

[Cloud SQL](https://cloud.google.com/sql/) (<https://cloud.google.com/sql/>)

[Documentation](https://cloud.google.com/sql/docs/) (<https://cloud.google.com/sql/docs/>)

[MySQL](https://cloud.google.com/sql/docs/mysql/) (<https://cloud.google.com/sql/docs/mysql/>) [Reference](#)

REST Resource: instances

Resource: DatabaseInstance

A Cloud SQL instance resource.

JSON representation

```
{
  "kind": string,
  "state": enum (SqlInstanceState (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#SqlInstanceState)),
  "databaseVersion": enum (SqlDatabaseVersion (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#SqlDatabaseVersion)),
  "settings": {
    object (Settings (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#Settings))
  },
  "etag": string,
  "failoverReplica": {
    "name": string,
    "available": boolean
  },
  "masterInstanceName": string,
  "replicaNames": [
    string
  ],
  "maxDiskSize": string,
  "currentDiskSize": string,
  "ipAddresses": [
    {
      object (IpMapping (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#IpMapping))
    }
  ],
  "serverCaCert": {
    object (SslCert (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/sslCerts#SslCertificate))
  },
  "instanceType": enum (SqlInstanceType (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#SqlInstanceType)),
  "project": string,
  "ipv6Address": string,
  "serviceAccountEmailAddress": string,
```

JSON representation

```

"onPremisesConfiguration": {
  object (OnPremisesConfiguration (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#OnPremisesConfiguration)),
},
"replicaConfiguration": {
  object (ReplicaConfiguration (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#ReplicaConfiguration)),
},
"backendType": enum (SqlBackendType (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#SqlBackendType)),
"selfLink": string,
"suspensionReason": [
  enum (SqlSuspensionReason (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#SqlSuspensionReason)),
],
"connectionName": string,
"name": string,
"region": string,
"gceZone": string,
"diskEncryptionConfiguration": {
  object (DiskEncryptionConfiguration (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#DiskEncryptionConfiguration)),
},
"diskEncryptionStatus": {
  object (DiskEncryptionStatus (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#DiskEncryptionStatus)),
},
"rootPassword": string,
"scheduledMaintenance": {
  object (SqlScheduledMaintenance (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#SqlScheduledMaintenance)),
}
}

```

Fields

kind	string
	This is always
	sql#instance

Fields

state

enum ([SqlInstanceState](https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#SqlInstanceState)

(<https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#SqlInstanceState>)
)

The current serving state of the Cloud SQL instance. This can be one of the following.

RUNNABLE

: The instance is running, or is ready to run when accessed.

SUSPENDED

: The instance is not available, for example due to problems with billing.

PENDING_CREATE

: The instance is being created.

MAINTENANCE

: The instance is down for maintenance.

FAILED

: The instance creation failed.

UNKNOWN_STATE

: The state of the instance is unknown.

Fields

databaseVersion	<p>enum (<u>SqlDatabaseVersion</u> (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/SqlDatabaseVersion))</p> <p>The database engine type and version. The</p> <p>databaseVersion</p> <p>field can not be changed after instance creation. MySQL Second Generation instances:</p> <p>MYSQL_5_7</p> <p>(default) or</p> <p>MYSQL_5_6</p> <p>. PostgreSQL instances:</p> <p>POSTGRES_9_6</p> <p>(default) or</p> <p>POSTGRES_11 Beta</p> <p>MySQL First Generation instances:</p> <p>MYSQL_5_6</p> <p>(default) or</p> <p>MYSQL_5_5</p>
settings	<p>object (<u>Settings</u> (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#Settings))</p> <p>The user settings.</p>

Fields	
etag	<p>string</p> <p>This field is deprecated and will be removed from a future version of the API. Use the settings.settingsVersion field instead.</p>
failoverReplica	<p>object</p> <p>The name and status of the failover replica. This property is applicable only to Second Generation instances.</p>
failoverReplica.name	<p>string</p> <p>The name of the failover replica. If specified at instance creation, a failover replica is created for the instance. The name doesn't include the project ID. This property is applicable only to Second Generation instances.</p>
failoverReplica.available	<p>boolean</p> <p>The availability status of the failover replica. A false status indicates that the failover replica is out of sync. The master can only failover to the failover replica when the status is true.</p>
masterInstanceName	<p>string</p> <p>The name of the instance which will act as master in the replication setup.</p>
replicaNames[]	<p>string</p> <p>The replicas of the instance.</p>
maxDiskSize	<p>string (Int64Value (https://developers.google.com/discovery/v1/type-format) format)</p> <p>The maximum disk size of the instance in bytes.</p>

Fields

currentDiskSize	<p>string (Int64Value (https://developers.google.com/discovery/v1/type-format) format)</p> <p>The current disk usage of the instance in bytes. This property has been deprecated. Users should use the "cloudsql.googleapis.com/database/disk/bytes_used" metric in Cloud Monitoring API instead. Please see this announcement (https://groups.google.com/d/msg/google-cloud-sql-announce/I_7-F9EBhT0/BtvFtdFeAgAJ) for details.</p>
ipAddresses[]	<p>object (IpMapping (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#IpMapping))</p> <p>The assigned IP addresses for the instance.</p>
serverCaCert	<p>object (SslCert (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/sslCerts#SslCert))</p> <p>SSL configuration.</p>
instanceType	<p>enum (SqlInstanceType (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#SqlInstanceType))</p> <p>The instance type. This can be one of the following.</p> <p>CLOUD_SQL_INSTANCE</p> <p>: A Cloud SQL instance that is not replicating from a master.</p> <p>ON_PREMISES_INSTANCE</p> <p>: An instance running on the customer's premises.</p> <p>READ_REPLICA_INSTANCE</p> <p>: A Cloud SQL instance configured as a read-replica.</p>

Fields	
project	string The project ID of the project containing the Cloud SQL instance. The Google apps domain is prefixed if applicable.
ipv6Address	string The IPv6 address assigned to the instance. This property is applicable only to First Generation instances.
serviceAccountEmailAddress	string The service account email address assigned to the instance. This property is applicable only to Second Generation instances.
onPremisesConfiguration	object (<u>OnPremisesConfiguration</u>) (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#OnPremisesConfiguration)) Configuration specific to on-premises instances.
replicaConfiguration	object (<u>ReplicaConfiguration</u>) (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#ReplicaConfiguration)) Configuration specific to failover replicas and read replicas.

Fields

backendType	<p>enum (SqlBackendType (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#SqlBackendType))</p> <p>FIRST_GEN</p> <p>: First Generation instance. MySQL only.</p> <p>SECOND_GEN</p> <p>: Second Generation instance or PostgreSQL instance.</p> <p>EXTERNAL</p> <p>: A database server that is not managed by Google. This property is read-only; use the</p> <p>tier</p> <p>property in the</p> <p>settings</p> <p>object to determine the database type and Second or First Generation.</p>
selfLink	<p>string</p> <p>The URI of this resource.</p>
suspensionReason[]	<p>enum (SqlSuspensionReason (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#SqlSuspensionReason))</p> <p>If the instance state is SUSPENDED, the reason for the suspension.</p>
connectionName	<p>string</p> <p>Connection name of the Cloud SQL instance used in connection strings.</p>
name	<p>string</p> <p>Name of the Cloud SQL instance. This does not include the project ID.</p>

Fields

region	<p>string</p> <p>The geographical region. Can be</p> <p>us-central</p> <p>(</p> <p>FIRST_GEN</p> <p>instances only),</p> <p>us-central1</p> <p>(</p> <p>SECOND_GEN</p> <p>instances only),</p> <p>asia-east1</p> <p>or</p> <p>eu-west1</p> <p>. Defaults to</p> <p>us-central</p> <p>or</p> <p>us-central1</p> <p>depending on the instance type (First Generation or Second Generation). The region can not be changed after instance creation.</p>
gceZone	<p>string</p> <p>The Compute Engine zone that the instance is currently serving from. This value could be different from the zone that was specified when the instance was created if the instance has failed over to its secondary zone.</p>

Fields	
diskEncryptionConfiguration	<p>object (DiskEncryptionConfiguration (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/DiskEncryptionConfiguration))</p> <p>Disk encryption configuration specific to an instance. Applies only to Second Generation instances.</p>
diskEncryptionStatus	<p>object (DiskEncryptionStatus (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/DiskEncryptionStatus))</p> <p>Disk encryption status specific to an instance. Applies only to Second Generation instances.</p>
rootPassword	<p>string</p> <p>Initial root password. Use only on creation.</p>
scheduledMaintenance	<p>object (SqlScheduledMaintenance (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#SqlScheduledMaintenance))</p> <p>The start time of any upcoming scheduled maintenance for this instance.</p>

SqlInstanceState

The current serving state of the database instance.

Enums	
SQL_INSTANCE_STATE_UNSPECIFIED	The state of the instance is unknown.
RUNNABLE	The instance is running.
SUSPENDED	The instance is currently offline, but it may run again in the future.
PENDING_DELETE	The instance is being deleted.

Enums

PENDING_CREATE	The instance is being created.
MAINTENANCE	The instance is down for maintenance.
FAILED	The instance failed to be created.

Settings

Database instance settings.

JSON representation

JSON representation

```
{
  "settingsVersion": string,
  "authorizedGaeApplications": [
    string
  ],
  "tier": string,
  "kind": string,
  "userLabels": {
    string: string,
    ...
  },
  "availabilityType": enum (SqlAvailabilityType (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#SqlAvailabilityType)),
  "pricingPlan": enum (SqlPricingPlan (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#SqlPricingPlan)),
  "replicationType": enum (SqlReplicationType (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#SqlReplicationType)),
  "storageAutoResizeLimit": string,
  "activationPolicy": enum (SqlActivationPolicy (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#SqlActivationPolicy)),
  "ipConfiguration": {
    object (IpConfiguration (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#IpConfiguration))
  },
  "storageAutoResize": boolean,
  "locationPreference": {
    object (LocationPreference (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#LocationPreference))
  },
  "databaseFlags": [
    {
      object (DatabaseFlags (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#DatabaseFlags))
    }
  ],
  "dataDiskType": enum (SqlDataDiskType (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#SqlDataDiskType)),
  "maintenanceWindow": {
    object (MaintenanceWindow (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#MaintenanceWindow))
  },
  "backupConfiguration": {
    object (BackupConfiguration (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#BackupConfiguration))
  },
  "databaseReplicationEnabled": boolean,
  "crashSafeReplicationEnabled": boolean,
  "dataDiskSizeGb": string
}
```

Fields

Fields	
settingsVersion	<p>string (Int64Value format) (https://developers.google.com/discovery/v1/type-format)</p> <p>The version of instance settings. This is a required field for update method to make sure concurrent updates are handled properly. During update, use the most recent settingsVersion value for this instance and do not try to update this value.</p>
authorizedGaeApplications[]	<p>string</p> <p>The App Engine app IDs that can access this instance. First Generation instances only.</p>
tier	<p>string</p> <p>The tier (or machine type) for this instance, for example</p> <p>db-n1-standard-1</p> <p>(MySQL instances) or</p> <p>db-custom-1-3840</p> <p>(PostgreSQL instances). For MySQL instances, this property determines whether the instance is First or Second Generation. For more information, see Instance Settings (https://cloud.google.com/sql/docs/mysql/instance-settings).</p>
kind	<p>string</p> <p>This is always</p> <p>sql#settings</p> <p>.</p>
userLabels	<p>map (key: string, value: string)</p> <p>User-provided labels, represented as a dictionary where each label is a single key value pair.</p> <p>An object containing a list of "key": value pairs. Example: { "name": "wrench", "mass": "1.3kg", "count": "3" }.</p>

Fields

availabilityType

enum ([SqlAvailabilityType](https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#SqlAvailabilityType)
(<https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#SqlAvailabilityType>)
)

Availability type (PostgreSQL instances only). Potential values:

ZONAL

: The instance serves data from only one zone. Outages in that zone affect data accessibility.

REGIONAL

: The instance can serve data from more than one zone in a region (it is highly available).

For more information, see [Overview of the High Availability Configuration](https://cloud.google.com/sql/docs/postgres/high-availability) (<https://cloud.google.com/sql/docs/postgres/high-availability>).

pricingPlan

enum ([SqlPricingPlan](https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#SqlPricingPlan)
(<https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#SqlPricingPlan>)
)

The pricing plan for this instance. This can be either

PER_USE

or

PACKAGE

. Only

PER_USE

is supported for Second Generation instances.

Fields

replicationType	<p>enum (SqlReplicationType (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#SqlReplicationType))</p> <p>The type of replication this instance uses. This can be either</p> <p>ASYNCHRONOUS</p> <p>or</p> <p>SYNCHRONOUS</p> <p>. This property is only applicable to First Generation instances.</p>
storageAutoResizeLimit	<p>string (Int64Value (https://developers.google.com/discovery/v1/type-format) format)</p> <p>The maximum size to which storage capacity can be automatically increased. The default value is 0, which specifies that there is no limit. Not used for First Generation instances.</p>

Fields

activationPolicy

enum ([SqlActivationPolicy](https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#SqlActivationPolicy)
(<https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#SqlActivationPolicy>)
)

The activation policy specifies when the instance is activated; it is applicable only when the instance state is

RUNNABLE

. Valid values:

ALWAYS

: The instance is on, and remains so even in the absence of connection requests.

NEVER

: The instance is off; it is not activated, even if a connection request arrives.

ON_DEMAND

: First Generation instances only. The instance responds to incoming requests, and turns itself off when not in use. Instances with

PER_USE

pricing turn off after 15 minutes of inactivity. Instances with

PER_PACKAGE

pricing turn off after 12 hours of inactivity.

ipConfiguration

object ([IpConfiguration](https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#IpConfiguration)
(<https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#IpConfiguration>)
)

The settings for IP Management. This allows to enable or disable the instance IP and manage which external networks can connect to the instance. The IPv4 address cannot be disabled for Second Generation instances.

Fields	
storageAutoResize	boolean Configuration to increase storage size automatically. The default value is true. Not used for First Generation instances.
locationPreference	object (<u>LocationPreference</u> (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#LocationPreference)) The location preference settings. This allows the instance to be located as near as possible to either an App Engine app or Compute Engine zone for better performance. App Engine co-location is only applicable to First Generation instances.
databaseFlags[]	object (<u>DatabaseFlags</u> (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#DatabaseFlags)) The database flags passed to the instance at startup.
dataDiskType	enum (<u>SqlDataDiskType</u> (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#SqlDataDiskType)) The type of data disk: PD_SSD (default) or PD_HDD . Not used for First Generation instances.

Fields	
maintenanceWindow	<p>object (MaintenanceWindow) (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#MaintenanceWindow))</p> <p>The maintenance window for this instance. This specifies when the instance can be restarted for maintenance purposes. Not used for First Generation instances.</p>
backupConfiguration	<p>object (BackupConfiguration) (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#BackupConfiguration))</p> <p>The daily backup configuration for the instance.</p>
databaseReplicationEnabled	<p>boolean</p> <p>Configuration specific to read replica instances. Indicates whether replication is enabled or not.</p>
crashSafeReplicationEnabled	<p>boolean</p> <p>Configuration specific to read replica instances. Indicates whether database flags for crash-safe replication are enabled. This property is only applicable to First Generation instances.</p>
dataDiskSizeGb	<p>string (Int64Value) format (https://developers.google.com/discovery/v1/type-format) format)</p> <p>The size of data disk, in GB. The data disk size minimum is 10GB. Not used for First Generation instances.</p>

SqlAvailabilityType

The availability type of the given Cloud SQL instance.

Enums	
SQL_AVAILABILITY_TYPE_UNSPECIFIED	This is an unknown Availability type.

Enums	
ZONAL	Zonal available instance.
REGIONAL	Regional available instance.

SqlPricingPlan

The pricing plan for this instance.

Enums	
SQL_PRICING_PLAN_UNSPECIFIED	This is an unknown pricing plan for this instance.
PACKAGE	The instance is billed at a monthly flat rate.
PER_USE	The instance is billed per usage.

SqlReplicationType

Enums	
SQL_REPLICATION_TYPE_UNSPECIFIED	This is an unknown replication type for a Cloud SQL instance.
SYNCHRONOUS	The synchronous replication mode for First Generation instances. It is the default value.
ASYNCHRONOUS	The asynchronous replication mode for First Generation instances. It provides a slight performance gain, but if an outage occurs while this option is set to asynchronous, you can lose up to a few seconds of updates to your data.

SqlActivationPolicy

Specifies when the instance should be activated.

Enums

SQL_ACTIVATION_POLICY_UNSPECIFIED	Unknown activation plan.
ALWAYS	The instance is always up and running.
NEVER	The instance should never spin up.
ON_DEMAND	The instance spins up upon receiving requests.

IpConfiguration

IP Management configuration.

JSON representation

```
{
  "ipv4Enabled": boolean,
  "privateNetwork": string,
  "requireSsl": boolean,
  "authorizedNetworks": [
    {
      object (AclEntry (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#
    )
  ]
}
```

Fields

ipv4Enabled	boolean	Whether the instance should be assigned an IP address or not.
privateNetwork	string	The resource link for the VPC network from which the Cloud SQL instance is accessible for private IP. For example, /projects/myProject/global/networks/default . This setting can be updated, but it cannot be removed after it is set.

Fields	
requireSsl	<p>boolean</p> <p>Whether SSL connections over IP should be enforced or not.</p>
authorizedNetworks[]	<p>object (AclEntry (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#AclEntry))</p> <p>The list of external networks that are allowed to connect to the instance using the IP. In CIDR notation (http://en.wikipedia.org/wiki/CIDR_notation#CIDR_notation), also known as 'slash' notation (e.g. 192.168.100.0/24).</p>

AclEntry

An entry for an Access Control list.

JSON representation	
<pre>{ "value": string, "expirationTime": string, "name": string, "kind": string }</pre>	

Fields	
value	<p>string</p> <p>The whitelisted value for the access control list.</p>

Fields

expirationTime	<p>string (Timestamp (https://developers.google.com/protocol-buffers/docs/reference/google.protobuf#google.protobuf.Timestamp) format)</p> <p>The time when this access control entry expires in RFC 3339 (https://tools.ietf.org/html/rfc3339) format, for example</p> <p>2012-11-15T16:19:00.094Z</p> <p>.</p> <p>A timestamp in RFC3339 UTC "Zulu" format, accurate to nanoseconds. Example: "2014-10-02T15:01:23.045123456Z".</p>
name	<p>string</p> <p>Optional. A label to identify this entry.</p>
kind	<p>string</p> <p>This is always</p> <p>sql#aclEntry</p> <p>.</p>

LocationPreference

Preferred location. This specifies where a Cloud SQL instance should preferably be located, either in a specific Compute Engine zone, or co-located with an App Engine application. Note that if the preferred location is not available, the instance will be located as close as possible within the region. Only one location may be specified.

JSON representation

```
{
  "followGaeApplication": string,
  "zone": string,
  "kind": string
}
```

Fields	
followGaeApplication	<p>string</p> <p>The App Engine application to follow, it must be in the same region as the Cloud SQL instance.</p>
zone	<p>string</p> <p>The preferred Compute Engine zone (e.g. us-central1-a, us-central1-b, etc.).</p>
kind	<p>string</p> <p>This is always</p> <p>sql#locationPreference</p> <p>.</p>

DatabaseFlags

Database flags for Cloud SQL instances.

JSON representation	
<pre>{ "name": string, "value": string }</pre>	
Fields	
name	<p>string</p> <p>The name of the flag. These flags are passed at instance startup, so include both server options and system variables for MySQL. Flags should be specified with underscores, not hyphens. For more information, see Configuring Database Flags (https://cloud.google.com/sql/docs/mysql/flags) in the Cloud SQL documentation.</p>


Fields

value	string
	The value of the flag. Booleans should be set to on for true and off for false. This field must be omitted if the flag doesn't take a value.

SqlDataDiskType

The type of disk that is used for a v2 instance to use.

Enums

SQL_DATA_DISK_TYPE_UNSPECIFIED	This is an unknown data disk type.
PD_SSD	An SSD data disk.
PD_HDD	An HDD data disk.
OBSOLETE_LOCAL_SSD	This field is deprecated and will be removed from a future version of the API.
	This item is deprecated!

MaintenanceWindow

Maintenance window. This specifies when a v2 Cloud SQL instance should preferably be restarted for system maintenance purposes.

JSON representation

JSON representation

```
{
  "hour": integer,
  "day": integer,
  "updateTrack": enum ( SqlUpdateTrack (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#SqlUpdateTrack) )
  "kind": string
}
```

Fields

hour	integer hour of day - 0 to 23.
day	integer day of week (1-7), starting on Monday.
updateTrack	enum (SqlUpdateTrack (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#SqlUpdateTrack)) Maintenance timing setting: canary (Earlier) or stable (Later). Learn more (https://cloud.google.com/sql/docs/mysql/instance-settings#maintenance-timing-2ndgen) .
kind	string This is always sql#maintenanceWindow .

SqlUpdateTrack

Enums

SQL_UPDATE_TRACK_UNSPECIFIED	This is an unknown maintenance timing preference.
canary	For instance update that requires a restart, this update track indicates your instance prefer to restart for new version early in maintenance window.
stable	For instance update that requires a restart, this update track indicates your instance prefer to let Cloud SQL choose the timing of restart (within its Maintenance window, if applicable).

BackupConfiguration

Database instance backup configuration.

JSON representation

```
{
  "startTime": string,
  "enabled": boolean,
  "kind": string,
  "binaryLogEnabled": boolean,
  "replicationLogArchivingEnabled": boolean,
  "location": string
}
```

Fields

startTime	string
	Start time for the daily backup configuration in UTC timezone in the 24 hour format - HH:MM

Fields	
enabled	boolean Whether this configuration is enabled.
kind	string This is always sql#backupConfiguration .
binaryLogEnabled	boolean Whether binary log is enabled. If backup configuration is disabled, binary log must be disabled as well.
replicationLogArchivingEnabled	boolean Reserved for future use.
location	string Location of the backup

IpMapping

Database instance IP Mapping.

JSON representation
<pre>{ "type": enum (SqlIpAddressType (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances), "ipAddress": string, "timeToRetire": string }</pre>
Fields

Fields	
type	<p>enum (SqlIpAddressType (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#SqlIpAddressType))</p> <p>The type of this IP address. A</p> <p>PRIMARY</p> <p>address is a public address that can accept incoming connections. A</p> <p>PRIVATE</p> <p>address is a private address that can accept incoming connections. An</p> <p>OUTGOING</p> <p>address is the source address of connections originating from the instance, if supported.</p>
ipAddress	<p>string</p> <p>The IP address assigned.</p>
timeToRetire	<p>string (Timestamp (https://developers.google.com/protocol-buffers/docs/reference/google.protobuf#google.protobuf.Timestamp) format)</p> <p>The due time for this IP to be retired in RFC 3339 (https://tools.ietf.org/html/rfc3339) format, for example</p> <p>2012-11-15T16:19:00.094Z</p> <p>. This field is only available when the IP is scheduled to be retired.</p> <p>A timestamp in RFC3339 UTC "Zulu" format, accurate to nanoseconds. Example: "2014-10-02T15:01:23.045123456Z".</p>

SqlIpAddressType

Enums

SQL_IP_ADDRESS_TYPE_UNSPECIFIED	This is an unknown IP address type.
PRIMARY	IP address the customer is supposed to connect to. Usually this is the load balancer's IP address
OUTGOING	Source IP address of the connection a read replica establishes to its external master. This IP address can be whitelisted by the customer in case it has a firewall that filters incoming connection to its on premises master.
PRIVATE	Private IP used when using private IPs and network peering.
MIGRATED_1ST_GEN	V1 IP of a migrated instance. We want the user to decommission this IP as soon as the migration is complete. Note: V1 instances with V1 ip addresses will be counted as PRIMARY.

SqlInstanceType

Enums

SQL_INSTANCE_TYPE_UNSPECIFIED	This is an unknown Cloud SQL instance type.
CLOUD_SQL_INSTANCE	A regular Cloud SQL instance.
ON_PREMISES_INSTANCE	An instance running on the customer's premises that is not managed by Cloud SQL.
READ_REPLICA_INSTANCE	A Cloud SQL instance acting as a read-replica.

OnPremisesConfiguration

On-premises instance configuration.

JSON representation

JSON representation

```
{
  "hostPort": string,
  "kind": string,
  "caCertificate": string,
  "clientCertificate": string,
  "clientKey": string
}
```

Fields

hostPort	string	The host and port of the on-premises instance in host:port format
kind	string	This is always sql#onPremisesConfiguration .
caCertificate	string	PEM representation of the trusted CA's x509 certificate.
clientCertificate	string	PEM representation of the slave's x509 certificate.
clientKey	string	PEM representation of the slave's private key. The corresponding public key is encoded in the client's certificate.

ReplicaConfiguration

Read-replica configuration for connecting to the master.

JSON representation

JSON representation

```
{
  "kind": string,
  "mysqlReplicaConfiguration": {
    object (MySQLReplicaConfiguration (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#MySQLReplicaConfiguration))
  },
  "failoverTarget": boolean
}
```

Fields

kind	string This is always sql#replicaConfiguration .
mysqlReplicaConfiguration	object (MySQLReplicaConfiguration (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances#MySQLReplicaConfiguration)) MySQL specific configuration when replicating from a MySQL on-premises master. Replication configuration information such as the username, password, certificates, and keys are not stored in the instance metadata. The configuration information is used only to set up the replication connection and is stored by MySQL in a file named master.info in the data directory.

Fields

failoverTarget

boolean

Specifies if the replica is the failover target. If the field is set to

true

the replica will be designated as a failover replica. In case the master instance fails, the replica instance will be promoted as the new master instance.

Only one replica can be specified as failover target, and the replica has to be in different zone with the master instance.

MySQLReplicaConfiguration

Read-replica configuration specific to MySQL databases.

JSON representation

```
{
  "dumpFilePath": string,
  "username": string,
  "password": string,
  "connectRetryInterval": integer,
  "masterHeartbeatPeriod": string,
  "caCertificate": string,
  "clientCertificate": string,
  "clientKey": string,
  "sslCipher": string,
  "verifyServerCertificate": boolean,
  "kind": string
}
```

Fields

Fields	
dumpFilePath	string Path to a SQL dump file in Google Cloud Storage from which the slave instance is to be created. The URI is in the form gs://bucketName/fileName. Compressed gzip files (.gz) are also supported. // Dumps should have the binlog co-ordinates from which replication should // begin. This can be accomplished by setting --master-data to 1 when using // mysqldump.
username	string The username for the replication connection.
password	string The password for the replication connection.
connectRetryInterval	integer Seconds to wait between connect retries. MySQL's default is 60 seconds.
masterHeartbeatPeriod	string (Int64Value (https://developers.google.com/discovery/v1/type-format) format) Interval in milliseconds between replication heartbeats.
caCertificate	string PEM representation of the trusted CA's x509 certificate.
clientCertificate	string PEM representation of the slave's x509 certificate.
clientKey	string PEM representation of the slave's private key. The corresponding public key is encoded in the client's certificate.
sslCipher	string A list of permissible ciphers to use for SSL encryption.

Fields

verifyServerCertificate	boolean
	Whether or not to check the master's Common Name value in the certificate that it sends during the SSL handshake.
kind	string
	This is always <code>sql#mysqlReplicaConfiguration</code> .

SqlBackendType

Enums

SQL_BACKEND_TYPE_UNSPECIFIED	This is an unknown backend type for instance.
FIRST_GEN	V1 speckle instance.
SECOND_GEN	V2 speckle instance.
EXTERNAL	On premises instance.

SqlSuspensionReason

The suspension reason of the database instance if the state is `SUSPENDED`.

Enums

SQL_SUSPENSION_REASON_UNSPECIFIED	This is an unknown suspension reason.
BILLING_ISSUE	The instance is suspended due to billing issues (e.g., GCP account issue)

Enums

LEGAL_ISSUE	The instance is suspended due to illegal content (e.g., child pornography, copyrighted material, etc.).
OPERATIONAL_ISSUE	The instance is causing operational issues (e.g., causing the database to crash).
KMS_KEY_ISSUE	The KMS key used by the instance is either revoked or denied access to


SqlScheduledMaintenance

Any scheduled maintenance for this instance.

JSON representation

```
{
  "startTime": string,
  "canDefer": boolean,
  "canReschedule": boolean
}
```

Fields

startTime	string (<u>Timestamp</u> (https://developers.google.com/protocol-buffers/docs/reference/google.protobuf#google.protobuf.Timestamp) format)
	The start time of any upcoming scheduled maintenance for this instance. A timestamp in RFC3339 UTC "Zulu" format, accurate to nanoseconds. Example: "2014-10-02T15:01:23.045123456Z".
canDefer (deprecated)	boolean
	This item is deprecated!
canReschedule	boolean If the scheduled maintenance can be rescheduled.

Methods	
<u>addServerCa</u> (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances/addServerCa)	Add a new trusted Certificate Authority (CA) version for the specified instance.
<u>clone</u> (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances/clone)	Creates a Cloud SQL instance as a clone of the source instance.
<u>delete</u> (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances/delete)	Deletes a Cloud SQL instance.
<u>demoteMaster</u> (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances/demoteMaster)	Demotes the stand-alone instance to be a Cloud SQL read replica for an external database server.
<u>export</u> (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances/export)	Exports data from a Cloud SQL instance to a Cloud Storage bucket as a SQL dump or CSV file.
<u>failover</u> (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances/failover)	Failover the instance to its failover replica instance.
<u>get</u> (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances/get)	Retrieves a resource containing information about a Cloud SQL instance.
<u>import</u> (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances/import)	Imports data into a Cloud SQL instance from a SQL dump or CSV file in Cloud Storage.
<u>insert</u> (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances/insert)	Creates a new Cloud SQL instance.
<u>list</u> (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances/list)	Lists instances under a given project.
<u>listServerCas</u> (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances/listServerCas)	Lists all of the trusted Certificate Authorities (CAs) for the specified instance.

Methods

<p><u>patch</u> (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances/patch)</p>	Updates settings of a Cloud SQL instance.
<p><u>promoteReplica</u> (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances/promoteReplica)</p>	Promotes the read replica instance to be a stand-alone Cloud SQL instance.
<p><u>resetSslConfig</u> (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances/resetSslConfig)</p>	Deletes all client certificates and generates a new server SSL certificate for the instance.
<p><u>restart</u> (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances/restart)</p>	Restarts a Cloud SQL instance.
<p><u>restoreBackup</u> (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances/restoreBackup)</p>	Restores a backup of a Cloud SQL instance.
<p><u>rotateServerCa</u> (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances/rotateServerCa)</p>	Rotates the server certificate to one signed by the Certificate Authority (CA) version previously added with the addServerCA method.
<p><u>startReplica</u> (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances/startReplica)</p>	Starts the replication in the read replica instance.
<p><u>stopReplica</u> (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances/stopReplica)</p>	Stops the replication in the read replica instance.
<p><u>truncateLog</u> (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances/truncateLog)</p>	Truncate MySQL general and slow query log tables
<p><u>update</u> (https://cloud.google.com/sql/docs/mysql/admin-api/rest/v1beta4/instances/update)</p>	Updates settings of a Cloud SQL instance.

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