Overview of Nintendo DS Program Distribution

Revolution SDK Extensions (RevoEX)

Version 1.02

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Revision History

Version	Revision Date	Description
1.02	2007/05/17	Revised the name of the document. Standardized the terminology. Deleted Chapter 2.
1.01	2007/04/27	Overall proofing, unification of terminology.
1.00	2007/03/20	Initial Version.

1 Introduction

1.1 About this Document

This document provides a summary of the basic mechanism for distributing programs from a Wii console to a Nintendo DS system. For a detailed explanation of the individual libraries and tools that are referenced in this document, please refer to the separate function references and related documents.

Unless otherwise noted, all libraries and tools mentioned in this document are included in the Revolution SDK Extensions (RevoEX) package.

1.2 The Flow When Distributing Programs from Wii to DS

Developers need to perform the following tasks in order to distribute programs from Wii to the DS:

1. The `$RevoEX/X86/bin/regds.exe` tool must be used in advance to create a Program Registration Information list of all DS programs that might be distributed.

   This registration information is output as a C source file.

2. The source file created in step 1 is incorporated into the build of the Wii program.

   This task involves simply compiling and linking as you would a regular C source file.

3. MPDL and the other distribution libraries are used to implement the actual processes to distribute programs.

   To learn how to implement these processes, see the sample demos for the various distribution libraries that are contained in the RevoEX package.
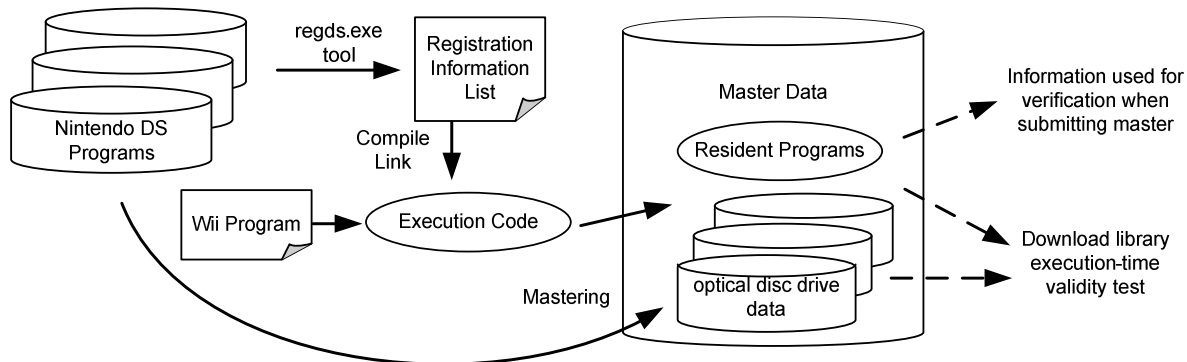
4. When the distribution library performs the act of actually distributing a DS program, a search of the Registration Information list is performed automatically inside the library. If the program that is about to be distributed is not on that list, the library aborts the process after sending a warning to debug output or some other operation.

The Program Registration Information is important for two reasons in this process flow.

First, it prevents distributing programs that the developer did not intend to distribute. The library rejects any distribution process on programs that have not been explicitly specified with the `regds.exe` tool.

Second, it provides a way of accurately determining the master ROM information of the DS programs stored in the production version of the Wii program. The Registration Information list includes text strings indicating the SDK information used by every program as well as the status of use of middleware that requires licensing agreements. This information is all stored in a verifiable form in the master data when the master of the Wii program is submitted.

Figure 1-1   Program Distribution Flow

Nintendo DS Programs
regds.exe tool
Registration Information List
Compile Link
Wii Program
Execution Code
Mastering
Master Data
Resident Programs
optical disc drive data
Information used for verification when submitting master
Download library execution-time validity test