

# RAIDGuide RAID Manager

## Chapter 1 - Introduction

**RAIDGuide RAID Manager** is a software that operator with RAID system. Use PC serial port receives RAID system information and display on screen. The information include drive address, real time status (hard disk fail, system fail, hard disk insert and identify), rebuild progress. It provides an easily and friendly operation interface for user.

### Function and Feature

- Support two RAID system connections.
- Support e-mail notifies when hard disk fail or system fail.
- Support PC speaker alarm and play wav or midi file when hard disk fail or system fail.
- Support 20 users multi-remote RAID system monitor.
- Hide in tray and restore window when RAID system hard disk fail or system fail.

## System Requirements

Hardware	Specification
Microprocessor	Pentium
Memory	64MB
Connection Line	1 Set
Hard Disk Space	10 MB
Screen Resolution (Suggestion)	800 ×600

## Chapter 2 - How to Install

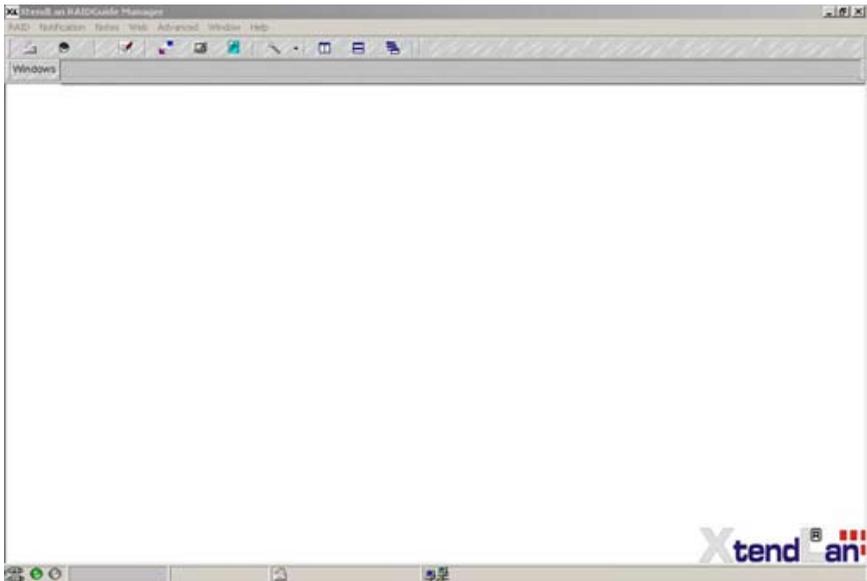
Put the RAIDGuide RAID Manager CD-ROM in the CD-ROM device. It will be auto run and start install program. You can choice folder to install it or use default path. After the installation of RAIDGuide RAID Manager software completed, you can start the program right now.





## Chapter 3 - How to Use

Pushes [Start] button and choose the [RAIDGuide RAID MANAGER] icon. The program will execute and display the main window like below figure. Check the connection line and start program. Use the on line HELP when you have program about operation.

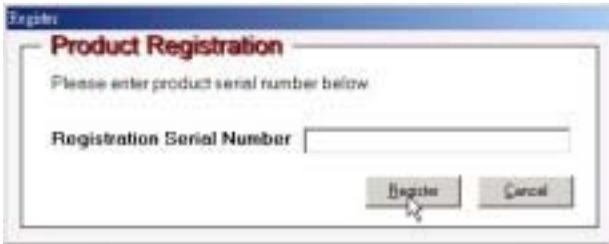


### 3.1 RAID System Connection and Disconnect

**Program** use PC serial port receives RAID system information and display on screen. The informations include system mode, hard disk fail, system fail and rebuild progress.

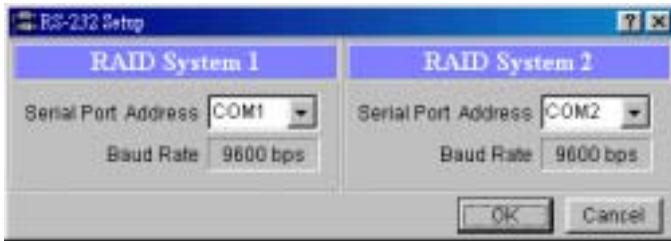
#### **Connect:**

1. Please enter product serial number below.

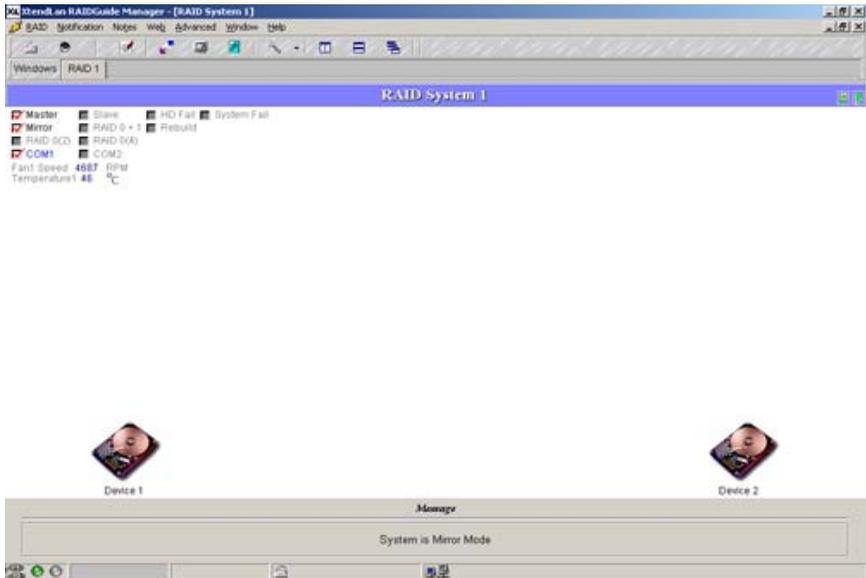


2. Select [RAID] main menu and [Connect] sub menu.
3. Select one or two RAID system connection and select correct serial port address to connect RAID system. Push [OK] button to connect local RAID system. If all system are correct which the RAID system windows will display later. Otherwise display error message window.
4. The serial port baud rate is 9600 bps.





5. When the RAID system window display, click the right top button to restore window size or display RAID system detail information.
6. The RAID system detail information include RAID model name, firmware revision, firmware date, transmission mode, RAID capacity, 1st and 2nd hard disk information.
7. After connecting, the RAID system windows will display below.



**Disconnect:**

If you want to close [local](#) connected RAID system window select [\[RAID\]](#) main menu and [\[Disconnect\]](#) sub menu to close the connected RAID system windows.

## 3.2 Notification

### 3.2.1 E-Mail

Use **program** setup e-mail notifies when hard disk fail or system fail. You can select whether or not send e-mail when fail occurring. Edit the e-mail **Subject** and **Contents** by yourself. And program will auto add fail information in front of e-mail content.

When execute E-Mail function:

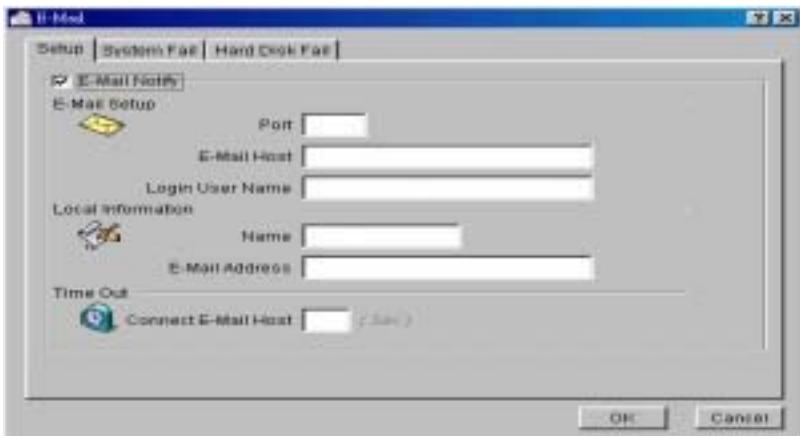
- Whenever PC serial port receives RAID system hard disk fail or system fail notification.

When stop e-mail function:

- When accomplish e-mail notify function.
- When accomplish retry function.

Notes:

The computer must install TCP/IP network component.



## Use :

### Setup Page:

1. Select [\[Notification\]](#) main menu and [\[E-Mail\]](#) sub menu. Select [\[Setup\]](#) page.
2. Check Box: Select whether or not enable e-mail notifies function.  
If checked which is enable. Otherwise is disable.
3. Port: E-mail Host port. **Example: 25**
4. E-Mail Host: E-mail Host name. **Example: mail.\*\*\*.com**
5. Login User Name: User Login Internet / Intranet User Name.
6. Name: User E-mail name.
7. E-Mail Address: User e-mail Address.
8. Time Out: Setup [wait time](#) when try connecting to e-mail Host.

### System Fail / Hard Disk Fail Page:

1. Select [\[Notification\]](#) main menu and [\[E-Mail\]](#) sub menu. Select others page.
2. E-Mail Address: Edit receivers e-mail address. (Use mouse right button to [copy](#), [paste](#) and [delete](#) data ).
3. Add: Addition a new receiver e-mail address to above address table.
4. E-Mail Subject: Edit send e-mail subject.
5. E-Mail Content: Edit send e-mail content.

### Notes:

- The **program** auto add hard disk / system fail information in front of e-mail content.

- If you want enable e-mail notify function, remember checked the [\[Setup\]](#) page check box.
- If you enabled e-mail notify function and local connected RAID system occurring hard disk fail or system fail, it will auto send e-mail.
- If you can't checked the check box and display error message, please install TCP/IP network component.

### 3.2.2 Alarm Setup

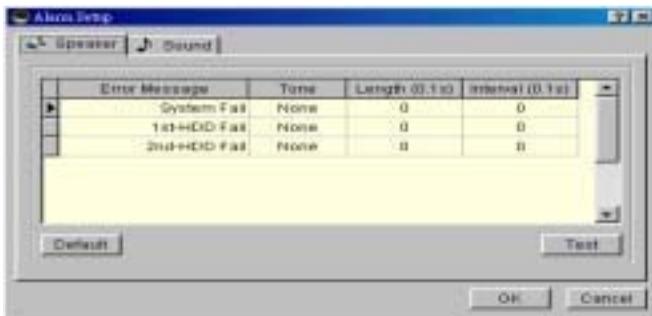
Use **program** setups PC speaker alarms or play wav or midi file when RAID system occurring hard disk fail or system fail. If you want to play wav or midi file, the PC must install sound effect card beforehand. You can setup different tone frequency or sound corresponds to different error message which easy to recognize. The alarm function only support **local connected** RAID system.

When execute alarm:

- The **Tone** field selected High(Middle or Low) or **Sound** field select correct wav, midi file.
- Setup **Length** and Interval value. (Only Speaker Page).
- Setup **Interval** value. (Speaker or Sound Page).
- When RAID system occurring correspond to **Error Message**. (1st-HDD Fail, 2nd-HDD Fail and System Fail).

When stop alarm:

In 1st-HDD or 2nd-HDD Fail mode, the alarm will be stopped automatically when insert hard disk and lock it.



### **Use Tone Alarm :**

1. Select [Notification] menu item and [Alarm] sub menu, select [Speaker] page.
2. Click Tone field and pull down tone list box. Select one frequency correspond to Error Message. There are four kinds frequency which include None, High, Middle and Low.
3. Setup tone Length value. The unit is 0.1 sec.
4. Setup tone replay Interval value. The unit is 0.1 sec.
5. Suggest you select one error message and pushing [Test] button to test the tone alarm. And push again to stop it.
6. Push [OK] button to save setup data and close window.

#### Notes:

- The Error Message field can't edit.
- Use [Default] button to setup all Tone = None, Length = 0 sec, Interval = 0 sec.
- If you want to disable single speaker alarm function, select one Tone field None item and press Enter key. The Length and Interval value will auto set to 0.

### **Use Sound Alarm :**

1. Select [Notification] menu item and [Alarm] sub menu, select [Sound] page.
2. Click File field and pull down open file dialog window. Select one wav or midi file correspond to Error Message.
3. The Length field will auto display the file length.
4. Setup wav or midi file replay Interval time. The unit is 0.1 sec.

5. Suggest you select one error message and pushing [Test] button to test the sound alarm and push again to stop it.
6. Push [OK] button to save setup data and close window.

Notes:

- The [Error Message] and [Length] field can't edit.
- Use [Default] button to setup all File = None, Length = 0 sec, Interval = 0 sec.
- If you want to disable single sound alarm function, select one File field clear contents and press Enter key. The Length and Interval value will auto set to 0.

### 3.3 Event record

**Program** record events in database. Select [from date](#) , [end date](#) and [event name](#) to search event data. Push mouse right button to [delete](#) one or all database events. You can setup which ones record in database in [\[Advanced\]](#) main menu and [\[Options\]](#) sub menu.

#### Event items:

- All Event.
- Connected.
- Disconnect.
- System is Mirror Mode.
- System is JBOD Mode.
- 1st-HDD Fail.
- 2nd-HDD Fail.
- 1st-HDD Insert and Identify.
- 2nd-HDD Insert and Identify.
- Rebuild (1st-HDD to 2nd-HDD).
- Rebuild (2nd-HDD to 1st-HDD).
- System Fail(1st-HDD Fail).
- System Fail(2nd-HDD Fail).
- RAID Information Upload Fail.
- Send E-Mail Fail.
- Fan1 Speed
- Temperature

Event Record

RAID System 1 RAID System 2 Total Record : 25

No	Event	Date	Time
10	2nd-HDD Insert and Identify	2/23/01	16:00:06
11	Rebuild (1st-HDD to 2nd-HDD)	2/23/01	16:00:25
12	2nd-HDD Fail	2/23/01	16:00:27
13	Send E-Mail Fail	2/23/01	16:00:32
14	2nd-HDD Insert and Identify	2/23/01	16:00:55
15	2nd-HDD Fail	2/23/01	16:01:08
16	2nd-HDD Insert and Identify	2/23/01	16:01:28
17	2nd-HDD Fail	2/23/01	16:01:39
18	System Fail(1st-HDD Fail)	2/23/01	16:01:40
19	Send E-Mail Fail	2/23/01	16:01:41
20	Send E-Mail Fail	2/23/01	16:01:41
21	Disconnect	2/23/01	16:01:43
22	Connected	2/23/01	16:01:46
23	System is Mirror Mode	2/23/01	16:01:46
24	System Fail(1st-HDD Fail)	2/23/01	16:01:46
25	Send E-Mail Fail	2/23/01	16:01:46

All Events  
 Connected  
 Disconnect  
 System is Mirror Mode  
 System is JBOD Mode  
 1st-HDD Fail  
 2nd-HDD Fail  
 1st-HDD Insert and Identify  
 2nd-HDD Insert and Identify  
 Rebuild (1st-HDD to 2nd-HDD)  
 Rebuild (2nd-HDD to 1st-HDD)  
 System Fail(1st-HDD Fail)  
 System Fail(2nd-HDD Fail)  
 RAID Information Upload Fail  
 Send E-Mail Fail

From: 2/23/01 20:30:01  
 To: 2/23/01 20:30:01

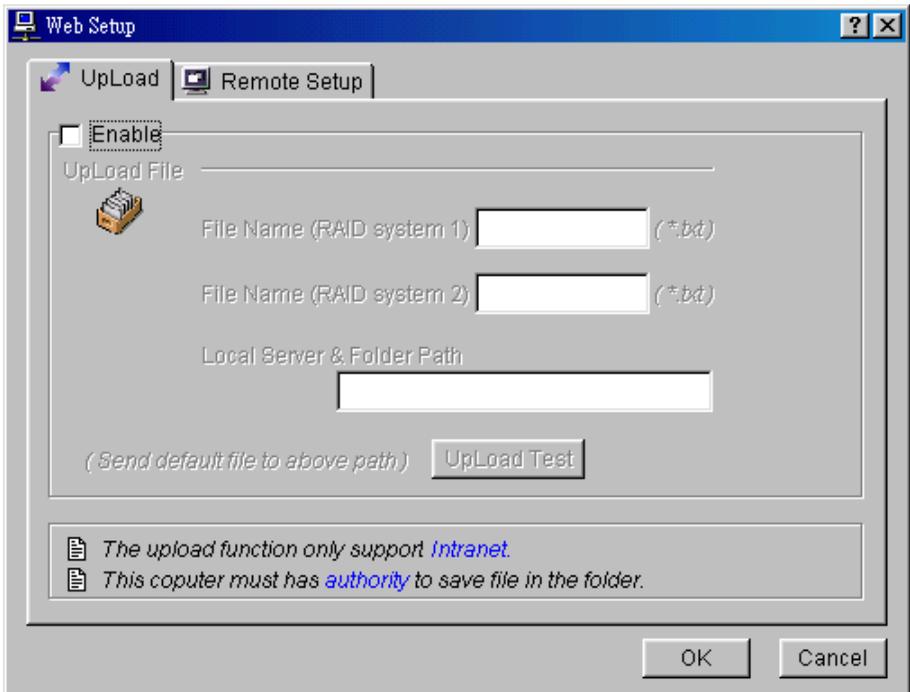
## 3.4 Web

### 3.4.1 Upload

**Program** supports network remote monitor. Upload RAID system information to **Intranet** web server folder. If the RAID system work at some one computer and it have **Intranet** connection. You can upload the RAID system information to web server folder and remote monitor it by the **program**.

Notes:

- The **Upload** function **only** support upload local RAID system information to **Intranet** web server. **Not support Internet upload.**
- The computer must install TCP/IP network component.



## Use:

- Select [Web] menu item and [UpLoad] sub menu.
- Checked the check box.
- Edit local RAID system 1/ RAID system 2 to upload file name.  
Like (\*.txt).
- Edit local web server upload path. Like ( Local Computer Name \ Folder Name\).
- You can push [UpLoad Test] button to test the upload path and it's authority. And program will show correspond message.
- Push [OK] button to save setup data and close window.

## Notes:

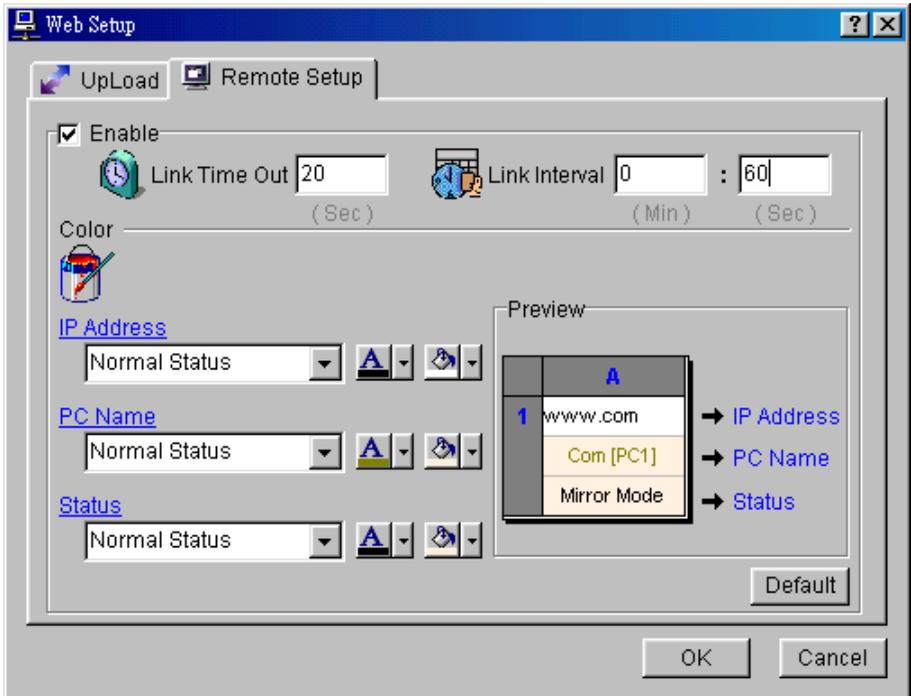
- Suggest using [UpLoad Test] button to test the upload path before upload local RAID system information.
- If you want enable upload function , remember checked the [Upload] page check box.
- The computer must have authority to save files in the folder.
- The upload function will auto execute when enable upload function and the local RAID system receive data from serial port.
- If you can't checked the check box and display error message, please install TCP/IP network component.

### 3.4.2 Remote Setup

Use **program** display remote RAID system information. Download remote RAID system information through network and display on the screen. It will download data by Interval time and paint status color on the multi-remote grid which user setup.

Notes:

The computer must install TCP/IP network component.



**Use :**

**Setup:**

- Select [Web] menu item and [Remote Setup] sub menu.
- Checked the check box.
- Setup Link Time Out value.
- Setup Link Interval time.
- Setup color about the list box items.
- Press [Default] button to reload grid default color.
- Press [OK] button to save setup data and close window.

**Notes:**

If you want enable multi-remote window function, remember checked the [Remote Setup] page check box.

**Display multi-remote monitor window:**

- Select [Web] menu item and [Multi-Remote Window] sub menu.
- If you can't select the above button , you can click the [Remote Setup] check box to enable multi-remote windows.

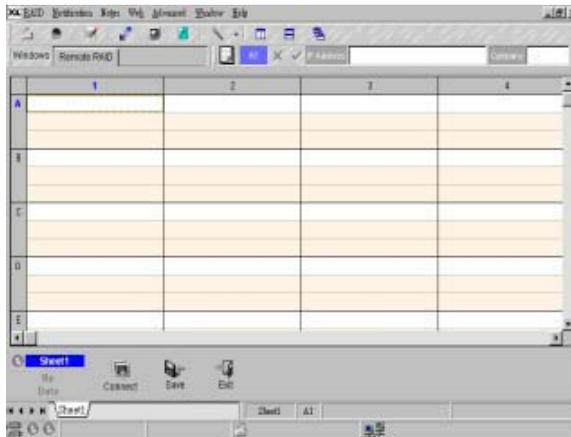
### 3.4.3 Multi-Remote Window

Use **program** display multi-remote RAID system information. The window support 20 users remote RAID system. The Grid color can be changed in the [\[Remote Setup\]](#) window.

#### Notes:

The computer must install TCP/IP network component.

#### Setup:



- Select [\[Web\]](#) menu item and [\[Multi-Remote Windows\]](#) sub menu.

- Select one cell in the grid and press **Enter** to edit the IP address and company name, click the **[ V ]** button to confirm the data.
- Press **mouse right button** to use other functions: **(It will be enabled when disconnection)**
- **Edit Data** : Edit IP address and Company name. Select one grid when the mouse shape becomes hand shape. Press **Enter** to edit data. Press the **[V]** button or **Enter** to confirm data. Hot Key **[Enter]**.  
**Example** : [www.xxx.com/folder/RAID1.txt](http://www.xxx.com/folder/RAID1.txt)
- **Remote RAID Info** : Display the remote RAID system complete information. Hot Key **[F5]**.
- **Link Test** : Try to link the selected IP address. Hot Key **[F6]**.
- **Copy Grid Data** : Copy the selected grid data.
- **Paste Grid Data** : Paste the copied grid data.
- **Delete Grid Data** : Delete the selected grid data.
- **Insert & Shift Grid** : Insert one grid at selected position and shift others grid data. You can select row or column direction.
- **Del & Shift Grid** : Delete selected grid and shift others grid data. You can select only selected row , only selected column , all row or all column direction.
- **Undo** : Undo the previous insert or Del grid action.
- **Clear All Grid Data** : Clear the selected page data.
- **Connect** : Press **[Connect]** button to start linking remote RAID system information. It will active all pages connection at the same time.

- **Disconnect** : Press [**Disconnect**] button to disable download remote RAID system. If you want exit the window, please make sure disconnect.
- **Save** : Press [**Save**] button to save multi-remote window data which include IP address, company , computer and sheet name. If the window data has modified and not save, it will show notification.
- **Exit** : Press [**Exit**] button to exit multi-remote window.
- **Sheet Rename** : Select one sheet and use mouse right button. It will display other rename window.
- 

**Notes:**

- If you want enable multi-remote window, remember checked the [**Remote Setup**] page check box.
- **The mouse right button function active when remote RAID system are not connection.**

**Display Remote RAID system window:**

Select one IP address and **double click** or press [**F5**] to display the remote RAID system complete information.

## 3.5 Advanced

### 3.5.1 Options

Use **program** Options window to setup detail parameter.

#### Connect:

- Setup PC serial port connects [wait time](#).

Notes:

- The blank space must set value.

#### E-Mail:

- Send Retry: Select whether or not enable send e-mail retry function. If check box is checked which enable function. Otherwise disable.
- Setup send [retry times](#) and [interval time](#) when connecting e-mail Host fail.

#### Remote Monitor:

- Link Retry: Select whether or not enable link retry function. If check box is checked which enable function. Otherwise disable.
- Setup link [retries times](#) when linking remote web server fails.

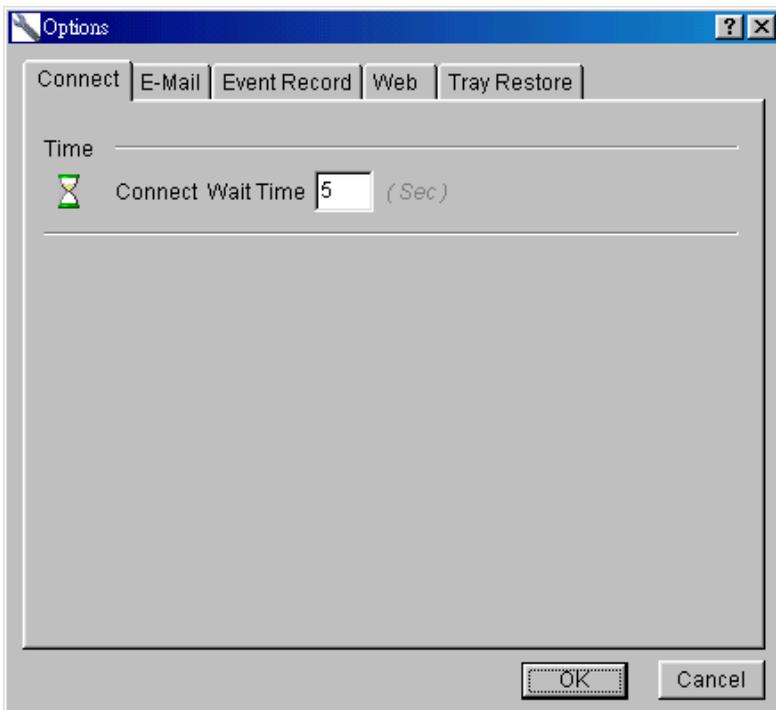
#### Event Record:

- Select event record items to decide which ones record in database. Use [\[Select All\]](#) button to check all items and use [\[Clear All\]](#) button to clear all items.

#### Tray Restore:

- Program can hide in tray when push HotKey [F10](#).
- Restore program window when [double click](#) tray icon. Or click mouse right button select pop-up menu item.

- Select whether or not auto restores window when [local/remote](#) RAID system hard disk fail or system fail.



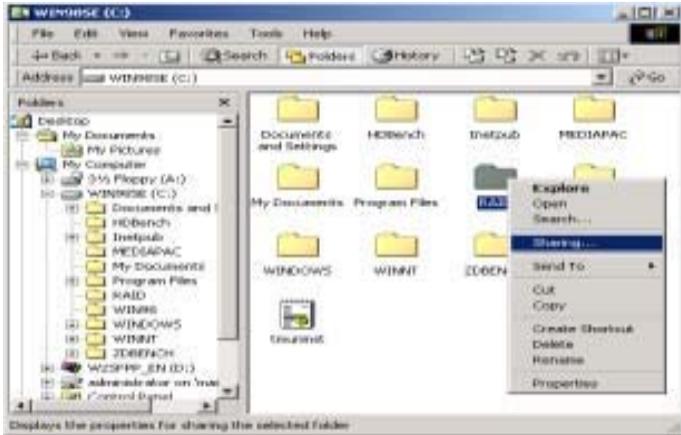
## Chapter 4 - Share Web Server computer folder (Example :Windows 2000 Server)

The RAID Manager support **Upload(Intranet)** / **Remote(Internet)** function. So you must share one folder which let others RAID system upload \*.txt files.

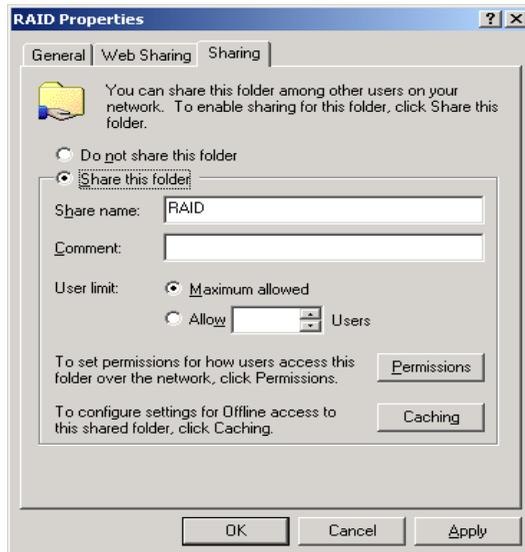
In addition to share the folder, you must **set the folder readable at web browse**. And there are two methods to set Web Server computer folder readable. The first method is using **Internet Service Manager**, the other is using **Windows Explore**.

### 4-1 Share Folder : (for upload)

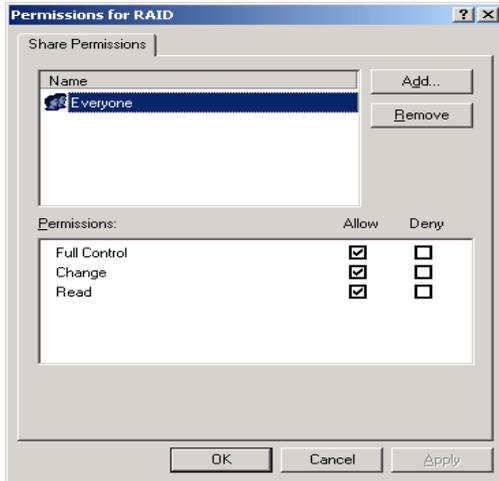
- (a). Execute the Windows Explore and use mouse right button to share folder. (See figure A-1.1).
- (b). Edit the **[Share Name]** at figure A-1.2.
- (c). Press **[Permissions]** button to set the folder Permissions. (See figure A-1.3).
- (d). The folder changes the icon. (See figure A-1.4).



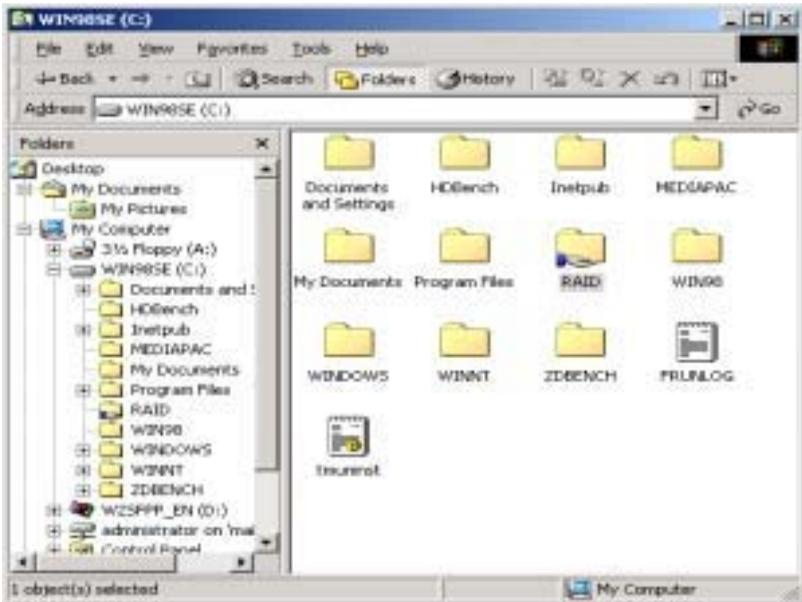
(Figure A-1.1)



(Figure A-1.2)



(Figure A-1.3)

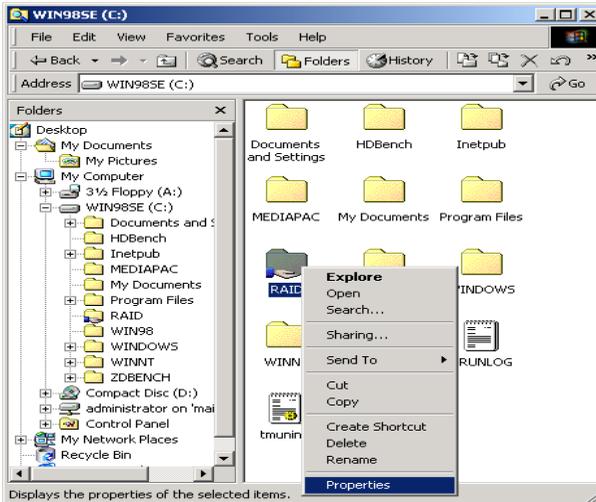


(Figure A-1.4)

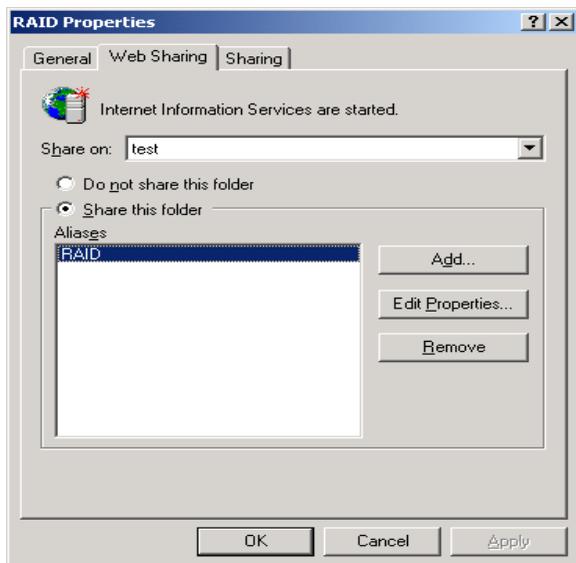
## 4-2 Set the Folder Readable at Web Browse : (for Remote)

### 4-2-1 Method 1 : (Windows Explore)

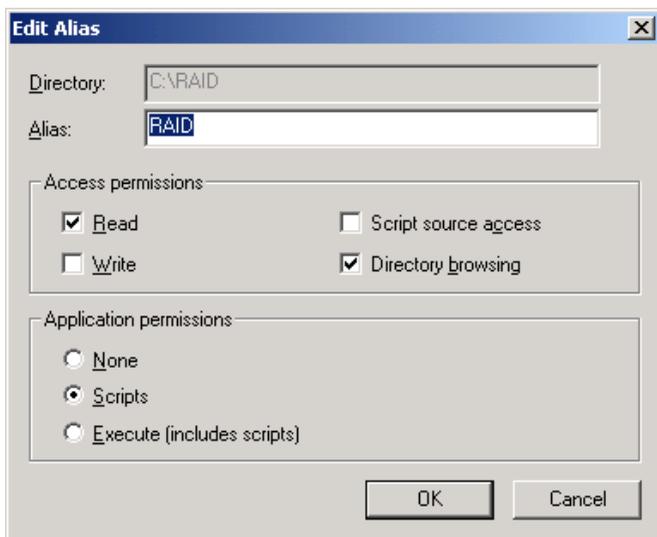
- (a). Select the shared folder and use mouse right button to setup function. (See figure A-2.1).
- (b). Select the Web Sharing page. Select the **[Share On]** item, which is Web Server home page. (See figure A-2.2).
- (c). Check the **[Share this folder]** check box.
- (d). Press **[Edit Properties...]** button to set the folder property. (See figure A-2.3).
- (e). Edit **[Alias]** name and check the **[Read]** and **[Directory browsing]** check box.
- (f). Test the folder at Web browse. (See figure A-2.4).



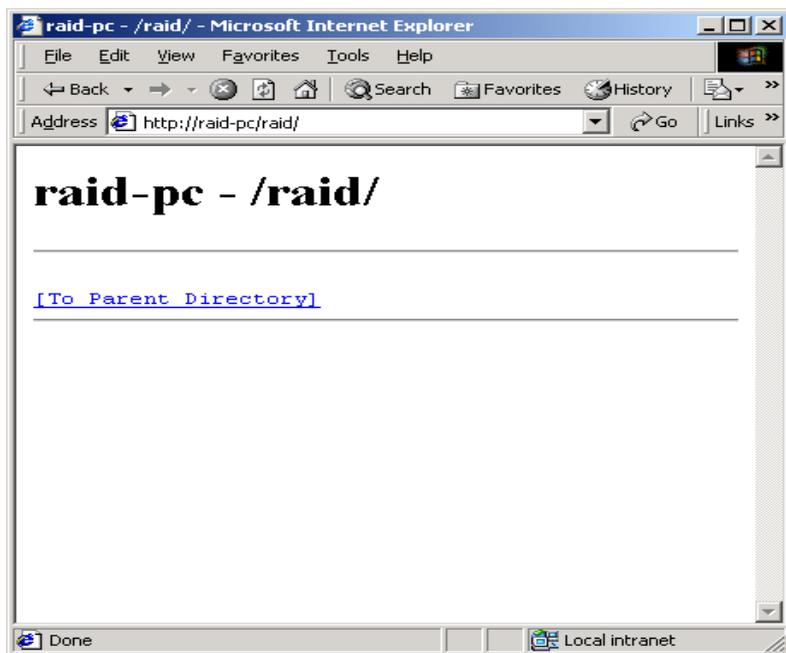
(Figure A-2.1)



(Figure A-2.2)



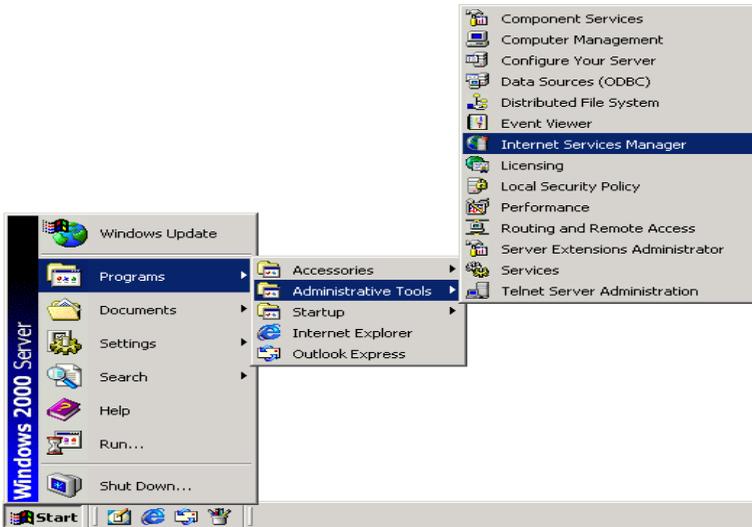
(Figure A-2.3)



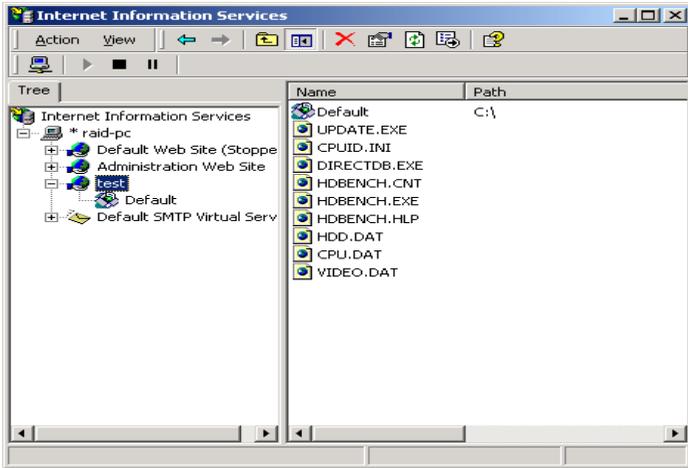
(Figure A-2.4)

## 4-2-2 Method 2 : (Internet Services Manager)

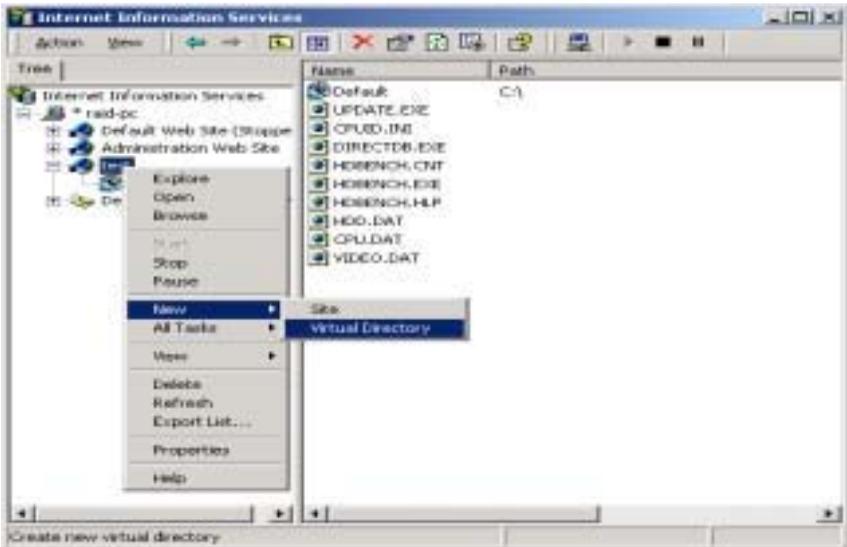
- (a). Select **[Internet Services Manager]**. (See figure A-2.5).
- (b). Execute the **[Internet Services Manager]** and select the Web Server home page folder. (See figure A-2.6).
- (c). Use mouse right button to create new virtual directory. (See figure A-2.7).
- (d). Operation from figure A-2.8 to figure A-2.12. The folder directory must equal to share folder directory.
- (e). Close the setup window and the Web Server home page folder will add new folder. (See figure A-2.13).
- (f). Test the folder at Web browse. (See figure A-2.14).



(Figure A-2.5)



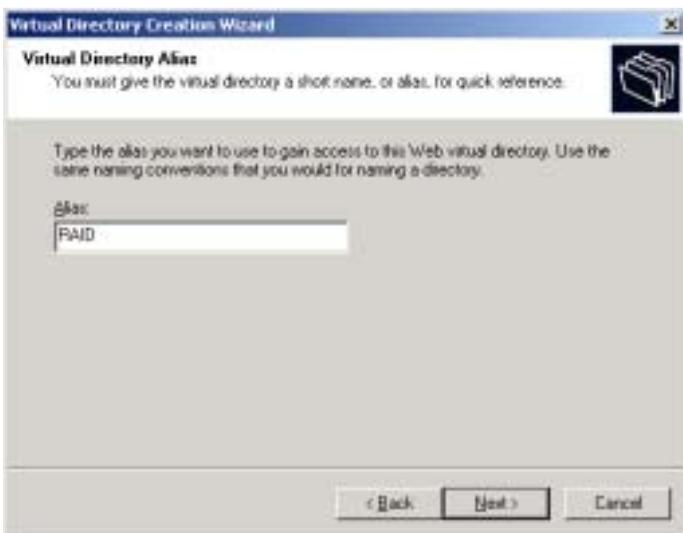
(Figure A-2.6)



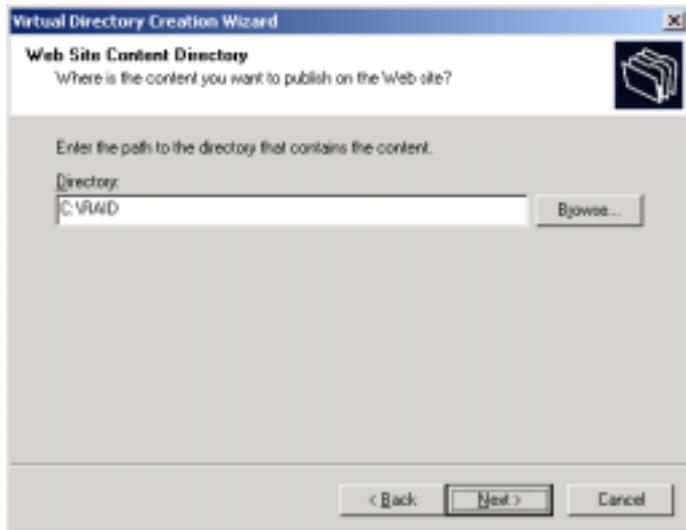
(Figure A-2.7)



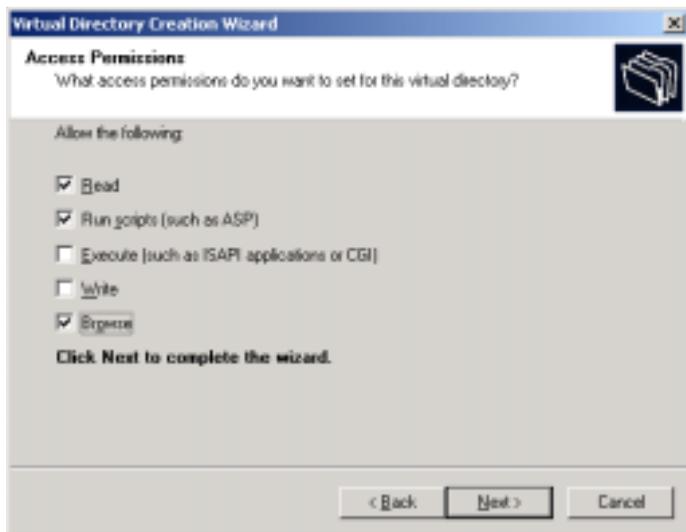
(Figure A-2.8)



(Figure A-2.9)



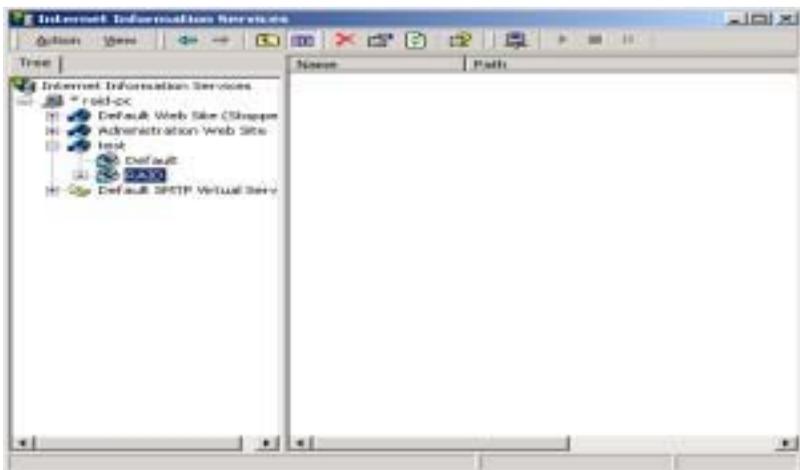
(Figure A-2.10)



(Figure A-2.11)



(Figure A-2.12)



(Figure A-2.13)



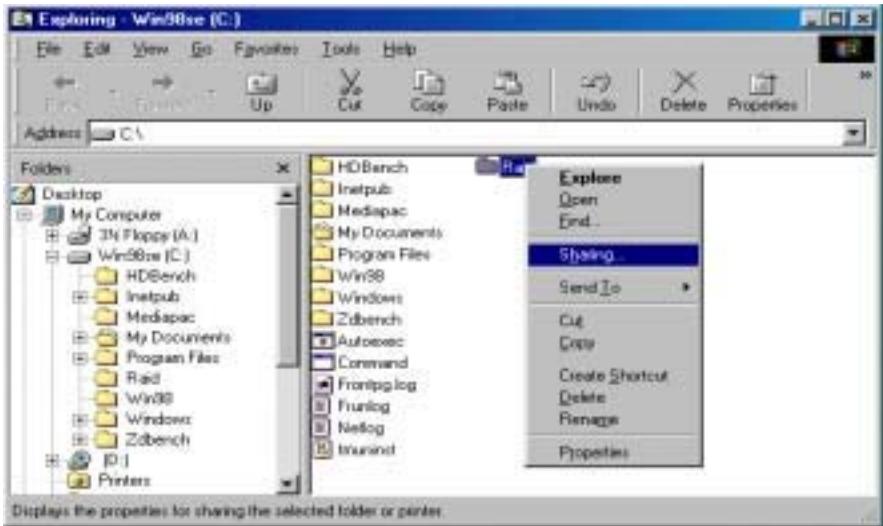
(Figure A-2.14)

## Chapter 5 - Personal Web Server

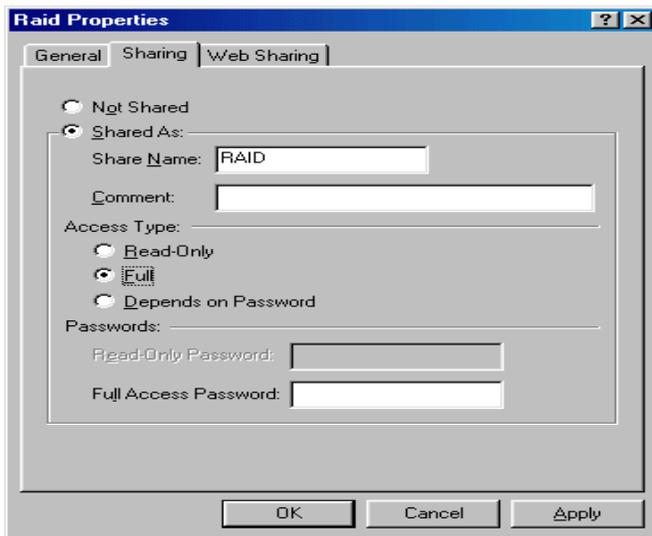
The RAID Manager support **upload(Intranet)** / **remote(Internet)** function. If you want to use the remote function which without Web Server. You can use **Personal Web Server** program. The step lists below, which include **share folder** and **create virtual folder**.

### 5-1 Share Folder: (for Upload)

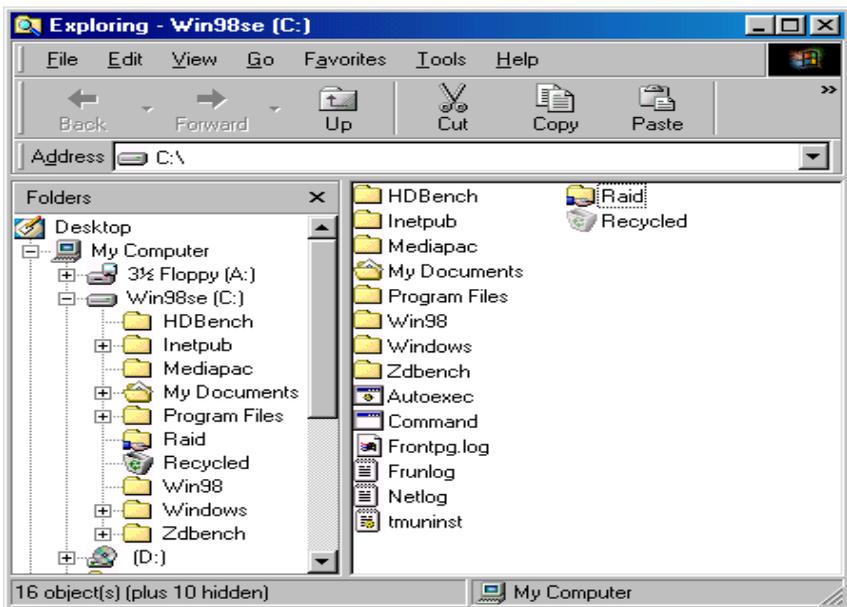
- (a). Create a new folder or select one existed folder, use mouse right button to share the folder. (See figure B-1.1).
- (b). Select sharing page and check the **[Shared As]** check box, edit share name and check the **[Full]** item at **[Access Type]** check box. (See figure B-1.2).
- (c). The folder will change the icon. (See figure B-1.3).
- (d). This share folder let others RAID system upload \*.txt files.



[Figure B-1.1]



[Figure B-1.2]



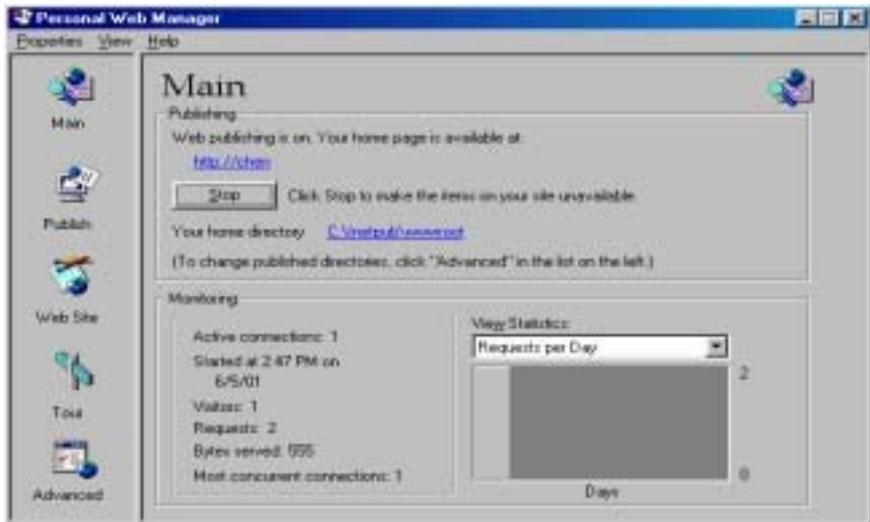
[Figure B-1.3]

## 5-2 Create virtual folder : (for Remote)

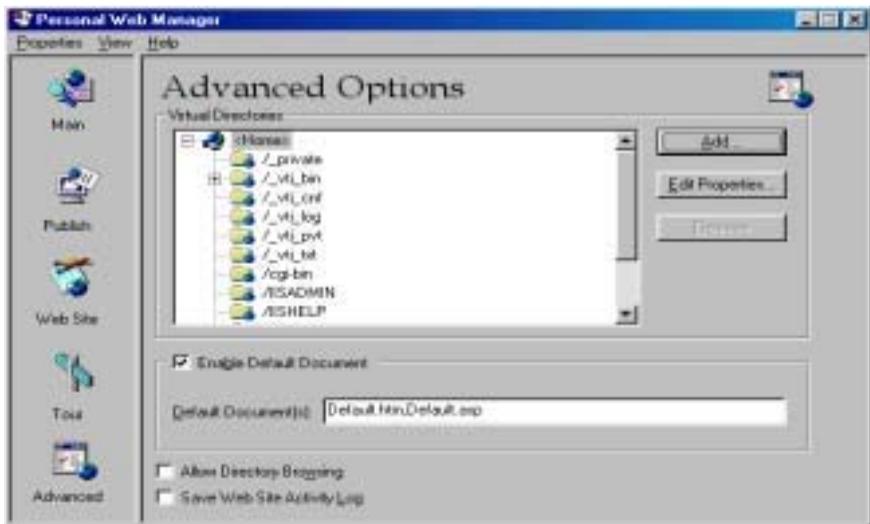
- (a). Please install the **Personal Web Server (PWS)** program beforehand.
- (b). Execute the PWS. (See figure B-2.1).
- (c). Press the **[Advanced]** icon at left bottom. (See figure B-2.2).
- (d). Press **[Add]** button to create new virtual folder. Edit the Directory which you share above (B.1 Share Folder) and edit the Alias name. (See figure B-2.3).
- (e). Please check the **[Read]** check box at figure B-2.3 .
- (f). Check the **[Advanced]** window which add new folder. (See figure B-2.4).
- (g). Please check the **[Allow Directory Browsing]** check box at figure B-2.5, and close the PWS window.
- (h). Test the virtual folder. (See figure B-2.6).
- (i). The last, you can edit the RAID Manager remote path like **chen/raid**.

### Note:

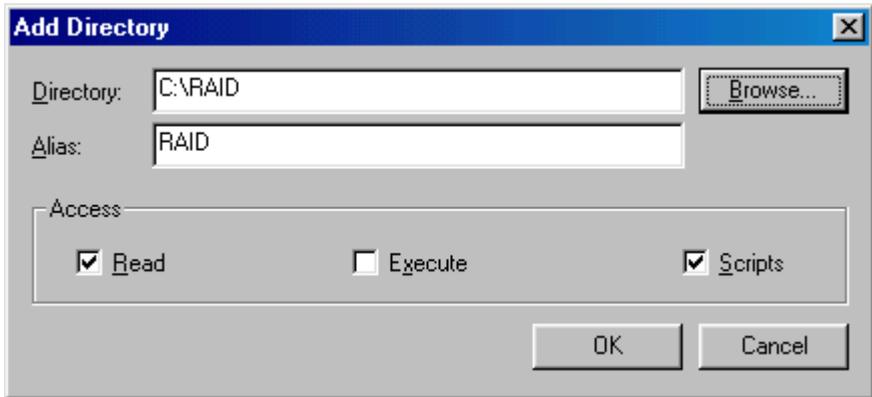
**The virtual folder directory must equal to share folder directory.**



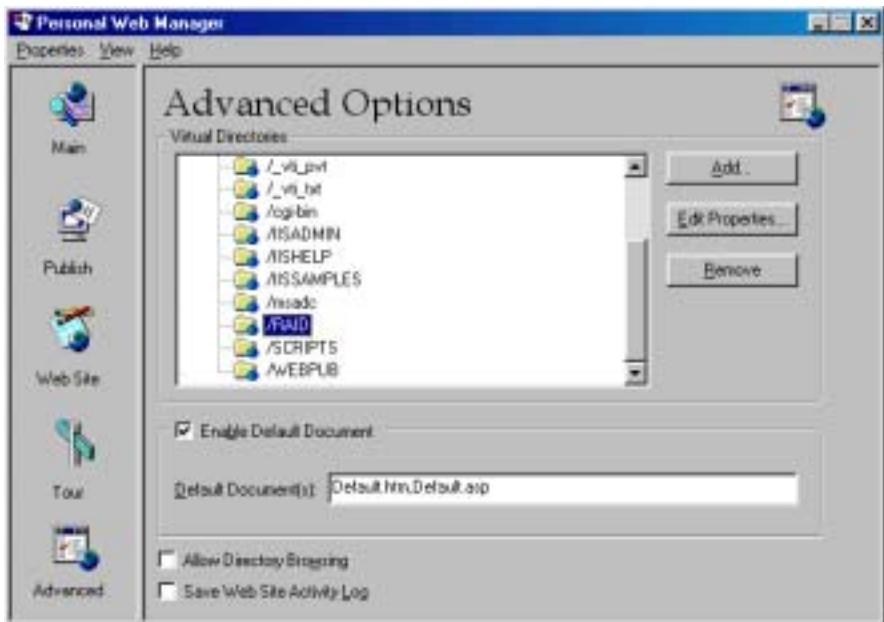
[Figure B-2.1]



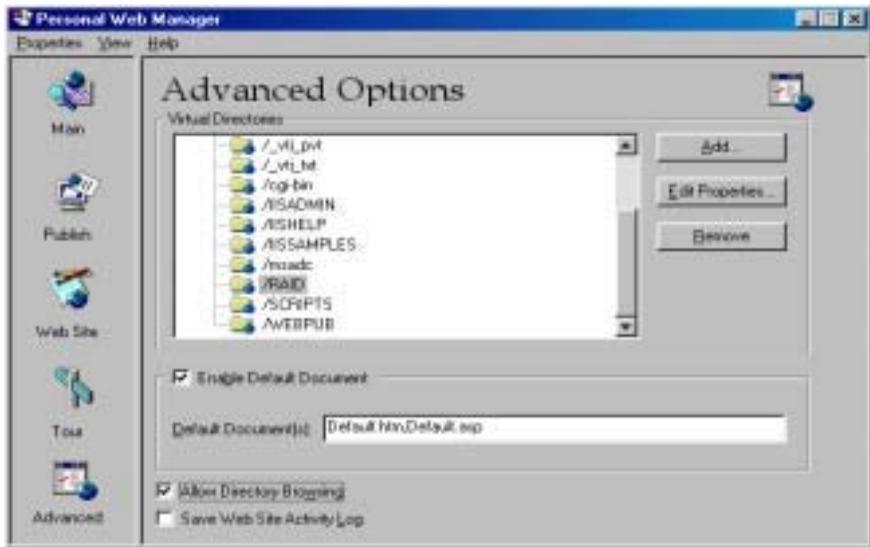
[Figure B-2.2]



[Figure B-2.3]



[Figure B-2.4]



[Figure B-2.5]



[Figure B-2.6]