



CumuloLogic SQL API Guide

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1. Entity: SQL Instance

1.1 Create SQL Instance

| Http Method | URL | Description |
|-------------|-------------------------|----------------------------|
| POST | /sql/api/v1/sqlinstance | Creates a new SQL instance |

Request Parameters:

| Attribute | Type | Description | Required |
|-----------------------------|---------|---|----------|
| <action> | String | Action name " create " | Yes |
| name | String | Unique instance name. | Yes |
| description | String | Description about instance | No |
| engineId | Integer | Unique ID of existing engine. Ex. "engine": {"id": "1"} | Yes |
| nodes | Integer | Number of instances to be provisioned | Yes |
| targetCloudId | Integer | Unique ID of created target cloud. Ex. "targetCloud": {"id": "1"} | Yes |
| instanceTypeId | Integer | Unique ID of instance type. Ex. "instanceType": {"id": "1"} If target cloud is a VM pool, this parameter is not mandatory. | Yes |
| availabilityZone | String | This parameter holds the value of the availability zone in which the instances is to be launched. If target cloud is a VM pool, then this parameter is not mandatory. | Yes |
| multiAZ | Integer | Mandatory when setting up Multi AZ redundant node Valid Values: multiAZ=0 for No OR multiAZ=1 for yes Supported only for Percona engine wherein (In case this flag is set, the parameters "multiAZAvailabilityZone" and "multiAZAvailabilityZoneName" are mandatory) | Yes |
| multiAZAvailabilityZone | String | Second availability zone in which the secondary node of the Percona Multi AZ instances is to be launched This is mandatory only if multiAZ value is 1. | No |
| multiAZAvailabilityZoneName | String | Second Availability zone name in which the secondary node of the Percona Multi AZ instances is to be launched | No |

| | | | |
|-----------------------|---------|--|-----|
| | | This Is mandatory only if multiAZ value is 1. | |
| multiAZInstanceType | Integer | Unique ID of instance type for secondary availability zone Ex. "instanceType": {"id": "1"} If target cloud is a VM pool, then this parameter is not mandatory. | No |
| serviceTag | String | Environment type Tag Preferred values: Testing, Development, Production, Staging. | Yes |
| serviceAccessGroup | Integer | Unique ID of existing access group. Usage: "serviceAccessGroup" : {"id": "123"} | No |
| shema | String | Database name. | Yes |
| masterUserName | String | Database user name. | Yes |
| masterUserPassword | String | Database User Password. | Yes |
| characterSet | String | Character set format Preferred value: UTF-8 | No |
| Port | Integer | Database default port 3036 | Yes |
| parameterGroup | Integer | Unique ID of existing parameter group Usage: " parameterGroup" : {"id": "123"} | No |
| storageSize | Integer | The size of the volume. Valid values: 10 to 1024GB If target cloud is a VM pool, then this parameter is not mandatory. | Yes |
| isBackupPreferenceSet | Integer | This flag needs to be set in case automated backup snapshots of the instance being launched need to be triggered Set value as 0 to disable backups Set vaue as 1 to enable backups (In case this flag is set, the parameters "backupRetentionPeriod" and "backupStartTime" are mandatory) | Yes |
| backupRetentionPeriod | Integer | This parameter defines the time period for which the backup snspshots are to be retained. Range: 1 to 50 days | No |
| backupStartTime | String | This parameter defines the Start time for triggering the automated backup snapshots cycle (Automated Backup snapshot frequency defined under Global Variables) Format: HH:MM | No |
| isDefault | Boolean | Set value as 'true' if you wish to add the defaults else set value as 'false' | Yes |
| isProvision | Boolean | Set value as 'true' if you wish to provision the instance else set value as 'false' if you wish to ad the instance but in the terminated state | Yes |

Example Request:

```
curl -i "http://localhost:8080/sql/api/v1/sqlinstance" -X POST -H "CL-AUTH-TOKEN:dd660ba2-7ce2-4e46-99c1-a3335f66b712" -d '{"create":{"sqlInstance":{"name":"Server1","description":"Server1","nodes":1,"schema":"demo","masterUserName":"demouser","masterUserPassword":"demouser","port":3306,"serviceTag":"Testing","characterSet":"UTF-8","engine":{"id":3},"targetCloud":{"id":1},"storageSize":20,"availabilityZone":"us-east1","instanceType":{"id":1},"isBackupPreferenceSet":1,"backupRetentionPeriod":4,"backupStartTime":"10:00","multiAZ":1,"multiAZInstanceType":{"id":1},"multiAZAvailabilityZoneName":"US-East1","multiAZAvailabilityZone":"us-east1"},"isDefault":false,"isProvision":true}}'
```

Example Response:

```
{'success':true,'errors':{},'response':{'instance':[{'port':3306,'autoMinorEnabled':null,'backupRetentionPeriod':4,'multiAZ':1,'backupStartTime':'10:00','isbackupPreferenceSet':1,'isInProgress':2,'noOfSnapshots':0,'instancetype':{'id':1,'instanceTypeId':'t1.micro','name':'XSmall'},'id':4,'schema':'demo','description':'Server1','masterPassword':'demouser','name':'Server1','availabilityZone':'us-east1','availabilityZoneName':'US-East1','createdDate':'2014-07-08 09:18:38','masterUserName':'demouser','accessGroupName':null,'serviceaccessgroup':{'id':5393,'name':'default_Percona-Server_831'},'targetcloud':{'id':1,'name':'Amazonian','iaasProviderId':1},'characterSet':'UTF-8','status':2,'engine':{'id':3,'engineName':'Percona-Server','version':'5.5'},'servicetag':1,'multiAvailabilityZone':'us-east1','isReplica':0,'environment':'Testing','createdBy':2,'nodes':2,'multiAZAvailabilityZoneName':'US-East1','storageSize':20,'multiAzInstanceType':{'id':1,'instanceTypeId':null,'name':null},'noOfReplicas':0}]}}
```

Response Code(s):

| | |
|--------------------------------|---|
| Normal Response Code(s): | 200 |
| Error Response Code(s): | computeFault (400, 500), serviceUnavailable (503), unauthorized (401), forbidden (403), badRequest (400), badMethod (405), overLimit (413), itemNotFound (404), serverCapacityUnavailable (503) |
| Custom Error Response Code(s): | queryFailed(1009), invalidParameterValue(1013), invalidAction(1001), entityAlreadyExist(1011), invalidRequest(1000) |

1.2 Update SQL Instance

| Http Method | URI | Description |
|-------------|------------------------------|--|
| PUT | /sql/api/v1/sqlinstance/<id> | Updates the existing SQL instance (Terminated) |

Request Parameters:

| Attribute | Type | Description | Required |
|-----------------------------|---------|--|----------|
| <id> | Integer | Unique database Instance ID | Yes |
| name | String | Unique instance name. | Yes |
| description | String | Description about instance | No |
| engineId | Integer | Unique ID of existing engine. Ex. "engine": {"id": "1"} | Yes |
| nodes | Integer | Number of instances to be provisioned | Yes |
| targetCloudId | Integer | Unique ID of created target cloud. Ex. "targetCloud": {"id": "1"} | Yes |
| instanceTypeId | Integer | Unique ID of instance type. Ex. "instanceType": {"id": "1"} If target cloud is a VM pool, then this parameter is not mandatory. | Yes |
| availabilityZone | String | This parameter holds the value of the availability zone in which the instances is to be launched. If target cloud is a VM pool, then this parameter is not mandatory. | Yes |
| multiAZ | Integer | Mandatory when setting up Multi AZ redundant node Valid Values: multiAZ=0 for No OR multiAZ=1 for yes Supported only for Percona engine wherein (In case this flag is set, the parameters "multiAZAvailabilityZone" and "multiAZAvailabilityZoneName" are mandatory) | Yes |
| multiAZAvailabilityZone | String | Second Availability zone in which the secondary node of the Percona Multi AZ instances is to be launched This is mandatory only if multiAZ value is 1. | No |
| multiAZAvailabilityZoneName | String | Second Availability zone name in which the secondary node of the Percona Multi | No |

| | | | |
|-----------------------|---------|--|-----|
| | | AZ instance is to be launched This is mandatory only if multiAZ value is 1. | |
| multiAZInstanceType | Integer | Unique ID of instance type for secondary availability zone Ex. "instanceType": {"id": "1"} If target cloud is a VM pool, then this parameter is not mandatory. | No |
| serviceTag | String | Environment type Tag Preferred values: Testing, Development, Production, Staging. | Yes |
| serviceAccessGroup | Integer | Unique ID of existing access group. Usage: "serviceAccessGroup" : {"id": "123"} | No |
| shema | String | Database name. | Yes |
| masterUserName | String | Database user name. | Yes |
| masterUserPassword | String | Database User Password. | Yes |
| characterSet | String | Character set format Preferred value: UTF-8 | No |
| Port | Integer | Database default port 3036 | Yes |
| parameterGroup | Integer | Unique ID of existing parameter group Usage: " parameterGroup" : {"id": "123"} | No |
| storageSize | Integer | The size of the volume. Valid values: 10 to 1024GB If target cloud is a VM pool, then this parameter is not mandatory. | Yes |
| isBackupPreferenceSet | Integer | This flag needs to be set in case automated backup snapshots of the instance being launched need to be triggered Set value as 0 to disable backups Set vaue as 1 to enable backups (In case this flag is set, the parameters "backupRetentionPeriod" and "backupStartTime" are mandatory) | Yes |
| backupRetentionPeriod | Integer | This parameter defines the time period for which the backup snspshots are to be retained. Range: 1 to 50 days | No |
| backupStartTime | String | This parameter defines the Start time for triggering the automated backup snapshots cycle (Automated Backup snapshot frequency defined under Global Variables) Format: HH:MM | No |

Example Request:

```
curl -i "http://localhost:8080/sql/api/v1/sqlinstance/57" -X PUT -H "CL-AUTH-TOKEN:aac0f4f0-2337-4740-a6c9-184665b3dbf2" -d{"name":"Server2","description":"Server2","nodes":1,"schema":"demo","masterUserName":"demouser","masterUserPassword":"demouser","port":3306,"serviceTag":"Testing","characterSet":"UTF-8","engine":{"id":3},"targetCloud":{"id":1},"storageSize":10,"availabilityZone":"us-east1","instanceType":{"id":1},"serviceAccessGroup":{"id":5393},"isBackupPreferenceSet":1,"backupRetentionPeriod":3,"backupStartTime":"10:05","multiAZ":1,"multiAZInstanceType":{"id":1},"multiAZAvailabilityZoneName":"US-East1","multiAZAvailabilityZone":"us-east1"}
```

Example Response:

```
{"success":true,"errors":{},"response":{}}
```

Response Code(s):

| | |
|--------------------------------|---|
| Normal Response Code(s): | 200 |
| Error Response Code(s): | computeFault (400, 500), serviceUnavailable (503), unauthorized (401), forbidden (403), badRequest (400), badMethod (405), overLimit (413), itemNotFound (404), serverCapacityUnavailable (503) |
| Custom Error Response Code(s): | queryFailed(1009), invalidParameterValue(1013), entityDoesNotExist(1012), invalidAction(1001), invalidRequest(1000) |

1.3 Modify SQL Instance

| Http Method | URI | Description |
|-------------|-------------------------|--|
| POST | /sql/api/v1/sqlinstance | Modifies the existing SQL instance (Provisioned) |

Request Parameters:

| Attribute | Type | Description | Required |
|-----------------------|---------|---|----------|
| <action> | String | Action name "modify" | Yes |
| ID | Integer | Unique ID of the existing instance | Yes |
| parameterGroup | Integer | Unique ID of existing parameter group Usage: " parameterGroup" : {"id": "123"} | No |
| isBackupPreferenceSet | Integer | This flag needs to be set in case automated backup snapshots of the instance being launched need to be triggered. Set value as 0 to disable backups Set vaue as 1 to enable backups | Yes |

| | | | |
|-----------------------|---------|---|-----|
| | | (In case this flag is set, the parameters "backupRetentionPeriod" and "backupStartTime" are mandatory) | |
| backupRetentionPeriod | Integer | This parameter defines the time period for which the backup snapshots are to be retained. Range: 1 to 50 days | No |
| backupStartTime | String | This parameter defines the start time for triggering the automated backup snapshots cycle (Automated Backup snapshot frequency defined under Global Variables) Format: HH:MM | No |
| applyNow | Boolean | Apply changes to instance. Values: true – If changes are to be applied immediately false – if changes are to be saved but not applied immediately and be applied on service restart | Yes |

Example Request:

```
curl -i "http://localhost:8080/sql/api/v1/sqlinstance" -X POST -H "CL-AUTH-TOKEN:339b155a-31ba-43fd-887a-e5b47b33df34" -d'
{"modify":{"sqlInstance":{"id":2,"parameterGroup":{"id":3},"isBackupPreferenceSet":1,"backupRetentionPeriod":5,"backupStartTime":"12:10"},"applyNow":true}}
```

Example Response:

```
{"success":true,"errors":{},"response":{"instance":[{"port":3306,"autoMinorEnabled":0,"backupRetentionPeriod":5,"multiAZ":1,"backupStartTime":"12:10","isBackupPreferenceSet":1,"isInProgress":2,"noOfSnapshots":null,"instancetype":{"id":1,"instanceTypeId":"t1.micro","name":"XSmall"},"id":2,"schema":"demo","description":"PERCONAMULTIAZ","masterPassword":"demouser","name":"RESTOREDSNAP1","availabilityZone":"us-east1","availabilityZoneName":null,"createdDate":"2014-07-08 07:05:08","parametergroup":{"id":3,"parameterGroupFamilyName":"Percona-Server","name":"Percona_PG","parameterGroupFamilyId":null,"masterUserName":"demouser","accessGroupName":"cumu_7023_default_Percona-Server_1265","serviceaccessgroup":{"id":5392,"name":"default_Percona-Server_1265"},"targetcloud":{"id":1,"name":"Amazonian","iaasProviderId":1},"characterSet":"UTF-8","status":1,"engine":{"id":3,"engineName":"Percona-Server","version":"5.5"},"servicetag":1,"multiAvailabilityZone":"us-east1","isReplica":0,"environment":"Testing","createdBy":2,"nodes":2,"multiAZAvailabilityZoneName":null,"storageSize":20,"multiAzInstanceType":{"id":1,"instanceTypeId":"t1.micro","name":"XSmall"},"noOfReplicas":null}]}}
```

Response Code(s):

| | |
|--------------------------------|---|
| Normal Response Code(s): | 200 |
| Error Response Code(s): | computeFault (400, 500), serviceUnavailable (503), unauthorized (401), forbidden (403), badRequest (400), badMethod (405), overLimit (413), itemNotFound (404), serverCapacityUnavailable (503) |
| Custom Error Response Code(s): | queryFailed(1009), invalidParameterValue(1013), invalidAction(1001), invalidRequest(1000) |

1.4 Delete SQL Instance

| Http Method | URL | Description |
|-------------|------------------------------|-----------------------------------|
| DELETE | /sql/api/v1/sqlinstance/<id> | Deletes the existing SQL instance |

Example Request:

```
curl -i "http://localhost:8080/sql/api/v1/sqlinstance/56" -X DELETE -H "CL-AUTH-TOKEN:67bcb185-dd7a-4007-b659-004e3da63ae3"
```

Response Format: JSON

```
{"success":true,"errors":{},"response":{}}
```

Response Code(s):

| | |
|--------------------------------|---|
| Normal Response Code(s): | 200 |
| Error Response Code(s): | computeFault (400, 500), serviceUnavailable (503), unauthorized (401), forbidden (403), badRequest (400), badMethod (405), overLimit (413), itemNotFound (404), serverCapacityUnavailable (503) |
| Custom Error Response Code(s): | queryFailed(1009), invalidParameterValue(1013), invalidAction(1001), invalidRequest(1000) |

1.5 Get All SQL Instances

| Http Method | URI | Description |
|-------------|--------------------------|--------------------------|
| GET | /sql/api/v1/sqlinstance/ | To get all SQL instances |

Example Request:

```
curl -i "http://localhost:8080/sql/api/v1/sqlinstance" -X GET -H "CL-AUTH-TOKEN:67bcb185-dd7a-4007-b659-004e3da63ae3"
```

Example Response:

```
{
  "success": true,
  "errors": {},
  "response": {
    "instance": [
      {
        "port": 3306,
        "autoMinorEnabled": null,
        "backupRetentionPeriod": null,
        "multiAZ": 1,
        "backupStartTime": null,
        "isbackupPreferenceSet": 0,
        "isInProgress": 2,
        "noOfSnapshots": 1,
        "instancetype": {
          "id": 1,
          "instanceTypeId": "t1.micro",
          "name": "XSmall"
        },
        "id": 1,
        "schema": "demo",
        "description": "PERCONAMULTIAZ",
        "masterPassword": "demouser",
        "name": "PERCONAMULTIAZ",
        "availabilityZone": "us-east1",
        "availabilityZoneName": null,
        "createdDate": "2014-07-08 06:58:40",
        "masterUserName": "demouser",
        "serviceaccessgroup": {
          "id": 5391,
          "name": "default_Percona-Server_5385"
        },
        "targetcloud": {
          "id": 1,
          "name": "Amazonian",
          "iaasProviderId": 1
        },
        "characterSet": "UTF-8",
        "engine": {
          "id": 3,
          "engineName": "Percona-Server",
          "version": "5.5"
        },
        "status": 1,
        "servicetag": 1,
        "multiAvailabilityZone": "us-east1",
        "isReplica": 0,
        "environment": "Testing",
        "createdBy": 2,
        "nodes": 2,
        "multiAZAvailabilityZoneName": null,
        "storageSize": 20,
        "multiAzInstanceType": {
          "id": 1,
          "instanceTypeId": "t1.micro",
          "name": "XSmall"
        },
        "noOfReplicas": 0,
        "port": 3306,
        "autoMinorEnabled": 0,
        "backupRetentionPeriod": 1,
        "multiAZ": 1,
        "backupStartTime": null,
        "isbackupPreferenceSet": null,
        "isInProgress": 2,
        "noOfSnapshots": 0,
        "instancetype": {
          "id": 1,
          "instanceTypeId": "t1.micro",
          "name": "XSmall"
        },
        "id": 2,
        "schema": "demo",
        "description": "PERCONAMULTIAZ",
        "masterPassword": "demouser",
        "name": "RESTORED SNAP1",
        "availabilityZone": "us-east1",
        "availabilityZoneName": null,
        "createdDate": "2014-07-08 07:05:08",
        "masterUserName": "demouser",
        "serviceaccessgroup": {
          "id": 5392,
          "name": "default_Percona-Server_1265"
        },
        "targetcloud": {
          "id": 1,
          "name": "Amazonian",
          "iaasProviderId": 1
        },
        "characterSet": "UTF-8",
        "engine": {
          "id": 3,
          "engineName": "Percona-Server",
          "version": "5.5"
        },
        "status": 1,
        "servicetag": 1,
        "multiAvailabilityZone": "us-east1",
        "isReplica": 0,
        "environment": "Testing",
        "createdBy": 2,
        "nodes": 2,
        "multiAZAvailabilityZoneName": null,
        "storageSize": 20,
        "multiAzInstanceType": {
          "id": 1,
          "instanceTypeId": "t1.micro",
          "name": "XSmall"
        },
        "noOfReplicas": 0
      }
    ]
  }
}
```

Response Code(s):

| | |
|--------------------------------|--|
| Normal Response Code(s): | 400 |
| Error Response Code(s): | computeFault (400, 500), serviceUnavailable (503), unauthorized (401), forbidden (403), badRequest (400), badMethod (405), overLimit (413) |
| Custom Error Response Code(s): | queryFailed(1009), entityDoesNotExist(1012), invalidRequest(1000) |

1.6 Get SQL Instance by ID

| Http Method | URI | Description |
|-------------|---------------------------------|---------------------------|
| GET | /sql/api/v1/sqlinstance?id=<id> | To get SQL instance by ID |

Query Parameters:

| Filter Name | Type | Description | Required |
|-------------|---------|----------------------------|----------|
| Id | Integer | Unique ID of the instance. | Yes |

Example Request:

```
curl -i "http://localhost:8080/sql/api/v1/sqlinstance?id=57" -X GET -H "CL-AUTH-TOKEN:67bcb185-dd7a-4007-b659-004e3da63ae3"
```

Example Response:

```
{
  "success": true,
  "errors": {},
  "response": {
    "instance": [
      {
        "port": 3306,
        "autoMinorEnabled": null,
        "backupRetentionPeriod": null,
        "multiAZ": 1,
        "backupStartTime": null,
        "isbackupPreferenceSet": 0,
        "isInProgress": 2,
        "noOfSnapshots": 1,
        "instancetype": {
          "id": 1,
          "instanceTypeId": "t1.micro",
          "name": "XSmall"
        },
        "id": 1,
        "schema": "demo",
        "description": "PERCONAMULTIAZ",
        "masterPassword": "demouser",
        "name": "PERCONAMULTIAZ",
        "availabilityZone": "us-east1",
        "availabilityZoneName": "US-East1",
        "createdDate": "2014-07-08 06:58:40",
        "masterUserName": "demouser",
        "serviceaccessgroup": {
          "id": 5391,
          "name": "default_Percona-Server_5385"
        },
        "targetcloud": {
          "id": 1,
          "name": "Amazonian",
          "iaasProviderId": 1
        },
        "characterSet": "UTF-8",
        "engine": {
          "id": 3,
          "engineName": "Percona-Server",
          "version": "5.5"
        },
        "status": 1,
        "servicetag": 1,
        "multiAvailabilityZone": "us-east1",
        "isReplica": 0,
        "environment": "Testing",
        "createdBy": 2,
        "nodes": 2,
        "multiAZAvailabilityZoneName": "US-East1",
        "storageSize": 20,
        "multiAzInstanceType": {
          "id": 1,
          "instanceTypeId": "t1.micro",
          "name": "XSmall"
        },
        "noOfReplicas": 0
      }
    ]
  },
  "00:26:11",
  "masterUserName": "demo",
  "serviceaccessgroup": {
    "id": 4173,
    "name": "default_MySQL_911"
  },
  "targetcloud": {
    "id": 33,
    "name": "falcon_hpcs"
  },
  "engine": {
    "id": 1,
    "engineName": "MySQL",
    "version": "5.5.27"
  },
  "status": 2,
  "charset": null,
  "servicetag": 1,
  "isReplica": null,
  "databaseName": null,
  "environment": "Testing",
  "createdBy": 43,
  "nodes": 1,
  "storageSize": 10,
  "isInProgress": 2,
  "noOfReplicas": 0
}
```

Response Code(s):

| | |
|--------------------------------|--|
| Normal Response Code(s): | 200 |
| Error Response Code(s): | computeFault (400, 500), serviceUnavailable (503), unauthorized (401), forbidden (403), badRequest (400), badMethod (405), overLimit (413) |
| Custom Error Response Code(s): | queryFailed(1009), entityDoesNotExist(1012), invalidRequest(1000) |

1.7 Get Default SQL Instance

| Http Method | URL | Description |
|-------------|--|-----------------------------|
| GET | /sql/api/v1/sqlinstance?userId=1&default=1 | To get default SQL instance |

Query Parameters:

| Filter Name | Type | Description | Required |
|-------------|---------|------------------------|----------|
| user ID | Integer | Unique id of the user. | Yes |
| Default | Integer | Default value is 1. | Yes |

Example Request:

```
curl -i "http://localhost:8080/sql/api/v1/sqlinstance?userId=2&default=1" -X GET -H "CL-AUTH-TOKEN:dd660ba2-7ce2-4e46-99c1-a3335f66b712"
```

Example Response:

```
{
  "success": true,
  "errors": {},
  "response": {
    "instance": {
      "port": 3306,
      "autoMinorEnabled": null,
      "backupRetentionPeriod": null,
      "multiAZ": 0,
      "backupStartTime": null,
      "isbackupPreferenceSet": null,
      "isInProgress": 2,
      "noOfSnapshots": 0,
      "instancetype": {
        "id": 1,
        "instanceTypeId": "t1.micro",
        "name": "XSmall"
      },
      "id": 3,
      "schema": "demo",
      "description": "description",
      "masterPassword": "demouser",
      "name": "defaultInstance",
      "availabilityZone": "us-east1",
      "availabilityZoneName": "US-East1",
      "createdDate": "2014-07-08 08:40:32",
      "masterUserName": "demouser",
      "targetcloud": {
        "id": 1,
        "name": "Amazonian",
        "iaasProviderId": 1,
        "characterSet": "UTF-8",
        "engine": {
          "id": 1,
          "engineName": "MySQL",
          "version": "5.5.27"
        },
        "status": 2,
        "servicetag": 1,
        "isReplica": 0,
        "environment": "Testing",
        "createdBy": 2,
        "nodes": 1,
        "storageSize": null,
        "noOfReplicas": 0
      }
    }
  }
}
```

Response Code(s):

| | |
|--------------------------------|--|
| Normal Response Code(s): | 200 |
| Error Response Code(s): | computeFault (400, 500), serviceUnavailable (503), unauthorized (401), forbidden (403), badRequest (400), badMethod (405), overLimit (413) |
| Custom Error Response Code(s): | queryFailed(1009), entityDoesNotExist(1012), invalidRequest(1000) |

1.8 Provision SQL Instance

| Http Method | URL | Description |
|-------------|-------------------------|---|
| POST | /sql/api/v1/sqlinstance | Starts re-provisioning of an terminated SQL instance. |

Request Parameters:

| Attribute | Type | Description | Required |
|-----------|---------|---|----------|
| <action> | String | Action name " provision " | Yes |
| Id | Integer | Unique Id of the existing instance (Terminated) | Yes |

Example Request:

```
curl -i "http://54.196.106.131:8080/sql/api/v1/sqlinstance" -X POST -H "CL-AUTH-TOKEN:f01cdd12-4cf6-4348-8c7c-4cda70f48d00" -d '{"provision": {"sqlInstance": {"id": "5"}}}'
```

Example Response:

```
{ "success": true, "errors": {}, "response": { "instance": [] } }
```

Response Code(s):

| | |
|--------------------------------|---|
| Normal Response Code(s): | 200 |
| Error Response Code(s): | computeFault (400, 500), serviceUnavailable (503), unauthorized (401), forbidden (403), badRequest (400), badMethod (405), overLimit (413), itemNotFound (404), serverCapacityUnavailable (503) |
| Custom Error Response Code(s): | queryFailed(1009), invalidParameterValue(1013), invalidAction(1001), invalidRequest(1000) |

1.9 Terminate SQL Instance

| Http Method | URI | Description |
|-------------|-------------------------|---|
| POST | /sql/api/v1/sqlinstance | Terminate the existing SQL instance (provisioned) |

Request Parameters:

| Attribute | Type | Description | Required |
|-----------|---------|------------------------------------|----------|
| <action> | String | Action name " terminate " | Yes |
| Id | Integer | Unique Id of the existing instance | Yes |

Example Request:

```
curl -i "http://localhost:8080/sql/api/v1/sqlinstance" -X POST -H "CL-AUTH-TOKEN:0185f8cc-aa30-4ef7-a81d-43fd512282d6" -d '{"terminate": {"sqlInstance": {"id": "6"}}}'
```

Example Response

```
{ "success": true, "errors": {}, "response": {} }
```

Response Code(s):

| | |
|--------------------------------|---|
| Normal Response Code(s): | 200 |
| Error Response Code(s): | computeFault (400, 500), serviceUnavailable (503), unauthorized (401), forbidden (403), badRequest (400), badMethod (405), overLimit (413), itemNotFound (404), serverCapacityUnavailable (503) |
| Custom Error Response Code(s): | queryFailed(1009), invalidParameterValue(1013), invalidAction(1001), invalidRequest(1000) |

1.10 Restart SQL Instance

| Http Method | URL | Description |
|-------------|-------------------------|---|
| POST | /sql/api/v1/sqlinstance | Restarts services on the existing SQL instance. |

Request Parameters:

| Attribute | Type | Description | Required |
|-----------|---------|------------------------------------|----------|
| <action> | String | Action name "restart" | Yes |
| Id | Integer | Unique Id of the existing instance | Yes |

Example Request:

```
curl -i "http://localhost:8080/sql/api/v1/sqlinstance" -X POST -H "CL-AUTH-TOKEN:0185f8cc-aa30-4ef7-a81d-43fd512282d6" -d '{"restart": {"sqlInstance": {"id": "20"}}}'
```

Example Response:

```
{ "success": true, "errors": {}, "response": {} }
```

Response Code(s):

| | |
|--------------------------------|---|
| Normal Response Code(s): | 200 |
| Error Response Code(s): | computeFault (400, 500), serviceUnavailable (503), unauthorized (401), forbidden (403), badRequest (400), badMethod (405), overLimit (413), itemNotFound (404), serverCapacityUnavailable (503) |
| Custom Error Response Code(s): | queryFailed(1009), invalidParameterValue(1013), invalidAction(1001), invalidRequest(1000) |

1.11 Cancel SQL Instance

| Http Method | URI | Description |
|-------------|-------------------------|---|
| POST | /sql/api/v1/sqlinstance | Cancel provisioning of the existing SQL instance. |

Request Parameters:

| Attribute | Type | Description | Required |
|-----------|---------|------------------------------------|----------|
| <action> | String | Action name "cancel" | Yes |
| Id | Integer | Unique Id of the existing instance | Yes |

Example Request:

```
curl -i "http://localhost:8080/sql/api/v1/sqlinstance" -X POST -H "CL-AUTH-TOKEN:0185f8cc-aa30-4ef7-a81d-43fd512282d6" -d '{"cancel": {"sqlInstance": {"id": "20"}}}'
```

Example Response:

```
{ "success": true, "errors": {}, "response": {} }
```

Response Code(s):

| | |
|--------------------------------|---|
| Normal Response Code(s): | 200 |
| Error Response Code(s): | computeFault (400, 500), serviceUnavailable (503), unauthorized (401), forbidden (403), badRequest (400), badMethod (405), overLimit (413), itemNotFound (404), serverCapacityUnavailable (503) |
| Custom Error Response Code(s): | queryFailed(1009), invalidParameterValue(1013), invalidAction(1001), invalidRequest(1000) |

1.12 Create Read Replica

| Http Method | URI | Description |
|-------------|-------------------------|--|
| POST | /sql/api/v1/sqlinstance | Creates and starts provisioning of a read replica. |

Request Parameters:

| Attribute | Type | Description | Required |
|-----------|---------|---|----------|
| <action> | String | Action name "provisionReadReplica" | Yes |
| Id | Integer | Unique Id of the existing database instance | Yes |
| name | String | Name of the Read Replica to be created | Yes |

| | | | |
|------------------|---------|--|-----|
| availabilityZone | String | Availability Zone in which instance is to be provisioned | |
| instanceType | Array | Instance type id. Ex. "instanceType": {"id": "1"} | Yes |
| storageSize | Integer | Size of Volume. Range: 10 to 1024GB | Yes |

Example Request:

```
curl -i "http://localhost:8080/sql/api/v1/sqlinstance" -X POST -H "CL-AUTH-TOKEN:f01cdd12-4cf6-4348-8c7c-4cda70f48d00" -d'{"provisionReadReplica":{"sqlInstance":{"name":"REPLICA1","id":"49"},"availabilityZone": "us-east1","storageSize":10,"instanceType":{"id": "5"}}}'
```

Example Response:

```
{"success":true,"errors":{},"response":{"instance":{"port":3306,"autoMinorEnabled":null,"backupRetentionPeriod":null,"multiAZ":0,"backupStartTime":null,"isBackupPreferenceSet":0,"isInProgress":2,"noOfSnapshots":0,"instancetype":{"id":5,"instanceTypeId":"t1.micro","name":"XSmall"},"id":64,"schema":"demo","description":"VM1","masterPassword":"demouser","name":"REPLICA1","availabilityZone":"us-east1","availabilityZoneName":"US-East1","createdDate":"2014-06-25 15:15:01","masterUserName":"demouser","accessGroupName":"cumu_94_default_MySQL_144","serviceaccessgroup":{"id":4909,"name":"default_MySQL_144"},"targetcloud":{"id":2,"name":"AmazonEC2"},"iaasProviderId":1,"characterSet":"UTF-8","status":1,"engine":{"id":1,"engineName":"MySQL","version":"5.5.27"},"servicetag":1,"isReplica":1,"environment":"Testing","createdBy":2,"nodes":1,"storageSize":10,"noOfReplicas":0}}}
```

Response Code(s):

| | |
|--------------------------------|---|
| Normal Response Code(s): | 200 |
| Error Response Code(s): | computeFault (400, 500), serviceUnavailable (503), unauthorized (401), forbidden (403), badRequest (400), badMethod (405), overLimit (413), itemNotFound (404), serverCapacityUnavailable (503) |
| Custom Error Response Code(s): | queryFailed(1009), invalidParameterValue(1013), invalidAction(1001), invalidRequest(1000) |

1.13 Promote Read Replica

| Http Method | URI | Description |
|-------------|-------------------------|--|
| POST | /sql/api/v1/sqlinstance | Promotes the existing read replica as a Main/Master node |

Request Parameters:

| Attribute | Type | Description | Required |
|-----------|---------|------------------------------------|----------|
| <action> | String | Action name "promote" | Yes |
| Id | Integer | Unique Id of the existing instance | Yes |

Example Request:

```
curl -i "http://localhost:8080/sql/api/v1/sqlinstance" -X POST -H "CL-AUTH-TOKEN:0185f8cc-aa30-4ef7-a81d-43fd512282d6" -d '{"promoteReadReplica": {"sqlInstance": {"id": "20"}}}'
```

Example Response:

```
{ "success": true, "errors": {}, "response": {} }
```

Response Code(s):

| | |
|--------------------------------|---|
| Normal Response Code(s): | 200 |
| Error Response Code(s): | computeFault (400, 500), serviceUnavailable (503), unauthorized (401), forbidden (403), badRequest (400), badMethod (405), overLimit (413), itemNotFound (404), serverCapacityUnavailable (503) |
| Custom Error Response Code(s): | queryFailed(1009), invalidParameterValue(1013), invalidAction(1001), invalidRequest(1000) |

1.14 Get Read Replica By User ID

| Http Method | URI | Description |
|-------------|---|-----------------------------------|
| GET | /sql/api/v1/sqlinstance?userId=<userid>&isReplica=1 | Gets replica instances by user ID |

Example Request:

```
curl -i "http://localhost:8080/sql/api/v1/sqlinstance?userId=2&isReplica=1" -X GET -H "CL-AUTH-TOKEN:f2e04895-af0d-4104-aebd-b394b12affcb"
```

Example Response:

```
{ "success": true, "errors": {}, "response": { "instance": [ { "accessGroupName": null, "port": 3306, "multiaz": null, "autoMinorEnabled": null, "status": 2, "backupRetentionPeriod": null, "backupStartTime": null, "charset": null, "engineName": "MySQL-5.5.27", "targetCloudName": "testtargetcloud123", "servicetag": 1, "instanceType": "xsmall", "id": 162, "databaseName": null, "isReplica": 1, "environment": "Testing", "createdBy": 42, "description": null, "nodes": 1, "name": "abc", "masterPassword": "cumulogic", "storageSize": null, "isInProgress": 2, "createdDate": "2014-04-15 11:41:11", "masterUserName": "cumulogic" }, { "accessGroupName": null, "port": 3306, "multiaz": null, "autoMinorEnabled": null, "status": 2, "backupRetentionPeriod": null, "backupStartTime": null, "charset": null, "engineName": "MySQL-
```

```
5.5.27",targetCloudName":"sttargetcloud123", "servicetag": 1,"instanceType": "xsmall", "id":
163,"databaseName": null, "isReplica": 1,"environment": "Testing","createdBy": 42,"description":
null,"nodes": 1, "name": "765sds","masterPassword": "cumulogic", "storageSize": null, "isInProgress":
"createdDate": "2014-04-15 11:41:11", "masterUserName": "cumulogic"} ] }
```

Response Code(s):

| | |
|--------------------------------|--|
| Normal Response Code(s): | 200 |
| Error Response Code(s): | computeFault (400, 500), serviceUnavailable (503), unauthorized (401), forbidden (403), badRequest (400), badMethod (405), overLimit (413) |
| Custom Error Response Code(s): | queryFailed(1009), entityDoesNotExist(1012), invalidRequest(1000) |

1.15 Clone MySQL Instance

| Http Method | URI | Description |
|-------------|-------------------------|---------------------------------|
| POST | /sql/api/v1/sqlinstance | Clone the existing SQL instance |

Request Parameters:

| Attribute | Type | Description | Required |
|-----------|---------|------------------------------------|----------|
| <action> | String | Action name "clone" | Yes |
| id | Integer | Unique ID of the existing instance | Yes |

Example Request:

```
curl -i "http://localhost:8080/sql/api/v1/sqlinstance" -X POST -H "CL-AUTH-TOKEN:0185f8cc-aa30-4ef7-a81d-43fd512282d6" -d '{"clone": {"sqlInstance": {"id": "6"}}}'
```

Example Response

```
{ "success": true, "errors": {}, "response": {} }
```

Response Code(s):

| | |
|--------------------------------|---|
| Normal Response Code(s): | 200 |
| Error Response Code(s): | computeFault (400, 500), serviceUnavailable (503), unauthorized (401), forbidden (403), badRequest (400), badMethod (405), overLimit (413), itemNotFound (404), serverCapacityUnavailable (503) |
| Custom Error Response Code(s): | queryFailed(1009), invalidParameterValue(1013), invalidAction(1001), invalidRequest(1000) |

1.16 Get Events for SQL instance by ID

| Http Method | URI | Description |
|-------------|-------------------------------------|---|
| GET | /sql/api/v1/instance/events?id=<id> | Gets events for the database Instance by ID |

Example Request:

```
curl -i "http://localhost:8080/sql/api/v1/instance/events?id=5" -X POST -H "CL-AUTH-TOKEN:0185f8cc-aa30-4ef7-a81d-43fd512282d6"
```

Example Response:

```
{
  "success": true,
  "errors": {},
  "response": {
    "events": [
      {
        "message": "Create instance job started",
        "id": 147,
        "createdBy": "2014-07-08 15:14:25",
        "timeZone": "UTC",
        "type": "INFO"
      },
      {
        "message": "Create instance task started",
        "id": 148,
        "createdBy": "2014-07-08 15:14:25",
        "timeZone": "UTC",
        "type": "INFO"
      },
      {
        "message": "Create instance task completed for Host ec2-54-89-86-46.compute-1.amazonaws.com",
        "id": 149,
        "createdBy": "2014-07-08 15:14:57",
        "timeZone": "UTC",
        "type": "INFO"
      },
      {
        "message": "Instance network configuration started for Host ec2-54-89-86-46.compute-1.amazonaws.com",
        "id": 150,
        "createdBy": "2014-07-08 15:14:57",
        "timeZone": "UTC",
        "type": "INFO"
      },
      {
        "message": "Instance network configuration completed for Host ec2-54-89-86-46.compute-1.amazonaws.com",
        "id": 151,
        "createdBy": "2014-07-08 15:14:57",
        "timeZone": "UTC",
        "type": "INFO"
      },
      {
        "message": "Validate instance connection started for Host ec2-54-89-86-46.compute-1.amazonaws.com",
        "id": 152,
        "createdBy": "2014-07-08 15:14:57",
        "timeZone": "UTC",
        "type": "INFO"
      },
      {
        "message": "Validate instance connection completed for Host ec2-54-89-86-46.compute-1.amazonaws.com",
        "id": 153,
        "createdBy": "2014-07-08 15:17:03",
        "timeZone": "UTC",
        "type": "INFO"
      },
      {
        "message": "Storage configuration started for Host ec2-54-89-86-46.compute-1.amazonaws.com",
        "id": 154,
        "createdBy": "2014-07-08 15:17:03",
        "timeZone": "UTC",
        "type": "INFO"
      },
      {
        "message": "Storage configuration completed for Host ec2-54-89-86-46.compute-1.amazonaws.com",
        "id": 155,
        "createdBy": "2014-07-08 15:17:45",
        "timeZone": "UTC",
        "type": "INFO"
      },
      {
        "message": "Engine pre-work started for Host ec2-54-89-86-46.compute-1.amazonaws.com",
        "id": 156,
        "createdBy": "2014-07-08 15:17:45",
        "timeZone": "UTC",
        "type": "INFO"
      },
      {
        "message": "Processing installable for Host ec2-54-89-86-46.compute-1.amazonaws.com",
        "id": 157,
        "createdBy": "2014-07-08 15:17:45",
        "timeZone": "UTC",
        "type": "INFO"
      },
      {
        "message": "Engine pre-work completed for Host ec2-54-89-86-46.compute-1.amazonaws.com",
        "id": 158,
        "createdBy": "2014-07-08 15:19:57",
        "timeZone": "UTC",
        "type": "INFO"
      },
      {
        "message": "Create instance job finished",
        "id": 159,
        "createdBy": "2014-07-08 15:20:05",
        "timeZone": "UTC",
        "type": "INFO"
      },
      {
        "message": "Container engine configuration started",
        "id": 160,
        "createdBy": "2014-07-08 15:20:10",
        "timeZone": "UTC",
        "type": "INFO"
      },
      {
        "message": "Container engine configuration completed",
        "id": 161,
        "createdBy": "2014-07-08 15:21:48",
        "timeZone": "UTC",
        "type": "INFO"
      },
      {
        "message": "CL-agent configuration job started",
        "id": 162,
        "createdBy": "2014-07-08 15:21:50",
        "timeZone": "UTC",
        "type": "INFO"
      },
      {
        "message": "CL-agent configuration task started for Host ec2-54-89-86-46.compute-1.amazonaws.com",
        "id": 163,
        "createdBy": "2014-07-08"
      }
    ]
  }
}
```

```

15:21:50","timeZone":"UTC","type":"INFO"},{"message":"CL-agent configuration task completed for
Host ec2-54-89-86-46.compute-1.amazonaws.com","id":164,"createdBy":"2014-07-08
15:21:50","timeZone":"UTC","type":"INFO"},{"message":"CL-agent configuration job completed
","id":165,"createdBy":"2014-07-08 15:22:00","timeZone":"UTC","type":"INFO"},{"message":"All Tasks
for current job completed successfully","id":166,"createdBy":"2014-07-08
15:22:10","timeZone":"UTC","type":"INFO"},{"message":"Create instance snapshot task started
","id":168,"createdBy":"2014-07-08 15:24:05","timeZone":"UTC","type":"INFO"},{"message":"Create
instance snapshot task completed ","id":170,"createdBy":"2014-07-08
15:24:05","timeZone":"UTC","type":"INFO"},{"message":"All Tasks for current job completed
successfully","id":172,"createdBy":"2014-07-08
15:24:15","timeZone":"UTC","type":"INFO"},{"message":"Create instance binlog task
started.","id":173,"createdBy":"2014-07-08
15:25:05","timeZone":"UTC","type":"INFO"},{"message":"Create instance binlog task
completed.","id":174,"createdBy":"2014-07-08
15:25:05","timeZone":"UTC","type":"INFO"},{"message":"All Tasks for current job completed
successfully","id":175,"createdBy":"2014-07-08
15:25:15","timeZone":"UTC","type":"INFO"},{"message":"Create instance binlog task
started.","id":176,"createdBy":"2014-07-08
15:30:05","timeZone":"UTC","type":"INFO"},{"message":"Create instance binlog task
completed.","id":177,"createdBy":"2014-07-08
15:30:05","timeZone":"UTC","type":"INFO"},{"message":"All Tasks for current job completed
successfully","id":178,"createdBy":"2014-07-08 15:30:15","timeZone":"UTC","type":"INFO"}}}}

```

Response Code(s):

| | |
|--------------------------------|---|
| Normal Response Code(s): | 200 |
| Error Response Code(s): | computeFault (400, 500), serviceUnavailable (503), unauthorized (401), forbidden (403), badRequest (400), badMethod (405), overLimit (413), itemNotFound (404), serverCapacityUnavailable (503) |
| Custom Error Response Code(s): | queryFailed(1009), invalidParameterValue(1013), invalidAction(1001), invalidRequest(1000) |

2. Entity: SQL Snapshot

2.1 Create Snapshot

| Http Method | URI | Description |
|-------------|-------------------------|---|
| POST | /sql/api/v1/sqlsnapshot | Creates a new snapshot of the instance. |

Request Parameters:

| Attribute | Type | Description | Required |
|-------------|--------|---------------------------------|----------|
| <action> | String | Action name " snapshot " | Yes |
| name | String | Unique instance name. | Yes |
| description | String | Description about vm. | No |

Example Request:

```
curl -i "http://localhost:8080/sql/api/v1/sqlsnapshot" -X POST -H "CL-AUTH-TOKEN:0e3a7b1d-f572-4089-aa76-792d5a20dff1" -d'{"snapshot": {"sqlInstance": {"dbInstance": {"id": "2"},"name": "snapshot1"}}}'
```

Example Response:

```
{"success":true,"errors":{},"response":{"snapshot":{"sqlInstance":{"port":null,"dbInstanceName":null,"dbInstanceId":2,"port":3306,"id":1,"targetcloud":{"availabilityZone":"us-east1","availabilityZoneName":null,"targetCloudId":2,"targetCloudName":"AmazonEC2Cloud"},"status":2,"name":"snapshot1","retentionPeriod":null,"storageSize":10,"isInProgress":2,"type":1,"createdAt":"2014-06-25 21:30:19","instancetype":{"id":1,"instanceTypeId":"t1.micro","instanceTypeName":"XSmall"}}}}}
```

Response Code(s):

| | |
|--------------------------------|---|
| Normal Response Code(s): | 200 |
| Error Response Code(s): | computeFault (400, 500), serviceUnavailable (503), unauthorized (401), forbidden (403), badRequest (400), badMethod (405), overLimit (413), itemNotFound (404), serverCapacityUnavailable (503) |
| Custom Error Response Code(s): | queryFailed(1009), invalidParameterValue(1013), invalidAction(1001), entityAlreadyExist(1011), invalidRequest(1000) |

2.2 Restore From Snapshot

| Http Method | URI | Description |
|-------------|-------------------------|--------------------------------------|
| POST | /sql/api/v1/sqlsnapshot | Restores the instance from snapshot. |

Request Parameters:

| Attribute | Type | Description | Required |
|-----------------------------|---------|--|----------|
| <action> | String | Action name " restoreFromSnapshot " | Yes |
| dbInstanceName | String | Unique instance name. | Yes |
| ID | Integer | Unique ID of the snapshot. | Yes |
| availabilityZone | String | This parameter holds the value of the availability zone in which the instance is to be launched. If target cloud is a VM pool, then this parameter is not mandatory. | Yes |
| availabilityZoneName | String | This parameter holds the value of the availability zone name in which the instance is to be launched. If target cloud is a VM pool, then this parameter is not mandatory. | Yes |
| Port | Integer | Port for database access. Default=3306 | Yes |
| instanceType | Array | Unique Instance type ID. Usage: "instanceType": {"id": "1"} | Yes |
| multiAZ | Integer | Mandatory when setting up Multi AZ redundant node Valid Values: multiAZ=0 for No OR multiAZ=1 for yes Supported only for Percona engine wherein (In case this flag is set, the parameters "multiAZAvailabilityZone" and "multiAZAvailabilityZoneName" are mandatory) | Yes |
| multiAZAvailabilityZone | String | Second availability zone in which the secondary node of the Percona Multi AZ instance is to be launched. This is mandatory only if multiAZ value is 1. | No |
| multiAZAvailabilityZoneName | String | Second availability zone name in which the secondary node of the Percona Multi AZ instances is to be launched. This is mandatory only if multiAZ value is 1. | No |
| multiAZInstanceType | Integer | Unique ID of instance type for secondary availability zone. Ex. "instanceType": {"id": "1"} If target cloud is a VM pool, then this parameter is not mandatory. | No |

| | | | |
|-------------|---------|--|-----|
| storageSize | Integer | The size of the volume. Valid values: 10 to 1024GB If target cloud is a VM pool, then this parameter is not mandatory. | Yes |
|-------------|---------|--|-----|

Example Request:

```
curl -i "http://54.196.106.131:8080/sql/api/v1/sqlsnapshot" -X POST -H "CL-AUTH-TOKEN:0458a745-d90c-4890-86fd-8959dc139470" -d'{"restoreFromSnapshot": {"sqlInstance": {"id": "17","dbInstanceName": "Restored1","availabilityZone": "us-east1","availabilityZoneName": "US-East1","storageSize": 10,"port": "3306","instanceType": {"id": "1"}}}'
```

Example Response:

```
{"success":true,"errors":{},"response":{"snapshot":{"sqlInstance":{"port":3306,"dbInstanceName":"test_snap","dbInstanceId":64},"id":4,"targetcloud":{"availabilityZone":"az-2.region-a.geo-1","availabilityZoneName":null,"targetCloudId":33,"targetCloudName":"falcon_hpcs"},"status":2,"name":"snapshot1","retentionPeriod":null,"storageSize":10,"isInProgress":2,"type":1,"createdDate":"2014-04-29 04:37:24","instancetype":{"id":29,"instanceTypeId":"100","instanceTypeName":"xsmall"}}}}
```

Response Code(s):

| | |
|--------------------------------|--|
| Normal Response Code(s): | 200 |
| Error Response Code(s): | computeFault (400, 500),serviceUnavailable (503), unauthorized (401), forbidden (403), badRequest (400), badMethod (405), overLimit (413), itemNotFound (404), serverCapacityUnavailable (503) |
| Custom Error Response Code(s): | queryFailed(1009), invalidParameterValue(1013),invalidAction(1001), entityAlreadyExist(1011), invalidRequest(1000) |

2.3 Restore To Snapshot (Point-in-Time Restore)

| Http Method | URI | Description |
|-------------|-------------------------|---|
| POST | /sql/api/v1/sqlsnapshot | Restores the instance from a snapshot at a particular point-in-time |

Request Parameters:

| Attribute | Type | Description | Required |
|----------------------|--------|--|----------|
| <action> | String | Action name - "restoreToSnapshot" | Yes |
| customRestorableTime | String | Custom restorable time and date. Format Ex. 2014-06-26 02:30:00 | Yes |

| | | | |
|--------------|---------|---|-----|
| Port | Integer | Port of database. | Yes |
| instanceType | Array | Unique image instance typ ID. Usage: "instanceType": {"id": "1"} | Yes |
| dbInstance | Array | database Instance ID. Usage:"dbInstance": { "id": "25", "name": "restore", "port": "3306", "isAutoUpdateEnabled": "0"} | Yes |
| storageSize | Integer | Size of additional Volume | |

Example Request:

```
curl -i "http://54.196.106.131:8080/sql/api/v1/sqlsnapshot" -X POST -H "CL-AUTH-TOKEN:0458a745-d90c-4890-86fd-8959dc139470" -d{"restoreToSnapshot": {"sqlInstance": {"dbInstance": {"id": "69", "name": "Restored11", "port": "3306", "isAutoUpdateEnabled": "0"}, "customRestorableTime": "2014-06-26 02:30:00", "instanceType": {"id": "1"}}}}
```

Example Response:

```
{"success":true,"errors":{},"response":{"snapshot":[{"sqlinstance":{"port":3306,"dbInstanceName":"Restored11","dbInstanceId":101,"port":null,"id":126,"status":null,"name":null,"retentionPeriod":null,"storageSize":null,"isInProgress":null,"type":null,"createdDate":"2014-06-30 11:03:41","instancetype":{"id":1,"instanceTypeid":null,"instanceTypeName":null}}]}
```

Response Code(s):

| | |
|--------------------------------|---|
| Normal Response Code(s): | 200 |
| Error Response Code(s): | computeFault (400, 500), serviceUnavailable (503), unauthorized (401), forbidden (403), badRequest (400), badMethod (405), overLimit (413), itemNotFound (404), serverCapacityUnavailable (503) |
| Custom Error Response Code(s): | queryFailed(1009), invalidParameterValue(1013),invalidAction(1001), entityAlreadyExist(1011), invalidRequest(1000) |

2.4 Delete MySQL Snapshot

| Http Method | URL | Description |
|-------------|------------------------------|------------------------|
| GET | /sql/api/v1/sqlsnapshot/<id> | Deletes snapshot by ID |

Example Request:

```
curl -i "http://localhost:8080/sql/api/v1/sqlsnapshot/2"-X DELETE-H "CL-AUTH-TOKEN:3d76564703b3-4334-9a3e-b2d562b5909e"
```

Example Response:

```
{"response": [], "errors": {}, "success": true}
```

Response Code(s):

| | |
|--------------------------------|--|
| Normal Response Code(s): | 200 |
| Error Response Code(s): | computeFault (400, 500), serviceUnavailable (503), unauthorized (401), forbidden (403), badRequest (400), badMethod (405), overLimit (413), itemNotFound (404) |
| Custom Error Response Code(s): | queryFailed(1009), entityDoesNotExist(1012), invalidRequest(1000), invalidParameterValue(1013) |

2.5 Get SQL Snapshot by Name

| Http Method | URL | Description |
|-------------|-------------------------------------|---------------------------------|
| GET | /sql/api/v1/sqlsnapshot?name=<name> | Gets specific snapshot by name. |

Example Request:

```
curl -i "http://localhost:8080/sql/api/v1/sqlsnapshot?name=SNAP1" -X GET -H "CL-AUTH-TOKEN:dd660ba2-7ce2-4e46-99c1-a3335f66b712"
```

Example Response:

```
{"success":true,"errors":{},"response":{"snapshot":[{"sqlinstance":{"port":3306,"dbInstanceName":"PERCONAMULTIAZ","dbInstanceId":1,"port":3306,"targetcloud":{"availabilityZone":"us-east1","availabilityZoneName":null,"iaasProviderId":1,"targetCloudId":1,"targetCloudName":"Amazonian"},"jobId":2,"status":2,"engine":{"id":3,"engineName":"Percona-Server","version":"5.5"},"isInProgress":1,"type":1,"instancetype":{"id":1,"instanceTypeId":"t1.micro","instanceTypeName":"XSmall"},"id":1,"name":"SNAP1","masterPassword":"demouser","retentionPeriod":null,"storageSize":20,"createdDate":"2014-07-08 07:04:30","masterUserName":"demouser"}]}}
```

Response Code(s):

| | |
|--------------------------|--|
| Normal Response Code(s): | 200 |
| Error Response Code(s): | computeFault (400, 500), serviceUnavailable (503), unauthorized (401), forbidden (403), badRequest (400), badMethod (405), overLimit (413) |

| | |
|--------------------------------|---|
| Custom Error Response Code(s): | queryFailed(1009), entityDoesNotExist(1012), invalidRequest(1000) |
|--------------------------------|---|

2.6 Get SQL Snapshot by ID

| Http Method | URI | Description |
|-------------|---------------------------------|-------------------------------|
| GET | /sql/api/v1/sqlsnapshot?id=<id> | Gets specific snapshot by ID. |

Example Request: Query Parameters

```
curl -i "http://localhost:8080/sql/api/v1/sqlsnapshot?id=1" -X GET -H "CL-AUTH-TOKEN:dd660ba2-7ce2-4e46-99c1-a3335f66b712"
```

Example Response:

```
{
  "success": true,
  "errors": {},
  "response": {
    "snapshot": {
      "sqlinstance": {
        "port": 3306,
        "dbInstanceName": "PERCONAMULTIAZ",
        "dbInstanceid": 1,
        "port": 3306,
        "targetcloud": {
          "availabilityZone": "us-east1",
          "availabilityZoneName": "US-East1",
          "iaasProviderId": 1,
          "targetCloudId": 1,
          "targetCloudName": "Amazonian",
          "jobId": 2,
          "status": 2,
          "engine": {
            "id": 3,
            "engineName": "Percona-Server",
            "version": "5.5"
          },
          "isInProgress": 1,
          "type": 1,
          "instancetype": {
            "id": 1,
            "instanceTypeId": "t1.micro",
            "instanceTypeName": "XSmall",
            "id": 1,
            "name": "SNAP1",
            "masterPassword": "demouser",
            "retentionPeriod": null,
            "storageSize": 20,
            "createdDate": "2014-07-08 07:04:30",
            "masterUserName": "demouser"
          }
        }
      }
    }
  }
}
```

Response Code(s):

| | |
|--------------------------------|--|
| Normal Response Code(s): | 200 |
| Error Response Code(s): | computeFault (400, 500), serviceUnavailable (503), unauthorized (401), forbidden (403), badRequest (400), badMethod (405), overLimit (413) |
| Custom Error Response Code(s): | queryFailed(1009), entityDoesNotExist(1012), invalidRequest(1000) |

2.7 Get SQL Snapshot By User

| Http Method | URI | Description |
|-------------|---|--------------------------------------|
| GET | /sql/api/v1/sqlsnapshot?userId=<userid> | To get specific snapshot by user ID. |

Example Request:

```
curl -i "http://localhost:8080/sql/api/v1/sqlsnapshot?userId=2" -X GET -H "CL-AUTH-TOKEN:9e54e9d8-e58b-4524-8e6c-d34bc5e4a1d1"
```

Example Response:

```
{
  "success": true,
  "errors": {},
  "response": {
    "snapshot": {
      "sqlinstance": {
        "port": 3306,
        "dbInstanceName": "PERCONAMULTIAZ",
        "dbInstanceId": 1,
        "port": 3306,
        "targetcloud": {
          "availabilityZone": "us-east1",
          "availabilityZoneName": "US-East1",
          "iaasProviderId": 1,
          "targetCloudId": 1,
          "targetCloudName": "Amazonian",
          "jobId": 2,
          "status": 2,
          "engine": {
            "id": 3,
            "engineName": "Percona-Server",
            "version": "5.5"
          },
          "isInProgress": 1,
          "type": 1,
          "instancetype": {
            "id": 1,
            "instanceTypeId": "t1.micro",
            "instanceTypeName": "XSmall",
            "id": 1,
            "name": "SNAP1",
            "masterPassword": "demouser",
            "retentionPeriod": null,
            "storageSize": 20,
            "createdDate": "2014-07-08 07:04:30",
            "masterUserName": "demouser"
          }
        }
      }
    }
  }
}
```

Response Code(s):

| | |
|--------------------------------|--|
| Normal Response Code(s): | 200 |
| Error Response Code(s): | computeFault (400, 500), serviceUnavailable (503), unauthorized (401), forbidden (403), badRequest (400), badMethod (405), overLimit (413) |
| Custom Error Response Code(s): | queryFailed(1009), entityDoesNotExist(1012), invalidRequest(1000) |

2.8 Get Events for a Snapshot by ID

| Http Method | URI | Description |
|-------------|-------------------------------------|---|
| GET | /sql/api/v1/snapshot/events?id=<id> | To get events for specific snapshot by user ID. |

Example Request:

```
curl -i "http://localhost:8080/sql/api/v1/sqlsnapshot/events?id=1" -X GET -H "CL-AUTH-TOKEN:9e54e9d8-e58b-4524-8e6c-d34bc5e4a1d1"
```

Example Response:

```
{
  "success": true,
  "errors": {},
  "response": {
    "events": [
      {
        "message": "Create instance snapshot task started",
        "id": 34,
        "createdBy": "2014-07-08 11:04:35",
        "timeZone": "UTC",
        "type": "INFO"
      },
      {
        "message": "Create instance snapshot task completed",
        "id": 35,
        "createdBy": "2014-07-08 11:04:35",
        "timeZone": "UTC",
        "type": "INFO"
      },
      {
        "message": "All Tasks for current job completed successfully",
        "id": 36,
        "createdBy": "2014-07-08 11:04:45",
        "timeZone": "UTC",
        "type": "INFO"
      }
    ]
  }
}
```

Response Code(s):

| | |
|--------------------------------|--|
| Normal Response Code(s): | 200 |
| Error Response Code(s): | computeFault (400, 500), serviceUnavailable (503), unauthorized (401), forbidden (403), badRequest (400), badMethod (405), overLimit (413) |
| Custom Error Response Code(s): | queryFailed(1009), entityDoesNotExist(1012), invalidRequest(1000) |

3. Entity: Database Engines

3.1 Get All Database Engines

| Http Method | URI | Description |
|-------------|-----------------------|-----------------------|
| GET | /sql/api/v1/sqlengine | Gets all SQL engines. |

Example Request:

```
$ curl -i "http://localhost:8080/sql/api/v1/sqlengine" -X GET -H "CL-AUTH-TOKEN:339b155a-31ba-43fd-887a-e5b47b33df34"
```

Example Response:

```
{"success":true,"errors":{},"response":{"engine":[{"id":1,"hostType":2,"name":"MySQL","type":1,"version":"5.5.27"}, {"id":3,"hostType":3,"name":"Percona-Server","type":2,"version":"5.5"}]}}
```

Response Code(s):

| | |
|--------------------------------|--|
| Normal Response Code(s): | 200 |
| Error Response Code(s): | computeFault (400, 500), serviceUnavailable (503), unauthorized (401), forbidden (403), badRequest (400), badMethod (405), overLimit (413) |
| Custom Error Response Code(s): | queryFailed(1009), entityDoesNotExist(1012), invalidRequest(1000) |

3.2 Get Database Engine By ID

| Http Method | URI | Description |
|-------------|-------------------------------|------------------------|
| GET | /sql/api/v1/sqlengine?id=<id> | Gets SQL engine by ID. |

Example Request:

```
$ curl -i "http://localhost:8080/sql/api/v1/sqlengine?id=1" -X GET -H "CL-AUTH-TOKEN:339b155a-31ba-43fd-887a-e5b47b33df34"
```

Example Response:

```
{"success":true,"errors":{},"response":{"engine":[{"id":1,"hostType":2,"name":"MySQL","type":1,"version":"5.5.27"}]}}
```

Response Code(s):

| | |
|--------------------------------|--|
| Normal Response Code(s): | 200 |
| Error Response Code(s): | computeFault (400, 500), serviceUnavailable (503), unauthorized (401), forbidden (403), badRequest (400), badMethod (405), overLimit (413) |
| Custom Error Response Code(s): | queryFailed(1009), entityDoesNotExist(1012), invalidRequest(1000) |

3.3 Get Database Engine By Name and Version

| Http Method | URI | Description |
|-------------|---|-------------------------------------|
| GET | /sql/api/v1/sqlengine?name=<name>&version=<version> | Gets SQL engine by name and version |

Example Request:

```
$ curl -i "http://localhost:8080/sql/api/v1/sqlengine?name=MySQL&version=5.5.27" -X GET -H "CL-AUTH-TOKEN:339b155a-31ba-43fd-887a-e5b47b33df34"
```

Example Response:

```
{"success":true,"errors":{},"response":{"engine":[{"id":1,"hostType":2,"name":"MySQL","type":1,"version":"5.5.27"}]}}
```

Response Code(s):

| | |
|--------------------------------|--|
| Normal Response Code(s): | 200 |
| Error Response Code(s): | computeFault (400, 500), serviceUnavailable (503), unauthorized (401), forbidden (403), badRequest (400), badMethod (405), overLimit (413) |
| Custom Error Response Code(s): | queryFailed(1009), entityDoesNotExist(1012), invalidRequest(1000) |

4. Entity: SQL Parameter Groups

4.1 Create SQL Parameter Group

| Http Method | URL | Description |
|-------------|-------------------------------|------------------------------------|
| Create | /sql/api/v1/sqlparametergroup | Creates a new SQL parameter group. |

Request Parameters:

| Attribute | Type | Description | Required |
|-------------------------------|---------|--|----------|
| <action> | String | Action name "create" | Yes |
| name | String | Unique parameter group name. | Yes |
| description | String | Description about SQL parameter group. | No |
| <u>parameterGroupFamilyId</u> | Integer | Unique ID of parameter groupfamily ID. | Yes |

Example Request:

```
curl -i "http://localhost:8080/sql/api/v1/sqlparametergroup?" -X POST -H "CL-AUTH-TOKEN:dd660ba2-7ce2-4e46-99c1-a3335f66b712" -d '{"create":{"parameterGroupFamilyId":1,"name":"SQL_PG","description":"SQL_PG"}}'
```

Example Response:

```
{"success":true,"errors":{},"response":{"parameterGroup":{"id":2,"description":"SQL_PG","name":"SQL_PG","engineName":"MySQL-5.5.27","parameters":[{"id":15,"scope":"Global","possibleValues":"25 PER of RAM","name":"key_buffer_size","value":null,"isDynamic":1,"comment":"","defaultValue":"","type":"Numeric"}, {"id":16,"scope":"Global","possibleValues":"0 to 18446744073709547520","name":"query_cache_size","value":null,"isDynamic":1,"comment":"permitted values are multiple of 1024","defaultValue":"0 (off)","type":"Numeric"}, {"id":17,"scope":"Global","possibleValues":"0 or 1 or 2","name":"query_cache_type","value":null,"isDynamic":1,"comment":"","defaultValue":"1 (on)","type":"Numeric"}, {"id":18,"scope":"Global","possibleValues":"0 to 16384","name":"thread_cache_size","value":null,"isDynamic":1,"comment":"","defaultValue":"0","type":"Numeric"}, {"id":19,"scope":"Global","possibleValues":"0 to 1000","name":"innodb_thread_concurrency","value":null,"isDynamic":1,"comment":"Setting to 0, takes the limit off","defaultValue":"8","type":"Numeric"}, {"id":20,"scope":"Global","possibleValues":"0 to 5000","name":"max_connections","value":null,"isDynamic":1,"comment":"","defaultValue":"100","type":"Numeric"}, {"id":21,"scope":"Global","possibleValues":"upto 80 PER of memory","name":"innodb_buffer_pool_size","value":null,"isDynamic":0,"comment":"Setting it very
```

large takes longer to initialize", "defaultValue": "8MB", "type": "Numeric"}, {"id": 22, "scope": "Global", "possibleValues": "1MB to 8MB", "name": "innodb_log_buffer_size", "value": null, "isDynamic": 0, "comment": "permitted values are multiple of 1024", "defaultValue": "1MB", "type": "Numeric"}, {"id": 23, "scope": "Global", "possibleValues": "min 10, default 300", "name": "innodb_open_files", "value": null, "isDynamic": 0, "comment": "", "defaultValue": "300", "type": "Numeric"}, {"id": 24, "scope": "Global", "possibleValues": "upto 4GB max", "name": "join_buffer_size", "value": null, "isDynamic": 1, "comment": "", "defaultValue": "0", "type": "Numeric"}, {"id": 25, "scope": "Global", "possibleValues": "minimum 4096 bytes, max 1GB", "name": "max_binlog_size", "value": null, "isDynamic": 1, "comment": "", "defaultValue": "1GB", "type": "Numeric"}, {"id": 26, "scope": "Global", "possibleValues": "upto 2GB max", "name": "read_buffer_size", "value": null, "isDynamic": 1, "comment": "should be in multiple of 4KB", "defaultValue": "131072", "type": "Numeric"}, {"id": 27, "scope": "Global", "possibleValues": "Max upto 4GB", "name": "sort_buffer_size", "value": null, "isDynamic": 1, "comment": "", "defaultValue": "2097144", "type": "Numeric"}, {"id": 28, "scope": "Global", "possibleValues": "Max upto 4GB", "name": "sort_buffer_size", "value": null, "isDynamic": 1, "comment": "", "defaultValue": "2097144", "type": "Numeric"}], "createdDate": "2014-07-08 06:21:56"}]}}

Response Code(s):

| | |
|--------------------------------|--|
| Normal Response Code(s): | 200 |
| Error Response Code(s): | computeFault (400, 500), serviceUnavailable (503), unauthorized (401), forbidden (403), badRequest (400), badMethod (405), overLimit (413) |
| engineName | String |
| Custom Error Response Code(s): | queryFailed(1009), entityDoesNotExist(1012), invalidParameterValue(1013), invalidRequest(1000) |

4.2 Delete SQL Parameter Group

| Http Method | URL | Description |
|-------------|------------------------------------|------------------------------------|
| DELETE | /sql/api/v1/sqlparametergroup/<id> | Deletes the existing SQL instance. |

Example Request:

```
curl -i "http://localhost:8080/sql/api/v1/sqlparametergroup/2" -X DELETE -H "CL-AUTH-TOKEN:dd660ba2-7ce2-4e46-99c1-a3335f66b712"
```

Response Format:

```
{"success":true,"errors":{},"response":{}}
```

Response Code(s):

| | |
|--------------------------------|--|
| Normal Response Code(s): | 200 |
| Error Response Code(s): | computeFault (400, 500), serviceUnavailable (503), unauthorized (401), forbidden (403), badRequest (400), badMethod (405), overLimit (413) |
| engineName | String |
| Custom Error Response Code(s): | queryFailed(1009), entityDoesNotExist(1012), invalidParameterValue(1013), invalidRequest(1000) |

4.3 Update SQL Parameter Group

| Http Method | URI | Description |
|-------------|-------------------------------|---|
| PUT | /sql/api/v1/sqlparameter/<id> | Updates the existing SQL parameter group. |

Request Parameters:

| Attribute | Type | Description | Required |
|--------------|-----------|----------------------------------|----------|
| name | String | Unique SQL parameter Group name. | Yes |
| dbParameters | ArrayList | List of parameters | Yes |

Example Request:

```
curl -i "http://localhost:8080/sql/api/v1/sqlparametergroup/1" -X PUT -H "CL-AUTH-TOKEN:f01cdd12-4cf6-4348-8c7c-4cda70f48d00" -d{"dbParameters":[{"id":14,"scope":"Global","possibleValues":"25 PER of RAM","name":"key_buffer_size","value":null,"isDynamic":1,"comment":"","defaultValue":"","type":"Numeric"},{"id":15,"scope":"Global","possibleValues":"0 to 18446744073709547520","name":"query_cache_size","value":null,"isDynamic":1,"comment":"permitted values are multiple of 1024","defaultValue":"0 (off)","type":"Numeric"},{"id":16,"scope":"Global","possibleValues":"0 or 1 or 2","name":"query_cache_type","value":null,"isDynamic":1,"comment":"","defaultValue":"1 (on)","type":"Numeric"},{"id":17,"scope":"Global","possibleValues":"0 to 16384","name":"thread_cache_size","value":null,"isDynamic":1,"comment":"","defaultValue":"0","type":"Numeric"},{"id":18,"scope":"Global","possibleValues":"0 to 1000","name":"innodb_thread_concurrency","value":null,"isDynamic":1,"comment":"Setting to 0, takes the limit off","defaultValue":"8","type":"Numeric"},{"id":19,"scope":"Global","possibleValues":"0 to 5000","name":"max_connections","value":"30000","isDynamic":1,"comment":"","defaultValue":"100","type":"Numeric"},{"id":20,"scope":"Global","possibleValues":"upto 80 PER of memory","name":"innodb_buffer_pool_size","value":null,"isDynamic":0,"comment":"Setting it very large takes longer to"}]}
```

```
initialize","defaultValue":"8MB","type":"Numeric"},{"id":21,"scope":"Global","possibleValues":"1MB to
8MB","name":"innodb_log_buffer_size","value":null,"isDynamic":0,"comment":"permitted values are
multiple of
1024","defaultValue":"1MB","type":"Numeric"},{"id":22,"scope":"Global","possibleValues":"min 10,
default
300","name":"innodb_open_files","value":null,"isDynamic":0,"comment":"","defaultValue":"300","type
":"Numeric"},{"id":23,"scope":"Global","possibleValues":"upto 4GB
max","name":"join_buffer_size","value":null,"isDynamic":1,"comment":"","defaultValue":"0","type":"N
umeric"},{"id":24,"scope":"Global","possibleValues":"minimum 4096 bytes, max
1GB","name":"max_binlog_size","value":null,"isDynamic":1,"comment":"","defaultValue":"1GB","type":
"Numeric"},{"id":25,"scope":"Global","possibleValues":"upto 2GB
max","name":"read_buffer_size","value":null,"isDynamic":1,"comment":"should be in multiple of
4KB","defaultValue":"131072","type":"Numeric"},{"id":26,"scope":"Global","possibleValues":"Max upto
4GB","name":"sort_buffer_size","value":null,"isDynamic":1,"comment":"","defaultValue":"2097144","ty
pe":"Numeric"}]}'
```

Example Response:

```
{'success':true,'errors':{},'response':{}}
```

Response Code(s):

| | |
|--------------------------------|---|
| Normal Response Code(s): | 200 |
| Error Response Code(s): | computeFault (400, 500), serviceUnavailable (503), unauthorized (401), forbidden (403), badRequest (400), badMethod (405), overLimit (413), itemNotFound (404), serverCapacityUnavailable (503) |
| Custom Error Response Code(s): | QueryFailed(1009), entityDoesNotExist(1012), invalidParameterValue(1013), invalidAction(1001), invalidRequest(1000) |

4.4 Get SQL Parameter Group By Name

| Http Method | URL | Description |
|-------------|--|--|
| GET | /sql/api/v1/sqlparametergroup?name=<name of Parameter Group> | Gets specific SQL parameter group by its name. |

Example Request: Query Parameters

```
curl -i "http://localhost:8080/sql/api/v1/sqlparametergroup?name=MySQL_PG" -X GET -H "CL-AUTH-TOKEN:dd660ba2-7ce2-4e46-99c1-a3335f66b712"
```

Example Response:

```
{
  "success": true,
  "errors": {},
  "response": {
    "parameterGroup": [
      {
        "id": 1,
        "description": "MySQL_Parameter_Group",
        "name": "MySQL_PG",
        "engineName": "MySQL-5.5.27",
        "parameters": [
          {
            "id": 1,
            "scope": "Global",
            "possibleValues": "25 PER of RAM",
            "name": "key_buffer_size",
            "value": null,
            "isDynamic": 1,
            "comment": "",
            "defaultValue": "",
            "type": "Numeric"
          },
          {
            "id": 2,
            "scope": "Global",
            "possibleValues": "0 to 18446744073709547520",
            "name": "query_cache_size",
            "value": null,
            "isDynamic": 1,
            "comment": "permitted values are multiple of 1024",
            "defaultValue": "0 (off)",
            "type": "Numeric"
          },
          {
            "id": 3,
            "scope": "Global",
            "possibleValues": "0 or 1 or 2",
            "name": "query_cache_type",
            "value": null,
            "isDynamic": 1,
            "comment": "",
            "defaultValue": "1 (on)",
            "type": "Numeric"
          },
          {
            "id": 4,
            "scope": "Global",
            "possibleValues": "0 to 16384",
            "name": "thread_cache_size",
            "value": null,
            "isDynamic": 1,
            "comment": "",
            "defaultValue": "0",
            "type": "Numeric"
          },
          {
            "id": 5,
            "scope": "Global",
            "possibleValues": "0 to 1000",
            "name": "innodb_thread_concurrency",
            "value": null,
            "isDynamic": 1,
            "comment": "Setting to 0, takes the limit off",
            "defaultValue": "8",
            "type": "Numeric"
          },
          {
            "id": 6,
            "scope": "Global",
            "possibleValues": "0 to 5000",
            "name": "max_connections",
            "value": null,
            "isDynamic": 1,
            "comment": "",
            "defaultValue": "100",
            "type": "Numeric"
          },
          {
            "id": 7,
            "scope": "Global",
            "possibleValues": "upto 80 PER of memory",
            "name": "innodb_buffer_pool_size",
            "value": null,
            "isDynamic": 0,
            "comment": "Setting it very large takes longer to initialize",
            "defaultValue": "8MB",
            "type": "Numeric"
          },
          {
            "id": 8,
            "scope": "Global",
            "possibleValues": "1MB to 8MB",
            "name": "innodb_log_buffer_size",
            "value": null,
            "isDynamic": 0,
            "comment": "permitted values are multiple of 1024",
            "defaultValue": "1MB",
            "type": "Numeric"
          },
          {
            "id": 9,
            "scope": "Global",
            "possibleValues": "min 10, default 300",
            "name": "innodb_open_files",
            "value": null,
            "isDynamic": 0,
            "comment": "",
            "defaultValue": "300",
            "type": "Numeric"
          },
          {
            "id": 10,
            "scope": "Global",
            "possibleValues": "upto 4GB max",
            "name": "join_buffer_size",
            "value": null,
            "isDynamic": 1,
            "comment": "",
            "defaultValue": "0",
            "type": "Numeric"
          },
          {
            "id": 11,
            "scope": "Global",
            "possibleValues": "minimum 4096 bytes, max 1GB",
            "name": "max_binlog_size",
            "value": null,
            "isDynamic": 1,
            "comment": "",
            "defaultValue": "1GB",
            "type": "Numeric"
          },
          {
            "id": 12,
            "scope": "Global",
            "possibleValues": "upto 2GB max",
            "name": "read_buffer_size",
            "value": null,
            "isDynamic": 1,
            "comment": "should be in multiple of 4KB",
            "defaultValue": "131072",
            "type": "Numeric"
          },
          {
            "id": 13,
            "scope": "Global",
            "possibleValues": "Max upto 4GB",
            "name": "sort_buffer_size",
            "value": null,
            "isDynamic": 1,
            "comment": "",
            "defaultValue": "2097144",
            "type": "Numeric"
          },
          {
            "id": 14,
            "scope": "Global",
            "possibleValues": "Max upto 4GB",
            "name": "sort_buffer_size",
            "value": null,
            "isDynamic": 1,
            "comment": "",
            "defaultValue": "2097144",
            "type": "Numeric"
          }
        ]
      }
    ]
  },
  "createdDate": "2014-07-08 05:57:10"
}
```

Response Code(s):

| | |
|--------------------------------|--|
| Normal Response Code(s): | 200 |
| Error Response Code(s): | computeFault (400, 500), serviceUnavailable (503), unauthorized (401), forbidden (403), badRequest (400), badMethod (405), overLimit (413) |
| Custom Error Response Code(s): | queryFailed(1009), entityDoesNotExist(1012), invalidRequest(1000) |

4.5 Get SQL Parameter Group By User ID

| Http Method | URI | Description |
|-------------|---|-------------------------------------|
| GET | /sql/api/v1/sqlparametergroup?userId=<id> | Gets SQL parametergroup by user ID. |

Example Request:

```
curl -i "http://localhost:8080/sql/api/v1/sqlparametergroup?userId=2" -X GET -H "CL-AUTH-TOKEN:dd660ba2-7ce2-4e46-99c1-a3335f66b712"
```

Example Response:

```
{
  "success": true,
  "errors": {},
  "response": {
    "parameterGroup": [
      {
        "id": 1,
        "description": "MySQL_Parameter_Group",
        "name": "MySQL_PG",
        "engineName": "MySQL-5.5.27",
        "parameters": [
          {
            "id": 1,
            "scope": "Global",
            "possibleValues": "25 PER of RAM",
            "name": "key_buffer_size",
            "value": null,
            "isDynamic": 1,
            "comment": "",
            "defaultValue": "",
            "type": "Numeric"
          },
          {
            "id": 2,
            "scope": "Global",
            "possibleValues": "0 to 18446744073709547520",
            "name": "query_cache_size",
            "value": null,
            "isDynamic": 1,
            "comment": "permitted values are multiple of 1024",
            "defaultValue": "0 (off)",
            "type": "Numeric"
          },
          {
            "id": 3,
            "scope": "Global",
            "possibleValues": "0 or 1 or 2",
            "name": "query_cache_type",
            "value": null,
            "isDynamic": 1,
            "comment": "",
            "defaultValue": "1 (on)",
            "type": "Numeric"
          },
          {
            "id": 4,
            "scope": "Global",
            "possibleValues": "0 to 16384",
            "name": "thread_cache_size",
            "value": null,
            "isDynamic": 1,
            "comment": "",
            "defaultValue": "0",
            "type": "Numeric"
          },
          {
            "id": 5,
            "scope": "Global",
            "possibleValues": "0 to 1000",
            "name": "innodb_thread_concurrency",
            "value": null,
            "isDynamic": 1,
            "comment": "Setting to 0, takes the limit off",
            "defaultValue": "8",
            "type": "Numeric"
          },
          {
            "id": 6,
            "scope": "Global",
            "possibleValues": "0 to 5000",
            "name": "max_connections",
            "value": null,
            "isDynamic": 1,
            "comment": "",
            "defaultValue": "100",
            "type": "Numeric"
          },
          {
            "id": 7,
            "scope": "Global",
            "possibleValues": "upto 80 PER of memory",
            "name": "innodb_buffer_pool_size",
            "value": null,
            "isDynamic": 0,
            "comment": "Setting it very large takes longer to initialize",
            "defaultValue": "8MB",
            "type": "Numeric"
          },
          {
            "id": 8,
            "scope": "Global",
            "possibleValues": "1MB to 8MB",
            "name": "innodb_log_buffer_size",
            "value": null,
            "isDynamic": 0,
            "comment": "permitted values are multiple of 1024",
            "defaultValue": "1MB",
            "type": "Numeric"
          },
          {
            "id": 9,
            "scope": "Global",
            "possibleValues": "min 10, default 300",
            "name": "innodb_open_files",
            "value": null,
            "isDynamic": 0,
            "comment": "",
            "defaultValue": "300",
            "type": "Numeric"
          },
          {
            "id": 10,
            "scope": "Global",
            "possibleValues": "upto 4GB max",
            "name": "join_buffer_size",
            "value": null,
            "isDynamic": 1,
            "comment": "",
            "defaultValue": "0",
            "type": "Numeric"
          },
          {
            "id": 11,
            "scope": "Global",
            "possibleValues": "minimum 4096 bytes, max 1GB",
            "name": "max_binlog_size",
            "value": null,
            "isDynamic": 1,
            "comment": "",
            "defaultValue": "1GB",
            "type": "Numeric"
          },
          {
            "id": 12,
            "scope": "Global",
            "possibleValues": "upto 2GB max",
            "name": "read_buffer_size",
            "value": null,
            "isDynamic": 1,
            "comment": "should be in multiple of 4KB",
            "defaultValue": "131072",
            "type": "Numeric"
          },
          {
            "id": 13,
            "scope": "Global",
            "possibleValues": "Max upto"
          }
        ]
      }
    ]
  }
}
```

```
4GB", "name": "sort_buffer_size", "value": null, "isDynamic": 1, "comment": "", "defaultValue": "2097144", "type": "Numeric"}, {"id": 14, "scope": "Global", "possibleValues": "Max upto 4GB", "name": "sort_buffer_size", "value": null, "isDynamic": 1, "comment": "", "defaultValue": "2097144", "type": "Numeric"}], "createdDate": "2014-07-08 05:57:10"}]}
```

Response Code(s):

| | |
|--------------------------------|--|
| Normal Response Code(s): | 200 |
| Error Response Code(s): | computeFault (400, 500), serviceUnavailable (503), unauthorized (401), forbidden (403), badRequest (400), badMethod (405), overLimit (413) |
| Custom Error Response Code(s): | queryFailed(1009), entityDoesNotExist(1012), invalidRequest(1000) |

4.6 Get SQL Parameter Group By ID

| Http Method | URI | Description |
|-------------|---------------------------------------|--------------------------------|
| GET | /sql/api/v1/sqlparametergroup?id=<id> | Gets SQL parametergroup by ID. |

Example Request: Query Parameters

```
curl -i "http://localhost:8080/sql/api/v1/sqlparametergroup?id=1" -X GET -H "CL-AUTH-TOKEN:dd660ba2-7ce2-4e46-99c1-a3335f66b712"
```

Example Response:

```
{ "success": true, "errors": {}, "response": { "parameterGroup": [ { "id": 1, "description": "MySQL_Parameter_Group", "name": "MySQL_PG", "engineName": "MySQL-5.5.27", "parameters": [ { "id": 1, "scope": "Global", "possibleValues": "25 PER of RAM", "name": "key_buffer_size", "value": null, "isDynamic": 1, "comment": "", "defaultValue": "", "type": "Numeric"}, { "id": 2, "scope": "Global", "possibleValues": "0 to 18446744073709547520", "name": "query_cache_size", "value": null, "isDynamic": 1, "comment": "permitted values are multiple of 1024", "defaultValue": "0 (off)", "type": "Numeric"}, { "id": 3, "scope": "Global", "possibleValues": "0 or 1 or 2", "name": "query_cache_type", "value": null, "isDynamic": 1, "comment": "", "defaultValue": "1 (on)", "type": "Numeric"}, { "id": 4, "scope": "Global", "possibleValues": "0 to 16384", "name": "thread_cache_size", "value": null, "isDynamic": 1, "comment": "", "defaultValue": "0", "type": "Numeric"}, { "id": 5, "scope": "Global", "possibleValues": "0 to 1000", "name": "innodb_thread_concurrency", "value": null, "isDynamic": 1, "comment": "Setting to 0, takes the limit off", "defaultValue": "8", "type": "Numeric"}, { "id": 6, "scope": "Global", "possibleValues": "0 to 5000", "name": "max_connections", "value": null, "isDynamic": 1, "comment": "", "defaultValue": "100", "type": "Numeric"} ] } ] }
```

```

{"id":7,"scope":"Global","possibleValues":"upto 80 PER of
memory","name":"innodb_buffer_pool_size","value":null,"isDynamic":0,"comment":"Setting it very
large takes longer to
initialize","defaultValue":"8MB","type":"Numeric"},{"id":8,"scope":"Global","possibleValues":"1MB to
8MB","name":"innodb_log_buffer_size","value":null,"isDynamic":0,"comment":"permitted values are
multiple of
1024","defaultValue":"1MB","type":"Numeric"},{"id":9,"scope":"Global","possibleValues":"min 10,
default
300","name":"innodb_open_files","value":null,"isDynamic":0,"comment":"","defaultValue":"300","type
":"Numeric"},{"id":10,"scope":"Global","possibleValues":"upto 4GB
max","name":"join_buffer_size","value":null,"isDynamic":1,"comment":"","defaultValue":"0","type":"N
umeric"},{"id":11,"scope":"Global","possibleValues":"minimum 4096 bytes, max
1GB","name":"max_binlog_size","value":null,"isDynamic":1,"comment":"","defaultValue":"1GB","type":
"Numeric"},{"id":12,"scope":"Global","possibleValues":"upto 2GB
max","name":"read_buffer_size","value":null,"isDynamic":1,"comment":"should be in multiple of
4KB","defaultValue":"131072","type":"Numeric"},{"id":13,"scope":"Global","possibleValues":"Max upto
4GB","name":"sort_buffer_size","value":null,"isDynamic":1,"comment":"","defaultValue":"2097144","ty
pe":"Numeric"},{"id":14,"scope":"Global","possibleValues":"Max upto
4GB","name":"sort_buffer_size","value":null,"isDynamic":1,"comment":"","defaultValue":"2097144","ty
pe":"Numeric"}],"createdDate":"2014-07-08 05:57:10"}

```

Response Code(s):

| | |
|--------------------------------|--|
| Normal Response Code(s): | 200 |
| Error Response Code(s): | computeFault (400, 500), serviceUnavailable (503), unauthorized (401), forbidden (403), badRequest (400), badMethod (405), overLimit (413) |
| Custom Error Response Code(s): | queryFailed(1009), entityDoesNotExist(1012), invalidRequest(1000) invalidParameterValue(1013) |

4.7 Get SQL Parameter Group By User ID and Engine Name

| Http Method | URL | Description |
|-------------|---|---|
| GET | /sql/api/v1/sqlparametergroup?userId=<id>&engineName=MySQL 5.5.27 | Gets SQL parameter group by user ID and engine name |

Query Parameters:

| Filter Name | Type | Description |
|-------------|---------|-----------------------------|
| user ID | Integer | Unique ID of the user. |
| engineName | String | Engine name for SQL service |

Example Request:

```
curl -i "http://localhost:8080/sql/api/v1/sqlparametergroup?userId=2&engineName=MySQL+5.5.27" -X GET -H "CL-AUTH-TOKEN:dd660ba2-7ce2-4e46-99c1-a3335f66b712"
```

Example Response:

```
{
  "success": true,
  "errors": {},
  "response": {
    "parameterGroup": {
      "id": 1,
      "description": "MySQL_Parameter_Group",
      "name": "MySQL_PG",
      "engineName": "MySQL-5.5.27",
      "parameters": [
        {
          "id": 1,
          "scope": "Global",
          "possibleValues": "25 PER of RAM",
          "name": "key_buffer_size",
          "value": null,
          "isDynamic": 1,
          "comment": "",
          "defaultValue": "",
          "type": "Numeric"
        },
        {
          "id": 2,
          "scope": "Global",
          "possibleValues": "0 to 18446744073709547520",
          "name": "query_cache_size",
          "value": null,
          "isDynamic": 1,
          "comment": "permitted values are multiple of 1024",
          "defaultValue": "0 (off)",
          "type": "Numeric"
        },
        {
          "id": 3,
          "scope": "Global",
          "possibleValues": "0 or 1 or 2",
          "name": "query_cache_type",
          "value": null,
          "isDynamic": 1,
          "comment": "",
          "defaultValue": "1 (on)",
          "type": "Numeric"
        },
        {
          "id": 4,
          "scope": "Global",
          "possibleValues": "0 to 16384",
          "name": "thread_cache_size",
          "value": null,
          "isDynamic": 1,
          "comment": "",
          "defaultValue": "0",
          "type": "Numeric"
        },
        {
          "id": 5,
          "scope": "Global",
          "possibleValues": "0 to 1000",
          "name": "innodb_thread_concurrency",
          "value": null,
          "isDynamic": 1,
          "comment": "Setting to 0, takes the limit off",
          "defaultValue": "8",
          "type": "Numeric"
        },
        {
          "id": 6,
          "scope": "Global",
          "possibleValues": "0 to 5000",
          "name": "max_connections",
          "value": null,
          "isDynamic": 1,
          "comment": "",
          "defaultValue": "100",
          "type": "Numeric"
        },
        {
          "id": 7,
          "scope": "Global",
          "possibleValues": "upto 80 PER of memory",
          "name": "innodb_buffer_pool_size",
          "value": null,
          "isDynamic": 0,
          "comment": "Setting it very large takes longer to initialize",
          "defaultValue": "8MB",
          "type": "Numeric"
        },
        {
          "id": 8,
          "scope": "Global",
          "possibleValues": "1MB to 8MB",
          "name": "innodb_log_buffer_size",
          "value": null,
          "isDynamic": 0,
          "comment": "permitted values are multiple of 1024",
          "defaultValue": "1MB",
          "type": "Numeric"
        },
        {
          "id": 9,
          "scope": "Global",
          "possibleValues": "min 10, default 300",
          "name": "innodb_open_files",
          "value": null,
          "isDynamic": 0,
          "comment": "",
          "defaultValue": "300",
          "type": "Numeric"
        },
        {
          "id": 10,
          "scope": "Global",
          "possibleValues": "upto 4GB max",
          "name": "join_buffer_size",
          "value": null,
          "isDynamic": 1,
          "comment": "",
          "defaultValue": "0",
          "type": "Numeric"
        },
        {
          "id": 11,
          "scope": "Global",
          "possibleValues": "minimum 4096 bytes, max 1GB",
          "name": "max_binlog_size",
          "value": null,
          "isDynamic": 1,
          "comment": "",
          "defaultValue": "1GB",
          "type": "Numeric"
        },
        {
          "id": 12,
          "scope": "Global",
          "possibleValues": "upto 2GB max",
          "name": "read_buffer_size",
          "value": null,
          "isDynamic": 1,
          "comment": "should be in multiple of 4KB",
          "defaultValue": "131072",
          "type": "Numeric"
        },
        {
          "id": 13,
          "scope": "Global",
          "possibleValues": "Max upto 4GB",
          "name": "sort_buffer_size",
          "value": null,
          "isDynamic": 1,
          "comment": "",
          "defaultValue": "2097144",
          "type": "Numeric"
        },
        {
          "id": 14,
          "scope": "Global",
          "possibleValues": "Max upto 4GB",
          "name": "sort_buffer_size",
          "value": null,
          "isDynamic": 1,
          "comment": "",
          "defaultValue": "2097144",
          "type": "Numeric"
        }
      ]
    },
    "createdDate": "2014-07-08 05:57:10"
  }
}
```

Response Code(s):

| | |
|--------------------------------|--|
| Normal Response Code(s): | 200 |
| Error Response Code(s): | computeFault (400, 500), serviceUnavailable (503), unauthorized (401), forbidden (403), badRequest (400), badMethod (405), overLimit (413) |
| engineName | String |
| Custom Error Response Code(s): | queryFailed(1009), entityDoesNotExist(1012), invalidParameterValue(1013), invalidRequest(1000) |

5. Entity: SQL Subscriptions

5.1 Add Subscription

| Http Method | URL | Description |
|-------------|--------------------------|---|
| POST | /sql/api/v1/subscription | Creates a new SQL service subscription. |

Request Parameters:

| Attribute | Type | Description | Required |
|----------------------|---------|---|----------|
| <action> | String | Action name "add" | Yes |
| name | String | Unique subscription name. | Yes |
| price | String | Subscription pricing in dollars(\$) | Yes |
| priceType | String | Subscription Duration Expected values: Monthly=1 OR Yearly=2 | Yes |
| features | String | Salient Features /Description of the subscription. | Yes |
| storageSize | Integer | Size of storage. Valid Range:10 to 1024GB | Yes |
| multiNode | Integer | Number of instances want to provision. | Yes |
| iaasProviderId | Integer | Unique ID of IaaS Provider | Yes |
| imageInstanceId | Integer | Unique ID of image instance type. | Yes |
| engineId | Integer | Unique ID of engine. | Yes |
| availabilityZone | String | This parameter holds the value of the availability zone in which the instances is to be launched If target cloud is a VM pool, then this parameter is not mandatory. | Yes |
| availabilityZoneName | String | This parameter holds the value of the availability zone name in which the instances is to be launched.If target cloud is a VM pool, then this parameter is not mandatory. | Yes |
| multiAZ | Integer | Mandatory when setting up Multi AZ | Yes |

| | | | |
|-----------------------------|---------|--|----|
| | | <p>redundant node</p> <p>Valid Values: multiAZ=0 for No, multiAZ=1 for yes</p> <p>Supported only for Percona engine wherein</p> <p>(In case this flag is set, the parameters "multiAZAvailabilityZone" and "multiAZAvailabilityZoneName" are mandatory)</p> | |
| multiAZAvailabilityZone | String | <p>Second Availability zone in which the secondary node of the Percona Multi AZ instances is to be launched</p> <p>This is mandatory only if multiAZ value is 1.</p> | No |
| multiAZAvailabilityZoneName | String | <p>Second Availability zone name in which the secondary node of the Percona Multi AZ instances is to be launched</p> <p>This is mandatory only if multiAZ value is 1.</p> | No |
| multiAZInstanceType | Integer | <p>Valid Input: {"id":1} and so on.</p> <p>Unique ID of image instance type for secondary zone.</p> <p>This is mandatory only if multiAZ value is 1.</p> | No |

Example Request:

```
curl -i "http://localhost:8080/sql/api/v1/subscription" -X POST -H "CL-AUTH-TOKEN:724234d3-0e7b-493d-aa55-6c43a28222f4" -d '{"add":{"subscription": {"name": "SQLSubscription1","price": "$10","priceType": "1","features": "MySQLServiceonStandaloneVM<br>VMConfiguration:<br>Engine: MySQL5.5.27<br>IaaSProvider: AmazonEC2<br>AvailabilityZone: us-east1<br>InstanceConfiguration:standard.xsmall-1vCPU/1GBRAM/30GBHD-$1<br>NoofNodes: 1<br>Ext.Volume: 100GB<br>","storageSize": "10","multiAZ": "0","multiAZInstanceType":{"id":1},"multiAZAvailabilityZoneName":"US-East1","multiAZAvailabilityZone":"us-east1","iaasProviderId": "1","availabilityZoneName": "US-East1","availabilityZone": "us-east1","engineId": "1","imageInstanceId": "1","multiNode": "1"}}}'
```

Example Response:

```
{ "success": true, "errors": {}, "response": { "subscription": { "ownerType": 1, "priceType": 1, "imageInstanceId": 1, "multiAZ": 0, "id": 94, "multiAvailabilityZone": "", "price": "$10", "createdBy": 1, "nodes": 1, "name": "SQLSubscription1", "availabilityZone": "us-east1", "storageSize": 10, "multiAZAvailabilityZoneName": "", "feature": "MySQLServiceonStandaloneVM<br>VMConfiguration:<br>Engine: MySQL5.5.27<br>IaaSProvider: AmazonEC2<br>AvailabilityZone: us-east1<br>InstanceConfiguration:standard.xsmall-1vCPU/1GBRAM/30GBHD-$1<br>NoofNodes: 1<br>Ext.Volume: 100GB<br>","availabilityZoneName": "US-East1","engineId": 1,"targetCloudId": null,"iaasProviderId": 1,"createdDate": "2014-07-08"
```

04:53:09","multiAzInstanceTypeId":0}}}

Response Code(s):

| | |
|--------------------------------|---|
| Normal Response Code(s): | 200 |
| Error Response Code(s): | computeFault (400, 500), serviceUnavailable (503), unauthorized (401), forbidden (403), badRequest (400), badMethod (405), overLimit (413), itemNotFound (404), serverCapacityUnavailable (503) |
| Custom Error Response Code(s): | queryFailed(1009), invalidParameterValue(1013), invalidAction(1001), entityAlreadyExist(1011), invalidRequest(1000) |

5.2 Update Subscription

| Http Method | URL | Description |
|-------------|--------------------------|------------------------------------|
| PUT | /sql/api/v1/subscription | Updates the existing subscription. |

Request Parameters:

| Attribute | Type | Description | Required |
|----------------|---------|---|----------|
| ID | Integer | Unique ID of existing subscription. | Yes |
| name | String | Unique subscription name. | Yes |
| price | String | Subscription pricing in dollars(\$) | Yes |
| priceType | String | Subscription Duration Expected values: Monthly=1 OR Yearly=2 | Yes |
| features | String | Salient Features /Description of the subscription. | Yes |
| storageSize | Integer | Size of storage. Valid Range:10 to 1024GB | Yes |
| multiNode | Integer | Number of instances want to provision. | Yes |
| iaasProviderId | Integer | Unique ID of IaaS Provider | Yes |

| | | | |
|-----------------------------|---------|--|-----|
| imageInstanceTypeId | Integer | Unique ID of image instance type. | Yes |
| engineId | Integer | Unique ID of engine. | Yes |
| availabilityZone | String | This parameter holds the value of the Availability zone in which the instances is to be launched If target cloud is a VM pool, then this parameter is not mandatory. | Yes |
| availabilityZoneName | String | This parameter holds the value of the Availability zone name in which the instances is to be launched.If target cloud is a VM pool, then this parameter is not mandatory. | Yes |
| multiAZ | Integer | Mandatory when setting up Multi AZ redundant node Valid Values: multiAZ=0 for No, mulitAZ=1 for yes Supported only for Percona engine wherein (In case this flag is set, the parameters "multiAZAvailabilityZone" and "multiAZAvailabilityZoneName" are mandatory) | Yes |
| multiAzAvailabilityZone | String | Second Availability zone in which the secondary node of the Percona Multi AZ instances is to be launched This Is mandatory only if multiAZ value is 1. | No |
| multiAzAvailabilityZoneName | String | Second Availability zone name in which the secondary node of the Percona Multi AZ instances is to be launched This Is mandatory only if multiAZ value is 1. | No |
| multiAzInstanceTypeId | Integer | Unique ID of image instance type for secondary zone This Is mandatory only if multiAZ value is 1. | No |

Example Request:

```
curl -i "http://localhost:8080/sql/api/v1/subscription/94" -X PUT -H "CL-AUTH-TOKEN:724234d3-0e7b-493d-aa55-6c43a28222f4" -d{"name": "SQLSubscription1", "price": "$10", "priceType": "1", "features": "Percona MultiAZ Instance<br>VMConfiguration:<br>Engine: Percona Server 5.5<br>IaaSProvider: AmazonEC2<br>AvailabilityZone: us-east1<br>InstanceConfiguration:standard.xsmall-1vCPU/1GBRAM/30GBHD-$1<br>No of Nodes: 1<br>Ext.Volume: 10GB<br>", "storageSize": "10", "multiAZ": "1", "multiAzInstanceTypeId": "1", "multiAzAvailabilityZoneName": "US-East1", "multiAzAvailabilityZone": "us-east1", "iaasProviderId": "1", "availabilityZoneName": "US-
```

East1","availabilityZone": "us-east1","engineId": "3","imageInstanceId": "1","multiNode": "1"}

Example Response:

```
{"success":true,"errors":{},"response":{}}
```

Response Code(s):

| | |
|--------------------------------|---|
| Normal Response Code(s): | 200 |
| Error Response Code(s): | computeFault (400, 500), serviceUnavailable (503), unauthorized (401), forbidden (403), badRequest (400), badMethod (405), overLimit (413), itemNotFound (404), serverCapacityUnavailable (503) |
| Custom Error Response Code(s): | queryFailed(1009), invalidParameterValue(1013), entityDoesNotExist(1012), invalidAction(1001), invalidRequest(1000) |

5.3 Delete Subscription by ID

| Http Method | URL | Description |
|-------------|-------------------------------|--------------------------------|
| DELETE | /sql/api/v1/subscription/<id> | Deletes the subscription by ID |

Example Request:

```
curl -i "http://localhost:8080/sql/api/v1/subscription/94" -X DELETE -H "CL-AUTH-TOKEN:724234d3-0e7b-493d-aa55-6c43a28222f4"
```

Response Format:

```
{"success":true,"errors":{},"response":{}}
```

Response Code(s):

| | |
|--------------------------------|--|
| Normal Response Code(s): | 200 |
| Error Response Code(s): | computeFault (400, 500), serviceUnavailable (503), unauthorized (401), forbidden (403), badRequest (400), badMethod (405), overLimit (413) |
| engineName | String |
| Custom Error Response Code(s): | queryFailed(1009), entityDoesNotExist(1012), invalidParameterValue(1013), invalidRequest(1000) |

5.4 Get Subscription by ID

| Http Method | URL | Description |
|-------------|----------------------------------|-----------------------------|
| GET | /sql/api/v1/subscription?id=<id> | Gets specific subscription. |

Example Request:

```
curl -i "http://localhost:8080/sql/api/v1/subscription/294" -X GET -H "CL-AUTH-TOKEN:e67f8afb-f959-4669-8d14-6e5d6d015e1f"
```

Example Response:

```
{"success":true,"errors":{},"response":{"subscription":{"ownerType":1,"priceType":1,"imageInstanceId":1,"multiAZ":1,"id":94,"multiAvailabilityZone":"us-east1","price":"$10","createdBy":1,"nodes":1,"name":"SQLSubscription1","availabilityZone":"us-east1","storageSize":10,"multiAZAvailabilityZoneName":"US-East1","feature":"Percona MultiAZ Instance<br>VMConfiguration:<br>Engine: Percona Server 5.5<br>IaaSProvider: AmazonEC2<br>AvailabilityZone: us-east1<br>InstanceConfiguration:standard.xsmall-1vCPU/1GBRAM/30GBHD-$1<br>No of Nodes: 1<br>Ext.Volume: 10GB<br>","availabilityZoneName":"US-East1","engineId":3,"targetCloudId":null,"iaasProviderId":1,"createdDate":"2014-07-08 05:23:10","multiAzInstanceTypeId":1}}}}
```

Response Code(s):

| | |
|--------------------------------|--|
| Normal Response Code(s): | 200 |
| Error Response Code(s): | computeFault (400, 500), serviceUnavailable (503), unauthorized (401), forbidden (403), badRequest (400), badMethod (405), overLimit (413) |
| engineName | String |
| Custom Error Response Code(s): | queryFailed(1009), entityDoesNotExist(1012), invalidParameterValue(1013), invalidRequest(1000) |

5.5 Get All Subscriptions

| Http Method | URL | Description |
|-------------|--------------------------|--|
| GET | /sql/api/v1/subscription | Gets details of all SQL subscriptions. |

Example Request:

```
curl -i "http://localhost:8080/sql/api/v1/subscription" -X GET -H "CL-AUTH-TOKEN:e67f8afb-f959-4669-8d14-6e5d6d015e1f"
```

Example Response:

```
{
  "success": true,
  "errors": {},
  "response": {
    "subscription": [
      {
        "ownerType": 1,
        "priceType": 1,
        "imageInstanceId": 1,
        "multiAZ": 1,
        "id": 94,
        "multiAvailabilityZone": "us-east1",
        "price": "$10",
        "createdBy": 1,
        "nodes": 1,
        "name": "SQLSubscription1",
        "availabilityZone": "us-east1",
        "storageSize": 10,
        "multiAZAvailabilityZoneName": "US-East1",
        "feature": "Percona MultiAZ Instance<br>VMConfiguration:<br>Engine: Percona Server 5.5<br>IaaSProvider: AmazonEC2<br>AvailabilityZone: us-east1<br>InstanceConfiguration: standard.xsmall-1vCPU/1GBRAM/30GBHD-$1<br>No of Nodes: 1<br>Ext.Volume: 10GB<br>",
        "availabilityZoneName": "US-East1",
        "engineId": 3,
        "targetCloudId": null,
        "iaasProviderId": 1,
        "createdDate": "2014-07-08 05:23:10",
        "multiAzInstanceTypeId": 1,
        {
          "ownerType": 1,
          "priceType": 1,
          "imageInstanceId": 1,
          "multiAZ": 1,
          "id": 96,
          "multiAvailabilityZone": "us-east1",
          "price": "$2",
          "createdBy": 1,
          "nodes": 1,
          "name": "X",
          "availabilityZone": "us-east1",
          "storageSize": 10,
          "multiAZAvailabilityZoneName": "US-East1",
          "feature": "X",
          "availabilityZoneName": "US-East1",
          "engineId": 3,
          "targetCloudId": null,
          "iaasProviderId": 1,
          "createdDate": "2014-07-08 05:21:23",
          "multiAzInstanceTypeId": 1,
          {
            "ownerType": 1,
            "priceType": 1,
            "imageInstanceId": 1,
            "multiAZ": 0,
            "id": 97,
            "multiAvailabilityZone": "",
            "price": "$10",
            "createdBy": 1,
            "nodes": 1,
            "name": "SQLSubscription2",
            "availabilityZone": "us-east1",
            "storageSize": 10,
            "multiAZAvailabilityZoneName": "",
            "feature": "MySQLServiceonStandaloneVM<br>VMConfiguration:<br>Engine: MySQL5.5.27<br>IaaSProvider: AmazonEC2<br>AvailabilityZone: us-east1<br>InstanceConfiguration: standard.xsmall-1vCPU/1GBRAM/30GBHD-$1<br>NoofNodes: 1<br>Ext.Volume: 10GB<br>",
            "availabilityZoneName": "US-East1",
            "engineId": 1,
            "targetCloudId": null,
            "iaasProviderId": 1,
            "createdDate": "2014-07-08 05:24:32",
            "multiAzInstanceTypeId": 1
          }
        }
      }
    ]
  }
}
```

Response Code(s):

| | |
|--------------------------------|--|
| Normal Response Code(s): | 200 |
| Error Response Code(s): | computeFault (400, 500), serviceUnavailable (503), unauthorized (401), forbidden (403), badRequest (400), badMethod (405), overLimit (413) |
| Error Response Code(s): | computeFault (400, 500), serviceUnavailable (503), unauthorized (401), forbidden (403), badRequest (400), badMethod (405), overLimit (413) |
| Custom Error Response Code(s): | queryFailed(1009), invalidRequest(1000) |