



# The 3Com E-Rate Workbook

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## E-rate Background

The federal government has historically established programs aimed at providing telecommunications services at reasonable rates to every person in the United States. The Telecommunications Act of 1996, which deregulated a wide range of telecommunications services, is the latest example. The Snowe-Rockefeller-Exon-Kerrey Amendment to this law is especially significant for schools and libraries, because it makes equipment and access to the Internet/World Wide Web affordable for educators, students, and library users. This amendment establishes a \$2.25 billion annual E-rate fund that allows eligible schools and libraries to purchase networking equipment, telecommunications services, internal connections, and Internet access at substantial discounts.

The Universal Service Fund Schools and Libraries Program Description is available for download at: [www.sl.universalservice.org/apply/step1.asp](http://www.sl.universalservice.org/apply/step1.asp).

## Key Dates for Year 4 Funding: July 1, 2001 to June 30, 2002

**Form 470.** The Form 470 application can be filed at any time of the year if you are seeking internal connections contracts. The deadline for completing this form is December 21, 2000.

**Form 471.** The filing window for Form 471 applications opened November 6, 2000. The deadline for filing this form is January 18, 2001.

**Form 486.** Form 486 should be filed after delivery of the services. If these services start in July 2001, Form 486 can be filed as soon as the SLD notifies the applicants that its funding commitment has been approved.

Check the SLD's Web site at [www.sl.universalservice.org](http://www.sl.universalservice.org) for the latest information on the E-rate program.

## Summary of Changes Since Your Last Application

The E-rate program underwent some major changes in Year 3, but this will not be the case in Year 4. Applicants will apply in the fall of 2000 for discounts for the funding year that will run from July 1, 2001 to June 30, 2002. However, there will be a few minor changes involved in processing funding requests for Year 3. Here are further details:

### Choosing Your Payment Method

The Federal Communications Commission (FCC) is leaving it up to applicants and service providers to work out whether or not they'll want to use discounted invoices or the Billed Entity Applicant Reimbursement (BEAR) process to receive their discounts during the third funding year, which runs from July 1, 2000 to June 30, 2001. More details on these payment methods are available in the "Getting Your Discounts" section of this workbook.

However, once you have submitted a form for a particular funding item, you must continue to use that payment method all year long. In other words, if your service provider submits an invoice to the Schools and Libraries Division, you must commit yourself to that payment method. Similarly, if you submit a BEAR form for a particular item, you must continue to use that method throughout the rest of the year.

### **Form 486 and Form 500**

In the summer of 2000, the FCC approved a new version of Form 486, the form that E-rate applicants have to submit to certify that their service providers should be paid. Consequently, the SLD is no longer accepting the old version of this form, which was dated October 1998.

The new form is simplified, and is to be used to signal that a service has been delivered and the Universal Service Administrative Company is authorized to begin processing payments to a vendor. Applicants also will use this form to specify the entity that has approved their technology plans.

Form 500 takes over some of the functions that Form 486 used to perform. Form 500 should be used if an applicant needs to extend a contract to take advantage of an extension in the installation deadline. For instance, if an applicant did not install internal connections until right before the Sept. 30, 2000 deadline for Year 2, and the contract's expiration date was June 30, 2000, the applicant would have to use Form 500 to notify the SLD that the contract had been extended so that the work could be performed.

Form 500 is also used to cancel funding requests an applicant will not be able to use, or to reduce the amount of funding that has been set aside for an applicant. The SLD hopes that applicants will make use of these features to free-up funding that could be committed to other applicants.

### **Funding for Year 2 Applicants Who Filed Late**

Because applicant demand for Year 2 discounts did not exceed the available funds, the SLD will make funds available for Year 2 applications that were received after April 6, 1999. The SLD will fund eligible applications that were filed between April 6, 1999 and March 1, 2000, as well as fund applications filed between March 1 and March 31, 2000, according to special priority rules.

The SLD will not begin issuing these funding commitments until it has finished processing funding commitments for Year 3.

### **Waivers for the Filing Deadline**

The FCC has approved waivers for of the Year 3 filing window deadline for two categories of users. The first group is those applicants who were trying to complete an online application the night of the Year 3 filing deadline when the SLD's server crashed. Those applicants who had notified the SLD or their state E-rate coordinator of the problem have been given additional time to complete their applications.

In addition, the FCC has granted relief to more than 150 school districts in Oklahoma whose applications were rejected after the SLD determined that there were certain irregularities associated with a vendor named in the applications. The FCC has given these schools until Sept. 11, 2000, to file a new Form 470 application for Year 3. The FCC will also give them until Dec. 11, 2000 to complete a new Form 471 application. Applicants will not be able to request additional support.

## Qualifying for E-Rate Funding

A school qualifies for E-rate funding if it is a public or private K-12 school in the United States operating on a non-profit basis.

In addition:

- Schools must meet the statutory definition of an elementary or secondary school found in the Elementary and Secondary Education Act of 1965.
- Private schools cannot have an endowment exceeding \$50 million.
- Post-secondary schools (colleges, universities, community colleges, junior colleges, adult education centers, trade schools) do not qualify for E-rate funding.
- To qualify, a library must be eligible for assistance from a state library administrative agency under the Library Services and Technology Act.
- A library must operate as a nonprofit entity to qualify.
- An academic library is eligible only if its budget is independent from the budget of any institution of higher education.

As you prepare to apply for E-rate money, it is important to keep the following in mind:

- Schools and libraries must have a budget allocating funds to cover the nondiscounted portion of the services requested. For example, if your school receives a 60-percent discount, you need to have funds budgeted to cover 40 percent of the cost of eligible E-rate services.
- Your school or library has to certify that your technology plan has been approved before the actual flow of money can occur.

## Applications for 2001–2002 E-Rate Discounts

The 2001–2002 funding period will run from July 1, 2001 to June 30, 2002. Form 470 may be filed at any time of the year to cover contracts. If you intend to purchase telecommunications services at tariffed rates, or Internet access or cellular or paging services on a month-to-month basis, you must file Form 470 after July 1 of the year preceding the funding year.

The application filing window only applies to the Form 471 application. Don't wait until that window opens to start the application process; 3Com recommends filing Form 470 as soon as possible. The current versions of Form 470 and Form 471 applications are available at [www.sl.universalservice.org/form](http://www.sl.universalservice.org/form).

## Application Process

To qualify for E-rate funding, schools and libraries must submit three separate forms to SLD. These forms must be submitted in the following order:

- Form 470 describes the service that a school/library intends to purchase. Using the information provided on Form 470, the SLD will post the request for services to its Web site for 28 days.
- Form 471 details the services for which a contract has been signed. Form 471 can be filed with the SLD after the 28-day Web-posting period.
- Form 486 confirms that contracted services have started, and that the vendor should be paid by the SLD.

## **Applying For Application for E-Rate Funding is a Two-Step Process**

### **Step 1**

Eligible schools, libraries, and consortia file Form 470 electronically or on paper. Electronic filing is encouraged. See [www.sl.universalservice.org/menu.asp](http://www.sl.universalservice.org/menu.asp) for more details.

Electronic versions of Form 470 and Form 470 Instructions can be accessed via the Web at [www.sl.universalservice.org/form](http://www.sl.universalservice.org/form).

Applications for contracts can be submitted at any time of the year, or after July 1, 2000, if you intend to purchase telecommunications services or Internet access on a month-to-month basis.

Information from most Form 470s will be posted on the SLD Web Site, which begins the competitive bidding process. See [www.sl.universalservice.org/menu.asp](http://www.sl.universalservice.org/menu.asp). Schools and libraries must wait at least 28 days from the time their Form 470 information is posted, before they can select the most cost-effective proposal.

It is important to understand that the bid requirements for the E-rate process do not supersede any local laws or regulations. All state and local procurement laws, regulations, and procedures must be followed.

If you decide to purchase services using a multiyear contract that has already been qualified for E-rate support, you do not need to file a new Form 470 to cover that contract.

### References:

#### *Form 470*

You can obtain a copy of this form at [www.sl.universalservice.org/form](http://www.sl.universalservice.org/form).

#### *Form 470 Applicant Instructions*

Instructions for completing Form 470 applications are located at [www.sl.universalservice.org/form](http://www.sl.universalservice.org/form).

### Tools to Assist You in Preparing Form 470 Applications

#### *Minimum Processing Standards*

There are certain mistakes that will cause automatic rejection of your application. To discover how to avoid automatic rejection, go to [www.sl.universalservice.org/reference/470mps.asp](http://www.sl.universalservice.org/reference/470mps.asp).

#### *Eligible Services List*

The list of products and services that are eligible for E-rate funding is at [www.sl.universalservice.org/reference/eligible.asp](http://www.sl.universalservice.org/reference/eligible.asp).

#### *Technology Planning*

To qualify for E-rate funding, your technology plan must be approved by your designated state agency. If you have questions about the technology plan approval process in your state, contact your State Department of Education or State Library. For guidance in developing a technology plan visit these sites:

[www.sl.universalservice.org/apply/step2.asp](http://www.sl.universalservice.org/apply/step2.asp)

3Com Solutions  
[www.3com.com/education/index.html](http://www.3com.com/education/index.html)  
National Center for Technology Planning  
[www.nctp.com](http://www.nctp.com)

#### More Information to Assist You in Preparing Form 470

##### *Electronic Filing Internet Address for Form 470*

Select this site to access the online application form:  
[www.sl.universalservice.org/menu.asp](http://www.sl.universalservice.org/menu.asp)

##### *Mailing Addresses for Form 470*

SLD-Form 470  
c/o Ms. Smith  
3833 Greenway Drive  
Lawrence, Kansas 66046-5444

- Completed applications should be mailed for manual filing.
- Only the signed Block 5 Certification page should be mailed for electronic filing.
- It is recommended that you send these forms by express delivery or, request a U.S. Postal Service return receipt.

#### **Step 2**

Schools and libraries must wait at least 28 days from the time their Form 470 information is posted to the SLD Web site, before they select the most cost-effective proposal and submit Form 471. After the 28-day waiting period and the opening of the equal opportunity filing window, eligible schools, libraries, and consortia can file Form 471 electronically or on paper. Electronic filing is encouraged. Go to [www.sl.universalservice.org/menu.asp](http://www.sl.universalservice.org/menu.asp). Electronic versions of Form 471, and the instructions for Form 471 can be accessed via the Web at [www.sl.universalservice.org/form](http://www.sl.universalservice.org/form). The application window opened November 6 and will close January 18, 2000. Applications must be postmarked by that date to have the best chance of being funded.

#### References:

##### *Form 471*

You can obtain a copy of this form at: [www.sl.universalservice.org/form](http://www.sl.universalservice.org/form).

##### *Form 471 Application Instructions*

Instructions for completing Form 471 applications are located at:  
[www.sl.universalservice.org/form](http://www.sl.universalservice.org/form).

##### *Calculating Your Discount*

If you are applying for E-rate discounts on eligible services, you must calculate the percentage discount that you and the entities you represent are eligible to receive. For information and examples of calculations for a school, school district, library branch, library system, or consortium check [www.sl.universalservice.org/Reference/discount.asp](http://www.sl.universalservice.org/Reference/discount.asp).

## Tools to Assist You in Preparing a Form 471 Application

### *Minimum Processing Standards*

There are certain mistakes that will cause automatic rejection of your application. To discover how to avoid automatic rejection, go to [www.sl.universalservice.org/reference/471mps.asp](http://www.sl.universalservice.org/reference/471mps.asp).

### *Eligible Services List*

The list of products and services that are eligible for E-rate funding is at [www.sl.universalservice.org/reference/eligible.asp](http://www.sl.universalservice.org/reference/eligible.asp).

### *Discount Matrix*

Information about how to calculate your E-rate Discount can be found at [www.sl.universalservice.org/reference/dmatrix.asp](http://www.sl.universalservice.org/reference/dmatrix.asp).

### *MSA/Goldsmith Data*

Where your district is located—in an urban or rural area—will have an impact on your discount. For information on how to determine if your school district is in an urban or rural area check [www.sl.universalservice.org/Reference/msa.asp](http://www.sl.universalservice.org/Reference/msa.asp)

### *Technology Planning*

To qualify for E-rate funding you must have a technology plan, and it must be approved by your designated state agency. If you have questions about the technology plan approval process in your state, contact your State Department of Education or State Library. For guidance in developing a technology plan visit these sites:

- [www.sl.universalservice.org/apply/step2.asp](http://www.sl.universalservice.org/apply/step2.asp)
- 3Com Solutions—Education Resource Center  
[www.3com.com/education/index.html](http://www.3com.com/education/index.html)
- National Center for Technology Planning  
[www.nctp.com](http://www.nctp.com)

## Guidance on Special Topics to Assist You in Preparing a Form 471 Application

### *Wide Area Networks (WAN)*

The Wide Area Networks Fact Sheet provides information to assist you in determining what is or is not eligible for E-rate funding. The Fact Sheet is at [www.sl.universalservice.org/reference/wan.asp](http://www.sl.universalservice.org/reference/wan.asp).

## Cost Allocation Guidelines

Guidelines for calculating the “pre-discount cost” for discounted services that contain eligible and ineligible components and consortia comprising eligible and ineligible entities is at [www.sl.universalservice.org/Reference/costaloc.asp](http://www.sl.universalservice.org/Reference/costaloc.asp).

## Electronic Filing Internet Address for Form 471

Select this site to access the online application form:  
[www.sl.universalservice.org/menu.asp](http://www.sl.universalservice.org/menu.asp)

### Mailing Addresses for Form 471

SLD-Form 471  
c/o Ms. Smith  
3833 Greenway Drive  
Lawrence, KS 66044-5444

- Completed applications should be mailed for manual filing.
- Only item 25, (description[s] of services), and the signed Block 6 certification should be mailed for electronic filing.
- These forms should be sent by express delivery, or request a U.S. Postal Service return receipt.

### Problem Resolution and Program Integrity Assurance (PIA)

The SLD will review Form 471 requests before making funding commitments. During the process, there may be questions concerning Form 471. The problem-resolution process will begin at that point.

#### References:

##### Form 471 Problem Resolution

For helpful documents and tips on how to guide you through the process of resolving problems identified in the SLD review process, check [www.sl.universalservice.org/apply/6pr.asp](http://www.sl.universalservice.org/apply/6pr.asp).

The SLD is responsible for making sure that the E-rate funds are used within the guidelines of the legislation. The Program Integrity Assurance team reviews Form 471 applications to ensure that the schools and libraries applying for E-rate discounts are complying with the program.

Additional information about PIA is available at: [www.sl.universalservice.org/apply/6pia.asp](http://www.sl.universalservice.org/apply/6pia.asp).

### Corrections, Funding Commitments, and Appeals

The Form 471 Receipt Acknowledgement Letter (RAL) provides the opportunity to make some corrections to enable your Form 471 application to proceed through the process efficiently.

After your Form 471 has been processed, you will receive a Form 471 Receipt Acknowledgement Letter. This does not mean that your application has been approved. It simply means that your application has made it through one stage of the review process.

You should review your RAL to make sure that the SLD entered all of your information correctly, particularly the Service Provider Identification Number (SPIN) of your vendors, and the discount rates and funding you requested. Also make sure that your contact information is correct. If you need to make corrections, follow the instructions on the form for faxing the corrections to the SLD. You will not be able to increase the amount you originally requested.

Further information about the Form 471 RAL and how to use it is at [www.sl.universalservice.org/apply/5ral.asp](http://www.sl.universalservice.org/apply/5ral.asp).



When the SLD knows how much the FCC will let it commit for a particular funding year, and it has finished reviewing some applications, the SLD will begin issuing funding commitment letters. These letters inform you and your vendors about the amount you will receive toward the projects for which you requested support. If you were denied funding for some of your projects, it will be explained in the letter. It is important to retain this letter, because it includes several numbers and key pieces of information you will need when you proceed to get your E-rate funds.

Because the SLD treats support for telecommunications services and Internet access differently than it treats support for internal connections, it is possible you will get a letter that commits funding for the first two categories but defers a decision on the third category until the SLD knows for sure what the threshold will be for approved internal connections.

Although the SLD tries to issue the funding commitment letters before the start of the funding year on July 1 of each year, it has not yet been able to do so. In fact, it may take it as many as 20 weeks or more to complete the process. When it begins issuing funding commitment letters, it tries to issue a series of letters each week, and then posts details of the approved funding commitments to its Web site.

If you don't understand a decision, or if you believe the SLD was incorrect when it rejected one of your contracts, you can write the SLD for more information, or you can appeal the decision to the SLD or the FCC. If you wish to appeal, your appeal must be delivered to the pertinent agency within 30 days of the date of your funding commitment letter. A failure to file your appeal within that time period is automatic grounds for rejection.

Most applicants start with the SLD and then follow-up with an appeal to the FCC if the SLD rejects their arguments. Do not send appeals to both agencies at the same time. If your issue involves a substantive policy change, it should be directed to the FCC.

For post-funding commitment questions, go to [www.sl.universalservice.org/apply/10questionpost.asp](http://www.sl.universalservice.org/apply/10questionpost.asp).

SLD procedures for post-commitment appeals are at [www.sl.universalservice.org/apply/10procpost.asp](http://www.sl.universalservice.org/apply/10procpost.asp).

Sometimes applicants discover that they need to change the name of the vendor from whom they will purchase eligible E-rate products or services. If the wrong SPIN was specified for the vendor in question, or if the SPIN has changed because of a merger or acquisition, you can request that changes be made by writing a letter to the SLD.

Currently, the SLD will authorize other kinds of SPIN changes if the original vendor went out of business, refuses to participate in the program, or has failed to live up to the terms of its contract. For more information on SPIN correction and change procedures go to [www.sl.universalservice.org/apply/10spinchange.asp](http://www.sl.universalservice.org/apply/10spinchange.asp).

The FCC is currently reviewing this policy and whether or not it should be made more flexible.

## Getting Your Discounts

Once your funding commitments have been approved, you must complete some paperwork before you can receive your E-rate discounts.

### Form 486

Applicants who are notified of funding commitments and have received their Funding Commitment Decisions Letter use Form 486 to inform the SLD that the approved services have been provided by a vendor. Electronic versions of Form 486 and Form 486 instructions can be accessed at: [www.sl.universalservice.org/form](http://www.sl.universalservice.org/form).

#### References:

We recommend that these forms be sent by express delivery, or U.S. Postal Service return receipt requested, to:

SLD-Form 486  
c/o Ms. Smith  
3833 Greenway Drive  
Lawrence, KS 66044-5444

### Form 500

When the FCC tried to simplify Form 486 in the summer of 2000, it transferred some of its tasks to a new form, Form 500.

Most E-rate applicants will not have to file Form 500. However, if your situation fits one of these scenarios, you will have to do Form 500:

- You need to extend a contract to take advantage of an extension during the installation period. In the first two years of the E-rate program, the FCC decided to extend the deadline for which applicants could complete their one-time installations to Sept. 30, instead of June 30, which was the original end of the E-rate funding year. In some cases, applicants may have reported on Form 486 that their contract expired before Sept. 30. Thus, to take advantage of the deadline extension, they would need to extend their contract and report the extension to the SLD. Form 500 lets you do this.
- You decide you do not need a particular funding commitment, or you do not need as much money as you originally requested. In the E-rate program's first year, the SLD committed several hundred million dollars that applicants never used. Therefore the SLD decided to free up the money for someone else. This notification is not required, but may help other E-rate applicants. However, once you relinquish funding, you cannot reclaim it in that funding year.
- Beginning in Year 3, the SLD changed the rules about when a Form 486 could be filed. If applicants received a funding commitment letter before the start of the funding year, and thought they would start receiving services in July, the first month of the funding year, they could file Form 486 early. Form 500 provides a mechanism through which applicants can let the SLD know that they made a mistake and that they did not actually receive their services in July, like they had indicated on Form 486.

Electronic versions of Form 500 and Form 500 instructions can be accessed at <http://www.sl.universalservice.org/form>.

**BEAR Forms and Discounted Invoices**

After you have filed Form 486, you must send additional paperwork to the SLD before E-rate discounts can be processed. You can either request reimbursement for bills you have already paid, or your vendor can send the SLD a form to receive the government's portion of the purchase price. You and your vendor will need to work out which payment method will be used. However, in Year 3, once you begin using a particular method for a particular funding request, you must continue to use that method for the rest of the year.

**The BEAR Form (Form 472)**

The Billed Entity Applicant Reimbursement form, otherwise known as the BEAR form or Form 472, is used in cases where applicants already paid a vendor. This approach may be necessary if you begin receiving services before you receive your funding commitment letter. Sometimes applicants prefer this method because they feel it gives them greater leverage over their provider's performance, or because it is easier to recapture the savings for the technology budget.

You can obtain a copy of this form and instructions for completing it at: [www.sl.universalservice.org/form](http://www.sl.universalservice.org/form).

You must file a BEAR form for each service provider you have paid. Before you file the form, you must get the provider's signature on page four. The SLD will permit you to fax this page to your provider and get it returned via fax.

In the case of 3Com, BEAR forms should be faxed to Denise Cano at 408-326-7285. Her telephone number is 408-326-5884.

Once a BEAR form has been completed and your vendor has signed page four, mail the form via express delivery or U.S. Postal Service return receipt requested to:

SLD-BEAR Form  
c/o Ms. Smith  
3833 Greenway Drive  
Lawrence, KS 66044-5444

When the SLD has reviewed and approved your BEAR form, it will notify you by letter. It will then notify the Universal Service Administrative Company (USAC) to send a check for the approved amount to your vendor. The vendor is supposed to cut a check, or credit your account, within 10 days of receiving the check from USAC.

**The Service Provider Invoice Form (Form 474)**

If you prefer to pay your portion of the cost of the eligible E-rate services, ask your service provider to provide you with a discounted invoice. In this case, the provider sends you its standard invoice for the undiscounted portion of the price (for instance, 20 percent of the price if you qualified for an 80-percent discount).

The provider then completes a Service Provider Invoice Form (Form 474) and submits it to the SLD. The SLD is supposed to review the form within 20 days and send it to USAC, which then sends the payment to the vendor.

You can obtain a copy of this form and instructions for completing it at: [www.sl.universalservice.org/form](http://www.sl.universalservice.org/form).

## SLD Resources

The Schools and Libraries Division's Web site [www.sl.universalservice.org](http://www.sl.universalservice.org) provides detailed information on the E-rate program.

The SLD Web site has seven main areas:

- **What's New:** [www.sl.universalservice.org/whatsnew](http://www.sl.universalservice.org/whatsnew)  
The What's New area provides the latest news and updates on the E-rate program as well as events scheduled by the SLD.
- **How to Apply Step-by-Step:** [www.sl.universalservice.org/apply/](http://www.sl.universalservice.org/apply/)  
The How to Apply area has a 10-step process that guides you through your application for E-rate funding.
- **Apply Online:** [www.sl.universalservice.org/menu.asp](http://www.sl.universalservice.org/menu.asp)  
The Apply Online area of the SLD Web site provides the opportunity for schools and libraries to file their Form 470 and Form 471 electronically.
- **Reference Area:** [www.sl.universalservice.org/Reference/](http://www.sl.universalservice.org/Reference/)  
The Reference area provides a wealth of information about the E-rate program. This section includes information and guidance on all phases of the program including the necessary forms, instructions for completing forms, supporting documents, and frequently asked questions.
- **Vendor Area:** [www.sl.universalservice.org/vendor](http://www.sl.universalservice.org/vendor)  
The Vendor area provides vendors with resources to search Form 470 applications, which will assist them in submitting bids to schools and libraries. This area also has useful information for service providers, on learning about and complying with the E-rate program.
- **Funding Data:** [www.sl.universalservice.org/funding](http://www.sl.universalservice.org/funding)  
The Funding Data area provides information about funding commitments made to the schools and libraries that have applied for E-rate support.
- **SLD Forms:** [www.sl.universalservice.org/form](http://www.sl.universalservice.org/form)  
The SLD Forms area contains all the SLD forms and instructions. The forms and instructions may be downloaded for both PC and Macintosh computers.

## Service Provider Resources

Service providers can find information about how to participate in the E-rate program, detailed guidance on the processes, and procedures necessary to obtain contracts and receive payment.

References:

### *E-Rate Manual for Service Providers*

- A step-by-step guide to the E-rate program
- Program overview
- Process overview
- Functional overview
- Resources: [www.sl.universalservice.org/vendor/manual](http://www.sl.universalservice.org/vendor/manual)

### *Form 474 Service Provider Invoice Form and Instructions*

A copy of this form and instructions can be obtained at [www.sl.universalservice.org/form](http://www.sl.universalservice.org/form).

*Form 473 Service Provider Annual Certification Form and Instructions*

You can obtain a copy of this form and instructions at [www.sl.universalservice.org/form](http://www.sl.universalservice.org/form).

*Form 498 Service Provider Information Form*

- This form must be submitted to obtain a SPIN.
- You can obtain a copy of this form at [www.sl.universalservice.org/form](http://www.sl.universalservice.org/form).
- Phone number for inquiries: 1-888-641-8722
- Fax number for inquiries: 1-888-637-6226
- Address to send a completed Form 498 and a company letter of authorization:

USAC—Universal Service Administrative Company  
100 South Jefferson Rd.  
Whippany, NJ 07981

*Form 498 Service Provider Information Form Instructions*

Instructions for completing Form 498 are located at: [www.sl.universalservice.org/form](http://www.sl.universalservice.org/form).

*Form 499-S Universal Service Worksheet*

This form, formerly Form 457, is to be completed only by companies contributing to the Universal Service Fund, and should be submitted on a semi-annual basis. You can obtain a copy of Form 499-S at [www.sl.universalservice.org/form](http://www.sl.universalservice.org/form).

Mail copies of Form 499-S to:

Form 499-S  
c/o NECA  
80 South Jefferson Rd.  
Whippany, NJ 07981

*Service Provider Weekly Conference Call*

Call-in number: 1-847-413-2931  
Pass code: 1390177#

A conference call for service providers is held every other week. The conference call is a forum in which service providers can raise issues or concerns or ask for clarification of rules or requirements. An agenda is provided for the calls. Following the agenda portion of the call, a general question and answer session is held.

The call is moderated by Ellen Wolfhagen, director of Service Provider Outreach. The call begins at 1:00 p.m. eastern time, and concludes by 3:00 p.m. eastern time. To be added to the list to receive the agenda electronically, e-mail the SLD at [serviceprovider@universalservice.org](mailto:serviceprovider@universalservice.org).

## Schools and Libraries Division (SLD) Contact Information:

Web site: [www.sl.universalservice.org](http://www.sl.universalservice.org)

Toll-free phone number for questions: 1-888-203-8100

Toll-free fax question line: 1-888-276-8736

E-mail questions to: [question@universalservice.org](mailto:question@universalservice.org)

Guidance documents via fax-on-demand: 1-800-959-0733

E-mail questions from service providers to  
[serviceprovider@universalservice.org](mailto:serviceprovider@universalservice.org).

Send comments about the USAC Web site to [comments@universalservice.org](mailto:comments@universalservice.org).

## School Connectivity Options

### **Level I: Basic Internet Access for School Computer Labs**

### **Level II: Basic Internet Access Extended to Classrooms**

### **Level III: Networking the School District**

### **Level IV: Advanced Multimedia Network**

#### **Level I: Basic Internet Access for School Computer Labs**

This is an initial stage for network connectivity, which can scale into a larger, more powerful network. This type of computer network forms a Local Area Network, or LAN, that connects together the computers in your computer lab. It also connects these computers to a shared server and out to the Internet via a data line to an Internet Service Provider, or ISP.

Throughout this workbook, at all four levels, we assume that the data line to the ISP may employ any of today's popular Wide Area Network (WAN) technologies, including ISDN, Digital Subscriber Line (DSL), T1/Frame Relay or cable modem service.

#### *Equipment needed:*

**Router.** This device operates between the LAN and the external data line. The type of router you choose depends on the type of data line. Your ISP may support one or many types of data lines, so you should check on the technological capabilities of your ISP.

**Firewall/Website filter.** This device shields the computer lab from outside intrusion. This device may also have a Website filter, available as a regularly updated software subscription, that prevents lab computer users from accessing inappropriate web content.

**Ethernet switches.** These devices serve as the main connection points for the network. Each PC will have a separate data cable (Ethernet typically uses Category 5 UTP with RJ-45 connectors) running from PC to switch. Each PC cable connects into one port on the switch. Today's switches generally support two different Ethernet speeds: 10Mbps or 100Mbps (also known as Fast Ethernet) The switch provides 23 Ethernet 10 Mbps or 100 Mbps ports for the client PCs and the router and one 100 Mbps port for the server. For computer labs with more than 24 PCs, schools may interconnect multiple switches. The same switch may also be used to coordinate networking for the District Office servers. For large networks, there are switches that support 1000 Mbps or Fast Ethernet.

**Network interface cards (NICs) for each of the PCs and the server.** These connect the PC cable into the PC or server. Our recommendation is to install 10/100 Mbps NICs whenever possible. This provides easy upgrades from Ethernet to Fast Ethernet to accommodate growth in network traffic.

*Other Products (covered by E-rate) to Complete Your Network:*

**Network server.** This is the PC that acts as central storage for the network and the connection to the printer.

**Data service.** This is the link to your Internet service provider (ISP). Choose a local ISP based on service level, speed, capacity, and cost. Alternatively, you should consult with your local telephone company to determine the best level of service that meets your needs. Wide-area data service options include ISDN, Digital Subscriber Line (DSL), T1/Frame Relay or cable modem service. The ISP or service provider can assist you in selecting a compatible 3Com router for their service.

**3Com Product Ordering Information**

**Router Options (choices depend on what technologies your ISP supports)**

3C438000	OfficeConnect 810 ADSL Router
3CP4144	OfficeConnect 812 ADSL Router
3C840	OfficeConnect 840 SDSL Router
3CR400U97	SuperStack II Router 400, ISDN BRI-U, 128bit Encryption

**Modem Options Suitable for Level I only:**

3C892A-US	OfficeConnect ISDN LAN Modem (up to 24 users)
3C892-IDSL	OfficeConnect IDSL LAN Modem (up to 24 users)

**Firewalls/Website Filters**

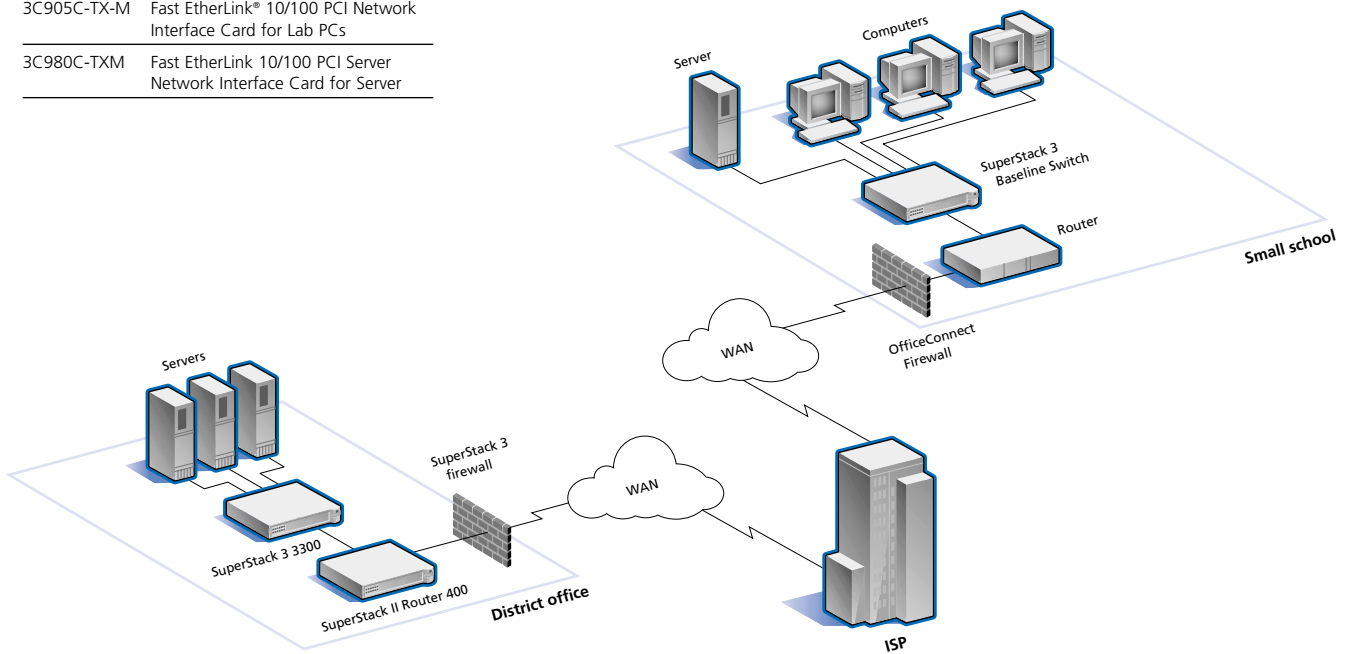
3C16770-US	OfficeConnect Firewall 25 (up to 25 users)
3C16771-US	OfficeConnect Firewall DMZ (up to 100 users)
3C16772	OfficeConnect Firewall Website Filter (1yr subscription service)

**Ethernet Switches**

3C16985B-US	SuperStack 3 Switch 3300XM 24-Port 10/100 Switch
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**Network Interface Cards**

3C905C-TX-M	Fast EtherLink® 10/100 PCI Network Interface Card for Lab PCs
3C980C-TXM	Fast EtherLink 10/100 PCI Server Network Interface Card for Server



Level I: Basic Internet access for school computer users



**Additional 3Com Product Ordering Information**

**Switches for Classrooms:**

3C16773A-US	OfficeConnect Dual Speed Switch 4 (4 RJ-45 connections), or
3C16734B-US	OfficeConnect Dual Speed Switch 8 (8 RJ-45 connections), or
3C16735B-US	OfficeConnect Dual Speed Switch 16 (16 RJ-45 connections)

**Central Wiring Closet Switch**

3C16985B-US	SuperStack 3 Switch 3300XM 24-Port 10/100 Switch
3C16988A	SuperStack 3 SwitchMM 24-port 10/100 switch with three matrix ports

**District Headquarters Switch:**

3C16815	Switch 4007 Fast Ethernet Layer 3 Copper Starter Kit with 48-ports. – 7-slot Switch 4007 chassis with 18 Gbps switch fabric with three GBIC slots for uplinks, single management module, and power supply 48 10/100BASE-TX and 3 Gigabit Ethernet ports: – One 12-port Fast Ethernet MultiLayer Switch module (RJ-45) – One 36-port Fast Ethernet module (RJ-45) – Three GBIC slots on the switch fabric for Gigabit Ethernet ports – 4 empty payload slots, expandable to 192 Fast Ethernet ports
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**Network Telephony System:**

3C10111	NBX Chassis APX30M/4
3C10110	NBX Call Processor Card (10BASE-T uplink, software)
3C10116	NBX Digital Line Card (24 outside T1 or PRI phone lines—PRI is required for E911)
3C10114	NBX Analog Line Card (4 outside analog telephone lines)
3C10121	NBX Business telephone

**Wireless System:**

3CRWE343A	AirConnect 11Mbps Wireless LAN Starter Pack (1 AP, 3 PC Cards)
3CRWE747A	AirConnect 11Mbps Wireless LAN Access Point
3CRWE737A	AirConnect 11Mbps Wireless LAN PC Card for Laptop Computers
3CRWE777A	AirConnect 11Mbps Wireless PCI Card for Desktop Computers

**Level II: Extending Basic Internet Access to Classrooms**

As your network grows, you can add to rather than replace equipment in your Level I network: the central point of your network now moves to a wiring closet or some other location more central to all classrooms. Here, incoming data lines connect the school to the wide-area network and/or to the Public Switched Telephone Network (PSTN). In the wiring closet, you may stack multiple Ethernet switches together, then connect those to individual switches in the classrooms.

Also, you may add to administrative simplicity and network economy by installing newer technologies, such as network-based telephones or wireless Ethernet Access Points, in select locations.

*The Main Changes to the Network are:*

- A larger number of PC nodes on the network, including more PCs, NICs, and switches.
- Permanent data cables to connect the classrooms to the wiring closet. The recommendation for data cables is Category 5 UTP wiring for all cable runs that are less than 100 meters. This applies to all cabling within a building and cabling between buildings where the cable is accessible but protected from weather and tampering. For runs longer than 100 meters and cabling that runs in underground conduits, multimode fiber is generally the best option.
- Greater network traffic. This usually requires larger, faster data lines. Expanding the switch located in the wiring closet, and placing smaller switches in individual classrooms helps to fully segment the traffic on the network and avoid congestion during busy periods.

*Additional Equipment Needed for Level II Connections:*

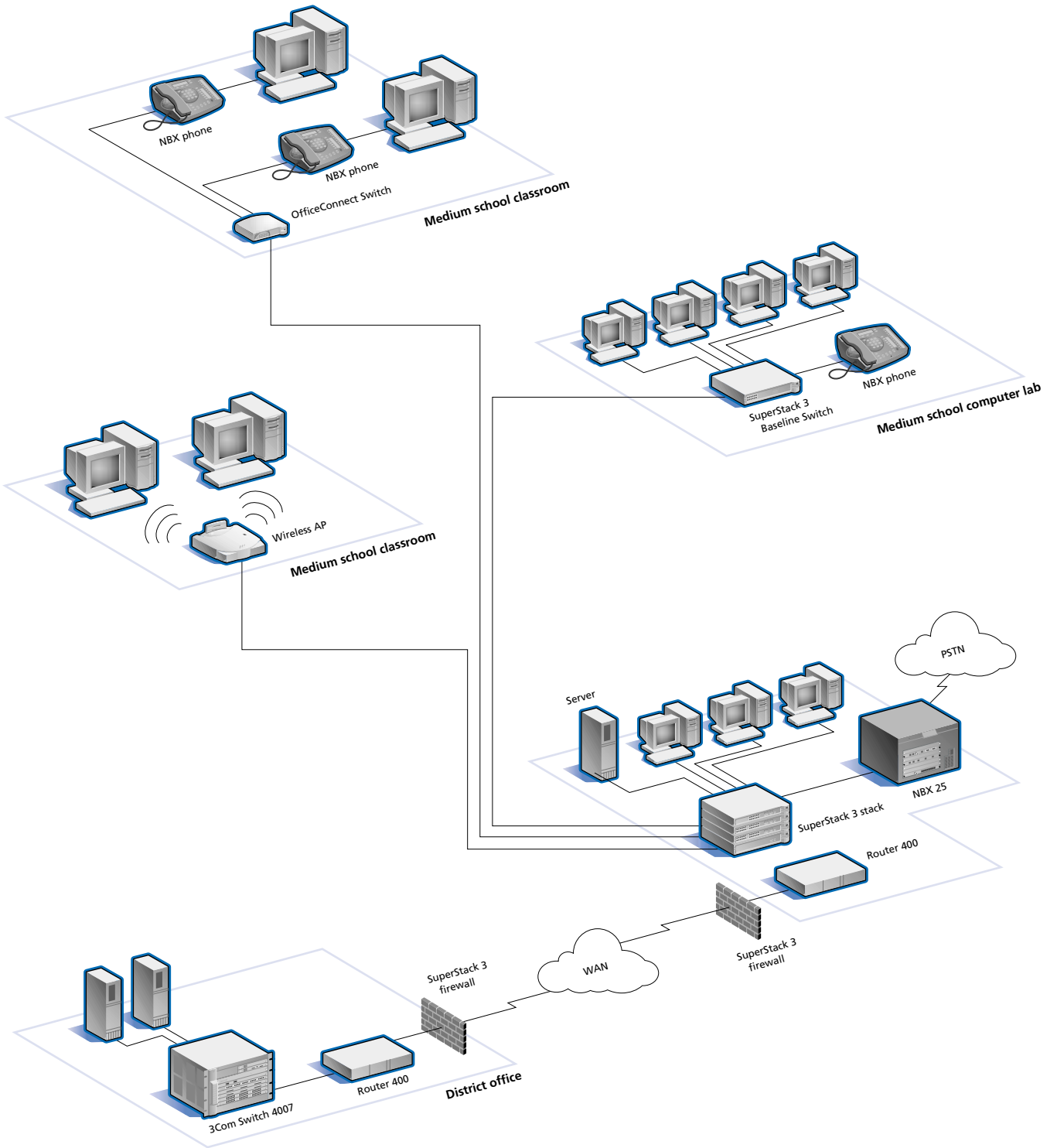
- **Central wiring closet.** This is where the cables from each of the classrooms terminate. As a termination device, multiple SuperStack 3 Switch 3300s may be stacked together. The 3 Switch 3300XM is a 10/100 Mbps switch that can provide 100 Mbps ports for the computer lab, servers, or any classrooms that require high network bandwidth.

The wiring closet is also a good place to put one or more network servers. This gives everyone on the network equal access to the servers and allows for easier maintenance and security. Servers should operate on 100/1000 Mbps links. This allows the servers to share more power among multiple users.

- **Ethernet switches.** With the network now extending into the classroom, smaller switches are needed in each of the classrooms where PCs are located. These are less expensive since they typically provide only four, eight or sixteen connections.
- **Chassis switch.** A high performance switch may be required at district headquarters, to support the greater network traffic of a Level II installation.
- **Network telephony system.** A system of network telephones—also frequently called “Ethernet phones” or VoIP (Voice over Internet Protocol) phones—can cut costs and reduce the complexities of managing separate networks for voice and data. With network telephony, the phones connect directly to Ethernet switches and “speak” in Ethernet packets, so they don’t require conventional phone wiring.
- **Wireless Ethernet connectors.** To save further on cabling costs and administrative overhead, you can install wireless devices – network cards in PCs, which transmit to nearby access points – based on a new industry standard for 11 Mbps Ethernet. These make it easy for students or teachers to move their PCs or laptops to different locations that are within the range of the access points.



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Level II Connectivity: Basic Internet access extended to classrooms

### Level III: Networking the School District/Adding Gigabit to the Larger Schools

There are economic advantages to having the district office act as the central network point for all the schools in the district. Here, the network links the schools over one large WAN. Also, the district office can maintain a high-speed DSL, cable, T1, or Frame Relay connection to the Internet and share the bandwidth and costs across several schools. By centralizing this connection, a school district may require fewer network management staff.

*Main Changes to the Network are:*

- The number of PC nodes on the network grows proportionately. This means there are more NICs and switches.
- Some schools may now maintain data lines to the district office rather than directly to the ISP.
- The district office and/or a large school can operate a high-density router connected to the ISP. Such a connection permits district officials or teachers to boost data privacy over the public Internet by employing Virtual Private Networks (VPNs) that create secure tunnels through the public Internet.

*Additional Equipment Needed for Level III Connections:*

- At the district office: This is where a high-density router may be located. It has a connection for a data line from each of the schools in the district, and it has a high-speed line for connection to an ISP.

The district office will likely have an administrative network operating within the building. This requires a higher-capacity chassis switch, to handle the greater volume of traffic between the district servers and the various schools. Also, to expand bandwidth of the server network, you may install network interface cards in the chassis switch to permit load balancing, or to support connections for Gigabit Ethernet over Category 5 cable or SX fiber.

- In the large school: This school, probably the high school, also needs a chassis switch for its considerable internal demands. In addition, to meet demands for high-volume, secure data transmission, you might want to install a high-density router that is capable of setting up and terminating VPNs.

**3Com Product Ordering Information**

**District Headquarters Switch**

3C16816-US	Switch 4007 Fiber Gigabit Layer 3 Starter Kit: 7-slot Switch 4007 chassis with 48 Gbps switch fabric, management module, and power supply 13 Gigabit ports: One 4-port Gigabit Ethernet MultiLayer Switch module (GBIC) One 9-port Gigabit Ethernet module (1000BASE-SX) 4 empty payload slots, expandable to 49 Gigabit ports
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**Large School Switches**

3C17700	Switch 4900 12-port 1000Base-T Switch
3C17702	Switch 4900 12-port 1000Base-SX Switch
3C17710	Switch 4900 4-port 1000Base-SX Module for Switch 4900
3C16987A	SuperStack 3 Switch 3300, 24-port 10/100 switch with 1 1000Base-SX fiber port to connect to 4900SX switch, or 4900 1000Base-SX Module. (for edge classrooms/labs, etc.)

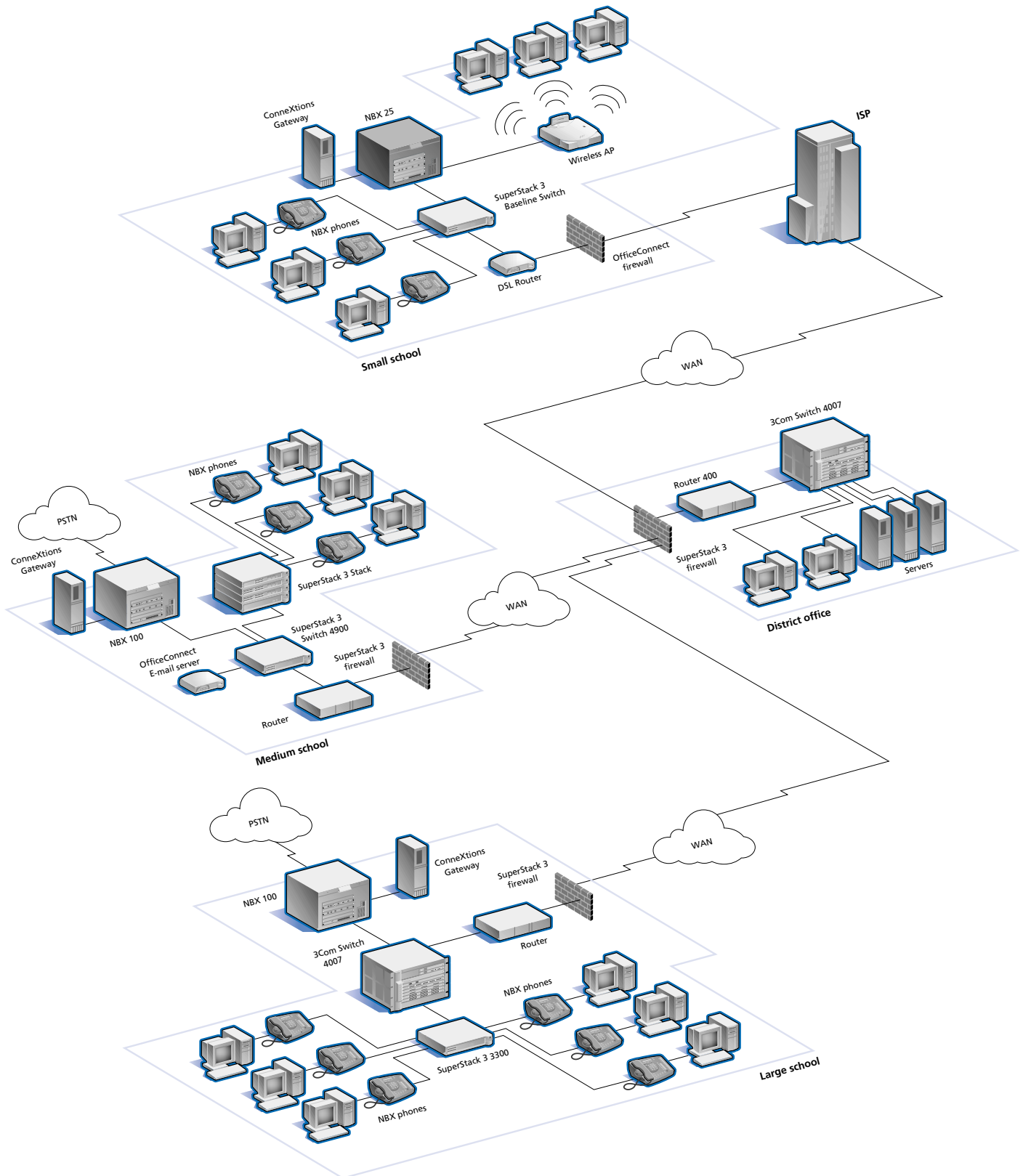
**Router for VPNs**

3CR400U97	SuperStack II Router 400, ISDN BRI-U, 128-bit encryption
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**Network Interface Cards**

3C980C-TXM	EtherLink Server 10/100 PCI Network Interface Card
3C995-T	EtherLink Server Network Interface Card for Gigabit Ethernet over Cat 5
3C995-SX	EtherLink Server Network Interface Card for Gigabit Ethernet over SX fiber

THE 3COM E-RATE WORKBOOK



Level III: School district network

**3Com Product Ordering Information**

**Media Ease Central Service Point 1**

Includes 3Com SuperStack 3 Switch 4900, 3Com SuperStack II Router 400, plus other equipment ranging from SQL content database, Web and Application servers, to file servers, tape backup units, switches, cables and monitors

**Media Ease Central Service Point 2**

Includes redundant 3Com SuperStack 3 Switch 4900s, 3Com SuperStack II Router 400, plus load-balanced application servers, and redundant installations of equipment used in the Central Service Point 1, including SQL content database, Web and Application servers, to file servers, tape backup units, switches, cables and monitors

**Media Ease Relay Point**

These systems come in three performance levels to suit the multimedia needs of different types and sizes of schools. All Media Ease Relay Points contain a 3Com SuperStack II Router 400; depending on the performance level, Media Ease Relay Points may also include a 3Com SuperStack 3 Switch 4900, Web Servers, RAID5 (Redundant Arrays of Inexpensive Disk) storage, uninterruptible power supplies and other, related products.

**Level IV: Advanced Multimedia Network**

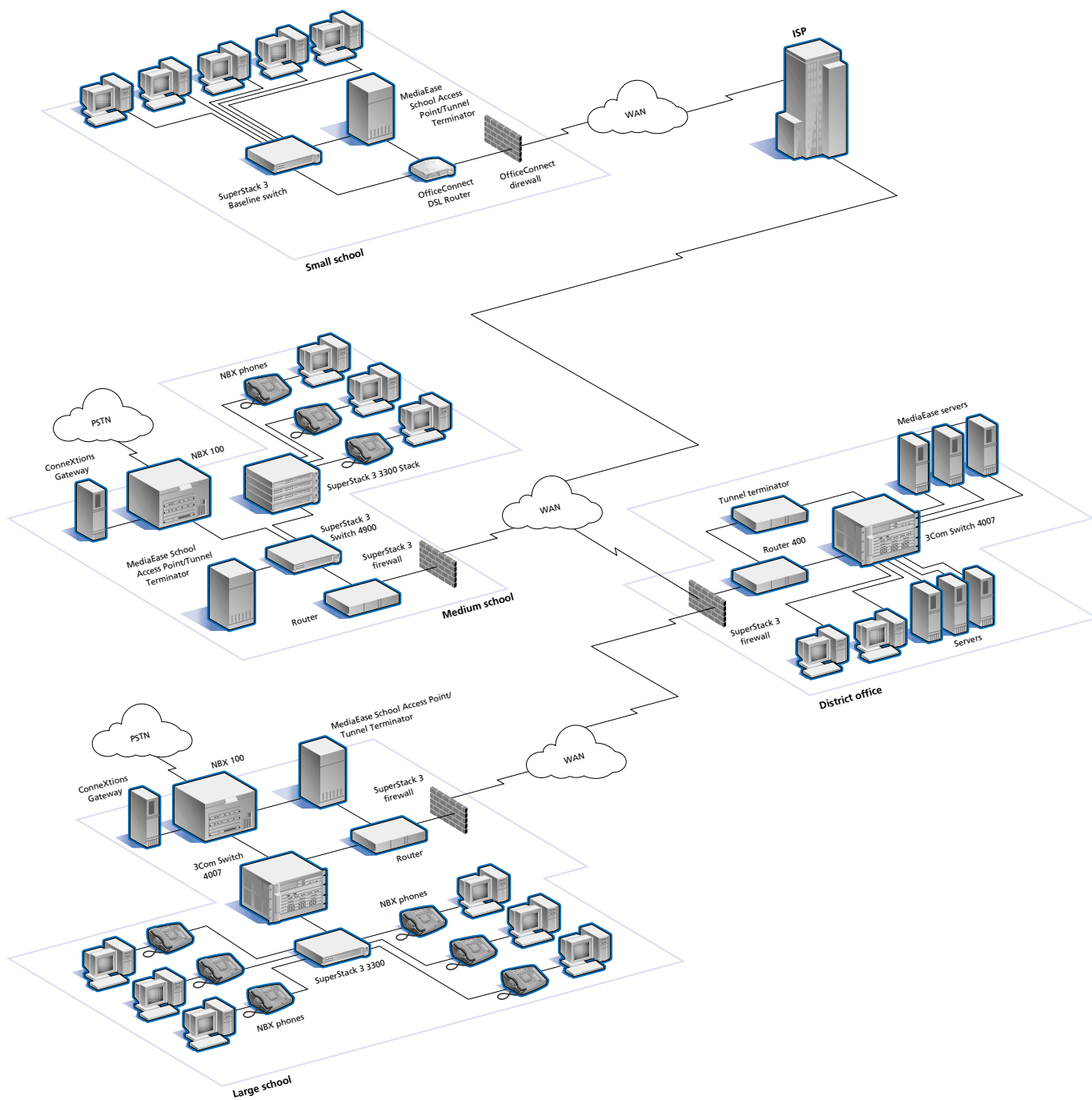
This is a high-bandwidth network designed for heavy traffic loads consisting of large graphics files, full-motion video, and voice traffic to deliver multimedia curriculum to the classroom. In networks where only a portion of the users have requirements for the additional bandwidth, specified segments of the network can be upgraded without affecting other parts of the network.

In larger school districts, however, it may be prudent to consider upgrading to a system for storing, organizing and delivering rich media such as the new Media Ease Learning Solution from 3Com and marchFIRST. The Media Ease solution consists of hardware and software bundles for individual schools, known as Media Ease Relay Points, as well as larger, called Media Ease Central Service Points, for installation in district offices. The Media Ease solutions perform content manipulation, storage management, previewing, scheduling, distribution and any other tasks required to give students high-quality multimedia content, and teachers the greatest degree of teaching flexibility possible.

*Main Changes to the Networks Include:*

- Local Ethernet switches should be upgraded to Fast Ethernet. Current devices can be moved from the network core to the edge.
- The school backbone should be upgraded from Fast Ethernet to Gigabit Ethernet.
- The district office will need higher-performance data services.
- Local PCs and servers should be upgraded to 100 Mbps Fast Ethernet NICs.
- Media Ease Central Service Points and Relay Points may be introduced, and will be fully compatible with existing equipment. See [www.3Com.com/mediaease](http://www.3Com.com/mediaease) for more detail on these systems.

THE 3COM E-RATE WORKBOOK



Level IV: Advanced multimedia network

## Electronic Resources

### General E-Rate Information

The following E-rate Web sites are included in this section to provide you with a variety of places to obtain comprehensive information on E-rate. These sites are updated frequently to ensure that you will be able to find the latest updates.

#### *Schools and Libraries Division*

[www.sl.universalservice.org](http://www.sl.universalservice.org)

The Schools and Libraries Division has established a Client Service Help Desk to provide guidance to schools and libraries applying for E-rate support.

Client service help desk: 1-888-203-8100.

Fax: 1-888-276-8736.

E-mail: [question@universalservice.org](mailto:question@universalservice.org)

#### *Federal Communications Commission*

[www.fcc.gov/ccb/universal\\_service/schoolsandlibs.html](http://www.fcc.gov/ccb/universal_service/schoolsandlibs.html)

This Web site gives you the most current information concerning E-rate.

#### *U.S. Department of Education*

[www.ed.gov](http://www.ed.gov)

The Department of Education has developed and gathered significant amounts of information about education technology. This site not only provides information about E-rate, but also about other federal programs to help schools use technology effectively.

#### *American Library Association*

Office for Information Technology

[www.ala.org/oitp/telcom/univserv.html](http://www.ala.org/oitp/telcom/univserv.html)

The American Library Association maintains this site to assist libraries with technology issues and the E-rate process.

#### *EdLiNC*

[www.edlinc.org](http://www.edlinc.org)

The official Web site of the Education and Library Networks Coalition (EdLiNC) regularly posts information and advocacy material about E-rate.

#### *Consortium for School Networking (CoSN)*

[www.cosn.org](http://www.cosn.org)

CoSN educates and informs policymakers on the educational value of telecommunications, and provides updates on related policies, issues, and resources through its Web site, conferences, and newsletters.

#### *State Departments of Education Technology Initiatives*

[www.ed.gov/Technology/statetech.html](http://www.ed.gov/Technology/statetech.html)

This site lists contact information for all state departments of education.

The Following Sites Offer Extensive E-rate Information and Resources:

*Funds for Learning*

[www.fundsforlearning.com](http://www.fundsforlearning.com)

*Merit*

[www.merit.edu/k12.michigan/usf](http://www.merit.edu/k12.michigan/usf)

*New York's E-Rate Central*

[www.e-ratecentral.com](http://www.e-ratecentral.com)

*Schools and Libraries Pennsylvania*

[www.pde.psu.edu/usf/index.html](http://www.pde.psu.edu/usf/index.html)

*Mid Continent Educational Laboratory (McRel)*

[www.mcrel.org/resources/links/techined.asp](http://www.mcrel.org/resources/links/techined.asp)

### **Technology Planning**

The sites listed here will provide useful information that will assist and guide schools and libraries in their preparation and development of technology inventories and technology plans.

*3Com Solutions-Education Resource Center*

[www.3com.com/education/index.html](http://www.3com.com/education/index.html)

This Web site offers vital information on topics such as how networks work, as well as information on Internet resources for educators and a teacher training manual.

*Smart Valley Technology Planning Guidebook*

[www.foothill.fhda.edu/cfi/smart/resources.html](http://www.foothill.fhda.edu/cfi/smart/resources.html)

An excellent Technology Planning Guide is available at this site.

*National Center for Technology Planning*

[www.nctp.com](http://www.nctp.com)

This site provides many excellent resources for technology planning.

### **Policies and Procedures**

*Safety*

[www.ou.edu/oupd/kidsafe/warn\\_kid.htm](http://www.ou.edu/oupd/kidsafe/warn_kid.htm)

The site provides information on safety and children on the Internet, as well as pointers children may need when online.

*Acceptable Use Policy*

These sites will provide examples of and criteria for developing acceptable use policies that will guide students and staff in using school networks and the Internet properly.

[www2.msstate.edu/~fyh1/aup.html](http://www2.msstate.edu/~fyh1/aup.html)

[www.bham.wednet.edu/policies.htm](http://www.bham.wednet.edu/policies.htm)

### *Copyright*

Electronic copyright is an important area to include in technology planning and implementation. The following references provide information and guidance for developing policies and procedures concerning electronic copyright.  
fairuse.stanford.edu

*The Copyright Primer for Librarians and Educators*

2nd Edition, 1995

Janis H. Bruwelheide

American Library Association and National Education Association

ISBN: ALA 08389 0647 2

### *Security*

[www.alw.nih.gov/Security/security-faqs.html](http://www.alw.nih.gov/Security/security-faqs.html)

Establishing the appropriate security procedures for a schools or library's computer network is an essential element in the technology planning and implementation process. The site provides helpful information for schools or libraries developing procedures to assure network security.

### **Technology Models**

The following sites, which contain diagrams or models, can help assist schools and libraries in planning computer networks.

#### *Interconnection of Schools*

<http://www.cde.ca.gov/edtech/ntpg/images/ch05.6.gif>

#### *Distributed Network Services*

<http://www.cde.ca.gov/edtech/ntpg/images/ch06.1.gif>

#### *Phone Net Diagram*

<http://www.cde.ca.gov/edtech/ntpg/images/ch05.4.gif>

#### *Individual Ethernet Connection to a Network*

<http://www.cde.ca.gov/edtech/ntpg/images/ch05.1.gif>

### **Staff and Professional Development**

Staff development is essential when integrating technology into the school curriculum. The following sites provide assistance to schools and libraries in designing and implementing staff and professional development plans.

#### *3Com Solutions—Integrating Telecommunication into K-12 Curriculum*

[www.3com.com/edu/index.html](http://www.3com.com/edu/index.html)

This Web site offers vital information on topics such as how networks work, as well as information on Internet resources for educators and a teacher training manual.

#### *Designing and Implementing Professional Development*

[www.ncrel.org/tandl/implem1.htm](http://www.ncrel.org/tandl/implem1.htm)

This site provides strategies for implementing professional development and case studies.



## Education Technology at State Departments of Education

The following is a list of the Departments of Technology in each of the 50 U.S. states and in the District of Columbia, as provided by the U.S. Department of Education. Please contact the appropriate people and Web sites for further information on the approval of Technology Plans in your state.

### A

#### **Alabama State Department of Education**

Gordon Persons Building, Room 5351  
50 North Ripley St.  
Montgomery, AL 36130-2101  
Ph: (334) 242-9594  
Fax: (334) 242-8001  
Contact: Lisa Woodard, Educational Technology Specialist

#### **Alaska Department of Education**

801 West 10th St., Suite 200  
Juneau, AK 99801  
Ph: (907) 465-8730  
Fax: (907) 465-2713  
Contact: Helen Mehrkens or Rick Cross

#### **Arizona Department of Education**

1535 West Jefferson St.  
Phoenix, AZ 85007  
Ph: (602) 542-5233  
Fax: (602) 542-3590  
Contact: Chris Castillo, Education Program Specialist

#### **Arkansas Department of Education**

Educational Technology, Room 301A  
#4 State Capital Mall  
Little Rock, AR 72201  
Ph: (501) 682-5750  
Fax: (501) 682-4487  
Contact: Melanie Bradford, Program Advisor

### C

#### **California Department of Education**

Education Technology Office  
P.O. Box 944272  
Sacramento, CA 94244-2720  
Ph: (916) 323-5204  
Fax: (916) 323-5110  
Contact: Nancy Sullivan, Consultant

**Colorado Department of Education**

201 East Colfax Ave.  
Denver, CO 80203-1705  
Ph: (303) 866-6859  
Fax: (303) 830-0793  
Contact: Eric Feder, Director, Educational Telecommunications

**Connecticut Department of Education**

165 Capitol Ave., Room 302  
Hartford, CT 06106  
Ph: (860) 566-8888  
Fax: (860) 566-8890  
Contact: German Bermudez, Ph. D., State Technology Coordinator

D

**Delaware Department of Public Instruction**

Townsend Building  
Dover, DE 19903-1402  
Ph: (302) 739-4692  
Fax: (302) 739-4483  
Contact: Teresa Kough, Executive Director

**District of Columbia Department of Education**

Office of the Deputy Superintendent and Chief Academic Officer  
415 12th St., N.W. Suite 1209  
Washington, DC 20004-1994  
Ph: (202) 724-4222  
Fax: (202) 727-1516  
Contact: Eloise Brooks, Deputy Chief Academic Officer  
Stan Johnson, 202-442-5663

F

**Florida Department of Education**

Florida Education Center  
Suite 501-B  
325 West Gaines St.  
Tallahassee, FL 32399-0400  
Ph: (904) 488-0980  
Fax: (904) 488-3691  
Contact: Peter Lenkway, Administrator, Office of Educational Technology

G

**Georgia Department of Education**

1754 Twin Towers East  
Atlanta, GA 30334  
Ph: (404) 657-1176  
Fax: (404) 657-6822  
Contact: Clara Keith, Instructional Technology Coordinator

## H

### **Hawaii Department of Education**

1390 Miller St.  
Honolulu, HI 96813  
Ph: (808) 586-3307  
Fax: (808) 832-3645  
Contact: Diana Oshiro, Asst. Superintendent for Information and  
Telecommunications Services

## I

### **Idaho Department of Education**

Bureau of Technology Services  
P.O. Box 83720  
Boise, ID 83720-0027  
Ph: (208) 332-6970  
Fax: (208) 332-6878  
Contact: David Breithaupt, Educational Technology Specialist

### **Illinois Department of Education**

100 North First St., N361  
Springfield, IL 62777-0001  
Ph: (217) 782-5596  
Fax: (217) 785-7650  
Contact: Sharon Roberts, Associate Superintendent, Learning Technologies

### **Indiana State Department of Education**

Office of Learning Resources  
State House, Room 229  
Indianapolis, IN 46204-2798  
Ph: (317) 232-9175  
Fax: (317) 232-9121  
Contact: June Ward, Instructional Technology Coordinator

### **Iowa Department of Education**

Grimes State Office Building  
Des Moines, IA 50319  
Ph: (515) 242-6015  
Fax: (515) 242-6025  
Contact: John O'Connell, Technology Consultant

## K

### **Kansas Department of Education**

Technical Assistance for Kansas Educators  
120 East 10th St.  
Topeka, KS 66612-1182  
Ph: (785) 296-3300  
Fax:  
Contact: Jayne James

**Kentucky Department of Education**

1825 Capitol Plaza Tower

Frankfort, KY 40601

Ph: (502) 564-6900

Fax: (502) 564-5680

Contact: Linda Pittenger, Director for the Division of Planning Services,  
Office of Educational Technology

L

**Louisiana Department of Education**

2758-D Brightside Ln.

Baton Rouge, LA 70820

Ph: (504) 763-5575

FAX (504) 763-5461

Contact: Carol Scott Whelan, Ph.D., Director of Educational Technology

M

**Maine Department of Education**

State House Station #23

Augusta, ME 04333

Ph: (207) 287-5986

Fax: (207) 287-5927

Contact: Heidi McGinley, State Technology Coordinator

**Maryland Department of Education**

200 West Baltimore St.

Baltimore, MD 21201

Ph: (410) 767-0382

Fax: (410) 333-2128

Contact: Barbara Reeves, Director of Instructional Technology

**Massachusetts State Department of Education**

350 Main St.

Malden, MA 02148

Ph: (617) 388-3300 x275

Fax: (617) 388-3395

Contact: Connie Louie, Coordinator of Instructional Technology

**Michigan Department of Education**

608 W. Allegan

Lansing, MI 48933

Ph: (517) 373-0108

Fax: (517) 373-3325

Contact: Lucien Parshall

**Minnesota Department of Children, Families, and Learning**

938 Capitol Square Building  
550 Cedar St.  
St. Paul, MN 55101  
Ph: (612) 297-3151  
Fax: (612) 297-1795  
Contact: Theresa Mish, Project Analyst

**Mississippi Department of Education**

P.O. Box 771  
Walter Sillers Building, Suite 604  
Jackson, MS 39205  
Ph: (601) 359-3954  
Fax: (601) 359-2040  
Contact: Helen Soule, Director of Technology

**Missouri Department of Elementary and Secondary Education**

P.O. Box 480  
Jefferson City, MO 65102  
Ph: (573) 751-3175  
Contact: Susan Cole or Deb Sutton, Coordinators of State Programs

**Montana Office of Public Instruction**

P.O. Box 202501  
Helena, MT 59620-2501  
Ph: (406) 444-4422  
Fax: (406) 444-1373  
Contact: Michael Hall, Office of Instructional Technology

**N**

**Nebraska Department of Education**

301 Centennial Mall South  
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## E-rate Terminology

### Basic Terms

**E-Rate:** A common name for the Universal Service Fund for Schools and Libraries.

**FCC:** Federal Communications Commission, the regulatory agency that oversees E-rate.

**Telecommunications Act:** The Telecommunications Act of 1996 established the federal universal service support mechanism for eligible schools and libraries.

**Universal Service Fund:** Provides discounts to telecommunications carriers for delivering affordable telecommunications services to various categories of customers, including schools and libraries.

**SLD:** Schools and Libraries Division of the Universal Service Administrative Company is responsible for administering the schools and libraries program.

**USAC:** The Universal Service Administrative Company is the parent company responsible for overseeing the administration of the Universal Service Fund.

### SLD Departments

**Client Service Bureau (CSB):** E-rate Help Desk where applicant and service providers can get answers to questions. 1-888-203-8100.

**Program Integrity Assurance (PIA):** Team that reviews Form 471 applications for compliance with FCC rules.

**Technical Client Service Bureau (TCSB):** Team that answers technical questions about eligible services and program rules.

### Applicant Forms

**Form 470:** Description of Services Requested; this is the first step required of applicants.

**Form 471:** Services Ordered form; this is the second step required of applicants.

**Form 486:** Receipt of Services Confirmation form; this is the third step required of applicants.

**Form 500:** Adjustment to Funding Commitment and Modification to Receipt of Services Confirmation form. This form is filed by applicants who want to change or cancel a funding commitment request.

**Form 472:** The Billed Entity Applicant Reimbursement form is filed by applicants seeking reimbursements for bills paid in full, and are due a discount.

### **Vendor Forms**

**Form 473:** The Service Provider Annual Certification form required to be filed annually by participating providers.

**Form 474:** The Service Provider Invoice form used to invoice the SLD for E-rate services delivered.

**Form 498:** The Service Provider Information form is required to be filed after receipt of a Service Provider Identification Number.

### **Letters**

**Form 470 Notification:** This is sent to applicants informing them of the date their 470 was posted to the SLD Web Site for bidding.

**RAL:** The Receipt Acknowledgement Letter is sent to applicants and vendors after the SLD has entered the information from Form 471 into its systems.

**FCDL:** The Funding Commitment Decision Letter is sent to applicants and vendors informing them of the level of discount that has been awarded to each funding request.

### **Numbers to Keep Handy**

**Entity:** A 10-digit number used to track applications for each applicant at the SLD. (Often called the billed entity number.)

**Form 470:** A 15-digit number (formerly, the Universal Service Control Number) assigned to all Form 470 applications filed with the SLD.

**Form 471:** This number is assigned to each Form 471 filed, after it has been entered into the system, and used to track the 471 at the SLD; can be up to 10 digits.

**FRN:** Funding Request Number is assigned to each item in Block 5 of Form 471, and is described in the Funding Commitment Decision Letter.

**SPIN:** A 9-digit number given to service providers and vendors after they've submitted Form 498, a SPIN is needed by applicants for completion of Form 471.

**Applicant-Created Identifier:** Identifier made up of numbers or letters, assigned by the applicant for SLD forms.

### **E-Rate Identity**

**Eligible Entity:** Any school, library, or consortium eligible to participate in the E-rate program.

**Billed Entity:** The organization that pays the bills, and writes the checks for services delivered.

**Consortium:** A group of organizations or institutions that join together for the purpose of contracting and applying for E-rate funds.

**Service Provider/Vendor:** A business or organization that sells connections or equipment necessary for communications.

**Additional E-Rate Terms**

**Tariffed Services:** Telephone service (e.g., local and long distance) regulated by state and federal officials.

**POTS:** Plain Old Telephone Service for placing and receiving phone calls.

**Common Carrier:** Any telecommunications company that provides telecommunications services for a fee to the general public or to businesses.

**Month-to-Month Contract:** Services billed on a monthly basis without a written contract.

**Pre-Discount Cost:** Cost of service before E-rate discount is applied.

**Internal Connections:** The wires and equipment needed for connecting computers within an entity.

**Shared Services:** Services delivered to more than one site; discount based on average or aggregate level.

**Site-Specific Services:** Services delivered to only one entity, such as a single school.

**Weighted Average:** The calculated amount of discount that reflects the number of students eligible for the National Free Lunch Program for a school district.

**Window:** Time during which all Form 471s are treated as if filed on same day.



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