Firmware Maintenance Utility User Guide

This document contains the information about the utility "Firmware Maintenance (FWM)", the utility provide a backend processing ability to replace the specify data in firmware image that generated by AMI MegaRAC SPX and SP2 series.

System Requirement

The utility is working on Linux based X86 computer.

FMH

FMH is the AMI-specific firmware header; it contains the information about partition size, location, loading address, etc. and each partition inside the firmware image will be added this header.

Partition Replacement Limitation

The –r option (Source data replacement) only support following partitions:

- www
- 3wabt
- 3wlogo
- jverabt
- conf
- bkupconf
- params
- paramsbk

FWM Options

- -i Specify the input file name
- -l List the FMH information
- -s Separate the partitions(s) as FMH file(s) and binary file(s)
- -r Replace the specific partition(s) by providing source data
- -R Replace the specific partition(s) by providing FMH binary image(EXPERIMENTAL)
- -o Generate the new image

FWM Working Directories

FWM requires following directories:

- ./processing
- ./output(If –o is used)
- ./replace
- ./replace/src(If –r is used)
- ./replace/bin(If –R is used)

It will automatically create and clean the output and processing directories when application starts, so once user specify –o option to generate a new image, be sure the file has been move to other folder before calling FWM again.

Examples

- EX 1 : List the FMH partition(s) and separate it as FMH file(s) and binary files(s)
    1. Execute "./fwm –i rom.ima –l –s"
    2. The file(s) will be located at "./output" and all of firmware image
        - {Partition Name}.fmh 🡪 Binary image + FMH header
        - {Partition Name}.bin 🡪 Pure binary image

- EX 2 : Replace the file which located in 3wlogo partition
    1. Put the new file(s) in "./replace/src/3wlogo"
    2. Execute "./fwm –i rom.ima –r –o new.ima
    3. New image will be located at "./output/new.ima"

- EX 3 : Replace the 3wlogo partition as new one
    1. Put the new file(s) in "./replace/src/3wlogo"