**Mimer Web Service API Reference**

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# Common Introduction of API Calls

**Request URI format**

{URI-scheme}://{URI-host}/{path}

All API calls by default should communicate using the HTTPS scheme. Exact method (GET, POST) and request parameters can be found in the description of each individual API.

**Request headers**

Authorization: a token for accessing the Mimer Web Services. Required if the Web Service admin user name and password are not provided. Token can be obtained by the following call:

curl -u {username}:{password} https://{URI-host}/gettoken.

The default username is mimadmin, and password is generated when installing Mimer Web Service.

Content-type: required if parameters are passed through the request body. Type: application/json.

**Request body**

See the description of each individual API.

**Example with curl**

To obtain a token:

curl -u mimadmin:pass https://10.1.82.166:5001/gettoken

response: {"token":"eyJhbGciOiJIUzUxMiJ9.eyJ1c2VybmFtZSI6Im1pbWFkbWluIiwiaGFzaGhhc2giOiI4NGY2NzY5ZjU0NTljNzhhNDIzNTBiOWYwMzViNjFkNWRhN2MwNGNhZDFjOTI0ZTNhYTcyYTg2ZDg2NTU2ZjAxIn0.yjKm7WzKITJqQ4PBop5\_\_fX3FQEh5IZcJE0KiUfjy5BSXa9zA74oul8h-k931sjkFU1\_659XRipbB-ZSUX\_4PQ"}

To send a request:

curl -H "Authorization: token eyJhbGciOiJIUzUxMiJ9.eyJ1c2VybmFtZSI6Im1pbWFkbWluIiwiaGFzaGhhc2giOiI4NGY2NzY5ZjU0NTljNzhhNDIzNTBiOWYwMzViNjFkNWRhN2MwNGNhZDFjOTI0ZTNhYTcyYTg2ZDg2NTU2ZjAxIn0.yjKm7WzKITJqQ4PBop5\_\_fX3FQEh5IZcJE0KiUfjy5BSXa9zA74oul8h-k931sjkFU1\_659XRipbB-ZSUX\_4PQ"

-H "Content-Type: application/json"

-X POST -d '{"user\_name":"SYSADM","password":"EVpoEZm4Mm","backup\_location":"/data"}'

<https://10.1.82.166:5001/createbackup/mimerdb>

# Database Management Interfaces

Check status of database server

**Description**

Check the status of a database server.

**URI**

GET|POST /status/{database\_name}

**Request Parameters**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Default Value | Description |
| database\_name | Path | String | Y |  |  | The name of the database |

**Response Parameters**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of values | Description |
| return\_code | Body | String | Y | {“success”, “failure”} | Return code of the request |
| error\_code | Body | Int | N |  | Error code in case of failure |
| error\_message | Body | String | N |  | Message that explains the error |
| status | Body | String | Y |  | Status of the server |
| start\_time | Body | Int | Y |  | The time when the server was started |
| login | Body | String | Y |  | If login is enabled |
| connected\_users | Body | Int | Y |  | Number of connected users |
| bufferpool\_size | Body | Int | Y |  | Size of bufferpool |
| Database\_path | Body | String | Y |  | Path to the root of the database files |

**Examples**

Request example:

{}

Response example:

{

   "bufferpool\_size":2148323328,  
   "connected\_users":0,  
   "database\_path":"/data/mimerdb",  
   "login":"Enabled",  
   "return\_code":"success",  
   "start\_time":"2020-06-30 09:41",  
   "status":"Running"

}

**Error code**

Please refer to Mimer SQL Return Codes: <https://download.mimer.com/pub/developer/docs/html_110/Mimer_SQL_Engine_DocSet/App_Return_Codes3.html>

Start database server

**Description**

Start a database server.

**URI**

GET|POST /startdatabase/{database\_name}

**Request Parameters**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Default Value | Description |
| database\_name | Path | String | Y |  |  | The name of the database |

**Response Parameters**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of values | Description |
| return\_code | Body | String | Y | {“success”, “failure”} | Return code of the request |
| error\_code | Body | Int | N |  | Error code in case of failure |
| error\_message | Body | String | N |  | Message that explains the error |

**Examples**

Request example:

{}

Response example:

{  
   "return\_code":"success"

}

**Error code**

Please refer to Mimer SQL Return Codes: <https://download.mimer.com/pub/developer/docs/html_110/Mimer_SQL_Engine_DocSet/App_Return_Codes3.html>

Stop database server

**Description**

Stop a database server.

**URI**

GET|POST /stopdatabase/{database\_name}

**Request Parameters**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Default Value | Description |
| database\_name | Path | String | Y |  |  | The name of the database |

**Response Parameters**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of values | Description |
| return\_code | Body | String | Y | {“success”, “failure”} | Return code of the request |
| error\_code | Body | Int | N |  | Error code in case of failure |
| error\_message | Body | String | N |  | Message that explains the error |

**Examples**

Request example:

{}

Response example:

{  
   "return\_code":"success"

}

**Error code**

Please refer to Mimer SQL Return Codes: <https://download.mimer.com/pub/developer/docs/html_110/Mimer_SQL_Engine_DocSet/App_Return_Codes3.html>

Reset SYSADM password

**Description**

Reset the password of the root user SYSADM.

**URI**

POST /update\_sysadm\_pass/{database\_name}

**Request Parameters**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Default Value | Description |
| database\_name | Path | String | Y |  |  | The name of the database |
| old\_password | Body | String | Y |  |  | Old SYSADM password |
| new\_password | Body | String | Y |  |  | New SYSADM password |

**Response Parameters**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of values | Description |
| return\_code | Body | String | Y | {“success”, “failure”} | Return code of the request |
| error\_code | Body | Int | N |  | Error code in case of failure |
| error\_message | Body | String | N |  | Message that explains the error |

**Examples**

Request example:

{

   "old\_password":"25bG517VOa",  
   "new\_password":"SYSADM"

}

Response example:

{  
   "return\_code":"success"

}

**Error code**

Please refer to Mimer SQL Return Codes: <https://download.mimer.com/pub/developer/docs/html_110/Mimer_SQL_Engine_DocSet/App_Return_Codes3.html>

# User Management Interfaces

Create User

**Description**

Create a new user of the database with specified system privileges.

**URI**

POST /create\_user/{database\_name}

**Request Parameters**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Default Value | Description |
| database\_name | Path | String | Y |  |  | The name of the database |
| creator\_name | Body | String | Y |  |  | The name of the creator user who creates the new user |
| creator\_password | Body | String | Y |  |  | The password of the creator user who creates the new user |
| user\_name | Body | String | Y |  |  | The name of the created new user |
| user\_password | Body | String | Y |  |  | The password of the created new user |
| can\_backup | Body | String | N | {“true”, “false”} | “false” | If the new user should have privilege to make backups of the database. |
| can\_databank | Body | String | N | {“true”, “false”} | “false” | If the new user should have privilege to create databanks. |
| can\_schema | Body | String | N | {“true”, “false”} | “false” | If the new user should have privilege to create schemas. |

**Response Parameters**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of values | Description |
| return\_code | Body | String | Y | {“success”, “failure”} | Return code of the request |
| error\_code | Body | Int | N |  | Error code in case of failure |
| error\_message | Body | String | N |  | Message that explains the error |

**Examples**

Request example:

{

   "creator\_name":"SYSADM",  
   "creator\_password":"8VsuVcNGe9",  
   "user\_name":"test",  
   "user\_password":"test",  
   "can\_backup":"true",  
   "can\_databank":"true",  
   "can\_schema":"true"

}

Response example:

{

   "return\_code":"success"

}

**Error code**

Please refer to Mimer SQL Return Codes: <https://download.mimer.com/pub/developer/docs/html_110/Mimer_SQL_Engine_DocSet/App_Return_Codes3.html>

Delete User

**Description**

Delete an existing user of the database, by its creator.

**URI**

POST /delete\_user/{database\_name}

**Request Parameters**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Default Value | Description |
| database\_name | Path | String | Y |  |  | The name of the database |
| creator\_name | Body | String | Y |  |  | The name of the creator user who created the user |
| creator\_password | Body | String | Y |  |  | The password of the creator user who created the user |
| user\_name | Body | String | Y |  |  | The name of the user |
| is\_cascade | Body | String | N | {“true”, “false”} | “false” | If the delete has cascade effect |

**Response Parameters**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Description |
| return\_code | Body | String | Y | {“success”, “failure”} | Return code of the request |
| error\_code | Body | Int | N |  | Error code in case of failure |
| error\_message | Body | String | N |  | Message that explains the error |

**Examples**

Request example:

{

   "creator\_name":"SYSADM",  
   "creator\_password":"8VsuVcNGe9",  
   "user\_name":"test",  
   "is\_cascade":"true"

}

Response example:

{

   "return\_code":"success"

}

**Error code**

Please refer to Mimer SQL Return Codes: <https://download.mimer.com/pub/developer/docs/html_110/Mimer_SQL_Engine_DocSet/App_Return_Codes3.html>

Update User Password

**Description**

Update the password of a user, provided the user name and old password.

**URI**

POST /update\_user\_pass/{database\_name}

**Request Parameters**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Default Value | Description |
| database\_name | Path | String | Y |  |  | The name of the database |
| user\_name | Body | String | Y |  |  | The name of the user |
| old\_password | Body | String | Y |  |  | The old password of the user |
| new\_password | Body | String | Y |  |  | The new password of the user |

**Response Parameters**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Description |
| return\_code | Body | String | Y | {“success”, “failure”} | Return code of the request |
| error\_code | Body | Int | N |  | Error code in case of failure |
| error\_message | Body | String | N |  | Message that explains the error |

**Examples**

Request example:

{

   "user\_name":"test",  
   "old\_password":"123",  
   "new\_password":"456"

}

Response example:

{

   "return\_code":"success"

}

**Error code**

Please refer to Mimer SQL Return Codes: <https://download.mimer.com/pub/developer/docs/html_110/Mimer_SQL_Engine_DocSet/App_Return_Codes3.html>

Reset User Password

**Description**

Reset the password of a user, provided the creator’s name and password.

**URI**

POST /reset\_user\_pass /{database\_name}

**Request Parameters**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Default Value | Description |
| database\_name | Path | String | Y |  |  | The name of the database |
| creator\_name | Body | String | Y |  |  | The name of the creator |
| creator\_password | Body | String | Y |  |  | The password of the creator |
| user\_name | Body | String | Y |  |  | The name of the user |
| user\_password | Body | String | Y |  |  | The new password of the user |

**Response Parameters**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Description |
| return\_code | Body | String | Y | {“success”, “failure”} | Return code of the request |
| error\_code | Body | Int | N |  | Error code in case of failure |
| error\_message | Body | String | N |  | Message that explains the error |

**Examples**

Request example:

{

   "creator\_name":"SYSADM",  
   "creator\_password":"J0x3XBKUbN",  
   "user\_name":"test",  
   "user\_password":"1234"

}

Response example:

{

   "return\_code":"success"

}

**Error code**

Please refer to Mimer SQL Return Codes: <https://download.mimer.com/pub/developer/docs/html_110/Mimer_SQL_Engine_DocSet/App_Return_Codes3.html>

User Lookup

**Description**

Look up for user information.

**URI**

POST /user\_lookup/{database\_name}

**Request Parameters**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Default Value | Description |
| database\_name | Path | String | Y |  |  | The name of the database |
| user\_name | Body | String | Y |  |  | The name of the user |
| password | Body | String | Y |  |  | The password of the user |

**Response Parameters**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Description |
| return\_code | Body | String | Y | {“success”, “failure”} | Return code of the request |
| error\_code | Body | Int | N |  | Error code in case of failure |
| error\_message | Body | String | N |  | Message that explains the error |
| creator | Body | String | Y |  | Creator name |
| own\_schemas | Body | List <schema\_name> | Y |  | A list of schema names owned by the user |
| sub\_users | Body | List <subuser\_name> | Y |  | A list of users created by the user |
| groups | Body | List <group\_name> | Y |  | A list of groups which the user is a member of |
| table\_privileges | Body | List <table\_privilege> | Y |  | A list of table access privileges which the user has acquired |
| system\_privileges | Body | List <system\_privilege> | Y |  | A list of system privileges which the user has acquired |
| function\_privileges | Body | List <function\_privilege> | Y |  | A list of function execution privileges which the user has acquired |
| procedure\_privileges | Body | List < procedure \_privilege> | Y |  | A list of procedure execution privileges which the user has acquired |

Type table\_privilege:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Description |
| table\_name | Body | String | Y |  | Name of the table |
| privilege | Body | String | Y | {“INSERT”, “DELETE”, “SELECT”, “UPDATE”,  “LOAD”,”REFERENCES”} | Access privilege type of the table |
| grantor | Body | String | Y |  | The grantor of the privilege |
| is\_grantable | Body | String | Y | {“YES”,”NO”} | If YES, the privilege can be further granted by the user to other users/groups |
| table\_type | Body | String | Y | {“BASE\_TABLE”,”VIEW”} | Type of table or view |

Type system\_privilege:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Description |
| privilege | Body | String | Y | {“BACKUP”, “DATABANK”, “IDENT”, “SCHEMA”,  “LIBRARY”,”SHADOW”,” STATISTICS”} | System privilege type |
| grantor | Body | String | Y |  | The grantor of the privilege |
| is\_grantable | Body | String | Y | {“YES”,”NO”} | If YES, the privilege can be further granted by the user to other users/groups |

Type function\_privilege/procedure\_privilege:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Description |
| function\_name/  procedure\_name | Body | String | Y |  | Name of the function/procedure |
| privilege | Body | String | Y | {“EXECUTE”} | Execute privilege type of the function/procedure |
| grantor | Body | String | Y |  | The grantor of the privilege |
| is\_grantable | Body | String | Y | {“YES”,”NO”} | If YES the privilege can be further granted by the user to other users/groups |

**Examples**

Request example:

{  
   "user\_name":"test",  
   "password":"1234"

}

Response example:

{

"creator":"SYSTEM",

"sub\_users":[

{

"sub\_user":"test"

},

{

"sub\_user":"testgroup"

}

],

"own\_schemas":[

{

"schema\_name":"SYSADM"

}

],

"system\_privileges":[

{

"privilege":"BACKUP",

"grantor":"\_SYSTEM",

"is\_grantable":"YES"

}

],

"table\_privileges":[

{

      "table\_name":"SYSADM.test",  
      "privilege":"DELETE",  
      "grantor":"SYSADM",  
      "is\_grantable":"YES"

},

   {

      "table\_name":"SYSADM.test",  
      "privilege":"INSERT",  
      "grantor":"SYSADM",  
      "is\_grantable":"YES"

}

],

"function\_privileges":[

{

"function\_name":"BUILTIN.BINARY",

"privilege":"EXECUTE",

"grantor":"\_SYSTEM",

"is\_grantable":"YES"

}

],

"procedure\_privileges":[],

"groups":[

{

"group\_name":"SYSADM.testgroup"

}

],

"return\_code":"success"

}

**Error code**

Please refer to Mimer SQL Return Codes: <https://download.mimer.com/pub/developer/docs/html_110/Mimer_SQL_Engine_DocSet/App_Return_Codes3.html>

# Group Management Interfaces

Create Group

**Description**

Create a new group.

**URI**

POST /create\_group/{database\_name}

**Request Parameters**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Default Value | Description |
| database\_name | Path | String | Y |  |  | The name of the database |
| creator\_name | Body | String | Y |  |  | The name of the creator user who creates the new group |
| creator\_password | Body | String | Y |  |  | The password of the creator user who creates the new group |
| group\_name | Body | String | Y |  |  | The name of the group |

**Response Parameters**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of values | Description |
| return\_code | Body | String | Y | {“success”, “failure”} | Return code of the request |
| error\_code | Body | Int | N |  | Error code in case of failure |
| error\_message | Body | String | N |  | Message that explains the error |

**Examples**

Request example:

{

   "creator\_name":"SYSADM",  
   "creator\_password":"8VsuVcNGe9",  
   "group\_name":"test\_group"

}

Response example:

{

   "return\_code":"success"

}

**Error code**

Please refer to Mimer SQL Return Codes: <https://download.mimer.com/pub/developer/docs/html_110/Mimer_SQL_Engine_DocSet/App_Return_Codes3.html>

Delete Group

**Description**

Delete an existing group, by its creator.

**URI**

POST /delete\_group/{database\_name}

**Request Parameters**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Default Value | Description |
| database\_name | Path | String | Y |  |  | The name of the database |
| creator\_name | Body | String | Y |  |  | The name of the creator user who created the group to be deleted |
| creator\_password | Body | String | Y |  |  | The password of the creator user who created the group |
| group\_name | Body | String | Y |  |  | The name of the created new group |
| is\_cascade | Body | String | N | {“true”, “false”} | “false” | If the delete has cascade effect |

**Response Parameters**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Description |
| return\_code | Body | String | Y | {“success”, “failure”} | Return code of the request |
| error\_code | Body | Int | N |  | Error code in case of failure |
| error\_message | Body | String | N |  | Message that explains the error |

**Examples**

Request example:

{

   "creator\_name":"SYSADM",  
   "creator\_password":"8VsuVcNGe9",  
   "group\_name":"test",  
   "is\_cascade":"true"

}

Response example:

{

   "return\_code":"success"

}

**Error code**

Please refer to Mimer SQL Return Codes: <https://download.mimer.com/pub/developer/docs/html_110/Mimer_SQL_Engine_DocSet/App_Return_Codes3.html>

Grant Membership

**Description**

Grant membership of a group to a grantee by the group creator.

**URI**

POST /grant\_member/{database\_name}

**Request Parameters**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Default Value | Description |
| database\_name | Path | String | Y |  |  | The name of the database |
| grantor\_name | Body | String | Y |  |  | The name of the grantor user who created the group |
| grantor\_password | Body | String | Y |  |  | The password of the grantor user who created the group |
| grantee\_name | Body | String | Y |  |  | The name of the user or group to be added as a member |
| group\_name | Body | String | Y |  |  | The name of the group |
| is\_grantable | Body | String | N | {“true”, “false”} | “false” | If true, the grantee can grant membership to other users |

**Response Parameters**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Description |
| return\_code | Body | String | Y | {“success”, “failure”} | Return code of the request |
| error\_code | Body | Int | N |  | Error code in case of failure |
| error\_message | Body | String | N |  | Message that explains the error |

**Examples**

Request example:

{

   "grantor\_name":"SYSADM",  
   "grantor\_password":"8VsuVcNGe9",

   "grantee\_name":"test",  
   "group\_name":"test\_group",  
   "is\_cascade":"true"

}

Response example:

{

   "return\_code":"success"

}

**Error code**

Please refer to Mimer SQL Return Codes: <https://download.mimer.com/pub/developer/docs/html_110/Mimer_SQL_Engine_DocSet/App_Return_Codes3.html>

Revoke Membership

**Description**

Revoke membership of a group from a grantee by the group creator.

**URI**

POST /revoke\_member/{database\_name}

**Request Parameters**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Default Value | Description |
| database\_name | Path | String | Y |  |  | The name of the database |
| grantor\_name | Body | String | Y |  |  | The name of the grantor user who created the group |
| grantor\_password | Body | String | Y |  |  | The password of the grantor user who created the group |
| grantee\_name | Body | String | Y |  |  | The name of the user or group to be added as a member |
| group\_name | Body | String | Y |  |  | The name of the group |
| is\_cascade | Body | String | N | {“true”, “false”} | “false” | If true, the revoke has cascade effect |

**Response Parameters**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Description |
| return\_code | Body | String | Y | {“success”, “failure”} | Return code of the request |
| error\_code | Body | Int | N |  | Error code in case of failure |
| error\_message | Body | String | N |  | Message that explains the error |

**Examples**

Request example:

{

   "grantor\_name":"SYSADM",  
   "grantor\_password":"8VsuVcNGe9",

   "grantee\_name":"test",  
   "group\_name":"test\_group",  
   "is\_cascade":"true"

}

Response example:

{

   "return\_code":"success"

}

**Error code**

Please refer to Mimer SQL Return Codes: <https://download.mimer.com/pub/developer/docs/html_110/Mimer_SQL_Engine_DocSet/App_Return_Codes3.html>

Group Lookup

**Description**

Look up for group information.

**URI**

POST /group\_lookup/{database\_name}

**Request Parameters**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Default Value | Description |
| database\_name | Path | String | Y |  |  | The name of the database |
| creator\_name | Body | String | Y |  |  | The name of the creator |
| creator \_password | Body | String | Y |  |  | The password of the creator |
| group\_name | Body | String | Y |  |  | The name of the group |

**Response Parameters**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Description |
| return\_code | Body | String | Y | {“success”, “failure”} | Return code of the request |
| error\_code | Body | Int | N |  | Error code in case of failure |
| error\_message | Body | String | N |  | Message that explains the error |
| creator | Body | String | Y |  | Creator name |
| members | Body | List <member\_name> | Y |  | A list of members in the group |
| table\_privileges | Body | List <table\_privilege> | Y |  | A list of table access privileges which the group has acquired |
| system\_privileges | Body | List <system\_privilege> | Y |  | A list of system privileges which the group has acquired |
| function\_privileges | Body | List <function\_privilege> | Y |  | A list of function execution privileges which the group has acquired |
| procedure\_privileges | Body | List < procedure \_privilege> | Y |  | A list of procedure execution privileges which the group has acquired |

Type table\_privilege:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Description |
| table\_name | Body | String | Y |  | Name of the table |
| privilege | Body | String | Y | {“INSERT”, “DELETE”, “SELECT”, “UPDATE”,  “LOAD”,”REFERENCES”} | Access privilege type of the table |
| grantor | Body | String | Y |  | The grantor of the privilege |
| is\_grantable | Body | String | Y | {“YES”,”NO”} | If YES, the privilege can be further granted by the user to other users/groups |

Type system\_privilege:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Description |
| privilege | Body | String | Y | {“BACKUP”, “DATABANK”, “IDENT”, “SCHEMA”,  “LIBRARY”,”SHADOW”,” STATISTICS”} | System privilege type |
| grantor | Body | String | Y |  | The grantor of the privilege |
| is\_grantable | Body | String | Y | {“YES”,”NO”} | If YES, the privilege can be further granted by the user to other users/groups |

Type function\_privilege/procedure\_privilege:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Description |
| function\_name/  procedure\_name | Body | String | Y |  | Name of the function/procedure |
| privilege | Body | String | Y | {“EXECUTE”} | Execute privilege type of the table |
| grantor | Body | String | Y |  | The grantor of the privilege |
| is\_grantable | Body | String | Y | {“YES”,”NO”} | If YES, the privilege can be further granted by the user to other users/groups |

**Examples**

Request example:

{

   "creator\_name":"SYSADM",  
   "creator\_password":"SYSADM",  
   "group\_name":"test\_group"

}

Response example:

{

"creator":"SYSTEM",

"members":[

{

"member":"test"

},

{

" member":"test2"

}

],

"system\_privileges":[

{

"privilege":"BACKUP",

"grantor":"\_SYSTEM",

"is\_grantable":"YES"

}

],

"table\_privileges":[

{

      "table\_name":"SYSADM.test",  
      "privilege":"DELETE",  
      "grantor":"SYSADM",  
      "is\_grantable":"YES"

},

   {

      "table\_name":"SYSADM.test",  
      "privilege":"INSERT",  
      "grantor":"SYSADM",  
      "is\_grantable":"YES"

}

],

"function\_privileges":[

{

"function\_name":"BUILTIN.BINARY",

"privilege":"EXECUTE",

"grantor":"\_SYSTEM",

"is\_grantable":"YES"

}

],

"procedure\_privileges":[

{

    "grantor":"SYSADM",  
    "is\_grantable":"YES",  
    "privilege":"EXECUTE",  
    "procedure\_name":"SYSADM.p1"

}

],

"return\_code":"success"

}

**Error code**

Please refer to Mimer SQL Return Codes: <https://download.mimer.com/pub/developer/docs/html_110/Mimer_SQL_Engine_DocSet/App_Return_Codes3.html>

# Privilege Management Interfaces

Grant Access Privilege

**Description**

Grant access privilege (select, insert, update, delete, references, load, all) of a table to a grantee (user, group) by the grantor

**URI**

POST /grant\_access/{database\_name}

**Request Parameters**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Default Value | Description |
| database\_name | Path | String | Y |  |  | The name of the database |
| grantor\_name | Body | String | Y |  |  | The name of the grantor |
| grantor\_password | Body | String | Y |  |  | The password of grantor |
| grantee\_name | Body | String | Y |  |  | The name of the grantee |
| table\_name | Body | String | Y |  |  | The name of the table |
| privilege | Body | String | Y | {“INSERT”, “DELETE”, “SELECT”, “UPDATE”,  “LOAD”,”REFERENCES”, “ALL”} |  | The privilege type that should be granted |
| is\_grantable | Body | String | N | {“true”, “false”} | “false” | If true, the grantee can grant the privilege to others |

**Response Parameters**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of values | Description |
| return\_code | Body | String | Y | {“success”, “failure”} | Return code of the request |
| error\_code | Body | Int | N |  | Error code in case of failure |
| error\_message | Body | String | N |  | Message that explains the error |

**Examples**

Request example:

{

   "grantor\_name":"SYSADM",  
   "grantor\_password":"zOBhA9ndJM",  
   "grantee\_name":"test2",  
   "table\_name":"test",  
   "privilege":"all",  
   "is\_grantable":"true"

}

Response example:

{

   "return\_code":"success"

}

**Error code**

Please refer to Mimer SQL Return Codes: <https://download.mimer.com/pub/developer/docs/html_110/Mimer_SQL_Engine_DocSet/App_Return_Codes3.html>

Revoke Access Privilege

**Description**

Revoke access privilege (select, insert, update, delete, references, load, all) of a table from a grantee (user, group) by the grantor

**URI**

POST /revoke\_access/{database\_name}

**Request Parameters**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Default Value | Description |
| database\_name | Path | String | Y |  |  | The name of the database |
| grantor\_name | Body | String | Y |  |  | The name of the grantor |
| grantor\_password | Body | String | Y |  |  | The password of grantor |
| grantee\_name | Body | String | Y |  |  | The name of the grantee |
| table\_name | Body | String | Y |  |  | The name of the table |
| privilege | Body | String | Y | {“INSERT”, “DELETE”, “SELECT”, “UPDATE”,  “LOAD”,”REFERENCES”, “ALL”} |  | The privilege type that should be granted |
| is\_cascade | Body | String | N | {“true”, “false”} | “false” | If true, the revoke has cascade effect |

**Response Parameters**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of values | Description |
| return\_code | Body | String | Y | {“success”, “failure”} | Return code of the request |
| error\_code | Body | Int | N |  | Error code in case of failure |
| error\_message | Body | String | N |  | Message that explains the error |

**Examples**

Request example:

{

   "grantor\_name":"SYSADM",  
   "grantor\_password":"zOBhA9ndJM",  
   "grantee\_name":"test2",  
   "table\_name":"test",  
   "privilege":"all",  
   "is\_cascade ":"true"

}

Response example:

{

   "return\_code":"success"

}

**Error code**

Please refer to Mimer SQL Return Codes: <https://download.mimer.com/pub/developer/docs/html_110/Mimer_SQL_Engine_DocSet/App_Return_Codes3.html>

Grant Execution Privilege

**Description**

Grant execution privilege of a function or procedure to a grantee (user, group) by the grantor

**URI**

POST /grant\_execute/{database\_name}

**Request Parameters**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Default Value | Description |
| database\_name | Path | String | Y |  |  | The name of the database |
| grantor\_name | Body | String | Y |  |  | The name of the grantor |
| grantor\_password | Body | String | Y |  |  | The password of grantor |
| grantee\_name | Body | String | Y |  |  | The name of the grantee |
| routine\_name | Body | String | Y |  |  | The name of the routine |
| routine\_type | Body | String | Y | {“function”, “procedure”} |  | The type of routine |
| is\_grantable | Body | String | N | {“true”, “false”} | “false” | If true, the grantee can grant the privilege to others |

**Response Parameters**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of values | Description |
| return\_code | Body | String | Y | {“success”, “failure”} | Return code of the request |
| error\_code | Body | Int | N |  | Error code in case of failure |
| error\_message | Body | String | N |  | Message that explains the error |

**Examples**

Request example:

{

   "grantor\_name":"SYSADM",  
   "grantor\_password":"zOBhA9ndJM",  
   "grantee\_name":"test2",  
   "routine\_name":"p1",  
   "routine\_type":"procedure",  
   "is\_grantable":"true"

}

Response example:

{

   "return\_code":"success"

}

**Error code**

Please refer to Mimer SQL Return Codes: <https://download.mimer.com/pub/developer/docs/html_110/Mimer_SQL_Engine_DocSet/App_Return_Codes3.html>

Revoke Execution Privilege

**Description**

Revoke execution privilege of a function or procedure from a grantee (user, group) by the grantor

**URI**

POST /revoke\_execute/{database\_name}

**Request Parameters**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Default Value | Description |
| database\_name | Path | String | Y |  |  | The name of the database |
| grantor\_name | Body | String | Y |  |  | The name of the grantor |
| grantor\_password | Body | String | Y |  |  | The password of grantor |
| grantee\_name | Body | String | Y |  |  | The name of the grantee |
| routine\_name | Body | String | Y |  |  | The name of the routine |
| routine\_type | Body | String | Y | {“function”, “procedure”} |  | The type of routine |
| is\_cascade | Body | String | N | {“true”, “false”} | “false” | If true, the revoke has cascade effect |

**Response Parameters**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of values | Description |
| return\_code | Body | String | Y | {“success”, “failure”} | Return code of the request |
| error\_code | Body | Int | N |  | Error code in case of failure |
| error\_message | Body | String | N |  | Message that explains the error |

**Examples**

Request example:

{

   "grantor\_name":"SYSADM",  
   "grantor\_password":"zOBhA9ndJM",  
   "grantee\_name":"test2",  
   "routine\_name":"p1",  
   "routine\_type":"procedure",  
   "is\_ cascade ":"true"

}

Response example:

{

   "return\_code":"success"

}

**Error code**

Please refer to Mimer SQL Return Codes: <https://download.mimer.com/pub/developer/docs/html_110/Mimer_SQL_Engine_DocSet/App_Return_Codes3.html>

Grant System Privilege

**Description**

Grant system privilege (backup, schema, databank, ident, shadow, statistics, library) to a grantee by the grantor

**URI**

POST /grant\_system\_privilege/{database\_name}

**Request Parameters**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Default Value | Description |
| database\_name | Path | String | Y |  |  | The name of the database |
| grantor\_name | Body | String | Y |  |  | The name of the grantor |
| grantor\_password | Body | String | Y |  |  | The password of grantor |
| grantee\_name | Body | String | Y |  |  | The name of the grantee |
| privilege | Body | String | Y | {“BACKUP”, “DATABANK”, “IDENT”, “SCHEMA”,  “LIBRARY”,”SHADOW”,” STATISTICS”} |  | The privilege type that should be granted |
| is\_grantable | Body | String | N | {“true”, “false”} | “false” | If true, the grantee can grant the privilege to others |

**Response Parameters**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of values | Description |
| return\_code | Body | String | Y | {“success”, “failure”} | Return code of the request |
| error\_code | Body | Int | N |  | Error code in case of failure |
| error\_message | Body | String | N |  | Message that explains the error |

**Examples**

Request example:

{

   "grantor\_name":"SYSADM",  
   "grantor\_password":"zOBhA9ndJM",  
   "grantee\_name":"test2",

"privilege":"ident"  
   "is\_grantable":"true"

}

Response example:

{

   "return\_code":"success"

}

**Error code**

Please refer to Mimer SQL Return Codes: <https://download.mimer.com/pub/developer/docs/html_110/Mimer_SQL_Engine_DocSet/App_Return_Codes3.html>

Revoke System Privilege

**Description**

Revoke system privilege (backup, schema, databank, ident, shadow, statistics, library) from a grantee by the grantor

**URI**

POST /grant\_system\_privilege/{database\_name}

**Request Parameters**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Default Value | Description |
| database\_name | Path | String | Y |  |  | The name of the database |
| grantor\_name | Body | String | Y |  |  | The name of the grantor |
| grantor\_password | Body | String | Y |  |  | The password of grantor |
| grantee\_name | Body | String | Y |  |  | The name of the grantee |
| privilege | Body | String | Y | {“BACKUP”, “DATABANK”, “IDENT”, “SCHEMA”,  “LIBRARY”,”SHADOW”,” STATISTICS”} |  | The privilege type that should be granted |
| is\_cascade | Body | String | N | {“true”, “false”} | “false” | If true, the revoke has cascade effect |

**Response Parameters**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of values | Description |
| return\_code | Body | String | Y | {“success”, “failure”} | Return code of the request |
| error\_code | Body | Int | N |  | Error code in case of failure |
| error\_message | Body | String | N |  | Message that explains the error |

**Examples**

Request example:

{

   "grantor\_name":"SYSADM",  
   "grantor\_password":"zOBhA9ndJM",  
   "grantee\_name":"test2",

"privilege":"ident"  
   "is\_ cascade":"true"

}

Response example:

{

   "return\_code":"success"

}

**Error code**

Please refer to Mimer SQL Return Codes: <https://download.mimer.com/pub/developer/docs/html_110/Mimer_SQL_Engine_DocSet/App_Return_Codes3.html>

# Schema Management Interfaces

Create Schema

**Description**

Create a new schema.

**URI**

POST /create\_schema/{database\_name}

**Request Parameters**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Default Value | Description |
| database\_name | Path | String | Y |  |  | The name of the database |
| user | Body | String | Y |  |  | The name of the user to create the schema |
| password | Body | String | Y |  |  | The password of the user |
| schema\_name | Body | String | Y |  |  | The name of the created schema |

**Response Parameters**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of values | Description |
| return\_code | Body | String | Y | {“success”, “failure”} | Return code of the request |
| error\_code | Body | Int | N |  | Error code in case of failure |
| error\_message | Body | String | N |  | Message that explains the error |

**Examples**

Request example:

{

   "user":"SYSADM",  
   "password":"8VsuVcNGe9",  
   "schema\_name":"bank”

}

Response example:

{

   "return\_code":"success"

}

**Error code**

Please refer to Mimer SQL Return Codes: <https://download.mimer.com/pub/developer/docs/html_110/Mimer_SQL_Engine_DocSet/App_Return_Codes3.html>

Delete Schema

**Description**

Delete an existing schema.

**URI**

POST /delete\_schema/{database\_name}

**Request Parameters**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Default Value | Description |
| database\_name | Path | String | Y |  |  | The name of the database |
| user | Body | String | Y |  |  | The name of the user to delete the schema |
| password | Body | String | Y |  |  | The password of the user |
| schema\_name | Body | String | Y |  |  | The name of the schema |

**Response Parameters**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of values | Description |
| return\_code | Body | String | Y | {“success”, “failure”} | Return code of the request |
| error\_code | Body | Int | N |  | Error code in case of failure |
| error\_message | Body | String | N |  | Message that explains the error |

**Examples**

Request example:

{

   "user":"SYSADM",  
   "password":"8VsuVcNGe9",  
   "schema\_name":"bank”

}

Response example:

{

   "return\_code":"success"

}

**Error code**

Please refer to Mimer SQL Return Codes: <https://download.mimer.com/pub/developer/docs/html_110/Mimer_SQL_Engine_DocSet/App_Return_Codes3.html>

List Schema

**Description**

List all schemas accessible to a user.

**URI**

POST /list\_schemas/{database\_name}

**Request Parameters**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Default Value | Description |
| database\_name | Path | String | Y |  |  | The name of the database |
| user | Body | String | Y |  |  | The name of the user to list the schemas for |
| password | Body | String | Y |  |  | The password of the user |

**Response Parameters**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of values | Description |
| return\_code | Body | String | Y | {“success”, “failure”} | Return code of the request |
| error\_code | Body | Int | N |  | Error code in case of failure |
| error\_message | Body | String | N |  | Message that explains the error |
| Schema\_list | Body | List <String> | Y |  | A list of schema names. |

**Examples**

Request example:

{

   "user":"SYSADM",  
   "password":"8VsuVcNGe9"

}

Response example:

{

   "return\_code":"success",

"schema\_list":

[

{"schema\_name": "bank"},

{"schema\_name":"storage"}

]

}

**Error code**

Please refer to Mimer SQL Return Codes: <https://download.mimer.com/pub/developer/docs/html_110/Mimer_SQL_Engine_DocSet/App_Return_Codes3.html>

Schema Lookup

**Description**

Look up for an existing schema.

**URI**

POST /schema\_lookup/{database\_name}

**Request Parameters**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Default Value | Description |
| database\_name | Path | String | Y |  |  | The name of the database |
| user | Body | String | Y |  |  | The name of the user |
| password | Body | String | Y |  |  | The password of the user |
| schema\_name | Body | String | Y |  |  | The name of the schema |

**Response Parameters**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of values | Description |
| return\_code | Body | String | Y | {“success”, “failure”} | Return code of the request |
| error\_code | Body | Int | N |  | Error code in case of failure |
| error\_message | Body | String | N |  | Message that explains the error |
| schema\_owner | Body | String | Y |  | Owner of the schema |
| tables | Body | List <table\_name> | Y |  | A list of tables in the schema |
| indexes | Body | List <index\_name> | Y |  | A list of index in the table |
| functions | Body | List <function\_name> | Y |  | A list of functions in the table |
| procedures | Body | List < procedure\_name> | Y |  | A list of procedures in the table |

**Examples**

Request example:

{

   "user":"SYSADM",  
   "password":"8VsuVcNGe9",  
   "schema\_name":"bank”

}

Response example:

{

   "functions":[

      {

         "function\_name":"f1"

      }

   ],  
   "indexes":[

      {

         "index\_name":"i1"

      }

   ],  
   "procedures":[

      {

         "procedure\_name":"p1"

      }

   ],  
   "return\_code":"success",  
   "schema\_owner":SYSADM",  
   "tables":[

      {

         "table\_name":"t1"

      },  
      {

         "table\_name":"t2"

      }

   ],  
   "view":[

      {

         "schema\_name":"v1"

      }

   ]

}

**Error code**

Please refer to Mimer SQL Return Codes: <https://download.mimer.com/pub/developer/docs/html_110/Mimer_SQL_Engine_DocSet/App_Return_Codes3.html>

Table Lookup

**Description**

Look up for an existing table.

**URI**

POST /table\_lookup/{database\_name}

**Request Parameters**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Default Value | Description |
| database\_name | Path | String | Y |  |  | The name of the database |
| user | Body | String | Y |  |  | The name of the user |
| password | Body | String | Y |  |  | The password of the user |
| schema\_name | Body | String | Y |  |  | The name of the schema |
| table\_name | Body | String | Y |  |  | The name of the table |

**Response Parameters**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of values | Description |
| return\_code | Body | String | Y | {“success”, “failure”} | Return code of the request |
| error\_code | Body | Int | N |  | Error code in case of failure |
| error\_message | Body | String | N |  | Message that explains the error |
| columns | Body | List <column> | Y |  | A list of columns in the table |
| number\_of\_rows | Body | Int | Y |  | The number of rows in the table |

Type column:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of values | Description |
| column\_name | Body | String | Y |  | The name of the column |
| column\_type | Body | Int | Y |  | The data type of the column |
| primary\_key | Body | Boolean | Y | {true,false} | If the column is part of the primary key |

**Examples**

Request example:

{

   "user":"SYSADM",  
   "password":"8VsuVcNGe9",  
   "schema\_name":"bank”,  
   "table\_name":"t1”

}

Response example:

{

   "columns":[

      {

         "column\_name":"c1",  
         "column\_type":"INTEGER",  
         "primary\_key":true

      },  
      {

         "column\_name":"c2",  
         "column\_type":"CHARACTER VARYING",  
         "primary\_key":false

      }

   ],  
   "number\_of\_rows":10,  
   "return\_code":"success"

}

**Error code**

Please refer to Mimer SQL Return Codes: <https://download.mimer.com/pub/developer/docs/html_110/Mimer_SQL_Engine_DocSet/App_Return_Codes3.html>

View Lookup

**Description**

Look up for an existing view.

**URI**

POST /view\_lookup/{database\_name}

**Request Parameters**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Default Value | Description |
| database\_name | Path | String | Y |  |  | The name of the database |
| user | Body | String | Y |  |  | The name of the user |
| password | Body | String | Y |  |  | The password of the user |
| schema\_name | Body | String | Y |  |  | The name of the schema |
| view\_name | Body | String | Y |  |  | The name of the view |

**Response Parameters**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of values | Description |
| return\_code | Body | String | Y | {“success”, “failure”} | Return code of the request |
| error\_code | Body | Int | N |  | Error code in case of failure |
| error\_message | Body | String | N |  | Message that explains the error |
| columns | Body | List <column\_name> | Y |  | A list of columns in the view |
| number\_of\_rows | Body | Int | Y |  | The number of rows in the table |

**Examples**

Request example:

{

   "user":"SYSADM",  
   "password":"8VsuVcNGe9",  
   "schema\_name":"bank”,  
   "view\_name":"v1”

}

Response example:

{

   "columns":[

      {

         "column\_name":"c1"

      }

   ],   
   "number\_of\_rows":10,  
   "return\_code":"success"

}

**Error code**

Please refer to Mimer SQL Return Codes: <https://download.mimer.com/pub/developer/docs/html_110/Mimer_SQL_Engine_DocSet/App_Return_Codes3.html>

# Configuration Management Interfaces

Get Configurations

**Description**

List all configuration parameters and their current values.

**URI**

GET|POST /getconfig /{database\_name}

**Request Parameters**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Default Value | Description |
| database\_name | Path | String | Y |  |  | The name of the database |

**Response Parameters**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of values | Description |
| return\_code | Body | String | Y | {“success”, “failure”} | Return code of the request |
| error\_code | Body | Int | N |  | Error code in case of failure |
| error\_message | Body | String | N |  | Message that explains the error |
| config | Body | List <configuration> | Y |  | A list of configurations |

Type configuration:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of values | Description |
| config\_name | Body | String | Y |  | The name of the configuration |
| config\_value | Body | String | Y |  | The value of the configuration |
| config\_comment | Body | String | Y |  | The explanation of the configuration |

List of configurations:

|  |  |
| --- | --- |
| Name | Description |
| Databanks | Max # of databanks (20-1000) |
| Tables | Max # of tables (500-1000000) |
| ActTrans | Max # of active trans (500-1000000) |
| SQLPool | Initial SQLPool (400-8388607 kb) |
| RequestThreads | # of request threads (1-100) |
| BackgroundThreads | # of background threads (1-100) |
| TcFlushThreads | # of t-cache flush threads (0-20) |
| Users | Max # of logged in users (1-5000) |
| DBCheck | DB check, 0=index, 1=all, 2=immediate, 3=im. index, 4=im. all (0-4) |
| Pages4K | # of 4K bufferpool pages (11-33554432) |
| Pages32K | # of 32K bufferpool pages (7-4194304) |
| Pages128K | # of 128K bufferpool pages (0-1048576) |
| DelayedCommit | Delayed commit, 0=Off 1=On 2=Disabled (0-2) |
| DelayedCommitTimeout | Delayed commit timeout in milliseconds (0-60000) |
| GroupCommitTimeout | Group commit timeout in milliseconds (0-20) |
| Oper | Receivers for messages |
| DumpPath | Path for dump directory |
| TCPPort | TCP/IP port |
| MaxSQLPool | SQLPool max size (2400-16777215 kb) |
| MemLock | Lock bpool in memory, 0=No 1=Yes (0-1) |
| MiniDump | Small bufferpool dump (no page content), 0=No 1=Yes (0-1) |
| BackgroundPriority | Thread priority, 0=Default, 1=Highest, 40=Lowest (0-40) |
| AutoStart | Autostart, 0=No, 1=Yes (0-1) |
| DumpScript | Dump Script |
| IoOption | IO Option, 0=Default, 1=SYNC\_IO, 2=THREAD\_AIO, 3=KERNEL\_AIO (0-3) |
| HugePages | HugePages, 0=No, 1=2MB, 2=1GB (0-2) |
| CPUAffinity | CPU affinity |
| DiskIOSync | Sync options, 0=O\_DSYNC, 1=O\_DIRECT, 2=(O\_DSYNC | O\_DIRECT) (0-2) |
| DiskIOAlignReads | Align IO reads, 0=No, 1=512B, 2=4096B (0-2) |
| DiskIOAlignWrites | Align IO writes, 0=No, 1=512B, 2=4096B (0-2) |
| ServerType | Server type: 3=mimexper, 7=miminm (3-7) |

**Examples**

Request example:

{}

Response example:

{

   "config":[

      {

         "config\_comment":"# Max # of databanks (20-1000)",  
         "config\_name":"Databanks",  
         "config\_value":"100"

      },  
      {

         "config\_comment":"# Max # of tables (500-1000000)",  
         "config\_name":"Tables",  
         "config\_value":"4000"

      }

],

   "return\_code":"success"

}

**Error code**

Please refer to Mimer SQL Return Codes: <https://download.mimer.com/pub/developer/docs/html_110/Mimer_SQL_Engine_DocSet/App_Return_Codes3.html>

Set Configurations

**Description**

Change the values of specified configurations.

**URI**

POST /setconfig /{database\_name}

**Request Parameters**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Default Value | Description |
| database\_name | Path | String | Y |  |  | The name of the database |
| config | Body | List <configuration> | Y |  |  | A list of configurations |

Type configuration:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of values | Description |
| config\_name | Body | String | Y |  | The name of the configuration |
| config\_value | Body | String | Y |  | The value of the configuration |
| config\_comment | Body | String | Y |  | The explanation of the configuration |

The list of configurations can be referred to in Section 6.1.

**Response Parameters**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of values | Description |
| return\_code | Body | String | Y | {“success”, “failure”} | Return code of the request |
| error\_code | Body | Int | N |  | Error code in case of failure |
| error\_message | Body | String | N |  | Message that explains the error |

**Examples**

Request example:

{

   "config":[

      {

         "config\_comment":"# Max # of databanks (20-1000)",  
         "config\_name":"Databanks",  
         "config\_value":"100"

      },  
      {

         "config\_comment":"# Max # of tables (500-1000000)",  
         "config\_name":"Tables",  
         "config\_value":"4000"

      }

]

}

Response example:

{

   "return\_code":"success"

}

**Error code**

Please refer to Mimer SQL Return Codes: <https://download.mimer.com/pub/developer/docs/html_110/Mimer_SQL_Engine_DocSet/App_Return_Codes3.html>

# Database Monitoring Interfaces

Server Performance Log

**Description**

Show the performance of a database server.

**URI**

GET|POST /show\_perf/{database\_name}

**Request Parameters**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Default Value | Description |
| database\_name | Path | String | Y |  |  | The name of the database |

**Response Parameters**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of values | Description |
| return\_code | Body | String | Y | {“success”, “failure”} | Return code of the request |
| error\_code | Body | Int | N |  | Error code in case of failure |
| error\_message | Body | String | N |  | Message that explains the error |
| cpu | Body | String | Y |  | CPU consumption in percentage |
| memory | Body | String | Y |  | Memory consumption in percentage |
| sqlpool\_memory | Body | String | Y |  | Size of SQL pool in KB |
| active\_users | Body | List <String> | Y |  | A list of currently active users |
| committed\_transactions | Body | String | Y |  | Number of committed transactions |
| committed\_read | Body | String | Y |  | Number of committed reads |
| aborted\_transactions | Body | String | Y |  | Number of aborted transactions |
| io\_threads | Body | String | Y |  | Number of I/O threads |
| bg\_threads | Body | String | Y |  | Number of background threads |
| request\_threads | Body | String | Y |  | Number of request threads |
| pending\_bg\_requests | Body | String | Y |  | Number of pending background thread requests |
| pending\_transaction\_restarts | Body | String | Y |  | Number of pending transaction restarts |

**Examples**

Request example:

{}

Response example:

{

   "cpu":"3.0",  
   "sqlpool\_memory":"476",  
   "aborted\_transactions":"0",  
   "active\_users":["SYSADM","test"],  
   "committed\_read":"0",  
   "committed\_transactions":"0",  
   "memory":"7.2",  
   "io\_threads":"7",  
   "bg\_threads":"8",  
   "request\_threads":"8",  
   "pending\_bg\_requests":"0",  
   "pending\_transaction\_restarts":"0",

"return\_code":"success"

}

**Error code**

Please refer to Mimer SQL Return Codes: <https://download.mimer.com/pub/developer/docs/html_110/Mimer_SQL_Engine_DocSet/App_Return_Codes3.html>

SQL Log

**Description**

Show the log of the executed SQL statements.

**URI**

POST /log\_sql/{database\_name}

**Request Parameters**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Default Value | Description |
| database\_name | Path | String | Y |  |  | The name of the database |
| password | Body | String | Y |  |  | SYSADM password |

**Response Parameters**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of values | Description |
| return\_code | Body | String | Y | {“success”, “failure”} | Return code of the request |
| error\_code | Body | Int | N |  | Error code in case of failure |
| error\_message | Body | String | N |  | Message that explains the error |
| statement | Body | String | Y |  | SQL statement |
| total\_statement\_execution\_count | Body | String | Y |  | The number of times that the statement has been executed |
| total\_table\_operation\_count | Body | String | Y |  | The total number of table operations |
| total\_transaction\_records\_count | Body | String | Y |  | The total number of records in transactions |
| total\_elapsed\_time | Body | String | Y |  | The total amount of elapsed time to execute the statement |

**Examples**

Request example:

{

"password":"8VsuVcNGe9"

}

Response example:

{

   "logs":[

{

"statement":"select \* from t1",

"total\_elapsed\_time":"0.000355",

"total\_statement\_execution\_count":"1",

"total\_table\_operation\_count":"2",

"total\_transaction\_records\_count":"0"

},

{

"statement":"insert into t1 values(1, 'a')",

"total\_elapsed\_time":"0.002131",

"total\_statement\_execution\_count":"1",

"total\_table\_operation\_count":"1",

"total\_transaction\_records\_count":"1"

},

"return\_code":"success"

]

}

**Error code**

Please refer to Mimer SQL Return Codes: <https://download.mimer.com/pub/developer/docs/html_110/Mimer_SQL_Engine_DocSet/App_Return_Codes3.html>

# Backup and Restore Interfaces

Backup

**Description**

Create databank backups for a database. The user needs to have backup system privilege.

All databanks are verified to be valid and not corrupt after the backup is done. If there are any checksum errors or other problems, an error is returned.

A JSON file called backup\_info.json is stored together with the backup. This file contain extra information needed when restoring the backup.

**URI**

POST /createbackup/{database\_name}

**Request Parameters**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Default Value | Description |
| database\_name | Path | String | Y |  |  | The name of the database |
| user\_name | Body | String | Y |  |  | The name of the user |
| password | Body | String | Y |  |  | The password of the user |
| backup\_name | Body | String | N |  |  | Name of the backup |
| backup\_comment | Body | String | N |  |  | A comment that describe the backup |
| backup\_location | Body | String | Y |  |  | The path to the backup directory |

**Response Parameters**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of values | Description |
| return\_code | Body | String | Y | {“success”, “failure”} | Return code of the request |
| backup\_id | Body | String | Y | ISO 8601 timestamp | The timestamp when the backup was created |
| error\_code | Body | Int | N |  | Error code in case of failure |
| error\_message | Body | String | N |  | Message that explains the error |
| databanks | Body | List <databank\_backup> | Y |  | A list of databank backups |

Type databank\_backup:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of values | Description |
| databank | Body | String | Y |  | The name of the databank file |
| databank\_check | Body | String | Y | {“OK”, “ERROR”, “WARNING”} | Status of the databank backup file |

**Examples**

Request example:

{

   "user\_name":"SYSADM",  
   "password":"EVpoEZm4Mm",  
   "backup\_location":"/data"

}

Response example:

{

   "backup\_id":"2020-07-02T07:55:29.946770",

   "databanks":[

      {

         "databank":"sysdb110.dbf",  
         "databank\_check":"OK"

      },  
      {

         "databank":"transdb.dbf",  
         "databank\_check":"OK"

      },  
      {

         "databank":"logdb.dbf",  
         "databank\_check":"OK"

      },  
      {

         "databank":"sqldb.dbf",  
         "databank\_check":"OK"

      }

   ],  
   "return\_code":"success"

}

**Error code**

Please refer to Mimer SQL Return Codes: <https://download.mimer.com/pub/developer/docs/html_110/Mimer_SQL_Engine_DocSet/App_Return_Codes3.html>

Restore

**Description**

Restore a database from a backup. The user needs to be SYSADM. There are two possible types of restore available using the Web Service API:

1. A full restore of any backup. With this type the entire backup is loaded from the backup and changes done since the backup are lost
2. A full restore with backup using the LOGDB. This can only be done using the latest backup.

For other types of restore, please see the System Management handbook found at <http://developer.mimer.com> and <https://developer.mimer.com/article/restore-data/>.

The restore operations is done carefully so in case of an error with the parameters or if the backup files cannot be verified to be valid and correct nothing is done.

If restoring using LOGDB and TRANSDB from the current state, both LOGDB and TRANSDB are verified before anything is done.

**URI**

POST /restorebackup/{database\_name}

**Request Parameters**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Default Value | Description |
| database\_name | Path | String | Y |  |  | The name of the database |
| user\_name | Body | String | Y |  |  | The name of the user |
| password | Body | String | Y |  |  | The password of the user |
| backup\_location | Body | String | Y |  |  | The path to the backup directory |
| backup\_id | Body | String | N |  |  | The id of the backup, for example 20200703-18\_45\_52 |
| restore\_log | Body | String | N | ‘true’ or ‘false’ | ‘true’ | Should we restore to the current state using LOGDB.  If the LOGDB have been corrupted by a hardware failure an error is returned. In this case you can restore to the latest backup with restore\_log=false |
| keep\_transdb | Body | String | N | ‘true’ or ‘false’ | ‘true’ | When restoring the backup the TRANSDB can be kept to redo all transaction that haven’t been flushed to LOGDB. If the TRANSDB have been corrupted (for example by a hardware failure) an error is returned and a new attempt can be done with keep\_transdb=false.  If restore\_log=false it has no effect. |

**Response Parameters**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of values | Description |
| return\_code | Body | String | Y | {“success”, “failure”} | Return code of the request |
| error\_code | Body | Int | N |  | Error code in case of failure |
| error\_message | Body | String | N |  | Message that explains the error |

**Examples**

Request example:

{

   "user\_name":"SYSADM",  
   "password":"EVpoEZm4Mm",  
   "backup\_location":"/data",  
   "restore\_log":"true"

}

Response example:

{  
   "return\_code":"success"

}

**Error code**

Please refer to Mimer SQL Return Codes: <https://download.mimer.com/pub/developer/docs/html_110/Mimer_SQL_Engine_DocSet/App_Return_Codes3.html>

Show backup

**Description**

Show information about a Mimer SQL backup.

**URI**

POST /showbackup

**Request Parameters**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Default Value | Description |
| backup\_location | Body | String | Y |  |  | The path to the backup directory |
| backup\_id | Body | String | Y |  |  | The ID of the backup |

**Response Parameters**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of values | Description |
| return\_code | Body | String | Y | {“success”, “failure”} | Return code of the request |
| error\_code | Body | Int | N |  | Error code in case of failure |
| error\_message | Body | String | N |  | Message that explains the error |
| backup\_id | Body | String | Y |  | ID of the backup |
| backup\_name | Body | String | Y |  | User supplied name of the backup, or the same as backup\_id |
| backup\_date | Body | String | N |  | Date for backup |
| backup\_comment | Body | String | N |  | User supplied comment about the backup |
| backup\_status | Body | String | Y |  | Status of the backup |
| databanks | Body | List <databank\_backup> | Y |  | List of databanks |

Type databank\_backup:

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of values | Description |
| databank | databanks | String | Y |  | Name of the databank |
| file\_name | Body | String |  |  | Name of the databank file |
| last\_backup |  |  |  |  | Date for the last backup of the databank |
| databank\_check | Body | String | Y | {“OK”, “ERROR”, “WARNING”} | Status of the databank backup file |

**Examples**

Request example:

{

   "backup\_location":"/backups",

"backup\_id":"2020-07-02T07:55:29.946770"

}

Response example:

{

"return\_code": "success",

"backup\_id": "2020-07-07T12:24:06.332146",

"backup\_name": "Before upgrade",

"backup\_date": "2020-07-07 12:24:06.332146",

"backup\_comment": "Backup before upgraing the system just in case something goes wrong",

"databanks": [

{

"databank": "SYSDB",

"file\_name": "sysdb110.dbf",

"verification": "OK",

"last\_backup": "2020-07-07 12:24:06.13"

},

{

"databank": "TRANSDB",

"file\_name": transdb.dbf",

"verification": "OK",

"last\_backup": "2020-07-07 12:24:06.13"

},

{

"databank": "LOGDB",

"file\_name": "logdb.dbf",

"verification": "OK",

"last\_backup": "2020-07-07 12:24:06.13"

},

{

"databank": "SQLDB",

"file\_name": "sqldb.dbf",

"verification": "OK",

"last\_backup": "2020-07-07 12:24:06.13"

},

{

"databank": "mydb",

"file\_name": "/tmp/mydb.dbf",

"verification": "OK",

"last\_backup": "2020-07-07 12:24:06.13"

}

],

"backup\_status": "success"

}

List backups

**Description**

List available Mimer SQL backups.

**URI**

POST /listbackups

**Request Parameters**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Default Value | Description |
| backup\_location | Body | String | Y |  |  | The path to the backup directory |

**Response Parameters**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of values | Description |
| return\_code | Body | String | Y | {“success”, “failure”} | Return code of the request |
| error\_code | Body | Int | N |  | Error code in case of failure |
| error\_message | Body | String | N |  | Message that explains the error |
| backups | Body | List | N |  | See “Show backup” |

**Examples**

Request example:

{

   "backup\_location":"/backups"

}

Response example:

{

"return\_code": "success",

"backups": [

{

"return\_code": "success",

"backup\_id": "2020-07-07T12:24:06.049462",

"backup\_name": "2020-07-07T12:24:06.049462",

"backup\_date": "2020-07-07 12:24:06.049462",

"backup\_comment": "",

"databanks": [

{

"databank": "SYSDB",

"file\_name": "sysdb110.dbf",

"verification": "OK",

"last\_backup": ""

},

{

"databank": "TRANSDB",

"file\_name": "/home/fral/tmp/transdbx.dbf",

"verification": "OK",

"last\_backup": ""

},

{

"databank": "LOGDB",

"file\_name": "logdb.dbf",

"verification": "OK",

"last\_backup": ""

},

{

"databank": "SQLDB",

"file\_name": "sqldb.dbf",

"verification": "OK",

"last\_backup": ""

},

{

"databank": "mydb",

"file\_name": "/tmp/mydb.dbf",

"verification": "OK",

"last\_backup": ""

}

],

"backup\_status": "success"

},

{

"return\_code": "success",

"backup\_id": "2020-07-07T12:24:06.332146",

"backup\_name": "Before upgrade",

"backup\_date": "2020-07-07 12:24:06.332146",

"backup\_comment": "Backup before upgraing the system just in case something goes wrong",

"databanks": [

{

"databank": "SYSDB",

"file\_name": "sysdb110.dbf",

"verification": "OK",

"last\_backup": "2020-07-07 12:24:06.13"

},

{

"databank": "TRANSDB",

"file\_name": transdb.dbf",

"verification": "OK",

"last\_backup": "2020-07-07 12:24:06.13"

},

{

"databank": "LOGDB",

"file\_name": "logdb.dbf",

"verification": "OK",

"last\_backup": "2020-07-07 12:24:06.13"

},

{

"databank": "SQLDB",

"file\_name": "sqldb.dbf",

"verification": "OK",

"last\_backup": "2020-07-07 12:24:06.13"

},

{

"databank": "mydb",

"file\_name": "/tmp/mydb.dbf",

"verification": "OK",

"last\_backup": "2020-07-07 12:24:06.13"

}

],

"backup\_status": "success"

}

]

}

Delete backup

**Description**

Delete a Mimer SQL backup. The backup is verified to be a Mimer SQL backup directory before beeing deleted.

**URI**

POST /deletebackup

**Request Parameters**

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of value | Default Value | Description |
| backup\_location | Body | String | Y |  |  | The path to the backup directory |
| backup\_id | Body | String | Y |  |  | ID of the backup to delete |

**Response Parameters**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Name | Position | Type | If necessary | Range of values | Description |
| return\_code | Body | String | Y | {“success”, “failure”} | Return code of the request |
| error\_code | Body | Int | N |  | Error code in case of failure |
| error\_message | Body | String | N |  | Message that explains the error |

**Examples**

Request example:

{

   "backup\_location":"/backups",

"backup\_id": "2020-07-07T12:24:06.049462"

}

Response example:

{

"return\_code": "success"

}