

NTT Communications

Cloudⁿ

RDB API Manual

Ver.1.3

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Ver.1.2	27/6/2013	Added APIs (SecurityGroup)
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1-1) Service overview

This manual explains how to use Cloudⁿ Relational Database (RDB).

Cloudⁿ Relational Database (RDB) Service makes it easy to set up, operate, and expand a relational database (MySQL) in the cloud.

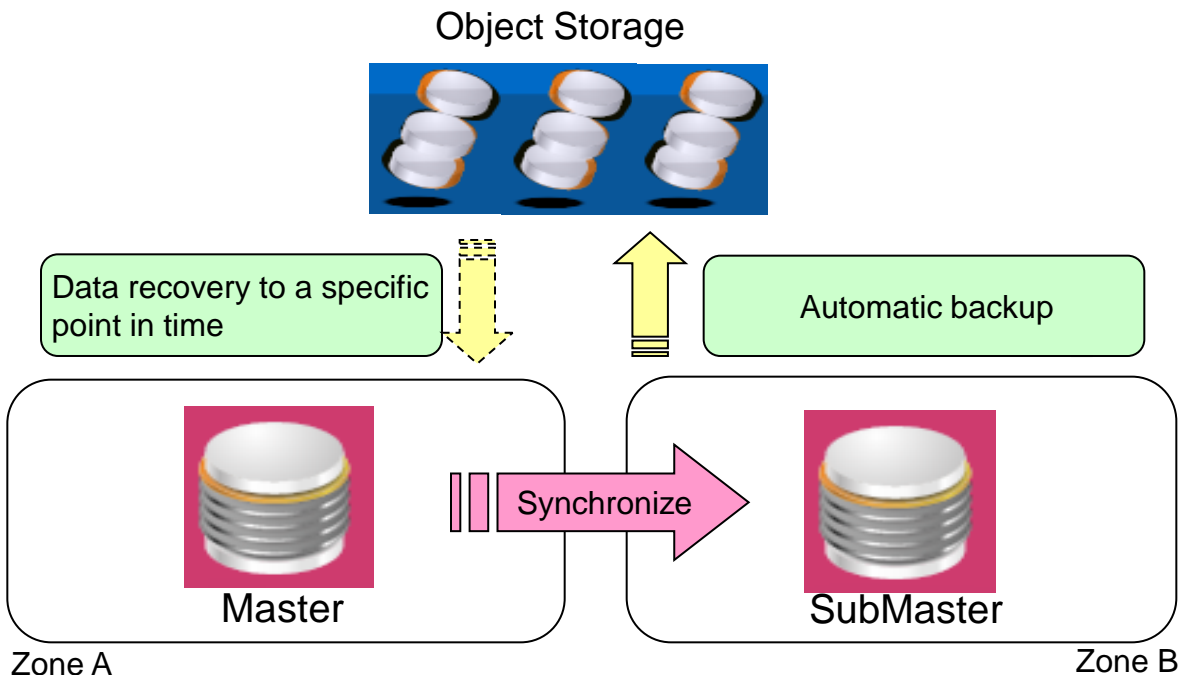
This relieves customers from time-consuming database management, and provides flexibly scalable functions at low cost, allowing the customers to concentrate on application development and their businesses.

The followings are the major features offered in the service.

- Like other Cloudⁿ services, no initial investment is required, and the customer only has to pay for the actual resources used. In addition, data transfer (I/O) is provided free of charge.
- Either a single-zone or a multi-zone configuration can be selected for deployment.
- Availability and reliability of multi-zone configuration can be enhanced further by mirroring.
- In multi-zone configuration, failover is performed automatically whenever a trouble occurs to Master.
- Specific point-in-time recovery is made possible by storing backups for the retention period that the user specified.

Backup scheme and redundancy

- ❑ The data backup function offers automatic backups for the retention period that the customer specified in "BackupRetentionPeriod".
- ❑ The data can be restored to any point in time as long as it is within the period that the customer specified in "BackupRetentionPeriod".
Note: It can be restored to 5 minutes before at the closest.
- ❑ With multi-zone configuration, failover to SubMaster is performed automatically whenever a trouble occurs to Master.



1-2) Making preparation

Make sure you have the followings before using Cloudⁿ RDB API.



Start of RDB service

Start using RDB service from Cloudⁿ Portal. Refer to “3-1) Start using RDB service” in “Cloudⁿ Portal Operation Manual.”



API access key and secret key common to Cloudⁿ Services

In Cloudⁿ Portal, check that you have the common API access key and secret key necessary for using RDB API. Refer to “3-3) Managing API access key/secret key” in Cloudⁿ Portal Instruction Manual.”



Virtual servers created in Compute (FLAT type) for RDB services

Make sure that you have created virtual servers (Linux OS/CentOS, Ubuntu) in Compute (FLAT type/east Japan) to start using the RDB of Cloudⁿ RDB Service.

For how to create virtual servers, refer to “Cloudⁿ Compute (FLAT type) Operation Manual.”



You cannot use RDB Service from virtual servers created in VLAN type Compute.

2-1) API request format

In this service, customers are provided with APIs for creating/deleting the DB instances of RDB services.

Using the APIs, the customers can operate resources directly from their own programs. These APIs are also AmazonWebService RDS compatible (2012-04-23 version). You will need to connect to the following API server (endpoint) URL to use the service.

API server (endpoint) URL: rdb-api.jp-e1.cloudn-service.com

[API request format]

API requests are sent in Query API format as bellow.

```
https://rdb-api.jp-e1.cloudn-service.com/  
?Action=CreateDBInstance&DBInstanceIdentifier=db-instance-  
name&Engine=MySQL&EngineVersion=5.5.28&MasterUserPassword=db_password&Allo-  
catedStorage=30&MasterUsername=db_username&Version=2012-04-  
23&DBInstanceClass=db.m1.small&SignatureVersion=2&SignatureMethod=HmacSHA2  
56&Timestamp=2013-02-  
01T05%3A54%3A53.578Z&AWSAccessKeyId=<APIKey>&Signature=<Signature>
```

The above shows “Create DB Instance” as an example.

Usually, an API request contains the command type and option value, and is comprised of the following components.

1. <https://rdb-api.jp-e1.cloudn-service.com/>
2. Action=CreateDBInstance
3. DBInstanceIdentifier=db-instance-name
4. Engine=MySQL
5. EngineVersion=5.5.28
6. MasterUserPassword=db_password
7. AllocatedStorage=30
8. MasterUsername=db_username
9. Version=2012-04-23
10. DBInstanceClass=db.m1.small
11. SignatureVersion=2
12. SignatureMethod=HmacSHA256
13. Timestamp=2013-02-01T05%3A54%3A53.578Z
14. AWSAccessKeyId=<APIKey>
15. Signature=<Signature>

1st line: API server/endpoint URL

2nd line: Command sent to Cloudⁿ RDB

3rd to 10th line: Options and its values given to the command

11th to 15th line: Signature information

The procedure for signing the request message is explained from the next page.

2-2) Creating requests

API requests need to have a signature to guarantee the request content. Signatures are created from the request message (created from component 1), adding the user's secret key and HMAC-SHA-256 hash algorithm.

The published key and the secret key necessary for the service are distributed beforehand, and are respectively called "APIKEY" and "SECRETKEY" in the service. Please use the distributed APIKEY and SECRETKEY when using the service.

As an example, the following explains how to create the signature and HTTP request for generating a DB instance.

1

Create command parameters for the request.

In this example, all command parameters other than the signature are created to generate a MySQL DB instance. Enter "CreateDBInstance", which is the action key for DB instance generation.

Command (parameter) = key	Values (sample) = value
Action	CreateDBInstance
DBInstanceIdentifier	db-instance-name
Engine	MySQL
EngineVersion	5.5.28
MasterUserPassword	db_password
AllocatedStorage	30
MasterUsername	db_username
Version	2012-04-23
DBInstanceClass	db.m1.small
SignatureVersion	2
SignatureMethod	HmacSHA256
Timestamp	2013-01-30T18%3A09%3A45Z
AWSAccessKeyId	<APIKEY>



When entering the keys, make sure that the case is correct (case sensitive).



Timestamp keys are created in ISO8601 format, using the time of request issuance.



For details about the parameters, see "4. [RDP API reference](#)."

2-2) Creating requests

The next step is the creation of a signature.

2

Sort the command parameters created in Step 1 in the ascending order of ASCII, and url-encode the value. This is only for signature creation, and the order within the request message is not rearranged. (The request message itself does not have to be rearranged.)

Command (parameter) = key	Values (sample) =value
AWSAccessKeyId	<APIKEY>
Action	CreateDBInstance
AllocatedStorage	30
DBInstanceClass	db.m1.small
DBInstanceIdentifier	db-instance-name
Engine	MySQL
EngineVersion	5.5.28
MasterUserPassword	db_password
MasterUsername	db_username
SignatureMethod	HmacSHA256
SignatureVersion	2
Timestamp	2013-01-30T18%3A09%3A45Z
Version	2012-04-23



Note that the keys need to be sorted in the ascending order of ASCII, not an alphabetical order.

3

Connect each key and value in Step 2 with “=” and connect the sets with “&” to create a single text string for the signature. Make sure that all the components of HTTP request are in place. Hereafter, the following text string is called “data.”

```
GET <
rdb-api.jp-e1.cloudn-service.com/<
/<
AWSAccessKeyId=<APIKey>&Action=CreateDBInstance&AllocatedStorage=30&DBInstanceClass=db.m1.small&DBInstanceIdentifier=db-instance-name&Engine=MySQL&EngineVersion=5.5.28&MasterUserPassword=db_password&MasterUsername=db_username&SignatureMethod=HmacSHA256&SignatureVersion=2&Timestamp=2013-01-30T18%3A09%3A45Z&Version=2012-04-23
```



Start a new line after each element (at the point where < is shown) until “AWSAccessKeyId=...” query starts. The query part should be created in one line without a line break.

2-2) Creating requests

4

For the text string created in Step 3 (“data”), generate a signature using HMAC-SHA256 and SECRETKEY, and then encode it by Base64 to include in the HTTP request.

HMAC-SHA256:

Use the library function of OpenSSL and others.
(e.g., For Ruby, use “ruby-hmac (0.4.0)” of gem library, etc.)

SECRETKEY:

Use the secret key distributed from NTT Com

Sample signature generated by HMAC:

5df60c66d6715d33c5b49af3428c0cbb84918a0baa96c29f3b32670a742bdc29

Sample signature: (after Base64-encoding)

XfYmZtZxXTPFtJrzQowMu4SRiguqlsKfOzJnCnQr3Ck=

Make sure that no line break is included in the signature.

5

Create a request text string by adding the signature to the request message. Firstly, url-encode the parameter values. And then, connect each key and value (already url-encoded) with “=” and connect the parameter sets with “&”. Sorting is unnecessary for HTTP requests.

```
DBInstanceIdentifier=db-instance-name&MasterUsername=db_username&SignatureMethod=HmacSHA256&AllocatedStorage=30&DBInstanceClass=db.m1.small&Action=CreateDBInstance&SignatureVersion=2&MasterUserPassword=db_password&AWSAccessKeyId=<APIKEY>&Engine=MySQL&Version=2012-04-23&EngineVersion=5.5.28&Timestamp=2013-01-30T18%3A09%3A45Z&Signature=XfYmZtZxXTPFtJrzQowMu4SRiguqlsKfOzJnCnQr3Ck%3D
```

NOTE: Do not include line breaks.

6

By using the created request message, execute a GET request in HTTPS. The endpoint of Cloudⁿ RDB is <https://rdb-api.jp-e1.cloudn-service.com/>.

```
GET /? DBInstanceIdentifier=db-instance-name&MasterUsername=db_username&SignatureMethod=HmacSHA256&AllocatedStorage=30&DBInstanceClass=db.m1.small&Action=CreateDBInstance&SignatureVersion=2&MasterUserPassword=db_password&AWSAccessKeyId=<APIKEY>&Signature=XfYtZtZxXTPitJrzQowMu4SpiguqlsKfOzJnCnQS3Ck%3D&Engine=MySQL&Version=2012-04-23&EngineVersion=5.5.28&Timestamp=2013-01-30T18%3A09%3A45Z
```

NOTE: Do not include line breaks.

2-3) Confirming the response

1

When request is successful, a response is returned in xml format as below.

```
<CreateDBInstanceResponse xmlns="http://api.rdb.cloudn-service.com/">
  <CreateDBInstanceResult>
    <DBInstance>
      <ReadReplicaDBInstanceIdentifiers></ReadReplicaDBInstanceIdentifiers>
      <Engine>MySQL</Engine>
      <PendingModifiedValues>
        <MasterUserPassword>****</MasterUserPassword>
      </PendingModifiedValues>
      <BackupRetentionPeriod>0</BackupRetentionPeriod>
      <MultiAZ>false</MultiAZ>
      <LicenseModel>general-public-license</LicenseModel>
      <DBInstanceStatus>creating</DBInstanceStatus>
      <DBName/>
      <EngineVersion>5.5.28</EngineVersion>
      <DBInstanceIdentifier>db-instance-name</DBInstanceIdentifier>
      <DBParameterGroups>
        <DBParameterGroup>
          <ParameterApplyStatus>in-sync</ParameterApplyStatus>
          <DBParameterGroupName>default.mysql5.5</DBParameterGroupName>
        </DBParameterGroup>
      </DBParameterGroups>
      <DBSecurityGroups>
      </DBSecurityGroups>
      ...
      <AllocatedStorage>30</AllocatedStorage>
      <DBInstanceClass>db.m1.small</DBInstanceClass>
      <MasterUsername>db_username</MasterUsername>
    </DBInstance>
  </CreateDBInstanceResult>
  <ResponseMetadata>
    <RequestId>job-f7a2ac50d76487a2fefe829b84cda9d6</RequestId>
  </ResponseMetadata>
</CreateDBInstanceResponse>
```

3-1) Creating DB instances

The following explains how to create a DB instance using a specific example.

1

Create a request for DB instance creation:

Enter “CreateDBInstance” as “Action” key, and the desired DB instance name as “DBInstanceIdentifier” key.

And then, enter the name and password of the user who connects to the DB instance as “MasterUsername” and “MasterUserPassword” respectively.

Command (parameter) = key	Value (sample) =value
Action	CreateDBInstance
DBInstanceIdentifier	db-instance-name *
Engine	MySQL
EngineVersion	5.5.28
MasterUserPassword	db_password *
AllocatedStorage	30 ✖
MasterUsername	db_username *
Version	2012-04-23
DBInstanceClass	db.m1.small
SignatureVersion	2
SignatureMethod	HmacSHA256
Timestamp	2013-01-30T18%3A09%3A45Z
AWSAccessKeyId	<APIKEY>



For details about the parameters, see “4. [RDP API reference](#).”



Values with asterisks “*” do not have to be consistent, while the value of “DBInstanceIdentifier” key must be fixed in the system.

3-1) Creating DB instances

2

When request is successful, a response is returned in xml format as below.

```
<CreateDBInstanceResponse xmlns="http://api.rdb.cloudn-service.com/">
  <CreateDBInstanceResult>
    <DBInstance>
      <ReadReplicaDBInstanceIdentifiers></ReadReplicaDBInstanceIdentifiers>
      <Engine>MySQL</Engine>
      <PendingModifiedValues>
        <MasterUserPassword>****</MasterUserPassword>
      </PendingModifiedValues>
      <BackupRetentionPeriod>0</BackupRetentionPeriod>
      <MultiAZ>false</MultiAZ>
      <LicenseModel>general-public-license</LicenseModel>
      <DBInstanceStatus>creating</DBInstanceStatus>
      <DBName/>
      <EngineVersion>5.5.28</EngineVersion>
      <DBInstanceIdentifier>db-instance-name</DBInstanceIdentifier>
      <DBParameterGroups>
        <DBParameterGroup>
          <ParameterApplyStatus>in-sync</ParameterApplyStatus>
          <DBParameterGroupName>default.mysql5.5</DBParameterGroupName>
        </DBParameterGroup>
      </DBParameterGroups>
      <DBSecurityGroups>
      </DBSecurityGroups>
      ...
      <AllocatedStorage>30</AllocatedStorage>
      <DBInstanceClass>db.m1.small</DBInstanceClass>
      <MasterUsername>db_username</MasterUsername>
    </DBInstance>
  </CreateDBInstanceResult>
  <ResponseMetadata>
    <RequestId>job-f7a2ac50d76487a2fefe829b84cda9d6</RequestId>
  </ResponseMetadata>
</CreateDBInstanceResponse>
```

3-2) Displaying the DB instance

The following explains how to create DB instances created in 3-1) using a specific example.

1

Create a request for displaying the created DB instance information:

Enter "DescribeDBInstances" as "Action" key, and the desired DB instance name as "DBInstanceIdentifier" key.

If "DBInstanceIdentifier" key is omitted, all DB instance information is displayed.

Command (parameter) = key	Value (sample) = value
Action	DescribeDBInstances
DBInstanceIdentifier	db-instance-name
SignatureVersion	2
SignatureMethod	HmacSHA256
Version	2012-04-23
Timestamp	2013-01-30T18%3A09%3A45Z
AWSAccessKeyId	<APIKEY>



For details about the parameter, see "4. [RDP API reference](#)."

3-2) Displaying the DB instance

2

When request is successful, a response is returned in xml format as below.

```
<DescribeDBInstancesResponse xmlns="http://api.rdb.cloudn-service.com/">
  <DescribeDBInstancesResult>
    <DBInstances>
      <DBInstance>
        <ReadReplicaDBInstanceIdentifiers>
        </ReadReplicaDBInstanceIdentifiers>
        <LatestRestorableTime/>
        <Engine>MySQL</Engine>
        <DBName/>
        <PendingModifiedValues>
          <MasterUserPassword>****</MasterUserPassword>
          <AllocatedStorage>30</AllocatedStorage>
        </PendingModifiedValues>
        <BackupRetentionPeriod>0</BackupRetentionPeriod>
        <MultiAZ>false</MultiAZ>
        <LicenseModel>general-public-license</LicenseModel>
        <DBInstanceStatus>available</DBInstanceStatus>
        <EngineVersion>5.5.28</EngineVersion>
        <Endpoint>
          <Port>3306</Port>
          <Address>testdb.***.example.com</Address>
        </Endpoint>
        <DBInstanceIdentifier>db-instance-name</DBInstanceIdentifier>
        (OMMISSION)
      </DBInstance>
    </DBInstances>
  </DescribeDBInstancesResult>
  <ResponseMetadata>
    <RequestId>job-b3e443166f2e1b4c4891f221c4abbb32</RequestId>
  </ResponseMetadata>
</DescribeDBInstancesResponse>
```

For the response format:

Check that the value in <DBInstanceStatus> tag is "available".

If the value is still "creating", you cannot use the DB instance yet.

DB instance connection information is expressed in <Endpoint> tag.

<Address> tag: Hostname for DB connection

<Port> tag: Port no. for DB connection

3-3) Connecting to the DB instance

The following explains how to connect to a DB instance by using a specific example.

1

The below items are necessary for using the DB instance.

- DB user name: “MasterUsername” setting you made during DB instance creation
- DB password: “MasterUserPassword” setting you made during DB instance creation
- DB host name: Value in <Address> tag under <Endpoint> of the DB instance information
- DB port no.: Value in <Port> tag under <Endpoint> of the DB instance information.

Examples)

MasterUsername=db_username

MasterUserPassword=db_password

Address=db-instance-name.****.example.com

Port=3306

3-3) Connecting to the DB instance

2

Connect to the DB instance using the information in Step 1.

[When connecting from DB client]

Connect from a mysql client, and check that a database/table/record can be created.

```
$ mysql -h (DB hostname) -P (DB port no.) -u (DB username) -p
--> When a prompt appears, enter the password.
mysql> (Connection is successful)
mysql> CREATE DATABASE testdb1;
mysql> USE testdb1;
mysql> CREATE TABLE example ( id INT NOT NULL AUTO_INCREMENT PRIMARY
    KEY,
    data VARCHAR(100));
mysql> INSERT INTO example (data) VALUES ('value1'), ('value2'), ('value3');
mysql> SELECT * FROM example;
+----+-----+
| id | data  |
+----+-----+
| 1 | value1 |
| 2 | value2 |
| 3 | value3 |
+----+-----+
3 rows in set (0.20 sec)
```

[When connecting from the program]

Check that you can connect from the program. The following example shows a DB record created from Ruby.

```
$ ruby -r mysql -e "Mysql.connect ('DB hostname', 'username', 'password', 'DB name').query
('SELECT * FROM example').each {|id,data| puts ¥"id:#{id} data:#{data}¥"}"
id:1 data:value1
id:2 data:value2
id:3 data:value3
```


3-4) Deleting DB instances

The following explains how to delete a DB instance using a specific example.

1

Create a request for deleting the DB instance:

Enter “DeleteDBInstance” as “Action” key, and the DB instance name you want to delete as “DBInstanceIdentifier” key.

In this example, “true” is entered as “SkipFinalSnapshot” key to omit the creation of DB snapshot prior to deletion.

Command (parameter) = key	Value (sample) = value
Action	DeleteDBInstance
DBInstanceIdentifier	db-instance-name
SkipFinalSnapshot	true
SignatureVersion	2
SignatureMethod	HmacSHA256
Version	2012-04-23
Timestamp	2013-01-30T18%3A09%3A45Z
AWSAccessKeyId	<APIKEY>



For details about the parameters, see “4. [RDP API reference](#).”

3-4) Deleting DB instances

2

When request is successful, a response is returned in xml format as below.

```
<DeleteDBInstanceResponse xmlns="http://api.rdb.cloudn-service.com/">
  <DeleteDBInstanceResult>
    <DBInstance>
      ...
      <DBInstanceStatus>deleting</DBInstanceStatus>
      <DBInstanceIdentifier>db-instance-name</DBInstanceIdentifier>
      ...
    </DBInstance>
  </DeleteDBInstanceResult>
  (omission)
</DeleteDBInstanceResponse>
```

Wait for a while, and display the DB instance. Confirm the deletion by checking that “deleted” is shown in <DBInstanceStatus> tag.

4-1) RDB API list (Action)

The following actions are supported:

Action	Command	Description
	CreateDBInstance	Creates a new DB instance.
	DeleteDBInstance	The DeleteDBInstance action deletes a previously provisioned DB instance. If a final DBSnapshot is requested the status of the RDS instance will be "deleting" until the DBSnapshot is created. DescribeDBInstance is used to monitor the status of this operation. This cannot be canceled or reverted once submitted.
	DescribeDBInstances	Returns information about provisioned DB instances.
	DescribeEvents	Returns events related to DB Instances, DB Security Groups, DB Snapshots and DB Parameter Groups for the past 14 days. By default, the past hour of events are returned.
	ModifyDBInstance	Modify settings for a DB Instance. You can change one or more database configuration parameters by specifying these parameters and the new values in the request.
	RebootDBInstance	Rebooting a DB instance restarts the database engine service. A reboot also applies to the DB instance any modifications to the associated DB parameter group that were pending. Rebooting a DB instance results in a momentary outage of the instance, during which the DB instance status is set to rebooting. If the RDS instance is configured for MultiAZ, it is possible that the reboot will be conducted through a failover. An event is created when the reboot is completed.
	RestoreDBInstanceToPointInTime	Restores a DB Instance to an arbitrary point-in-time.
	AuthorizeDBSecurityGroupIngress	Enables ingress to a DBSecurityGroup using IP addresses.
	CreateDBSecurityGroup	Creates a new DB Security Group.
	DeleteDBSecurityGroup	Deletes a DB Security Group.
	DescribeDBSecurityGroups	Returns a list of DB Security Group descriptions Groups.
	RevokeDBSecurityGroupIngress	Revokes ingress from a DB Security Group for previously authorized IP ranges.

4-1) RDB API list (Action)



The following API (Action) are NOT supported.

- CreateDBInstanceReadReplica
- CreateDBSnapshot
- CopyDBSnapshot
- DeleteDBSnapshot
- DescribeDBSnapshots
- RestoreDBInstanceFromDBSnapshot
- CreateDBParameterGroup
- DescribeDBParameterGroups
- DescribeDBParameters
- DeleteDBParameterGroup
- ModifyDBParameterGroup
- ResetDBParameterGroup
- DescribeEngineDefaultParameters
- DescribeDBEngineVersions
- DescribeOrderableDBInstanceOptions

4-2) RDB API list (Data Type)

The following data types are supported.

Data Types	Command	Description
	EC2SecurityGroup	This data type is used as a response element in the following actions: <ul style="list-style-type: none"> •AuthorizeDBSecurityGroupIngress •DescribeDBSecurityGroups •RevokeDBSecurityGroupIngress
	IPRanges	This data type is used as a response element in the DescribeDBSecurityGroups action.
	DBParameterGroupStatus	The status of the DB Parameter Group. This data type is used as a response element in the following actions: <ul style="list-style-type: none"> •CreateDBInstance •CreateDBInstanceReadReplica •DeleteDBInstance •ModifyDBInstance •RebootDBInstance •RestoreDBInstanceFromDBSnapshot •RestoreDBInstanceToPointInTime
	DBSecurityGroupMemberships	This data type is used as a response element in the following actions: <ul style="list-style-type: none"> •ModifyDBInstance •RebootDBInstance •RestoreDBInstanceFromDBSnapshot •RestoreDBInstanceToPointInTime
	DBSubnetGroup	Contains the result of a successful invocation of the following actions: <ul style="list-style-type: none"> •CreateDBSubnetGroup •ModifyDBSubnetGroup •DescribeDBSubnetGroups •DeleteDBSubnetGroup This data type is used as a response element in the DescribeDBSubnetGroups action.
	Subnets	This data type is used as a response element in the DescribeDBSubnetGroups action.
	AvailabilityZone	Contains Availability Zone information. This data type is used as an element in the following data type: <ul style="list-style-type: none"> •OrderableDBInstanceOption
	Endpoint	This data type is used as a response element in the following actions: <ul style="list-style-type: none"> •CreateDBInstance •DescribeDBInstances •DeleteDBInstance •RestoreDBInstanceToPointInTime

4-2) RDB API list (Data Type)

The following data types are supported.

Data Types	Command	Description
	OptionGroupMembership	-
	PendingModifiedValues	This data type is used as a response element in the following actions. <ul style="list-style-type: none"> • CreateDBInstance • ModifyDBInstance • RestoreDBInstanceToPointInTime
	DBInstance	Contains the result of a successful invocation of the following actions: <ul style="list-style-type: none"> • CreateDBInstance • DeleteDBInstance • ModifyDBInstance • RestoreDBInstanceToPointInTime
	DBSecurityGroup	Contains the result of a successful invocation of the following actions: <ul style="list-style-type: none"> • CreateDBInstance • ModifyDBInstance • RebootDBInstance • DescribeDBInstance • DeleteDBInstance • DescribeDBSecurityGroups • AuthorizeDBSecurityGroupIngress • CreateDBSecurityGroup • RestoreDBInstanceToPointInTime • RevokeDBSecurityGroupIngress
	Event	This data type is used as a response element in the DescribeEvents action.

4-2) RDB API General Information

This is API Server (End Point).

rdb-api.jp-e1.cloudn-service.com

Common Query Parameters		
Parameter	Description	Required
Action	The action to be performed.	Yes
AWSAccessKeyID	The access key ID that corresponds to the secret access key that you used to sign the request. Default : None Type : String	Yes
Expires ※It is not supported at the moment.	The date and time when the request signature expires, expressed in the format YYYY-MM-DDThh:mm:ssZ, as specified in the ISO 8601 standard. Condition: Requests must include either <i>Timestamp</i> or <i>Expires</i> , but not both. Default : None Type : String	Conditional
SecurityToken ※It is not supported at the moment.	The temporary security token that was obtained through a call to AWS Security Token Service. Default : None Type : String	
Signature	The digital signature that you created for the request. For information about generating a signature, see the service's developer documentation. Default : None Type : String	Yes
SignatureMethod	The hash algorithm that you used to create the request signature. Default : None Valid Values : HmacSHA256 Type : String	Yes
SignatureVersion	The signature version you use to sign the request. Set this to the value that is recommended for your service. <code>version2</code> only. Default : None Type : String	Yes
Timestamp	The date and time when the request was signed, expressed in the format YYYY-MM-DDThh:mm:ssZ, as specified in the ISO 8601 standard. Condition: Requests must include either <i>Timestamp</i> or <i>Expires</i> , but not both. Timestamp is required at the moment because "Expires" is not provided. Default : None Type : String	Yes
Version	The API version that the request is written for, expressed in the format YYYY-MM-DD. Only support "2013-04-23" version and Signature version "2".	Yes

4-2) RDB API General Information

Common Errors		
Error	Description	HTTP Status Code
IncompleteSignatureRequest	The request signature does not conform to AWS standards.	400
InternalFailure	The request processing has failed because of an unknown error, exception or failure.	500
InvalidAction	The action or operation requested is invalid.	400
InvalidClientTokenId	The X.509 certificate or RDB access key ID provided does not exist in our records.	403
InvalidParameterCombination	Parameters that must not be used together were used together.	400
InvalidParameterValue	An invalid or out-of-range value was supplied for the input parameter.	400
InvalidQueryParameter	AWS query string is malformed, does not adhere to AWS standards.	400
MalformedQueryString	The query string contains a syntax error.	404
MissingAction	The request is missing an action or a required parameter.	400
MissingAuthenticationToken	Request must contain either a valid (registered) AWS access key ID or X.509 certificate.	403
MissingParameter	A required parameter for the specified action is not supplied.	400
OptInRequired ※It is not supported at the moment.	The AWS access key ID needs a subscription for the service.	403
RequestExpired	The request reached the service more than 15 minutes after the date stamp on the request or more than 15 minutes after the request expiration date (such as for pre-signed URLs), or the date stamp on the request is more than 15 minutes in the future.	400
ServiceUnavailable	The request has failed due to a temporary failure of the server.	503
Throttling	Request was denied due to request throttling.	400

4-3) RDB API(Action)

CreateDBInstance

Description	Creates a new DB instance.
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Request Parameters		
Parameter	Description	Required
AllocatedStorage	The amount of storage (in gigabytes) to be initially allocated for the database instance. MySQL Valid Values : 30 100 Type : Integer	Yes
AutoMinorVersionUpgrrade	Indicates that minor engine upgrades will be applied automatically to the DB Instance during the maintenance window. Default : true Type : Boolean	No
AvailabilityZone	Availability Zone that the database instance will be created in. Default value is set by Cloud ⁿ . Example : jp-e1a jp-e1b Type : String	No
BackupRetentionPeriod	The number of days for which automated backups are retained. The number of days for which automated backups are retained. Default : 1 Constraints : You can only set 0. Type : Integer	No
CharacterSetName ※You can set this parameter but it is not supported at the moment.	For supported engines, indicates that the DB Instance should be associated with the specified CharacterSet. Type : String	No
DBInstanceClass	The compute and memory capacity of the DB Instance. Valid Values : db.m1.small db.m1.medium db.m1.large db.m1.xlarge Type : String	Yes
DBInstanceIdentifier	The DB Instance identifier. This parameter is stored as a lowercase string. Constraints : Must contain from 1 to 63 alphanumeric characters or hyphens. First character must be a letter. Cannot end with a hyphen or contain two consecutive hyphens. Example : my-db-instance Type : String	Yes
DBName	The name of the database to create when the DB Instance is created. If this parameter is not specified, no database is created in the DB Instance. Constraints : Must contain 1 to 64 alphanumeric characters Cannot be a word reserved by the specified database engine Type : String	No

4-3) RDB API(Action)

Request Parameters		Required
パラメーター名	説明	
DBParameterGroupName ※You can set this parameter but it is not supported at the moment.	The name of the DB Parameter Group to associate with this DB instance. If this argument is omitted, the default DBParameterGroup for the specified engine will be used. Constraints : Must be 1 to 255 alphanumeric characters First character must be a letter Cannot end with a hyphen or contain two consecutive hyphens Type : String	No
DBSecurityGroups.member.N	Cannot end with a hyphen or contain two consecutive hyphens. DBSecurityGroups associated with the DB instance are up to three. Default : The default DB Security Group for the database engine. Type : String list	No
DBSubnetGroupName ※You can set this parameter but it is not supported at the moment.	A DB Subnet Group to associate with this DB Instance. If there is no DB Subnet Group, then it is a non-VPC DB instance. Type : String	No
Engine	The version number of the database engine to use. Valid Values : MySQL Type : String	Yes
EngineVersion	The name of the database engine to be used for this instance. Only supported : "5.5.28" Example : 5.5.28 Type : String	No
LicenseModel	License model information for this DB Instance. Valid values : general-public-license Type : String	No
MasterUserPassword	The password for the master database user from Client DBInstance for replication. Constraints : Must contain from 8 to 41 characters. Type : String	Yes
MasterUsername	The name of master user for the client DB Instance for replication. Constraints : Must be 1 to 30 alphanumeric characters. First character must be a letter. Cannot be a reserved word for the database engine. Type : String	Yes
MultiAZ	Specifies if the DB Instance is a Multi-AZ deployment. Type : Boolean	No
OptionGroupName ※You can set this parameter but it is not supported at the moment.	Indicates that the DB Instance should be associated with the specified option group. Type : String	No

4-3) RDB API(Action)

Request Parameters		
Parameter	Description	Required
Port	The port number on which the database accepts connections. Default : 3306 Valid values : 1150~65535 except for 4949,7801,12812 and 30022. Type : Integer	No
PreferredBackupWindow	The daily time range during which automated backups are created, using the BackupRetentionPeriod parameter. Default : A 240-minute window selected at random. Constraints : Must be in the format hh24:mi-hh24:mi. Times should be Universal Time Coordinated (UTC). Must not conflict with the preferred maintenance window. You can set only a 240-minutes window Starting time must not be in between 02:00 and 11:00(UTC). Type : String	No
PreferredMaintenanceWindow	The weekly time range (in UTC) during which system maintenance can occur. Times should be Universal Time Coordinated (UTC). Format : ddd:hh24:mi-ddd:hh24:mi Default : A 30-minute window selected at random Valid Days : Mon, Tue, Wed, Fri, Sat, Sun Constraints : You can set only a 300-minutes window Type : String	No

4-3) RDB API(Action)

Response Elements	
Parameter	Description
AllocatedStorage	Specifies the allocated storage size specified in gigabytes. Type : Integer
AutoMinorVersionUpgrade	Indicates that minor version patches are applied automatically. Type : Boolean
AvailabilityZone	Specifies the name of the Availability Zone the DB Instance is located in. Type : String
BackupRetentionPeriod	Specifies the number of days for which automatic DB Snapshots are retained. Type : Integer
CharacterSetName	If present, specifies the name of the character set that this instance is associated with. Type : String
DBInstanceClass	Contains the name of the compute and memory capacity class of the DB Instance. Type : String
DBInstanceIdentifier	Contains a user-supplied database identifier. This is the unique key that identifies a DB Instance. Type : String
DBInstanceStatus	Specifies the current state of this database. Valid Values : available creating modifying rebooting deleting deleted backing-up resetting-master-credentials failed incompatible-restore incompatible-parameters storage-full Type : String
DBName	Contains the name of the initial database of this instance that was provided at create time, if one was specified when the DB Instance was created. This same name is returned for the life of the DB Instance. Type : String
DBParameterGroups ※You can set this parameter but it is not supported at the moment.	Provides the list of DB Parameter Groups applied to this DB Instance. Type : DBParameterGroupStatus list For more information of DBParameterGroupsStatus, see DBParameterGroupStatus.
DBSecurityGroups	Provides List of DB Security Group elements containing only DBSecurityGroup.Name and DBSecurityGroup.Status subelements. Type : DBSecurityGroupMembership list For more information of DBSecurityGroupMembership, see DBSecurityGroupMembership.
DBSubnetGroup ※You can set this parameter but it is not supported at the moment.	Provides the information of the subnet group associated with the DB instance, including the name, description and subnets in the subnet group. Type : DBSubnetGroup For more information, see DBSubnetGroup.
Endpoint	Specifies the connection endpoint. Type : Endpoint
Engine	Provides the name of the database engine to be used for this DB Instance. Type : String
EngineVersion	Indicates the database engine version. Type : String
InstanceCreateTime	Indicates the database engine version. Type : DateTime
LatestRestorableTime	Specifies the latest time to which a database can be restored with point-in-time restore. Type : DateTime

4-3) RDB API(Action)

Response Elements	
Parameter	Description
LicenseModel	License model information for this DB Instance. Type : String
MasterUsername	Contains the master username for the DB Instance. Type : String
MultiAZ	Specifies if the DB Instance is a Multi-AZ deployment. Type : Boolean
OptionGroupMembership ※You can set this parameter but it is not supported at the moment.	Provides the list of option group memberships for this DB Instance. Type : OptionGroupMembership
PendingModifiedValues ※Not supported at the moment.	Specifies that changes to the DB Instance are pending. Type : PendingModifiedValues
PreferredBackupWindow	Specifies the daily time range during which automated backups are created if automated backups are enabled. Type : String
PreferredMaintenanceWindow	Specifies the weekly time range (in UTC) during which system maintenance can occur. Type : String
ReadReplicaDBInstanceIdentifiers ※Not supported at the moment.	Contains one or more identifiers of the Read Replicas associated with this DB Instance. Type : String list
ReadReplicaSourceDBInstanceIdentifier ※Not supported at the moment.	Contains the identifier of the source DB Instance if this DB Instance is a Read Replica. Type : String

4-3) RDB API(Action)

Errors	
Parameter	Description
DBInstanceAlreadyExists	User already has a DB Instance with the given identifier. HTTP Status Code : 400
DBParameterGroupNotFound	<i>DBParameterGroupName</i> does not refer to an existing DB Parameter Group. HTTP Status Code : 404
DBSecurityGroupNotFound	<i>DBSecurityGroupName</i> does not refer to an existing DB Security Group. HTTP Status Code : 404
DBSubnetGroupNotFound	<i>DBSubnetGroupName</i> does not refer to an existing DB Subnet Group. HTTP Status Code : 400
InstanceQuotaExceeded	Request would result in user exceeding the allowed number of DB Instances. HTTP Status Code : 400
InsufficientDBInstanceCapacity	Specified DB Instance class is not available in the specified Availability Zone. HTTP Status Code : 400
InvalidVPCNetworkState	DB Subnet Group does not cover all availability zones after it is created because users' change. HTTP Status Code : 400
OptionGroupNotFound	The specified option group could not be found. HTTP Status Code : 400
ProvisionedIopsNotAvailableInAZ	Provisioned IOPS not available in the specified Availability Zone. HTTP Status Code : 400
StorageQuotaExceeded	Request would result in user exceeding the allowed amount of storage available across all DB Instances. HTTP Status Code : 400

4-3) RDB API(Action)

DeleteDBInstance

Description	The DeleteDBInstance action deletes a previously provisioned DB instance. If a final DBSnapshot is requested the status of the instance will be "deleting" until the DBSnapshot is created. DescribeDBInstance is used to monitor the status of this operation. This cannot be canceled or reverted once submitted.
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Request Parameters		
Parameter	Description	Required
DBInstanceIdentifier	The DB Instance identifier for the DB Instance to be deleted. This parameter isn't case sensitive. Constraints : Must contain from 1 to 63 alphanumeric characters or hyphens. First character must be a letter. Cannot end with a hyphen or contain two consecutive hyphens. Type : String	Yes
FinalDBSnapshotIdentifier ※You can set this parameter but it is not supported at the moment.	The DBSnapshotIdentifier of the new DBSnapshot created when SkipFinalSnapshot is set to false. Note Specifying this parameter and also setting the SkipFinalShapshot parameter to true results in an error. Constraints : Must be 1 to 255 alphanumeric characters First character must be a letter Cannot end with a hyphen or contain two consecutive hyphens Type : String	No
SkipFinalSnapshot ※You can set this parameter but it is not supported at the moment.	Determines whether a final DB Snapshot is created before the DB Instance is deleted. If true is specified, no DBSnapshot is created. If false is specified, a DB Snapshot is created before the DB Instance is deleted. Note The FinalDBSnapshotIdentifier parameter must be specified if SkipFinalSnapshot is false. Default : true Type : Boolean	Yes

4-3) RDB API(Action)

Response Elements	
Parameter	Description
AllocatedStorage	Specifies the allocated storage size specified in gigabytes. Type : Integer
AutoMinorVersionUpgrade	Indicates that minor version patches are applied automatically. Type : Boolean
AvailabilityZone	Specifies the name of the Availability Zone the DB Instance is located in. Type : String
BackupRetentionPeriod	Specifies the number of days for which automatic DB Snapshots are retained. Type : Integer
CharacterSetName	If present, specifies the name of the character set that this instance is associated with. Type : String
DBInstanceClass	Contains the name of the compute and memory capacity class of the DB Instance. Type : String
DBInstanceIdentifier	Contains a user-supplied database identifier. This is the unique key that identifies a DB Instance. Type : String
DBInstanceStatus	Specifies the current state of this database. Valid Values : available creating modifying rebooting deleting deleted backing-up resetting-master-credentials failed incompatible-restore incompatible-parameters storage-full Type : String
DBName	Contains the name of the initial database of this instance that was provided at create time, if one was specified when the DB Instance was created. This same name is returned for the life of the DB Instance. Type : String
DBParameterGroups ※You can set this parameter but it is not supported at the moment.	Provides the list of DB Parameter Groups applied to this DB Instance. Type : DBParameterGroupStatus list
DBSecurityGroups	Provides List of DB Security Group elements containing only DBSecurityGroup.Name and DBSecurityGroup.Status subelements. Type : DBSecurityGroupMembership list
DBSubnetGroup ※You can set this parameter but it is not supported at the moment.	Provides the information of the subnet group associated with the DB instance, including the name, description and subnets in the subnet group. Type : DBSubnetGroup
Endpoint	Specifies the connection endpoint. Type : Endpoint
Engine	Provides the name of the database engine to be used for this DB Instance. Type : String
EngineVersion	Indicates the database engine version. Type : String
InstanceCreateTime	Provides the date and time the DB Instance was created. Type : DateTime
LatestRestorableTime	Specifies the latest time to which a database can be restored with point-in-time restore. Type : DateTime

4-3) RDB API(Action)

Response Elements	
Parameter	Description
LicenseModel	License model information for this DB Instance. Type : String
MasterUsername	Contains the master username for the DB Instance. Type : String
MultiAZ	Specifies if the DB Instance is a Multi-AZ deployment. Type : Boolean
OptionGroupMembership ※You can set this parameter but it is not supported at the moment.	Provides the list of option group memberships for this DB Instance. Type : OptionGroupMembership
PendingModifiedValues ※You can set this parameter but it is not supported at the moment.	Specifies that changes to the DB Instance are pending. Type : PendingModifiedValues
PreferredBackupWindow	Specifies the daily time range during which automated backups are created if automated backups are enabled. Type : String
PreferredMaintenanceWindow	Specifies the weekly time range (in UTC) during which system maintenance can occur. Type : String
ReadReplicaDBInstanceIdentifiers ※You can set this parameter but it is not supported at the moment.	Contains one or more identifiers of the Read Replicas associated with this DB Instance. Type : String list
ReadReplicaSourceDBInstanceIdentifier ※You can set this parameter but it is not supported at the moment.	Contains the identifier of the source DB Instance if this DB Instance is a Read Replica. Type : String

Errors	
Parameter	Description
DBInstanceNotFound	<i>DBInstanceIdentifier</i> does not refer to an existing DB Instance. HTTP Status Code : 404
DBSnapshotAlreadyExists	<i>DBSnapshotIdentifier</i> is already used by an existing snapshot. HTTP Status Code : 400
InvalidDBInstanceState	The specified DB Instance is not in the <i>available</i> state. HTTP Status Code : 400
SnapshotQuotaExceeded	Request would result in user exceeding the allowed number of DB Snapshots. HTTP Status Code : 400

4-3) RDB API(Action)

DescribeDBInstances

Description	Returns information about provisioned instances.
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Request Parameters		
Parameter	Description	Required
DBInstanceIdentifier	The user-supplied instance identifier. If this parameter is specified, information from only the specific DB Instance is returned. This parameter isn't case sensitive. Constraints : Must contain from 1 to 63 alphanumeric characters or hyphens First character must be a letter Cannot end with a hyphen or contain two consecutive hyphens Type : String	No
Marker ※You can set this parameter but it is not supported at the moment.	An optional pagination token provided by a previous DescribeDBInstances request. If this parameter is specified, the response includes only records beyond the marker, up to the value specified by MaxRecords . Type : String	No
MaxRecords ※You can set this parameter but it is not supported at the moment.	The maximum number of records to include in the response. If more records exist than the specified MaxRecords value, a pagination token called a marker is included in the response so that the remaining results may be retrieved. Default : 100 Constraints : minimum 20, maximum 100 Type : Integer	No

Response Elements	
Parameter	Description
DBInstances	A list of DBInstance instances. Type : DBInstance
Marker ※You can set this parameter but it is not supported at the moment.	An optional pagination token provided by a previous request. If this parameter is specified, the response includes only records beyond the marker, up to the value specified by MaxRecords . Type : String

Errors	
Parameter	Description
DBInstanceNotFound	<i>DBInstanceIdentifier</i> does not refer to an existing DB Instance. HTTP Status Code : 404

4-3) RDB API(Action)

ModifyDBInstance

Description	Modify settings for a DB Instance.
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Request Parameters		
Parameter	Description	Required
AllocatedStorage	The new storage capacity of the instance. Changing this parameter does not result in an outage and the change is applied during the next maintenance window unless the ApplyImmediately parameter is set to true for this request. Default : Uses existing setting Constraints : Value supplied must be greater than the current value. Valid Values : 30 100 Type : Integer	No
AutoMajorVersionUpgrade ※You can set this parameter but it is not supported at the moment.	Indicates that major version upgrades are allowed. Changing this parameter does not result in an outage and the change is asynchronously applied as soon as possible. Constraints : This parameter must be set to true when specifying a value for the EngineVersion parameter that is a different major version than the DB Instance's current version. Type : Boolean	No
ApplyImmediately	Specifies whether or not the modifications in this request and any pending modifications are asynchronously applied as soon as possible, regardless of the PreferredMaintenanceWindow setting for the DB Instance. If this parameter is passed as false, changes to the DB Instance are applied on the next call to RebootDBInstance, the next maintenance reboot, or the next failure reboot, whichever occurs first. Valid Values : true Constraints : Only "true" supported at the moment. "false" will be supported. Type : Boolean	Yes
AutoMinorVersionUpgrade ※You can set this parameter but it is not supported at the moment.	Indicates that minor version upgrades will be applied automatically to the DB Instance during the maintenance window. Type : Boolean	No
BackupRetentionPeriod ※You can set this parameter but it is not supported at the moment.	The number of days to retain automated backups. Setting this parameter to 0 disables automated backups. Default : Uses existing setting Constraints : Must be a value from 0 to 35 Cannot be set to 0 if the DB Instance is a master instance with read replicas or if the DB Instance is a read replica Type : Integer	No
DBInstanceClass	The new compute and memory capacity of the DB Instance. Passing a value for this parameter causes an outage during the change and is applied during the next maintenance window, unless the ApplyImmediately parameter is specified as true for this request. Valid Values : db.m1.small db.m1.medium db.m1.large db.m1.xlarge Type : String	No
DBInstanceIdentifier	The DB Instance identifier. This value is stored as a lowercase string. Constraints : Must be the identifier for an existing DB Instance Must contain from 1 to 63 alphanumeric characters or hyphens First character must be a letter Cannot end with a hyphen or contain two consecutive hyphens Example : my-db-instance Type : String	Yes

4-3) RDB API(Action)

Request Parameters		
Parameter	Description	Required
DBParameterGroupName ※You can set this parameter but it is not supported at the moment.	The name of the DB Parameter Group to apply to this DB Instance. Changing this parameter does not result in an outage and the change is applied during the next maintenance window unless the ApplyImmediately parameter is set to true for this request. Default : Uses existing setting Constraints : The DB Parameter Group must be in the same DB Parameter Group family as this DB Instance. Type : String	No
DBSecurityGroups.member.N	A list of DB Security Groups to authorize on this DB Instance. Changing this parameter does not result in an outage and the change is asynchronously applied as soon as possible. The change does not run during a maintenance window. [Caution]Please specify the DBSecurityGroups(up to 3)of all that you want to associate with the DBInstance. [For example] (Before executing ModifyDBInstance) DBSecurityGroups.member.1 = sample1, DBSecurityGroups.member.2 = sample2 You specify the DBSecurityGroups.member.1 = sample3 and execute ModifyDBInstance. (After executing ModifyDBInstance) DBSecurityGroups.member.1 = sample3 ※Note: DBSecurityGroups.member.1 = sample1, DBSecurityGroups.member.2 = sample2 is deleted. Constraints : Must be 1 to 255 alphanumeric characters First character must be a letter Cannot end with a hyphen or contain two consecutive hyphens Type : String list	No
EngineVersion ※You can set this parameter but it is not supported at the moment.	The version number of the database engine to upgrade to. Example : 5.5.28 Type : String	No
MasterUserPassword ※You can set this parameter but it is not supported at the moment.	The new password for the DB Instance master user. Changing this parameter does not result in an outage and the change is asynchronously applied as soon as possible. Between the time of the request and the completion of the request, the MasterUserPassword element exists in the PendingModifiedValues element of the operation response. Default : Uses existing setting Constraints : Must be 8 to 41 alphanumeric characters Note : RDB API actions never return the password, so this action provides a way to regain access to a master instance user if the password is lost. Type : String	No
MultiAZ ※You can set this parameter but it is not supported at the moment.	Specifies if the DB Instance is a Multi-AZ deployment. Constraints : Cannot be specified if the DB Instance is a read replica. Type : Boolean	No
OptionGroupName ※You can set this parameter but it is not supported.	Indicates that the DB Instance should be associated with the specified option group. Type : String	No
PreferredBackupWindow ※You can set this parameter but it is not supported at the moment.	The daily time range during which automated backups are created if automated backups are enabled, as determined by the BackupRetentionPeriod. Constraints : Must be in the format hh24:mi-hh24:mi Times should be Universal Time Coordinated (UTC) Must not conflict with the preferred maintenance window Must be 240 minutes Start time must not be between 02:00 and 11:00 (UTC) Type : String	No

4-3) RDB API(Action)

Request Parameters		
Parameter	Description	Required
PreferredMaintenanceWindow ※You can set this parameter but it is not supported at the moment.	<p>The weekly time range (in UTC) during which system maintenance can occur, which may result in an outage. The change is asynchronously applied as soon as possible. If moving this window to the current time, there must be at least 120 minutes between the current time and end of the window to ensure pending changes are applied.</p> <p>Default : Uses existing setting。 Format : ddd:hh24:mi-ddd:hh24:mi Valid Days : Mon, Tue, Wed, Fri, Sat, Sun Constraints : Must be 300 minutes Type : String</p>	No

4-3) RDB API(Action)

Response Elements	
Parameter	Description
AllocatedStorage	Specifies the allocated storage size specified in gigabytes. Type : Integer
AutoMinorVersionUpgrade	Indicates that minor version patches are applied automatically. Type : Boolean
AvailabilityZone	Specifies the name of the Availability Zone the DB Instance is located in. Type : String
BackupRetentionPeriod	Specifies the number of days for which automatic DB Snapshots are retained. Type : Integer
CharacterSetName	If present, specifies the name of the character set that this instance is associated with. Type : String
DBInstanceClass	Contains the name of the compute and memory capacity class of the DB Instance. Type : String
DBInstanceIdentifier	Contains a user-supplied database identifier. This is the unique key that identifies a DB Instance. Type : String
DBInstanceStatus	Specifies the current state of this database. Valid Values : available creating modifying rebooting deleting deleted backing-up resetting-master-credentials failed incompatible-restore incompatible-parameters storage-full Type : String
DBName	Contains the name of the initial database of this instance that was provided at create time, if one was specified when the DB Instance was created. This same name is returned for the life of the DB Instance. Type : String
DBParameterGroups ※Not supported at the moment	Provides the list of DB Parameter Groups applied to this DB Instance. Type : DBParameterGroupStatus list
DBSecurityGroups	Provides List of DB Security Group elements containing only DBSecurityGroup.Name and DBSecurityGroup.Status subelements. Type : DBSecurityGroupMembership list
DBSubnetGroup ※Not supported at the moment	Provides the information of the subnet group associated with the DB instance, including the name, description and subnets in the subnet group. Type : DBSubnetGroup
Endpoint	Specifies the connection endpoint. Type : Endpoint
Engine	Provides the name of the database engine to be used for this DB Instance. Type : String
EngineVersion	Indicates the database engine version. Type : String
InstanceCreateTime	Provides the date and time the DB Instance was created. Type : DateTime
LatestRestorableTime	Specifies the latest time to which a database can be restored with point-in-time restore. Type : DateTime

4-3) RDB API(Action)

Response Elements	
Parameter	Description
LicenseModel	License model information for this DB Instance. Type : String
MasterUsername	Contains the master username for the DB Instance. Type : String
MultiAZ	Specifies if the DB Instance is a Multi-AZ deployment. Type : Boolean
OptionGroupMembership ※You can set this parameter but it is not supported.	Provides the list of option group memberships for this DB Instance. Type : OptionGroupMembership
PendingModifiedValues	Specifies the daily time range during which automated backups are created if automated backups are enabled. Type : PendingModifiedValues
PreferredBackupWindow ※Not supported at the moment	Specifies the weekly time range (in UTC) during which system maintenance can occur. Type : String
PreferredMaintenanceWindow	Specifies the weekly time range (in UTC) during which system maintenance can occur. Type : String
ReadReplicaDBInstanceIdentifiers ※Not supported at the moment	Contains one or more identifiers of the Read Replicas associated with this DB Instance. Type : String list
ReadReplicaSourceDBInstanceIdentifier ※Not supported at the moment	Contains the identifier of the source DB Instance if this DB Instance is a Read Replica. Type : String

4-3) RDB API(Action)

Errors	
パラメーター名	説明
DBInstanceNotFound	<i>DBInstanceIdentifier</i> does not refer to an existing DB Instance. HTTP Status Code : 404
DBParameterGroupNotFound	<i>DBParameterGroupName</i> does not refer to an existing DB Parameter Group. HTTP Status Code : 404
DBSecurityGroupNotFound	<i>DBSecurityGroupName</i> does not refer to an existing DB Security Group. HTTP Status Code : 404
InsufficientDBInstanceCapacity	Specified DB Instance class is not available in the specified Availability Zone. HTTP Status Code : 400
InvalidDBInstanceState	The specified DB Instance is not in the <i>available</i> state. HTTP Status Code : 400
InvalidDBSecurityGroupState	The state of the DB Security Group does not allow deletion. HTTP Status Code : 400
InvalidVPCNetworkState	DB Subnet Group does not cover all availability zones after it is created because users' change. HTTP Status Code : 400
StorageQuotaExceeded	Request would result in user exceeding the allowed amount of storage available across all DB Instances. HTTP Status Code : 400

4-3) RDB API(Action)

DescribeEvents

Description	Returns events related to DB Instances, DB Security Groups, DB Snapshots and DB Parameter Groups for the past 14 days.
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Request Parameters		
Parameter	Description	Required
Duration	The number of minutes to retrieve events for. Default : 60 Type : Integer	No
EndTime	The end of the time interval for which to retrieve events, specified in ISO 8601 format. Example : 2013-05-01T18:00Z Type : DateTime	No
Marker	An optional pagination token provided by a previous DescribeEvents request. If this parameter is specified, the response includes only records beyond the marker, up to the value specified by MaxRecords. Type : String	No
MaxRecords	The maximum number of records to include in the response. Default : 100 Constraints : minimum 20, maximum 100 Type : Integer	No
SourceIdentifier	The identifier of the event source for which events will be returned. If not specified, then all sources are included in the response. Constraints : If SourceIdentifier is supplied, SourceType must also be provided. If the source type is DBInstance, then a DBInstanceIdentifier must be supplied. If the source type is DBSecurityGroup, a DBSecurityGroupName must be supplied. If the source type is DBParameterGroup, a DBParameterGroupName must be supplied. If the source type is DBSnapshot, a DBSnapshotIdentifier must be supplied. Cannot end with a hyphen or contain two consecutive hyphens. Example : Action=ModifyDBInstance&SourceType=db-Instance&DBInstanceIdentifier=db-instance-name Type : String	No
SourceType	The event source to retrieve events for. If no value is specified, all events are returned. Valid Values : db-instance db-parameter-group db-security-group db-snapshot Type : String	No
StartTime	The beginning of the time interval to retrieve events for, specified in ISO 8601 format. Example : 2013-05-01T18:00Z Type : DateTime	No

4-3) RDB API(Action)

Response Elements	
Parameter	Description
Events	A list of Event instances. Type : Event list
Marker	An optional pagination token provided by a previous Events request. Type : String

4-3) RDB API(Action)

RebootDBInstance

Description	Rebooting a DB instance restarts the database engine service. A reboot also applies to the DB instance any modifications to the associated DB parameter group that were pending. Rebooting a DB instance results in a momentary outage of the instance, during which the DB instance status is set to rebooting. If the instance is configured for MultiAZ, it is possible that the reboot will be conducted through a failover. An event is created when the reboot is completed.
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Request Parameters		
Parameter	Description	Required
DBInstanceIdentifier	The DB Instance identifier. This parameter is stored as a lowercase string. Constraints : Must contain from 1 to 63 alphanumeric characters or hyphens First character must be a letter Cannot end with a hyphen or contain two consecutive hyphens Type : String	Yes
ForceFailover	When true, the reboot will be conducted through a MultiAZ failover. Constraint : You cannot specify true if the instance is not configured for MultiAZ. Default : false Type : Boolean	No

Response Elements	
Parameter	Description
AllocatedStorage	Specifies the allocated storage size specified in gigabytes. Type : Integer
AutoMinorVersionUpgrade	Indicates that minor version patches are applied automatically. Type : Boolean
AvailabilityZone	Specifies the name of the Availability Zone the DB Instance is located in. Type : String
BackupRetentionPeriod	Specifies the number of days for which automatic DB Snapshots are retained. Type : Integer
CharacterSetName	If present, specifies the name of the character set that this instance is associated with. Type : String
DBInstanceClass	Contains the name of the compute and memory capacity class of the DB Instance. Type : String
DBInstanceIdentifier	Contains a user-supplied database identifier. This is the unique key that identifies a DB Instance. Type : String
DBInstanceStatus	Specifies the current state of this database. Valid Values : available creating modifying rebooting deleting deleted backing-up resetting-master-credentials failed incompatible-restore incompatible-parameters storage-full Type : String
DBName	Contains the name of the initial database of this instance that was provided at create time, if one was specified when the DB Instance was created. This same name is returned for the life of the DB Instance. Type : String
DBParameterGroups ※You can set this parameter but it is not supported at the moment.	Provides the list of DB Parameter Groups applied to this DB Instance. Type : DBParameterGroupStatus list

4-3) RDB API(Action)

Response Elements	
Parameter	Description
DBSecurityGroups	Provides List of DB Security Group elements containing only DBSecurityGroup.Name and DBSecurityGroup.Status subelements. Type : DBSecurityGroupMembership list
DBSubnetGroup ※You can set this parameter but it is not supported at the moment.	Provides the information of the subnet group associated with the DB instance, including the name, description and subnets in the subnet group. Type : DBSubnetGroup
Endpoint	Specifies the connection endpoint. Type : Endpoint
Engine	Provides the name of the database engine to be used for this DB Instance. Type : String
EngineVersion	Indicates the database engine version. Type : String
InstanceCreateTime	Provides the date and time the DB Instance was created. Type : DateTime
LatestRestorableTime	Specifies the latest time to which a database can be restored with point-in-time restore. Type : DateTime
LicenseModel	License model information for this DB Instance. Type : String
MasterUsername	Contains the master username for the DB Instance. Type : String
MultiAZ	Specifies if the DB Instance is a Multi-AZ deployment. Type : Boolean
OptionGroupMembership ※You can set this parameter but it is not supported.	Provides the list of option group memberships for this DB Instance. Type : OptionGroupMembership
PendingModifiedValues ※You can set this parameter but it is not supported at the moment.	Specifies that changes to the DB Instance are pending. Type : PendingModifiedValues
PreferredBackupWindow	Specifies the daily time range during which automated backups are created if automated backups are enabled. Type : String
PreferredMaintenanceWindow	Specifies the weekly time range (in UTC) during which system maintenance can occur. Type : String
ReadReplicaDBInstanceIdentifiers ※You can set this parameter but it is not supported at the moment.	Contains one or more identifiers of the Read Replicas associated with this DB Instance. Type : String list
ReadReplicaSourceDBInstanceIdentifier ※You can set this parameter but it is not supported at the moment.	Contains the identifier of the source DB Instance if this DB Instance is a Read Replica. Type : String

Errors	
Parameter	Description
DBInstanceNotFound	<i>DBInstanceIdentifier</i> does not refer to an existing DB Instance. HTTP Status Code : 404
InvalidDBInstanceState	The specified DB Instance is not in the <i>available</i> state. HTTP Status Code : 400

4-3) RDB API(Action)

RestoreDBInstanceToPointInTime

Description	Restores a DB Instance to an arbitrary point-in-time. Users can restore to any point in time before the latestRestorableTime for up to backupRetentionPeriod days. The target database is created from the source database with the same configuration as the original database.
-------------	--

Request Parameters		
Parameter	Description	Required
AutoMinorVersionUpgrade	Indicates that minor version upgrades will be applied automatically to the DB Instance during the maintenance window. Default : true Type : Boolean	No
AvailabilityZone	The Availability Zone that the database instance will be created in. The initial value is chosen by the system. Example : jp-e1 Type : String	No
DBInstanceClass	The compute and memory capacity of the DB instance. Default : The current DBInstanceClass Valid Values : db.m1.small db.m1.medium db.m1.large db.m1.xlarge Type : String	No
DBName	The database name for the restored DB Instance. Note : This parameter is not used for the MySQL engine. Type : String	No
DBSecurityGroups.member.N	The list of DB Security Group is associated with the original DB Instance to restore. Users can associate arbitrary DB Security Groups with the original DB Instance to restore. DBSecurityGroups associated with the DB instance are up to three. Default : default DBSecurityGroup Type : String list	No
DBSubnetGroupName	The DB subnet group name to use for the new instance. Type : String	No
Engine	The database engine to use for the new instance. Default : The same as source Constraint : Must be compatible with the engine of the source Example : MySQL Type : String	No
LicenseModel	License model information for the restored DB Instance. Default : Same as source. Valid values : general-public-license Type : String	No
MultiAZ	Specifies if the DB Instance is a Multi-AZ deployment. Default : false Constraint : You cannot specify the AvailabilityZone parameter if the MultiAZ parameter is set to true. Type : Boolean	No
OptionGroupName ※You can set this parameter but it is not supported.	The name of the option group to be used for the restored DB instance. Type : String	No
Port	The port number on which the database accepts connections. Valid values: Value must be 1150-65535 except for 4949/7801/12812/30022. Default : The same port as the original DB Instance. Type : Integer	No

4-3) RDB API(Action)

Request Parameters		
Parameter	Description	Required
RestoreTime	The date and time to restore from. Valid values : Value must be a UTC time Constraint : Must be before the latest restorable time for the DB Instance Cannot be specified if UseLatestRestorableTime parameter is true Example : 2013-01-10T23:45:15Z Type : DateTime	No
SourceDBInstanceIdentifier	The identifier of the source DB Instance from which to restore. Constraints : Must be the identifier of an existing database instance Must contain from 1 to 63 alphanumeric characters or hyphens First character must be a letter Cannot end with a hyphen or contain two consecutive hyphens Type : String	Yes
TargetDBInstanceIdentifier	The name of the new database instance to be created. Constraints : Must contain from 1 to 63 alphanumeric characters or hyphens First character must be a letter Cannot end with a hyphen or contain two consecutive hyphens Type : String	Yes
UseLatestRestorableTime	Specifies whether (true) or not (false) the DB Instance is restored from the latest backup time. Default : false Constraint : Cannot be specified if RestoreTime parameter is provided. Type : Boolean	No

4-3) RDB API(Action)

Response Elements	
Parameter	Description
AllocatedStorage	Specifies the allocated storage size specified in gigabytes. Type : Integer
AutoMinorVersionUpgrade	Indicates that minor version patches are applied automatically. Type : Boolean
AvailabilityZone	Specifies the name of the Availability Zone the DB Instance is located in. Type : String
BackupRetentionPeriod	Specifies the number of days for which automatic DB Snapshots are retained. Type : Integer
CharacterSetName	If present, specifies the name of the character set that this instance is associated with. Type : String
DBInstanceClass	Contains the name of the compute and memory capacity class of the DB Instance. Type : String
DBInstanceIdentifier	Contains a user-supplied database identifier. This is the unique key that identifies a DB Instance. Type : String
DBInstanceStatus	Specifies the current state of this database. Type : String
DBName	Contains the name of the initial database of this instance that was provided at create time, if one was specified when the DB Instance was created. This same name is returned for the life of the DB Instance. Type : String
DBParameterGroups ※You can set this parameter but it is not supported at the moment.	Provides the list of DB Parameter Groups applied to this DB Instance. Type : DBParameterGroupStatus list
DBSecurityGroups	Provides List of DB Security Group elements containing only DBSecurityGroup.Name and DBSecurityGroup.Status subelements. Type : DBSecurityGroupMembership list
DBSubnetGroup ※You can set this parameter but it is not supported at the moment.	Provides the information of the subnet group associated with the DB instance, including the name, description and subnets in the subnet group. Type : DBSubnetGroup
Endpoint	Specifies the connection endpoint. Type : Endpoint
Engine	Provides the name of the database engine to be used for this DB Instance. Type : String
EngineVersion	Indicates the database engine version. Type : String
InstanceCreateTime	Provides the date and time the DB Instance was created. Type : DateTime
LatestRestorableTime	Specifies the latest time to which a database can be restored with point-in-time restore. Type : DateTime

4-3) RDB API(Action)

Response Elements	
Parameter	Description
LicenseModel	License model information for this DB Instance. Type : String
MasterUsername	Contains the master username for the DB Instance. Type : String
MultiAZ	Specifies if the DB Instance is a Multi-AZ deployment. Type : Boolean
OptionGroupMembership ※Not supported.	Provides the list of option group memberships for this DB Instance. Type : OptionGroupMembership
PendingModifiedValues	Specifies that changes to the DB Instance are pending. Type : PendingModifiedValues
PreferredBackupWindow	Specifies the daily time range during which automated backups are created if automated backups are enabled. Type : String
PreferredMaintenanceWindow	Specifies the weekly time range (in UTC) during which system maintenance can occur. Type : String
ReadReplicaDBInstanceIdentifiers ※You can set this parameter but it is not supported at the moment.	Contains one or more identifiers of the Read Replicas associated with this DB Instance. Type : String list
ReadReplicaSourceDBInstanceIdentifier ※You can set this parameter but it is not supported at the moment.	Contains the identifier of the source DB Instance if this DB Instance is a Read Replica. Type : String

4-3) RDB API(Action)

Errors	
Parameter	Description
DBInstanceAlreadyExists	User already has a DB Instance with the given identifier. HTTP Status Code : 400
DBInstanceNotFound	<i>DBInstanceIdentifier</i> does not refer to an existing DB Instance. HTTP Status Code : 404
DBSubnetGroupNotFound	<i>DBSubnetGroupName</i> does not refer to an existing DB Subnet Group. HTTP Status Code : 400
InstanceQuotaExceeded	Request would result in user exceeding the allowed number of DB Instances. HTTP Status Code : 400
InsufficientDBInstanceCapacity	Specified DB Instance class is not available in the specified Availability Zone. HTTP Status Code : 400
InvalidDBInstanceState	The specified DB Instance is not in the <i>available</i> state. HTTP Status Code : 400
InvalidRestore	Cannot restore from vpc backup to non-vpc DB instance. HTTP Status Code : 400
InvalidVPCNetworkState	DB Subnet Group does not cover all availability zones after it is created because users' change. HTTP Status Code : 400
PointInTimeRestoreNotEnabled	<i>SourceDBInstanceIdentifier</i> refers to a DB Instance with <i>BackupRetentionPeriod</i> equal to 0. HTTP Status Code : 400
StorageQuotaExceeded	Request would result in user exceeding the allowed amount of storage available across all DB Instances. HTTP Status Code : 400

4-3) RDB API(Action)

AuthorizeDBSecurityGroupIngress

Description	Enables ingress to a DBSecurityGroup using IP addresses. IP ranges are available if the application accessing your database is running on the Internet. You can set multiple IP addresses to DBSecurityGroupName.
-------------	--

Request Parameters		
Parameter	Description	Required
CIDRIP	The IP range to authorize. Example : 192.168.1.1/24 Type : String	Yes
DBSecurityGroupName	The name of the DB Security Group to add authorization to. Type : String	Yes
EC2SecurityGroupID ※You can set this parameter but it is not supported.	Id of the EC2 Security Group to authorize. For VPC DB Security Groups, EC2SecurityGroupId must be provided. Otherwise, EC2SecurityGroupOwnerId and either EC2SecurityGroupName or EC2SecurityGroupId must be provided. Type : String	No
EC2SecurityGropuName ※You can set this parameter but it is not supported.	Name of the EC2 Security Group to authorize. For VPC DB Security Groups, EC2SecurityGroupId must be provided. Otherwise, EC2SecurityGroupOwnerId and either EC2SecurityGroupName or EC2SecurityGroupId must be provided. Type : String	No
EC2SecurityGroupOwnerI d ※You can set this parameter but it is not supported.	AWS Account Number of the owner of the EC2 Security Group specified in the EC2SecurityGroupName parameter. For VPC DB Security Groups, EC2SecurityGroupId must be provided. Otherwise, EC2SecurityGroupOwnerId and either EC2SecurityGroupName or EC2SecurityGroupId must be provided. Type : String	No

4-3) RDB API(Action)

Response Elements	
Parameter	Description
DBSecurityGroupDescription	Provides the description of the DB Security Group. Type : String
DBSecurityGropuName	Specifies the name of the DB Security Group. Type : String
EC2SecurityGroups	Contains a list of EC2SecurityGroup elements. Type : EC2SecurityGroup list
IPRanges	Contains a list of IPRange elements. Type : IPRange list
OwnerId ※You can set this parameter but it is not supported.	Provides the AWS ID of the owner of a specific DB Security Group. Type : String
VpcId ※You can set this parameter but it is not supported.	Provides the VpcId of the DB Security Group. Type : String

Errors	
Parameter	Description
AuthorizationAlreadyExists	The specified CIDRIP or EC2 security group is already authorized for the specified DB security group. HTTP Status Code : 400
AuthorizationQuotaExceeded	Database security group authorization quota has been reached. HTTP Status Code : 400
DBSecurityGroupNotFound	<i>DBSecurityGroupName</i> does not refer to an existing DB Security Group. HTTP Status Code : 404
InvalidDBSecurityGroupState	The state of the DB Security Group does not allow deletion. HTTP Status Code : 400

4-3) RDB API(Action)

CreateDBSecurityGroup

Description	Creates a new DB Security Group. DB Security Groups control access to a DB Instance.
-------------	--

Request Parameters		
Parameter	Description	Required
DBSecurityGroupDescription	The description for the DB Security Group. Type : String	Yes
DBSecurityGroupName	The name for the DB Security Group. This value is stored as a lowercase string. Constraints : Must contain no more than 255 alphanumeric characters or hyphens. Must not be "Default". Example : mysql-securitygroup Type : String	Yes
EC2VpcId ※You can set this parameter but it is not supported.	The Id of VPC. Indicates which VPC this DB Security Group should belong to. Must be specified to create a DB Security Group for a VPC; may not be specified otherwise. Type : String	No

Response Elements	
Parameter	Description
DBSecurityGroupDescription	Provides the description of the DB Security Group. Type : String
DBSecurityGroupName	Specifies the name of the DB Security Group. Type : String
EC2SecurityGroups	Contains a list of EC2SecurityGroup elements. Type : EC2SecurityGroup list
IPRanges	Contains a list of IPRange elements. Type : IPRange list
OwnerId ※Not supported.	Provides the AWS ID of the owner of a specific DB Security Group. Type : String
VpcId ※Not supported.	Provides the VpcId of the DB Security Group. Type : String

4-3) RDB API(Action)

Errors	
Parameter	Description
DBSecurityGroupAlreadyExists	A database security group with the name specified in <i>DBSecurityGroupName</i> already exists. HTTP Status Code : 400
DBSecurityGroupQuotaExceeded	Request would result in user exceeding the allowed number of DB Security Groups. HTTP Status Code : 400

4-3) RDB API(Action)

DeleteDBSecurityGroup

Description	Deletes a DB Security Group. The specified DB Security Group must not be associated with any DB Instances.
-------------	---

Request Parameters

Parameter	Description	Required
DBSecurityGroupName	The name of the DB Security Group to delete. Note : You cannot delete the default DB Security Group. Constraints : Must be 1 to 255 alphanumeric characters First character must be a letter Cannot end with a hyphen or contain two consecutive hyphens Type : String	Yes

Errors

Parameter	Description
DBSecurityGroupNotFound	<i>DBSecurityGroupName</i> does not refer to an existing DB Security Group. HTTP Status Code : 404
InvalidDBSecurityGroupState	The state of the DB Security Group does not allow deletion. HTTP Status Code : 400

4-3) RDB API(Action)

DescribeDBSecurityGroups

Description	Returns a list of DBSecurityGroup descriptions. If a DBSecurityGroupName is specified, the list will contain only the descriptions of the specified DBSecurityGroup.
-------------	--

Request Parameters		
Parameter	Description	Required
DBSecurityGroupName	The name of the DB Security Group to return details for. Type : String	No
Marker ※You can set this parameter but it is not supported.	An optional pagination token provided by a previous DescribeDBSecurityGroups request. If this parameter is specified, the response includes only records beyond the marker, up to the value specified by MaxRecords. Type : String	No
MaxRecords ※You can set this parameter but it is not supported.	The maximum number of records to include in the response. If more records exist than the specified MaxRecords value, a pagination token called a marker is included in the response so that the remaining results may be retrieved. Default : 100 Constraints : minimum 20, maximum 100 Type : Integer	No

Response Elements	
Parameter	Description
DBSecurityGroups	A list of DBSecurityGroup instances. Type : EC2SecurityGroup list
IPRanges	Contains a list of IPRange elements. Type : IPRange list

Errors	
Parameter	Description
DBSecurityGroupNotFound	<i>DBSecurityGroupName</i> does not refer to an existing DB Security Group. HTTP Status Code : 404

4-3) RDB API(Action)

RevokeDBSecurityGroupIngress

Description	Revokes ingress from a DBSecurityGroup for previously authorized IP ranges. Required parameters for this API is CIDRIP.
-------------	---

Request Parameters		
Parameter	Description	Required
CIDRIP	The IP range to revoke access from. Must be a valid CIDR range. If CIDRIP is specified, EC2SecurityGroupName, EC2SecurityGroupId and EC2SecurityGroupOwnerId cannot be provided. Type : String	Yes
DBSecurityGroupName	The name of the DB Security Group to revoke ingress from. Type : String	Yes
EC2SecurityGroupID ※You can set this parameter but it is not supported.	The id of the EC2 Security Group to revoke access from. For VPC DB Security Groups, EC2SecurityGroupId must be provided. Otherwise, EC2SecurityGroupOwnerId and either EC2SecurityGroupName or EC2SecurityGroupId must be provided. Type : String	No
EC2SecurityGropuName ※You can set this parameter but it is not supported.	The name of the EC2 Security Group to revoke access from. For VPC DB Security Groups, EC2SecurityGroupId must be provided. Otherwise, EC2SecurityGroupOwnerId and either EC2SecurityGroupName or EC2SecurityGroupId must be provided. Type : String	No
EC2SecurityGroupOwnerId ※You can set this parameter but it is not supported.	The AWS Account Number of the owner of the EC2 security group specified in the EC2SecurityGroupName parameter. For VPC DB Security Groups, EC2SecurityGroupId must be provided. Otherwise, EC2SecurityGroupOwnerId and either EC2SecurityGroupName or EC2SecurityGroupId must be provided. Type : String	No

4-3) RDB API(Action)

Response Elements	
Parameter	Description
DBSecurityGroupDescription	Provides the description of the DB Security Group. Type : String
DBSecurityGroupuName	Specifies the name of the DB Security Group. Type : String
EC2SecurityGroups	Contains a list of EC2SecurityGroup elements. Type : EC2SecurityGroup list
IPRanges	Contains a list of IPRange elements. Type : IPRange list
OwnerId ※Not supported.	Provides the AWS ID of the owner of a specific DB Security Group. Type : String
VpcId ※Not supported.	Provides the VpcId of the DB Security Group. Type : String

Errors	
Parameter	Description
AuthorizationNotFound	Specified CIDRIP or EC2 security group is not authorized for the specified DB Security Group. HTTP Status Code : 404
DBSecurityGroupNotFound	<i>DBSecurityGroupName</i> does not refer to an existing DB Security Group. HTTP Status Code : 404
InvalidDBSecurityGroupState	The state of the DB Security Group does not allow deletion. HTTP Status Code : 400

4-4) RDB API(Data Type)

EC2SecurityGroup

Description

※You can set this parameter but it is not supported.

This data type is used as a response element in the following actions:

- AuthorizeDBSecurityGroupIngress
- DescribeDBSecurityGroups
- RevokeDBSecurityGroupIngress

Contents

Parameter	Description
EC2SecurityGroupID	Specifies the id of the EC2 Security Group. Type : String
EC2SecurityGroupName	Specifies the name of the EC2 Security Group. Type : String
EC2SecurityGroupOwnerID	Specifies the AWS ID of the owner of the EC2 security group specified in the EC2SecurityGroupName field. Type : String
Status	Provides the status of the EC2 security group. Status can be "authorizing", "authorized", "revoking", and "revoked". Type : String

IPRanges

Description

※You can set this parameter but it is not supported.

This data type is used as a response element in the following action:

- DescribeDBSecurityGroups

Contents

Parameter	Description
CIDRIP	Specifies the IP range. Type : String
Status	Specifies the status of the IP range. Status can be "authorizing", "authorized", "revoking", and "revoked". Type : String

4-4) RDB API(Data Type)

DBParameterGroupStatus

Description

※You can set this parameter but it is not supported.

The status of the DB Parameter Group.

This data type is used as a response element in the following actions:

- CreateDBInstance
- CreateDBInstanceReadReplica
- DeleteDBInstance
- ModifyDBInstance
- RebootDBInstance
- RestoreDBInstanceFromDBSnapshot

Contents

Parameter	Description
DBParameterGroupName	The name of the DP Parameter Group. Type : String
ParameterApplyStatus	The status of parameter updates. Type : String

DBSecurityGroupMembership

Description

※You can set this parameter but it is not supported.

This data type is used as a response element in the following actions:

- ModifyDBInstance
- RebootDBInstance
- RestoreDBInstanceFromDBSnapshot
- RestoreDBInstanceToPointInTime

Contents

Parameter	Description
DBSecurityGroupName	The name of the DB Security Group. Type : String
Status	The status of the DB Security Group. Type : String

4-4) RDB API(Data Type)

DBSubnetGroup

Description

※You can set this parameter but it is not supported at the moment.

Contains the result of a successful invocation of the following actions:

- CreateDBSubnetGroup
- ModifyDBSubnetGroup
- DescribeDBSubnetGroups
- DeleteDBSubnetGroup

This data type is used as a response element in the DescribeDBSubnetGroups action.

Contents

パラメーター名	説明
DBSubnetGroupDescription	Provides the description of the DB Subnet Group. Type : String
DBSubnetGroupName	Specifies the name of the DB Subnet Group. Type : String
SubnetGroupStatus	Provides the status of the DB Subnet Group. Type : String
Subnets	Contains a list of Subnet elements. Type : String
VpcID	Provides the VpcId of the DB Subnet Group. Type : String

Subnets

Description

※You can set this parameter but it is not supported at the moment.

This data type is used as a response element in the DescribeDBSubnetGroups action.

Contents

パラメーター名	説明
SubnetAvailabilityZone	Contains Availability Zone information. This data type is used as an element in the following data type: • OrderableDBInstanceOption Type : AvailabilityZone
SubnetIdentifier	Specifies the identifier of the subnet. Type : String
SubnetStatus	Specifies the status of the subnet. Type : String

4-4) RDB API(Data Type)

AvailabilityZone

Description	Contains Availability Zone information. This data type is used as an element in the following data type: •OrderableDBInstanceOption
-------------	---

Contents

Parameter	Description
Name	The name of the availability zone. Type : String
ProvisionedIopsCapable	Type : Boolean

Endpoint

Description	This data type is used as a response element in the following actions: •CreateDBInstance •DescribeDBInstances •DeleteDBInstance
-------------	--

Contents

Parameter	Description
Address	Specifies the DNS address of the DB Instance. (FQDN) Type : String
Port	Specifies the port that the database engine is listening on. Type : Integer Required : No

4-4) RDB API(Data Type)

OptionGroupMembership

Description
※You can set this parameter but it is not supported .

-

Contents

パラメーター名	説明
OptionGroupName	The name of the option group that the instance belongs to. Type : String Required : No
Status	The status of the DB Instance's option group membership. Type : String Required : No

PendingModifiedValues

Description

This data type is used as a response element in the ModifyDBInstance action.

Contents

Parameter	Description
AllocatedStorage	Contains the new AllocatedStorage size for the DB Instance that will be applied or is in progress. Type : Integer Required : No
BackupRetentionPeriod	Specifies the pending number of days for which automated backups are retained. Type : Integer Required : No
DBInstanceClass	Contains the new DBInstanceClass for the DB Instance that will be applied or is in progress. Type : String Required : No
EngineVersion	Indicates the database engine version. Type : String Required : No
MasterUserPassword	Contains the pending or in-progress change of the master credentials for the DB Instance. Type : String Required : No
MultiAZ	Indicates that the Single-AZ DB Instance is to change to a Multi-AZ deployment. Type : Boolean Required : No
Port	Specifies the pending port for the DB Instance. Type : Integer Required : No

4-4) RDB API(Data Type)

DBInstance

Description	<p>Contains the result of a successful invocation of the following actions:</p> <ul style="list-style-type: none"> • CreateDBInstance • DeleteDBInstance • ModifyDBInstance <p>This data type is used as a response element in the DescribeDBInstances action.</p>
-------------	---

Contents

Parameter	Description
AllocatedStorage	<p>Specifies the allocated storage size specified in gigabytes.</p> <p>Type : Integer Required : No</p>
AutoMinorVersionUpgrade	<p>Indicates that minor version patches are applied automatically.</p> <p>Type : Boolean Required : No</p>
AvailabilityZone	<p>Specifies the name of the Availability Zone the DB Instance is located in.</p> <p>Type : String Required : No</p>
BackupRetentionPeriod	<p>Specifies the number of days for which automatic DB Snapshots are retained.</p> <p>Type : Integer Required : No</p>
CharacterSetName	<p>If present, specifies the name of the character set that this instance is associated with.</p> <p>Type : String Required : No</p>
CloudnPaaSLinkStatus	<p>Contains the condition of usage of Cloud[®] PaaS service</p> <p>Type : String Required : No</p>
DBInstanceClass	<p>Contains the name of the compute and memory capacity class of the DB Instance.</p> <p>Type : String Required : No</p>
DBInstanceIdentifier	<p>Contains a user-supplied database identifier. This is the unique key that identifies a DB Instance.</p> <p>Type : String Required : No</p>
DBInstanceStatus	<p>Specifies the current state of this database.</p> <p>Type : String Required : No</p>
DBName	<p>Contains the name of the initial database of this instance that was provided at create time, if one was specified when the DB Instance was created. This same name is returned for the life of the DB Instance.</p> <p>Type : String Required : No</p>
DBParameterGroups	<p>Provides the list of DB Parameter Groups applied to this DB Instance.</p> <p>Type : DBParameterGroupStatus list Required : No</p> <p>※You can set this parameter but it is not supported at the moment.</p>
DBSecurityGroups	<p>Provides List of DB Security Group elements containing only DBSecurityGroup.Name and DBSecurityGroup.Status subelements.</p> <p>Type : DBSecurityGroupMembership list Required : No</p> <p>※You can set this parameter but it is not supported at the moment.</p>

4-4) RDB API(Data Type)

Contents	
Parameter	Description
DBSubnetGroups ※You can set this parameter but it is not supported at the moment.	Provides the information of the subnet group associated with the DB instance, including the name, description and subnets in the subnet group. Type : DBSubnetGroup Required : No
Endpoint	Specifies the connection endpoint. Type : Endpoint Required : No
Engine	Provides the name of the database engine to be used for this DB Instance. Type : String Required : No
EngineVersion	Indicates the database engine version. Type : String Required : No
InstanceCreateTime	Provides the date and time the DB Instance was created. Type : DateTime Required : No
LatesRestorableTime	Specifies the latest time to which a database can be restored with point-in-time restore. Type : DateTime Required : No
LicenseModel	License model information for this DB Instance. Type : String Required : No
MasterUsername	Contains the master username for the DB Instance. Type : String Required : No
MultiAZ	Specifies if the DB Instance is a Multi-AZ deployment. Type : Boolean Required : No
OptionGroupMembership ※You can set this parameter but it is not supported.	Provides the list of option group memberships for this DB Instance. Type : OptionGroupMembership Required : No
PendingModifiedValues ※You can set this parameter but it is not supported at the moment.	Specifies that changes to the DB Instance are pending. Type : PendingModifiedValues Required : No
PreferredBackupWindow	Specifies the daily time range during which automated backups are created if automated backups are enabled. Type : String Required : No
PreferreMaintenanceWindow	Specifies the weekly time range (in UTC) during which system maintenance can occur. Type : String Required : No
ReadReplicaDBInstanceIdentifiers ※You can set this parameter but it is not supported at the moment.	Contains one or more identifiers of the Read Replicas associated with this DB Instance. Type : String list Required : No
ReadReplicaSourceDBInstanceIdentifier ※You can set this parameter but it is not supported at the moment.	Contains the identifier of the source DB Instance if this DB Instance is a Read Replica. Type : String Required : No

4-4) RDB API(Data Type)

DBSecurityGroup

Description	Contains the result of a successful invocation of the following actions: <ul style="list-style-type: none">• DescribeDBSecurityGroups• AuthorizeDBSecurityGroupIngress• CreateDBSecurityGroup• RevokeDBSecurityGroupIngress This data type is used as a response element in the DescribeDBSecurityGroups action.
-------------	---

Contents

パラメーター名	説明
DBSecurityGroupDescription	Provides the description of the DB Security Group. Type : String
DBSecurityGroupName	Specifies the name of the DB Security Group. Type : String
EC2SecurityGroups	Contains a list of EC2SecurityGroup elements. Type : EC2SecurityGroup list
IPRanges	Contains a list of IPRange elements. Type : IPRanges list
OwnerId ※You can set this parameter but it is not supported.	Provides the AWS ID of the owner of a specific DB Security Group. Type : String
VpcId ※You can set this parameter but it is not supported.	Provides the VpcId of the DB Security Group. Type : String

Event

Description	This data type is used as a response element in the following action: <ul style="list-style-type: none">• DescribeEvents
-------------	--

Contents

Parameter	Description
Date	Specifies the date and time of the event. Type : DateTime
Message	Provides the text of this event. Type : String
SourceIdentifier	Provides the identifier for the source of the event. Type : String
SourceType	Specifies the source type for this event. Type : String Valid Values : db-instance db-parameter-group db security-group db -snapshot

4-5) Specification difference RDS and RDB

Difference of specification		
API Name	RDS	RDB
CreateDBInstance	AllocatedStorage: Valid values: 5-1024 (integer)	AllocatedStorage Valid values: 30 or 1000
CreateDBInstance	BackupRetentionPeriod: Valid values: 0-8	BackupRetentionPeriod: Valid values:0~35
CreateDBInstance	DBInstanceClass: 7 values	DBInstanceClass: 4 values as following, db.m1.small db.m1.medium db.m1.large db.m1.xlarge
CreateDBInstance	DBSecurityGroups associated with the DB instance are up to 20.	DBSecurityGroups associated with the DB instance are up to three.
CreateDBInstance	Supported Database: MySQL/Oracle/SQL Server	Supported Database: MySQL
CreateDBInstance	MySQL : EngineVersion is several values.	MySQL: EngineVersion is only "5.5.28".
CreateDBInstance	LicenseModel: 3 values	LicenseModel: "general-public-license"
CreateDBInstance	Port : Valid values : 1150-65535	Port : Valid values : 1150-65535 except for 4949/7801/12812/30022
CreateDBInstance	PreferredBackupWindow: at least 30 minutes	PreferredBackupWindow: 240 minutes. • Start time must not be between 2:00 to 11:00 (UTC)(In JST:11:00-20:00)
CreateDBInstance	PreferredMaintenanceWindow: at least 30 minutes	PreferredMaintenanceWindow: 300 minutes •Must not be in Thursday (UTC).
ModifyDBInstance	DBSecurityGroups associated with the DB instance are up to 20.	DBSecurityGroups associated with the DB instance are up to three.
RestoreDBInstanceToPointInTime	The DB instance is created with the default DB security group. DBSecurityGroups associated with the DB instance are up to 20.	Users can associate arbitrary DB Security Groups with the original DB Instance to restore. DBSecurityGroups associated with the DB instance are up to three.