

# Client Library Functions

## Controlling a PostScript Execution Context

### Create a context

DPSContext	<b>DPSCreateContext</b> (const char * <i>hostName</i> , const char * <i>serverName</i> , DPSTextProc <i>textProc</i> , DPSErrorProc <i>errorProc</i> ) <sup>2</sup>
DPSContext	<b>DPSCreateContextWithTimeoutFromZone</b> (const char * <i>hostName</i> , const char * <i>serverName</i> , DPSTextProc <i>textProc</i> , DPSErrorProc <i>errorProc</i> , int <i>timeout</i> , NXZone * <i>zone</i> ) <sup>2</sup>
DPSContext	<b>DPSCreateNonsecureContext</b> (const char * <i>hostName</i> , const char * <i>serverName</i> , DPSTextProc <i>textProc</i> , DPSErrorProc <i>errorProc</i> , int <i>timeout</i> , NXZone * <i>zone</i> ) <sup>2</sup>
DPSContext	<b>DPSCreateStreamContext</b> (NXStream * <i>stream</i> , int <i>debugging</i> , DPSProgramEncoding <i>progEnc</i> , DPSNameEncoding <i>nameEnc</i> , DPSErrorProc <i>errorProc</i> ) <sup>2</sup>
void	<b>DPSDestroyContext</b> (DPSContext <i>context</i> )

### Create a child context

int	<b>DPSChainContext</b> (DPSContext <i>parent</i> , DPSContext <i>child</i> )
void	<b>DPSUnchainContext</b> (DPSContext <i>context</i> )

### Access the current context

void	<b>DPSSetContext</b> (DPSContext <i>context</i> )
DPSContext	<b>DPSGetCurrentContext</b> (void)

### Control a context

int	<b>DPSSynchronizeContext</b> (DPSContext <i>context</i> , int <i>enableFlag</i> ) <sup>2</sup>
void	<b>DPSWaitContext</b> (DPSContext <i>context</i> )
void	<b>DPSAsynchronousWaitContext</b> (DPSContext <i>context</i> , DPSPingProc <i>handler</i> , void * <i>userData</i> )

**Warning:** The following two context-controlling functions aren't implemented in NeXTSTEP

void	<b>DPSInterruptContext</b> ()
void	<b>DPSResetContext</b> ()

### Extract space from a context

DPSSpace	<b>DPSSpaceFromContext</b> (DPSContext <i>context</i> )
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### Destroy a space and all contexts in it

void	<b>DPSDestroySpace</b> (DPSSpace <i>space</i> )
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# Sending Data to the Window Server

## Send PostScript code to the Window Server

void	<b>DPSWritePostScript</b> (DPSContext <i>context</i> , const void * <i>buf</i> , int <i>count</i> )
void	<b>DPSWriteData</b> (DPSContext <i>context</i> , const void * <i>buf</i> , unsigned int <i>count</i> )
void	<b>DPSPrintf</b> (DPSContext <i>context</i> , const char * <i>format</i> , ...)
void	<b>DPSFlushContext</b> (DPSContext <i>context</i> )
void	<b>DPSFlush</b> (void) <sup>2</sup>
void	<b>DPSSendEOF</b> (DPSContext <i>context</i> ) <sup>2</sup>

## Send an encoded PostScript path to the Window Server

void	<b>DPSDoUserPath</b> (void * <i>coords</i> , int <i>numCoords</i> , DPSNumberFormat <i>numType</i> , unsigned char * <i>ops</i> , int <i>numOps</i> , void * <i>bbox</i> , int <i>action</i> ) <sup>2</sup>
void	<b>DPSDoUserPathWithMatrix</b> (void * <i>coords</i> , int <i>numCoords</i> , DPSNumberFormat <i>numType</i> , unsigned char * <i>ops</i> , int <i>numOps</i> , void * <i>bbox</i> , int <i>action</i> , float <i>matrix</i> [6]) <sup>2</sup>

# User Objects and User Names

## Create a user object

int	<b>DPSDefineUserObject</b> (int <i>index</i> ) <sup>2</sup>
void	<b>DPSUndefineUserObject</b> (int <i>index</i> ) <sup>2</sup>

## Access the system and user name tables

void	<b>DPSMapNames</b> (DPSContext <i>context</i> , unsigned int <i>numNames</i> , const char *const * <i>nameArray</i> , long int *const * <i>numPtrArray</i> )
const char *	<b>DPSNameFromIndex</b> (int <i>index</i> )
const char *	<b>DPSNameFromTypeAndIndex</b> (short <i>type</i> , int <i>index</i> ) <sup>2</sup>

# Event-Handling

## Access events from the Window Server

int	<b>DPSGetEvent</b> (DPSContext <i>context</i> , NXEvent * <i>anEvent</i> , int <i>mask</i> , double <i>timeout</i> , int <i>threshold</i> ) <sup>2</sup>
int	<b>DPSPeekEvent</b> (DPSContext <i>context</i> , NXEvent * <i>anEvent</i> , int <i>mask</i> , double <i>timeout</i> , int <i>threshold</i> ) <sup>2</sup>
void	<b>DPSDiscardEvents</b> (DPSContext <i>context</i> , int <i>mask</i> ) <sup>2</sup>

## Coalesce events

int	<b>DPSSetTracking</b> (int <i>flag</i> ) <sup>2</sup>
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**Set the event-filter function**

DPSEventFilterFunc **DPSSetEventFunc**(DPSTextContext *context*, DPSEventFilterFunc *func*)<sup>2</sup>

**Create an event**

int **DPSPostEvent**(NXEvent \**anEvent*, int *atStart*)<sup>2</sup>

**Create a timed entry**

DPSTimedEntry **DPSAddTimedEntry**(double *period*, DPSTimedEntryProc *handler*, void \**userData*, int *priority*)<sup>2</sup>

void **DPSRemoveTimedEntry**(DPSTimedEntry *teNumber*)<sup>2</sup>

**Initiate a count down for the wait cursor**

void **DPSStartWaitCursorTimer**(void)<sup>2</sup>

**Allow dead key processing**

void **DPSSetDeadKeysEnabled**(DPSTextContext *context*, int *flag*)<sup>2</sup>

**Generate an event mask for an event type**

int **NX\_EVENTCODEMASK**(int *type*)

**File and Port Monitoring**

**Monitor a file descriptor**

void **DPSAddFD**(int *fd*, DPSTextFDProc *handler*, void \**userData*, int *priority*)<sup>2</sup>

void **DPSRemoveFD**(int *fd*)<sup>2</sup>

**Monitor a Mach port**

void **DPSAddPort**(port\_t *newPort*, DPSTextPortProc *handler*, int *maxSize*, void \**userData*, int *priority*)<sup>2</sup>

void **DPSRemovePort**(port\_t *port*)<sup>2</sup>

**Set the notify port call-back function**

void **DPSAddNotifyPortProc**(DPSTextPortProc *handler*, void \**userData*)<sup>2</sup>

void **DPSRemoveNotifyPortProc**(DPSTextPortProc *handler*)<sup>2</sup>

**Text-Handling**

**Set the text call-back functions**

DPSTextProc	<b>DPSSetTextProc</b> (DPSTextProc <i>context</i> , DPSTextProc <i>tp</i> )
DPSTextProc	<b>DPSSetTextBackstop</b> (DPSTextProc <i>textProc</i> )
DPSTextProc	<b>DPSGetCurrentTextBackstop</b> ( <i>void</i> )

# Debugging and Error-Handling

## Trace data and events

int	<b>DPSTraceContext</b> (DPSTextProc <i>context</i> , int <i>flag</i> ) <sup>2</sup>
void	<b>DPSTraceEvents</b> (DPSTextProc <i>context</i> , int <i>flag</i> ) <sup>2</sup>

## Handle errors

DPSErrorProc	<b>DPSSetErrorProc</b> (DPSTextProc <i>context</i> , DPSErrorProc <i>ep</i> )
void	<b>DPSDefaultErrorProc</b> (DPSTextProc <i>context</i> , DPSErrorCode <i>errorCode</i> , long unsigned int <i>arg1</i> , long unsigned int <i>arg2</i> )
void	<b>DPSSetErrorBackstop</b> (DPSErrorProc <i>errorProc</i> )
DPSErrorProc	<b>DPSGetCurrentErrorBackstop</b> ( <i>void</i> )
void	<b>DPSPrintError</b> (FILE <i>*fp</i> , const DPSBinObjSeqRec <i>error</i> ) <sup>2</sup>
void	<b>DPSPrintErrorToStream</b> (NXStream <i>*stream</i> , const DPSBinObjSeqRec <i>error</i> ) <sup>2</sup>

# Functions Used by pswrap

## Wait for return values from the Window Server

void	<b>DPSAwaitReturnValues</b> (DPSTextProc <i>context</i> )
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## Write strings in binary object sequence

void	<b>DPSWriteStringChars</b> (DPSTextProc <i>context</i> , const char <i>*buf</i> , unsigned int <i>count</i> )
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## Write PostScript code in a specified format

void	<b>DPSWriteTypedObjectArray</b> (DPSTextProc <i>context</i> , DPSDefinedType <i>type</i> , const void <i>*array</i> , unsigned int <i>length</i> )
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## Begin a new binary object sequence

void	<b>DPSBinObjSeqWrite</b> (DPSTextProc <i>context</i> , const void <i>*buf</i> , unsigned int <i>count</i> )
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## Define information expected from the PostScript interpreter

void	<b>DPSSetResultTable</b> (DPSTextProc <i>context</i> , DPSResults <i>table</i> , unsigned int <i>length</i> )
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## Update a context's name map from the client library's name map

void	<b>DPSUpdateNameMap</b> (DPSTextProc <i>context</i> )
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