

A

Comparing the LOB Interfaces

The tables in this section compare the eight LOB programmatic interfaces by listing their functions and methods used to operate on LOBs. The tables are split in two only to accommodate all eight interfaces.

APIs for BLOBs and CLOBs

Table A-1 APIs for BLOBs and CLOBs (PL/SQL, JDBC, OCI, OCCI)

PL/SQL: DBMS_LOB (dbmslob.sql)	JDBC (Java) interfaces java.sql.Clob and java.sql.Blob	OCI (C/ocip.h)	OCCI (C++/occiData.h) classes: Clob and Blob
NA	NA	OCILobLocatorIsInit()	isInitialized()
ISSECUREFILE	isSecureFile()	NA	NA
OPEN	open()	OCILobOpen()	Open()
ISOPEN	isOpen()	OCILobIsOpen()	isOpen()
CLOSE	close()	OCILobClose()	Close()
CREATETEMPORARY	createTemporary	OCILobCreateTemporary()	NA
FREETEMPORARY	freeTemporary	OCILobFreeTemporary()	NA
ISTEMPORARY	isTemporary	OCILobIsTemporary()	NA
GETLENGTH	length()	OCIGetLobLength2()	length()
GET_STORAGE_LIMIT	NA	OCILobGetStorageLimit()	NA
GETCHUNKSIZE	getChunkSize()	OCILobGetChunkSize()	getChunkSize()
READ	Blob: getBytes() getBinaryStream() Clob: getChars() getCharacterStream() getAsciiStream()	OciLobRead2() OCILobArrayRead()	read()
SUBSTR	getSubString	NA	NA
INSTR	position	NA	NA
NA	NA	OCILobCharSetId()	getCharSetId() (Clob only)
NA	NA	OCILobCharSetForm()	getCharSetForm (Clob only)
WRITE	Blob: setBytes() setBinaryStream() Clob: setString() setCharacterStream()	OCILobWrite2() OCILobArrayWrite()	write

Table A-1 (Cont.) APIs for BLOBs and CLOBs (PL/SQL, JDBC, OCI, OCCI)

PL/SQL: DBMS_LOB (dbmslob.sql)	JDBC (Java) interfaces java.sql.Clob and java.sql.Blob	OCI (C/ocip.h)	OCCI (C++/occiData.h) classes: Clob and Blob
WRITEAPPEND	use length() and then putString() or putBytes()	OCILobWriteAppend2 ()	NA
ERASE	NA	OCILobErase2()	NA
TRIM	truncate()	OCILobTrim2()	trim
NA	equal	OCILobIsEqual()	Use operators == / !=
COMPARE	Use DBMS_LOB	NA	NA
APPEND	Use length() and then putString() or putBytes()	OCILobWriteAppend2 ()	NA
COPY	Use read and write	OCILobCopy2()	copy()
Use operator :=	Use operator =	OCILobLocatorAssign()	use operator =
CONVERTTOBLOB	NA	NA	NA
CONVERTTOCLOB	NA	NA	NA
NA	NA	NA	closeStream()
GETOPTIONS	NA	OCILobGetOptions()	getOptions()
SETOPTIONS	NA	OCILobSetOptions()	setOptions()
GETCONTENTTYPE	NA	OciLobGetContentType()	getContentType()
SETCONTENTTYPE	NA	OciLobSetContentType()	setContentType()
FRAGMENT_DELETE FRAGMENT_INSERT FRAGMENT_MOVE FRAGMENT_REPLACE	NA	NA	NA

Table A-2 APIs for BLOB and CLOB (PL/SQL, .NET, Pro*C/C++, Pro COBOL)

PL/SQL: DBMS_LOB (dbmslob.sql)	ODP.NET Classes: OracleClob and OracleBlob	Pro*C/C++ and Pro*COBOL
OPEN	BeginChunkWrite	OPEN
ISOPEN	IsInChunkWriteMode	DESCRIBE [ISOPEN]
CLOSE	EndChunkWrite	CLOSE
CREATETEMPORARY	Add()	CREATE TEMPORARY
FREETEMPORARY	Dispose() and Close()	FREE TEMPORARY
ISTEMPORARY	IsTemporary()	DESCRIBE [ISTEMPORARY]
GETLENGTH	Length()	DESCRIBE [LENGTH]
GETCHUNKSIZE	OptimumChunkSize()	DESCRIBE [CHUNKSIZE]
READ	Value Read	READ
INSTR	Search	NA

Table A-2 (Cont.) APIs for BLOB and CLOB (PL/SQL, .NET, Pro*C/C++, Pro COBOL)

PL/SQL: DBMS_LOB (dbmslob.sql)	ODP.NET Classes: OracleClob and OracleBlob	Pro*C/C++ and Pro*COBOL
WRITE	Write	WRITE
WRITEAPPEND	Append	WRITE APPEND
ERASE	Erase	ERASE
TRIM	SetLength	TRIM
NA	IsEqual	NA
COMPARE	Compare	NA
APPEND	Append	APPEND
COPY	CopyTo	COPY
Use operator :=	Clone	ASSIGN

APIs for BFILES**Table A-3 APIs for BFILES (PL/SQL, JDBC, OCI, OCCI)**

PL/SQL: DBMS_LOB (dbmslob.sql)	JDBC (Java) interface oracle.jdbc.OracleBfile	OCI (C/ociap.h)	OCCI (C++/occiData.h) class: Bfile
FILEEXISTS	fileExists	OciLobFileExist()	fileExists()
FILEGETNAME	getDirAlias, getName	OCILobFileGetName()	getDirAlias()getFil eName()
SQL BFILENAME operator	SQL BFILENAME operator	OCILobFileSetName()	setName()
OPEN	openFile	OCILobOpen()	open()
ISOPEN	isFileOpen()	OCILobIsOpen()	isOpen()
CLOSE	closeFile	OCILobClose()	close()
FILECLOSEALL	Use DBMS_LOB	OCILobFileCloseAll()	NA
GETLENGTH	length	OCILobGetLength2()	length()
READ	getBytes()getBinary Stream()	OCILobRead() OCILobA rrayRead()	read
SUBSTR	getBytes	NA	NA
INSTR	position	NA	NA
Use operator :=	Use operator =	OCILobLocatorAssig n()	Use operator =
LOADCLOBFROMFILE LOADBLOBFROMFILE	NA	OCILobLoadFromFile 2()	Blob.copy() or Clob.copy()
COMPARE	NA	NA	NA
NA	equal	OCILobIsEqual()	Use operators ==/!=

Table A-4 APIs for BFILES (PL/SQL, ODP.NET, Pro*C/C++ and Pro*COBOL)

PL/SQL: DBMS_LOB (dbmslob.sql)	ODP.NET Class: OracleBfile	Pro*C/C++ and Pro*COBOL
FILEEXISTS	FileExists	DESCRIBE [FILEEXISTS]
FILEGETNAME	DirectoryName, Filename	DESCRIBE [DIRECTORY, FILENAME]
SQL BFILENAME operator	DirectoryName, Filename	FILE SET
OPEN	OpenFile	OPEN
ISOPEN	IsOpen()	DESCRIBE [ISOPEN]
CLOSE	CloseFile	CLOSE
FILECLOSEALL	NA	FILE CLOSE ALL
GETLENGTH	Length	DESCRIBE [LENGTH]
READ	Value,Read	READ
SUBSTR	NA	NA
INSTR	Search	NA
Use operator :=	NA	NA
LOADCLOBFROMFILE LOADBLOBFROMFILE	NA	NA
COMPARE	Compare	NA
NA	IsEqual	NA