

NITRO-Viewer Package Release Notes

Version 1.7.2

**The contents in this document are highly
confidential and should be handled accordingly.**

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Revision History

Version	Revision Date	Description
1.7.2	09/01/2005	<ul style="list-style-type: none">Added support for version 09/01/2005
1.7.2	07/22/2005	<ul style="list-style-type: none">Added support for version 07/22/2005
1.7.0	06/20/2005	<ul style="list-style-type: none">Added support for version 06/20/2005.
1.6.4	06/06/2005	<ul style="list-style-type: none">Added support for version 06/06/2005.
1.6.3	04/04/2005	<ul style="list-style-type: none">Added support for version 04/04/2005.
1.6.0	02/28/2005	<ul style="list-style-type: none">Added support for version 02/28/2005.
1.5.0	01/31/2005	<ul style="list-style-type: none">Added support for version 01/31/2005.Changed "NITRO" to "Nintendo DS."
1.4.0	12/13/2004	<ul style="list-style-type: none">Added support for version 12/13/2004.
1.3.1	12/06/2004	<ul style="list-style-type: none">Added support for version 12/06/2004.Fixed bug in NITRO-Viewer Controller.
1.2.1	10/19/2004	<ul style="list-style-type: none">Added support for version 10/19/2004.
1.2.0	10/12/2004	<ul style="list-style-type: none">Added support for version 10/12/2004.Corrected Figure 1-1 NITRO-Viewer Package Directory Structure.
1.1.0	9/16/2004	<ul style="list-style-type: none">Added support for version 09/16/2004.
1.0.0	9/2/2004	<ul style="list-style-type: none">Added support for version 09/02/2004.
0.9.1	8/17/2004	<ul style="list-style-type: none">Initial version as release notes for version 08/17/2004.

1 About the NITRO-Viewer Package

The NITRO-Viewer application transfers data from 3D Material Editor or NITRO-CHARACTER to the Nintendo DS to be previewed. The NITRO-Viewer package contains all of the applications required to run NITRO-Viewer.

1.1 Package Contents

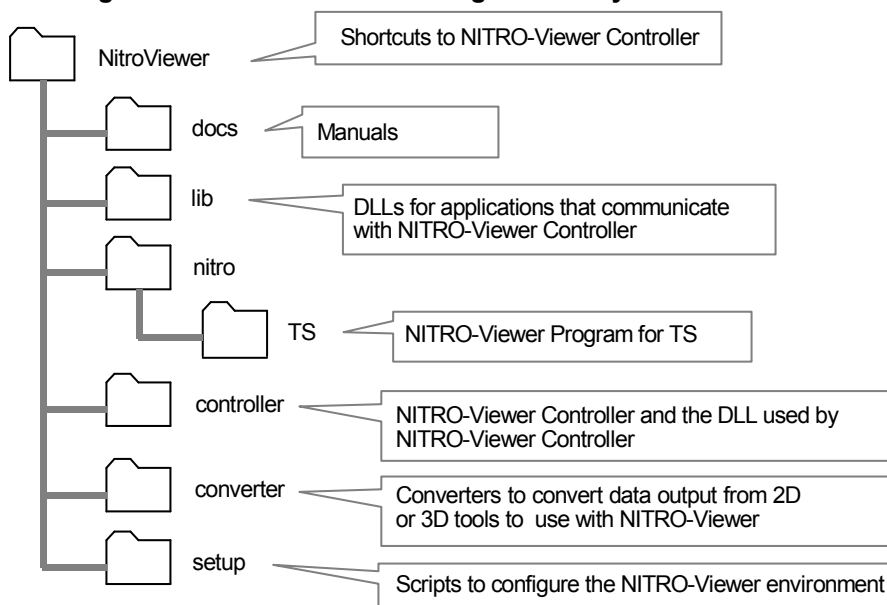
The NITRO-Viewer package contains the following applications.

- NITRO-Viewer
- NITRO-Viewer Controller
- 2D Binary Converter
- 3D Binary Converter

1.2 Directory Structure

The NITRO-Viewer Package Directory Structure is shown in the figure below.

Figure 1-1 NITRO-Viewer Package Directory Structure



1.3 Unzipping the NITRO-Viewer Package

Unzip the Nintendo NITRO-Viewer package anywhere on your local disk. This package is zip-compressed. Use any appropriate tool to unzip it. When you unzip the package, a `NitroViewer` directory will be created.

1.4 3D Material Editor Version Support

Version 2.7.0 (02/28/2005) or later of the 3D Material Editor is required to allow 3D preview with this version of NITRO-Viewer. If an earlier version is used, preview will be corrupted.

2 NITRO-Viewer Information

Information about the NITRO-Viewer can be found in the `docs` directory in the NITRO-Viewer package. Please refer to the following documents.

- (1) NITRO-Viewer User's Manual

Location: `NitroViewer\docs\NitroViewer.pdf`

This manual explains how to install and use the Nintendo NITRO-Viewer.

- (2) NITRO-Viewer Controller User's Manual

Location: `NitroViewer\docs\NITRO-ViewerController.pdf`

This manual explains how to use the Nintendo NITRO-Viewer Controller.

3 Main Changes

3.1 Changes in Version 9/1/2005

3.1.1 NITRO-Viewer Revisions

- Corrected the problem where, when loading model data, the updated animation frame rate was being changed to one FPS.
- Applied the changes made to the NITRO-System Library (9/1/2005).

3.2 Changes in Version 07/22/2005

3.2.1 Features Added to NITRO-Viewer

- Added automatic individual frame movement in a designated direction for each of the 2D operation targets.

3.2.2 NITRO-Viewer Revisions

- Made adjustments so that double-size will always be ON for OBJ in the 2D Player where scale/rotate is ON but double-size is not. However, this adjustment is made only when performing scaling with the controller.

3.3 Changes in Version 06/20/2005

3.3.1 Features added to NITRO-Viewer

- Added support for VRAM content display function in the 3D Material Editor.
- Added resident module display function.
- Revised the specifications so that the icons displayed for rotational movement mode and translation mode are swapped when the camera is moved during a 3D preview.

3.4 Changes in Version 06/06/2005

3.4.1 Revisions to NITRO-Viewer

- Created a wait period before key repetition starts so that moves in units of one dot can be made easily when previewing from NITRO-CHARACTER.
- When previewing in 2D and 3D simultaneously in shared mode, the camera on the 3D side moved during 2D operation. This has been fixed.
- Under certain conditions, when previewing a BG with rotation and scaling, the BG would move considerably. This has been fixed.
- When an OBJ's rotation and scaling was set to ON, and the OBJ was displayed without rotation or scaling, the display would malfunction. This has been fixed.
- Updates to NITRO-System library (06/06/2005 version) have been included.

3.5 Changes in Version 04/04/2005

3.5.1 Revisions to NITRO-Viewer

- When using the window function in a 2D preview with NITRO-Viewer, the window coordinate settings did not function properly. This problem was fixed.
- When using BG rotation or scaling in a 2D preview with NITRO-Viewer, malfunctions occurred in some cases. This problem was fixed.
- When using UIC, the title screen is now displayed on the screen before a connection is made from the NITRO-Viewer controller.

3.6 Changes in Version 02/28/2005

3.6.1 Features Added to NITRO-Viewer

- Added support for the screen capture feature of 3D Material Editor.
- Added a feature that operates 3D animations with the Nintendo DS controller.

3.7 Changes in Version 01/31/2004

3.7.1 Revisions to NITRO-Viewer

- Added support for NITRO Intermediate file version 1.6 and added preview features for environment mapping and projection mapping.
- Added support for selecting multiple nodes, polygons and materials, and modifying multiple parameters simultaneously in 3D Material Editor.
- Added a feature to display auxiliary lines to indicate the location, direction, and size of projection mapping.

3.8 Changes in Version 12/13/2004

3.8.1 Features Added to NITRO-Viewer

- Added support for NITRO Intermediate file version 1.5.
- Removed support for TEG.

3.9 Changes in Version 12/06/2004

3.9.1 Revisions to NITRO-Viewer Controller

- Corrected the problem that prevented 3D Material Editor or NITRO-CHARACTER from reconnecting when the connection was lost while switching between shared and exclusive modes or while changing VRAM settings while connected to NITRO-Viewer and UIC.
- Corrected the problem that caused an error to occur, depending on the operating environment, when

closing the VRAM Bank Allocation and Version Information dialog boxes.

3.10 Changes in Version 11/15/2004

3.10.1 Revisions to NITRO-Viewer

- Added support for linear interpolation of fractional frames in `ica` animation data.
- Added support for 30 frame playback of 3D animation.
- Added support for the option to stop the 3D animation after playing it once.
- Added support to enable/disable the setting of multiple animations set for 3D preview and made it possible to select a specific animation.
- Added support for three types of light movement modes. In addition to the individual mode, lighting can move with the camera or lighting can be applied from the same direction as the camera.

3.11 Changes in Version 10/19/2004

3.11.1 Revisions to NITRO-Viewer

- Corrected the problem that caused interference to be displayed when previewing a screen with a hidden BG that was previously viewed using NITRO-Viewer 2D Preview.

3.12 Changes in Version 10/12/2004

3.12.1 Revisions to NITRO-Viewer

- Added support for previews using `IS-NITRO-UIC`
- Corrected the problem that caused a memory leak when loading 3D model data.

3.12.2 Features Added to NITRO-Viewer Controller

- Added support for communication using `IS-NITRO-UIC`
- Corrected a problem so the NITRO-Viewer Controller does not freeze when a communication error occurs.

3.12.3 Other Changes

- Created a `controller` directory and moved NITRO-Viewer Controller files to this directory. The NITRO-Viewer Controller DLL files `nsmcs.dll` and `nnsnvc.dll` are stored in the `lib` directory because they are also used by applications that perform communication with the NITRO-Viewer Controller.

3.13 Changes in Version 09/16/2004

3.13.1 Revisions to NITRO-Viewer

- Corrected the problem that caused rendering to be slow when performing cell animation preview from

NITRO-CHARACTER.

3.13.2 Features Added and Revisions to NITRO-Viewer Controller Functions

- Supported preview on the Nintendo DS software emulator ensata.
- Fixed bug where error dialog box appears when shared mode settings are repeated.

3.13.3 Other Changes

- Added NITRO-Viewer startup shortcut file (ensata NITRO-Viewer Controller) for ensata.

3.14 Changes in Version 09/02/2004

3.14.1 Features Added to NITRO-Viewer

- The preview image can be shown on either the upper or lower Nintendo DS screen.
- The viewer now supports preview from NITRO-CHARACTER (with some restrictions).
- The spelling on the cancel button has been corrected in the "Allocate VRAM Banks" dialog box.

3.14.2 Language Support for NITRO-Viewer Controller

- NITRO-Viewer controller now supports English and Japanese.

3.14.3 Other Changes

- The G2D binary converter has been changed from `G2DConv.exe` to `g2dcvtr.exe`.
- The message that the initial setting script displays is now in English.
- A Japanese language resource DLL (`lib/1041/langRes.dll`) was added to the `lib` directory.

3.15 Changes in Version 08/17/2004

3.15.1 Features Added to NITRO-Viewer

- The viewer supports the preview of 3D material color animation (`ima`) and texture SRT animation (`ita`).
- We have added a process meter to indicate the processing time for rendering 3D models and 3D animation and an animation bar to indicate the currently displayed frame of a 3D animation.

3.15.2 Revisions to NITRO-Viewer Controller

- `ISNITRO.dll` version display has changed from 3 digits to 4 digits.

3.15.3 Other Changes

A `lib` directory has been added to the NITRO-Viewer package. The directory contains two additional DLLs (Dynamic Link Libraries) for the NITRO-Viewer controller.

4 Restrictions

4.1 About 3D Preview

- NITRO-Viewer does not support the specification of ST values in the material texture transformation matrix.
- Linear interpolation of fractional frames is not supported for `ima` or `ita` animation data. Even if the source animation data is configured with linear interpolation of fractional frames (`interpolation = linear`), fractional frames are discarded and only whole frames are played.

4.2 About 2D/3D Concurrent Preview

- NITRO-CHARACTER Version 1.0x does not support 2D/3D Simultaneous Preview.. We plan to support this feature in NITRO-CHARACTER Version 1.1 and all later versions.

4.3 About the Operating Environment

- When NITRO-Viewer is started with IS-CGB-EMULATOR, communication causes periodic frame drops, so the correct number of frames is not reproduced during animation.

Software developed by the Apache Software Foundation (<http://www.apache.org/>) is embedded in the NITRO-View package.

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