Networking DynEd Courseware

Tired of keeping track of all those CD-ROMs in your lab?

Why not go discless? All DynEd programs can be networked! Once the content of the CD-ROMs has been installed on the network server, the CDs themselves are no longer required. Students can easily access the programs from any station on the network. In addition, all student records are automatically stored on the central file server where they can be accessed and evaluated by instructional staff from any computer on the network.

Which DynEd Programs are Networkable? All of them!

What are the Advantages of NetWorking DynEd's Programs?

- **Eliminates CD-ROM management** – no more CDs to handle
- **Eases access** to all installed courses and simplifies switching between levels within a course
- **Centralizes all student records** on the network server for convenient analysis
- **Simplifies installation and updating** of DynEd courses (just once on the central file server)

What kind of Network is Required?

Most modern networks should be able to run DynEd courseware. Client computers may be either Macintosh or Windows computers, and servers running Novell Netware, Windows NT or AppleShare are all supported. An overview of some typical network configurations can be found in Example Network Configurations on the following pages.

How adequate any particular network is for running DynEd courseware depends on a number of factors, including how much video the course has, how many simultaneous users there are, and how much other traffic there is on the network. All servers and networks have limitations that may cause them to falter when the load exceeds one of their capacities.

Lessons which use video require streaming data at 90 Kilobytes per second.* Non-video lessons require only 22 Kilobytes of data per second streamed to the computers. Programs using DynEd's video-based courses generally need a 100Base-T connection to run the programs effectively. In addition, DynEd strongly recommends utilizing a "Switch" for connecting the computers, rather than a "Hub."

> ***Note: Compressed Video Versions** – On CDs labeled *version 4.0* or higher, we have added several more highly compressed versions of the course videos. By selecting one of these alternate video compressions, less bandwidth is required. This will allow significantly more video users to run simultaneously on your network.

What kind of demand on our Network should I plan for?

It is nearly impossible for DynEd to specify a server and network combination that we can guarantee will handle the number of simultaneous users you want. We outline below the type of network load that can be expected from the use of our programs, but we urge you find a dealer or manufacturer who can suggest a configuration that they are willing to support.

System load can vary from 22 Kilobytes (per second per student) for audio all the way up to 90 Kilobytes (per second per student) for video. Version 4.0 and 4.1 CD-ROMs contain alternate files with lower video data rates: typically 90KB/s, 45KB/s and 25KB/s. On average, for our video-based courses (*Functioning in Business* and *The Lost Secret*) video is playing 70% of the time. For *New Dynamic English*, *Dynamic Business English*, and *Clear Speech Works* the video is playing an average of 2010% of the time. For our non-video courses, it can be assumed that audio is playing 80% of the time.

In general, when designing a network server for DynEd courseware, a reasonable average data rate is 60 Kilobytes per second per user (for version 4.0 or higher CD-ROMs). So, if the goal is to support 30 simultaneous users, the server must be able to handle a data rate of at least 1.80 Megabytes per second (30 users times 60KB/s). (Don't forget that the server operating system license must also support the desired number of simultaneous users. If you are using Novell, for example, and want 30 simultaneous users, then you will need at least a 30-user Novell license on your server.)

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Will Your Network Work?

Attached is a Network Evaluation Worksheet – page 4 of this document. If you would like our engineering team to analyze your network configuration, please fill it out and fax it to DynEd at +1 650 375 7017. Our engineers will be happy to confirm whether or not the system described SHOULD be able to handle the number of simultaneous users required.

Testing Your Network

To confirm the efficiency of your network in running DynEd courses, you may do a free network test using the DynEd demo disc. Demo lessons are fully equivalent in terms of demand on network resources as similar lessons on regular courseware discs, and thereby provide a valid test of your actual network configuration.

To do a network installation of the demo disc: 1) Insert the demo disc CD in the CD-ROM drive of a client machine on the network; 2) Click on the Install button; 3) Read the License Agreement, then click on the *I Accept* button; 4) Browse to the server hard drive to specify the Installation Directory, which will be something like H:\DynEd – where "H" is the letter for the server's hard drive; 5) Click on *Run from HD* (650 MB) then on the *Install* button. Make sure you have enough space on the server hard drive to accommodate 650 MB and still have approximately 10% of the HD space left over; 6) Select the support language you prefer (usually English/Mix) and click the *OK* button; 7) Click the Install button; 8) Wait while all the relevant files are copied onto the server's hard drive -- then, when asked, click *Register Now; and* 9) Click on *Register Online* to complete the registration process.

Ordering DynEd Network Site Licenses

To order a DynEd network site license, please provide the following information:

- Courses
- Number of simultaneous users for each course*
- Duration of license

Your order will then be processed and you will be supplied with:

- one set of courseware discs
- all relevant support materials in an electronic format – User/Teacher/Study Guides, manuals, etc.
- an Installation CD & detailed installation instructions
- the DynEd Records Manager - DynEd network-based record-keeping system
- a DynEd Quick Start Guide with your unique Network Installation Code

* DynEd's network licenses (and pricing) are based on the number of simultaneous users to be allowed – i.e., the number of students who can study a particular program all at the same time. Generally, this is equivalent to the number of stations on the network, but it need not be in every case.

Please contact DynEd or your local DynEd dealer for help in evaluating your needs and for specific prices for the configuration that is most appropriate to your situation.

Installing DynEd Network Courses

Always install via a client machine (not directly at the server) using the most recent Installation Disc (or, for the Demo disc, the installer provided on it) and review the ***Network Installation Guide*** for step-by-step instructions.

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Disc Space Requirements

for Discless Network Installation

	Total MB
Let's Go	1,045
First English	210
English For Success	205
New Dynamic English	1,580
The Lost Secret	390
Dynamic Business English	290
Functioning in Business	410
English by the Numbers	105
Test Mountain	120
Clear Speech Works	520
Advanced Listening (1-9)	1,090
Hospitality English	125
Aviation English for Controllers	430
Aviation English for Pilots	375
Placement Test (Aviation)	145
Dynamic Classics	230
Teacher Training Course	500
Speaking Test	200
Placement Tests	240
e-Lective	120

NOTES

All numbers at left are in MBs, indicating the amount of hard disc space required to install the complete course indicated, with foreign language support.

Technology installers, such as, QuickTIme and Adobe Acrobat require an additional 150 MB.

All courses installed with foreign language support may also be run in an English-only mode.

If you are also installing DynEd's Placement on your network, please see the additional space these require:

Records Manager

The amount of required hard disc space for storing student records can be estimated with the following formula: # Students * # Sessions per week * # of Weeks *256/1.048,576 = # MBs of disc storage required

General Recommendations

1. **File Servers**
   - You should have more than one hard drive partitioned as one volume (RAID).
   - You should have more than 25% free hard drive space after loading all DynEd content.
   - Additional memory can improve performance.
2. **Network**
   - Switched networks are highly recommended if any Video courses will be used.
   - Extraneous network traffic can have a negative impact on the performance of DynEd courseware.
3. **Student Computers (Clients)**
   - All clients should have Microphones and Speakers or Headsets.
   - All clients must be able to access the file server as a hard drive (volume).
   - See the DynEd Users Guide for product specific requirements.

Other Information

- DynEd cannot guarantee network performance; these are guidelines only.
- TCP/IP support is not necessary for Networking DynEd courses.
- DynEd recommends you have knowledgeable network support personnel available.

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Network Evaluation Worksheet

Organization Name: _____ **Date:** _____

Contact Name: _____

E-mail: _____

Number of Simultaneous Users: _____

DynEd Product(s) to be Networked: _____

Server

Processor:	_____	RAM:	_____ MB
Available Hard Drive Space:	_____		GB
Hard Drive Controller:	[ ] IDE [ ] SCSI	[ ] RAID	
Network Card:	_____		Base-T
Operating System:	_____		

Network

Please fill in the blanks below or provide a written description of your network:

1. I have a 10 / 100 / 1000 Mbit link from the server to a switch / hub / other
2. From there, I have a 10 / 100 / 1000 Mbit link to a switch / hub / client / other
3. From there, I have a 10 / 100 / 1000 Mbit link to a switch / hub / client / other

Optional Text description of the connection(s) between the Server and Clients. Please include all Switches, Hubs, Routers, and Speeds (10Base-T or 100Base-T).

Example: *There is a 100Base-T connection from the Server to a 3Com SuperStack II Switch 2000. 15 clients are on the switch's 10Base-T ports. 5 clients are connected to an 8 Port 10Base-T hub that is connected to the switch. There is an Ascend P50 Router connected for Internet access.*

_____

_____

_____

_____

Student Computers (Clients)

Processor:	_____	RAM:	_____ MB
Operating System:	_____		
Network Card:	10 / 100 / 1000 Base-T		

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