IBM

Network Hardware Division

Presents

Asynchronous Transfer Mode

Technology Institute

© 1997 IBM Corporation

ATM Technology Institute

New Course Now Being Offered

Our Objective is to Build ATM Skills

Intensive Three Week Seminar
   Available in Two Parts:
   One week of ATM Fundamentals
   Two weeks of practical exposure to
   ATM in all its aspects

Developed to address requirements of:
   Customers, Business Partners,
   Consultants and IBM employees

Course Outline

The ATM Technology Institute is a new, premier educational offering from IBMs Networking Hardware Division. It is specifically designed to provide a diverse audience the knowledge needed to understand the issues involved when undertaking the use of Asynchronous Transfer Mode technology in their organization. Specifically, it will empower the student to make informed, and knowledgeable design, purchase, configuration, installation and recommendation decisions.

The class is offered as a three-week long seminar. Recognizing the needs of our intended audience of IBM customers, Business Partners, consultants and employees it may be taken as two seminars. The first part is a one week long introduction to ATM that encompasses many of the fundamentals but offer much more than other, standard industry offerings.

The second part is two weeks long and is an in-depth, 'roll up the sleeves' offering that is heavily weighted towards practical exercises. Student-teacher ratios are very low to afford easy and ready interactions. Machine to student ratios are similarly structured.

This world-class program is offered in the IBM Networking Center located in Cary, NC. The Networking Center is widely recognized for its state-of-the-art facilities.

Networking
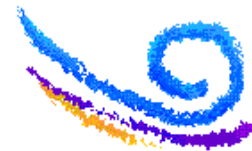
© 1997 IBM Corporation

Levels of Expectation

Attendees should want to understand:

What are the important issues
when deploying ATM?

They should possess:

Solid networking backgrounds
Unique topical knowledge
Industry experience
LAN / WAN competence
Minimal ATM experience

Levels of Expectation

Prospective enrollees should desire to acquire the knowledge and skills necessary to make informed and confident choices when designing, implementing and managing an ATM network. They may have some or minimal ATM experience but in general have demonstrated and accomplished networking skills. Our audiences typically include many students who have in-depth, topical knowledge in a particular facet of networking.

Candidates should have several years of industry experience in local area and/or wide-area networks. Our goal is to develop ATM skills in those students who, at a minimum, have the proficiency to design, install and configure networks typically deployed today.

Our instructional staff is comprised of experienced networking instructors who have solid ATM skills. Each is a subject matter expert in differing aspects of networking. They bring a global knowledge of the industry with significant accomplishments and backgrounds. Every instructor and presenter is competent in either LANs or WANs. In general, the staff shares an advanced skill level difficult to match anywhere.

© 1997 IBM Corporation

Course Structure

Three week class offered in two parts:
   Week One - Fundamentals
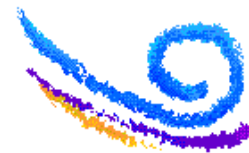   Weeks Two and Three - Practicals

Class is designed to permit attendance at either or both sessions

First session is vendor-neutral

Tailored for a diverse audience
   Decision makers, technical influencers,
   network managers and staff

Second session employs IBMs ATM
   technology

Course Structure

This course is intended for an audience of networking professionals who desire to acquire knowledge and experience with Asynchronous Transfer Mode technology. It is designed to offer the attendee flexibility in scheduling to accommodate a professionals demanding time constraints.

Organizations embarking on a major networking transformation utilizing ATM will appreciate the comprehensive curriculum designed to offer maximum exposure to a wide variety of topics in an intensive, focused and challenging course. Decision makers and managers seeking to acquire background and topical knowledge in ATM will appreciate the format of the Institute. This three week course is offered in two parts. Students may attend either or both as their needs dictate.

We anticipate that CIOs, key decision makers and organizational leaders will want to attend the first week with their staff. The format for this week is designed to provide the audience with a wide scope of information encompassing key aspects of ATM. By attending this session you will have learned not only the technical jargon of ATM, but the business aspects as well. The agenda includes presentations on potential costs and returns to an organization employing ATM, as well as impending or emerging standards and industry changes and their impact on strategic decisions in this dynamic and fast-paced arena.

Our second session is a concentrated period of learning-by-doing where students are given an immersion in the technology. The class is built around IBMs leading-edge technology but the core of the course illustrates and emphasizes principles and technique more than product feature or function. Thus, the information learned has a wide applicability across multi-vendor platforms.

© 1997 IBM Corporation

Course Syllabus

Part One
 Objective

 Students will acquire knowledge needed to
 understand and explain aspects of ATM

 Mainly lecture with some demonstrations

 Provide foundation level knowledge of ATM
  Industry drivers
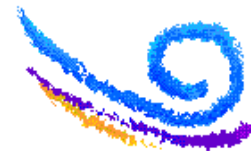 Structure / evolutionary history
  Physical / logical architecture
  Performance and design considerations
  Session with standards bodies liaisons
  User experiences
  Consultative advice for engaging service
  providers

Course Syllabus

Part One - Course Code ATI01

The first week will provide a broad brush look at ATM, including historical background, key developments, current ATM Forum standards as well as work-in-progress, demonstrations of technology, a 'koffee klatch' with members of industry standards bodies including the IEEE, IETF, and ATM Forum and a featured presenter for a consultative session on issues related to using ATM in the wide-area.

An afternoon is given to presentations by ATM users who will detail their experiences with implementing ATM. They will relate the business needs that caused them to use ATM, the impacts to their organization and share the rewards and costs associated with its deployment.

We will spend time exploring where and how TCP/IP fits in a high-speed network, what are the evolutionary changes that will emerge at the close of the decade and how they will impact users.

After attending this session, executives will leave with a greatly enhanced understanding of industry drivers and issues, while their accompanying technical staff will next embark on a two-week period of comprehensive skills acquisition.

© 1997 IBM Corporation

Course Syllabus

Part Two
  Objective

    Instill confidence and ability in students
    to successfully design, configure and install
    a campus ATM network

  Class is a 50/50 split between lecture and lab
    Simple ATM at first, graduated complexity
    Build on each step to acquire increased
    function and knowledge
    Use of scripted lab's for effectiveness
    Introduce ATM network management
    Emphasis on understanding 'why' as well
    as 'how'
    Advanced functions of IBMs ATM products
    Introduces WAN ATM connections

Course Syllabus

Part Two - Course Code ATI02

The second and third week offer the demanding networking professional a chance to experience ATM in all its elements, from the desktop to the backbone to the wide-area to the management console. Each day is structured around a series of lectures with hands-on practical exercises to illustrate the topics first hand. Every day is a progression in building a network 'from the ground up.'

The first steps are to learn basic-function ATM, such as RFC 1483 for bridging and routing. From here students will build a robust network that will include LANE services, RFC1577 Classical IP, NHRP, and advanced features and functions of IBMs Multiprotocol Switched Services. A wide-area connection will be established as well as deploying PNNI connections Students will verify the results of their efforts using management tools in every exercise.

The goal of this seminar is to help students understand the 'why' of what they are doing along with the 'how.' To accomplish this, topical reviews are sprinkled through the course to provide progress assessments and feedback to the student.
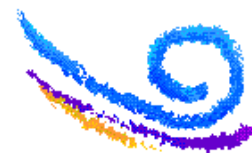
© 1997 IBM Corporation

Results of successful completion

Students will:

Be able to articulate salient aspects of ATM technology including ATM Forum specifications

Have the ability and confidence to make knowledgeable and informed purchase, design, configuration and installation decisions

Gain a solid working awareness of the features and functions of IBM ATM product offerings

Desired Results

The objective of the ATM-TI is to give students the knowledge needed to articulate and understand the salient aspects of ATM technology, including ATM Forum terminology as well as how and why to use an ATM application.

Students who attend the entire seminar will not only be able to make knowledgeable and informed purchase decisions with confidence, but also make design, configuration and installation choices as well. Upon completion students will have increased their working awareness of IBMs ATM offerings and will be familiar and comfortable working with them.
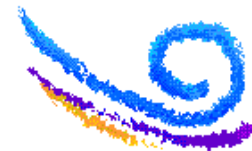
IBM

© 1997 IBM Corporation

Networking

This seminar empasizes Technology

It is a great foundation for further
education

This is not a substitute for Product
Education classes

The IBM ATM products used in the
course will consist of:

8265, 8260, 8285, 8274 ATM switches
8271, 8272, 8273 LAN / Edge switches
8210 and blade MSS
2210 w/ATM
IBM Workstations with ATM Adapters
NWays WorkGroup / Campus Manager

About the ATM Technology Institute

The ATM-TI is deliberately oriented towards and emphasizes ATM technology. Even though it uses IBM ATM equipment, we do not deliver *product education.* That is to say, there will be no modules that explain or explore the individual products selling points, design points, competitive strengths or installation and planning. IBMs Networking Hardware Division offers courses specifically to meet these needs for students desiring that level of knowledge.

However, as a natural outcome of working with the products students will become more conversant with them. We would like to emphasize that these seminars can reinforce a students prior product education and serve as a good base for potential future education.

How to Enroll

To enroll call:

1-800-426-8322

1-800-IBM-TEACh

Course Codes:

ATI01 - Part One

ATI02 - Part Two

ATI03 - Parts One and Two

Tuition:

ATI01 - $2000

ATI02 - $4500

ATI03 - $5000

IBM Employees may use MSE to enroll