

Nintendo Wi-Fi Connection

TWL DWC Programming Manual: Download Edition

Version 2.1.6

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and should be handled accordingly.**

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Revision History

Version	Revision Date	Description
2.1.6	2010/01/19	<p>Changed Figure 5-3.</p> <p>Renamed section 5.4.2 from “Changing the IP for Restricted Access” to “Changing the IP for Restricted Access (Entire Management Page).”</p> <p>Renamed the Change button to Register in section 5.4.2 Changing the IP for Restricted Access (Entire Management Page).</p> <p>Added section 5.4.3 Changing the IP for Restricted Access (Statistics Log Page).</p>
2.1.5	2009/08/20	Revised sections 2.1 Structure of the Download Server, and 3.1 Initialization. Specifically, the <code>DWC_Init</code> function was separated into two functions, one for development and one for production. Argument specifications also changed.
2.1.4	2009/06/30	Fixed the return value of the <code>DWC_NASLoginProcess</code> function in section 3.3.2 Log In to the Nintendo Authentication Server.
2.1.3	2009/01/20	Corrected a broken link in section 5.2.2 Administration Menu.
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2.1.1	2008/12/19	In Code 4-4 Cancellation Process: Revised the code to call the <code>DWC_NdProcess</code> function after calling the <code>DWC_NdCancelAsync</code> function.
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1.0.1a	2007/04/27	Corrected typographical errors and changed dates to international format.
1.0.1	2006/10/5	Corrected mistakes in section 3.3.2.
1.0.0	2006/07/21	Revised descriptions of provisional operations to match those of real operations.
0.9.1	2006/06/30	Added descriptions specific to the download functionality dedicated package.
0.9.0	2006/06/06	Initial version.

1 Introduction

This manual provides information about the Nintendo Wi-Fi Connection Download Service. The Nintendo Wi-Fi Connection Download Service provides content management from a PC, using the Web as well as the TWL DWC Download library to download content from a Nintendo DS system.

The Nintendo WFC download service offers the following features.

- Communicate securely using HTTPS
- Attach attributes to extract files
- Attach explanatory text for downloadable games
- Specify the date and time when downloads are possible
- Restrict access points from which downloads are possible
- Register files as large as 1 megabyte (MB)
- Register as many as 100 separate sets of content

To use the Nintendo Wi-Fi Connection Download Service, contact support@noa.com and inform us that you will be using the service. Then you must follow a specific procedure and get the following information.

- A connection game code and game password for accessing the Download server from the Nintendo DS system
- A URL for the Content Management screen and a user name and password

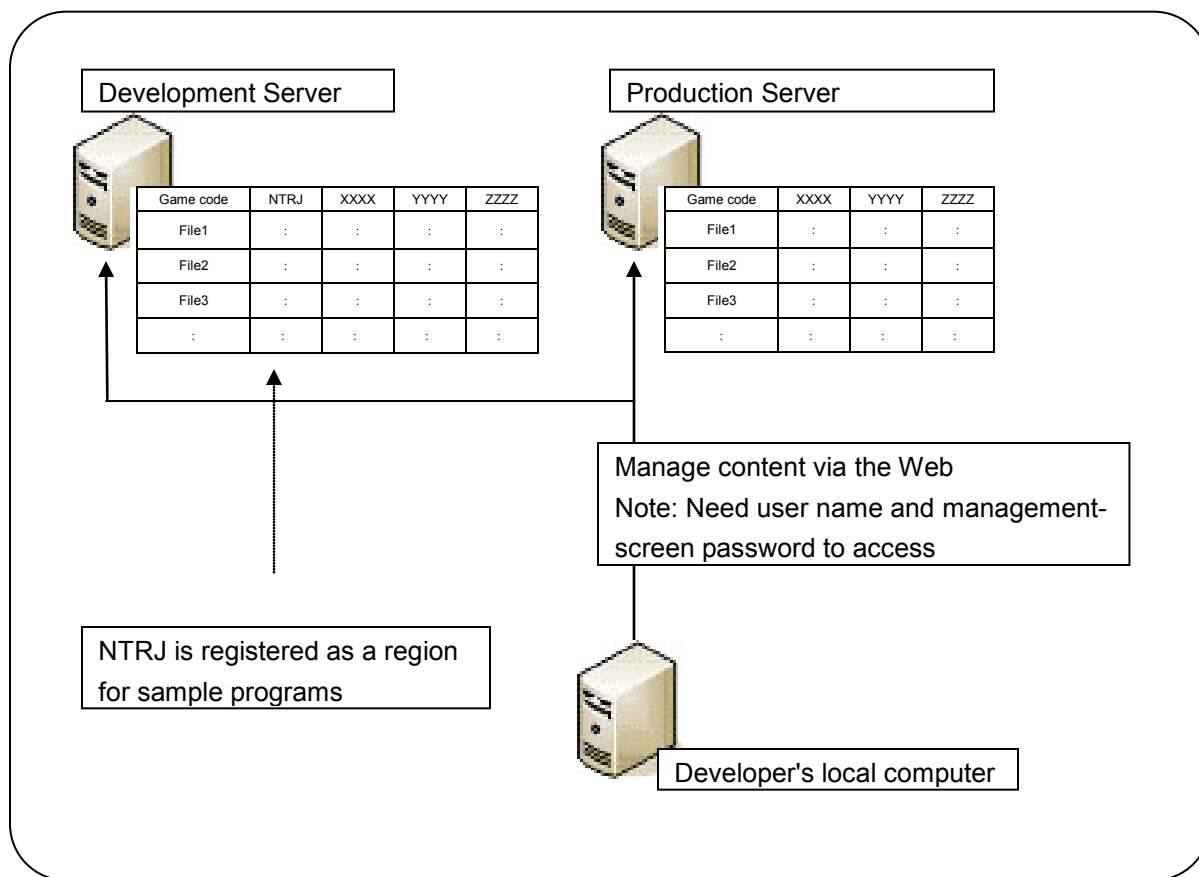
2 Overview

This chapter presents a general overview of the Nintendo Wi-Fi Connection Download Service.

2.1 Structure of the Download Server

The download server for registering content is divided into a development server and a production server, as shown in Figure 2-1. Use the development server to develop and debug code, and the production server for the production version ROM. You switch between servers from the Nintendo DS system depending on whether the `DWC_InitForDevelopment` function or `DWC_InitForProduction` function is used to initialize DWC

Figure 2-1 Schematic of Server Structure

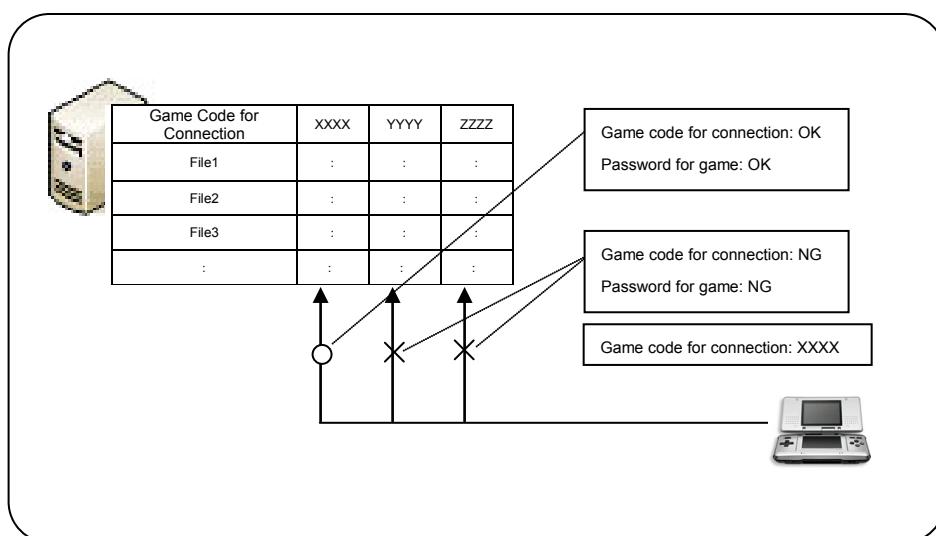


Once you apply to use the Nintendo Wi-Fi Connection Download Service, you are assigned disk space and a management screen on each server for every game. Content is registered via the Web by connecting to this management screen. To access this screen, you need to use the URL, the user name (same as the connection game code), and the password for the management screen provided by Nintendo.

2.2 Content Confidentiality

The disk space for registering games is divided up by the connection-use game codes. To protect the confidentiality of each game, there is also a game-use password that restricts access when connecting to the download server from the Nintendo DS system. The game-use password is supplied by Nintendo after you apply to use the Nintendo Wi-Fi Connection Download Service.

Figure 2-2 Access Restricted with a Password



Note: Different game titles can share the same disk space by using the same connection-use game code and game-use password.

2.3 Content Attributes

Up to three attributes can be attached to content registered in the download server. These attributes are called *content attributes*. The attributes specified on the Nintendo DS system side for getting files are called *file-to-get attributes*. The content attributes and the file-to-get attributes are compared to determine which file lists and files can be downloaded. By controlling these attributes, you can filter and restrict the content that is available.

The comparison follows these rules.

- A file is downloadable if the content attributes and the file-to-get attributes match fully.
- If the file-to-get attributes are empty strings, all files are unconditionally downloadable.

Table 2-1 provides some examples of how content attributes and file-to-get attributes combine to determine what can be downloaded. Note that two adjacent quotes ("") in the table denote the empty string.

Table 2-1 Examples of Attribute Comparisons

Example Number	Content Attributes			File-to-Get Attributes			Remarks
	1	2	3	1	2	3	
1	"A"	"B"	"C"	"A"	"B"	"C"	Complete match, so downloadable.
2	"A"	"B"	"C"	""	""	""	Attributes 1, 2, 3 are ignored, so downloadable.
3	"A"	"B"	"C"	""	"B"	"C"	Attribute 1 is ignored and attributes 2 and 3 match, so downloadable.
4	"A"	"B"	"C"	""	"1"	""	Attributes 1 and 3 are ignored but attribute 2 does not match, so not downloadable.
5	""	"B"	"C"	"A"	"B"	"C"	Attribute 1 does not match, so not downloadable. Note: If a content attribute is the empty string, the corresponding file-to-get attribute must also be the empty string in order for them to match.

2.4 Features of the DWC Download Library

The NITRO-DWC download library (the function group with names starting with `DWC_Nd`) lets you perform the following.

- Set the file-to-get attributes
- Get the number of files
- Get the file list
- Download files
- Check the progress of the download

2.5 Sample Program

The connection-use game code for the sample program is `NTRJ`. The content for the sample program is registered on the development server (see Table 2-2).

Starting the sample program activates the Settings utility. Use the utility to set the access point for the connection.

Once the Settings utility is completed, the connection to the Internet begins. After the connection is established, use `DWC_NdSetAttr` to set the file-to-get attributes. After the attributes are set, they are compared and a list of downloadable files is obtained from the server.

Select a file from the download list.

Table 2-2 Content for the Sample Program

Filename	File Size in Bytes	Attribute 1	Attribute 2	Attribute 3
64k.txt	65536	a		
64k_2.txt	65536	a	b	
128k.txt	131072	a	b	c
128k_2.txt	131072	b		
256k.txt	262144	b	b	
256k_2.txt	262144	b	b	c
512k.txt	524288	c		
512k_2.txt	524288	c	b	
1024k.txt	1048576	c	b	c

3 Accessing Nintendo Wi-Fi Connection

When the download-dedicated package (DWC-DL) is used, there is no need for user IDs, friend relationships, or associations between Nintendo DS systems and Game Cards. As a result, the procedure when connecting to the Internet is much simpler than it is with the normal DWC package. Use this chapter as a reference when accessing Nintendo Wi-Fi Connection using DWC-DL.

Note: When not using DWC-DL, see the *Nintendo Wi-Fi Connection TWL DWC Programming Manual*.

3.1 Initialization

As with the normal DWC package, when using DWC-DL either the `DWC_InitForDevelopment` or `DWC_InitForProduction` function performs the initialization.

3.2 Creating User Data

There is no need to create user data with DWC-DL.

3.3 Connection Process

With DWC-DL, the process for accessing Nintendo Wi-Fi Connection is divided into the following two phases.

1. Connect to the Internet (make a Nintendo Wi-Fi Connection and get an IP address).
2. Log in to the Nintendo authentication server.

3.3.1 Connecting to the Internet

The connection is made in the same way as with the normal DWC package.

3.3.2 Log In to the Nintendo Authentication Server

When logging in to the Nintendo authentication server, use the `DWC_NASLoginAsync` function, not the `DWC_LoginAsync` function. (There is no need to initialize matchmaking or friend relationship functionality with the `DWC_InitFriendsMatch` function.) After calling this function, call the `DWC_NASLoginProcess` function at a frequency of every game frame to advance the login process. When the `DWC_NASLoginProcess` function return value is `DWC_NASLOGIN_STATE_SUCCESS`, the login process has completed.

Once the login process has completed, perform the download processes as described in Chapter 4 Downloads.

3.4 Monitoring Communication Status

With the normal DWC package, communication status is monitored with the `DWC_ProcessFriendsMatch` function. However, because that function includes matchmaking and friend relationship functionality, it cannot be used with DWC-DL.

Instead, DWC-DL uses the `DWC_UpdateConnection` function to monitor communication status.

Once the login process to the Nintendo authentication server has completed, call this function at a frequency of once per game frame.

3.5 Disconnecting from the Internet

Disconnection occurs in the same way as for the normal DWC package.

4 Downloads

4.1 Initialization

After the Nintendo Wi-Fi Connection is made and the authentication process has completed, call the `DWC_NdInitAsync` function and initialize the DWC Download library, the group of functions that begin with `DWC_Nd` (see Code 4-1).

HTTP communications take place in the background during the initialization process, so be sure to give sufficient processing time for threads that have lower priority than the main thread during the process. After calling the `DWC_NdInitAsync` function, call the `DWC_NdProcess` function with a frequency of once every game frame. Other asynchronous process functions in the download library also require that the `DWC_NdProcess` function be called. When the initialization process is complete, the specified callback function is called.

Note: The callback function specified here is shared as the callback by the processes that initialize, terminate, and cancel the DWC Download library; get the number of files; get the file list; and download the files.

Code 4-1 Initializing the DWC Download Library

```
bool callback;
char gamecd[] = {"NTRJ"};           // Game code for connection
char passwd[] = {"ABCDEF"};         // Game-use password provided by Nintendo

void init_dwc_nd( void )
{
    callback = FALSE;
    if ( DWC_NdInitAsync( nd_callback, gamecd, passwd ) == FALSE )
    {
        disp_init_nd_error();        // Error processing
        return;
    }
    wait_callback(); // Wait for callback (call the DWC_NdProcess function here)
}
// The callback function
void nd_callback (DWCNdCallbackReason reason, DWCNdErr err, int servererr)
{
    callback = TRUE;
    switch ( reason )
    {
        // Callback at time of initialization process
        case DWC_ND_CBREASON_INITIALIZE:
            if ( err != DWC_ND_ERROR_NONE )
            {
                disp_init_nd_cb_error(); // Error processing
            }
            break;
        // Callback when getting number of file lists
        case DWC_ND_CBREASON_GETFILELISTNUM:
            :
            :
    }
}
```

4.2 Extracting Files by Specifying Attributes

By using the `DWC_NdSetAttr` function to specify file-to-get attributes, you can extract certain kinds of files (see Code 4-2). Up to three attribute strings can be specified to extract files. If no attributes have been specified, all files are treated as downloadable. The attribute string is a string of up to 10 ASCII characters, ending with the null terminator.

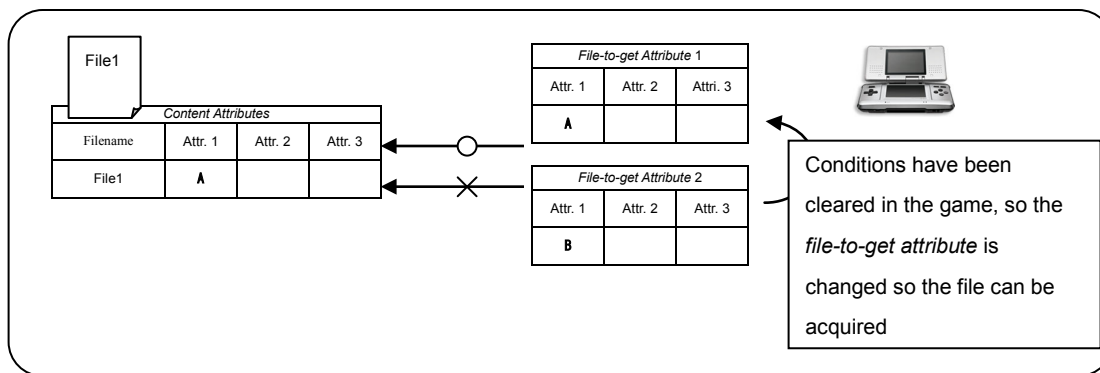
Code 4-2 Specifying Attributes

```
char attr1[] = {"A"};
char attr2[] = {"B"};
char attr3[] = {"C"};

void set_attr( void )
{
    if ( DWC_NdSetAttr( attr1, attr2, attr3 ) == FALSE )
    {
        disp_set_attr_error();          // Error processing
    }
}
```

By using this extraction process, you can set restrictions for when a file can be downloaded. For example, you can set attributes to allow download only after some event has occurred in the game or after the player has reached a certain level in the game.

Figure 4-1 Using File-to-Get Attributes to Limit What Is Acquired



4.3 Downloading Files

Call the `DWC_NdGetFileListNumAsync` function to get the total number of files that can be downloaded. Call the `DWC_NdGetFileListAsync` function to get a partial list or a complete list of these downloadable files. The file list contains information on the filename, the explanatory text for the game, the attributes, and the file size. It also clearly shows the user which files can be downloaded.

To start downloading a file from the obtained file list, call the `DWC_NdGetFileAsync` function. Specify the file information structure (`DWCNdFileInfo`) of the file you want to download as the function argument (see Code 4-3).

Code 4-3 Downloading a File

```

DWCNdFileinfo *info;
char          *buffer;

void get_file( void )
{
    int num, no;

    // Get the number of files
    callback = FALSE;
    if ( DWC_NdGetFileListNumAsync( &num ) == FALSE )
    {
        disp_get_filenum_error(); // Error processing
        return;
    }
    wait_callback(); // Wait for callback (call the DWC NdProcess function here)

    // Secure buffer for file list being obtained
    info = alloc_info_buffer(( sizeof( DWCNdFileinfo ) * num ));

    // Get file list
    callback = FALSE;
    if ( DWC_NdGetFileListAsync( info, 0, num ) == FALSE )
    {
        disp_get_filelist_error(); // Error processing
        return;
    }
    wait_callback(); // Wait for callback (call the DWC NdProcess function here)

    // Select which file to get
    no = select_download_file();
    // Allocate buffer for file being gotten
    buffer = alloc_file_buffer( info[no].size );

    // Get the file
    callback = FALSE;
    if ( DWC_NdGetFileAsync( &info[no], buffer, info[no].size ) == FALSE )
    {
        disp_get_file_error(); // Error processing
        return;
    }
    wait_callback(); // Wait for callback (call the DWC_NdProcess function here)
}

```

4.4 Cancellation Process

The processes that initialize the library, get the number of files, get the file list, and download a file can all be canceled by calling the `DWC_NdCancelAsync` function (see Code 4-4).

Code 4-4 Cancellation Process

```

bool cancel;          // TRUE entered on cancellation request from user

void wait_callback( void )
{
    cancel = FALSE;
    while( 1 )
    {
        if ( callback == TRUE ) break;

        // Cancellation process
        if ( cancel == TRUE )
        {
            if ( DWC_NdCancelAsync() == FALSE )
            {
                disp_cancel_error();          // Error processing
            }
            Cancel = FALSE;
        }

        // Asynchronous processing proceeds
        DWC_NdProcess();

        // Wait for V-Blank.
        // During this wait process, you need to give threads that have
        // lower priority than the main thread sufficient processing time,
        // so use the OS_WaitVBlankIntr function or some other way.
        GameWaitVBlankIntr();
    }
}

```

The cancellation process starts when the `DWC_NdCancelAsync` function returns `TRUE`. After that, `error = DWC_ND_ERROR_CANCELED` is entered in the callback for the function whose process was cancelled.

4.5 Checking Progress of the Download

Use the `DWC_NdGetProgress` function to check on the progress of a download (see Code 4-5).

Code 4-5 Checking the Progress of the Download

```

void check_progress( void )
{
    u32 received, contentlen;

    if ( DWC_NdGetProgress( &received, &contentlen ) == TRUE )
    {
        OS_TPrintf( "Download %d/100¥n", ( received*100)/contentlen );
    }
}

```


4.6 Terminating the Library

Call the `DWC_NdCleanupAsync` function to terminate the DWC Download library. After the termination process is complete, the callback function specified in `DWC_NdInitAsync` is called (see Code 4-6).

Code 4-6 Process for Terminating the Library

```

BOOL cleanup;

void cleanup dwc nd ( void )
{
    cleanup = FALSE;

    DWC_NdCleanupAsync();

    while( 1 )
    {
        // Asynchronous processing proceeds
        DWC_NdProcess();

        if ( cleanup == TRUE ) break;

        // Wait for V-Blank.
        // During this wait process, you need to give threads that have
        // lower priority than the main thread sufficient processing time,
        // so use the OS_WaitVBlankIntr function or some other way.
        GameWaitVBlankIntr();
    }
}

void NdCallback(DWCNdCallbackReason reason, DWCNdError error, int servererror)
{
    switch(reason) {
        case DWC_ND_CBREASON_GETFILELISTNUM:
            OS_TPrintf("DWC_ND_CBREASON_GETFILELISTNUM¥n");
            break;
        case DWC_ND_CBREASON_GETFILELIST:
            OS_TPrintf("DWC_ND_CBREASON_GETFILELIST¥n");
            break;
        case DWC_ND_CBREASON_GETFILE:
            OS_TPrintf("DWC_ND_CBREASON_GETFILE¥n");
            break;
        case DWC_ND_CBREASON_INITIALIZE:
            OS_TPrintf("DWC_ND_CBREASON_INITIALIZE¥n");
            break;
        case DWC_ND_CBREASON_CLEANUP:
            OS_TPrintf("DWC_ND_CBREASON_CLEANUP¥n");
            cleanup = TRUE;
            break;
    }

    :
    :
}

```

5 Content Management

5.1 Connecting to the Nintendo Wi-Fi Connection Download Server Management Screen

Connect to the Nintendo Wi-Fi Connection Download Server Management screen (hereafter, the Download Server Management screen) in the following way.

1. Access the screen using a Web browser and the URL provided by Nintendo.
2. At the authentication screen, enter the user name (the same as the connection game code) and the management screen password provided by Nintendo. (You can change this password at the management screen.)

5.2 Download Server Management Screen

The following screen is displayed when you log in to the Download Server Management screen.

Figure 5-1 Download Server Management Screen

Nintendo Wi-Fi Connection Download Server

Nintendo

Nintendo Wi-Fi Connection Download Server Management Page

Model : NTR
 Language : English
 Time Zone : JST (GMT +0900)
 Game Name : NOA
 Game Code for Connection : LICE
 Administrator : NOA <support@noa.com> You don't change your password between more than one month.
 Now Date : 2007-02-20 11:33:22 (JST)
 Last Login Date : 2006-09-21 18:00:50 (JST)
 Last Login IP : 111.111.111.111

Management Menu

- [Contents Management](#)
- [Changing Password for Management Page](#)
- [Log file acquisition for statistics](#)
- [Refer to the recent log for connection-test](#)

News from Nintendo

- o 2006/12/26 Today's maintenance has been completed. If you noticed any problems, please inform us. Thank you.
- o 2006/12/20 Dec 26 17:00-18:00(JST), we plan to update the server program. At that time, our service might stop for a few minutes. Thank you for your patience.

Nintendo

5.2.1 Information

The following content is displayed on the Download Server Management screen.

- **Model:** The model of the target machine. RVL represents Wii, and NTR represents Nintendo DS.
- **Language:** Select the language for the management screen. Choose Japanese or English.
- **Time Zone:** Select the time zone for the management screen to use.
- **Game Name:** The name of the target game.
- **Game Code for Connection:** The target connection game code.
- **Administrator:** The name and e-mail address of the registered administrator.
- **Current Time/Date:** The current time and date.
- **Last Login Date:** The time and date in the specified time zone for the previous login.
- **Last Login IP:** The IP address used the previous login.

5.2.2 Administration Menu

The following content is displayed in the Administration menu.

- **Content Management:** Link to the Content Management Screen.
- **Change Management Page Password:** Link to the Account Information Setting Screen.
- **Get Statistics Log File:** Link to the Get Statistics Log File Screen. Note that this will appear only on production servers.
- **Recent Log of Connection Tests:** Link to the Recent Log of Connection Tests Screen.

5.2.3 Notifications from Nintendo

Notifications from Nintendo are shown here.

5.3 Content Management Screen

From this screen you can register downloadable content as well as check and configure that content.

Figure 5-2 Content Management Screen

Nintendo Wi-Fi Connection Download Server

Nintendo

Nintendo Wi-Fi Connection Download Management Page (Contents Management)

Game Name : NOA

[Register a new file] - Only up to 32 alphanumeric characters, hyphens, underbars and periods can be used for a filename (excluded a foldename). Special characters cannot be used.

Local file for Uploading

Browse...

Upload!!

[Contents List] - Contents become invalid when the sorting number is an initial value (0). The sorting rule for this screen can be changed by selecting the radiobutton. (Ascending order)

<input type="checkbox"/> Filename (Up to 32 chars)	<input type="radio"/> Explanation for Game (Up to 50)	<input type="radio"/> Beginning Date (JST)	<input type="radio"/> Attr 1-3 (Up to 10 chars for each)	<input type="radio"/> Size
<input type="radio"/> Sorting number for Game	<input type="radio"/> Memo for Admin (Up to 100)	<input type="radio"/> End Date (JST)	<input type="radio"/> AP-type	<input type="radio"/> AP-info (Up to 10 chars)
				<input type="radio"/> Last Updated Date

You want to have checked contents to,

Nintendo

5.3.1 New Registration

Use this to register content that can be downloaded.

To register content, either enter a filename directly or use the **Browse** button to choose a target file from the local PC, and then click **Upload**.

Note: Do not exceed more than 100 items or file sizes greater than 1 MB.

5.3.2 Registration Status

This displays a list of registered content.

From here you can change the settings of registered content or delete content. Simply select the check box to the left of the content you want to change, and then click either **Update** or **Delete**.

Table 5-1 Menu Content of the Content Management Screen

Item	Description
Filename	The name of the file (up to 32 characters) to reference from the Nintendo DS system.
Game Sort Number	The sort order (ascending) of the file list reflected when the file list is obtained. Content is invalidated if 0 is specified.
Game Description	The description (up to 50 characters) that is obtained along with the file list. Referenced as a UTF-16LE string.
Admin Comments	A comment field that the administrator is free to use.
Starting Date/Time Ending Date/Time	The valid period of the content, specified as <i>year-month-day hour:minute:second</i> . Note: "0000-00-00 00:00:00" is treated as if nothing has been set. If specified for the starting date/time, the valid period lasts until the ending date/time. If specified for the ending date/time, the valid period begins at the set starting date/time but has no expiration date/time.
Attributes	The content attributes. These are used as a filter when getting file lists and files. (See section 2.3 Content Attributes.)
AP Type	This can be used to restrict the access points from which the content can be downloaded. Only the access points of the type specified (unrestricted, retail access point, hotspots) will allow connections to that type of access point for downloads.
AP Info	Only valid when retail access point is specified for AP Type. Based on information unique to retail access points, you can further refine from which retail access point downloads will be possible. Note: You should not normally set this. If this is needed within a game specification for some reason, contact support@noa.com first.
Size	The registered file size.
Date/Time of Last Update	The date/time when content was last updated.

5.4 Account Information Setting Screen

From this screen you can change the password for logging in to the management page and register the IP address of the terminal that can access the management screen.

Figure 5-3 Account Information Setting Screen

Nintendo Wi-Fi Connection Download Server

Nintendo

Nintendo Wi-Fi Connection Download Management Page (Changing Password for Management Page)

Game Name : NOA

[Password Changing] - This password is used to login to the Management Page.

Input password

Old Password	<input type="password"/>
New Password	<input type="password"/>
New Password (Confirmation)	<input type="password"/>

Change!!

5.4.1 Changing Passwords

To change the password:

1. Enter the current password in the **Old Password** field.
2. Enter the new password in the **New Password** field.
3. Confirm the new password by entering it a second time in the **New Password (Confirmation)** field.
4. Click **Change** to change the password.

5.4.2 Changing the IP for Restricted Access (Entire Management Page)

Change using the following procedures. Up to three IP addresses can be registered to grant access to, but one of those must be a global IP of a terminal that is currently accessing the management page.

1. Set **IP address to grant access to** to the global IP address to allow.
2. Click **Register** to register that IP address.

5.4.3 Changing the IP for Restricted Access (Statistics Log Page)

Take the following steps to change this setting. You can grant up to three IP addresses access, but one of those must be the global IP address of the computer that you are currently using to access the management page.

1. Set **IP Address to Allow Access** to the global IP address to allow.
2. Click **Register** to register that IP address.

Note: After you have configured this setting, you cannot get the statistics log nor can you see or edit this setting from an IP address that has not been granted access. You can only use this setting with a production server, *not* with a development server.

5.5 Get Statistics Log File Screen

In the **Get Statistics Log File** screen, you can display an access log (one tab-delimited text file per single day's activity) for the download server.

Note: This page is for production servers only. It is not available on development servers.

Figure 5-4 Get Statistics Log File Screen

Nintendo Wi-Fi Connection Download Server Management Page (Log file acquisition for statistics)

Gama Name : NOA

[Log file for Statistics] - The log file of one file a day is generated according to the UTC time.

Log file list that can be downloaded

- [2006-06-30](#) (1Lines, 175Bytes) - [2006-06-29](#) (1Lines, 175Bytes) - [2006-06-28](#) (1Lines, 175Bytes) - [2006-06-27](#) (1Lines, 175Bytes) - [2006-06-26](#) (1Lines, 175Bytes)
 - [2006-06-25](#) (1Lines, 175Bytes) - [2006-06-24](#) (1Lines, 175Bytes) - [2006-06-23](#) (1Lines, 175Bytes) - [2006-06-22](#) (1Lines, 175Bytes) - [2006-06-21](#) (1Lines, 175Bytes)

Log file format

The log file of one file a day is generated according to the UTC time. The log file is compressed by zip-format.
 The content of the log file concerns the download processing of the file. The acquisition processing of the number of files and the list is not included.
 The log file is a text file delimited in the tab space. The line feed code is CR-LF. The explanation of each item is as follows.
 The display period (= preservation period) of the log file will be done in 30 days. Please download in the period and use it.

No.	Explanation
1	Game Code for Connection
2	Download Date (UTC)
3	Download Date (JST)
4	DS IP address
5	Production Code (Information from ROM Header)
6	Wi-Fi Connection ID
7	MAC address
8	Filename
9	Result code
10	AP-type (S : Wi-Fi Station, W : Wayport)
11	Request Attribute 1
12	Request Attribute 2
13	Request Attribute 3

Explanation of the major Result code		
Result code	Message	Cause
101	Invalid parameter	Parameter is invalid. (Included invalid User-Agent)
103	Invalid token	Token is invalid.
104	Token expired	Token expired. (Passage of 24H after generating token)
105	File not found	File does not exist.
106	Attribute differed	Attribute is not corresponding to server setting.
107	Contents expired	Contents expired.
108	Non-target AP	DS accesses from non-target AP.
110	Invalid password	Game password is invalid.

5.5.1 Statistics Log File

To get a log file, click the desired date in the list of downloadable log files.

Note: The content of the log file differs from that described in section 5.6 Recent Log of Connection Tests Screen and refers only to downloads. No log is kept of the file list or file number get processes.

5.6 Recent Log of Connection Tests Screen

In the Recent Log of Connection Tests screen, you can see the 50 most recent log activities for server access.

Figure 5-5 Recent Log of Connection Tests Screen

Nintendo Wi-Fi Connection Download Server Management Page (Refer to the recent log for connection-test)

Game Name : NOA
Now Date : 2007-02-20 11:34:42 (JST)

[Recent Log for connection-test (0 Lines)] - The DS connection log within the current 24 hours is displayed by the reverse chronological order. (Up to 50 lines)

Reloading!!

Connect Date (JST)	DS IP addr	Conn-code	Prod-code	Wi-Fi Connection ID	MAC addr	Action-type	Filename	Res-code	offset/num	AP-param	Attr1	Attr2	Attr3
2006-07-21 14:40:06	222.222.222.222	AMBJ	AMBJ	1234567890000000	000%fl23000	Download	boot1	-	-/-	-	-	-	-
2006-07-21 14:39:29	222.222.222.222	AMBJ	AMBJ	1234567890000000	000%fl23000	List	-	-	-/-	-	-	-	-
2006-07-21 14:39:18	222.222.222.222	AMBJ	AMBJ	1234567890000000	000%fl23000	Num	-	-	-/-	-	-	-	-
2006-07-21 14:38:19	111.111.111.111	AMBJ	AMBJ	1234567890123000	000%fl23456	Download	boot1	-	-/-	Wi-Fi Station	-	-	-
2006-07-21 14:38:02	111.111.111.111	AMBJ	AMBJ	1234567890123000	000%fl23456	Download	-	101	-/-	Wi-Fi Station	-	-	-
2006-07-21 14:37:43	111.111.111.111	AMBJ	AMBJ	1234567890123000	000%fl23456	List	-	-	-/-	Wi-Fi Station	-	-	-
2006-07-21 14:37:30	111.111.111.111	AMBJ	AMBJ	1234567890123000	000%fl23456	Num	-	-	-/-	Wi-Fi Station	-	-	-

You want to have this page Reloading!!

5.6.1 Recent Connection Tests Log

The following content is displayed.

- **Connection Date/Time:** The date and time (JST or Japan Standard Time) of the connection.
- **DS IP Address:** The IP address of the connecting Nintendo DS system.
- **Connection Code:** The game code provided by Nintendo to connect to the download server.
- **Product Code:** The game code provided by Nintendo.
- **Nintendo Wi-Fi Connection ID:** The Nintendo Wi-Fi Connection ID of the connecting user.
- **MAC Address:** The fixed MAC address of the connected Nintendo DS system.
- **Action Type:**
 - Download: A file download process.
 - List: The file list get process.
 - Num: The file number get process.
- **Filename:** The name of the downloaded file.
- **Result Code:** Error messages returned from the server. (For more information, see the description of primary result codes in the Get Statistics Log File screen.)
- **offset/num:** Parameters used when getting lists.
- **AP Info:** Information for the connected access point.
- **Attribute 1:** Attribute 1 of the retrieved file.
- **Attribute 2:** Attribute 2 of the retrieved file.
- **Attribute 3:** Attribute 3 of the retrieved file.

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