# TS-U100

USB 2.0 Network Storage Server

**User's Guide** 





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# ABOUT THIS GUIDE

This manual provides instructions and illustrations on how to use your Network Storage Server, including:

- Chapter 1, **Introduction**, provides the general information on the product.
- Chapter 2, **Installation**, describes the hardware installation procedure for the product, and how to access to the storage server.
- Chapter 3, **Web Configuration**, completes the configuration using the web browser.
- Chapter 4, **Downloading Files**, helps you to set up downloading schedule.
- Chapter 5, **Product Specification**.

Please note that the illustrations or setting values in this manual are **FOR YOUR REFERENCE ONLY**. The actual settings and values depend on your system and network. If you are not sure about the respective information, please ask your network administrator or MIS staff for help.

# INTRODUCTION

Congratulations on purchasing your Network Storage Server, the easiest and fastest way to share data, file, and resource in your network.

This entry-level storage server is the value-added equipment in your network that allows you to control file-sharing needs within a small office/home office (SOHO) environment. With expandable function (through its two USB ports) in a compact form-factor, the Network Storage Server is ideal for sharing data, rich-media files, and for storage in a small office, remote corporate office or residential gateway environments.

#### **General Features**

- ♦ Compact-sized design.
- ◆ Compliant with USB1.1 and USB2.0.
- Provides one 10/100Mbps auto-MDIX fast Ethernet LAN port.
- ♦ Supports "Hot-plug" function.
- Two operating modes support: Open mode and Account mode.
- ◆ Supports Auto-IP function.
- ◆ Supports IP assignment for DHCP and Auto-IP.
- Supports IP address filtering for Ethernet access with either DENY or ALLOW setting.
- ◆ Supports external USB storage (Hard-disk, flash disk, CD-ROM, MO, and Micro Drive).
- Provides download assistance, making users download files without PC and schedule-able (support ftp and http).
- ◆ Supports NTP (network time protocol).
- Web-based administrative program is stored in flash ROM of the file server.
- ♦ No setup necessary in open mode.
- Firmware upgrade-able by Web-based administrative program.
- ◆ Supports Windows 98/ME/NT/2000/XP and Linux SMB.
- ◆ Provide FTP Server service.
- ◆ Supports UPnP for windows XP.
- Provides an easy-search program for different IP domain setting.

#### **Package Contents**

Unpack the package and check all the items carefully, and be certain that you have:

- ◆ One TS-U100 Network Storage Server.
- One AC Power Adapter suitable for your country's electric power service.
- ◆ One Multi-Language Quick Installation Guide.
- One Installation CD-ROM containing the manual files (PDF).

If any item contained is damaged or missing, please contact your local dealer immediately. Also, keep the box and packing materials in case you need to ship the unit in the future.

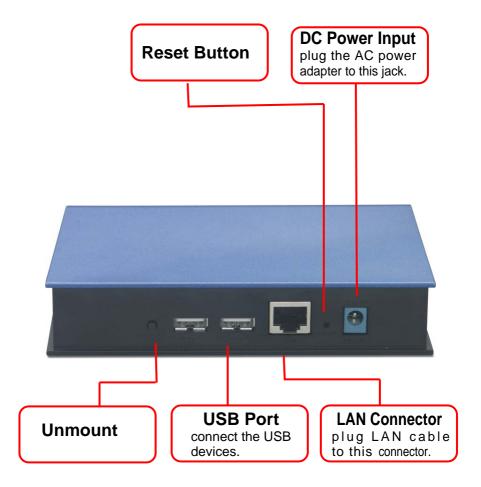
## **Product View**

This section describes the externally visible features of the storage server.

#### **Front View**



#### **Rear View**



#### **LEDs**

There are three LEDs on the front panel (four for wireless model):

LEDs	Description
Power	A steady <b>Green</b> light confirms that the storage server is powered on.
LAN	A steady <b>Green</b> light confirms that the storage server has a good connection to your network.
	When it blinks, the storage server is receiving/ transmitting data from/to the network.
WLAN (for wireless model)	A steady <b>Green</b> light confirms that the storage server has a good connection to your wireless network.
	When it blinks, the storage server is receiving/ transmitting data from/to the wireless network.
Mode	Off: no devices attached to the storage server.
(green/red)	<b>Green</b> : when you connect a USB device to the storage server, it starts blinking <b>Green</b> slowly; when the system has detected the device, it lights <b>Green</b> steadily to indicate that the attached device is OK.
	Red: when you press the Unmount Button to remove the attached device, it starts blinking Red slowly. If the last connected device failed, it lights Red steadily; you have to re-connect the device.

#### Reset Button

Press and hold the Reset Button for 4 seconds to reset the storage server.

#### **Unmount Button**

Press this button to remove the connected USB device safely.

# INSTALLATION

# **Networking Application**

The following diagram explains the application of your storage server.

**USB 2.0 Network Storage Server** (TS-U100) USB 2.0 External Drive USB 2.0 Flash Drive Internet Cable/DSL 4-Port Cable/DSL **Broadband Router** (TW100-S4W1CA) Modem 480Mbps USB 2.0 Workstations with Notebook with 12Mbps USB 1.1 Fast Ethernet Adapter CardBus Ethernet Card (TE100-PCIWN) 10/100Mbps (TE100-PCBUSR) \* Backwards compatible with

Network Storage Server Solution

#### **Installing the Storage Server**

Follow these steps for a trouble-free start of operations of Network Storage Server.

#### Connecting to the Network

- **1.** Confirm proper operation of the gateway/hub to be connected in the network.
- 2. Connect the storage server to the gateway/hub through the RJ-45 cable.
- **3.** Connect the power adapter of the storage server to the wall outlet. This will supply power to the storage server immediately.

#### Connecting to a Client Workstation

For some reasons, you may need to connect the storage server to a client workstation directly. For example, you build a direct connection between your desktop PC and the storage server to configure the storage server. In this event, you should set up the computer's IP address as instructions in next section.

#### Expanding the USB Devices

The storage server provides two USB ports that allow you to expand the storage server's function, such as connecting a large storage device.

To connect the USB device, simply plug the USB device into one of the storage server's USB ports. Alternately, you can connect the USB device through a USB cable.

#### **Using the Storage Server**

#### Configuring a Dynamic IP Address

When you connect your computer to the storage server directly to configure the storage server, you need to check the computer's IP address, and set up the IP address within the storage server's IP address range.

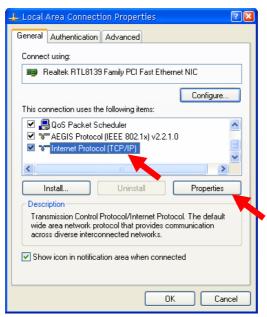
- Click Start and choose Control Panel to open the Control Panel window.
- Double-click the Network Connection icon to open the Network Connection window.



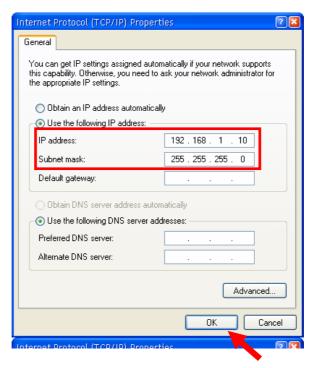
**3.** Right-click the Local Area Connection icon and click *Properties* from the shortcut menu.



**4.** When the Local Area Connection Properties window appears, choose **General** tab and select **Internet Protocol [TCP/IP]**, and then click *Properties* to bring up the Internet Protocol [TCP/IP] Properties window.



5. To configure a fixed IP address, check the "Use the following IP address" option. Then, enter an IP address into the empty field. Suggested IP Address is 192.168.1.x (x is 3~254), and suggested Subnet Mask is 255.255.255.0.



**6.** Click *OK* to complete the configuration.

#### Accessing the Storage Server

Since you have made the connection between your computer and the storage server, and configured the computer's IP address, you can access the storage server through the following steps.

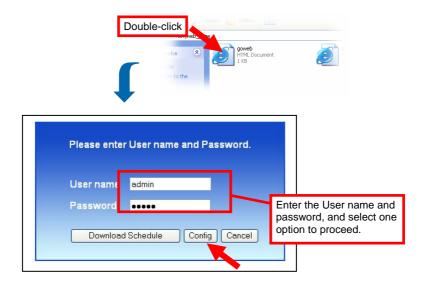
1. Click Start and choose My Network Places.



**2.** The storage server is named as **Samba Server (TS-U100)**. If you connect the USB device, it also appears in the window.



**3.** Double-click the **web\_page** shared folder, and then double-click the **goweb** item to launch your web browser and enter the web configuration utility. The login window will show as below.



Login Window of Web Configuration Utility

To enter the configuration utility, type **admin** in User name box and **admin** in Password box. Select the **Configure** option and click *Login*.

**TIP:** Selecting the **Download schedule** option allows you to enter the Download page.

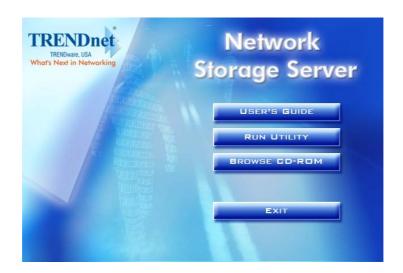
**Tip:** Administrator password can be changed in web configuration **Advance** menu under **Modify User** submenu.

#### **Run Utility - Easy Search**

To access and manage the Storage Server easily, the conveniently utility called **Easy Search** is provided in the Installation CD-ROM under Run Utility. **Easy Search** is a tool that allows you to set up the storage server's connection.

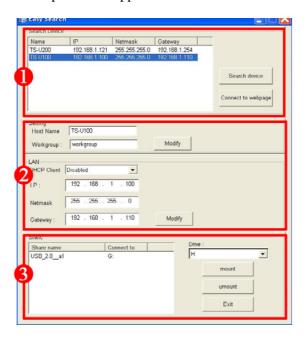
#### To Run Utiltiy

1. Insert the Installation CD-ROM into your computer's CD-ROM drive to initiate the Auto-Run program. Click **RUN UTILITY.** The easy\_search.exe will show on your desktop.



Autorun Screen of Installation CD-ROM

**2.** Click the **easy\_search.exe** on your desktop to launch the utility. The control panel will appear as below.



Control Panel of Easy Search Utility

- Search Device when launching the utility, it will search the connected file server(s) automatically, and display the results in the list. To refresh the list, click the *Search device* button again. Clicking the *Connect to webpage* button will lead you to the web configuration utility.
- **LAN** select one file server in the device list, and you can change its settings in this field. When you change the settings, click the *Modify* button to apply changed configuration.
- Static when you connect the USB device to the file server, click the *mount/umount* button to attach/remove the device to your system. Click the *Exit* button to close the utility.

# WEB CONFIGURATION

You can access and manage the Storage Server through a web browser. This chapter provides you with instructions of the Web Configuration Utility, and explains how to set up your storage server with the web browser.

# **Web Configuration Utility**

First, login the web configuration utility as described in the previous section. The Home menu will display as below.



There is a menu bar in the top of the configuration page, containing five items that allow you to set up your storage server.

#### HOME | BASIC | ADVANCED | MAINTENANCE | LOGOUT

#### The Menu Bar

- **Home** main screen of the utility, providing the brief instructions of the buttons on menu bar.
- **Basic** allows you to configure your storage server for Internet access through a step-by-step procedure.
- **Advanced** contains more submenus that allow you to set up advanced configuration.
- Maintenance provides maintenance tasks for the storage server, such as upgrading firmware and reloading factory defaults.
- **Logout** clicks to exit web configuration utility.

**TIP:** The computer's IP address must correspond with the file server's IP address in the same segment for the two devices to communicate. Extensive knowledge of LAN will be helpful in configuring the file server.

#### **Configuration - Basic**

The **Basic** menu contains three steps that will guide you through the basic configuration for the storage server. Click **Basic** in the top menu bar to start the step-by-step configuration.



Basic Menu - LAN

#### Basic → LAN

The first step is to configure the LAN settings. These options in this step display the current IP address and DHCP service of the file server, and can be modified manually. When complete, click *Next*.

#### Basic → Samba

This screen allows you to set up the Workgroup name for the storage server. You can also change the name and description of the storage server.



Basic Menu - Samba

When complete, click Next.

#### Basic → Time Zone

This screen displays the current time setting of the storage server.



Basic Menu - Time Zone

The *Method* pull-down menu allows you to set up the correct time by getting time from the computer or time server (need an Internet connection). In the *Time Zone* pull-down menu, select a time zone according to your location.

When complete, click Apply.

#### **Configuration - Advanced**

The **Advanced** menu contains six submenus: **Account**, **Samba**, **LAN**, **Time zone**, **FTP server**, and **Status**.

#### Advanced → Account

The *Account* submenu contains the options that allow you to add/delete users. Also, you can manage the users of the storage server.



Advanced Menu - Account

- Add user: You can add user of the storage server by entering a
  name in the User name box, and the corresponding password in
  the Password box. When complete, click Apply to activate the
  user's account.
- **Remove user:** You can delete an existing user's account in this option. Check the box associated to the user you want to delete and click *Apply*.
- Modify user: You can change the password of an existing user's account. Select the radio button associated to the user you want to modify and click Apply. Enter the original password in the Old password box, and then enter a new password in the New password and Retype new password boxes. When complete, click Apply.
- **User list:** Click this item to display the existing users of the storage server.

#### NOTE:

- 1. The storage server uses four pre-defined accounts in the firmware, which cannot be used as the user's account names, including: **root**, **admin**, **ftp**, and **nobody**.
- 2. The password you entered in the Password box must be longer than five characters.

#### Advanced → Samba

The *Samba* submenu allows you to set up the Workgroup name for the storage server, and change the name and description of the storage server. You can also manage the session in this submenu.



Advanced Menu - Samba

- **Global:** Enter the Workgroup name for the storage server; and you can change the name and description of the storage server
- Add/Modify/Remove Session: You can add/modify/remove the tasks in these relative options.
- Security: You can configure the security function by selecting **NO**, **Allow IP**, and **Deny IP** through the Filter Action pull-down menu.

#### Advanced → LAN

The *LAN* submenu displays the current IP address and DHCP service of the storage server, and can be modified manually.



Advanced Menu - LAN

#### Advanced → Time Zone

The *Time zone* submenu displays the current time setting of the storage server. For system management purpose, a correct time setting is critical to have accurate time stamps on the system logs.

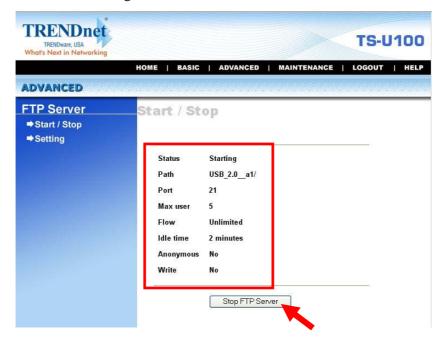


#### Advanced Menu - Time Zone

The *Method* pull-down menu allows you to set up the correct time by getting time from the computer or time server (need an Internet connection). In the *Time Zone* pull-down menu, select a time zone according to your location.

#### Advanced → FTP Server

The *FTP server* submenu contains the options that allow you to enable/disable the FTP service of the storage server, as well as the relative FTP settings.



Advanced Menu - FTP Server

• **Start/Stop:** Click *Start FTP Server* to enable the FTP server of the storage server. The status field displays the information of your FTP server settings. Once you enabled the FTP server, click *Stop FTP Server* to disable the service.

- **Setting:** This option contains the relative FTP server settings.
  - **Path:** Choose a destination for your FTP server.
  - **Port:** Assign a port (1~65535).
  - **Max user:** The users allowed to connect to the FTP server  $(1\sim10)$ .
  - **Anonymous:** Choose *Yes* will allow the user connect to the FTP server anonymously.
  - **Idle time:** Set up the idle time for the FTP server (1~10 minutes).
  - Flow: Give limit on transmission flow of the FTP server.

#### Advanced → Status

The *Status* submenu contains information of the storage server, including its basic status and the Samba server status.



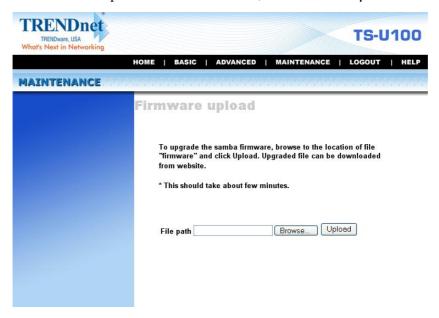
Advanced Menu - Status

#### **Configuration - Maintenance**

The **Maintenance** menu contains two submenus: *Firmware upload* and *Configuration*.

#### Maintenance → Firmware Upload

The *Firmware upload* submenu allows you to update the firmware of your storage server once you obtained a latest version of firmware. Click *Browse* to point to the firmware file, and then click *Upload*.



Maintenance Menu – Firmware Upload

#### Maintenance → Configuration

The *Configuration* submenu allows you to reload the factory default settings of the storage server. Also, you can set up the Ideal time in this submenu.



Maintenance Menu - Configuration

- **Default:** Clicking *Reset* allows you to resume the factory default settings of the storage server. This function is the same as pressing the **Reset** button on the machine.
- **Idle time:** If the user does nothing within the specified time in this option, then, the system would automatically logout. The idle time must be larger than **0**.

# **Configuration - Logout**

Click the **Logout** button to exit the web configuration utility, and it will return to the login screen of the utility.



You can re-login using the **admin** User name. Alternately, if you set up a new user for the storage server, you can login the utility using the given user account.

# DOWNLOAD FILES THROUGH STORAGE SERVER

#### **Entering Download Page**

1. If you are in the configuration mode, click **Logout** to exit the web configuration utility, and re-login the utility's download page by selecting the **Download schedule** item on the login dialog box.



**TIP:** If the administrator has added users of the storage server, the users can login the Download page with their user name and password.

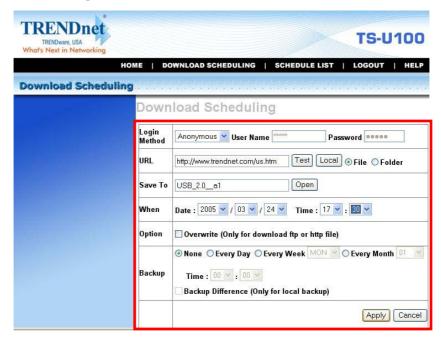
2. The Main menu of Download page will display as below.



- **Home** main screen of the download page, providing the brief instructions of the buttons on menu bar.
- Download Scheduling clicks to set up your download schedule.
- Schedule List contains the information of scheduled download tasks.
- **Logout** clicks to exit the download page.

#### Scheduling Download Task

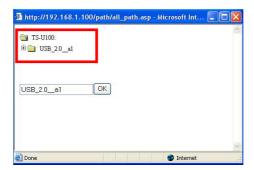
Click the **Download Scheduling** menu to set up your download tasks. Enter the required information in the relative fields.



Setup Screen of Download Scheduling

- Login Method: According to the settings of target server, choose Anonymous or Account from pull-down menu. When you choose Account, you have to enter the correct User name and Password.
- **URL:** Enter the URL address of target server. Click *test* to test the connection.

• Save to: Click *open* to bring up the following window that allows you to assign the destination folder to save the downloaded files. When completed, click *OK*.



- When: You have to set up the start-up time to download files from the pull-down menu of the *Date* and *Time* options.
- Overwrite: When the downloaded files have the same filename as the files in the destination folder, checking this option will overwrite the old file in the folder.

When completed, click *Apply* to save this download task to the Schedule List.

#### **Schedule List**

Click the **Schedule List** menu to display the scheduled download tasks as below.



Scheduled Download Tasks

You can edit, delete and view these download tasks from the list. When you change the settings of selected task, click *Apply* to save the configuration. Click *Refresh* to reload the status of these tasks.

#### Logout

Click the **Logout** button to exit the download page, and it will return to the login screen of the utility.



**NOTE:** If you are denied to enter the Configuration Utility or Download page, the following warning message will appear on the screen. Please try to enter the correct username and password again, or contact your network administrator.

# UNAUTHORIZED ACCESS There was an error with either your username and/or password. Please contact your System Administrator. Go Back to LOGIN or Close Browser.

# PRODUCT SPECIFICATION

#### **Standards**

Network Standards: IEEE 802.3, IEEE 802.3u.

USB Interface: USB 2.0, USB 1.1.

#### **Connecting Ports**

- One 10/100 RJ-45 connector (Auto MDI-X).
- Two USB 2.0 ports.
- One Power jack.

#### **Buttons**

Reset Button and Mode Button.

#### **LEDs**

Power, LAN, Mode

#### Management

- Web-based administrative program
- Easy Search

#### **Operating System Support**

- Windows 98/ME, Windows NT, Windows 2000/XP;
- Linux SMB.

#### Environmental and Physical

Power Supply: 5VDC, 2.4 Amp.

**Operating Temperature**: 0°C to 50°C.

Storage Temperature: -20°C to 50°C.

**Humidity**: 10% to 90%, non-condensing at 30°C.

#### **EMI Compliance**

FCC Class B, CE Class B, VCCI.

# **Limited Warranty**

TRENDware warrants its products against defects in material and workmanship, under normal use and service, for the following lengths of time from the date of purchase.

#### TS-U100 - 2 Years Warranty

If a product does not operate as warranted above during the applicable warranty period, TRENDware shall, at its option and expense, repair the defective product or part, deliver to customer an equivalent product or part to replace the defective item, or refund to customer the purchase price paid for the defective product. All products that are replaced will become the property of TRENDware. Replacement products may be new or reconditioned.

TRENDware shall not be responsible for any software, firmware, information, or memory data of customer contained in, stored on, or integrated with any products returned to TRENDware pursuant to any warranty.

There are no user serviceable parts inside the product. Do not remove or attempt to service the product by any unauthorized service center. This warranty is voided if (i) the product has been modified or repaired by any unauthorized service center, (ii) the product was subject to accident, abuse, or improper use (iii) the product was subject to conditions more severe than those specified in the manual.

Warranty service may be obtained by contacting TRENDware office within the applicable warranty period for a Return Material Authorization (RMA) number, accompanied by a copy of the dated proof of the purchase. Products returned to TRENDware must be pre-authorized by TRENDware with RMA number marked on the outside of the package, and sent prepaid, insured and packaged appropriately for safe shipment.

WARRANTIES EXCLUSIVE: IF THE TRENDWARE PRODUCT DOES NOT OPERATE AS WARRANTED ABOVE, THE CUSTOMER'S SOLE REMEDY SHALL BE, AT TRENDWARE'S OPTION, REPAIR OR REPLACEMENT. THE FOREGOING WARRANTIES AND REMEDIES ARE EXCLUSIVE AND ARE IN LIEU OF ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, EITHER IN FACT OR BY OPERATION OF LAW, STATUTORY OR OTHERWISE, INCLUDING WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. TRENDWARE NEITHER ASSUMES NOR AUTHORIZES ANY OTHER PERSON TO ASSUME FOR IT ANY OTHER LIABILITY IN CONNECTION WITH THE SALE, INSTALLATION MAINTENANCE OR USE OF TRENDWARE'S PRODUCTS.

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**Governing Law:** This Limited Warranty shall be governed by the laws of the state of California

AC/DC Power Adapter, Cooling Fan, and Power Supply carry

1 Year Warranty

# **Technical Support**

You can find the most recent driver/firmware/software and user documentations on the TRENDware website. TRENDware provides FREE technical support for all customers for the duration of the warranty period on this product.

TRENDware Technical Support Tel: +1-310-626-6252 Fax: +1-310-626-6267

E-mail: support@trendware.com www.TRENDnet.com

Monday ~ Friday, 7:30AM ~ 6:00PM Pacific Standard Time (Except holidays)



#### **Product Warranty Registration**

Please take a moment to register your product online. Go to TRENDware's website at http://www.TRENDNET.com

TRENDware International, Inc.

3135 Kashiwa Street Torrance, CA 90505

http://www.TRENDNET.com

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