

PBDTAddIcon

Add an icon to the desktop database.

#include <Files.h>

Finder Interface

```

OSErr      PBDTAddIcon(paramBlock, async);
DTPBPTr    paramBlock ;    pointer to a DTPB Param Block
Boolean    async;          0 = await completion; 1 = immediate return

```

Your application should not ordinarily call the functions for adding data to the database. If your application does need to write to or delete information from the desktop database, it must call **PBDTFlush** to update the copy stored on the volume.

To add an icon definition to the desktop database, use the **PBDTAddIcon** function.

Parameter block

| | | | | |
|---|----|---------------|-------|------------------------------------|
| → | 12 | ioCompletion | long | completion routine |
| ← | 16 | ioResult | short | result code |
| → | 24 | ioDTRefNum | short | desktop database reference number |
| → | 28 | ioTagInfo | long | reserved; must be initialized to 0 |
| → | 32 | ioDTBuffer | long | pointer to icon data |
| → | 36 | ioDTReqCount | long | size of icon bitmap |
| → | 45 | ioIconType | char | icon type |
| → | 52 | ioFileCreator | long | icon's file creator |
| → | 56 | ioFileType | long | icon's file type |

PBDTAddIcon adds an icon definition to the desktop database specified in ioDTRefNum. You specify the creator and file type that the icon is associated with in the ioFileCreator and ioFileType fields. For the icon type in ioIconType, specify either a constant or a value from the following list.

Corresponding

| Constant | Value | resource type | Description |
|-----------------------|-------|-----------------|--------------------------------------|
| <u>kLargeIcon</u> | 1 | ' <u>ICN#</u> ' | Large black-and-white icon with mask |
| <u>kLarge4BitIcon</u> | 2 | ' <u>icl4</u> ' | Large 4-bit color icon |
| <u>kLarge8BitIcon</u> | 3 | ' <u>icl8</u> ' | Large 8-bit color icon |
| <u>kSmallIcon</u> | 4 | ' <u>ics#</u> ' | Small black-and-white icon with mask |
| <u>kSmall4BitIcon</u> | 5 | ' <u>ics4</u> ' | Small 4-bit color icon |
| <u>kSmall8BitIcon</u> | 6 | ' <u>ics8</u> ' | Small 8-bit color icon |

The value you supply in ioDTReqCount is the size in bytes of the buffer that you've allocated for the icon's bitmap pointed to by ioDTBuffer; this value depends on the icon type. Be sure to allocate enough storage for the icon data; 1024 bytes is the largest amount required for any icon under System 7.0. You can use a constant from the following list.

| Constant | Value (bytes in bitmap) | Corresponding resource type | Description |
|---------------------------|-------------------------------|--------------------------------|--------------------------------------|
| <u>kLargeIconSize</u> | 256 | ' <u>ICN#</u> ' | Large black-and-white icon with mask |
| <u>kLarge4BitIconSize</u> | 512 | ' <u>icl4</u> ' | Large 4-bit color icon |
| <u>kLarge8BitIconSize</u> | 1024 | ' <u>icl8</u> ' | Large 8-bit color icon |
| <u>kSmallIconSize</u> | 64 | ' <u>ics#</u> ' | Small black-and-white icon with mask |

| | | | |
|---------------------------|-----|---------------|------------------------|
| <u>kSmall4BitIconSize</u> | 128 | <u>'ics4'</u> | Small 4-bit color icon |
| <u>kSmall8BitIconSize</u> | 256 | <u>'ics8'</u> | Small 8-bit color icon |

You pass a pointer to the icon bitmap in the ioDTBuffer field. You must initialize the ioTagInfo field to 0.

If the database already contains an icon definition for an icon of that type, file type, and file creator, the new definition replaces the old.

Returns: an Error code. It will be one of the following:

| | | |
|------------------|---------|--|
| noErr | (0) | No error |
| ioErr | (-36) | I/O error |
| wPrErr | (-44) | Volume is locked through hardware |
| vLckdErr | (-46) | Volume is locked through software |
| rfNumErr | (-51) | Reference number invalid |
| extFSErr | (-58) | External file system-file system identifier is nonzero |
| afplconTypeError | (-5030) | Sizes of new icon and one it replaces do not match |

Note: There is a second, asynchronous, version of this function. It does not take a second parameter; instead, it adds the suffix "Async" to the name of the routine.

Similarly, the third (synchronous) version of the routine does not take a second parameter; instead, it adds the suffix "Sync" to the name of the routine.

Note, however, that the second and third versions of these routines do not use the glue code that the first versions use and are therefore more efficient.