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# TELECOM 111

## THE NEW-GENERATION TELECOM NETWORK FOR NON-ENGINEERING PROFESSIONALS

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*A one-day comprehensive network technology overview and update for non-engineering professionals*

**Telecom 111** is a one-day course for those who don't need the Full Monty, but who do need a working knowledge of the network, including an overview and update on the current generation IP-based technologies like SIP Trunking.

This short course is designed for everyone, including management, finance, admin, analysts & programmers.

Anyone serious about the telecom business must be up to speed on the new-generation IP-based telecom network, how it handles telephone, television and Internet together, and new telecom services including SIP Trunking, MPLS, Hosted PBX, IoT and more.

In one information-packed day, we will bust the buzzwords and demystify the jargon, covering in plain English all of the main aspects of new-generation IP telecom, including what IP is, the business reasons for IP, the main network components, packets, addresses and routers, MPLS, Voice over IP, SIP, softswitches, and IP-based services.

You will understand the network technologies and services, and most importantly, the underlying ideas, and how it all fits together.

Be more confident, more accurate and more productive. Put an end to buzzword and jargon frustration and get up to speed. Sign up for this invaluable career training today!

Thousands of people from organizations including Cisco, Intel and Microsoft, CIA, NSA, IRS, FAA and FBI, the US Army, Navy, Air Force, Marines and Coast Guard, AT&T, Verizon, Sprint, Bell Canada, Comcast, Cox, Rogers, manufacturers, telecom users including banks, insurance companies and government have benefited from our training.

This training - and our superb instructors - consistently receive rave reviews on evaluations. Many attendees tell us they wish they'd had this course years ago!

Join us!

Register online at [www.teracomtraining.com](http://www.teracomtraining.com) or call toll-free: 1-877-412-2700

## Course Outline

In one information-packed day, we will bust the buzzwords and demystify the jargon, covering in plain English all of the main aspects of new-generation IP telecom, including what IP is, the business reasons for IP, the main network components, packets, addresses and routers, MPLS, Voice over IP, SIP, softswitches, and IP-based services like SIP Trunking.

In plain English. For non-engineers, including management, finance, accounting, admin personnel, analysts and programmers who will benefit from a broad overview and update on the network.

### 1. NEW-GENERATION TELECOM NETWORK OVERVIEW

- The IP Telecom Network business and technology goals & solutions
- Convergence: telephone, television and Internet together
- IP telecom network & components
- Ethernet LANs In-Building
- Fiber outside: Optical Ethernet, PONs
- Last mile on copper: DSL & cable modems
- Wireless: Cellular, WiFi, Satellite

### 2. FUNDAMENTALS OF IP

- The definition of a network
- IP addresses and IP packets
- Routers and packet forwarding
- Overbooking and Bandwidth on Demand
- MPLS for traffic management

### 3. VOIP AND SIP

- Voice digitization and packetization
- Packet voice communications end-to-end
- SIP and Softswitches
- Gateways

### 4. IP SERVICES

- Individual Phone Line
- Centrex Service
- Hosted PBX Service
- SIP Trunking
- VPN Service
- IPTV
- Internet Service and Internet Wholesale
- Cloud Services

Taking this proven training, you will understand the jargon and buzzwords, the technologies and services, and most importantly, the underlying ideas, and how it all fits together.

Be more confident, more accurate and more productive. Put an end to buzzword and jargon frustration and get up to speed.

Sign up for this invaluable career training today!

## Here's What Course Attendees Like You Are Saying

Hundreds of people like you have benefited from Teracom training. Many tell us this was their best course ever; filled gaps in their knowledge and tied everything together... knowledge they've been needing for years. Others on course their first week on the job remarked "what a wonderful way to get started in the business."

Here's a sampling of comments from Teracom alumni:

*"Feedback from my team was TERRIFIC. It gave our entire technical Call Center a common foundation, and you seem to have crafted that perfect balance between technical depth, real-world applications, and lively delivery. I couldn't be happier with the results. The things my team learned from this training were applied in real-world situations almost immediately."*

- Rusty Walther, Vice President, Client Services, AboveNet Communications

*"Excellent! I learned a lot - everyday terms, definitions, and acronyms. Seminar notebook very helpful. The instructor was the best I ever had - lots of knowledge and experience and stories were GREAT."*

- Serena Laursen, Microsoft

*"The selection of material - the order of its presentation - the way it was presented... incredibly effective at presenting concepts and ideas - uses great analogies and stays on topic."*

- Susan Lennon, Nortel

*"The seminar delivered exactly what was advertised, at a very high quality.*

*Truth in advertising!" - Gary Lundberg, Copper Mountain Networks*

Whether you work for an organization that produces telecom, datacom or networking products or services; or you buy these products and services - or just have to get up to speed on what all the rest of them are talking about when they say "SIP trunking", "Ethernet", "MAC frame", "4G, MPLS or VPN..."

*"Best course we have ever had onsite at 3Com"*

*"Perfect content; well organized, well paced, building block approach, resulted in a very nice cathedral" - Jim George, Qualcomm*

*"Course was excellent! One of the best I have taken. Extremely well organized and presented. Seminar workbook is outstanding - a very valuable reference" - Kieran Delaney, Maritime Life*

*"I liked most the use of analogies to explain complex concepts. It delivered exactly what the brochure promoted. Gave me a thorough understanding so I feel more confident."*

- Judith Myers, Ameritech

*"Excellent! Tied the individual pieces of knowledge together into a picture... was interactive and built up the knowledge layers properly." - Jim Geiss, Qwest*

*"Filled in a lot of gaps in my knowledge of networking... able to deliver the knowledge effectively and entertainingly. Excellent seminar" - Kirk Kroeker, IEEE Computer Society*

*"Great information that I will be able to use at work. Very easy to understand all the information especially the IP networking part. I wouldn't change a thing"*

- Orlando Jasso, AboveNet Communications.

*"Layman's terms with humor was very relaxing - helped me concentrate... understanding is now CLEAR ... the manual will be very helpful" - Linda Côté, Bell Canada*

*"Best instructor I have had on a course - excellent explainer in layman terms, not techie terms"*

- Susan Coleman, Bell Sygma

*"Best course materials ever; the full text descriptions are invaluable.*

*Course filled in so many gaps for me. Bravo!" - Ross Brooks, Vertek*

*"Outstanding! The best I've encountered, and I've attended many seminars."*

- Bob Gibbons, WMX Technologies

## Six Reasons to Take This Course

Teracom's courses have been taught to wide acclaim across North America since 1992 and are designed for the **non-engineering professional** needing to fill in the gaps, build a solid base of knowledge... and see how it all fits together.

1. Learn more with instructor-led training, where you can interact and ask questions – the best kind of training you can get – and instructors consistently rated “excellent” on student evaluations.
2. Cut through the buzzwords, jargon and vendor hype to gain a structured understanding of telecommunications and networking, allowing you to make meaningful comparisons and informed decisions... knowledge skills you can put to use today and in the future.
3. Get up to speed on the latest developments and trends. This course is totally up to date with SIP trunking, VoIP, 4G LTE, WiFi, Optical Ethernet, MPLS, IoT and more.
4. Get a solid base of vendor-independent knowledge of technologies, service providers, standard practices and mainstream solutions that you can build on.
5. Understand how it all fits together.
6. Obtain a course book with detailed text notes that will serve as a valuable reference for years.

Develop a structure for understanding technologies and solutions, allowing you to make informed choices and meaningful comparisons -- knowledge you can't get on the job, reading trade magazines or talking to vendors.

## Course Schedule

We're constantly adding new dates. To see the latest schedule, please visit [teracomtraining.com](http://teracomtraining.com).

## How to Register

Space in our seminars is limited, and may sell out, so please register as early as possible to reserve your place. Register online at [teracomtraining.com](http://teracomtraining.com), or call us at 1-877-412-2700. You will receive a registration package with full details and instructions plus a confirmation letter to sign and fax back to complete your registration.

## Tuition Fees

This five-day intensive course is \$1995. We accept Visa, MasterCard and Amex, checks and purchase orders.

## Free Bonus! Online Courses & TCO CTNS Certification

As a free bonus, you get the full set of Teracom's Online Courses. Not only are these an excellent way to take a second pass through various topics, the Online Courses include pictures of equipment and additional lessons beyond those in this course. If you choose to write the optional course exams, and pass, you will also earn the TCO CTNS certification, complete with certificate suitable for framing and letter of reference.

## Free Bonus! Optional Final Exam & TCO CTA Certification

The full Certified Telecommunications Analyst (CTA) certification from the Telecommunications Certification Organization is also included. This is the optional “final exam” for this course. Upon successful completion, obtain your CTA certification with certificate suitable for framing and letter of reference. The Unlimited Plan allows you to repeat exams as needed until you pass... guaranteed to pass if you're willing to learn!

## Your Course Materials: An Invaluable Reference

Every course comes complete with a high-quality course book that's been called the best on-the-job reference tool around. Written in plain English, this easy-to-use reference includes copies of all graphics PLUS extensive detailed text notes. Topics are organized in logical groups to give you easy reference after the seminar to the practical experience, theoretical background, and unbiased information on industry technologies, products and trends you'll need. With numerous chapters covering all major topics, you'll obtain an invaluable resource impossible to find anywhere else in one book.

Get a sneak preview of the course materials via the tutorials at [www.teracomtraining.com](http://www.teracomtraining.com).

## Bring This Course To Your Location

Since 1992, we have provided high-quality on-site training in telecommunications for non-engineering professionals at AT&T, Verizon, Bell Canada, TELUS, Qualcomm, 3Com, Cisco, Intel, Alcatel, Nortel, Teleglobe, the NSA, Defense Information Systems Agency, US Coast Guard, US Air Force, Office of Naval Intelligence, MindSpring, APEX Telecom, Equifax, Transamerica Insurance, The Hartford, American Broadband, Cap Gemini, ComSec Establishment, MicroCell Telecom, TDS Telecom, Kyocera, Winstar, Western Wireless, US Cellular, Ericsson/Hewlett-Packard, Entergy, Intelsat, RangeTel, Alltel, Vertek, DSCI, Cox Cable, Florida Power and Light, Frontier Communications, Western Iowa Telephone, Genuity, LG Electronics, Panasonic, SouthEast Telephone, State of Nebraska, State of Montana, Tektronix, Bermuda Telecom, UTS and the Universal Service Administrative Company... to name a few.

Plus, we have a GSA contract with pre-approved government pricing.

Onsite training has special advantages:

- Your personnel will be up to a common speed with a solid knowledge base.
- We'll fill in the gaps and put in place productivity-enhancing structured understanding of modern telecom and networking fundamentals, wireless, TCP/IP, MPLS, VoIP... to meet your requirements..
- The seminar will be a strong team-building exercise.
- Significant reductions in training costs are often achieved.
- Each student receives a detailed workbook / textbook that will be a valuable reference for years to come.
- Pre- and post-training testing is available, including team results on a spreadsheet

We have built a solid reputation for delivering high-quality private team-training programs that are a resounding success.

We'd like to do the same for you!

Please contact us at 1-877-412-2700 for more information.

## About the Author



Eric Coll is an international expert in telecommunications, data communications and networking and has been actively involved in the industry since 1983. He holds Bachelor of Engineering and Master of Engineering (Electrical) degrees.

Mr. Coll has taught telecommunications technology training seminars to wide acclaim across North America since 1992, and has broad experience working as an engineer in the telecommunications industry. He has worked for Nortel's R&D labs as a design engineer on projects including digital voice and data communications research and digital telecom network equipment design, and on satellite radar systems, consulting on Wide Area Network design, and many other projects in capacities ranging from detailed design and implementation to systems engineering, project leader and consultant.

In addition to being founder and Director of Teracom Training Institute, Mr. Coll provides consulting to the telecommunications industry, specializing in telecommunications technology R&D and as a Subject Matter Expert in tax matters.