

# Virtual DDBMS C++ Network-Library API Documentation

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The public API consist of three classes:

- **Exception**
- **DBRow**
- **DDBMSClient**

Please refer to the **Direct-Engine-Call API Documentation** for the API of the **Exception** and **DBRow** classes.

## The DDBMSClient Class

Below are the public interface of the class :

```
class DDBMSClient {
public:
    // Construct a new DDBMS client object
    DDBMSClient(const string& host, int port, const string& user, const string& password,
                bool secure, bool tryUseCompression = true, int queryTimeoutInSecond = 30);

    // Standard dtor
    ~DDBMSClient();

    // Evaluate the given SQL statements; use the function fetchNextRow() to get the
    // the evaluation result
    void evalSQL(const string& sqlStatement);

    // Execute the given SQL statements; in case the statements produce row sets, use
    // the function fetchNextRow() to collect them
    void execSQL(const string& sqlStatements);

    // Prepare the given SQL statement
    void prepSQL(const string& sqlStatement);

    // Set values of the prepared SQL
    void prepSetVal(char id, const string& value);

    // Execute the prepared SQL
    void prepExec();

    // Fetch the next row; returns 'false' if no more row can be fetched
    bool fetchNextRow(DBRow& row, uint8_t maxCacheSize = 10);

    // Discard some rows
    void discardRow(uint32_t count);

    // Discard all pending rows
    void discardAll();

    // Add a new resource definition
    const string addResource(const string& type,          const string& host,
                           int port,                  const string& dbName,
                           const string& user,         const string& password,
                           const string& odbcOptions, const string& description);

    // Delete a resource definition (it maybe not something you really want to do!)
    void removeResource(const string& resID);

    // Get the client library version
    void clientLibraryVersion(uint8_t& major, uint8_t& minor, uint8_t& revision,
                              uint8_t& bugFix) const;

    // Get the client protocol version
    void clientProtocolVersion(uint8_t& major, uint8_t& minor, uint8_t& revision,
                               uint8_t& bugFix) const;

    // Get the server protocol version
    void serverProtocolVersion(uint8_t& major, uint8_t& minor, uint8_t& revision,
                               uint8_t& bugFix) const;

    // Ping the server
    bool ping() const;
};
```

The class interface should be self-explanatory.