

hotlinks.hyper

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Chapter 1

hotlinks.hyper

1.1 hotlinks.doc

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```

```
ClosePub()  
  
GetPub()  
  
PutPub()  
  
PubInfo()  
  
NewPassword()
```

1.2 hotlinks.library/HLSysinfo

NAME

HLSysInfo - obtain information regarding the hotlinks system.

SYNOPSIS

```
error = HLSysInfo(handle, array)  
      d0          d0      d1
```

```
int HLSysInfo(ULONG, int *);
```

FUNCTION

Will fill array with useful information like memory used, number of editions, etc. The exact information to be returned has not been decided yet.

This routine is not yet implemented so it will return UNIMPLEMENTED.

INPUTS

handle - the hotlinks 'handle' as returned by HLRegister.

array - an array of long words that will be filled in by the routine. The exact format of this array has not been decided yet, other than to say that it will be an array of long words. But exactly how many entries are needed and what they each stand for has yet to be determined.

RESULTS

Will fill in the array with information about the hotlinks system.

Possible information includes:

- user name
- hotlinks resident code version number
- number of local editions
- number of remote editions
- number of programs registered with hotlinks
- memory used by hotlinks

BUGS

None.

1.3 hotlinks.library/HLRegister

NAME

HLRegister - register a program with the hotlinks system.

SYNOPSIS

```
handle = HLRegister(id, msgport, screen)
           d0         d0    d1    d2
```

```
ULONG HLRegister(int, struct MsgPort *, struct Screen *);
```

FUNCTION

Program must make this call to register themselves with HotLinks prior to making any calls to hotlinks.

Handle must be freed before the registered program exits or memory will be lost.

INPUTS

id - a four byte id to be used for as the creator id of any editions that this application may create.

msgport - a pointer to a standard exec message port. This port is used to send Notify messages to the application when an edition changes. This may be NULL, if the application never calls

```
Notify()
```

```
to set up
```

```
a notify on an edition.
```

screen - a pointer to a valid screen where to application wants hotlinks to open up it's requester on. If this argument is NULL the default public screen is chosen (which is normally Workbench).

RESULTS

handle - a handle to be maintained throughout the duration of the registered application. This must be freed by calling

```
UnRegister()
```

```
before the application exits or memory will be lost.
```

INVPARAM - ?

NOMEMORY - there was not enough memory to perform this function.

SEE ALSO

```
UnRegister()
```

```
BUGS
```

```
None.
```

1.4 hotlinks.library/UnRegister

NAME

UnRegister - used to unregister an application with hotlinks.

SYNOPSIS

```
error = UnRegister(handle)
      d0                d0
```

```
int UnRegister(ULONG);
```

FUNCTION

This call is used to free the handle allocated by HLRegister(). This routine must be called before the registered application exits or memory will be lost.

INPUTS

handle - must be a valid handle returned from HLRegister().

RESULTS

NOERROR - if everything is OK.
?

SEE ALSO

HLRegister()
BUGS

None.

1.5 hotlinks.library/AllocPBlock

NAME

AllocPBlock - allocate a publication block.

SYNOPSIS

```
pblock = AllocPBlock(handle)
      d0                d0
```

```
struct PubBlock *AllocPBlock(ULONG);
```

FUNCTION

This function will allocate a struct PubBlock and initialize it. This is the preferred method of allocating a PubBlock structure because if the size of the PubBlock structure changes your program will not have to be changed to work properly.

INPUTS

handle - must be a valid handle as returned by HLRegister().

RESULTS

pblock - points to a valid initialized PubBlock struct.

NOMEMORY - not enough memory to allocate a PubBlock struct.

INVPARAM - the handle was invalid.

SEE ALSO

```
FreePBlock()  
,  
HLRegister()  
BUGS
```

None.

1.6 hotlinks.library/FreePBlock

NAME

FreePBlock - frees a publication block obtained by
AllocPBlock()

.

SYNOPSIS

```
error = FreePBlock(pblock)  
d0 d0
```

```
int FreePBlock(struct PubBlock *);
```

FUNCTION

This will free the memory allocated by
AllocPBlock()
pointed to by
pblock.

INPUTS

pblock - must point to a valid PubBlock struct as returned by

```
AllocPBlock()
```

.

RESULTS

INVPARAM - if the pblock was not a valid PubBlock pointer (NULL
for example).

SEE ALSO

```
AllocPBlock()  
BUGS
```

None.

1.7 hotlinks.library/SetUser

NAME

SetUser - sets the current user on the hotlinks system.

SYNOPSIS

```
error = SetUser(handle, name, password);
      d0          d0      a0      a1
int SetUser(ULONG, char *, char *);
```

FUNCTION

Will set the current user to Name, if Password is valid for Name's account.

INPUTS

handle - must be a valid handle as returned by
HLRegister()

name - a pointer to a NULL terminated string or NULL.

password - a pointer to a NULL terminated string or NULL.

If both the name and password are NULL then the current user is logged off the system. The next time a call to hotlinks is made the login prompt will be presented.

RESULTS

INVPARAM - if password is not valid for name.

SEE ALSO

HLRegister()
BUGS

None.

1.8 hotlinks.library/ChgPassword

NAME

ChgPassword - allows the changing of a users password.

SYNOPSIS

```
Error = ChgPassword(handle, name, oldpwd, newpwd);
      d0          d0      a0      a1          a2
int ChgPassword(ULONG, char *, char *, char *);
```

FUNCTION

Changes the password of <name> from <oldpwd> to <newpwd>.

INPUTS

name - a pointer to a NULL terminated string.

oldpwd - a pointer to a NULL terminated string.

newpwd - a pointer to a NULL terminated string.

All values must be valid and not NULL, unless the current user is the superuser. As superuser, one must only supply the name and newpwd to change a regular user's password. If the superuser wants to change the superuser's password then all parameters must be valid and not NULL.

The arguments need not be kept around for the duration of the program. The hotlinks resident code makes copies of the strings.

RESULTS

INVPARAM - the oldpwd was not valid for name, or a parameter was NULL.
NOPRIV - the current user tried to change another users password.
NOMEMORY - not enough memory to allocate the newpwd.

BUGS

None.

1.9 hotlinks.library/FirstPub

NAME

FirstPub - fills in a PubBlock with the first publication's information

SYNOPSIS

```
error = FirstPub(pblock)
      d0          d0
```

```
int FirstPub(struct PubBlock *);
```

FUNCTION

Returns the pblock structure filled in for first available edition. This works much like the dos.library Examine call in that it sets up for a series of

NextPub()

calls to look at all the editions the current user can gain access to.

INPUTS

pblock - pointer to a valid PubBlock as returned by AllocPBlock()

.

RESULTS

NOERROR - pblock will be filled in with the information for the first edition file that the user can gain access to. Note that only the editions that the current user has access to will be peeked by this function all others will be skipped over.

NOMOREBLOCKS - if there are no editions this user can access or if there are no editions at all.

INVPARAM - if the pblock is invalid or NULL

SEE ALSO

NextPub()

BUGS

None.

1.10 hotlinks.library/NextPub

NAME

NextPub - fills in a pblock struct with the next pub's information.
Valid only after a call to
FirstPub()
.

SYNOPSIS

```
Error = NextPub(pblock)
          d0          d0
```

```
int NextPub(struct PubBlock *);
```

FUNCTION

Returns the pblock structure filled in for the next available edition.
pblock must be the same pblock that was used in the call to
FirstPub()
or the previous NextPub() call. This routine functions ↔
much like the
dos.library ExNext call. Repeated calls to this function will have
the result of stepping through each of the available editions available
to the currently logged in user.

INPUTS

pblock - must be a valid PubBlock as returned by
AllocPBlock()
and
processed by a call to
FirstPub()
or a previous call to NextPub().

RESULTS

NOERROR - pblock will be filled in with the information for the next
edition file that the user can gain access to. Note that only the
editions that the current user has access to will be peeked by
this function all others will be skipped over.
NOMOREBLOCKS - there are no more editions available.
INVPARAM - an invalid pblock was passed.

SEE ALSO

```
FirstPub()
BUGS
```

None.

1.11 hotlinks.library/RemovePub

NAME

RemovePub - delete an edition

SYNOPSIS

```
Error = RemovePub(pblock)
          d0          d0
```

```
int RemovePub(struct PubBlock *);
```

FUNCTION

Will remove the edition file if the currently logged in user can do so.

If an edition is deleted while applications still have links to it or notifies set up on it they will receive errors when those applications try to access any hotlinks function with that pblock. Normally this error will be INVPARAM.

INPUTS

pblock - must be a valid PubBlock as returned by AllocPBlock()

pblock->PRec.ID[0], pblock->PRec.ID[1], and pblock->PRec.Version must be valid. The version number must be the latest version number or the call will fail.

RESULTS

INVPARAM - the pblock was NULL or otherwise invalid (the version number was not the most recent).

IOERROR - the dos.library DeleteFile() routine failed.

CHANGED - ?

BUGS

None.

1.12 hotlinks.library/Notify

NAME

Notify - set up a notify node for this application on this edition

SYNOPSIS

```
Error = Notify(pblock, flag, class, userdata)
           d0          d0      d1      d2      a0
```

```
int Notify(struct PubBlock *, int, int, void *);
```

FUNCTION

This will cause a notify to be set up on the pblock. Anytime the edition file is changed by any application a message is sent to the message port specified in the

```
HLRegister()
call telling it so.
```

The message sent is a struct HLMsg.

INPUTS

pblock - must point to a valid PubBlock as returned by AllocPBlock().
flag -

INFORM - will set up a link to the edition file during which time if the document is changed. A message will be sent to the program indicating a publication has changed (and it's ID) via the message port specified in the

```
HLRegister()
    call.
```

EXINFORM - will set up a link to the edition file during which time if the document is changed. A message will be sent to the program indicating a publication has changed (and it's ID) via the message port specified in the HLRegister() call. Using this flag only 1 notify per edition per message port may be set up.

NOINFORM - will cancel the notify request made on a previous call to Notify() with either INFORM or EXINFORM.

RESULTS

NOERROR - a notify was set up on the edition file.
 INVPARAM - an invalid argument was passed.
 NOMEMORY - not enough memory to set up the notify.

SEE ALSO

```
HLRegister()
    BUGS
```

None.

1.13 hotlinks.library/PubStatus

NAME

PubStatus - checks to see if the edition has changed.

SYNOPSIS

```
Error = PubStatus(pblock)
    d0                d0
```

```
int PubStatus(struct PubBlock *);
```

FUNCTION

This will check to see if the edition file has changed from the data contained in the pblock passed to it.

INPUTS

pblock - must be a valid PubBlock as returned by AllocPBlock()
 .
 pblock->PRec.ID[0], pblock->PRec.ID[1], and pblock->PRec.Version must be valid.

RESULTS

NOERROR - if the edition has not changed.
 CHANGED - if the edition has changed.
 INVPARAM - if the pblock is invalid or NULL.
 NOPRIV - if the currently logged in user cannot access the edition file specified by the pblock.

No values in the pblock are modified by this call.

SEE ALSO

AllocPBlock()
BUGS

None.

1.14 hotlinks.library/GetInfo

NAME

GetInfo - fills in a pblock struct with the information for the given id.

SYNOPSIS

```
Error = GetInfo(pblock)
      d0          d0
```

```
int GetInfo(struct PubBlock *);
```

FUNCTION

This function will fill in a PubBlock with all the information for the requested edition file.

INPUTS

pblock - must be a valid PubBlock with the pblock->PRec.ID fields filled in for the edition file you want the information for.

RESULTS

NOERROR - the pblock is filled in with the edition's information.
INVPARAM - an invalid or NULL pblock was passed.
NOPRIV - the currently logged in user does not have access to the requested edition file.

BUGS

None.

1.15 hotlinks.library/SetInfo

NAME

SetInfo - will change the information for the publication to the new information as specified in the setinfo call.

SYNOPSIS

```
Error = SetInfo(pblock)
      d0          d0
```

```
int SetInfo(struct PubBlock *);
```

FUNCTION

This function will reset all fields in the hotlinks internal database record for the edition file with the information from the pblock. All the fields will be changed to the data specified in the pblock. To change only a few fields, first make a call to the

```
GetInfo()
    routine
```

to fill the pblock with all the current information. Then make your changes and call SetInfo().

INPUTS

pblock - must be a valid pblock filled in with the new information.

RESULTS

INVPARAM - an invalid pblock was passed.

SEE ALSO

```
GetInfo()
    BUGS
```

None.

1.16 hotlinks.library/LockPub

NAME

LockPub - locks an edition file for read or write access.

SYNOPSIS

```
Error = LockPub(pblock, flags)
    d0          d0      d1
```

```
int LockPub(struct PubBlock *, int);
```

FUNCTION

This function will allow you to lock other applications out from being able to modify the edition file until you unlock it.

This is a 'soft' lock in that it is only in effect while the hotlinks resident code is active. If the computer is turned off, all locks are lost.

INPUTS

pblock - must be a valid PubBlock.

flags -

LOCK_RELEASE - will release the previously held lock.

LOCK_READ - locks the edition file for reading. This is not an exclusive lock. So other applications can also gain read access to this file.

LOCK_WRITE - locks the edition file for writing. This is an exclusive lock. No other application can get a lock on the edition file until the lock is released.

RESULTS

NOERROR - got the lock with no problems.

INVPARAM - a invalid parameter was passed to the function.

INUSE - the edition file is locked by some one else.
NOPRIV - the currently logged in user does not have access to the
edition file asked for.
CHANGED - ?

BUGS

None.

1.17 hotlinks.library/OpenPub

NAME

OpenPub - opens a publication file for reading/writing.

SYNOPSIS

```
Error = OpenPub(pblock, flags)
      d0          d0      d1
```

```
int OpenPub(struct PubBlock *, int);
```

FUNCTION

Opens the edition file for read or write. No one else may read/write while the edition file is opened for writing. If opened for write, the version number is incremented and modified date and time are set.

INPUTS

pblock - must point to a valid PubBlock.
If pblock->PRec.ID[0] and [1] are 0, this means that a new edition file should be created. Call with the following parameters in PubBlock filled in:
Type, Access, Name, Desc, Creator.
flags -
OPEN_READ - opens the edition file for reading.
OPEN_WRITE - opens the edition file for writing.

RESULTS

NOERROR - the pblock is filled in with the latest information
NOMEMORY - not enough memory to carry out the open.
INVPARAM - either the pblock was NULL or had invalid information in it, or the flags were incorrect.
IOERROR - the dos.library Open() called failed.
INUSE - the edition file is currently in use by another application.

BUGS

None.

1.18 hotlinks.library/ReadPub

NAME

ReadPub - reads data from an edition file into a buffer.

SYNOPSIS

```
numbytes = ReadPub(pblock, buffer, len)
```

```

    d0                d0      d1      d2

```

```
int ReadPub(struct PubBlock *, char *, int);
```

FUNCTION

This will read len bytes into buff from the edition file pointed to by the pblock.

INPUTS

pblock - must be a valid pblock previously opened via
OpenPub()

.

buffer - a pointer to a buffer at least len bytes in size.

len - the number of bytes to read into buffer.

RESULTS

numbytes - the actual number of bytes read.

NOPRIV - the currently logged in user does not have access to the specified edition file.

IOERROR - the dos.library Read() call failed.

SEE ALSO

```

    OpenPub()
    ,
    WritePub()
    ,
    SeekPub()
    ,
    ClosePub()
    BUGS

```

None.

1.19 hotlinks.library/WritePub

NAME

WritePub - writes data to an edition file from a buffer.

SYNOPSIS

```
error = WritePub(pblock, buffer, len)
```

```

    d0                d0      d1      d2

```

```
int WritePub(struct PubBlock *, char *, int);
```

FUNCTION

This will read len bytes into buff from the edition specified by pblock.

INPUTS

pblock - a valid pblock previously opened via
OpenPub()

.

buffer - a pointer to a buffer at least len bytes long from which data will be written to the edition file.

len - the number of bytes to write to the edition file from buffer.

RESULTS

NOERROR - no problems occurred while writing.
 NOPRIV - the currently logged in user does not have access to the requested edition file.
 INVPARAM - there was a problem with one of the arguments.
 IOERROR - the dos.library Write() failed or fewer bytes than requested were written to the edition.
 CHANGED - ?

SEE ALSO

OpenPub()
 ,
 ReadPub()
 ,
 SeekPub()
 ,
 ClosePub()
 BUGS
 None.

1.20 hotlinks.library/SeekPub

NAME

SeekPub - Sets the current read/write position in the file.

SYNOPSIS

```
position = SeekPub(pblock, offset, flags)
           d0          d0      d1      d2
```

```
int SeekPub(struct PubBlock *, int, int);
```

FUNCTION

Sets the current read/write position in the file. Will return the new position in the file relative to the beginning.

INPUTS

pblock - must be a valid pblock, previously opened by OpenPub()
 .
 offset - the number of bytes to move.
 flags -
 SEEK_BEGINNING - the offset is from the start of the file.
 SEEK_CURRENT - the offset is from the current position.
 SEEK_END - the offset is from the end of the file.

RESULTS

position - the new position in the file.

 IOERROR - the dos.library Seek() call failed.
 INVPARAM - one of the arguments was invalid.
 NOPRIV - the currently logged in user does not have access to the

requested edition file.

SEE ALSO

```
OpenPub()  
,  
ReadPub()  
,  
WritePub()  
,  
ClosePub()  
BUGS
```

None.

1.21 hotlinks.library/ClosePub

NAME

ClosePub - closes an edition file.

SYNOPSIS

```
error = ClosePub(pblock)  
d0 d0
```

```
int ClosePub(struct PubBlock *);
```

FUNCTION

This will close the edition file that was opened via
OpenPub()
.

INPUTS

pblock - must be a valid pblock previously opened via
OpenPub()
.

RESULTS

NOERROR - the edition file closed without any problems.
NOPRIV - the currently logged in user does not have access to the
requested edition file.
IOERROR - the dos.library Close() call failed.

SEE ALSO

```
OpenPub()  
,  
ReadPub()  
,  
WritePub()  
,  
SeekPub()  
BUGS
```

None.

1.22 hotlinks.library/GetPub

NAME

GetPub - presents an edition requester (much like a file requester).

SYNOPSIS

```
error = GetPub(pblock, filterproc)
      d0          d0          d1
```

```
int GetPub(struct PubBlock *, int (*)());
```

FUNCTION

Presents the user with an edition requester. This functions much like a file requester except it only shows hotlinks edition files.

The requester will be opened on the screen specified in the

```
HLRegister()
  call.
```

Only the editions available to the currently logged in user will be shown in the requester.

INPUTS

pblock - must be a valid pblock.

filterproc - a pointer to a procedure that returns an integer in d0.

The filterproc is called with a pointer to a PubBlock in a0. This allows the calling application to display only the editions in the edition requester it wants to. It can decide if the edition should be displayed by examining the PubBlock (passed in a0) and returning ACCEPT or NOACCEPT in d0. This is useful if the application only handles one type of edition file (ILBM, DTEXT, etc.). If this argument is NULL, then all editions will be shown.

RESULTS

on return - the pblock is filled in with the information for the edition the user selected.

NOERROR - the data in the pblock is valid for the selected edition.

SEE ALSO

```
PutPub()
  BUGS
```

None.

1.23 hotlinks.library/PutPub

NAME

PutPub - presents a requester for a new edition file.

SYNOPSIS

```
Error = PutPub(pblock, filterproc)
```

```

d0                d0                d1

```

```

int PutPub(struct PubBlock *, int (*)());

```

FUNCTION

This presents the user with a new edition requester and allows them to edit the name, description, and access code.

The requester will be opened on the screen specified in the

```

    HLRegister()
    call.

```

Note that this does not create the edition file, the application must still call

```

    OpenPub()
    with the ID set to 0 for the edition to be
    created.

```

INPUTS

pblock - must be a valid pblock returned by
 AllocPBlock()
 . The
 pblock->PRec.Name, pblock->PRec.Description, and
 pblock->PRec.Access will be shown to the user when the requester
 opens. This is used for the application to give some default
 values.
 filterproc - This argument is not utilized at this time and may be
 set to NULL.

RESULTS

NOERROR - no problem.
 NOMEMORY - not enough memory to open the requester.
 IOERROR - ?

SEE ALSO

```

    GetPub()
    ,
    OpenPub()
    BUGS
    None.

```

1.24 hotlinks.library/PubInfo

NAME

PubInfo - presents a requester with the information for the edition and allows the user to make changes.

SYNOPSIS

```

error = PubInfo(pblock)
d0                d0

int PubInfo(struct PubBlock *);

```

FUNCTION

Presents the user with the new publication requester with the fields filled out and allows the user to make changes and save them to the edition file.

INPUTS

pblock - must be a valid pblock.

RESULTS

NOERROR - the new information is saved to the edition file and changed in the pblock.

BUGS

None.

1.25 hotlinks.library/NewPassword

NAME

NewPassword - presents the new password requester.

SYNOPSIS

```
error = NewPassword(handle);  
      d0                d0
```

```
int NewPassword(ULONG);
```

FUNCTION

Presents the user with a requester that allows them to change passwords interactively.

The requester will be opened on the screen specified in the

```
HLRegister()  
call.
```

INPUTS

handle - must be a valid handle as returned by
HLRegister()
.

RESULTS

NOERROR - the new password has been successfully saved to the password file.

SEE ALSO

```
ChgPassword()  
BUGS
```

None.
