

Nintendo for CTR

NW4C_LayoutArchiver

NW4C_LayoutArchiver Manual

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1.0.0

PROVISIONAL TRANSLATION

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1 Introduction

1.1 About NW4C_LayoutArchiver

NW4C_LayoutArchiver is a command line tool for archiving multiple files as a single file.

1.2 About this Manual

This manual explains how to use each of the features (modes) of NW4C_LayoutArchiver.

2 How to Use

This tool has a number of different *modes*. The mode is determined by the first option entered on the command line. When describing paths, be certain to always use the forward slash (/) and never the \ symbol.

2.1 Create mode

Use this mode when creating an archive. If a directory name is specified, all files below that directory are included in the archive file.

Note that the archiving of files/directories is conducted in the order specified by the commands.

```
NW4C_LayoutArchiver -c arcname file/directory list...
```

Option	Description
-c arcname	Archive filename.
<file path>	Specifies the files/directories to archive.

Example:

```
$ pwd
/CTR_SDK/data
$ NW4C_LayoutArchiver -c constitu.arc constitu
$ NW4C_LayoutArchiver -l constitu.arc
constitu/article1/section1
constitu/article1/section2
constitu/article1/section3
.....
$
```

2.1.1 Specifying a shared alignment value

Use this option when creating the archive to configure a common alignment value that will be shared.

```
NW4C_LayoutArchiver -a num
```

Option	Description
-a	Species shared alignment.
num	The shared alignment value.

Example:

```
NW4C_LayoutArchiver -a 64 -c test.arc archive_directory
```

In this example, the files in the `archive_directory` directory are aligned to 64.

The default alignment value is 32.

2.1.2 Specifying unique alignment values

Use this option when creating the archive to configure an alignment value that will be applied to all files that match a specified pattern.

Alignment values can be set for multiple files.

```
NW4C_LayoutArchiver -r file num
```

Option	Description
-r	Specifies the setting of a unique alignment.
file	File name.
num	Unique alignment value.

Examples:

```
NW4C_LayoutArchiver -r *.tga 128 -r *.pic 256 -c test.arc archive_directory
```

In this example, the *.tga files are aligned to 128 and the *.pic files are aligned to 256.

```
NW4C_LayoutArchiver -r *.bclim 128 -r *.bcfnt 128 -r *.bcfna 128 -a 4 -c test.arc archive_directory
```

In this example, only the files with the extensions bclim/bcfnt/bcfna are aligned to 128, and all other files are aligned to 4.

2.1.3 Specifying the archive directory

Use this option to specify some directory other than the current directory as the top of the directories being archived.

This does not change the current directory, but rather specifies the directory you want to archive.

```
NW4C_LayoutArchiver -f directory
```

Option	Description
-f	Specifies a directory as the origin of the archive.
directory	Directory name.

Example:

```
NW4C_LayoutArchiver -c target.arc -f resources img
```

Assume there is a file named resources/img/a.gif located in the current directory and you want to save it as /img/a.gif in the archive. If you do not use the -f option, then you will need to enter the commands as follows:

```
cd resources && NW4C_LayoutArchiver -c ../target.arc img
```

2.2 Extract mode

Use this mode when extracting archives.

For the extraction target directory you must specify a directory that does not exist.

```
NW4C_LayoutArchiver -x arcname directory
```

Option	Description
-x arcname	Archive file name.
directory	Specifies the directory to which archive will be extracted.

Example:

```
$ ls tmp
ls: tmp: No such file or directory
$ NW4C_LayoutArchiver -x constitu.arc tmp
  Position Length  name
-----
d          0        0 constitu/
d          0        0 constitu/article1/
-        512      209 constitu/article1/section1
.....
$ ls tmp
constitu/
$
```

2.3 Diff mode

Use this mode to compare the contents of an archive with actual files.

After moving to the specified directory for the task, the various files in the archive are compared for matches with the files in that directory.

```
NW4C_LayoutArchiver -d arcname directory
```

Option	Description
-d arcname	Archive file name.
directory	Specifies the task directory.

Example:

```
$ pwd
/CTR_SDK/data
$ NW4C_LayoutArchiver -d constitu.arc .
constitu/
constitu/article1/
constitu/article1/section1
.....
$
```

2.4 List mode

Use this mode when you want to view the contents of the archive.

By using this in combination with the `-v` option you can also view the offset and length of each file.

```
NW4C_LayoutArchiver -l arcname
```

Option	Description
<code>-l</code>	Lists the files inside the archive, showing them in their order in the archive file.
<code>arcname</code>	Archive file name.

Example:

```
$ NW4C_LayoutArchiver -l constitu.arc
constitu/article1/section1
constitu/article1/section2
constitu/article1/section3
.....
$ NW4C_LayoutArchiver -lv constitu.arc
File start offset: 0x00000200

  Position   Length   name
-----
  0x00000200 0x000000d1 constitu/article1/section1
  0x000002e0 0x0000075b constitu/article1/section2
  0x00000a40 0x00000826 constitu/article1/section3
.....
$
```

2.5 List mode 2

Use this mode if you want to display the contents of the archive in `tar` format, which is to say with the directory names shown first, followed by the file names.

Note that the display order will not necessarily be the same as the order of the files in the archive.

```
NW4C_LayoutArchiver -t arcname
```

Option	Description
<code>-t</code>	Lists the files contained in the archive, showing them in <code>tar</code> format.
<code>arcname</code>	Archive file name.

Example:

```
$ NW4C_LayoutArchiver -t constitu.arc
constitu/
```

```

constitu/article1/
constitu/article1/section1
.....
$ NW4C_LayoutArchiver -tv constitu.arc
  Position Length  name
-----
d         0         0 constitu/
d         0         0 constitu/article1/
-        512       209 constitu/article1/section1
.....

```

2.6 Delete mode

Use this mode to delete specified files/directories from the archive.

```
NW4C_LayoutArchiver -e arcname file/directory list
```

Option	Description
-e arcname	Archive file name.
<File path>	Specifies the files/directories to delete from the archive.

Example:

```

$ NW4C_LayoutArchiver -l constitu.arc
constitu/article1/section1
constitu/article1/section2
constitu/article1/section3
.....
$ NW4C_LayoutArchiver -e constitu.arc constitu/article1/section1
$ NW4C_LayoutArchiver -l constitu.arc
constitu/article1/section2
constitu/article1/section3
.....
$

```

2.7 Other Features

Option	Description
-v	Turns ON verbose mode (to show run state)
-V	Shows the version information.
-h	Shows verbose message.

3 Tips

You can specify the order of files/directories as a file in the manner shown below.

```
$ less filelist
constitu/article3/section3
constitu/article2/section2
constitu/article2/section4
constitu/article1/section1
constitu/article2/section1
constitu/article1/section2
constitu/article1/section3
constitu/article1/section4
constitu/article3/section2
constitu/article2/section3
constitu/article1/section5
constitu/article1/section7
constitu/article1/section8
constitu/article3/section1
constitu/article1/section9
constitu/article1/section6
constitu/article1/sectionA
$ NW4C_LayoutArchiver -c constitu.arc `less filelist`
$
```

You can easily change the file order by simply editing this file.

If you want to list all files in a given directory in a format like that shown above, use the `find` command like this:

```
$ find directory -type f -name "*"
```

If you want to use the above format to list the files that already exist in an archive, use the `-l` option.

```
$ NW4C_LayoutArchiver -l arcname
```

4 Revision History

Version	Revision Date	Description
1.0.0	2010/06/28	Initial version.

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