DMA-1000/1000W

Digital Media Adapter

Support Notes

<u>Revision 1.20</u> <u>Nov 2006</u>



All contents copyright (c) 2006 ZyXEL Communications Corporation.

INDEX

1. DMA-1000/1000W Introduction	3
2. Basic Application: Directly Connect to a Media Server	4
2.1 The Application Diagram	4
2.2 Hardware Connection	4
2.3 Software Installation	5
3. Advanced Application: Connect to a Ethernet Hub/Switch	6
3.1 The Application Diagram	6
3.2 Hardware Connection	7
3.3 Software Installation	8
Frequently Asked Questions	9
A. DiXiM Media Server FAQs	9
A01. DiXiM Media Server & Firewall related issue	9
A02. The "DiXiM Media Server Helper" window popping up 1	1
A03. How to publish contents on DiXiM Media Server?1	2
B. DMA-1000/1000W FAQs 1	3
B01. Setting the Network 1	3
B02. Finding the Media Server 1	5
B03. Add Favorite doesn't work on DMA-10001	6
C. General FAQs 1	7
C01. Can I run DiXiM Media Server and Microsoft Windows Media Connect at	
the same time on a computer?1	7
C02. Supported and Unsupported format on screen display 1	7

1. DMA-1000/1000W Introduction

In future, you will probably want to use all kinds of digital contents for your entertainment. E.g. surf internet, transmit data, watch movies, browse photos, and listen to music. Perhaps you will want to do this not only at your desk or in the study room, but also from everywhere in your house. Nowadays, you capture digital images on your digital camera, you capture digital videos on your digital camcorder, and you rip music from CDs into digital audio files and therefore, your PC is full of digital entertainment. You are disappointed that you can only enjoy these files on your PC, instead of on that large, digital, flat-screen TV you just bought. The ZyXEL digital media adapter DMA-1000/1000W is designed to receive the content from the PC through wired Ethernet networking technology to exchange digital media and control information then display the content to TV with simple audio and video cables.

From the comfort of your own living room, the DMA-1000/1000W allows you to stream all video content to your big flat panel Plasma or LCD TV from your PC with appropriate software. You can also view your digital photo collection on your TV straight from your PC or playback all the digital music from your computer on your stereo system.

Here we will show you two kinds of connection methods on how to deploy ZyXEL DMA-1000/1000W on your home:

Basic Application: Directly connect to a media server

• Advanced Application: Connect to a Ethernet Hub/Switch

See following for detail description on these two scenarios.

All contents copyright (c) 2006 ZyXEL Communications Corporation.

2. Basic Application: Directly Connect to a

Media Server

2.1 The Application Diagram



In this basic application scenario, you have all the devices including TV set, ZyXEL DMA-1000/1000W, and PC/Laptop or NAS (with embedded media server) in the same room. This is the simplest environment when deploy ZyXEL DMA-1000/1000W.

2.2 Hardware Connection

You need to use cross-over Ethernet cable to directly connect your PC/Laptop (or ZyXEL network storage appliance NSA-220) and ZyXEL DMA-1000/1000W. For connecting to you TV set, you can use either HDMI cable or S-Video cable for the video

signal transmission. If you use HDMI cable, then the audio output would be also transmitted over the HDMI cable. If you use S-Video cable for video transmission, then you need to choose either a coaxial S/PDIF cable or AV cable for transmission of the audio signal to the TV set.

For detail connection procedures, please refer to DMA-1000/1000W Quick Start Guide or User Guide.

2.3 Software Installation

The ZyXEL DMA-1000/1000W gets the data (music, photos and videos) from the media servers. In this directly connection scenario, a PC/Laptop or NAS (Network Attached Storage) need to act as a media server.

If you use ZyXEL NSA-220, then you won't need to install any extra software. If you want to use your PC/Laptop, install the bundled DiXiM Media Server software. For detail step-by-step procedures on installing DiXiM Media Server, please refer to DMA-1000/1000W Quick Start Guide.

3. Advanced Application: Connect to a

Ethernet Hub/Switch

3.1 The Application Diagram



In this advanced application scenario, your TV set had already sat down in living room (1st Floor) and there is no Ethernet outlet placed in living room. Meanwhile, your computer and network devices are all settled down in the study room (2nd Floor). This is a typical layout on most people's home. We will describe how to deploy ZyXEL DMA-1000/1000W in such environment.

3.2 Hardware Connection

In this application scenario, we use the following hardware devices:

- ZyXEL Digital Media Adapter DMA-1000/1000W
- ZyXEL Power Line Adapter PLA-400 *2
- ZyXEL Network Storage Appliance NSA-220
- ZyXEL DSL CPE P-662H
- PC/Laptop
- TV set

In the 1st floor, the living room, you need to use straight-through Ethernet cable to connect the ZyXEL PLA-400 and ZyXEL DMA-1000/1000W. Regarding the connection between DMA-1000/1000W and TV set, refer to the scenario described above or see the DMA-1000 Quick Start Guide.

In the 2nd floor, the study room, connect PLA-400 to the LAN port of your DSL MODEM ZyXEL P-662H. PC/Laptop and ZyXEL NSA-220 are also connected to the LAN port of P-662H.

You can extend the LAN area from study room on 2nd floor to the living room on 1st floor through using two PLA-400s. The data stored on PC/Laptop or NSA-220 will be streamed to DMA-1000/1000W and then to the TV set through the existing power line network.

3.3 Software Installation

The PC/Laptop or NSA-220 acts as a media server in this scenario too. The DMA-1000/1000W gets the data (music, photos and videos) from those media servers.

Like in the previous scenario, when using ZyXEL NSA-220 you don't need to install any extra software because NSA-220 has Media Server built-in. However, you may need to install the bundled DiXiM Media Server software on you PC/Laptop. For the detailed step-by-step procedures on installing DiXiM Media Server, please refer to DMA-1000/1000W Quick Start Guide.

Frequently Asked Questions

A. DiXiM Media Server FAQs

A01. DiXiM Media Server & Firewall related issue

When you installing DiXiM Media Server on your PC/Laptop, if you see a window asking about configuring the Windows firewall, just click YES. This allows the DMA-1000/1000W to access the media files that you publish on this media server.

Question	
?	To use DiXiM Media Server, you must configure Windows Firewall settings to allow the connections with the server. (Note: You can set this configuration later. Please see ""Help"" for more details.)
	Do you want to change the Windows Firewall settings?
	是(1) 否(10

The DiXiM Media Server will add an entry to the Windows Firewall Exceptions list.

The entry will look like the one encircled on the following figure.

😻 Windows Firewall 🛛 💽
General Exceptions Advanced
Windows Firewall is blocking incoming network connections, except for the programs and services selected below. Adding exceptions allows some programs to work better but might increase your security risk.
Programs and Services:
Name
Discover NSA devices on LAN
DXiM Media Server
🗹 File and Printer Sharing 🥂 🝵
☑ File Transfer Program
🗹 Genie Backup Manager
🖉 Genie Backup Manager 🥮
🗹 Genie Backup Manager Professional
☑ Internet Explorer
✓ iTunes
Meeting Room
Remote Assistance
Add Program Add Port Edit Delete
Display a notification when Windows Firewall blocks a program
What are the risks of allowing exceptions?
OK Cancel

If your computer has any other software firewalls, please refer to the following table

to manually configure them to allow the DMA-1000/1000W to access this PC/Laptop.

Application	Program file	Function	Port No.	Protocol
	name			
DiXiM Media	dmsf.exe	DiXiM SSDP Discovery	1900	UDP
Server		DiXiM Media Server Device	30000	ТСР
		DiXiM Media Server HTTP	30001	ТСР

A02. The "DiXiM Media Server Helper" window popping up

When finishing the installation of DiXiM Media Server, there will be DiXiM Media Server Helper windows popping up to notify about media clients requesting to access your DiXiM Media Server.



You can click on "Start Media Server Tool" button to open DiXiM Media Server Tool. Or tick on "Don't show this message again" checkbox to disable the pop-up window.



All contents copyright (c) 2006 ZyXEL Communications Corporation.

You can add this media client (e.g. DMA-1000/1000W. The IP address may vary from the screen shot.) on published list, then this media client will be able to access this media server's published content.

📟 DiXiM Media	a Server T	ool				
Published Folder	Security	Media Server Name	Туре	e of Published File Sta	arting or Stopping th	he Server
Unpublished List	t "-			Ċ	Published List	
IP Address	Host Na	MAC Address	^		IP Address	Host Name MAC Address
172.23.98		00-60-b3-55-aa-5a		1	192.168.50.33	00-40-ca-99-a2-50
172.23.100		00-60-b3-1e-6a-0d		Publication ->	172.23.30.106	00-40-ca-99-a2-38
192.168.50		00-40-ca-99-a2-51				
172.23.98		00-16-6f-11-0e-f0				7
172.23.98		00-16-6f-11-01-d3				
172.23.100		00-15-00-4b-b6-56		<. Hanublish		
172.23.98.33		00-15-00-41-f2-aa		<- unpublish	DM/	A-1000's MAC
172.23.99.82		00-15-00-07-34-12			add	1000
172.23.30		00-13-d3-l1-bb-55	_		auu	1033
172.23.99		00-13-ce-78-00-8e				
172.23.33		00-13-08-30-38-62		Delete		
172.23.30.03		00-13-49-03-30-64				
172.23.99		00-13-02-be-01-4e				
172.23.98.74		00-13-02-7c-da-00				
172.23.99.65		00-13-02-71-06-3f				
172.23.98		00-13-02-3a-d1-98	¥			
Default C Unpublish C Publicatio	n				, 🔽 Show Secur	rity Information Dialog Box.
				[ОК	Cancel Apply

A03. How to publish contents on DiXiM Media Server?

- 1. Open the DiXiM Media Server Tool by double clicking the DiXiM Media Server icon displayed in the bottom right system tray.
- 2. click on the tab "**Published Folder**" to see all the published folders
- 3. click on the "**Add Folder...**" button to add the folder you want to share with the media client (i.e. DMA-1000/1000W)

🚥 DiXiM Media Server Tool	
Published Folder Security Media Server Name Type of Published File Starting or Stopping the Serve	r]
Published Folder List	Refresh List
C:\Documents and Settings\All Users\Documents\My Music C:\Documents and Settings\All Users\Documents\My Pictures C:\Documents and Settings\All Users\Documents\My Videos D:\MP3 D:\MyPic	
Add Folder	Rebuild Database
OK Ca	incel Apply

B. DMA-1000/1000W FAQs

B01. Setting the Network

ZyXEL DMA-1000/1000W is designed for simple use. In general, it is not necessary to configure the DMA-1000/1000W. It can get or assign the IP address automatically. The default setting is as shown on the following figure. If you need to configure the IP address for you DMA-1000/1000W manually, you can find the setup page under "**OPTION**"/ "**Network Settings**"

TITLE	OPTION					
Network Settings	Network Settings	\$				
	TV Settings					
	Audio Output Settings					
	Language Settings					
	Settings for Ease of Use	SN GROUP				
	Reset Settings					
	Software Update					
	Device Information					
		1/8				

If you want to configure the IP address manually, just change the value of the "Get IP Address" field from YES to NO. Then you can enter the IP Address, Subnet Mask, Default Gateway, and DNS Server.

In the following figure, you can also get the information about MAC Address of DMA-1000/1000W. This MAC Address must be present in **Published List** of DiXiM Media Server installed on you PC/Laptop so that the media server can let this DMA-1000/1000W access the published media.



B02. Finding the Media Server

Just like the Network Setting, the DMA-1000/1000W can automatically scan media servers in the network. The following screenshot shows DMA-1000/1000W has found two media servers: A-TM3002WTMi and nsa-220. Thus, you can play the contents stored on these two media servers.

There is an icon shown in screen's bottom right which indicates the number of media servers (DiXiM Media Server or other DLNA certified media servers) that DMA-1000/1000W has found.



B03. Add Favorite doesn't work on DMA-1000

When adding/editing favorite list, you need to press power button from remote control to turn off and then turn on again to make the change become effective on DMA-1000. This is the Save Configuration procedures.

If you do not finish the Save Configuration procedures and turn the power off from the power cord or power button in the rear of DMA-1000, then all your editing will be lost. So please make sure you perform the Save Configuration procedures before you do these two kinds of shutdown.

C. General FAQs

C01. Can I run DiXiM Media Server and Microsoft Windows Media Connect at the same time on a computer?

We DO NOT recommend install DiXiM Media Server and Microsoft Windows Media Connect on the same computer. Due to they recognize metadata of file to get file information and register it to CDS (Content Directory Service), they will be read if both of them are installed on the same server. In other words, if you install both of them on you computer and publish (/share) the same folders to client (DMA-1000), then the client may have the error display on file lists.

C02. Supported and Unsupported format on screen display

You may find that the files existing on your computer which can be played/displayed properly on your computer but it can not be played/displayed even though you publish/share those files to DMA-1000. This is because the Media Server (DiXiM Media Server) and/or Media Client (DMA-1000) doesn't support the media format. There are three possible screen displays: black, gray or none (not display on screen).