

DB++

Introduction

db++, made by the German company [» Concept asa](#), is a relational database system with high performance and low memory and disk usage in mind. While providing SQL as an additional language interface, it is not really a SQL database in the first place but provides its own AQL query language which is much more influenced by the relational algebra than SQL is.

Concept asa always had an interest in supporting open source languages, db++ has had Perl and Tcl call interfaces for years now and uses Tcl as its internal stored procedure language.

Warning
This extension is <i>EXPERIMENTAL</i> . The behaviour of this extension?including the names of its functions and any other documentation surrounding this extension?may change without notice in a future release of PHP. This extension should be used at your own risk.

Installing/Configuring

Requirements

This extension relies on external client libraries so you have to have a db++ client installed on the system you want to use this extension on.

[» Concept asa](#) provides [» db++ Demo versions](#) and [» documentation](#) for Linux, some other Unix versions. There is also a Windows version of db++, but this extension doesn't support it (yet).

Installation

In order to build this extension yourself you need the db++ client libraries and header files to be installed on your system (these are included in the db++ installation archives by default). You have to run *configure* with option *--with-dbplus* to build this extension.

configure looks for the client libraries and header files under the default paths */usr/dbplus*, */usr/local/dbplus* and */opt/dbplus*. If you have installed db++ in a different place you have add the installation path to the *configure* option like this:
--with-dbplus=/your/installation/path.

Runtime Configuration

This extension has no configuration directives defined in *php.ini*.

Resource Types

dbplus_relation

Most db++ functions operate on or return *dbplus_relation* resources. A *dbplus_relation* is a handle to a stored relation or a relation generated as the result of a query.

Predefined Constants

The constants below are defined by this extension, and will only be available when the extension has either been compiled into PHP or dynamically loaded at runtime.

db++ error codes

DB++ Error Codes

PHP Constant	db++ constant	meaning
DBPLUS_ERR_NOERR (integer)	ERR_NOERR	Null error condition
DBPLUS_ERR_DUPLICATE (integer)	ERR_DUPLICATE	Tried to insert a duplicate tuple
DBPLUS_ERR_EOSCAN (integer)	ERR_EOSCAN	End of scan from rget()
DBPLUS_ERR_EMPTY (integer)	ERR_EMPTY	Relation is empty (server)
DBPLUS_ERR_CLOSE (integer)	ERR_CLOSE	The server can't close
DBPLUS_ERR_WLOCKED (integer)	ERR_WLOCKED	The record is write locked
DBPLUS_ERR_LOCKED (integer)	ERR_LOCKED	Relation was already locked
DBPLUS_ERR_NOLOCK (integer)	ERR_NOLOCK	Relation cannot be locked
DBPLUS_ERR_READ (integer)	ERR_READ	Read error on relation
DBPLUS_ERR_WRITE (integer)	ERR_WRITE	Write error on relation
DBPLUS_ERR_CREATE (integer)	ERR_CREATE	Create() system call failed
DBPLUS_ERR_LSEEK (integer)	ERR_LSEEK	Lseek() system call failed

DBPLUS_ERR_LENGTH (integer)	ERR_LENGTH	Tuple exceeds maximum length
DBPLUS_ERR_OPEN (integer)	ERR_OPEN	Open() system call failed
DBPLUS_ERR_WOPEN (integer)	ERR_WOPEN	Relation already opened for writing
DBPLUS_ERR_MAGIC (integer)	ERR_MAGIC	File is not a relation
DBPLUS_ERR_VERSION (integer)	ERR_VERSION	File is a very old relation
DBPLUS_ERR_PGSIZE (integer)	ERR_PGSIZE	Relation uses a different page size
DBPLUS_ERR_CRC (integer)	ERR_CRC	Invalid crc in the superpage
DBPLUS_ERR_PIPE (integer)	ERR_PIPE	Piped relation requires lseek()
DBPLUS_ERR_NIDX (integer)	ERR_NIDX	Too many secondary indices
DBPLUS_ERR_MALLOC (integer)	ERR_MALLOC	Malloc() call failed
DBPLUS_ERR_NUSERS (integer)	ERR_NUSERS	Error use of max users
DBPLUS_ERR_PREEXIT (integer)	ERR_PREEXIT	Caused by invalid usage
DBPLUS_ERR_ONTRAP (integer)	ERR_ONTRAP	Caused by a signal
DBPLUS_ERR_PREPROC (integer)	ERR_PREPROC	Error in the preprocessor
DBPLUS_ERR_DBPARSE (integer)	ERR_DBPARSE	Error in the parser
DBPLUS_ERR_DBRUNERR (integer)	ERR_DBRUNERR	Run error in db
DBPLUS_ERR_DBPREEXIT (integer)	ERR_DBPREEXIT	Exit condition caused by prexit() * procedure
DBPLUS_ERR_WAIT (ERR_WAIT	Wait a little (Simple only)

<code>integer)</code>		
DBPLUS_ERR_CORRUPT_TUPLE (<code>integer</code>)	ERR_CORRUPT_TUPLE	A client sent a corrupt tuple
DBPLUS_ERR_WARNING0 (<code>integer</code>)	ERR_WARNING0	The Simple routines encountered a non fatal error which was corrected
DBPLUS_ERR_PANIC (<code>integer</code>)	ERR_PANIC	The server should not really die but after a disaster send ERR_PANIC to all its clients
DBPLUS_ERR_FIFO (<code>integer</code>)	ERR_FIFO	Can't create a fifo
DBPLUS_ERR_PERM (<code>integer</code>)	ERR_PERM	Permission denied
DBPLUS_ERR_TCL (<code>integer</code>)	ERR_TCL	TCL_error
DBPLUS_ERR_RESTRICTED (<code>integer</code>)	ERR_RESTRICTED	Only two users
DBPLUS_ERR_USER (<code>integer</code>)	ERR_USER	An error in the use of the library by an application programmer
DBPLUS_ERR_UNKNOWN (<code>integer</code>)	ERR_UNKNOWN	

DB++ Functions

dbplus_add

dbplus_add -- Add a tuple to a relation

Description

```
int dbplus_add ( resource $relation, array $tuple )
```

Adds a tuple to a *relation*.

Parameters

relation

tuple

An array of attribute/value pairs to be inserted into the given *relation*. After successful execution this array will contain the complete data of the newly created tuple, including all implicitly set domain fields like sequences.

Return Values

The function will return **DBPLUS_ERR_NOERR** on success or a db++ error code on failure.

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

See Also

- [dbplus_errcode\(\)](#)

dbplus_aql

dbplus_aql -- Perform AQL query

Description

resource **dbplus_aql** (string *\$query* [, string *\$server* [, string *\$dbpath*]])

Executes an AQL *query* on the given *server* and *dbpath*.

Parameters

query

The AQL query to be executed. Further information on the AQL A... Query Language is provided in the original db++ manual.

server

dbpath

Return Values

Returns a relation handle on success. The result data may be fetched from this relation by calling [dbplus_next\(\)](#) and **dbplus_current()**. Other relation access functions will not work on a result relation.

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

dbplus_chdir

dbplus_chdir -- Get/Set database virtual current directory

Description

string **dbplus_chdir** ([string *\$newdir*])

Changes the virtual current directory where relation files will be looked for by [dbplus_open\(\)](#).

Parameters

newdir

The new directory for relation files. You can omit this parameter to query the current working directory.

Return Values

Returns the absolute path of the current directory.

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

dbplus_close

dbplus_close -- Close a relation

Description

mixed dbplus_close (resource \$relation)

Closes a relation previously opened by [dbplus_open\(\)](#).

Parameters

relation

A relation opened by [dbplus_open\(\)](#).

Return Values

Returns **TRUE** on success or **DBPLUS_ERR_UNKNOWN** on failure.

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

dbplus_curr

dbplus_curr -- Get current tuple from relation

Description

int **dbplus_curr** (resource \$relation, array &\$tuple)

Reads the data for the current tuple for the given *relation*.

Parameters

relation

A relation opened by [dbplus_open\(\)](#).

tuple

The data will be passed back in this parameter, as an associative array.

Return Values

The function will return zero (aka. DBPLUS_ERR_NOERR) on success or a db++ error code on failure.

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

See Also

- [dbplus_first\(\)](#)
- [dbplus_prev\(\)](#)
- [dbplus_next\(\)](#)
- [dbplus_last\(\)](#)
- [dbplus_errcode\(\)](#)

dbplus_errcode

dbplus_errcode -- Get error string for given errorcode or last error

Description

string **dbplus_errcode** ([int \$*errno*])

Returns a clear error string for the given error code.

Parameters

errno

The error code. If not provided, the result code of the last db++ operation is assumed.

Return Values

Returns the error message.

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

dbplus_errno

dbplus_errno -- Get error code for last operation

Description

int **dbplus_errno** (void)

Returns the error code returned by the last db++ operation.

Return Values

Returns the error code, as an integer.

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

See Also

- [dbplus_errcode\(\)](#)

dbplus_find

dbplus_find -- Set a constraint on a relation

Description

```
int dbplus_find ( resource $relation, array $constraints, mixed $tuple )
```

Places a constraint on the given *relation*.

Further calls to functions like [dbplus_curr\(\)](#) or [dbplus_next\(\)](#) will only return tuples matching the given constraints.

Parameters

relation

A relation opened by [dbplus_open\(\)](#).

constraints

Constraints are triplets of strings containing of a domain name, a comparison operator and a comparison value. The *constraints* parameter array may consist of a collection of string arrays, each of which contains a domain, an operator and a value, or of a single string array containing a multiple of three elements. The comparison operator may be one of the following strings: '==', '>', '>=', '<', '<=', '!=', '~' for a regular expression match and 'BAND' or 'BOR' for bitwise operations.

tuple

Return Values

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

See Also

- [dbplus_unselect\(\)](#)

dbplus_first

dbplus_first -- Get first tuple from relation

Description

```
int dbplus_first ( resource $relation, array &$tuple )
```

Reads the data for the first tuple for the given *relation*, makes it the current tuple and pass it back as an associative array in *tuple*.

Parameters

relation

A relation opened by [dbplus_open\(\)](#).

tuple

Return Values

Returns **DBPLUS_ERR_NOERR** on success or a db++ error code on failure.

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

See Also

- [dbplus_curr\(\)](#)
- [dbplus_prev\(\)](#)
- [dbplus_next\(\)](#)
- [dbplus_last\(\)](#)
- [dbplus_errcode\(\)](#)

dbplus_flush

dbplus_flush -- Flush all changes made on a relation

Description

int **dbplus_flush** (resource \$relation)

Writes all changes applied to *relation* since the last flush to disk.

Parameters

relation

A relation opened by [dbplus_open\(\)](#).

Return Values

Returns **DBPLUS_ERR_NOERR** on success or a db++ error code on failure.

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

See Also

- [dbplus_errcode\(\)](#)

dbplus_freealllocks

dbplus_freealllocks -- Free all locks held by this client

Description

int **dbplus_freealllocks** (void)

Frees all tuple locks held by this client.

Return Values

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

See Also

- [dbplus_getlock\(\)](#)
- [dbplus_freelock\(\)](#)
- [dbplus_freerlocks\(\)](#)

dbplus_freelock

dbplus_freelock -- Release write lock on tuple

Description

int **dbplus_freelock** (resource \$relation, string \$tuple)

Releases a write lock on the given *tuple* previously obtained by [dbplus_getlock\(\)](#).

Parameters

relation

A relation opened by [dbplus_open\(\)](#).

tuple

Return Values

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

See Also

- [dbplus_getlock\(\)](#)
- [dbplus_freelocks\(\)](#)
- [dbplus_freealllocks\(\)](#)

dbplus_freerlocks

dbplus_freerlocks -- Free all tuple locks on given relation

Description

int **dbplus_freerlocks** (resource \$relation)

Frees all tuple locks held on the given *relation*.

Parameters

relation

A relation opened by [dbplus_open\(\)](#).

Return Values

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

See Also

- [dbplus_getlock\(\)](#)
- [dbplus_freelock\(\)](#)
- [dbplus_freealllocks\(\)](#)

dbplus_getlock

dbplus_getlock -- Get a write lock on a tuple

Description

int **dbplus_getlock** (resource \$relation, string \$tuple)

Requests a write lock on the specified *tuple*.

Parameters

relation

A relation opened by [dbplus_open\(\)](#).

tuple

Return Values

Returns zero on success or a non-zero error code, especially **DBPLUS_ERR_WLOCKED** on failure.

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

See Also

- [dbplus_freelock\(\)](#)
- [dbplus_freerlocks\(\)](#)
- [dbplus_freealllocks\(\)](#)

dbplus_getunique

dbplus_getunique -- Get an id number unique to a relation

Description

int **dbplus_getunique** (resource \$relation, int \$uniqueid)

Obtains a number guaranteed to be unique for the given *relation* and will pass it back in the variable given as *uniqueid*.

Parameters

relation

A relation opened by [dbplus_open\(\)](#).

uniqueid

Return Values

Returns **DBPLUS_ERR_NOERR** on success or a db++ error code on failure.

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

dbplus_info

dbplus_info -- Get information about a relation

Description

int **dbplus_info** (resource \$relation, string \$key, array &\$result)

Warning
This function is currently not documented; only its argument list is available.

Parameters

relation

A relation opened by [dbplus_open\(\)](#).

key

result

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

dbplus_last

dbplus_last -- Get last tuple from relation

Description

```
int dbplus_last ( resource $relation, array &$tuple )
```

Reads the data for the last tuple for the given *relation*, makes it the current tuple and pass it back as an associative array in *tuple*.

Parameters

relation

A relation opened by [dbplus_open\(\)](#).

tuple

Return Values

Returns **DBPLUS_ERR_NOERR** on success or a db++ error code on failure.

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

See Also

- [dbplus_first\(\)](#)
- [dbplus_curr\(\)](#)
- [dbplus_prev\(\)](#)
- [dbplus_next\(\)](#)

dbplus_lockrel

dbplus_lockrel -- Request write lock on relation

Description

int **dbplus_lockrel** (resource \$relation)

Requests a write lock on the given *relation*.

Other clients may still query the relation, but can't alter it while it is locked.

Parameters

relation

A relation opened by [dbplus_open\(\)](#).

Return Values

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

dbplus_next

dbplus_next -- Get next tuple from relation

Description

```
int dbplus_next ( resource $relation, array &$tuple )
```

Reads the data for the next tuple for the given *relation*, makes it the current tuple and will pass it back as an associative array in *tuple*.

Parameters

relation

A relation opened by [dbplus_open\(\)](#).

tuple

Return Values

Returns **DBPLUS_ERR_NOERR** on success or a db++ error code on failure.

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

See Also

- [dbplus_first\(\)](#)
- [dbplus_curr\(\)](#)
- [dbplus_prev\(\)](#)
- [dbplus_last\(\)](#)

dbplus_open

dbplus_open -- Open relation file

Description

resource **dbplus_open** (string \$name)

Opens the given relation file.

Parameters

name

Can be either a file name or a relative or absolute path name. This will be mapped in any case to an absolute relation file path on a specific host machine and server.

Return Values

On success a relation file resource (cursor) is returned which must be used in any subsequent commands referencing the relation. Failure leads to a zero return value, the actual error code may be asked for by calling [dbplus_erno\(\)](#).

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

dbplus_prev

dbplus_prev -- Get previous tuple from relation

Description

```
int dbplus_prev ( resource $relation, array &$tuple )
```

Reads the data for the previous tuple for the given *relation*, makes it the current tuple and will pass it back as an associative array in *tuple*.

Parameters

relation

A relation opened by [dbplus_open\(\)](#).

tuple

Return Values

Returns **DBPLUS_ERR_NOERR** on success or a db++ error code on failure.

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

See Also

- [dbplus_first\(\)](#)
- [dbplus_curr\(\)](#)
- [dbplus_next\(\)](#)
- [dbplus_last\(\)](#)

dbplus_rchperm

dbplus_rchperm -- Change relation permissions

Description

int **dbplus_rchperm** (resource \$relation, int \$mask, string \$user, string \$group)

Changes access permissions as specified by *mask*, *user* and *group*. The values for these are operating system specific.

Parameters

relation

A relation opened by [dbplus_open\(\)](#).

mask

user

group

Return Values

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

dbplus_rcreate

dbplus_rcreate -- Creates a new DB++ relation

Description

resource **dbplus_rcreate** (string *\$name*, mixed *\$domlist* [, bool *\$overwrite*])

Creates a new relation. Any existing relation sharing the same *name* will be overwritten if the relation is currently not in use and *overwrite* is set to TRUE.

Parameters

name

domlist

A combination of domains. May be passed as a single domain name string or as an array of domain names. This parameter should contain the domain specification for the new relation within an array of domain description strings. A domain description string consists of a domain name unique to this relation, a slash and a type specification character. See the db++ documentation, especially the dbcreate(1) manpage, for a description of available type specifiers and their meanings.

Note
This function will also accept a string with space delimited domain description strings, but it is recommended to use an array

overwrite

Return Values

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

dbplus_rcrtexact

dbplus_rcrtexact -- Creates an exact but empty copy of a relation including indices

Description

mixed dbplus_rcrtexact (string *\$name*, resource *\$relation* [, bool *\$overwrite*])

[dbplus_rcrtexact\(\)](#) will create an exact but empty copy of the given *relation* under a new *name*.

Parameters

name

relation

The copied relation, opened by [dbplus_open\(\)](#).

overwrite

An existing relation by the same *name* will only be overwritten if this parameter is set to **TRUE** and no other process is currently using the relation.

Return Values

Returns resource on success or **DBPLUS_ERR_UNKNOWN** on failure.

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

dbplus_rcrtlike

dbplus_rcrtlike -- Creates an empty copy of a relation with default indices

Description

mixed dbplus_rcrtlike (string *\$name*, resource *\$relation* [, int *\$overwrite*])

[dbplus_rcrtexact\(\)](#) will create an empty copy of the given *relation* under a new *name*, but with default indices.

Parameters

name

relation

The copied relation, opened by [dbplus_open\(\)](#).

overwrite

An existing relation by the same *name* will only be overwritten if this parameter is set to **TRUE** and no other process is currently using the relation.

Return Values

Returns resource on success or **DBPLUS_ERR_UNKNOWN** on failure.

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

dbplus_resolve

dbplus_resolve -- Resolve host information for relation

Description

array **dbplus_resolve** (string *\$relation_name*)

[dbplus_resolve\(\)](#) will try to resolve the given *relation_name* and find out internal server id, real hostname and the database path on this host.

Parameters

relation_name
The relation name.

Return Values

Returns an array containing these values under the keys *sid*, *host* and *host_path* or **FALSE** on error.

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

See Also

- [dbplus_tcl\(\)](#)

dbplus_restorepos

dbplus_restorepos -- Restore position

Description

int **dbplus_restorepos** (resource \$relation, array \$tuple)

Warning
This function is currently not documented; only its argument list is available.

Parameters

relation

A relation opened by [dbplus_open\(\)](#).

tuple

Return Values

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

dbplus_rkeys

dbplus_rkeys -- Specify new primary key for a relation

Description

mixed dbplus_rkeys (resource \$relation, **mixed** \$domlist)

[dbplus_rkeys\(\)](#) will replace the current primary key for *relation* with the combination of domains specified by *domlist*.

Parameters

relation

A relation opened by [dbplus_open\(\)](#).

domlist

A combination of domains. May be passed as a single domain name string or as an array of domain names.

Return Values

Returns resource on success or **DBPLUS_ERR_UNKNOWN** on failure.

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

dbplus_ropen

dbplus_ropen -- Open relation file local

Description

resource **dbplus_ropen** (string *\$name*)

[dbplus_ropen\(\)](#) will open the relation *file* locally for quick access without any client/server overhead. Access is read only and only **dbplus_current()** and [dbplus_next\(\)](#) may be applied to the returned relation.

Parameters

name

Return Values

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

dbplus_rquery

dbplus_rquery -- Perform local (raw) AQL query

Description

resource **dbplus_rquery** (string \$query [, string \$dbpath])

[dbplus_rquery\(\)](#) performs a local (raw) AQL query using an AQL interpreter embedded into the db++ client library. [dbplus_rquery\(\)](#) is faster than [dbplus_aql\(\)](#) but will work on local data only.

Parameters

query

dbpath

Return Values

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

dbplus_rrename

dbplus_rrename -- Rename a relation

Description

int **dbplus_rrename** (resource *\$relation*, string *\$name*)

[dbplus_rrename\(\)](#) will change the name of *relation* to *name*.

Parameters

relation

A relation opened by [dbplus_open\(\)](#).

name

Return Values

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

dbplus_rsecindex

dbplus_rsecindex -- Create a new secondary index for a relation

Description

mixed dbplus_rsecindex (resource *\$relation*, **mixed** *\$domlist*, int *\$type*)

[dbplus_rsecindex\(\)](#) will create a new secondary index for *relation* with consists of the domains specified by *domlist* and is of type *type*

Parameters

relation

A relation opened by [dbplus_open\(\)](#).

domlist

A combination of domains. May be passed as a single domain name string or as an array of domain names.

type

Return Values

Returns resource on success or **DBPLUS_ERR_UNKNOWN** on failure.

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

dbplus_runlink

dbplus_runlink -- Remove relation from filesystem

Description

int **dbplus_runlink** (resource \$relation)

dbplus_unlink() will close and remove the *relation*.

Parameters

relation

A relation opened by [dbplus_open\(\)](#).

Return Values

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

dbplus_rzap

dbplus_rzap -- Remove all tuples from relation

Description

int **dbplus_rzap** (resource \$relation)

[dbplus_rzap\(\)](#) will remove all tuples from *relation*.

Parameters

relation

A relation opened by [dbplus_open\(\)](#).

Return Values

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

dbplus_savepos

dbplus_savepos -- Save position

Description

int **dbplus_savepos** (resource \$relation)

Warning
This function is currently not documented; only its argument list is available.

Parameters

relation

A relation opened by [dbplus_open\(\)](#).

Return Values

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

dbplus_setindex

dbplus_setindex -- Set index

Description

int **dbplus_setindex** (resource \$relation, string \$idx_name)

Warning
This function is currently not documented; only its argument list is available.

Parameters

relation

A relation opened by [dbplus_open\(\)](#).

idx_name

Return Values

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

dbplus_setindexbynumber

dbplus_setindexbynumber -- Set index by number

Description

int **dbplus_setindexbynumber** (resource \$relation, int \$idx_number)

Warning
This function is currently not documented; only its argument list is available.

Parameters

relation

A relation opened by [dbplus_open\(\)](#).

idx_number

Return Values

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

dbplus_sql

dbplus_sql -- Perform SQL query

Description

resource **dbplus_sql** (string *\$query* [, string *\$server* [, string *\$dbpath*]])

Warning
This function is currently not documented; only its argument list is available.

Parameters

query

server

dbpath

Return Values

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

dbplus_tcl

dbplus_tcl -- Execute TCL code on server side

Description

string **dbplus_tcl** (int \$sid, string \$script)

A db++ server will prepare a TCL interpreter for each client connection. This interpreter will enable the server to execute TCL code provided by the client as a sort of stored procedures to improve the performance of database operations by avoiding client/server data transfers and context switches.

[dbplus_tcl\(\)](#) needs to pass the client connection id the TCL *script* code should be executed by. [dbplus_resolve\(\)](#) will provide this connection id. The function will return whatever the TCL code returns or a TCL error message if the TCL code fails.

Parameters

sid

script

Return Values

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

See Also

- [dbplus_resolve\(\)](#)

dbplus_remove

dbplus_remove -- Remove tuple and return new current tuple

Description

int **dbplus_remove** (resource \$relation, array \$tuple [, array &\$current])

[dbplus_remove\(\)](#) removes *tuple* from *relation* if it perfectly matches a tuple within the relation. *current*, if given, will contain the data of the new current tuple after calling [dbplus_remove\(\)](#).

Parameters

relation

A relation opened by [dbplus_open\(\)](#).

tuple

current

Return Values

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

dbplus_undo

dbplus_undo -- Undo

Description

int **dbplus_undo** (resource \$relation)

Warning
This function is currently not documented; only its argument list is available.

Parameters

relation

A relation opened by [dbplus_open\(\)](#).

Return Values

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

dbplus_undoprepare

dbplus_undoprepare -- Prepare undo

Description

int **dbplus_undoprepare** (resource \$relation)

Warning
This function is currently not documented; only its argument list is available.

Parameters

relation

A relation opened by [dbplus_open\(\)](#).

Return Values

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

dbplus_unlockrel

dbplus_unlockrel -- Give up write lock on relation

Description

int **dbplus_unlockrel** (resource \$relation)

Release a write lock previously obtained by [dbplus_lockrel\(\)](#).

Parameters

relation

A relation opened by [dbplus_open\(\)](#).

Return Values

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

dbplus_unselect

dbplus_unselect -- Remove a constraint from relation

Description

int **dbplus_unselect** (resource \$relation)

Calling [dbplus_unselect\(\)](#) will remove a constraint previously set by [dbplus_find\(\)](#) on *relation*.

Parameters

relation

A relation opened by [dbplus_open\(\)](#).

Return Values

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

dbplus_update

dbplus_update -- Update specified tuple in relation

Description

int **dbplus_update** (resource \$relation, array \$old, array \$new)

[dbplus_update\(\)](#) replaces the *old* tuple with the data from the *new* one, only if the *old* completely matches a tuple within *relation*.

Parameters

relation

A relation opened by [dbplus_open\(\)](#).

old

The old tuple.

new

The new tuple.

Return Values

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

dbplus_xlockrel

dbplus_xlockrel -- Request exclusive lock on relation

Description

int **dbplus_xlockrel** (resource \$relation)

Request an exclusive lock on *relation* preventing even read access from other clients.

Parameters

relation

A relation opened by [dbplus_open\(\)](#).

Return Values

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.

See Also

- [dbplus_xunlockrel\(\)](#)

dbplus_xunlockrel

dbplus_xunlockrel -- Free exclusive lock on relation

Description

int **dbplus_xunlockrel** (resource \$relation)

Releases an exclusive lock previously obtained by [dbplus_xlockrel\(\)](#).

Parameters

relation

A relation opened by [dbplus_open\(\)](#).

Return Values

Notes

Warning
This function is <i>EXPERIMENTAL</i> . The behaviour of this function, its name, and surrounding documentation may change without notice in a future release of PHP. This function should be used at your own risk.