the Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=167.36) [instance to ALWAYS. The activation-policy](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=170.17999999999998) [for other resources on the GCP may have a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=172.59236363636364) [slightly different meaning. In the case of](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=175.834) [Cloud SQL, they are only used to start and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=177.99583333333328) [stop the instance. Starting the instance](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=181.07600000000002) [might take a couple of minutes here. You](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=183.3800000000001) [can switch over to the Instances page and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=185.74999999999997) [see the status of your operation. One](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=187.86776923076923) [thing I've noticed with the GCP is that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=189.60915384615382) [the web UI doesn't update immediately, so](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=192.15475000000004) [your instance might be started, but it](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=195.19216666666676) [might take a minute or so for the web UI](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=197.4629411764706) [to update. If the connections to your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=200.26882352941178) [Cloud SQL instances are hung and you can't](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=202.45807692307696) [tell why, you might need to restart your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=205.063) [instance. You can do this with a single](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=207.590111111111) [command as well. The gcloud sql instances](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=210.17049999999998) [restart command allows you to restart your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=212.79772727272726) [Cloud SQL instance. Now you might see a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=215.697) [message on screen which talks about the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=218.75546153846165) [activation policy on demand. Remember that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=221.5599090909091) [for Cloud SQL Second Generation MySQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=224.23863636363635) [instances, the activation policy on demand](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=227.1371) [is no longer applicable. The activation](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=230.2553) [policy can only be NEVER or ALWAYS. I'll](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=232.95708333333337)[enter Y at this prompt because, yes,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=236.30328571428572) [indeed, I do want to restart my clone, and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=238.34228571428577) [I'm going to go ahead and wait patiently](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=240.96923076923073) [until my instance is restarted. Now once](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=243.31384615384601) [your restart is complete, you can hide the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=246.31888888888895) [Cloud Shell, and then you can go to the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=249.4908) [OVERVIEW page of your clone and go to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=252.27360000000004)[Operations and logs. Notice there that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=255.05600000000004) [your logs reflect all the actions that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=257.19999999999993) [you've performed on this instance. And](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=259.6779999999998) [finally, let's go back to our Cloud Shell](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=261.85116666666664) [terminal window and delete this clone](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=264.8328181818182) [instance that we've created. I can do this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=267.44172727272723) [using gcloud sql instances delete. We'll](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=270.90411111111115) [get a warning which will rightly tell you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=273.302) [that once you delete this instance all the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=275.25400000000025) [data associated with this instance will be](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=277.46033333333344) [lost. I'll say Yes and then wait for my](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=279.6134166666669)[instance to be deleted. You'll get a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=282.5989999999999) [visual confirmation that your instance has](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=284.8696363636363) [been deleted when you go to the SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=286.7329090909089) [Instances page, and you see here that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=289.19969230769215) [reviews-prod clone has disappeared from my instances list.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=3&mode=live&start=291.353)

[Connecting Using the Cloud Shell](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live)

[Well, you have your instance set up at](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=2.169) [this point in time, but database](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=4.162333333333333) [administrators and even your developers](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=5.8548) [will need to connect to your Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=7.5943000000000005) [instance in order to run their SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=10.536846153846154) [commands. Let's see how you can connect](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=13.19523076923077) [using the Cloud Shell. We start off in the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=15.482999999999997) [OVERVIEW page of the reviews-prod Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=18.327692307692306) [SQL instance, which we created in the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=20.214923076923075) [spikey-reviews project. The spikey-reviews](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=23.120428571428576) [project is for the reviews and ratings](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=24.730800000000002)[team, which maintain the reviews and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=27.180100000000014) [ratings for our SpikySales organization.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=30.242000000000004) [The easiest way to connect using the Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=32.954) [Shell is to scroll down a little bit on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=34.98657142857143) [this page and use the link available here,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=37.63699999999999) [Connect using Cloud Shell. Just above that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=40.639666666666635) [link, you see the primary IP address of](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=43.00864285714286) [your Cloud SQL instance and also your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=45.32235714285716) [instance connection name. We'll use those](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=47.62485714285714) [later. For now, we want to connect using](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=49.65800000000001) [the Cloud Shell. This will activate your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=52.21000000000003) [Cloud Shell terminal window and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=54.72540000000001) [automatically populate the command that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=56.673400000000015) [you need to connect to this particular](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=58.55333333333333) [instance, the gcloud sql connect command](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=61.161416666666646) [followed by your instance name, and by](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=63.92950000000001) [default, we use the root user. When you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=67.07983333333333) [hit Enter, the first message that you'll](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=70.09916666666662) [see is that your IP for this Cloud Shell](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=72.49792857142857) [instance is being whitelisted by Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=75.457) [SQL. Now when you use the Cloud Shell, the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=78.34642857142856) [VM that has been set up is an ephemeral](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=80.86249999999998) [VM, so it doesn't have a static IP](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=83.2329) [address. But in order for this VM to be](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=85.92009999999996) [able to connect to your Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=88.46399999999997) [instance, the GCP will automatically](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=90.39599999999994) [whitelist your Cloud Shell IP for a short](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=92.35299999999998) [period of time. The fact that your Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=95.715) [Shell IP address has been whitelisted is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=97.66392307692306) [available in your AUTHORIZATION tab. So if](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=99.94314285714287) [you click on the AUTHORIZATION tab in your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=103.17066666666668) [web console, under the Authorized networks](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=105.46933333333337) [section, you'll see an IP address, which](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=107.78839999999998) [has been automatically added. This is the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=110.8032) [GCP's doing. You haven't explicitly](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=113.59060000000002) [whitelisted any address yet. If you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=115.88571428571429) [remember, the default security provided by](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=118.52566666666667) [the GCP does not allow you to connect to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=120.45066666666662) [your Cloud SQL instance unless you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=123.2123333333333) [whitelist your ID, use an SSL certificate,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=124.98633333333328)[or use the Cloud Proxy. Here our Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=127.82381818181817) [Shell IP has been automatically](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=130.99227272727273) [whitelisted to enable you to connect. In](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=132.74272727272728) [the Cloud Shell terminal window, we've](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=135.1058888888889) [connected as the root user. Go ahead and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=137.07578571428573) [enter your root user password, and then](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=139.70607142857145) [you'll be allowed to connect. You've](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=142.2146) [successfully connected at this point in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=144.80839999999998) [time, and you are at the MySQL prompt. You](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=146.98299999999995) [can now see all the databases that are](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=149.87781818181818) [present here. Show databases should show](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=152.0763636363636) [you all the databases that you see in the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=153.81769230769228) [DATABASES tab on the web console. I want](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=156.499) [to use the spikey\_db database, and you can](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=160.29776923076926) [see that the MySQL prompt changes to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=163.46653846153845) [indicate that I'm working in the spikey\_db](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=165.3204615384615) [database. If I run the show tables command](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=167.82866666666666) [within this database, that'll show me that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=171.256) [there are no tables yet because I haven't](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=173.797) [created any. Now my reviews and ratings](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=176.76725000000002) [team needs a table in order to populate](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=179.4628333333334)[information about reviews and ratings that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=182.34390909090905) [are available on the SpikySales site. Here](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=184.48000000000002) [is a simple CREATE TABLE command to create](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=187.15333333333334) [the reviews table. This Cloud SQL instance](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=190.4440000000001) [that I have running is simply a MySQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=193.0152307692308) [database running on the cloud, so all of](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=195.68969230769244) [the commands that I use within MySQL will](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=198.04749999999993) [work here as well. Once I've created this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=200.40992307692306) [table, I'm going to run the show tables](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=203.1213076923076) [command once again, and this will show me](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=205.727) [that my reviews table has been](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=208.227) [successfully created. I'll run the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=211.06466666666668) [describe reviews command to ensure that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=213.1835) [the column names within my MySQL table has](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=215.20850000000004)[been set up correctly. This table is now](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=218.19988888888884) [ready for my developers to use. You can](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=221.55500000000004) [run some more test SQL statements, such as](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=224.87053846153847) [select \* from reviews in order to test](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=227.5006923076924) [this prompt out. And if you type in exit,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=229.99914285714289) [you'll exit from this MySQL client shell.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=232.721) [We had connected earlier as the root user.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=236.02849999999998) [If you want to connect as the developer](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=239.28574999999998) [user, this is the user that you had set up](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=241.67174999999995) [using the web console, you simply change](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=243.9714615384615) [the --user flag to developer. Each time](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=246.540625) [you run the gcloud sql connect command on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=249.99676923076922) [your Cloud Shell, your Cloud Shell IP will](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=252.62384615384607) [be whitelisted. Because its IP is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=255.22316666666669) [ephemeral, it needs to be whitelisted each](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=257.16016666666667) [time. So go ahead and type in the password](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=259.3918571428571) [for your developer account, and you'll](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=262.1929090909091) [find that you'll be able to successfully](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=263.7283636363636) [connect. Everything else from here on in remains the same.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=4&mode=live&start=267.752)

[Connecting Using a MySQL Client](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live)

[Using the Cloud Shell to connect to our](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=2.296) [SQL instance is a quick and dirty way to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=4.372) [get up and running, but what your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=6.754000000000001) [developers and administrators really want](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=8.679000000000004) [is a permanent way to connect, which you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=10.29833333333333) [can do using the IP address and the MySQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=13.091166666666664) [client. This is something that they are](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=16.034916666666657) [probably familiar with already. When you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=18.667799999999996) [use IP addresses along with the MySQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=20.80930769230769) [client, you can connect to your Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=22.924384615384614) [instance from any machine whether it's a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=25.509000000000004) [desktop, your laptop, or any VM on any](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=27.917000000000012) [cloud platform somewhere. For this demo,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=31.32980000000001) [I'm going to create a new VM in the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=33.750499999999995) [spikey-developers project. This is the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=37.06699999999997) [project that I'd set up earlier. Confirm](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=38.67300000000001) [that you're indeed in the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=40.783500000000004) [spikey-developers project, as you can see](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=42.646000000000015) [from the blue bar at the very top. Click](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=44.53600000000001) [on the hamburger icon on the top left.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=47.090444444444444) [That is your navigation menu. Go to the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=49.206) [Compute Engine option on this navigation](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=52.01215384615385) [menu where we'll create a new VM instance.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=54.26733333333333) [Click on the VM instances option on this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=58.278) [menu. This will take you to a page where](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=61.177555555555536) [you can create a virtual machine in your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=63.58266666666666) [spikey-developers project. The idea of](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=65.74866666666667) [setting up a VM in a completely different](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=67.64199999999997) [project is that it mimics a completely](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=70.7209090909091) [different machine which has no links or](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=73.54509090909096) [connection with the Cloud SQL instance](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=75.81469230769228) [that we had set up earlier. Go ahead and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=77.56992307692302) [click on the Create button here, and this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=80.15538461538463) [will take you to the VM instance creation](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=82.52545454545455) [page. I'm going to call this VM the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=85.14727272727274) [mysql-client-vm. Because all I really need](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=88.84899999999999)[here is a simple virtual machine, I'm](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=90.89645454545452) [going to accept all of the defaults that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=93.12727272727274) [GCP proposes. Notice that this is a Debian](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=95.94545454545461) [Linux machine. If you're working with a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=99.17300000000003) [MySQL client on a Windows machine, I](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=101.73172727272724) [assume you know how to connect to a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=104.04983333333334) [particular SQL instance. You have to do](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=106.1045) [the exact same thing here when you connect](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=107.98273333333333) [to Cloud SQL. Go ahead and click on the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=110.19819999999999) [Create button here, and wait for your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=112.72238461538458) [virtual machine to be created. This might](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=114.698) [take a couple of minutes, so you need to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=116.33250000000004) [be a little patient. The next step is for](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=118.70049999999998) [me to SSH into this particular virtual](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=121.40162499999992) [machine so that I can set up the MySQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=123.73342857142858) [client. Click on the SSH drop-down, and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=126.95414285714286) [open up an SSH terminal window on a new](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=129.51324999999997) [browser. If you have pop-ups blocked like](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=132.8151249999999) [I do, you need to enable pop-ups from](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=135.1864285714286) [console. cloud. google. com. Once you've](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=137.859) [enabled pop-ups, you can click on the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=140.7613636363636) [button to SSH into your virtual machine](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=143.8427272727273) [once again. And once I've logged into my](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=146.16227272727284) [Linux terminal, I'm going to run sudo](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=148.76115384615383) [apt-get update in order to get the latest](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=151.02)[version of the MySQL client package. Once](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=155.11257142857133) [this update command has run through, I'm](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=158.52861538461536) [now ready to install the MySQL client on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=160.954923076923) [this virtual machine, which I can do using](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=163.77875) [sudo apt-get install mysql-client. If](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=166.6874166666667) [you're working on your personal laptop,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=169.54699999999997) [you might already have the MySQL client](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=173.291) [installed. You can go ahead and use that.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=175.50562499999995) [Make sure that the versions match the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=177.7789999999999) [version of your MySQL database on the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=179.736) [Cloud SQL instance. The rest of the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=182.54860000000005) [install should flow through as expected. I](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=185.0252) [now have MySQL client on my virtual](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=187.40361538461536) [machine in the spikey-developers project.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=190.704923076923) [I'll now open up a terminal window and go](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=193.063) [to console. cloud. google. com. This will](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=196.78449999999998) [bring up my Google Cloud Platform](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=199.48683333333335) [dashboard, and I'm going to switch over to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=201.3913333333334) [the spikey-reviews project. The](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=204.40385714285713) [spikey-reviews project is used by my](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=206.0499090909091) [reviews and ratings team, and that is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=208.0833636363636) [where I have my Cloud SQL instance. In](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=210.65039999999996) [order to be able to connect to my](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=213.8276153846154) [reviews-prod Cloud SQL instance in the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=216.63253846153856) [spikey-reviews project from the virtual](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=218.6701666666667) [machine that I have set up in my](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=220.25808333333342) [spikey-developers project, I need the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=223.23499999999999) [static external IP address of my virtual](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=225.54999999999995) [machine in order to whitelist it on my](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=228.47686666666667) [Cloud SQL instance. I'm going to switch](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=231.5526) [back to the browser tab on my](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=234.24353846153846) [spikey-developers project, notice the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=236.9342307692308) [project name on top here, and copy over](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=238.39576923076922) [the external IP address of my](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=241.16684615384608) [mysql-client-vm. You can see the external](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=243.51809090909092) [IP address highlighted here on screen.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=246.14227272727277) [Switch back to the reviews-prod instance](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=248.637) [in the spikey-reviews project and go to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=251.067) [the AUTHORIZATION tab. This AUTHORIZATION](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=254.70839999999993) [tab is where you can explicitly add the IP](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=257.07972727272727)[addresses that you want to whitelist.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=260.728) [Click on the Add network button that you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=262.57249999999993) [can see here. This will pop up a form that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=264.95487499999996) [you can fill in. You can specify a name](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=267.6442499999999) [for your connection. This is optional, but](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=270.2312500000001) [it's recommended because it's easy to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=272.4976666666667) [identify a particular ID using this name.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=274.5371666666668) [Specify the IP address that you want to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=276.9174166666666) [whitelist, and click on Done. Once you go](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=279.6567142857143) [ahead and hit Save on this screen, you've](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=282.5264285714288) [effectively whitelisted the IP address of](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=285.54400000000004) [the VM that you set up in the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=287.99200000000013) [spikey-developers project. Once your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=291.22375) [reviews-prod Cloud SQL instance has been](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=292.75863636363636) [updated with this new whitelisted IP](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=294.94754545454543) [address, you copy over the public IP](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=297.38725) [address of this Cloud SQL instance. This](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=300.5261666666667) [is the IP address that we'll use to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=303.0322307692307) [connect using our MySQL client. If you're](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=305.607) [connecting from a MySQL client that you've](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=308.56672727272723) [installed on your laptop at home, you can](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=311.05669230769234) [get your public IP address by going to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=313.18653846153865) [this website, whatsmyip. com. Switch over](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=317.73539999999997) [to the terminal window connected to our](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=321.029) [virtual machine in the spikey-developers](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=323.18499999999995) [project, and here we'll run the mysql](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=325.04318181818184) [command in order to connect to our Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=328.31281818181833) [SQL instance. The host parameter is where](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=331.8187500000001) [we specify the IP address, the public IP](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=334.16176923076915)[address of our Cloud SQL instance, and we](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=336.539) [want to connect as the root user. And](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=339.0669999999998) [that's it. Once you enter the root user's](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=341.6633) [password, you'll find that you've been](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=344.73769999999996) [connected. Using the MySQL client with a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=347.2428333333334) [whitelisted IP address of your virtual](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=350.212) [machine is a simpler and more permanent way to connect to your Cloud SQL instance.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=5&mode=live&start=352.5005)

[Connecting Using SSL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live)

[What we've viewed so far are insecure](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=2.316) [connections, but the best practice,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=4.917666666666667) [especially with production instances, is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=6.776) [for you to use a secure connection with](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=8.334181818181818) [SSL, and that's what we'll see how to do](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=10.939846153846155) [right now. We'll start off in the OVERVIEW](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=14.251153846153848) [page of our reviews-prod instance within](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=16.855727272727272) [our spikey-reviews project. We'll also be](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=18.871454545454547) [using the spikey-developers project. At](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=21.62218181818183) [any point in time, I'll talk about which](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=23.740785714285714) [project we are working in, so pay close](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=26.01907142857143) [attention to that. Now within here, notice](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=28.72538461538462) [the SSL tab. This is what will allow you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=31.717615384615396) [to set up the SSL certificates that you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=34.25699999999999) [need to connect securely to your Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=35.933) [instance. You can see here on this page](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=39.040555555555564) [that you have an option to allow only SSL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=41.52035294117649) [connections. You can click on this button,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=44.20923529411769) [or you can set this configuration using](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=46.410000000000004) [the Cloud Shell, and that's what we'll do](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=48.629) [here. The gcloud command-line utility](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=51.48855555555557) [allows us to patch our reviews-prod](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=53.79160000000001) [instance so that it requires SSL, which](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=56.71) [means non-encrypted connections will not](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=60.585666666666654) [be allowed to connect to our Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=62.85025)[instance. Once your Cloud SQL instance has](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=65.93625000000002) [been patched with the require-ssl property](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=68.55072727272724) [set to true, you can refresh your web](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=70.74076923076923) [console, and you'll see a message](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=73.40292307692307) [indicating that your instance requires all](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=75.74377777777777) [incoming connections to be encrypted to be](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=78.77311111111108) [secure. However, in order to allow SSL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=81.63450000000003)[connections, you need to configure client](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=84.44075) [certificates, and we haven't set up any](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=87.13924999999996) [yet. That's what we'll do right now. But](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=89.92623076923078) [let's first confirm that non-encrypted](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=93.06644444444444) [connections are indeed prevented or](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=95.13366666666663) [prohibited by our Cloud SQL instance.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=97.18625) [Switch over to the mysql-client-vm in the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=99.623) [spikey-developers project, and connect as](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=102.95811111111108) [we did before. You'll see that we have](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=104.96292857142858) [Access denied here. Only secure](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=107.76807142857145) [connections are allowed. Switch back to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=109.60622222222221) [our reviews-production instance in our](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=111.96488888888888) [spikey-reviews project, and let's set up a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=114.702) [client certificate which will allow us to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=117.35361538461537) [connect securely to this Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=119.42507692307689) [instance. Click on the Create a client](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=121.5476666666667) [certificate button that you see in the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=124.105) [middle of the screen here. This will throw](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=126.0305833333333) [up a dialog prompt asking you to create](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=128.3376153846154) [your client certificate and give it a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=130.82192307692316) [name. Go ahead and click on CREATE, and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=133.0684166666667) [this will pop up another dialog with three](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=135.77276923076923)[important pieces of information. The first](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=139.2029230769231) [of these is the client-key. pem, which is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=141.6186153846154) [the file which contains the private key](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=144.42107692307695) [that you'll use to authenticate your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=146.73272727272732) [virtual machine to the Cloud SQL instance](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=148.62381818181828) [that is the server. The client-key will](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=151.44939999999994) [only be available in this dialog here.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=154.0275) [Once this dialog is closed, you'll no](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=156.138) [longer have access to your client-key, so](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=158.38769230769222) [make sure you download it and store it](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=160.7466) [safely. Once you download it, then you'll](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=164.1914)[be allowed to close this dialog. So I'm](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=166.31999999999994) [going to download this client-key onto my](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=168.85150000000002) [local machine here, and I'm going to save](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=171.76875000000007) [it to a folder somewhere. Go ahead and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=174.62650000000008) [download the client certificate, as well](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=177.45638461538465) [as the server certificate. Once these](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=179.90115384615393) [three files are saved to your local](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=182.05653846153848) [machine, you can click on CLOSE and close](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=183.89592307692314) [this dialog. At this point, you have your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=186.53007692307688) [private key, the client certificate, and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=189.69623076923062) [the server certificate, everything that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=192.16262500000005) [you need to enable you to log in using](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=194.2295) [SSL. These are the three files that you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=197.93975) [need to enable your SSH handshake. Your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=200.4649230769231) [MySQL client virtual machine, which is in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=202.73954545454546) [the spikey-developers project, needs](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=205.98436363636364) [access to these client certificates in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=207.674) [order to be able to connect securely to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=209.46800000000005) [your Cloud SQL instance. Now we'll give it](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=212.2825714285714) [access using Cloud Storage buckets. Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=216.14600000000004) [Storage buckets, if you haven't used them](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=219.0898888888889) [before, are GCP's equivalent of Amazon's](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=221.2871111111112) [Simple Storage Service, and this is a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=223.73391666666663) [general purpose Blobstore where you can](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=226.72) [upload any kind of files. I'm going to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=228.9149090909091) [create a new bucket here. I'll make it a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=231.55057142857143) [regional bucket, meaning it'll only be](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=233.97028571428572) [located within a single region. This](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=235.92577777777782) [bucket is called spikey-dev, and it's](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=238.25570000000002) [located in us-west2. Go ahead and click on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=241.6019000000001) [the Create button. A new bucket will be](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=244.57321428571433) [created, and you can upload the three](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=246.65035714285725) [certificate files that you have on your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=248.6066153846153)[local machine to this Cloud Storage](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=250.586) [bucket. Uploading to this Cloud Storage](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=253.6588571428572) [bucket will allow us to transfer them to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=255.99808333333337) [the virtual machine which contains our](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=259.0558888888889) [MySQL client. There are several ways to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=262.0552222222223) [get files onto your virtual machine in any](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=264.56142857142856) [project. This is the simplest possible](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=266.97171428571426) [way. I have uploaded the certificate files](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=268.8948181818181) [to a bucket in the spikey-developers](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=271.20775000000003) [project, and I have made the links of each](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=273.4082500000002) [of these files public temporarily. For](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=277.4246666666666)[every. pem file, I'm going to copy the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=280.535) [link address and use wget on my Linux](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=283.59100000000007) [virtual machine, that is which has MySQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=286.7307272727272) [client, in order to download the contents](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=289.6000909090908) [of this file onto this VM. Switch over to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=292.40600000000006) [the mysql-client virtual machine in the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=295.86672727272725) [spikey-developers project. I've already](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=297.9961818181817) [SSHed into this terminal. I'm going to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=299.3849090909091) [create a directory called SSL and cd into](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=301.7610909090909) [that directory. This is the directory](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=305.03725000000014) [where I'm going to store my client](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=307.24633333333327) [certificates in order to connect via SSL,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=309.59716666666645) [and I get the client certificates using](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=311.91207692307705) [the wget command as you see on screen.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=314.221) [Wget can be used with any public URL, and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=316.9518571428571) [this gave me an easy way to circumvent any](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=320.3917857142858) [permission-related issues. The ls command](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=324.56714285714315) [shows me that my client certificate has](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=326.4672499999999) [been downloaded to this machine](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=328.73583333333306) [successfully. I'll do the same thing for](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=330.6908000000001) [all of the other certificates. I'll copy](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=333.74000000000024) [the link address and run wget on this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=336.7025) [public URL. Do this for all three](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=339.8404999999999) [certificates. Once you've completed](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=343.0494999999999) [executing all three wget commands for the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=344.98909999999984) [three client certificates, the client-key,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=348.2606666666666) [the client-cert, and the serve-ca. pem,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=350.59275) [confirm that it's present on your local](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=353.409) [machine. You're now ready to connect](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=355.44337499999983) [securely to your Cloud SQL instance. Run](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=358.479909090909) [this command within the SSL directory](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=362.176) [where your client certificates are](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=364.58200000000005) [located. Specify the server-ca, the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=366.96588888888886) [client-cert. pem, and the client-key. pem](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=369.91811111111093) [to your MySQL command. Enter your root](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=373.0349999999999) [password, and you're connected. Once](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=376.6904285714285) [you're connected using SSL, your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=379.376) [connection is secure and cannot be](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=381.34099999999984) [sniffed. The remaining operations within](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=383.69899999999967) [your MySQL prompt remain exactly the same](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=385.7980000000001) [as before. Just a reminder here for you to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=388.72240000000005) [clean up those client certificates which](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=392.01100000000025) [are available in the spikey-dev bucket](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=394.24725) [which are now publicly accessible. Make](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=396.7027499999999) [sure you unshare them publicly, or you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=399.14727272727276) [simply delete them. For the remaining](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=401.93518181818195) [demos in this course, I want to be able to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=403.8624285714285) [connect insecurely without using the SSL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=406.3038571428568)[certificates, so I'm going to switch back](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=408.4016363636363) [to the reviews-prod page, this is in the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=411.05899999999997) [spikey-reviews project, and allow](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=414.5229999999999) [unsecured connections under my SSL tab.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=416.41875000000005) [I'm going to make this change so that it's](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=419.508) [easier for me in the demos that follow. So](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=421.38211764705864) [I have reset my Cloud SQL instance to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=423.4655) [allow unencrypted connections. If you want](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=426.80550000000017) [to confirm that you can indeed connect](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=429.03925000000004) [without SSL, you can switch to your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=431.3288333333335) [mysql-client-vm, run a simple MySQL connect command, and see that it works.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=6&mode=live&start=434.14981818181826)

[Configuring Database Flags](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live)

[You can configure the database flags on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=1.856) [your MySQL instance running on Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=4.318833333333334) [to adjust MySQL parameters and options and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=6.981599999999999) [to configure and tune our instance. Let's](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=9.956599999999998) [start with the reviews-prod instance that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=12.693083333333332) [we had set up earlier, and you can edit](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=14.53558333333333) [the database flags that apply to your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=17.371)[instance by going to the edit](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=19.645999999999994) [configuration page. This is the same page](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=21.452999999999996) [that you'd access if you click on the EDIT](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=23.47774999999999) [link at the very top. Scroll down on the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=26.329461538461548) [configuration settings page, and there is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=29.033666666666665) [a section for Add database flags. This is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=30.68766666666666) [a section you can use to access the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=33.55671428571428) [key-value pairs to configure your database](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=36.647) [flags. You can also configure your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=40.04471428571427) [database flags using your terminal window](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=42.36327272727273) [using the gcloud utility, and that's what](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=44.466)[we'll do here. Let's connect to our](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=47.023099999999985) [reviews-prod instance using Cloud Shell as](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=49.40518181818183) [the root user first. In this demo, we are](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=51.33445454545458) [going to set up a database flag that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=53.99466666666665) [allows us to configure our table names](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=56.434090909090905) [only in lowercase. Before that, let's](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=59.18572727272726) [confirm that we can indeed create a table](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=61.23753846153846) [name in the uppercase before that flag has](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=63.56430769230769) [been set. So within the spikey\_db, when we](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=66.84225000000002) [run the show tables command here, you can](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=69.98100000000001) [only see the reviews table. Let's use the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=72.88566666666668) [create table command in order to create a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=75.54433333333338) [table called TEST\_CAPS. Notice that the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=78.65766666666667) [name of the table is in all capital](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=80.89025000000001) [letters. Now if you see the tables, you'll](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=83.57891666666669) [see that the TEST\_CAPS table has been](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=85.82276923076923) [successfully created. Let's exit from this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=87.9448) [MySQL connection and switch over to the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=90.86560000000001) [configuration details page of our](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=94.27909090909091) [reviews-prod instance. In this page, we](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=96.72045454545456) [are going to add a database flag that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=98.9147142857143) [ensures that all tables that we create](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=101.35014285714288) [from here on in have lowercase table](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=104.03784615384615) [names. All the database flags that can be](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=106.94823076923075) [configured in our MySQL instance is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=109.737) [available here in this drop-down, and you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=111.771) [can explore and use the configuration](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=114.0325833333333) [parameter that you're interested in. Set](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=116.05783333333333) [lower\_case\_table\_names to 1, and then hit](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=118.49425)[Close, and then go ahead and save these](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=120.81774999999996) [new settings. Wait for your instance to be](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=123.78550000000001) [updated. This requires a restart, and it](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=126.5361666666667) [might take a while. Once the new database](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=129.0322) [flag has been applied to your Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=131.9303846153846) [instance, let's connect using the Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=134.8571538461538) [Shell. Connect us to root user, and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=136.8552727272727) [specify the password. Switch over to the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=139.303) [spikey\_db database by calling the use](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=142.72600000000003) [command as you see on screen. The show](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=145.13) [tables command will show you that the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=147.6428333333333) [TEST\_CAPS table that you created earlier](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=149.87874999999988) [where the table name is all in capital](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=152.0303571428571) [letters still exists. That has not been](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=155.21264285714273) [affected. However, if you try to create a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=157.72371428571427) [new table now called TEST\_LOWER, notice](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=160.35914285714279) [that the table name we have still](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=162.4849090909091) [specified using capital letters. If you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=165.052) [run the show tables command after creating](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=167.4558181818181) [this table, you will see that the table](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=170.1060769230769) [name has been converted to lowercase. The](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=172.69438461538448) [database flag that you applied to this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=175.15954545454545) [Cloud SQL instance has forced your table](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=177.775) [names to be represented in the lowercase.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=180.8340000000001) [This is how you can use the web console to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=183.893) [configure the database flags that apply to your MySQL or PostgreSQL instance.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=7&mode=live&start=186.74530769230765)

[Labeling Cloud SQL Instances](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live)

[Labels on the GCP are key-value pairs that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=1.995) [help you organize your Cloud Platform](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=5.016333333333334) [resources. This can be for billing](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=7.2825999999999995) [purposes to identify which are production](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=9.549400000000002) [instances, which are developer instances,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=11.996499999999997) [to identify the team to which a particular](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=14.02725) [resource belongs to, and so on. This demo,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=16.74125) [we are working in the spikey-reviews](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=19.912444444444446) [project. We start off in the OVERVIEW page](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=21.98977777777779) [of our reviews-prod Cloud SQL instance,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=24.76553846153846) [and we are going to configure labels on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=26.848) [this instance. These labels will have some](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=29.7256) [meaning in order to indicate what exactly](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=32.008750000000006) [we are going to use this instance for.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=34.198) [Click on the EDIT button on the top in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=36.37800000000001) [order to go to your configuration settings](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=39.01063636363636) [page. You can add labels to this instance](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=41.33845454545453) [using the web console by going to the Add](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=43.9305) [labels section at the bottom and clicking](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=46.82428571428571) [on the Add label button. Labels are](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=49.04428571428569) [key-value pairs that you can use to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=51.42033333333334) [identify your resource in some ways. You](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=54.18650000000002) [can have labels for team or call centers.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=56.766000000000005) [Labels can be used to determine the state](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=59.554) [of a resource, whether the resource is in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=61.99181818181816) [an active state, a ready-to-delete state,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=64.69963636363637) [archival state, and so on. Using the web](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=66.852) [console to add labels is very](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=69.58061538461541) [straightforward, as you can see. In order](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=71.58866666666667)[to get some more practice using the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=73.70733333333334) [command line, we'll switch over to our](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=75.95749999999998) [Cloud Shell and use the gcloud utility in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=78.38299999999992) [order to add labels to our instances. You](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=81.48615384615388) [can associate labels with instances at the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=84.72333333333333) [time of instance creation. Here I'm using](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=87.70066666666662) [the gcloud beta sql instances create](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=90.5315) [command in order to create a new instance](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=92.79049999999995) [called reviews-stage. At the time this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=96.88642857142857) [course was recorded, associating labels](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=99.5306) [during instance creation requires the beta](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=101.35260000000002) [sql instances create command. You can see](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=104.47644444444441) [from the labels that this is a staging](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=107.52335714285712) [instance for our spikey-reviews team, and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=109.76164285714279) [the billing team associated with this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=111.89666666666668) [instance is spikey\_reviews. This command](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=114.488) [will spin up a new Cloud SQL instance](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=116.93549999999996) [using the MySQL database. This is the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=120.8476)[reviews-stage instance, and you might have](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=124.24680000000004) [to be a little patient, wait for a couple](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=125.92999999999999) [of minutes before this instance is fully](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=127.53199999999997) [created. On the SQL Instances page where](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=130.074) [all of our Cloud SQL instances are listed,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=132.37342857142855) [you can see at the very right column we](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=134.914) [have the Labels column, and you can see](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=137.54823076923074)[the billing-team and environment labels](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=140.25899999999996) [associated with our reviews-stage](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=142.1839999999999) [instance. You can also associate labels](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=143.9154) [with instances that have already been](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=146.60820000000004) [created. For example, our reviews-prod](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=149.3411666666667) [instance can have labels associated with](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=151.41280000000006) [it using the gcloud beta sql instances](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=153.835) [patch command. Here we are going to update](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=157.8553333333333) [labels. We want the environment for this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=160.7218461538462) [instance to be production, env=prod, and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=162.726) [billing-team is spikey\_reviews. Wait for a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=166.79199999999992) [couple of minutes. This will cause our](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=169.60663636363634) [existing reviews-prod instance to be](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=171.4304545454545) [updated, and the labels will now be](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=173.37609090909095) [associated with this instance as you can](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=176.325) [see at the top-right column, the Labels](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=178.81991666666661) [column, on this Cloud SQL Instances page.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=181.40400000000002) [Go to the OVERVIEW page of your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=184.211) [reviews-prod instance, and click on the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=186.67849999999996) [EDIT configuration. And if you scroll down](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=188.7785) [and see the labels that are associated](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=191.14100000000005) [with this instance, you can see the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=193.25900000000001)[billing-team is equal to spikey\_reviews,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=195.05100000000002) [and the environment is prod. Your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=197.10611111111106) [spikey-reviews team might want to have the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=199.73645454545454) [same labels associated with all of the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=202.40663636363635) [resources they use on the Google Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=204.79133333333328) [Platform. This will allow them to quickly](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=206.96191666666655) [look up what their billing is for every](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=209.46359999999993) [month. This will allow them to allocate](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=212.38573333333318) [costs for each of their resources. If you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=214.68500000000006) [label your Cloud SQL instances correctly,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=217.21666666666667) [you can use the gcloud command-line](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=219.00966666666667)[utility to quickly filter all of the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=220.9412) [resources with a particular label. Gcloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=223.5179) [sql instances list labels. env=prod will](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=226.98799999999994) [show you all your production instances. We](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=230.54157142857144) [have just one production instance here,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=233.55025) [but you can imagine that your reviews team](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=235.34575) [might have multiple instances running on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=237.93590909090906) [the cloud. Let's filter on a different](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=240.12372727272717) [label here. Let's filter on the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=242.63761538461534) [billing-team label. We want to see all of](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=244.77915384615375) [the resources that the spikey-reviews team](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=247.55976923076918)[uses, and you can see that there are two Cloud SQL instances with this label.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=8&mode=live&start=249.62653846153836)

[Introducing the Cloud SQL Proxy](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live)

[A common use case for the SpikySales](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=1.92) [company that uses the Google Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=4.143666666666667) [Platform is for external applications to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=6.198727272727273) [connect to our MySQL database running on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=8.999090909090908) [our Cloud SQL instance. An external](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=12.271285714285714) [application could be an app running on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=14.918) [GCP's App Engine, running on a Kubernetes](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=17.623500000000007)[cluster, or on your on-premise data](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=20.510636363636365) [center. One easy way for all your external](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=23.10209090909091) [applications to connect without having to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=25.839545454545465) [explicitly whitelist their IP address is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=28.12242857142857) [to use the Cloud SQL Proxy. We studied](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=31.018714285714296) [earlier that a zone on the Google Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=34.535769230769226) [Platform is similar to a data center, that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=37.018846153846134) [is the availability zone for your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=39.572916666666686) [resources; zones are grouped together into](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=41.520416666666705) [regions, regions are a set of zones with](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=43.55333333333334) [high-speed network links between them; and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=46.28409090909091) [a network is the user-controlled IP](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=48.318636363636344) [addresses that belong to the same VPC, or](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=50.66833333333334) [the virtual private cloud. An example of a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=54.472928571428575) [zone present in the US on the GCP is the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=57.09635714285715) [us-central1-a. It belongs to the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=61.19516666666666) [us-central1 region. And whenever you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=63.65433333333332) [create a resource on the GCP, such as a VM](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=65.47607142857142) [instance or a Cloud SQL instance, it](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=68.26964285714278) [belongs to the default network. As is the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=71.36190909090908) [case for any virtual machine running on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=74.56861538461538) [your on-premise data center or on the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=76.58138461538461)[cloud, Cloud SQL instances are vulnerable](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=79.15599999999999) [to security threats, and it is the GCP](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=81.72399999999998) [firewall that restricts access to your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=84.46100000000003) [Cloud SQL instances. We know that we can't](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=86.342) [explicitly access any Cloud SQL instance](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=89.8270909090909) [without either whitelisting the IP of the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=92.3320909090909) [client that is about to connect or getting](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=95.12763636363631) [the client and the server to trust one](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=97.39899999999997) [another by configuring SSL. There is a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=99.67990909090909) [third option here. We can use the Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=102.54227272727273) [SQL Proxy. We've already seen how to do](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=105.40743749999999) [the first two. Let's now look at the Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=108.02893749999996) [SQL Proxy and how it works. The way the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=111.11199999999997) [Google Cloud Platform enforces security is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=114.25125000000001) [by having all resources belong to some](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=116.32975000000003) [network. If you don't explicitly configure](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=118.82820000000001) [the network, it belongs to the default](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=121.017) [network that is set up by default. Each](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=123.52300000000002)[network enforces firewall rules, and by](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=126.51625) [default, only those resources whose IP](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=129.43974999999998) [address has been explicitly whitelisted on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=132.56649999999993) [your Cloud SQL instance can access that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=135.6190909090909) [Cloud SQL instance. You can't have any](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=138.51072727272717) [arbitrary VM instance A access your Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=141.57714285714292) [SQL instance X. Which basically means that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=144.77464285714302) [if you have multiple developers working on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=147.30027272727276) [your spikey-reviews project, each of their](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=149.322) [machines need to be explicitly whitelisted](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=151.50359999999995) [on your Cloud SQL instance X. Now you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=154.34675000000001) [might have multiple applications running](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=159.17427272727272) [not just in the spikey-reviews project,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=160.82745454545451) [but on other projects as well. Maybe the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=162.96599999999998)[search team, maybe the recommendations](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=165.98519999999996) [team of your e-commerce platform needs to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=167.4131999999999) [access review data. All of those IPs will](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=170.35514285714285) [need to be explicitly whitelisted. This is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=174.06699999999998) [not just a configuration and management](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=176.9127777777778) [problem. The IP address of all of the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=179.00611111111115) [machines you want to be able to access](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=181.2463999999999)[your Cloud SQL instance must be static.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=183.408) [All of your machines must have static IP](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=186.11641666666674) [addresses for them to be explicitly](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=189.12949999999998) [whitelisted, and on the cloud, this is a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=191.28649999999996) [problem. If you have applications running](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=193.85853846153853) [on the cloud, they might have ephemeral](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=195.755) [IPs. Now another option for you to have](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=198.88749999999993) [your VM talk to your Cloud SQL instance is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=201.29949999999997) [by using SSL. SSL allows the client and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=204.0303076923077) [the server to trust each other. We've](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=207.09553846153847) [already seen how we can set up client](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=209.40466666666669)[certificates and then use the MySQL client](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=211.724) [on a trusted client to connect to your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=214.3600833333334) [Cloud SQL Server. This solution enables](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=217.6009090909091) [your traffic to be encrypted and enables](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=220.31672727272735) [trust between the client and the server.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=222.78950000000003) [We still need static IP addresses though.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=224.984) [In order to overcome the static IP address](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=227.41183333333336)[problem, you use the Cloud SQL Proxy. When](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=230.159) [you use the Cloud SQL Proxy that GCP](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=233.23407692307694) [provides, the proxy handles authentication](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=236.5160909090909) [with Cloud SQL, it removes the need for](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=238.78290909090907) [static IP addresses, and there is no](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=241.44883333333334) [requirement to whitelist the IPs](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=243.277) [explicitly either. There is no need to use](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=245.80985714285708) [SSL as well. The proxy automatically](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=248.84776923076916) [encrypts traffic to and from the database.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=250.8725384615383) [The Cloud SQL Proxy works by having a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=253.57815384615387) [local client called the proxy client which](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=256.72584615384613) [runs in the local environment, and the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=259.419769230769) [application communicates with the proxy](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=262.05199999999996) [with the standard database protocol used](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=263.8219999999999) [by your database. A secure TCP tunnel is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=266.19925000000006) [set up between your proxy client on your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=269.7065833333335) [local environment and the proxy server](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=272.4532499999999) [that's running on the Cloud SQL instance.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=274.575625) [Once you have your Cloud SQL Proxy up and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=277.891) [running, all of your external applications](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=280.2316923076921) [can simply connect to this proxy and not directly to your Cloud SQL instance.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=9&mode=live&start=282.0528)

[Using the Cloud SQL Proxy](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live)

[In this demo, we'll see how we can](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=1.844) [configure and use the Cloud SQL Proxy to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=4.013142857142856) [manage external connections to our Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=6.5824) [SQL instance. We'll be working across two](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=9.409599999999998) [projects, the spikey-reviews project,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=12.438111111111109) [which contains our Cloud SQL instance, and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=14.107) [the spikey-developers project, which](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=16.694899999999997)[contains our mysql-client-vm. We'll first](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=18.31911111111111) [go to the spikey-reviews project and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=20.894666666666662) [enable the Cloud SQL API. This will allow](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=23.976000000000003) [the Cloud SQL Proxy to connect to our](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=27.57485714285714) [Cloud SQL instance. In order to administer](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=30.345142857142847) [it, this we'll do in the spikey-reviews](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=32.83733333333333) [project. Within the spikey-reviews](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=35.38066666666664) [project, we'll then create a service](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=37.04719999999999) [account with Cloud SQL access. A service](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=39.65359999999997) [account on the GCP is a special Google](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=42.255384615384635) [account that can belong to an application](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=45.15441666666666)[or a virtual machine rather than to an end](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=47.74733333333331) [user. Your application uses the service](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=51.18441666666667) [account to call the Google API of a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=53.53091666666668) [particular service so that users are not](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=56.25212500000001) [directly involved. The Cloud SQL Proxy](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=58.582250000000016) [will use the service account to administer](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=60.57333333333333) [your Cloud SQL instance. This service](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=62.89266666666666) [account has to be created in your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=65.02358333333333) [spikey-reviews project, which is where](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=67.543) [your Cloud SQL instance lives. We'll](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=70.03450000000001) [download the JSON key for this service](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=72.92144444444445) [account. This JSON key is available from](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=75.6895555555556) [the spikey-reviews project, but will be](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=78.34499999999998) [used by the spikey-developers project,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=80.57375000000002) [which is where we have the VM that we'll](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=82.40500000000006) [connect using the Cloud Proxy to our Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=85.72714285714284) [SQL instance running in the spikey-reviews](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=88.69857142857137) [project. The Cloud SQL Proxy executable](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=91.82333333333335) [has to be downloaded to the VM instance](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=94.45553846153848) [that is running in our spikey-developers](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=97.786) [project. The spikey-developers project](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=100.93) [also needs access to the service account](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=102.7089) [JSON key which was generated in the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=105.637) [spikey-reviews project. It will then use](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=108.56922222222221) [this key in order to connect using the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=111.18326666666668) [Cloud SQL Proxy. We start this demo off in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=114.73580000000005) [the spikey-reviews project. We are in the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=118.454) [SQL Instances page. Use the Navigation](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=120.85157142857142) [menu to go to API & Services. This is a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=122.65842857142852)[dashboard where we'll enable the Google](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=126.57600000000002) [Cloud SQL API. Go to ENABLE APIS AND](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=129.289) [SERVICES, and search for Cloud SQL API.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=133.04953333333333) [This is the first box that you see on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=136.34) [screen. Go ahead and click on the Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=138.68450000000007) [SQL API, and click on the ENABLE button](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=141.2105) [that you see here on screen. Wait for a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=143.75514285714286) [couple of minutes for this API to be](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=146.26742857142858) [enabled. Once the API has been enabled,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=149.484) [it's time for step two. We now need to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=152.0599090909091) [create a service account with Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=155.3503333333333) [access. Our Cloud SQL instance is in the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=158.1176666666666) [spikey-reviews project. Our service](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=160.9696428571429) [account also has to be created here. Go to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=162.3545000000001) [Identity and Access Management &](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=165.56254545454547) [administration, and click on the Service](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=167.52390909090917) [accounts option from your Navigation menu.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=170.14874999999998) [This will take you to a page where you can](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=173.316)[click on CREATE SERVICE ACCOUNT. Go ahead](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=176.41466666666665) [and give the service account a name. I'm](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=178.59244444444442) [going to call it CloudSQLProxyConnection.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=181.35383333333334) [Give it a meaningful name so that you can](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=184.163) [identify the service account if you see](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=186.40399999999997) [it. Notice that the service account ID has](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=188.45471428571426) [been automatically generated. We need to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=191.2672857142856) [assign a project role to this service](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=193.2665714285714) [account so that we know what its](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=195.47057142857136) [privileges are. Go to select a role, click](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=197.94328571428574) [on Cloud SQL, and click on Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=201.1787142857144) [Client. You can see here that Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=204.1873571428572) [Client allows you connectivity access to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=207.0599285714287) [your Cloud SQL instance. The next step is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=209.70511111111108) [for us to download the JSON key associated](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=212.69074999999998) [with this service account. You can do this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=215.00424999999996) [using the same menu where we create the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=217.22033333333337) [service account. Click on Furnish a new](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=219.65800000000007) [private key, and the Key type is JSON. Go](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=222.3074615384616) [ahead. Clicking on the SAVE button here](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=225.82957142857143) [will open up a dialog on your local](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=227.93357142857144) [machine that will allow you to download](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=230.45283333333333) [the service account key in the JSON](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=232.9582499999999) [format. Click on Save. You now have the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=235.30960000000002) [key saved on your local machine. Now let's](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=237.86480000000003) [switch over to our VM instance running in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=241.45746153846156) [the spikey-developers project. This is the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=245.18730769230777) [VM instance where we'll run our Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=247.59699999999998) [Proxy. We first need to download the proxy](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=250.2929999999999) [client here. The cloud\_sql\_proxy is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=253.5699999999999) [available from dl. google. com. You can](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=256.02025000000003) [download it using the wget command that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=259.32071428571425)[you see here on screen. Make sure you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=261.4792142857141) [choose the Cloud SQL Proxy that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=264.07614285714294) [corresponds to your VM instance. Mine is a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=266.1864285714288) [Linux instance running on amd64. The ls -l](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=269.63137499999993) [command will show me that the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=273.54625000000004) [cloud\_sql\_proxy is now available on my](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=275.7547500000001) [machine, but it's not executable yet. I](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=277.89900000000006) [need to run the chmod command +x in order](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=280.43466666666666) [to make the cloud\_sql\_proxy executable.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=284.5356666666667) [List the contents of this directory again.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=286.814) [You can see that the cloud\_sql\_proxy is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=288.899) [specified in green, indicating that it's](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=291.35459999999995) [now executable. This VM running in the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=293.7744) [spikey-developers project needs access to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=296.965) [the service account JSON key that we](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=299.2874999999999) [downloaded to our local machine. The](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=302.1664615384616) [easiest way to give it access is to upload](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=303.8358461538463) [it to the bucket that we had created, the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=306.4313333333333) [spikey-dev bucket in the spikey-developers](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=309.3855714285714) [project. Upload the JSON key from your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=312.1134285714284) [local machine, and make the key link](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=315.3144285714287) [public. To make this JSON file publicly](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=318.4124285714289) [accessible via a link, we'll use wget to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=321.16869230769237) [download it to our VM instance. This is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=324.2446428571429) [the step where in our spikey-developers](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=327.25778571428594)[project we download the service account](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=329.67787500000003) [key. So copy the link address, use wget,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=332.8991250000001) [and get the JSON service account key onto](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=335.8666153846152) [your VM. Run the ls -l command, and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=338.7807142857143) [confirm that the JSON key is now available](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=342.10357142857146) [on this VM instance. So we have the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=345.25207692307697) [service account key from our](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=348.22623076923094) [spikey-reviews project available now on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=350.4994545454545) [this VM, which is in the spikey-developers](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=352.87627272727264) [project. Make sure that you don't leave](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=356.1011666666667) [your service account JSON key publicly](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=358.5433846153847)[accessible. I've gone back to the bucket,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=360.5307692307694) [and I have unshared it, so it's no longer](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=362.47985714285716) [publicly available. We are now ready for](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=365.4343333333333) [our very last step, which we'll perform](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=368.40149999999994) [using the VM in our spikey-developers](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=370.32299999999987) [project. We will connect to our SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=372.53236363636364) [instance using the cloud\_sql\_proxy. So](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=375.438) [switch over to your VM instance, and run](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=378.51661538461536) [the cloud\_sql\_proxy as you see on screen.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=381.4175384615383) [The -instances flag specifies the Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=384.28290909090913) [SQL instance that you want to connect to.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=387.1127272727274) [We specified the full name of the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=390.0128571428573) [instance, spikey-reviews in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=392.29585714285747) [us-central1:reviews-prod, and we want to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=393.8573333333333) [connect to it using a TCP tunnel that's](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=396.94566666666657) [running on TCP 3306. The credential\_file](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=400.83059999999995) [that we use is the spikey-reviews service](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=403.721) [account that we had created earlier, and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=407.6550000000001) [the key for that service account is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=409.88453846153834) [available in JSON format on this machine.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=411.83) [The ampersand that you see at the very end](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=414.24033333333335) [will run this process in the background.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=417.3321818181819)[Hit Enter. Our cloud\_sql\_proxy is now](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=419.73) [running in the background, and it's ready](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=422.1702) [for new connections. We can use the mysql](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=424.8405384615385) [command to connect to the cloud\_sql\_proxy.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=427.62330769230766) [The cloud\_sql\_proxy is running on this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=430.2390000000001) [host, which is why the host parameter is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=433.1334615384616) [127. 0. 0. 1. I'm connecting here as the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=437.0891538461541) [root user. I specify the password for my](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=440.38046153846153) [Cloud SQL instance, and that's it. I am](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=442.482) [connected via the Cloud SQL Proxy, and I](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=445.76314285714267) [didn't need to whitelist my IP address.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=448.86511111111105) [You can try it on a VM where the IP](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=451.109) [address is not whitelisted, and you'll see that you'll connect just fine.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=10&mode=live&start=453.2782857142858)

[Working with PostgreSQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live)

[All the Cloud SQL demos that we've worked](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=2.028) [on so far have involved MySQL. Now using](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=4.409714285714285) [PostgreSQL on the Google Cloud is very](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=7.01) [similar to using MySQL, except for the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=9.859) [subtle database differences. Here we'll](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=13.065) [see a quick demo of setting up a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=15.094999999999999) [PostgreSQL instance, and you'll see how](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=17.022333333333332) [similar it is to working with MySQL on the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=19.094333333333328) [cloud. So go to CREATE AN INSTANCE, and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=22.75214285714286) [choose PostgreSQL. Notice that we once](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=26.61442857142858) [again have three options here on the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=28.882000000000005) [screen. You have PostgreSQL for](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=31.160500000000017) [Development, Staging, and Production, and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=33.7) [the default configuration settings for](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=36.27738461538462) [each of these options will be different.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=38.09430769230771) [You are, however, free to choose the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=40.638) [configuration settings that you want. You](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=42.64408333333333) [can go into PostgreSQL Development and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=44.466499999999996)[configure it to be a production instance](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=46.803499999999985) [if you want to. I'll click through through](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=49.31336363636364) [the Development configuration setting](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=51.56281818181821) [page. I'll call it reviews-prod-psql and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=53.88775) [use the spikey\_rr as my root password, and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=57.645923076923076) [go ahead and explore the other](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=60.461307692307706) [configuration settings. You can see that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=62.590090909090904) [the settings are very similar to the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=64.75336363636363) [settings that we saw when we set up a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=67.40433333333335) [MySQL instance. The features offered by](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=70.93533333333342) [PostgreSQL is very similar to the Second](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=73.05600000000001)[Generation MySQL instances. They are also](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=75.394) [available with the high-availability](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=78.96563636363638) [configuration. Go ahead, click on the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=81.34672727272729) [Create button to create a new instance.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=83.41574999999997) [You'll need to wait for a couple of](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=85.479) [minutes for the instance to spin up. We](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=87.7702) [can then click through to that instance](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=90.0666923076923) [from your SQL Instances page. This will](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=92.10853846153842) [take you to the OVERVIEW page. You have](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=94.164) [all the other tabs. Very similar to your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=96.55200000000004) [MySQL instance. You can connect to this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=99.28018181818182) [PostgreSQL instance using Cloud Shell as](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=101.965) [before. The actual connect command is a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=105.36442857142853) [little different. That's because the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=108.44575000000003) [default user for your PostgreSQL instance](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=110.84700000000001) [is the postgres user. When you use the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=113.97300000000001) [Cloud Shell as before, your ephemeral IP](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=117.36328571428571) [will be whitelisted, and GCP will allow](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=119.6492857142857) [your connection to go through. Specify the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=122.04455555555556) [password, and there you are at the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=124.642) [PostgreSQL prompt. You can run \l in order](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=127.54) [to list out all the databases that are](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=130.3617142857143) [available by default. You can exit out of](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=133.02) [this window by hitting :q. This will take](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=136.3178461538462) [you back to the PostgreSQL prompt. You can](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=139.3713333333333) [use SELECT datname FROM pg\_database in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=142.2190769230769) [order to see all the tables that you have](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=144.8083076923076) [available by default, and you can hit \q](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=148.3662857142857) [in order to quit this prompt. PostgreSQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=151.1668571428571) [has very few conceptual differences from](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=155.04699999999997) [MySQL running on the Google Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=158.65625) [Platform. You'll find that once you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=161.23174999999998) [understand how to manage Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=163.25516666666672) [instances which are running MySQL, using](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=165.1681666666668) [Cloud SQL instances with PostgreSQL is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=168.0081538461538) [very straightforward. And here are docs](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=171.03353846153834)[that can get you up to speed quickly. And](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=173.22766666666664) [on this note, we come to the very end of](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=175.76166666666666) [this module where we got plenty of](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=178.10406666666677) [hands-on experience working with Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=179.869) [instances. We started off by creating and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=183.01471428571435) [editing Cloud SQL instances before we](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=185.69900000000007) [moved on to more complex tasks. We saw how](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=187.859) [we could clone, start, and stop instances.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=191.3763125000001) [We then saw how we could connect to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=194.112) [instances when we use SSL and without](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=196.7194285714285) [using SSL. We saw that we could configure](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=199.05463636363638) [database flags using the web console UI,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=202.0917272727273) [as well as the gcloud command-line](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=204.78391666666667) [utility. We then saw how we could add](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=207.10341666666667)[labels to instances in order to group our](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=210.10887499999995) [resources. When your database is on the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=213.1018749999999) [cloud, you'll have applications running](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=215.36599999999999) [either on your on-premise data center,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=216.941) [other cloud platforms, or even on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=219.28500000000005) [different projects, all of which need to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=221.42719999999997) [access your Cloud SQL instance. Making](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=223.69099999999992) [this access easy is the Cloud SQL Proxy,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=225.62407142857143) [and we saw how we could configure and use](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=228.1526428571429) [the Cloud SQL Proxy on the GCP. In the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=231.25336363636364) [next module, we'll focus on how we can](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=234.53242857142857) [configure Cloud SQL for high availability](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=237.0061428571429) [using a failover replica. We'll also see](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=239.16333333333336) [how we can create and manage read replicas](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=241.7139285714286) [and how we can import and export data from Cloud SQL.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=b53dd677-0741-42da-b9bb-d9413c6502bc&clip=11&mode=live&start=243.60707142857154)

[Replication and Data Management](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=0&mode=live)

[Module Overview](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=0&mode=live)

[Hi, and welcome to this module where we'll](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=0&mode=live&start=0) [study replication and data management on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=0&mode=live&start=4.200666666666667) [Cloud SQL instances. Now Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=0&mode=live&start=7.2995) [instances, typically when used in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=0&mode=live&start=10.295) [production, are required to be highly](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=0&mode=live&start=12.788333333333334) [available. If your zone or a particular](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=0&mode=live&start=15.780333333333335) [data center goes down, you do not want the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=0&mode=live&start=17.98342857142858) [data in your database to be inaccessible.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=0&mode=live&start=20.648) [For this, you need to configure your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=0&mode=live&start=23.392) [instances for high availability.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=0&mode=live&start=26.35427272727272) [High-availability configuration involves](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=0&mode=live&start=28.047) [setting up a failover replica which](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=0&mode=live&start=29.33475) [replicates all of the data that is present](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=0&mode=live&start=31.855500000000003) [in our master, which means there might be](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=0&mode=live&start=34.85149999999999) [a replication lag. In this module, we'll](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=0&mode=live&start=37.61187500000001) [see how you can set up alerts to monitor](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=0&mode=live&start=39.88399999999999) [this replication lag. We'll also see how](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=0&mode=live&start=42.786499999999975) [we can configure on-demand and automatic](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=0&mode=live&start=45.29800000000001) [backups on Cloud SQL and restore our](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=0&mode=live&start=47.614000000000026) [instance using these backups. We'll then](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=0&mode=live&start=50.596000000000004) [move on to configuring read replicas in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=0&mode=live&start=53.01266666666667) [order to improve read throughput from our](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=0&mode=live&start=55.283000000000015)[database. We'll then see how we can import](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=0&mode=live&start=57.39566666666667) [and export data using SQL dump files, as well as CSV files.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=0&mode=live&start=59.675)

[High Availability Configuration](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live)

[Let's first understand how the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=1.788) [high-availability configuration works on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=4.112375) [Cloud SQL. In this discussion of high](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=5.9447777777777775) [availability, we'll talk primarily about](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=9.00922222222222)[MySQL Second Generation instances. A](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=11.678999999999998) [Second Generation instance is in a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=14.416222222222222) [high-availability configuration when it is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=17.447555555555557) [configured with a failover replica. The](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=19.71275) [original Cloud SQL instance to which all](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=22.122916666666665) [of the writes are transmitted is the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=24.35533333333333) [master. This master is configured along](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=27.019538461538463) [with a failover replica. This failover](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=29.79661538461539) [replica should be in the same region as](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=32.391230769230766) [the original master, but in a different](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=35.36415384615382) [zone. All changes to the data in the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=37.90053846153846) [master database are replicated to the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=40.74361538461538) [failover replica. Now there might be a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=43.334714285714284) [slight replication lag based on how long](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=45.6582857142857) [it takes to write out the data from the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=47.65928571428567) [master to the failover replica. The](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=50.60049999999998) [replication is set to be semisynchronous.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=52.72728571428571) [Semisynchronous replication is a trade off](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=55.333) [between completely asynchronous and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=57.760750000000016) [completely synchronous replication. The](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=59.833999999999996) [master waits after the transaction has](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=62.12236363636364) [been committed until at least one worker](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=64.47654545454547) [or one replica has received and logged the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=67.16325) [event. This is the basic definition of](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=70.14258333333333) [semisynchronous replication, and that's](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=72.85349999999997) [what Cloud SQL follows. Remember that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=74.49271428571429) [Cloud SQL is a regional resource. That](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=77.07185714285716) [means the failover replica that you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=79.9465) [configure for any master has to be in the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=81.71950000000002) [same region as the master and also in the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=84.4418) [same GCP project as the master. Failover](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=87.2426) [replicas are separately charged. They are](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=90.65) [charged as standalone Cloud SQL instances.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=93.85725000000001) [When you use the MySQL First Generation](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=96.795) [instances on Cloud SQL, high availability](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=99.46645454545452) [is configured by default. That is the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=101.91999999999999) [default configuration. Second Generation](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=105.25233333333333) [instances need to be explicitly configured](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=107.22344444444443) [for high availability. The default is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=109.93071428571426) [non-high availability in order to save on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=112.55863636363635) [costs. High availability is typically only](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=115.67745454545452) [required for production instances. Your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=118.30799999999999) [test, dev, and staging instances need not](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=120.46418181818181) [be highly available. Let's visually](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=123.32145454545453) [understand how failover works on a Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=125.60666666666667) [SQL instance. Let's say you have a client](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=128.57150000000001) [application which typically communicates](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=131.51359999999997) [with your Cloud SQL master instance. This](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=132.934) [master is present in us-central1-a. It has](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=136.47774999999996) [been configured in the high-availability](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=139.7505) [mode. It has a failover replica present in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=141.60424999999992) [us-central1-b. The master and the failover](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=145.82937499999997) [replica are kept in sync using the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=147.8733333333333) [high-speed links that connect different](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=149.964) [zones. Notice here that the master and the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=152.7973333333333) [failover are in different zones, though in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=155.5800833333334) [the same region, us-central1-a and b. This](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=158.322) [is an important point to remember. Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=162.12576923076924) [SQL is a regional resource, not a global](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=164.41315384615385) [resource. Its instances cannot span](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=167.62829999999997) [multiple regions. All the writes that you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=170.26379999999992) [make to your relational database are](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=172.88799999999998) [directed to the master instance. Changes](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=174.77199999999993) [are then replicated to the failover](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=177.11190909090917) [instance using these high-speed links. All](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=179.543) [your client applications which need to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=182.6103333333333) [connect to the database connect to the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=185.15499999999997) [master. This includes you Cloud SQL Proxy;](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=187.5139999999999) [your MySQL client, which might connect](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=189.91033333333326) [directly; your App Engine scripts;](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=192.23833333333332) [anything. Now it's quite possible that the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=194.40222222222218) [zone in which your master instance is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=196.64653846153854) [available suffers an outage. Maybe network](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=198.76) [connectivity is lost, and you can't access](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=201.8266666666667) [the master. In such a situation, the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=204.79359999999997) [failover replica is promoted to be the new](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=207.3662)[master. During the failover, there is a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=210.74380000000002) [short period of time for which your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=212.61661538461533) [database will be unavailable. This period](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=214.309) [of time depends on the replication lag](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=216.29390909090912) [between the master and the failover](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=218.87022222222222) [replica. Once the failover is promoted to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=221.63688888888888) [be the new master, a new failover replica](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=224.01107692307693) [is instantiated and backed up with all of](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=226.69899999999998) [the data from the new master. Notice that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=230.3469999999999) [the original failover replica, which is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=233.72583333333333) [now the new master, continues to remain in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=235.6543333333333) [the new zone, us-central1-b; however, the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=239.07111111111107) [IP address of the master is the same as](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=242.1503529411765) [the IP address of the original master. The](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=245.8885294117648)[IP address has been preserved so that all](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=249.05966666666666) [of the existing connections can continue](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=251.16899999999998) [to connect at the same IP address.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=253.1672) [Existing connections will be closed and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=255.984) [will have to be reestablished, but the IP](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=257.91109090909083) [address remains the same. Remember, the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=260.7401818181819) [brief outage depends on the length of the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=263.1865454545457)[replication lag, the time it takes for the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=266.0636923076922) [failover replica to get all the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=268.7391666666667) [information that was available in the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=270.36016666666677) [original master. You can simulate a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=272.4016666666667)[failover on the GCP to test out your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=275.16357142857134) [failover replicas. Failovers are typically](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=277.924714285714) [triggered when the zone of the master](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=279.6737272727272) [instance experiences an outage, when the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=282.14409090909066) [master is unresponsive for some reason or](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=284.24154545454553) [the other for about 60 seconds, when the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=286.6275) [master is in the normal state, when it's](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=288.96750000000014) [not stopped or in the maintenance state.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=291.46079999999995) [So if you're simulating failover in your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=293.866) [test scenarios, you can't explicitly stop](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=296.3860000000001) [your master instance. The gcloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=298.79628571428566)[command-line utility offers commands to simulate failover.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=1&mode=live&start=302.064)

[Configuring Failover Replicas for High Availability](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live)

[In this demo, you'll see how you can](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=1.928) [configure your Second Generation MySQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=4.304) [instance to a high-availability](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=6.253833333333334) [configuration. We start off in the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=9.301166666666667)[OVERVIEW page of our reviews-prod](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=11.961636363636364) [instance. We'll configure high](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=13.860272727272728) [availability on our reviews-prod instance](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=15.493999999999998) [using the terminal window on our Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=17.583999999999996) [Shell. Go ahead and activate the Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=19.81950000000001) [Shell, and let's see what instances we](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=22.00025) [have available at this point in time. The](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=24.543000000000006) [gcloud sql instances list will list out](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=27.44571428571429) [all of our instances within this project.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=29.9827142857143) [We have three instances configured. In](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=32.90822222222222) [order to configure an instance for high](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=35.53025) [availability, you need to have two](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=37.8) [prerequisite configuration settings set up](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=40.180749999999996) [correctly. Firstly, you need to have](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=42.89012499999998) [automated backups. I'm going to use the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=45.39557142857142) [gcloud sql instances patch command to set](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=47.62742857142855) [up my backup-start-time to 23:00 hours. My](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=49.65242857142853) [instance has been updated. I have](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=52.837111111111106) [automated backups enables at 23:00 hours](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=55.821200000000005) [every day. The second condition to enable](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=58.51880000000003) [high-availability configuration is to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=61.748555555555555) [enable binary logs on your Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=63.613) [instance. Reviews-prod already has](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=66.87150000000004) [binaryLogEnabled. I'm going to go ahead](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=69.76025) [and enable it using the command line](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=72.10030769230767) [anyway. Enable-bin-log reviews-prod will](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=74.2455384615384) [enable binary logging on my Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=76.11527272727275) [instance. We can now use the command line](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=79.76290909090916) [to create a failover replica for our](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=82.96325000000002) [reviews-prod instance. Use gcloud sql](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=85.64250000000003) [instances create. The instance will be](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=87.94645454545453) [called reviews-failover, the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=91.02336363636358) [master-instance is the reviews-prod](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=92.554) [instance, the replica-type is a FAILOVER](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=94.57399999999998) [replica, and I'm going to create it in the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=97.386) [us-central1 region. This will spin up a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=100.95) [brand-new Cloud SQL instance and replicate](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=103.56930769230766) [all of the data that's available in the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=105.76207692307685) [reviews-prod. Your instance might take](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=108.96157142857143) [some time to set up. You need to be a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=110.41433333333335) [little patient here. Once the failover](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=113.14984615384618)[replica has been created, it's available](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=114.87046153846161) [on the SQL Instances page. Notice that the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=116.71777777777775) [reviews-failover replica is indented to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=119.594) [show that it's associated with the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=121.73399999999998) [reviews-prod instance. Also notice that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=124.81919999999998) [reviews-prod has now been enabled for high](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=127.38281818181817) [availability. The High availability column](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=130.56272727272724) [shows Enabled. Another thing to note here](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=133.39500000000004) [is that our reviews-prod instance, the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=136.24399999999997) [master instance, is in us-central1-f, and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=138.44361538461538) [our failover replica is in us-central1-b.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=141.6813076923077) [Let's click through on the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=144.919) [reviews-failover and explore our failover](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=146.75399999999996) [replica. When you go to the OVERVIEW page,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=148.5889999999999) [it clearly shows you that this is a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=150.97526666666664) [failover replica, as you can see from the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=153.283) [left navigation pane. If you click on the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=156.2291818181819) [USERS tab here, you'll see all of the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=158.70366666666666) [users that are available, and our master](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=160.89513333333332) [instance is also available on the failover](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=163.64261538461534) [instance. If you click on the DATABASES](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=166.7220769230768) [tab, you'll see that the spikey\_db](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=169.22550000000004)[database is present here as well. The](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=171.289) [AUTHORIZATION tab will show you that the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=173.5960833333334) [MySQLClient-vm that we had configured in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=175.97177777777776) [our spikey-developers project is allowed](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=178.15511111111104) [to access the failover replica as well. If](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=180.67427272727275) [you click on the reviews-prod link at the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=184.73407142857144) [very top, that will take you to the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=187.03864285714297)[reviews-prod instance. And if you scroll](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=189.488) [down here within the Configuration](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=191.50599999999997) [settings, you'll see that it's now highly](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=193.43779999999998) [available. Let's confirm that this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=196.66759999999996)[failover replica works and it replicates](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=198.5162727272727) [any data that we add to our master](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=200.59718181818178) [instance. For this, I'm going to connect](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=203.00146153846154) [to the reviews-prod master instance using](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=205.1521) [the Cloud Shell. And once I'm connected,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=207.4747) [I'm going to see all of the databases that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=209.84533333333334) [exist here. On my reviews-prod master](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=212.56633333333338) [instance, I'm going to create a new](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=214.9781428571428) [database called replicated\_db. I'll run](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=218.14064285714275) [the show databases command once again to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=220.15150000000003) [confirm that this new database has been](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=222.4457500000001) [created. Now I'm going to use the Google](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=224.6739230769231) [Cloud Platform's web console to switch](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=227.1637692307693) [over to the failover replica. I'll go to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=229.6715) [the DATABASES tab here, and on this tab,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=232.88242857142856) [you'll see that the replicated\_db is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=235.5875714285714) [present. The database has been replicated](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=238.24646153846152) [to our failover replica. Let's now](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=241.53538461538454) [simulate a failover scenario. Open up your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=244.42966666666666) [Cloud Shell once again where you're](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=246.88549999999995) [connected to the reviews-prod MySQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=249.49366666666668) [database, switch over to the spikey\_db](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=252.0864444444445) [database within here, use spikey\_db, and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=254.75900000000001) [run the show tables command. You can see](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=257.25046153846154) [that these are the tables currently](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=259.95015384615374) [available under spikey\_db. Click on the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=262.5976) [plus tab just above your Cloud Shell](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=265.752) [terminal window. This will allow you to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=268.57066666666674) [add a new Cloud Shell session. Open up a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=270.9882727272727) [new Cloud Shell terminal window. This is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=273.7885) [where we are going simulate the failover](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=275.93730769230774) [of our master instance. You can simulate](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=278.40938461538485) [failover for your reviews-prod instance by](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=281.1213000000001) [calling gcloud sql instances failover](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=283.7199000000002) [reviews-prod. I am on the SQL Instances](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=287.7321999999999) [page on my web console so you can see](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=290.2036666666667) [what's going on. Once you hit Enter,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=292.5686666666668) [failover will be triggered. It'll confirm](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=294.92999999999995) [that you want to continue with failover](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=297.12319999999994) [first. Go ahead and click on Yes. Your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=299.2938999999998)[failover will start. And once you're](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=302.38439999999997) [failing over, your Cloud SQL instances](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=304.82925000000006) [will be unavailable. So if you switch over](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=307.33575000000013) [to spikey-reviews where you're connected](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=310.02233333333345) [to your Cloud SQL reviews-prod instance](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=311.4556666666669) [and you run the show tables command,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=313.65372727272734) [you'll see Server shutdown in progress.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=316.497) [Your reviews-prod is currently failing](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=319.10033333333325) [over. Go ahead and exit from this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=321.19440000000003) [connection, and let's see what's going on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=323.9678000000002) [in our SQL Instances console page. You can](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=326.33599999999996) [see here that reviews-prod has a warning](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=329.1878333333333) [icon there indicating that it's failing](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=332.2672499999998) [over. You'll need to wait for a couple of](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=334.45238461538463) [minutes before failover is complete. When](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=337.04853846153856) [you refresh the page, you'll find that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=339.0608888888889) [first reviews-prod is up and running.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=341.5686666666667) [That's because your failover replica has](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=343.826) [been promoted to be the new reviews-prod](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=345.93600000000015) [master on the same IP address. If you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=348.6125714285714) [notice the IP address of your reviews-prod](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=352.6114) [instance, you'll see it's the same IP](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=354.7093000000002)[address that we've been using so far. Your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=356.7840769230768) [failover replica has been promoted. Notice](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=359.325) [that the location of your reviews-prod is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=362.1449999999998) [us-central1-b. If you remember, our](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=365.53357142857135) [original master was in us-central1-f, and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=368.04415384615385) [our failover replica was in central1-b.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=371.03907692307683) [The new master is our original failover](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=374.034) [replica, which is in us-central1-b. The](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=377.31525) [GCP is in the process of creating a new](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=379.9934166666667) [failover replica. That's still in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=383.00316666666697) [progress. It hasn't completed yet. That'll](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=384.77862500000003) [take a little longer. Meanwhile, let's use](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=386.9760909090909) [our Cloud Shell terminal window in order](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=389.44772727272715) [to connect to our reviews-prod master](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=392.34772727272724) [instance. You'll see that our connection](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=395.1088181818181) [has been successfully reestablished for](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=397.8245) [our reviews-prod instance, which is the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=400.08) [original failover replica promoted to be](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=402.52000000000015) [the new master, and you can run the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=404.68015384615387) [database commands on it as you did before.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=407.18723076923084) [If you wait for a few more minutes, the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=409.7155714285713) [new reviews-failover instance will be up](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=412.6103333333333)[and running. It's now green. Notice that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=414.76633333333325) [it's located in us-central1-f. The new](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=417.99333333333334) [failover replica is in a different zone than the original failover replica.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=2&mode=live&start=422)

[Configuring Replication Lag Alerts Using Stackdriver](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live)

[In the Cloud SQL high-availability](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=2.556) [configuration, an important metric that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=4.639333333333333) [you need to track is the replication lag](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=6.615923076923077) [because this is what determines how up to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=9.095307692307694) [date your failover replica is. Let's see](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=11.898555555555554) [how we can use Stackdriver monitoring to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=14.778666666666668) [monitor this metric. Click on the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=18.0185) [hamburger icon on the top left, that will](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=20.100857142857144) [take you to your navigation menu, and go](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=21.951142857142862) [to STACKDRIVER Monitoring. This is where](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=25.527499999999996) [we'll configure our replication flag](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=28.52766666666667) [alert. If you're using Stackdriver for the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=30.645444444444447) [very first time on this project, you might](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=32.7065) [need to create a new Stackdriver Account](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=35.21492307692308) [for this spikey-reviews project. So go](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=38.26315384615385) [ahead and click on Continue and enable a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=40.856692307692306) [new Stackdriver Account. Once the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=44.26346153846152) [Stackdriver Account has been created,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=46.16209090909091) [you'll need to scroll down on this page](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=47.71481818181818) [here and click on Continue in order to add](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=50.288428571428575) [the spikey-reviews project to this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=53.28414285714287) [account. Stackdriver is a company that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=55.463) [made monitoring and logging tools, and it](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=58.232) [was acquired by Google in 2014.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=60.799384615384604) [Stackdriver can also be used to monitor](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=63) [your AWS resources. We don't really want](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=66.19619999999998) [to do that at this point in time, so I'm](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=68.41225) [going to say Skip AWS Setup and hit](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=70.527875) [Continue on the next page as well. I only](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=73.31961538461536) [want to set up a simple alert. I don't](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=76.61957142857142) [want any Stackdriver reports as well.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=79.03414285714281) [Click on Continue, and wait for a little](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=80.89569230769231) [bit while Stackdriver gathers information](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=83.71353846153849) [about the resources that you have on the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=85.68700000000001) [GCP. Once Stackdriver has completed the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=89.07100000000003) [initial collection of information, it will](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=91.65288888888891) [enable the Launch monitoring button, and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=94.04866666666666) [that's the button I'm going to click on at](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=96.05466666666666) [this point in time. This will take you to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=98.49700000000001) [the main Monitoring dashboard. Click on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=100.48600000000005) [the CREATE POLICY button, which will allow](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=103.11422222222224) [us to monitor our replication lag. This](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=106.27999999999999) [will take you to a page where you can](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=109.06726666666667) [create a new alerting policy. There are a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=111.83266666666664) [number of steps that you need to fill in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=114.083) [for this alert. The first is the condition](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=116.225) [under which you want to be alerted. Click](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=118.47858333333335) [on the Add Condition button, and select](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=121.06072727272728) [the Metric Threshold. That is the first](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=124.04781818181822) [option that you see here on screen. You](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=126.38836363636366) [can also get alerted on a Metric Absence,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=128.5536923076923) [but Metric Threshold is what we are](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=131.03123076923072) [looking for here. The RESOURCE TYPE](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=133.12225000000004) [drop-down here shows all of the resources](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=134.8267500000001) [that can be monitored using Stackdriver.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=137.17340000000004) [Choose the Cloud SQL option because that's](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=139.415) [what we want to monitor. You can see that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=141.86850000000007) [automatically reviews-failover is the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=145.60579999999996) [instance that has been selected. The](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=147.5905999999999) [metric that we want to monitor is the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=150.2688666666667) [Seconds Behind Master. If our replication](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=153.6406000000001) [lag goes beyond a certain threshold and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=156.09954545454548) [your replica is several seconds behind the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=158.88681818181826) [master, that's when we want to be alerted.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=161.18999999999997) [The CONDITION here is above. If Seconds](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=163.73) [Behind Master is above the threshold 180](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=166.61341666666658) [seconds for a period of about 3 minutes,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=169.54069230769232) [that's when the alert will be set. Once](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=173.01146153846162) [your metric threshold has been configured,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=176.128) [you can scroll down and click on the Save](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=178.306) [Condition button. This will set up a new](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=181.70390909090898) [condition for your alert. The next step is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=184.42999999999995) [for you to configure your notifications.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=187.10959999999997) [Click on the Add Notification button here,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=189.158) [and ask to be notified by email at](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=191.59992307692306) [reviews@spikey-sales. com. You can add](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=194.89477777777776)[multiple notifications if you want to.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=197.89922222222214) [Scroll down a little, and click on Add](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=200.8483846153846) [Documentation. This will contain the text](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=204.34315384615377) [message that you want sent along with your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=206.39857142857144) [notification. I'm going to set up a very](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=208.98828571428575) [simple text message here. The replication](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=210.84245454545456) [lag threshold is exceeded for your spikey](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=212.62500000000003) [reviews database. Scroll down to step 4,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=215.80300000000008) [and give this policy a name. I'm going to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=218.28554545454543) [call it](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=222.43600000000004) [SpikeyReviewsCloudSQLReplicationLag. Click](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=223.94333333333338) [on the Save Policy button, and you've](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=225.09763636363635) [successfully configured an alert for your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=227.90209090909082) [replication lag. If your replica is more](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=230.37100000000004) [than 180 seconds behind the master](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=233.32733333333343) [instance for a period of 3 minutes, that's when you'll be alerted.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=3&mode=live&start=235.75527272727274)

[Automated and On-demand Backups](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live)

[In this demo, we'll see how we can set up](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=1.973) [automatic, as well as on-demand backups](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=4.560142857142858) [for our Cloud SQL instance. We start this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=6.642428571428572) [demo off in the OVERVIEW page of our](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=10.469357142857143) [reviews-prod master instance. Click on the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=13.691642857142861) [BACKUPS tab, and you'll see that because](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=15.731499999999999) [this instance has been up and running for](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=17.671666666666663) [a while there are a number of backups that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=19.689199999999992) [have been created. Notice that all of](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=21.884) [these backups are on-demand backups, and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=25.105166666666662) [you can see that these backups have been](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=27.738071428571427) [taken on demand when we created the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=30.394642857142852) [failover replica. Notice the description](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=32.756800000000005) [for the first backup is Taking a master](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=34.51130000000002) [backup for failover. Automatic backups are](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=37.62525) [typically taken every 24 hours. This](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=40.331250000000004) [instance has not been up and running for](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=43.019642857142856) [24 hours, which is why there are no](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=44.93678571428569) [automatic backups. Typically, Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=47.410545454545456) [will retain the seven most recent](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=49.53645454545455) [automated backups and all of the on-demand](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=52.33190909090908)[backups. Automatic backups have already](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=55.8783636363636) [been configured for this instance. We did](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=58.153) [so at creation time. In any case when you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=60.82875) [want to set up a failover replica, we have](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=62.924625) [to configure automatic backups for our](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=65.62099999999998) [instance. You can manage your automatic](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=67.91899999999995) [backup settings by clicking on the Manage](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=69.99154545454547) [automated backups button here. This will](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=72.42725) [pop up a dialog box that will allow you to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=74.87674999999997) [configure your automated backup settings.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=79.02850000000001) [You can back up your instance at this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=81.139) [point in time by clicking on the Create](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=83.06913333333328) [backup button. This is an on-demand](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=85.298) [backup. This will take you to a screen](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=88.53800000000004)[where you can choose to fill out a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=90.65860000000005) [description for why you want this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=92.465) [particular backup. I'm going to say](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=94.55900000000003) [Complete backup of the Spikey reviews](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=96.81700000000001)[data. Go ahead and click on the Create](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=99.15700000000001) [button in order to create this backup. My](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=102.082) [backup has been successfully created, and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=104.92646153846154) [you can see it's at the top of the list](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=106.78323076923074) [here, along with the description that I](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=109.65292307692307) [filled in. If you want to save on storage](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=111.42553846153845) [space costs, you can choose to delete old](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=113.96462499999998) [backups. Simply click on the three-dot](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=116.28762499999996) [menu at the extreme right here, and you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=118.12254545454549) [can choose the Delete option to delete](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=120.60854545454546) [your backups. Remember, with MySQL Second](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=122.82245454545459) [Generation instances though that backups](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=125.26122222222223) [are incremental, and they may not take up](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=127.519) [very much space. This will pop up a dialog](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=130.1233636363636)[box that'll ask you to confirm your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=132.91285714285712) [delete. Go ahead and click on DELETE, and your backup will be deleted.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=4&mode=live&start=135.0278571428571)

[Restoring from a Backup](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live)

[We've created an on-demand backup. Let's](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=2.143) [see how we can restore our Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=4.1295) [instance from backups and also see how](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=7.0298333333333325) [point-in-time recovery works. In this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=10.228249999999997) [demo, we'll use the on-demand backup that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=12.243133333333333) [we created in the last clip. We start off](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=14.497599999999997) [in the OVERVIEW page of our reviews-prod](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=17.42409090909091) [instance, and we'll connect to this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=19.74363636363637) [instance using the Cloud Shell. So click](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=21.761499999999995) [on Connect using Cloud Shell, specify your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=24.151666666666664) [password for the root user, and go ahead](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=26.614499999999985) [and get connected. Let's switch over to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=29.67312499999999) [the spikey\_db and create some new tables](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=32.57233333333334) [in our spikey database. We'll use the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=35.5426666666667) [create table command for this, create](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=38.79164285714287) [table Blah, Blah1, and Blah2. We've](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=41.8949285714286) [created only the table Blah so far. Run](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=44.80230769230769) [the show tables command. You can see that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=47.37276923076922) [the blah table is present there in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=49.883666666666656) [lowercase. Remember, we have the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=52.0285833333333) [lower\_case\_table\_names database flag set.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=54.291999999999994) [Create the table Blah2 and the table](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=56.249) [Blah3. Once these three tables have been](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=60.003625) [created in our spikey\_db, run the show](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=63.195000000000014) [tables command and confirm that they are](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=65.92636363636362) [present. Now these are temporary test](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=68.16954545454539) [tables that we've created. Let's say your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=70.67944444444446) [reviews team has been trying something](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=73.36910000000002) [out. We want to go ahead and back up from](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=75.24530000000006) [an earlier version of this Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=77.90759999999999) [instance which does not have these](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=79.9118) [temporary test tables. Go to the OVERVIEW](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=82.53859999999997) [page of our reviews-prod instance, and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=85.18866666666665) [switch over to the BACKUPS tab. Here is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=87.19366666666662) [the on-demand backup that we created in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=90.01507692307695) [the last clip. Click on the three-dot](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=92.527)[menu, and hit Restore. This pops up a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=95.41290909090905) [dialog, and you'll immediately see that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=98.32066666666667) [you cannot perform restores on a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=100.20866666666667) [replicated setup. You cannot restore the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=102.3707272727273) [master from a previous backup if you have](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=104.66981818181824) [a replicated setup. Go ahead and click](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=107.6871) [CLOSE. What we are going to is switch over](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=110.05114285714288) [from our high-availability configuration](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=112.83021428571435) [to a regular single master instance. This](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=114.54766666666667) [we'll do by deleting the reviews-failover](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=117.89524999999999) [instance. Scroll over to the very right in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=121.07674999999996) [your SQL Instances page, and click on the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=123.99749999999997) [three-dot menu for reviews failover, and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=126.857) [hit Delete. In the dialog that pops up,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=129.67099999999996) [confirm that you indeed want to delete the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=132.52562499999996) [reviews-failover instance. Go ahead and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=135.0811249999999) [click on DELETE. Once the failover replica](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=136.81315384615382) [has been deleted, our reviews-prod Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=139.36384615384608) [SQL instance is no longer in the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=141.51) [high-availability mode, which means it can](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=143.967) [now be restored from an on-demand backup](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=146.3822727272727) [that we set up earlier. Click on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=149.34) [reviews-prod, and go to the BACKUPS tab.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=152.64749999999998) [This is where you can see a list of all](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=154.84987499999994) [the backups that have been made for this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=157.733)[particular instance. Click on the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=160.32980000000003) [three-dot menu for the latest backup, and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=162.1605) [click Restore. Now we have another dialog](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=164.91733333333335) [box, and here you see a warning. Notice](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=167.77666666666667) [that the Target Instance that we want to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=171.0360769230769) [back up is reviews-prod, and the warning](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=173.9086923076922) [says Restoring an instance from a backup](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=176.19672727272723) [will overwrite the data currently in the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=178.18409090909077) [instance. Yes, we do want to restore this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=181.10971428571432) [database to a previous state. Click on OK,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=183.2469166666666) [and your reviews-prod instance will be](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=185.72439999999997) [updated. It will be restored to the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=188.25519999999992) [backed-up version. Let's check the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=191.29674999999995) [databases and the tables available in this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=193.27754545454547) [backed-up version of our instance by](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=195.86181818181828) [connecting using the Cloud Shell. Enter](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=198.17349999999996) [the root password, and you are connected.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=200.46225) [Let's switch over to our spikey\_db. That's](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=202.886)[the database where we had created the Blah](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=205.5244166666666) [tables. If you run the show tables command](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=208.49975) [within spikey\_db, you'll find that our](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=211.4084166666667) [tables have been restored to a previous](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=213.86776923076923) [state. The Blah tables that we created](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=216.80184615384616) [after the backup was created are no longer](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=219.41884615384612) [present when we restored from our backup.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=222.427625) [Now that we've understood restoring a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=225.54) [Cloud SQL instance from a backup, let's](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=227.55549999999997) [see how point-in-time recovery works.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=230.05783333333332) [We've enabled binary logging on our](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=232.492) [reviews-prod Cloud SQL instance, which](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=235.18480000000002) [means we can run the command show binary](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=237.25907142857142) [logs and see all the binary logs that have](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=239.49164285714284) [been generated. Now every binary log is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=242.4008461538462) [made up of a sequence of events. These are](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=245.05007692307706) [granular events for every update that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=248.37950000000004) [we've made to our database. You can see](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=250.51507692307695) [binlog events using the command that you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=252.89969230769242) [see on screen. There might be many events](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=254.81846153846158) [in a single log file. Make sure you limit](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=256.7556923076923) [the number of rows that you retrieve. This](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=259.53300000000013) [particular binary log that we've chosen,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=262.4801111111111) [mysql-bin. 000005, contains exactly 3](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=266.40477777777767) [events. Notice that for every event we](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=268.81800000000004) [have a corresponding Position column.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=271.3963333333334) [Positions of 4, 123, and 194. Now if you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=274.16599999999994) [know exactly what these binary logs](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=279.2553) [represent, you can restore your database](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=281.3018999999999) [to a particular event by specifying your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=283.5350833333334) [binary log position within a binary log.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=286.184) [Let's see how you can create a clone of](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=288.9996153846153) [this reviews-prod Cloud SQL instance by](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=292.64824999999996) [using a specific position within your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=295.11874999999986) [binary logs. This is point-in-time](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=297.72200000000004) [recovery. Click on the CLONE link at the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=300.0020000000001) [top right that you see here. When you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=302.4804615384616) [clone an instance, you have an advanced](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=304.9990666666667) [option, Clone from an earlier position.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=307.7468000000001) [Fill out the remaining details in this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=310.102) [form. The new instance ID for the clone is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=312.48812499999985) [reviews-prod-clonefromposition, and the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=317.49922222222204) [binary log file name where we have our](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=318.632) [point from which we want to recover is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=320.8279999999999) [mysql-bin. 000005, and the recovery](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=324.33600000000007) [position is 123. Click on the Create clone](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=327.3485000000002) [button in order to create a clone from](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=330.72099999999995) [this point in time. Now, in my particular](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=333.22499999999985) [situation, it does not allow me to create](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=336.22707692307677) [a clone at this point in time because a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=339.0650666666666) [daily backup of my data has not been](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=341.46386666666643) [completed yet. Reviews-prod is an instance](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=344.1614285714286) [that I recently created. It'll ask you to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=346.6085714285715) [wait for one cycle when automated backup](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=349.9218461538462) [is available, and then you can do](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=352.8650769230771) [point-in-time recovery from a particular](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=355.89009090909093) [position, just like how we specified here.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=358.07418181818184) [In order to clone from a particular](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=360.5059999999999)[position, your current instance needs to be up for at least 24 hours.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=5&mode=live&start=362.8334999999998)

[Creating and Managing Read Replicas](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live)

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This is a situation](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=12.940800000000005) [where you might consider using read](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=15.400333333333334) [replicas in order to improve the read](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=17.341833333333327)[throughput on your data. In this demo,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=20.064555555555565) [we'll see how you can create and manage](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=22.645062499999998) [read replicas on Cloud SQL. We'll start](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=25.09856249999999) [off in the Cloud SQL Instances page. Here](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=27.262444444444444) [are the instances that we currently have](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=29.83377777777778) [running. Now if you scroll over to the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=32.38722222222222) [extreme right and click on the three-dot](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=34.37099999999998) [menu, that's where you can configure read](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=35.99) [replicas for each instance. In order to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=39.55236363636365) [create read replicas, you need to have](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=42.64975) [automated backups and binary logging](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=45.12716666666664) [enabled for your current instance. When we](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=47.160624999999996) [created our reviews-stage instance in an](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=50.1788) [earlier demo, we did not enable automated](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=52.60520000000002) [backup and binary logging, which means you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=55.30441666666668) [have to enable these first before you can](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=57.951) [create your read replica. The create read](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=60.91900000000002) [replica option helps you out here. It](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=63.38433333333332) [shows you where you can enable your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=65.68716666666666) [automated backups and binary logging and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=68.06833333333329) [then allows you to create your read](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=70.0566) [replica. Let's go back to an instance](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=72.2532) [which has this enabled, that is our](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=74.11407692307695) [reviews-prod instance, and click on Create](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=75.919) [read replica. This will take me to the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=79.47325000000002) [instance details page of my replica. I'm](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=82.62699999999997) [going to specify an instance ID. This is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=84.9759090909091) [the reviews-prod-replica. I'm going to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=88.01518181818186) [accept the remaining configuration](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=89.83675)[settings to be the default. Go ahead and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=91.25241666666665) [click on the Create button at the bottom](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=94.1220625) [and create your read replica. The read](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=97.05556249999998) [replica is present in the same region as](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=99.39783333333334) [the master. That is us-central1. It's](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=101.43316666666671) [located in a different zone. It's located](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=103.55577777777778) [in us-central1-c, whereas our master is in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=106.6552) [us-central1-b. If you click on the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=110.4429) [DATABASES tab of your read replica, you'll](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=112.19114285714285) [see all of the databases that were](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=113.88114285714285) [available in your master instance are](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=116.26399999999998) [available here. The one difference here is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=118.54399999999995) [that Create new database, that button, is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=121.04792857142856) [not present. That's because your read](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=123.48942857142853) [replica is read only. Let's test the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=125.82300000000002) [read-only nature of our read replica by](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=128.47775000000001) [connecting to it using the Cloud Shell.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=130.85483333333337) [I'll bring up the Cloud Shell instance and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=133.07976923076916) [connect using the root password, which is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=135.553) [the same as the root password for our](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=137.4389166666667) [master instance. We'll switch to the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=140.0293636363636) [spikey database, and we'll try to create](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=142.5160909090908) [our table here. The tables that are](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=145.00307692307695) [currently available are the reviews table,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=147.32438461538467) [the TEST\_CAPS, and the test\_lower table.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=149.96781818181825) [I'm going to create a new table called the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=152.742)[replica\_table, and you'll find that this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=155.66520000000008) [table cannot be created because the MySQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=157.63375000000008) [server is running with the read-only](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=159.935) [option. Let's switch over to our](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=163.51100000000002) [reviews-prod master instance, and in the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=166.0574545454545) [OVERVIEW page we'll click on the button](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=168.398) [which allows us to connect using the Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=170.60591666666664) [Shell. Enter the root user and password,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=173.3413) [and switch over to the spikey\_db database.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=176.044) [We still have just three tables in the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=180.14) [spikey\_db database, the TEST\_CAPS,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=183.00159999999994)[reviews, and test\_lower. I'm going to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=184.39318181818183) [create a new table called the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=186.42172727272728) [replicated\_table. The table creation](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=188.994125) [succeeds because we are now writing to the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=191.07162499999998) [master instance. If we exit from here and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=194.09155555555554) [switch over to our read replica in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=197.60242857142865) [us-central1-c, you'll see that this new](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=200.86492857142872) [table is now available in our read](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=203.32715384615383) [replica. We'll connect to the read replica](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=206.12176923076922) [using Cloud Shell. Once the connection is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=208.60300000000004) [successful, switch over to the spikey](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=211.21163636363633) [database, and then run the show tables](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=213.56309090909082) [command. This will show you that we have](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=215.72757142857145) [the replicated\_table, which was created in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=218.091) [the master, has been replicated in near](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=220.87649999999996)[real time to our read replica. Then in the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=223.8995454545455) [Instance details page of your read](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=227.31576923076926) [replica, you have the option to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=229.12130769230777) [temporarily disable replication. Click on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=231.48059999999998)[the DISABLE REPLICATION link at the very](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=233.84430769230767) [top, and this will dissociate your read](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=236.0503846153845) [replica from the master instance](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=238.71333333333337) [temporarily. You can see from the warning](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=241.05055555555563) [here that data from the reviews-prod](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=243.30049999999994) [master will not be replicated to this read](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=245.083) [replica until you enable replication once](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=248.16099999999997) [again. Click on OK and DISABLE](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=250.64644444444446) [REPLICATION. Wait for a little bit for](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=253.48577777777786) [this to update. Now let's switch over to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=255.79328571428573) [our reviews-prod master instance, and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=258.239) [within the DATABASES tab here, let's](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=260.85300000000007) [create a new database. This is a new](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=264.03049999999996) [database called some\_db. Click on the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=268.5384999999998) [CREATE button. This database will not be](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=271.29900000000004)[replicated to our read replica when](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=273.7956666666668) [replication has been disabled. Replication](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=276.4045000000001) [has been disabled here. Click on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=278.61512500000003) [DATABASES, and you'll find that some\_db is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=280.5058750000002) [not present here in this list. If you want](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=283.6390000000001) [the read replica to start replicating from](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=287.41972727272724) [the reviews-prod master once again, click](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=289.6660909090908) [on ENABLE REPLICATION at the very top.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=292.1315833333334) [Wait for the changes to propagate after we](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=295.134) [click on OK in this dialog box. Once the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=297.46253333333334) [replica is up and running, you'll find](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=300.3938461538462) [that the some\_db will be present in your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=303.5223076923079) [read replica. We saw earlier that we were](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=306.7543076923078) [unable to create a table within our read](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=309.6429230769234) [replica because the replica was read only.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=312.6729999999999) [The database was running with the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=315.342) [read-only flag. Now, at the very top](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=317.47725000000014) [right, you can see a link there. That](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=319.5669166666666) [allows you to promote your replica to be a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=321.9606153846154) [fully-fledged standalone instance. If you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=326.142153846154) [click on Promote replica, this will become](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=328.1938333333333) [a standalone Cloud SQL instance which](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=330.4962499999999) [allows read operations on its MySQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=333.09700000000004) [database. If you navigate to the SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=336.3250000000001) [Instances page, you'll see that the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=338.84750000000014) [reviews-prod-replica is no longer](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=340.832) [indented, indicating it's no longer a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=342.8062222222221) [replica of reviews-prod. Click through to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=345.7341818181818) [see the instance details of this replica](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=348.49527272727266) [that has been newly promoted to be an](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=351.189) [independent Cloud SQL instance. If you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=353.4636666666667) [click on the DATABASES tab on the screen,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=355.7176153846155) [you'll see that in the list of databases](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=358.869) [we now have the Create database button.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=361.54899999999986) [You can click on this button and create a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=363.894) [new database. This database will only be](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=366.643090909091) [present in this promoted replica. It's an](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=369.1105000000001) [independent Cloud SQL instance. This](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=371.7260909090909) [database will not be present in our](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=373.62381818181814) [reviews-prod instance. You can confirm](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=376.60419999999993) [this by switching over to the reviews-prod](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=379.04119999999983) [instance, look at DATABASES, and you'll](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=382.29766666666654) [find that only\_in\_promoted\_replica\_db is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=385.5834444444444) [not present here. The replica has been](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=388.50433333333325)[promoted to a standalone instance. It has](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=391.9061111111112) [no connection with the reviews-prod instance at this point in time.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=6&mode=live&start=395.42)

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[It's often the case that you want to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=1.815) [migrate the data that you have within your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=3.480714285714287) [SQL database on a Cloud SQL instance to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=5.479166666666668) [another instance or to another database.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=8.475833333333338) [It's possible to do this using a MySQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=10.805307692307691) [dump. Let's see how to do that within](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=13.965923076923074) [Cloud SQL. Before we get a SQL dump of the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=16.72544444444444) [data present in our reviews-prod Cloud SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=19.741571428571422) [instance, I'm going to edit the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=21.815166666666666) [configuration of this instance to turn off](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=23.724166666666665) [the database flag that says that lowercase](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=26.10942857142857) [table names are not allowed. I need to do](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=28.88992857142856) [this first because we have a table within](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=31.986857142857144) [our spikey\_db database which has its name](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=34.20857142857145) [in capital letters. We created this table](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=36.664000000000016) [before we enabled this flag, and this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=39.161333333333346) [creates problems when I create a SQL dump](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=41.5366666666667) [file from my spikey\_db table. Go ahead,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=44.86149999999998) [turn off the database flag, and click on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=47.921625000000006) [Save to update your reviews-prod instance.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=51.63212500000003) [If you switch over to the AUTHORIZATION](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=54.415) [tab, you'll see that our VM, the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=56.93715384615385) [MySQLClient-vm, is still authorized to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=59.5295) [connect to this instance. And that's what](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=61.68200000000001) [we are going to do here. We are going to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=63.93320000000001)[switch over to the mysql-client-vm, SSH](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=65.69720000000001) [into it. This is in our spikey\_developers](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=68.19545454545452) [project, if you remember. Use the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=71.95) [mysql-client to connect to our database](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=74.32818181818179) [using its IP address. Specify the root](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=76.75155555555556) [password. Once you're connected, switch](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=79.84244444444442) [over to the spikey\_db database. The show](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=82.51644444444447) [tables command will show you the tables](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=85.92271428571429) [that we have currently available. We have](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=88.07771428571431) [the TEST\_CAPS, the replicated\_table,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=90.67900000000002) [reviews, and test\_lower. We'll use the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=92.80300000000004) [insert SQL command in order to insert some](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=95.41543749999998) [data into our reviews table. These are](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=98.13393749999993) [reviews for the various products that we](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=100.73214285714286) [have in our SpikySales catalog. I'm going](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=103.87914285714288) [to run three separate insert commands in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=106.70453846153846) [order to get three rows of test data into](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=108.7259230769231) [our reviews database. You can now run a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=112.21349999999998) [select \* from reviews to ensure that our](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=114.92621428571425) [inserts have been successful. Once the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=117.02735714285706) [rows have been inserted, you can exit from](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=118.78166666666667) [the SQL connection. Now let's get a dump](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=121.28358333333334) [of our spikey\_db database using the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=124.59225000000002) [mysqldump command. The mysqldump command](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=127.487) [is available with your mysql-client. The](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=130.24366666666666) [databases that we want to dump for is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=132.6504545454546) [spikey\_db. The -h flag specifies the IP](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=135.93915384615383) [address of the Cloud SQL instance which](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=139.6566923076922) [has this database. Importing data into](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=143.2275454545455) [Cloud SQL instances on the GCP does not](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=146.12063636363646) [support triggers, which is why the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=149.29799999999997) [skip-triggers option is enabled here.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=151.511)[We'll write out the contents of the SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=153.49372727272723) [dump file to spikey\_db. sql. This file](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=156.767) [will contain a series of SQL commands to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=159.89600000000002) [replicate the spikey\_db database in any](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=164.0596666666667) [other instance. Once this command has run](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=167.62316666666672) [through, you can run an ls -l command on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=170.48278571428565) [your terminal window to confirm that a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=173.492)[spikey\_db. sql file is present. Let's use](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=176.64024999999995) [the nano editor in order to view the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=179.43285714285713) [contents of this file, and you can see](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=181.6082857142856) [that it contains a series of SQL commands.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=184.388) [Hit Ctrl+X to exit from this nano editor](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=187.772) [window, and now let's copy over the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=191.27784615384604) [spikey\_db. sql command to a Cloud Storage](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=194.524) [bucket. We'll use another utility that the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=198.21650000000002) [GCP provides in order to copy over to a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=200.67738461538463) [Cloud Storage bucket from the command](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=203.56122222222223) [line. This is the gsutil utility. Run](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=205.44588888888893)[gsutil config -b to enable permissions to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=208.6307272727273) [write to Cloud Storage. Clicking on the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=211.73881818181817) [URL that appears on screen here will take](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=214.2441818181818) [you to a page that will authorize you to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=216.78742857142853) [connect to Cloud Storage and give you an](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=219.60275) [authorization token to copy into this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=222.63274999999996) [particular terminal window. So choose the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=225.11550000000003) [Cloud User account. Allow GSUtil to view](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=227.42350000000002) [and manage your data across the GCP.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=229.6670000000001) [Clicking the ALLOW button will take you to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=231.77184615384618) [a page where you'll find an auth token.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=234.114) [Copy the contents of this page here, and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=236.886923076923) [paste the authorization code in your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=239.90181818181821) [terminal window. You're now authorized to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=242.46545454545463) [use gsutil to copy to Cloud Storage](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=245.03033333333332) [buckets within this project. This is the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=248.02341666666663) [spikey-developers project, if you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=250.64700000000008) [remember. I'm going to create a new bucket](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=252.11100000000013) [here. Click on the CREATE BUCKET link at](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=254.29161538461548) [the very top, and I'm going to create a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=256.6165384615385) [multi-regional bucket. A multi-regional](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=260.0794615384615) [bucket spans multiple regions across the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=261.8254444444445) [globe. Click on the Create button so that](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=264.754777777778) [the spikey\_test bucket is created. You can](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=268.34574999999984) [then switch over to the terminal window](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=271.1012857142857) [for your VM and use gsutil to copy the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=272.9887857142857) [spikey\_db. sql command to the spikey\_test](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=276.8897272727272) [bucket. Once the file has been copied over](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=280.71881818181805) [successfully, you can switch to your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=283.67049999999983) [browser window, which holds the Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=285.709) [Storage bucket, hit REFRESH, and you'll](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=288.02500000000015) [see that spikey\_db. sql is present within](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=290.8432857142857) [the spikey\_test bucket. We've successfully](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=294.4242857142856) [created a SQL dump file of our spikey\_db](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=296.8971818181819) [database and uploaded it to Cloud Storage.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=300.6499090909094) [We'll now use this dump file in the next clip.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=7&mode=live&start=307.119)

[Importing Data from a SQL Dump File](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live)

[In this demo, we'll see how you can import](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=2.211) [data from a SQL dump file into Cloud SQL.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=4.4994000000000005) [We'll start off with the spikey\_developers](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=8.187) [project, and we're going to create a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=10.6056) [brand-new Cloud SQL instance in this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=13.289299999999997) [project. You can think of the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=15.431899999999992) [spikey\_developers project as where the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=17.316272727272725) [developers of our SpikySales organization](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=18.84354545454545) [run their test projects. You can imagine a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=21.429500000000004) [scenario in the SpikySales organization](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=25.123090909090912) [that the search and recommendations team](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=26.88945454545455) [want to use review data in order to rank](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=29.020333333333337) [their search results. They prototype this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=32.305) [functionality by first creating a test](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=34.921) [instance within the spikey-developers](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=37.92625) [project. Activate the Cloud Shell, and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=40.18925000000001) [create a new Cloud SQL instance using the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=42.79916666666667) [command line, gcloud sql instances create](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=46.30225)[reviews-test. Your instance is created in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=50.14975) [an f1-micro machine, this is a pretty](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=52.224749999999986) [small machine, in the us-central1 region.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=54.232) [Click on the SQL Instances page, and wait](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=57.573) [for your reviews-test instance to be up](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=60.28209090909089) [and running. This might take a couple of](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=62.41184615384617) [minutes. This is a brand-new instance. Go](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=64.6395384615385) [to the Instance details page, and click on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=66.8881818181818) [DATABASES, and you'll find that only the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=69.43954545454544) [default databases have been set up. Now](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=71.56181818181813) [I'm going to import some data into this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=73.86715384615381) [instance by clicking on the IMPORT link at](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=76.57641666666667) [the very top. This brings us to a page](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=79.56375000000004) [which allows us to browse our Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=82.51785714285714) [Storage buckets for either SQL or CSV](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=84.65735714285714) [files which we can use to import data. I'm](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=87.3784285714286) [going to click on the spikey\_test bucket.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=90.91025) [That's the bucket where the spikey\_db. sql](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=93.089) [file is stored. Hit Select, and then hit](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=96.08360000000003) [Import. This Import button will cause all](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=99.54046153846151) [of the SQL commands in our. sql file to be](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=102.58330769230763) [executed on this reviews-test instance.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=107.12971428571431) [And after a while, provided all the data](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=109.414) [has been imported successfully, you'll get](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=111.9953333333333) [a message which says Import from the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=114.04933333333332)[spikey\_db. sql file succeeded, as you can](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=116.72099999999995) [see on the bottom left here. Clicking on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=119.08400000000002) [the DATABASES tab for the reviews-test](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=121.5292) [instance should show you that the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=123.38380000000001) [spikey\_db database has been set up. You](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=125.6784) [can then use the Cloud Shell to connect to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=128.4882142857143) [this database and view the tables and the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=131.14514285714282)[contents of the tables within your](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=134.44636363636366) [spikey\_db. In order to avoid repeating](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=137.62690909090915) [myself, I'm going to connect to this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=139.23200000000003) [instance using the Cloud Shell, switch](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=140.737)[over to the spikey\_db instance, and view](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=143.1053636363636) [the tables that are created and view the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=145.71726666666666) [contents of the reviews table. You can see](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=148.27033333333327) [that all of the records from our](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=150.83684615384615) [reviews-prod instance are now available in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=153.1021538461538) [reviews-test. Creating a SQL dump file](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=155.44509090909088) [from your existing MySQL database and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=158.18927272727262) [importing it to your Cloud SQL instance is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=160.75033333333337) [one way by which you can migrate data from your on-premise database to the cloud.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=8&mode=live&start=164.043)

[Exporting and Importing CSV Files](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live)

[In the last demo, we saw how we could](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=1.624) [import data from a SQL dump file into a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=3.6760000000000015) [Cloud SQL instance. In this demo, we'll](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=5.916) [work with exporting and importing data](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=8.17) [using CSV files. We start off in the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=10.878999999999998) [OVERVIEW page of the reviews-test instance](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=14.354500000000003) [within our spikey-developers project.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=16.433500000000006) [Remember, this is the project where the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=17.943333333333335) [developers in our organization run and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=20.7031) [test their prototypes. Click on the EXPORT](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=23.301699999999997) [link at the very top, and this will bring](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=25.6802) [up the options that you have to export the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=28.1084) [data that is present in this instance.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=31.106) [Using the web console, you can export the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=33.564) [data in the form of a. sql file or a CSV](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=35.99813333333331) [file. The. sql file will allow you to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=39.55015384615383) [configure databases and the tables within](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=42.3944615384615) [a database as well, whereas when you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=44.54416666666668) [export as CSV, this will only contain the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=47.056) [records within a particular table in a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=49.60466666666669) [database. We want to export our data as a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=51.895142857142865) [CSV file, and we want the CSV file to be](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=54.94357142857147)[stored in a Cloud Storage bucket. Within](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=57.95585714285712) [the spikey\_test bucket, we'll call the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=60.205666666666666) [reviews. csv. That's the name of the file.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=63.197666666666656) [Click on Select. The data that we export](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=65.89900000000003) [will be stored in this file. If you want](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=68.3891818181818) [to run your query on a particular table](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=71.20930769230769) [within a particular database, you can use](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=73.48746153846152) [the Database option to select this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=75.85241666666666) [database. I'm going to choose spikey\_db,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=78.00691666666664) [and I'm going to run select \* from](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=80.4035) [reviews. The records returned from this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=83.66349999999998) [query will populate the CSV file, the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=86.76814285714286) [reviews. csv. Click on the Export button,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=90.54414285714287) [and confirm that yes, indeed, you do want](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=93.00338461538465) [to perform the export, and go ahead and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=95.212) [click on EXPORT. Now depending on how much](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=97.81781818181823) [data was present in the reviews database,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=100.32083333333333) [this export could potentially take a long](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=102.457) [time. I just had three records. This](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=104.68037500000004) [export took just a minute or so to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=107.02040000000004) [complete. Now you can switch over to the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=109.71693333333342) [Cloud Storage bucket using the Navigation](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=112.13708333333335)[menu, choose the Browser option under](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=114.123125) [Storage, that will take you to your Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=117.11187500000001) [Storage buckets, and the spikey\_test](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=119.87449999999997) [bucket will contain the reviews. csv file.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=121.492) [You can click and download the CSV file](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=123.9501666666667) [and confirm that it has the records from](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=126.86399999999999) [your reviews table. Use the Navigation](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=129.95199999999997) [menu which you get by clicking on the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=132.01369230769228) [hamburger icon, and go to the SQL](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=134.42353846153833) [Instances page. Click on the reviews-test](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=137.1630833333333) [instance, and go ahead and connect to this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=139.72758333333326) [instance using the Cloud Shell. Switch](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=143.25308333333342) [over to the spikey\_db database once you've](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=145.8378888888889) [connected, and create a new table called](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=148.44111111111113)[reviews\_backup. You want the configuration](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=152.08471428571426) [of this table to be exactly like the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=153.69133333333332) [reviews table, so you'll say create table](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=155.814) [reviews\_backup like reviews. Once the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=159.37560000000005) [table has been created, run the describe](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=161.55781818181816) [command on reviews\_backup, and you'll see](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=163.85318181818178) [that this table looks exactly like the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=166.18192307692308)[reviews table. This table is completely](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=169.1095384615385) [empty though. The table schema has been](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=171.3325454545454) [copied over, but the table data has not.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=173.759) [Stay connected to this database, but hide](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=176.99715384615385) [the Cloud Shell, and then click on the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=179.71399999999997) [IMPORT link at the very top. This will](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=182.4859999999999) [allow you to import data either in the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=185.0974) [form of a. sql file or a. csv file. Both](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=187.22699999999998) [of the options are available here. I'm](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=190.3766363636363) [going to choose. csv, and I'm going to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=192.85564285714287) [browse for the bucket where the reviews.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=195.2287857142856) [csv file is available. This is under the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=197.55883333333333) [spikey\_test bucket, and the name of the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=200.94616666666667) [file is reviews. csv. Select this file](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=203.25300000000001) [from the Cloud Storage bucket. You go back](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=205.29700000000003) [to the Import screen. We want to import](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=207.9618) [this into the spikey\_db database,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=211.39922222222225) [specifically into the reviews\_backup](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=213.962) [table. This table has to exist when you](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=216.66359999999997) [try to import data into it; otherwise,](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=219.22900000000007) [this will be an error. Click on the Import](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=221.14763636363637) [button, and wait for the import to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=223.83536363636375) [complete. The import will complete](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=226.20454545454547) [successfully only if the columns within](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=227.93) [the reviews. csv file match the columns of](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=230.27800000000002) [our reviews\_backup data. They do, which is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=233.3021666666667) [why when you run select \* from](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=235.6687500000001) [reviews\_backup in our Cloud SQL connection](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=238.46699999999998) [you'll see that all of the records, all](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=241.14299999999997) [three of them, are available in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=244.6009999999999)[reviews\_backup. Creating the databases](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=247.18271428571413) [manually on your Cloud SQL instance and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=248.71509090909095) [then importing data using a CSV file is](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=251.2866363636365) [also a viable migration scenario from your on-premise database.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=9&mode=live&start=254.72175000000007)

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[And on this note, we come to the very end](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=10&mode=live&start=1.676) [of this module and to the end of this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=10&mode=live&start=3.797249999999999) [course on Cloud SQL on the GCP. In this](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=10&mode=live&start=6.235499999999999) [module, we primarily focused on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=10&mode=live&start=9.617600000000001) [replication and data management on Cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=10&mode=live&start=11.274100000000004) [SQL instances, specifically the](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=10&mode=live&start=13.858375) [high-availability configuration which we](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=10&mode=live&start=15.978875) [can set up using a failover replica. We](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=10&mode=live&start=17.791799999999995) [then saw how we could use Stackdriver](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=10&mode=live&start=21.086) [monitoring to configure replication lag](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=10&mode=live&start=23.192999999999987) [alerts. Cloud SQL allows you to configure](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=10&mode=live&start=25.121199999999998) [on-demand, as well as automatic backups of](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=10&mode=live&start=28.70939999999999) [your data. You can configure these](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=10&mode=live&start=31.390249999999995) [automatic backups to occur once every 24](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=10&mode=live&start=33.66) [hours at a time where traffic is slow. You](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=10&mode=live&start=36.36724999999999) [also saw how you could configure and](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=10&mode=live&start=39.656857142857156) [manage read replicas in order to improve](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=10&mode=live&start=42.16983333333334) [the read throughput of your SQL database.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=10&mode=live&start=44.52066666666667) [We then covered possible migration](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=10&mode=live&start=47.17889999999999) [scenarios to the Cloud SQL where we](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=10&mode=live&start=49.37039999999998) [created a SQL dump file and imported data](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=10&mode=live&start=51.9427142857143) [into a Cloud SQL instance using either a.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=10&mode=live&start=54.65585714285719) [sql or. csv file as the source. And on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=10&mode=live&start=57.986999999999995) [this note, it's time for us to say](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=10&mode=live&start=61.65772727272727) [goodbye. But before I leave, let's look at](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=10&mode=live&start=64.37263636363637) [what you can study further on Pluralsight](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=10&mode=live&start=66.85561538461536) [in order to further your understanding of](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=10&mode=live&start=68.94538461538455) [relational databases on the cloud. If](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=10&mode=live&start=71.51166666666664) [you're interested in AWS, Amazon's cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=10&mode=live&start=74.026125)[platform, Implementing SQL Server on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=10&mode=live&start=76.58287499999999) [Amazon RDS is a good course for you to](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=10&mode=live&start=78.36346153846152) [follow up with. Or if you're interested in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=10&mode=live&start=81.411) [Azure SQL databases, Azure SQL Database](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=10&mode=live&start=84.85172727272726) [for SQL Server DBA is a good course.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=10&mode=live&start=87.492) [Rather than focus on a specific cloud](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=10&mode=live&start=91.092) [platform, if you want to implement a](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=10&mode=live&start=93.34600000000002) [hybrid cloud scenario, SQL Server:](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=10&mode=live&start=95.8892) [Implementing a Hybrid Cloud Solution in](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=10&mode=live&start=98.2222) [Azure is a great course. Any of these make](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=10&mode=live&start=100.93075) [interesting follow-ups to this course on](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=10&mode=live&start=104.53299999999999) [Cloud SQL on the GCP. It's time for me to say goodbye now. Thank you for listening.](https://app.pluralsight.com/player?course=google-cloud-sql-creating-administering-instances&author=janani-ravi&name=0afdbece-b14d-4f36-80fd-89d174cfaf18&clip=10&mode=live&start=106.66449999999998)