Common Lotcheck Problems: Wii

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Common Lotcheck Problems: Wii

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Lotcheck's Purpose

- Check guideline adherence
 - Consistency
 - Ease of navigation

- ROM submissions in final state
 - Tested vs. Lotcheck Checklist
 - Hi Quality Submission = Hi Quality feedback





Test Equipment

- Tools available on WarioWorld:
 - Wii Remote memory corruption
 - SDK Check Tool
 - Master Editor
 - NCheck Tool

Cannot corrupt Save Data - yet





Common Issues Across Submissions

- Submission Documents
- Terminology
- Localization
- Disc Errors
- HOME Menu
- Video Settings
- Age Ratings





Submission Documents

 Available at WarioWorld in the Revolution Master Editor package.

- Complete and accurate
 - Knowledgeable of game
 - More information: Wii Checklist Instructions





Terminology

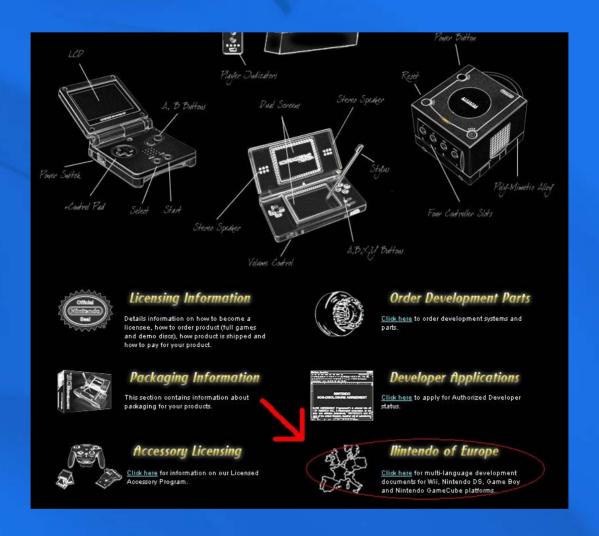
Common problems:

- Uppercase vs Lowercase
- Expressions for Peripheral Actions
- Graphic representations
- Competitor References
- 'Licensed by Nintendo' Legal Display
- Separate European documents





NOE section at Warioworld







Localization

- Use Message List, guidelines, or at Developer's Discretion
- [Changes prohibited] = verbatim
- Common Issues:
 - Disc Errors
 - Memory Messages
 - Wrist Strap Reminder
 - Incomplete translation
 - Questionable Localization
 - System Language support





Disc Errors

- Differences RVT-R and RVT-H
 - RVT-H: emulation varies (fast/slow)
 - Retry/Fatal Errors
 - RVT-R: normal processing
 - No Disc/Wrong Disc Errors





Disc Errors

- Startup Disc Errors (Wii Programming Guideline 3.8)
 - Common Issues:
 - No error message
 - Lock-up on black screen
- Resolving Disc Errors
 - RESET and Power Button
 - Update messaging for Retry Error





HOME Menu

- Common component amongst all Wii titles.
- Common issues:
 - Visual (Wii Programming Guidelines 11.1, 11.3 and 11.4)
 - Wii Remote settings change during transition from Wii Menu to game
 - Game audio during display (Wii Programming Guideline 11.13)
 - Wii Remote speaker audio corruption (Wii Programming Guideline 11.9)





Video Settings

- US Wii uses NTSC (480i or 480p, 60 Hz)
- EU console uses PAL
 - Standard PAL (576i, 50 Hz) support required
 - EURGB60 and Progressive (480i or 480p, 60 Hz) optional
- Specifications that are not fixed for PAL:
 - Number of lines
 - Display frequency





Common PAL problems

- Large parts of the display cut of at the bottom of the screen
- A green bar at the bottom of the screen
- Game Speed and/or possible high scores changing with display mode
- Problems with Nintendo Wi-Fi Connection if players are using different display modes





Age ratings

- The PAL console supports 4 different Age rating systems: USK, PEGI, BBFC and OFLC. But actually there are 5 different entries to implement in the software.
- Most popular source of problems in NOE Lotcheck (more than 50% of all initial master submissions)





Parental Control Settings

Name of entry	Applied for
USK	Germany
OFLC	Australia, New Zealand
PEGI + BBFC	United Kingdom
PEGI Portugal	Portugal
PEGI General	All other countries





Age ratings

- Common problems:
 - Entry missing completely
 - Entry set to "Unrated"
 - Inconsistent/incorrect entries
- Conclusion: Age rating issues are the #1
 pitfall for NOE Lotcheck. Best avoid them
 by obtaining final age ratings from the
 corresponding institutions in time and by
 implementing those ratings carefully.





Additional Notes

Minimum Library Version

Non-Approval Response

Played-Up Data





Questions? Contact us!

Receiving Centres:

NOE: datacenter@nintendo.de

NOA: submissions@noa.nintendo.com

Lotcheck teams:

NOE: lotcheck@nintendo.de

NOA: lotcheck@noa.nintendo.com





Differences Between American and European Markets

Theresa Apolinario
Product Evaluator/Tester
NOA Lotcheck





The Similarities

- Dev and QA tools
- Programming Guidelines
- Submission forms
- NOA Lotcheck and NOE Lotcheck share information





The Differences

- Contacts
- Submissions
- Video Standards
- Localization
- Age Ratings





Contacts

- Receiving centers are different for each market.
 - NOA: submissions@noa.nintendo.com
 - NOE: datacenter@nintendo.de
- Lotcheck is done separately.
 - NOA: lotcheck@noa.nintendo.com
 - NOE: lotcheck@nintendo.de





Submissions

- Multiple Precheck submissions accepted by NOA Lotcheck.
 - NOE will accept one Precheck submission.

Game must be playable.





Video Standards

- American console uses NTSC (480i or 480p, 60 Hz)
- European console uses PAL
 - Standard PAL (576i, 50 Hz) support required
 - EURGB60 and Progressive (480i or 480p, 60 Hz) optional
- Common NTSC problems:
 - Progressive Flag + AV Cable = Progressive Output
 - Image retention
 - Photosensitivity Issues





Localization

American Wii console supports three languages:

English, French, Spanish

 European Wii console supports six languages:

EFIGS + Dutch





System Language Support

- Wrist Strap Reminder displayed in console's language.
- Game information on Wii Menu:
 - Multiple languages
 - Default language
- Normal game processing regardless of settings.





In-Game Language Support

- Ensure American releases support:
 - US English
 - Canadian French
 - American Spanish
- Common problems:
 - Incomplete localization
 - Incorrect standard for terminology/error messaging
 - Unsupported characters





Age Ratings

- The American market uses ESRB.
- The European market requires various rating systems.
- ESRB rating not valid in Europe. Transfer of rating not possible.





Age Ratings

- Common issues:
 - Copy of rating not sent.
 - For Prechecks, acceptable.
 - For Lotcheck Submissions, immediate fail.
 - Not correctly implemented in ROM.





Conclusion

 A bug waiver is not valid across market regions.

 Waiver should be addressed in future releases for all markets, including other titles.





Wii Memory

Mike Rasciner
Sr. Product Tester
NOA Lotcheck





Memory Testing Goals

- Inform the user of problems early.
- Ensure messaging is clear and thorough.
- Ensure save data is created and functions properly.





Saving Design Structures

Taking it all at once

- *Advantages
- Simplified messaging.
- No Messaging once data is saved.
- Program and Testing time much shorter.
- Easier for the player to understand.
 - *Disadvantages
- Large files with data that the user may not need.





Saving Design Structures

Multiple Save files

*Advantages

 Avoiding large files with data that the user may not need.

*Disadvantages

- Save variations don't allow for a standard flow or message list.
- Variables and testing time increase with each file type.
- Confusion for the player.





Options For Handling Insufficient Space in the Wii System Memory

- Don't allow the player to continue.
- Disable all save features after informing the player they will not be able to save.
- Presenting the appropriate message every time the player attempts to save.





Testing Basics

- The differences between FS Blocks and User Blocks.
- The differences between the User area and System area of the Wii system memory.
- Basic memory testing apply to both save design structures.





Pre-tests

- HOME Directory.
- Wii System Menu differences.
- Understanding how the game save process works.
- Using the N-Check software efficiently.
- Verifying the size of your game's save file.





Testing

Proper messaging when insufficient space is available to save new data.

- ✓ Zero FS Blocks, I-nodes, and both.
- ✓ One FS Block, I-node, and both.
- One and Two FS Blocks less than required.
- ✓ Exactly enough space to save the banner.





Testing

Proper function when saving and overwriting if no additional space is available.

- Exactly enough space available to save.
- No extra FS Blocks or I-nodes available when game data is saved.





Wi-Fi Data Design Structures

Use of Copy Prohibition

 When a game can save Wi-Fi data, prohibit any of the save data from being copied to an SD Card.





Testing for Games that Create Multiple Save Files.

- Avoiding the problem of creating multiple files.
- Issues that must be considered when creating multiple save files.
 - Existing data can be loaded and overwritten.
 - ✓ Front-end and in-game messaging.
 - Displaying file sizes within the game.
 - ✓ Front-end full message trigger.
 - ✓ In-Game delete option.
 - ✓ Adjustable user block sizes in the messages.
 - Different message when the save file size limit has been reached.





Nintendo WFC and WiiConnect24

A Year in Learning

Dwayne St. Arnauld
Product Testing Coordinator
NOA Lotcheck





Nintendo Wi-Fi Connection Status

Still Evolving and Developing

 Only 1 out of 94 WFC submissions have passed on the first attempt

 Concept and Guideline review is Critical for successful Lotcheck





- WFC Programming Guidelines 9.3.7
 - Timing of Access to the Ranking Server
 - Guideline has changed now 10 accesses per 5 minute average
 - Based on per power-up
 - Average is key word





- Messaging
 - Use most up-to-date Message Lists
 - Use only correct references
 - "Nintendo Wi-Fi Connection" in first occurrence
 - No "Wi-Fi" when referencing Nintendo's service
 - ESRB
 - "Online Interactions Not Rated by the ESRB"
 - Capitalization is Important!





- Handling of Server Blocking
 - Error Message and Code Display
 - Adequate time for timeout
 - Must not Lockup





- Paperwork Issues
 - GSBranchID incorrect
 - List Correct Servers

- Design Statements
 - Required 4 months prior to ROM submission
 - Include Details
 - Debug with Gamespy information





Nintendo Wi-Fi Connection Documents to Review

- Nintendo Wi-Fi Connection Concept Guidelines
- Nintendo Wi-Fi Connection Programming Guidelines
- Nintendo Wi-Fi Connection Message List for Wii
- Wii Network Error Code List
- Nintendo WFC Terminology





Nintendo Lotcheck

If you have questions, we have answers. Contact us!

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Thank you for your continued support!





