JMB39X
HW RAID Manager
User Guide

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Rev.0.90

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Revision History

Revision	Date	Editor	Revision Description
0.90	2009/03/19	Shirley Yeh	Initial Release

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1. Introduction

This guide explains how to use JMB39X HW RAID Manager to configure RAID and monitor the status of the disks connected on JMB39X hardware RAID controller.

Once JMB39X HW RAID Manager is launched, the JMB39X HW RAID Manager GUI window will be opened and the application icon could also be found in the notification tray located at the bottom right hand corner of the screen.

For the consideration of different user experiences and achieving the ease of navigation, the main GUI is divided into two modes ("Basic mode" and "Advance mode").

When the user presses the "Basic Mode" button on the right side of the GUI window, there are three buttons to be chosen for navigating the corresponding basic pages. Those basic pages are "RAID and Disk Information" page, "Event Log Viewer" page and "Basic RAID Configuration" page. Users could simply do basic RAID configuration and browse all disks and RAID information as well as the event logs in this basic mode.

For the advanced users, they could press the "Advanced Mode" button to invoke another three advanced pages and do the advanced settings. Those advanced pages are "Email Notification and Event Settings" page, "Advanced RAID Configuration" page and "Firmware Update " page.

Besides, there are some buttons appearing on the upper part of the GUI window and they are provided for users to minimize the window, close the window, turnoff the buzzer (if the buzzer exists) and open the About window.

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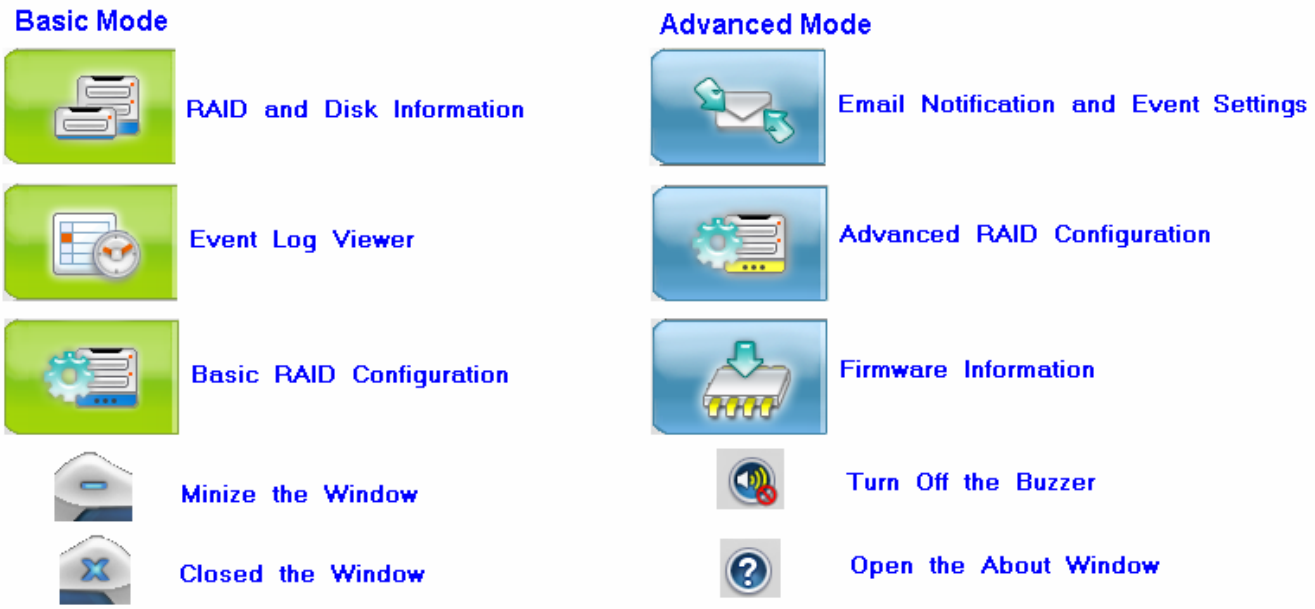

Figure 1 – Functional Buttons

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Figure 2 – Basic Mode

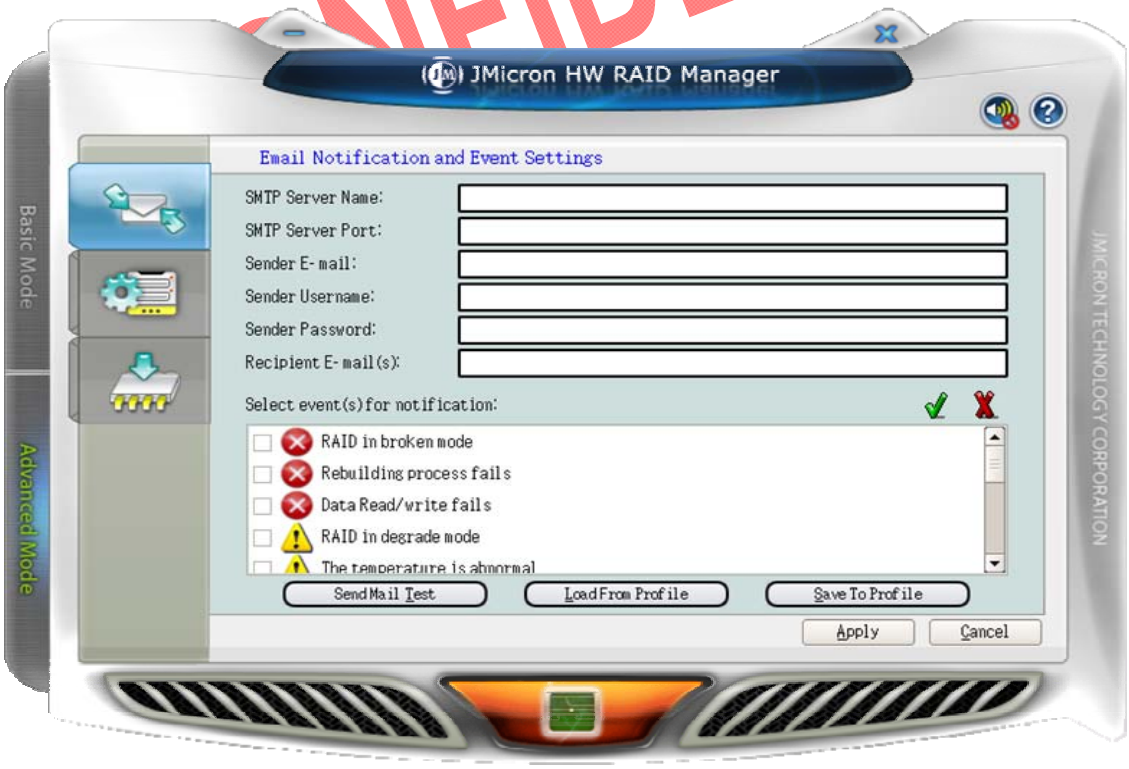

Figure 3 – Advanced Mode

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2. Getting Started

The following sections will lead you go through all basic pages and advanced pages. Let us start with the “RAID and Disk Information” page.

2.1 Basic Mode

The basic mode is aimed to provide users to navigate the disk and RAID information, the event log as well as do the basic configuration to the connected disks.

2.1.1 RAID and Disk Information

This page consists of two parts. The left part is a tree which shows all controllers on this platform and their connected RAID and disks in a hierarchy view. When the user selects a tree item, the detail information of the selected item will be displayed in the right part. All the disk and RAID information will be updated in real–time and users could monitor the status easily.

2.1.1.1 Controller Information

If the user selects a controller item from the tree view, it will display the model name and capacity of the RAID and disks connected on the specified controller at the right top table and also display all connected disk charts at the right bottom area. For RAID member disks, the disk charts will be drawn with the different colors according to the different RAID.

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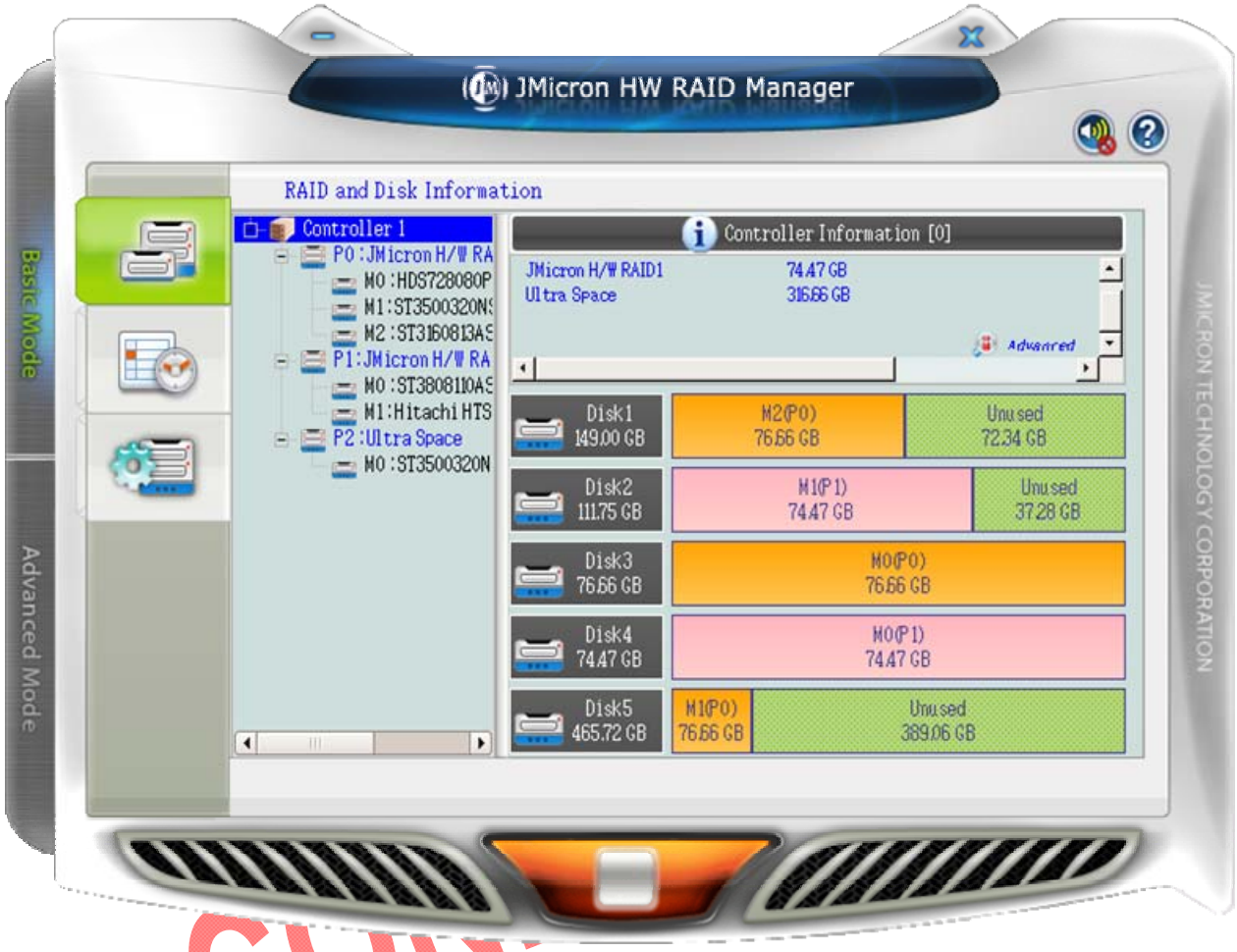

Figure 4 – Controller Information

When the user move the mouse upon the “Controller Information” label, it will be highlighted with red color and show a tool-tip to tell that it could be clicked to identify the controller with the specified host LED flashing.

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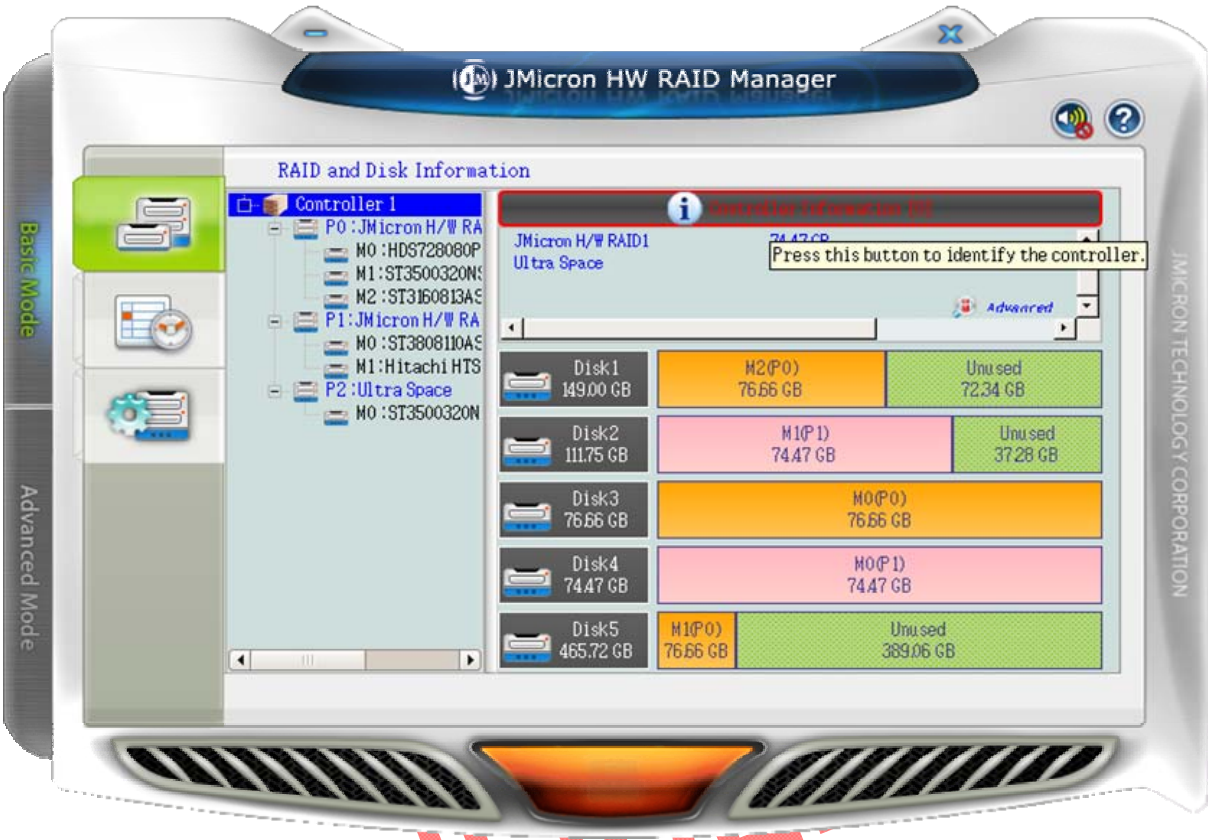

Figure 5 – Identify the Controller

If the hardware monitor controller exists, the application will show an “Advanced…” label at the right bottom corner of the table. The user could simply click it to browse the system information.

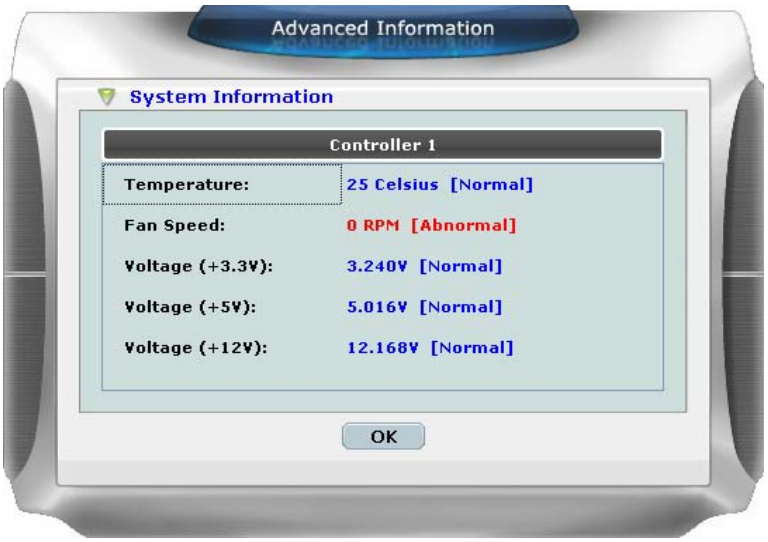

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Figure 6 – System Information

2.1.1.2 RAID Information

If the user selects a RAID item from the tree view, it will display the detail information of the specified RAID at the right top table and also display the RAID member disk charts at the right bottom area.

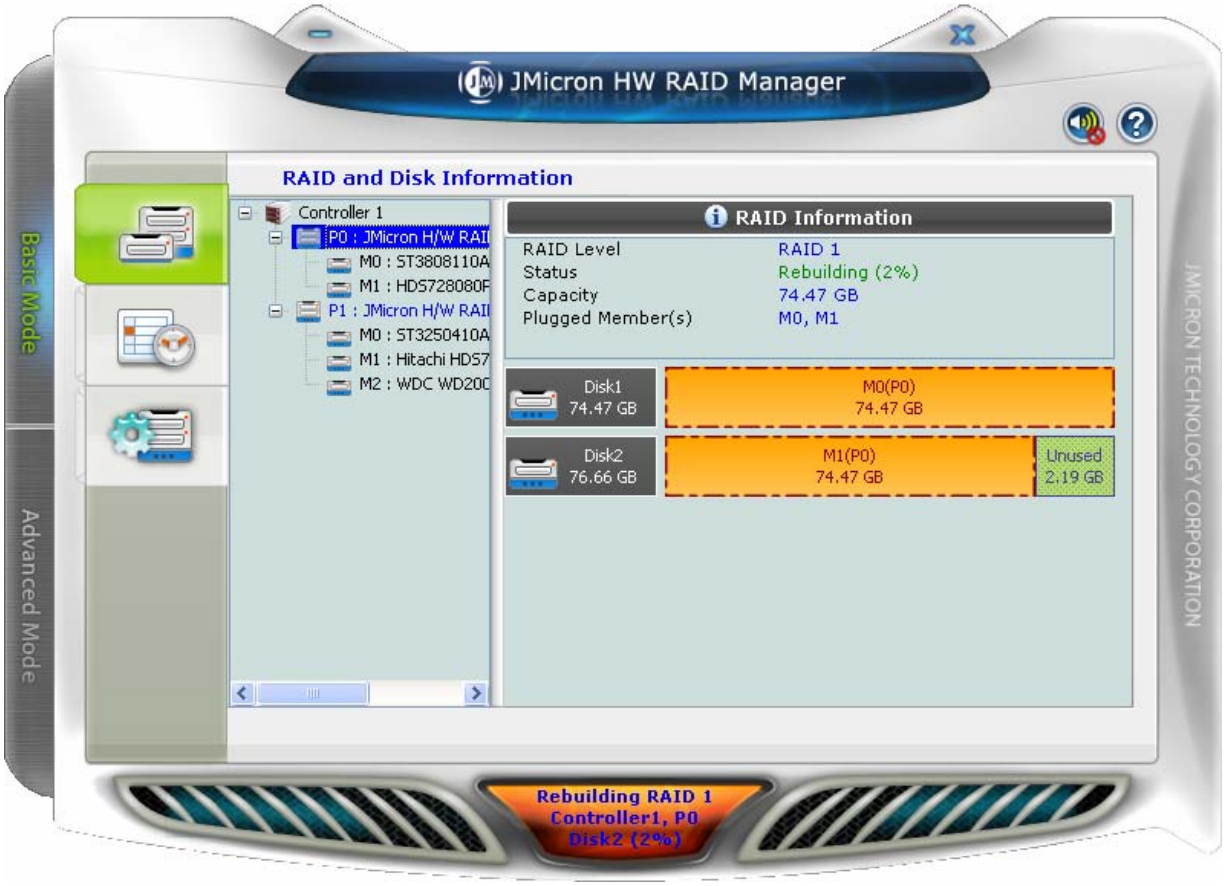

Figure 7 – RAID Information

If the selected RAID is in rebuilding state, it will be highlighted with green color in the tree view. Also, the rebuilding animation will be played at the bottom left and right area. The rebuilding percentage is displayed at the bottom center area, too.

The user could simply click the “RAID Information” label to identify the member disks of the specified RAID with all disk LED flashings at the same time.

2.1.1.3 Disk Information

If the user selects a Disk item from the tree view, it will display the detail information of the specified disk at the right top table and also display the disk pie chart at the right bottom area.

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If the selected disk is one member disk of the rebuilding RAID, the rebuilding animation will also be played at the bottom left and right area. The rebuilding percentage is displayed at the bottom center area, too.

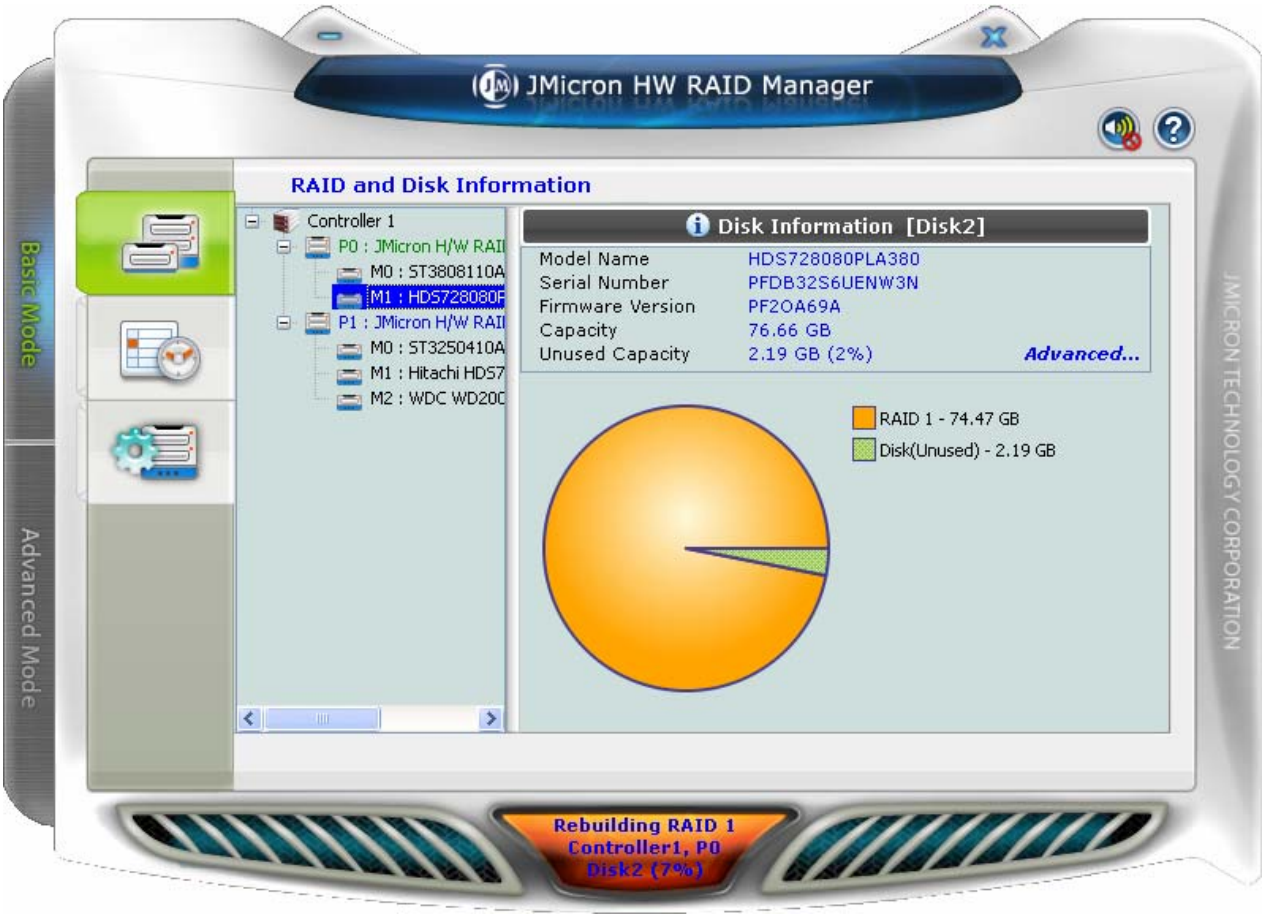

Figure 8 – Disk Information

The user could simply click the “Disk Information” label to identify the specified RAID with the disk LED flashing.

If the disk is a RAID member disk, the application will show an “Advanced…” label at the right bottom corner of the table. The user could simply click it to browse the SMART information of the specified disk.

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Figure 9 – SMART Information

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2.1.2 Event Log Viewer

JMicron HW RAID Manager will monitor the status of all connected disks and RAID and make records of the occurrence of the events. The user could browse all events through this event log viewer page.

The user could save the logs to a profile by pressing the “Save to Profile” button. It will pop up a dialog for the user to fill the profile name.

Besides, the user could simply clear all the logs by pressing the “Clear” button.

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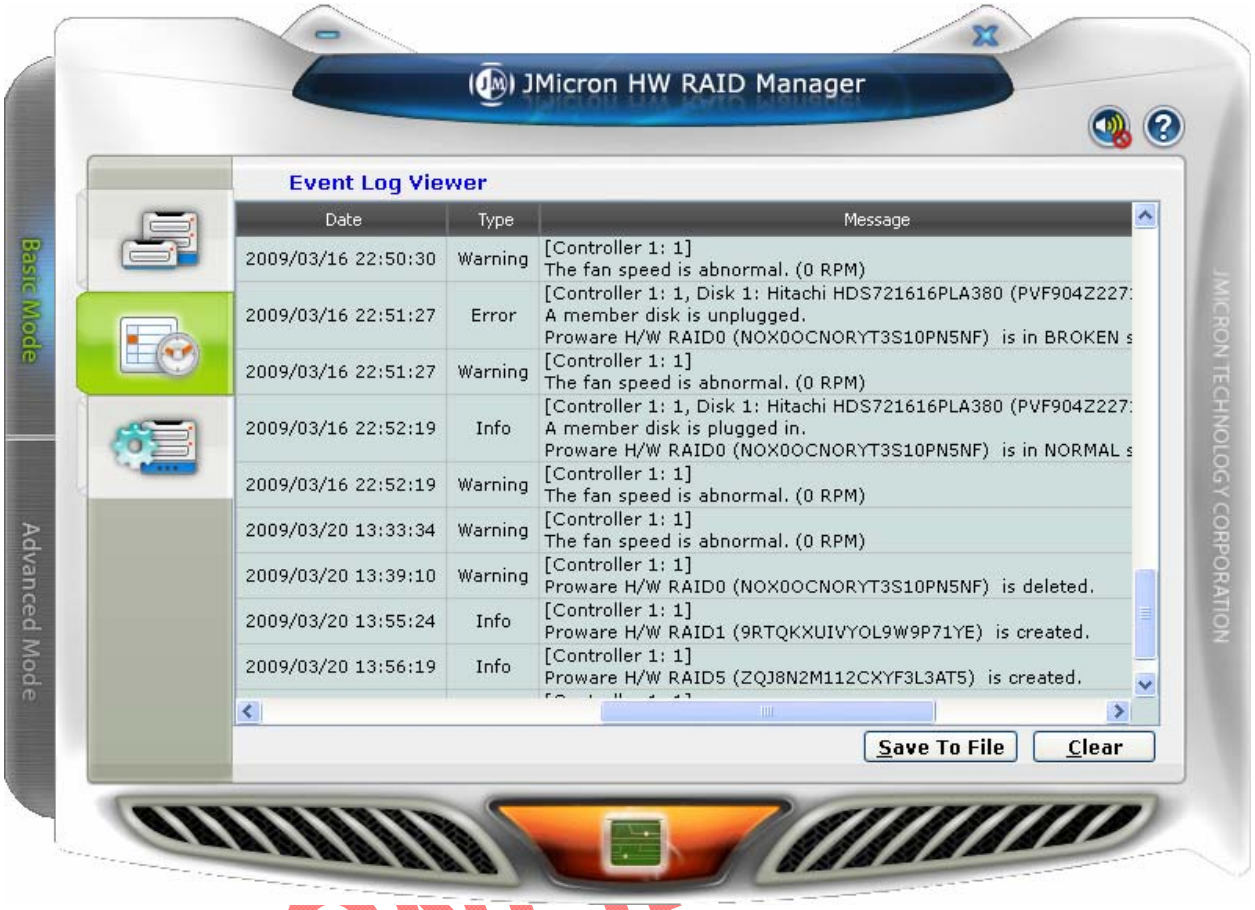

Figure 10 – Event Log Viewer

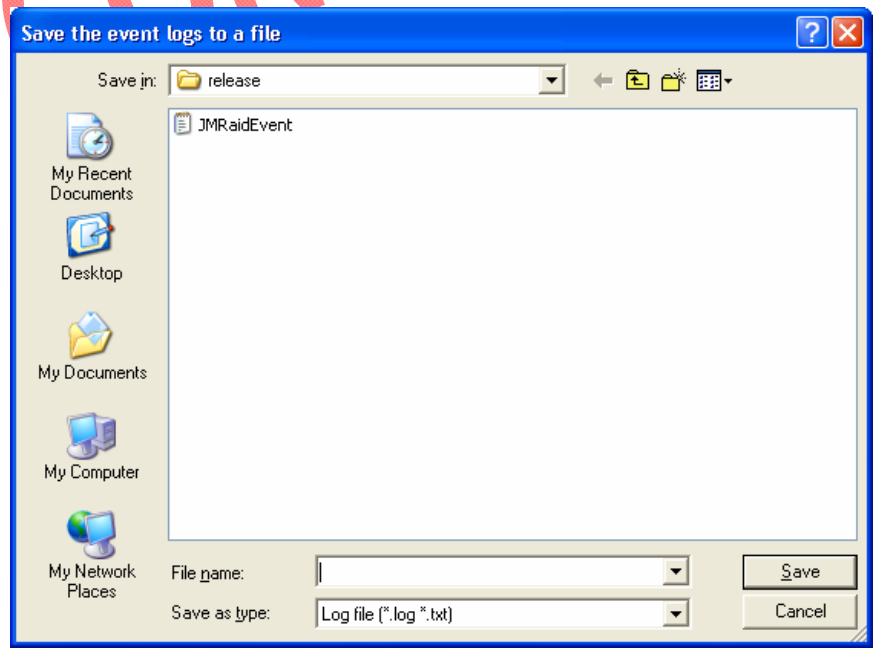

Figure 11 – Save The Event Logs To A File

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2.1.3 Basic RAID Configuration

JMicron HW RAID Manager provides users to do the basic RAID configuration to the connected disks in this page. According to the number and capacity of the connected disks, JMicron HW RAID Manager will provide the available RAID type for users to select. When the user select his/her desired RAID type, JMicron HW RAID Manager will automatically select the available disks to build the RAID and calculate the RAID capacity. It will show the selected disks charts drawn in the cross pattern on the right part.

For example, if the user selects RAID 10, JMicron HW RAID Manager will select four available disks to build RAID 10 starting from the lower Disk number. At the mean while, it will calculate the smallest disk size to build RAID and calculate the total capacity of the RAID.

Figure 12 – Create RAID 10

If the user wants to set the password for the new RAID, he/she could check the password group box and enter the password.

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Figure 13 – Setting Password for new RAID

After selecting the RAID type and setting the password (optional), the user just need press the “Apply” button to apply the configuration or press “Cancel” button to restore to the original disk state.
If the user wants to delete the existing RAID, the user could select the “DELETE ALL RAID” button to delete the RAID and apply it.

When the user presses the “Apply” button, it will pop up a dialog to ask for the confirmation.

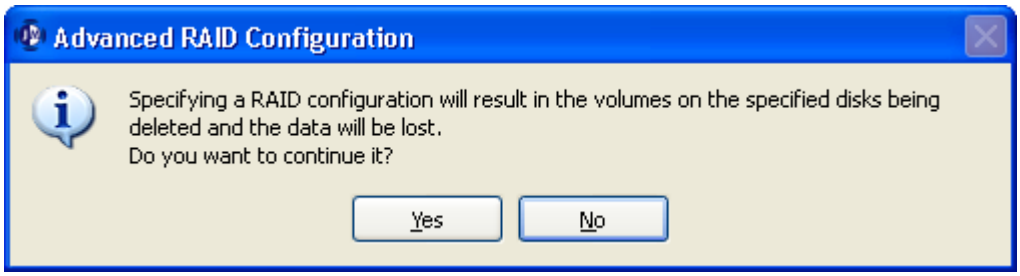

Figure 14 – Confirmation Dialog

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After the user confirms to apply the configuration, it will pop up another progress window to show the configuration status.

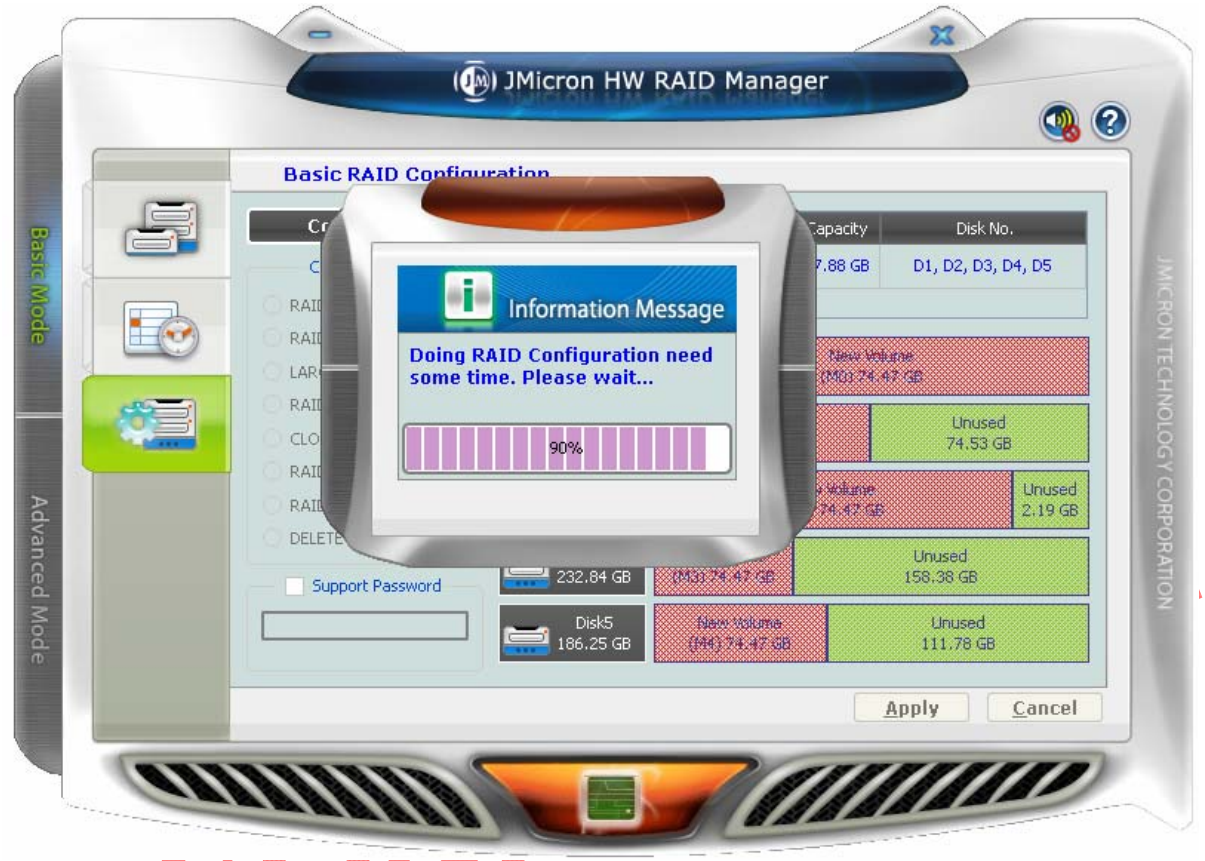

Figure 15 – Show Configuration Progress Window

After the RAID configuration finishes, it will pop up a message dialog to tell that a RAID is newly created or a RAID has been deleted.

Figure 16 – Information Message Box

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Figure 17 – Warning Message Box

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At last, the disk charts will be redrawn to reflect the result of the configuration. The newly created RAID will be shown with the gradient color. If the user deletes the RAID, the disk charts will be drawn in green color.

Figure 18 – Update Disk Charts After Creating RAID

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Figure 19 – Update Disk Charts After Deleting All RAID

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2.2 Advanced Mode

The advanced mode is aimed to provide the advanced functionalities, such as Email notification settings, the advanced RAID configuration and firmware update.

2.2.1 Email Notification and Event Settings

JMicron HW RAID Manager provides the function of the email notification when the specified events occur. The user might enter the mail server name, mail server port, sender e-mail address and recipients' e-mail addresses in this page. If the specified mail server need authenticate the sender's password when sending mail, the user might enter the correct username and password.

To check if the entered data is correct or not, the user could simply click the "Send Mail Test" button to send a mail to the specified recipients for testing.

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Figure 20 – Email Notification and Event Settings

Additionally, the user might select the events for email notification. The user could click the following buttons to select all events or clear all events. Of course, he could also check the events by himself for e-mail notification.

Figure 21 – “Select All Events” Button and “Clear All Events” Button

Furthermore, the user could save the email and event settings to a profile by pressing the “Save To Profile” button or load the settings from the specified profile by pressing “Load From Profile” button.

At last, the user could press the “Apply” button to apply the specified email and event settings or press the “Cancel” button to restore to the original settings.

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2.2.2 Advanced RAID Configuration

For the advanced users, JMicron HW RAID Manager also provides them to do the advanced RAID configuration to the connected disks.

The user is not only able to select the RAID type but also could select the desirable disks to build the RAID. JMicron HW RAID Manager will depend on the status of the connected disks and provide the available disks for users to select.

Figure 22 – Advanced RAID Configuration (Select Disks and Enter Password)

After applying the RAID configuration, the disk charts are updated and the supported RAID type will also be updated according to the remaining of the available disks.

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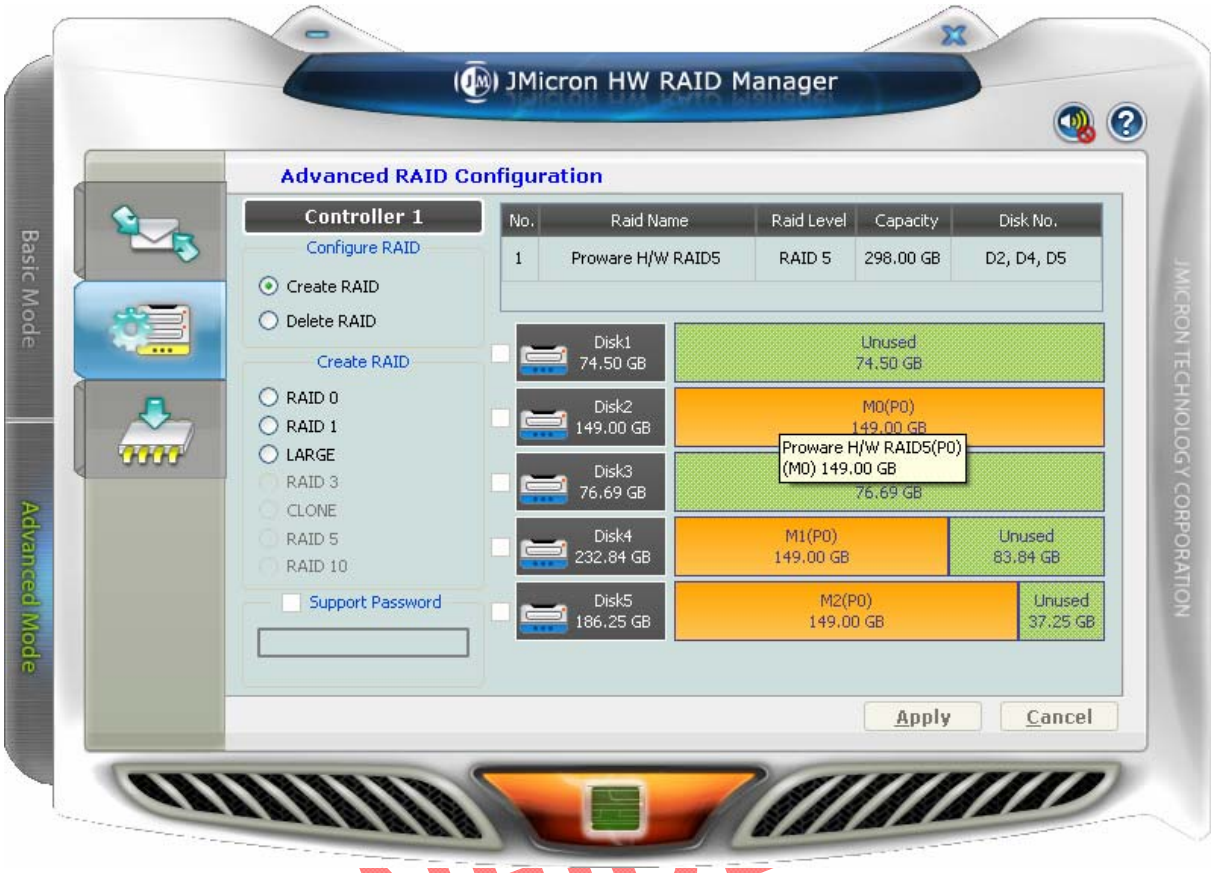

Figure 23 – Advanced RAID Configuration

When the user selects the disks, he/she could also modify the RAID disk size by simply clicking the specified disk chart and adjust the disk size from the slider at the bottom. The disk which is being adjusted the size is highlighted with deep red color.

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Figure 24 – Modify RAID Disk Size

The user could delete the RAID by checking the “Delete DAID” check box. The bottom group box will be updated and show the existing RAID. The user could select the RAID to be deleted.

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Figure 25 – Delete RAID

If the deleted RAID supports password, the password check box will be automatically enabled for the user to enter the password.

The RAID member disk which is being deleted is drawn in the cross pattern.

The “Apply” button is just enabled for clicking once all configuration settings are done.

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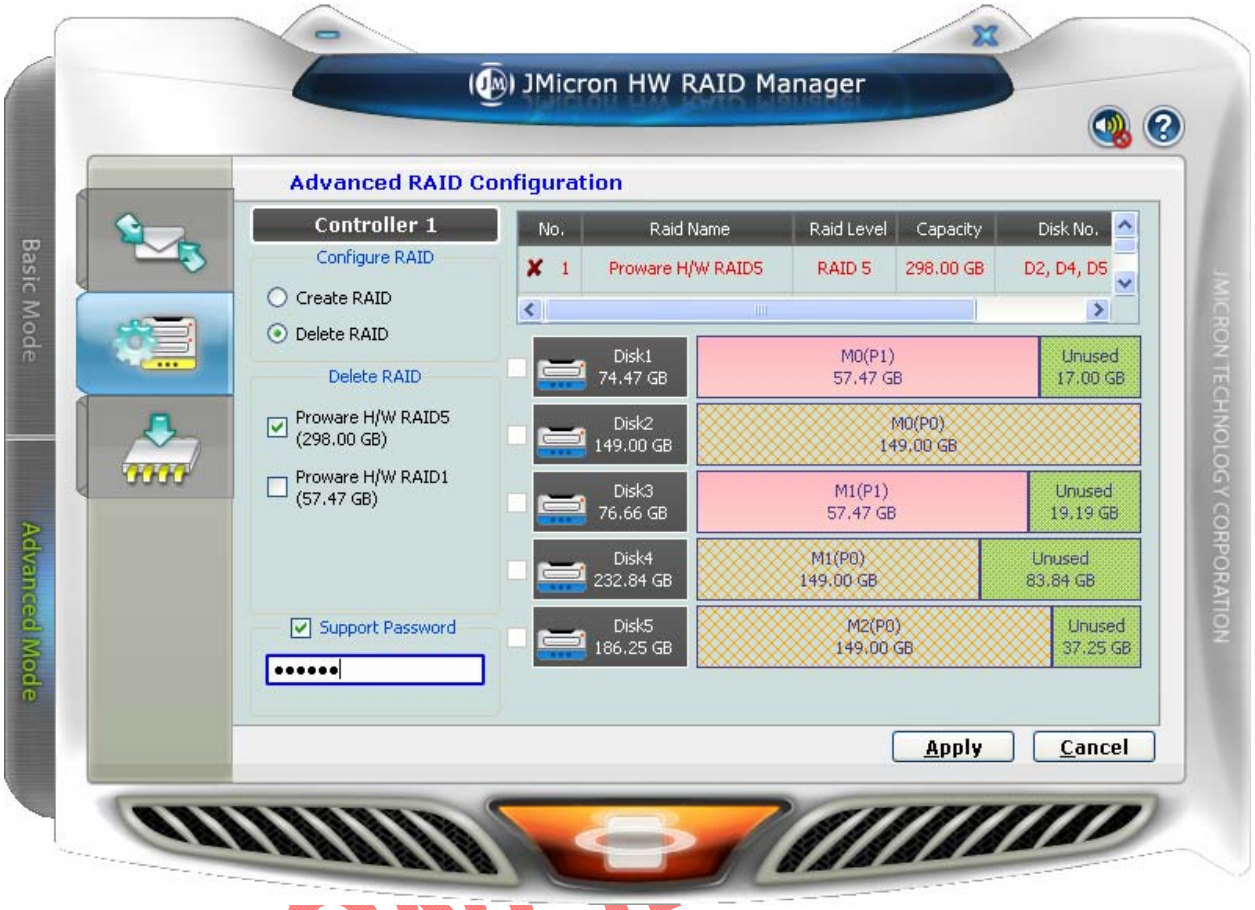

Figure 26 – Select The Deleted RAID And Provide Password

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2.2.3 Firmware Information

The user could browse the firmware information and update the firmware in this page.

To update the firmware, the user just simply presses the “browse” button to select the suitable firmware and then presses the “Update” button.

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Figure 27 – Firmware Update

There is a progress bar to be appeared at the bottom and it will show the percentage of the firmware update.

After the firmware update progress finishes, it will popup a message dialog and ask the user to restart the controller to take effect.

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Figure 28 – Show Progress Bar

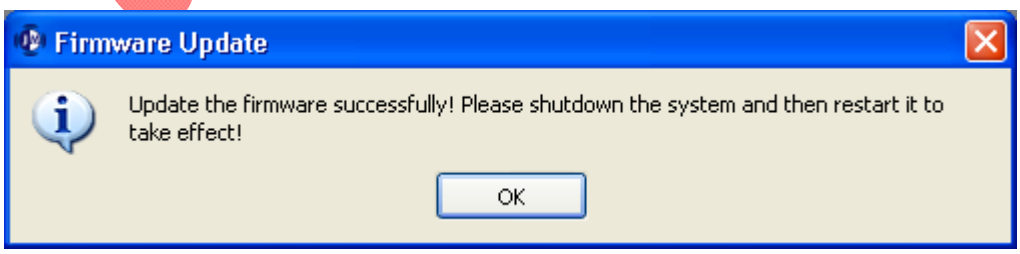

Figure 29 – Show Dialog to Reboot the System

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