

# **Appendix 11A**

## **PrintCore API**

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## PRINTAbortJob

**Description** Aborts an open print job. Does not flush, but immediately closes the queue or file.

**Syntax**

```
UINT32  
PRINTAbortJob(  
    UINT32  pgID,  
    UINT32  processID  
    UINT32  pJobAliasHandle)
```

---

**Input**

*pgID* Process group ID of the calling process group.

*processID* Process ID of the calling process.

*pJobAliasHandle*  
Alias print job handle.

**Return values**

SUCCESS\_CODE  
INVALID\_JOB\_HANDLE  
INVALID\_PARAMETER *pgID* or *processID* equal 0 or 0xFFFFFFFF

## PRINTCloseDevice

**Description** Closes a print device.

**Syntax**

```
UINT32  
PRINTCloseDevice(  
    UINT32  pgID,  
    UINT32  processID,  
    UINT32  pDevAliasHandle)
```

---

**Input**

*pgID* Process group ID of the calling process group.

*processID* Process ID of the calling process.

*pDevAliasHandle* Alias print device handle

**Return values**

SUCCESS\_CODE

INVALID\_PARAMETER *pgID* or *processID* equal 0 or 0xFFFFFFFF

**Remarks**

If the caller has sufficient rights (based on *modHandle*, *pgID*, and *processID*) this API closes all the print jobs associated with this print device, deregisters the print device as a system device, and deallocates the internal structures.

## PRINTCloseJob

**Description** Flushes any buffers associated with a print job and closes the print job.

**Syntax**

```
UINT32  
PRINTCloseJob(  
    UINT32  pgID,  
    UINT32  processID,  
    UINT32  pJobAliasHandle)
```

---

**Input**

*pgID* Process group ID of the calling process group.

*processID* Process ID of the calling process.

*pJobAliasHandle*  
Print job handle

**Output** None.

**Return values**

SUCCESS\_CODE  
INVALID\_JOB\_HANDLE  
INVALID\_PARAMETER *pgID* or *processID* equal 0 or 0xFFFFFFFF

## PRINTEnumDevices

**Description** Enumerates all accessible print devices

**Syntax**

```
UINT32  
PRINTEnumDevices(  
    UINT32    pgID,  
    UINT32    processID,  
    UINT32    *sIndex,  
    PrintDevInfo *pinfo)
```

---

**Input**

*pgID* Process group ID to match

*processID* Process ID of the calling process

*Index* Address of buffer to hold search index. This must be 0xFFFFFFFF to start and will be modified for subsequent calls to enumerate through all print devices.

**Note:** This value should not be examined nor should any attempt be made to translate this value in any way. Simply pass in 0xFFFFFFFF for the first search, and continue to pass the unmodified buffer for subsequent iterations of the search.

**Output** *pinfo* Address of buffer to hold print device information in the following format:

```
UINT32    pDevAliasHandle;  
UINT32    pgID;  
UINT32    processID;  
CONN_HANDLE qConnHandle;  
UINT8     queueName [MAX_QUEUE_NAME] ;
```

**Return values**

SUCCESS\_CODE  
NO\_MORE\_ENTRIES Search is complete  
INVALID\_PARAMETER *pgID* or *processID* equal 0 or 0xFFFFFFFF

## PRINTFlushJob

**Description** Flushes all buffers associated with a print job.

**Syntax**

```
UINT32  
PRINTFlushJob(  
    UINT32  pgID,  
    UINT32  processID,  
    UINT32  pJobAliasHandle)
```

---

**Input**

*pgID* Process group ID of the calling process group.

*processID* Process ID of the calling process.

*pJobAliasHandle*  
Print job handle

**Return values**

SUCCESS\_CODE  
INVALID\_PARAMETER *pgID* or *processID* equal 0 or 0xFFFFFFFF

## PRINTGetDeviceData

<b>Syntax</b>	<pre>UINT32 PRINTGetDeviceData(     UINT32  processID,     UINT32  pDevAliasHandle,     UINT32  *entryIDList,     UINT8   *getList)</pre> <hr/>
<b>Input</b>	<p><i>pgID</i>            Process group ID of the calling process group.</p> <p><i>processID</i>        Process ID of the calling process.</p> <p><i>pDevAliasHandle</i> Alias print device handle returned from <b>PRINTOpenDevice</b>.</p> <p><i>entryIDList</i>      Zero-terminated array of UINT32s containing any combination of the following typedefs, along with their respective sizes in bytes:</p> <pre>GET_DEVICE_DEF_FLAGS,     4 GET_DEVICE_DEF_COPIES,    4 GET_DEVICE_DEF_LINES,    4 GET_DEVICE_DEF_COLS,     4 GET_DEVICE_DEF_TAB,      4 GET_DEVICE_DEF_FORMTYPE, 4 GET_DEVICE_DEF_CONTROL,   2 GET_DEVICE_DEF_SETUP_ALLOCLLEN, 4 GET_DEVICE_DEF_RESET_ALLOCLLEN, 4 GET_DEVICE_DEF_SETUP_BUFFLEN, 4 GET_DEVICE_DEF_RESET_BUFFLEN, 4 GET_DEVICE_DEF_SETUP_PTR, 4 GET_DEVICE_DEF_RESET_PTR, 4</pre> <p><i>getList</i>            Caller-defined structure defined by the size and ordering of the <i>entryIDList</i>. If <i>entryIDList</i> is defined as:</p> <pre>entryIDList[] = {GET_DEVICE_DEF_FLAGS, 4,                  GET_DEVICE_DEF_COPIES, 4,                  0};</pre>



then `getList` would be a pointer to an array that looks like:

```
typedef getListTag {
    UINT32  flags;
    UINT32  copies;
} getListStruct;
```

And the call to `PRINTGetDeviceData` would look like:

```
PRINTGetDeviceData(
    modHandle,
    pgID,
    processID,
    pDevAliasHandle,
    entryIDList,
    &getList);
```

<b>Output</b>	<i>getList</i>	Contains the requested data
<b>Return values</b>	SUCCESS_CODE INVALID_PDEVICE_HANDLE INVALID_PARAMETER	<i>pgID</i> or <i>processID</i> equal 0 or 0xFFFFFFFF
<b>See also</b>	PRINTSetDeviceData	

## PRINTGetDeviceStrData

**Description** Gets data associated with default print device strings.

**Syntax**

```
UINT32  
PRINTGetDeviceStrData(  
    UINT32  pgID,  
    UINT32  processID,  
    UINT32  pDevAliasHandle,  
    UINT32  elementNumber,  
    UINT8   *buffer,  
    UINT32  size,  
    UINT32  *bRead)
```

---

**Input**

*pgID* Process group ID of the calling process group.

*processID* Process ID of the calling process.

*pDevAliasHandle*  
Alias print device handle returned from  
PRINTOpenDevice.

*elementNumber*  
GET\_DEVICE\_DEF\_BANNER  
GET\_DEVICE\_DEF\_FORMNAME  
GET\_DEVICE\_DEF\_BANNERNAME  
GET\_DEVICE\_DEF\_DESCRIPTION  
GET\_DEVICE\_DEF\_RESET\_STR  
GET\_DEVICE\_DEF\_SETUP\_STR

*size* Size in bytes of buffer

**Output**

*buffer* Buffer to copy device string field data into

*bRead* Number of bytes read from device string field. If  
*bRead* is less than *size*, then the value returned in  
*bRead* is the size in bytes of the requested string  
field.

**Return values**            SUCCESS\_CODE  
                              INVALID\_PARAMETER *pgID* or *processID* equal 0 or 0xFFFFFFFF

**See also**                    PRINTSetDeviceStrData, PRINTGetJobStrData,  
                                  PRINTSetJobStrData

## PRINTGetJobData

**Description**                      Retrieves data associated to a print job and places it in the caller-supplied buffer.

**Syntax**

```
UINT32  
PRINTGetJobData(  
    UINT32  pgID,  
    UINT32  processID,  
    UINT32  pJobAliasHandle,  
    UINT32  *entryIDList,  
    UINT8   *getList)
```

---

**Input**

*pgID*                      Process group ID of the calling process group.

*processID*                Process ID of the calling process.

*pJobAliasHandle*        Print job handle returned from **PRINTOpenJob**.

*entryIDList*            Zero-terminated array of UINT32s containing any combination of the following typedefs along with their respective sizes, in bytes:

- GET\_JOB\_FLAGS, 4
- GET\_JOB\_COPIES, 4
- GET\_JOB\_LINES, 4
- GET\_JOB\_COLS, 4
- GET\_JOB\_TAB, 4
- GET\_JOB\_FORMTYPE, 4
- GET\_JOB\_CONTROL, 2
- GET\_JOB\_TARGETTIME, 6
- GET\_JOB\_SETUP\_ALLOCLLEN, 4
- GET\_JOB\_RESET\_ALLOCLLEN, 4
- GET\_JOB\_SETUP\_BUFFLEN, 4
- GET\_JOB\_RESET\_BUFFLEN, 4
- GET\_JOB\_SETUP\_PTR, 4
- GET\_JOB\_RESET\_PTR, 4

*getList* A caller defined structure defined by the size and ordering of the *entryIDList*. If *entryIDList* is defined as:  
`entryIDList[] = {GET_JOB_FLAGS, 4L,  
GET_JOB_COPIES, 4L, 0};`  
then *getList* would be a pointer to an array that looks like this:  

```
typedef getListTag {  
    UINT32flags;  
    UINT32copies;  
} getListStruct;
```

And the call to **PRINTGetJobData** would look like:

```
PRINTGetDeviceData(modHandle, pgID,  
processID, pJobAliasHandle, entryIDList, &getList);
```

**Output** *getList* Contains requested data

**Return values** SUCCESS\_CODE  
INVALID\_PARAMETER *pgID* or *processID* equal 0 or 0xFFFFFFFF

**See also** PRINTSetDeviceData, PRINTGetDeviceData, PRINTSetJobData

## PRINTGetJobStrData

**Description** Sets data associated to a print job from a caller supplied buffer.

**Syntax**

```
UINT32  
PRINTGetJobStrData(  
    UINT32  pgID,  
    UINT32  processID,  
    UINT32  pJobAliasHandle,  
    UINT32  elementNumber,  
    UINT8   *buffer,  
    UINT32  size,  
    UINT32  *bRead)
```

---

**Input**

*pgID* Process group ID of the calling process group.

*processID* Process ID of the calling process.

*pJobAliasHandle*  
Print job handle

*elementNumber*  
SET\_JOB\_BANNER  
SET\_JOB\_FORMNAME  
SET\_JOB\_BANNERNAME  
SET\_JOB\_DESCRIPTION  
SET\_JOB\_RESET\_STR  
SET\_JOB\_SETUP\_STR

*buffer* Buffer to copy job string field data into

*size* Size in bytes of buffer

*bRead* Buffer that *SetJobStrData* fills with number of bytes read.

**Output**

*bRead* The number of bytes read from job string field

**Return values**            SUCCESS\_CODE  
                              INVALID\_PARAMETER *pgID* or *processID* equal 0 or 0xFFFFFFFF

**See also**                 PRINTSetJobStrData, PRINTGetDeviceStrData,  
                              PRINTSetDeviceStrData

## PRINTOpenDevice

**Description** Opens a print device.

**Syntax**

```
UINT32  
PRINTOpenDevice(  
    UINT32    pgID,  
    UINT32    processID,  
    CONN_HANDLE qConnHandle,  
    UINT8     *queueName,  
    UINT32    queueID,  
    UINT32    *pDevAliasHandle)
```

---

**Input**

<i>pgID</i>	Process group ID of the calling process group
<i>processID</i>	Process ID of the calling process
<i>qConnHandle</i>	Connection handle associated with the queue. If servername is included in the queueName, qConnHandle can be zero.
<i>queueName</i>	Name of queue to associate print device. Full UNC path may be specified. (\\SERVERNAME\QUEUE_NAME).
<i>queueID</i>	Queue ID where print jobs are to be sent. If queueName is passed, queueID can be 0

**Output** *pDevAliasHandle* Address to return alias device handle

**Return values**

SUCCESS_CODE	Successful
PRINT_DEVICE_NOT_FOUND	Device was not registered
DEVICE_ALREADY_OPEN	Device already opened
OUT_OF_CLIENT_MEMORY	Out of memory
INVALID_PARAMETER	<i>pgID/processID=0</i> or 0xFFFFFFFF
INVALID_CONN_HANDLE	Specified connHandle is invalid
INVALID_QUEUE_SPECIFIED	Specified queue does not exist
QUEUE_NAME_ID_MISMATCH	Both queue name and queue ID were specified but do not refer to the same object.



**Remarks**

If device is already opened, it fills the *pDevAliasHandle* buffer and returns PRINT\_DEVICE\_ALREADY\_OPEN. Otherwise, it registers the print device as a system device and allocates the necessary structures.

## PRINTOpenJob

**Description** Opens a print job and allocates a print job structure.

**Syntax**

```
UINT32  
PRINTOpenJob(  
    UINT32  pgID,  
    UINT32  processID,  
    UINT32  pDevAliasHandle,  
    UINT32  dirHandle,  
    UINT8   nameSpace,  
    UINT8   *path  
    UINT32  actionFlag,  
    UINT32  *pJobAliasHandle)
```

---

**Input**

<i>pgID</i>	Calling process group ID
<i>processID</i>	Calling process ID
<i>pDevAliasHandle</i>	Alias print device handle
<i>dirHandle</i>	Alias directory handle, 0 if fully specified.
<i>nameSpace</i>	Name space type. (See API.H "NAME_SPACE")
<i>path</i>	Address of input path and filename, NULL if no file redirection.
<i>actionFlag</i>	Bits that match DOS open/create action bits. 0 = Fail, 1 = Create, bits 1,2 indicate action if exists, 00 = Fail, 01 = Open, 10 = Create, 11 = Invalid. See "ACTION_" in API.H for equates.

**Output** *pJobAliasHandle* Handle to a print job or 0 if error

**Return values** SUCCESS\_CODE  
INVALID\_PARAMETER *pgID* or *processID* equal 0 or 0xFFFFFFFF

---

## PRINTSetDeviceData

<b>Description</b>	Sets numeric data associated with a print device.	
<b>Syntax</b>	<pre> UINT32 PRINTSetDeviceData(     UINT32  pgID,     UINT32  processID,     UINT32  pDevAlias,     UINT32  *entryIDList,     UINT8   *setList) </pre> <hr/>	
<b>Input</b>	<i>pgID</i>	Process group ID of the calling process group.
	<i>processID</i>	Process ID of the calling process.
	<i>pDevAliasHandle</i>	Alias print device handle
	<i>entryIDList</i>	Zero-terminated array of UINT32 containing any combination of the following typedefs along with their respective size in bytes: <p style="margin-left: 40px;"> SET_DEVICE_DEF_FLAGS, 4  SET_DEVICE_DEF_COPIES, 4  SET_DEVICE_DEF_LINES, 4  SET_DEVICE_DEF_COLS, 4  SET_DEVICE_DEF_TAB, 4  SET_DEVICE_DEF_FORMTYPE, 4  SET_DEVICE_DEF_CONTROL, 2  SET_DEVICE_DEF_SETUP_ALLOCLLEN, 4  SET_DEVICE_DEF_RESET_ALLOCLLEN, 4  SET_DEVICE_DEF_SETUP_BUFFLEN, 4  SET_DEVICE_DEF_RESET_BUFFLEN, 4  SET_DEVICE_DEF_SETUP_PTR, 4  SET_DEVICE_DEF_RESET_PTR, 4 </p>
	<i>setList</i>	Caller-defined structure defined by the size and ordering of the <i>entryIDList</i> . If <i>entryIDList</i> is defined as:

```
entryIDList[] = {SET_DEVICE_DEF_FLAGS, 4,  
                 SET_DEVICE_DEF_COPIES, 4,  
                 0};
```

then `getList` would be a pointer to an array that looks like:

```
typedef getListTag {  
    UINT32  flags;  
    UINT32  copies;  
} setListStruct;
```

And the call to **PRINTSetDeviceData** would look like:

```
PRINTSetDeviceData(  
    modHandle,  
    pgID,  
    processID,  
    pDevAliasHandle,  
    entryIDList,  
    &getList);
```

**Return values**

SUCCESS\_CODE  
INVALID\_PARAMETER *pgID* or *processID* equal 0 or 0xFFFFFFFF

---

## PRINTSetDeviceStrData

<b>Description</b>	Sets string data associated with a print device.	
<b>Syntax</b>	<pre> UINT32 PRINTSetDeviceStrData(     UINT32 pgID,     UINT32 processID,     UINT32 pDevAliasHandle,     UINT32 elementNumber,     UINT8 *buffer,     UINT32 size,     UINT32 *bWritten) </pre> <hr/>	
<b>Input</b>	<i>pgID</i>	Process group ID of the calling process group.
	<i>processID</i>	Process ID of the calling process.
	<i>pDevAliasHandle</i>	Alias print device handle
	<i>elementNumber</i>	SET_DEVICE_DEF_BANNER SET_DEVICE_DEF_FORMNAME SET_DEVICE_DEF_BANNERNAME SET_DEVICE_DEF_DESCRIPTION SET_DEVICE_DEF_RESET_STR SET_DEVICE_DEF_SETUP_STR
	<i>buffer</i>	Buffer to copy into device string field
	<i>size</i>	Size in bytes of string in buffer
<b>Output</b>	<i>bWritten</i>	Number of bytes written into the device string field.
<b>Return values</b>	SUCCESS_CODE INVALID_PARAMETER <i>pgID</i> or <i>processID</i> equal 0 or 0xFFFFFFFF	
<b>Remarks</b>	The <i>bufferLen</i> field in the setup or reset string structures will be set	

to the value that is returned in *bWritten* when this is called to establish or change a setup or reset string.

**See also**

PRINTGetDeviceStrData, PRINTGetJobStrData,  
PRINTSetJobStrData

## PRINTSetJobData

**Description** Sets data associated to a print job from a caller supplied buffer.

**Syntax**

```

UINT32
PRINTSetJobData (
    UINT32  pgID,
    UINT32  processID,
    UINT32  pJobAliasHandle,
    UINT32  *entryIDList,
    UINT8   *setList)

```

**Input**

*pgID* Process group ID of the calling process group.

*processID* Process ID of the calling process.

*pJobAliasHandle* Print job handle

*entryIDList* Zero-terminated array of UINT32s containing any combination of the following typedefs along with their respective sizes, in bytes:

```

SET_JOB_FLAGS, 4
SET_JOB_COPIES, 4
SET_JOB_LINES, 4
SET_JOB_COLS, 4
SET_JOB_TAB, 4
SET_JOB_FMTTYPE, 4
SET_JOB_CONTROL, 2
SET_JOB_TARGETTIME, 6
SET_JOB_SETUP_ALLOCLN, 4
SET_JOB_RESET_ALLOCLN, 4
SET_JOB_SETUP_BUFFLEN, 4
SET_JOB_RESET_BUFFLEN, 4
SET_JOB_SETUP_PTR, 4
SET_JOB_RESET_PTR, 4

```

*setList*

Caller-defined structure defined by the size and ordering of the *entryIDList*. If *entryIDList* is defined as:

```
entryIDList[] = {SET_JOB_FLAGS, 4,  
                 SET_JOB_COPIES, 4, 0};
```

then *getList* would be a pointer to an array that looks like:

```
typedef setListTag {  
    UINT32  flags;  
    UINT32  copies;  
} setListStruct;
```

And the call to **PRINTSetDeviceData** would look like:

```
PRINTSetDeviceData(  
    modHandle,  
    pgID,  
    processID,  
    pDevAliasHandle,  
    entryIDList,  
    &getList);
```

**Return values**

SUCCESS\_CODE

INVALID\_PARAMETER *pgID* or *processID* equal 0 or 0xFFFFFFFF



## PRINTSetJobStrData

**Description** Sets data associated with a print job from a caller-supplied buffer.

**Syntax**

```

UINT32
PRINTSetJobStrData (
    UINT32  pgID,
    UINT32  processID,
    UINT32  pJobAliasHandle,
    UINT32  elementNumber,
    UINT8   *buffer,
    UINT32  size,
    UINT32  *bWritten)
    
```

<b>Input</b>	<i>pgID</i>	Process group ID of the calling process group.
	<i>processID</i>	Process ID of the calling process.
	<i>pJobAliasHandle</i>	Print job handle
	<i>elementNumber</i>	SET_JOB_BANNER SET_JOB_FORMNAME SET_JOB_BANNERNAME SET_JOB_DESCRIPTION SET_JOB_RESET_STR SET_JOB_SETUP_STR
	<i>buffer</i>	Buffer to copy into job string field
	<i>size</i>	Size in bytes of string in buffer
	<i>bWritten</i>	Buffer that SetJobStrData fills with number of bytes written.
<b>Output</b>	<i>bWritten</i>	Number of bytes written into the job string field

<b>Return values</b>	SUCCESS_CODE INVALID_PARAMETER <i>pgID</i> or <i>processID</i> equal 0 or 0xFFFFFFFF
<b>Remarks</b>	The <i>bufferLen</i> field in the setup or reset string structures will be set to the value that is returned in <i>bWritten</i> when this is called to establish or change a setup or reset string.
<b>See also</b>	PRINTGetJobStrData, PRINTGetDeviceStrData, PRINTSetDeviceStrData

## PRINTWriteToJob

**Description** Writes a buffer to a print job

**Syntax**

```

UINT32
PRINTWriteToJob(
    UINT32  pgID,
    UINT32  processID,
    UINT32  pJobAlias,
    UINT32  size,
    UINT8   *printBuffer
    UINT32  *reserved)

```

### Input

<i>pgID</i>	Process group ID of the calling process group.
<i>processID</i>	Process ID of the calling process.
<i>pJobAliasHandle</i>	Print job handle.
<i>size</i>	Number of bytes being written.
<i>printBuffer</i>	Buffer containing data to be written.
<i>reserved</i>	Reserved. Set to NULL.

### Return values

```

SUCCESS_CODE
PRN_FILE_CREATED
INVALID_JOB_HANDLE
INVALID_PDEVICE_HANDLE
INVALID_FILE_HANDLE
OUT_OF_CLIENT_MEMORY
NCP_NO_MORE_FILE_HANDLES
INVALID_PARAMETER  pgID or processID equal 0 or 0xFFFFFFFF

```