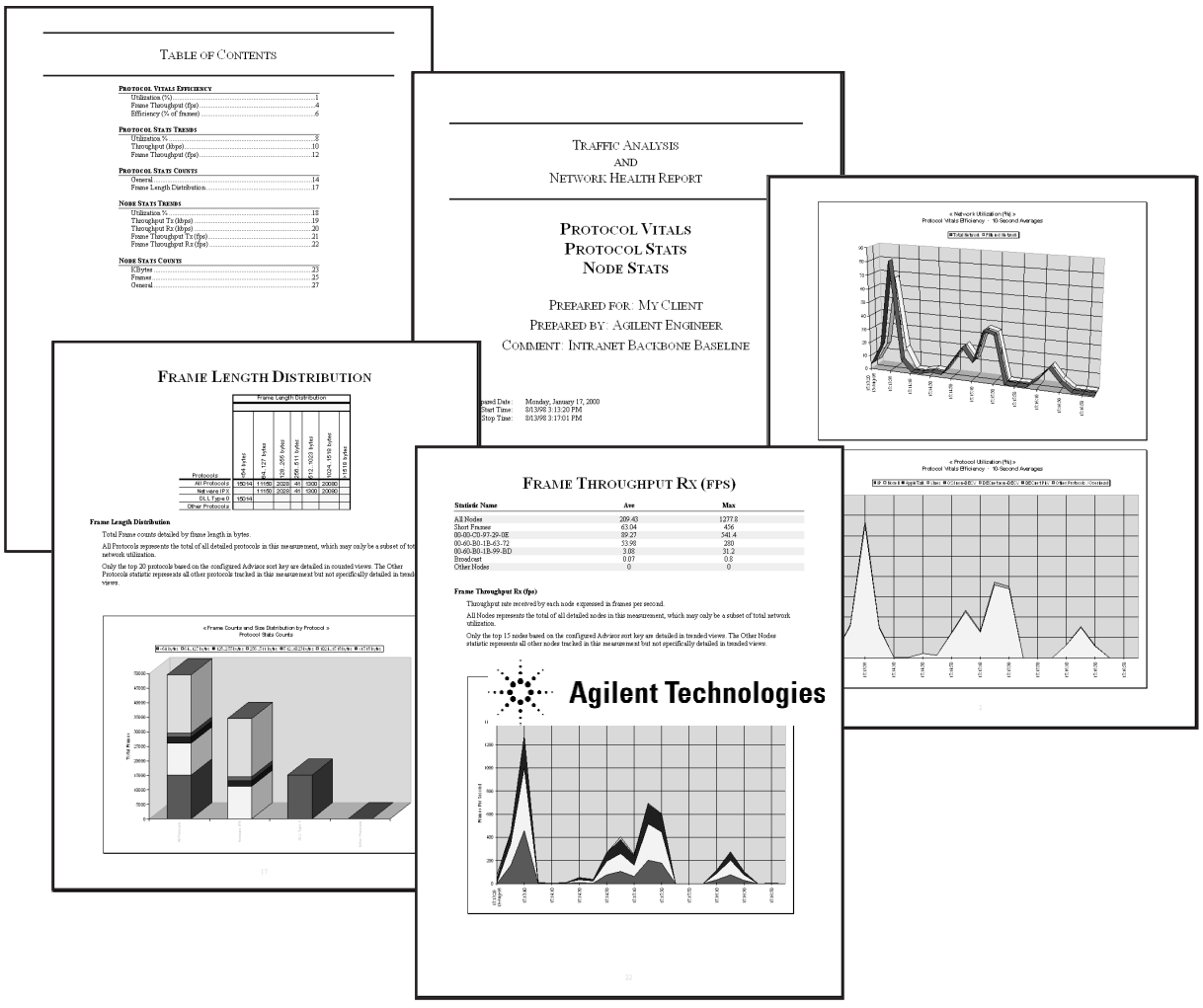
Agilent Technologies

Agilent Advisor Reporter

Technical Specification

Agilent Advisor Reporter extends the capabilities of the Advisor into the world of network baselining and benchmarking. More than just a powerful troubleshooting tool, the Advisor is capable of gathering an unparalleled array of LAN, WAN, and ATM statistics. Advisor Reporter taps into this data and automatically presents it in meaningful tables, charts, and fully-formatted reports.



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What Makes Agilent Advisor Reporter the Best Baselining and Benchmarking Tool For You?

Ease of Use

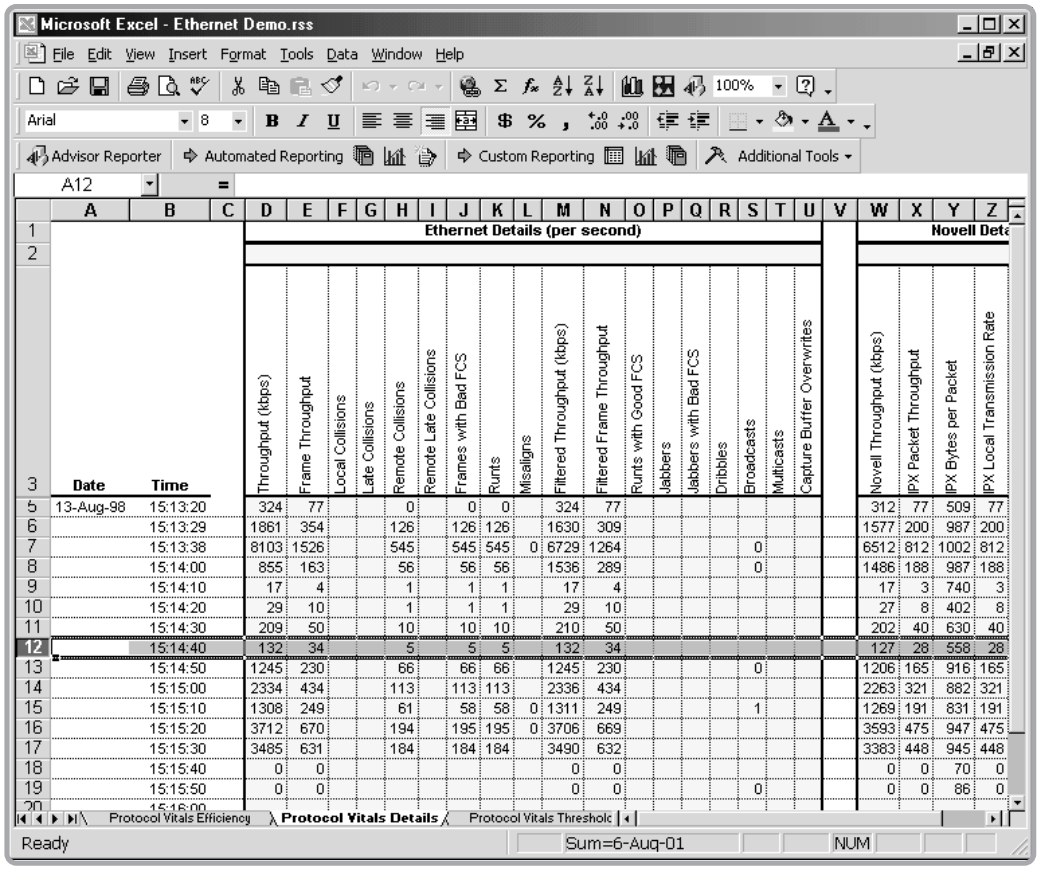
Advisor Reporter comes with built-in AutoReport Profiles that make your first reports as easy to create as selecting a file, choosing which measurements to report on, and pressing the GO! Button. Before your eyes, Advisor Reporter creates data tables and charts in Microsoft® Excel, or builds a fully-formatted report in Microsoft® Word, complete with a cover page and table of contents, inline statistics and glossary definitions for each measurement, and a wide range of embedded charts.

Advisor Reporter is so easy to use it can create in minutes a report that used to take days to produce.

Customizability

Advisor Reporter does not sacrifice power for ease of use. Advisor Reporter can work in either Automated Reporting or Custom Reporting mode. With Custom Reporting, you are prompted through all table, chart, or report options step-by-step, allowing you to maintain control over all aspects of the reporting process.

If you want the power of Automated Reporting and the flexibility of Custom Reporting, try the AutoReport Editor. Its well-organized graphical interface allows you to build your own profiles for use with Automated Reporting. These profiles can include such information as header, footer and cover page text, charts to include in the report, and number or date formats for the tables.



Data collected from your Agilent Advisor is presented in an easy-to-read format.

Accuracy

A reporting tool is only as good as the data it processes. Very few network analyzers capture 100% of the data on most networks, especially at speeds of 100Mbps and greater. Fortunately, the Agilent Advisor is one of those few. And that means Advisor Reporter produces a much more accurate representation of network traffic than most other network reporting tools. Anything less just doesn't make sense.

Broad Range of Statistics

The Advisor offers an extremely varied array of statistics for all networks, from the physical layer up to the application layer. And many statistics can be customized through the use of filter counters to suit specific needs.

Going one step further, Advisor Reporter produces efficiencies for many statistics, factoring such things as error counts against utilization or successful call setups against requests. You can even edit CIR rates on frame relay circuits to see if they are really delivering or utilizing the bandwidth that is being paid for.

Broad Range of Network Interfaces

Advisor Reporter produces consistent reports from a wide variety of network types, making it the only reporting tool you'll need. One product supports all of these technologies:

- Ethernet
- Token-ring
- FDDI
- Fast Ethernet
- Gigabit Ethernet
- HDLC/SDLC
- Frame relay
- X.25
- ISDN
- PPP
- ATM
- LAN over WAN and ATM
- WAN and ATM BERT

Understanding

With all of the statistics Advisor Reporter produces, understanding specifically what they mean isn't left to chance. A complete glossary is generated as part of your reports that explains statistic by statistic what your looking at and how it was calculated. Nothing can be more frustrating than looking at a chart and not really knowing what it represents. The Advisor Reporter makes it easy.

True Presentation – Quality Output

Every aspect of every table, chart, and report that Advisor Reporter creates is painstakingly reviewed for readability and accuracy. The result is true presentation-quality output. Tables, charts, and reports are ready to go to the printer (and your colleagues or clients) without requiring extra formatting, cutting, or pasting.

Microsoft® Office 2000 Integration

A cornerstone of Advisor Reporter's heritage is complete integration into the Microsoft Office environment. This integration affords a degree of flexibility not achievable with other standalone applications. By keeping your data in Excel and Word compatible formats, you can use the full power of these applications to further manipulate your reports. Change data values, create new efficiencies, edit names, add balloon text or notes, even modify a complete report to work on your company's letterhead.

A Wide Range of Applications

Advisor Reporter makes quick work of sifting through large quantities of network data. With this ease of reporting, you will find yourself using your Internet Advisor for a much wider range of tasks than you expected from a network analyzer. Here are just a few of Internet Reporter's many potential applications:

Baselining

- Quickly visualize and isolate difficult to spot network problems
- Document healthy networks for future reference when problems arise
- Identify and solve developing problems before they become real problems
- Balance your bandwidth for maximum efficiency
- Stay ahead of the capacity planning curve
- Cost-justify network component upgrades
- Manage virtual circuits and control costs on WAN and ATM lines

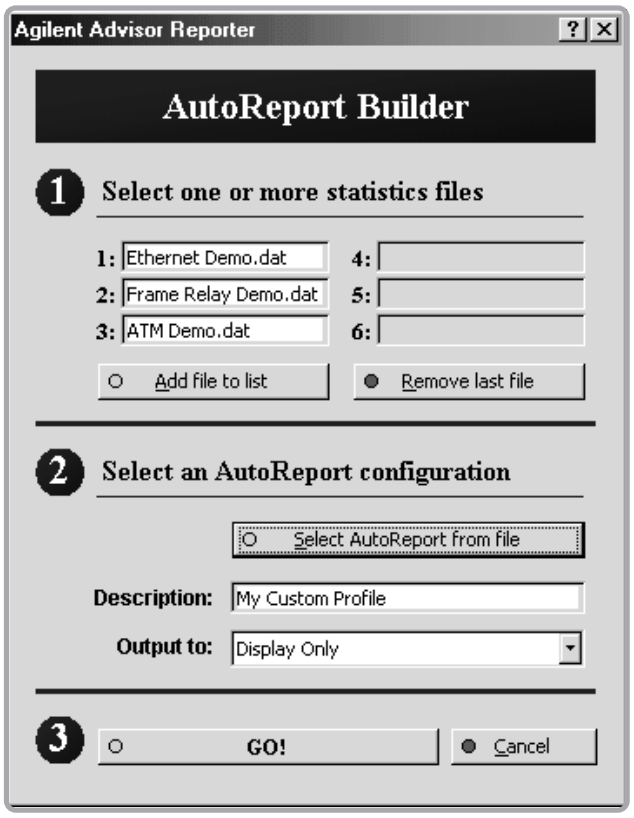
Benchmarking

- Choose the right components for a specific network environment.
- Fine-tune configuration parameters of network components for optimal performance.
- Identify upper limits of network component performance

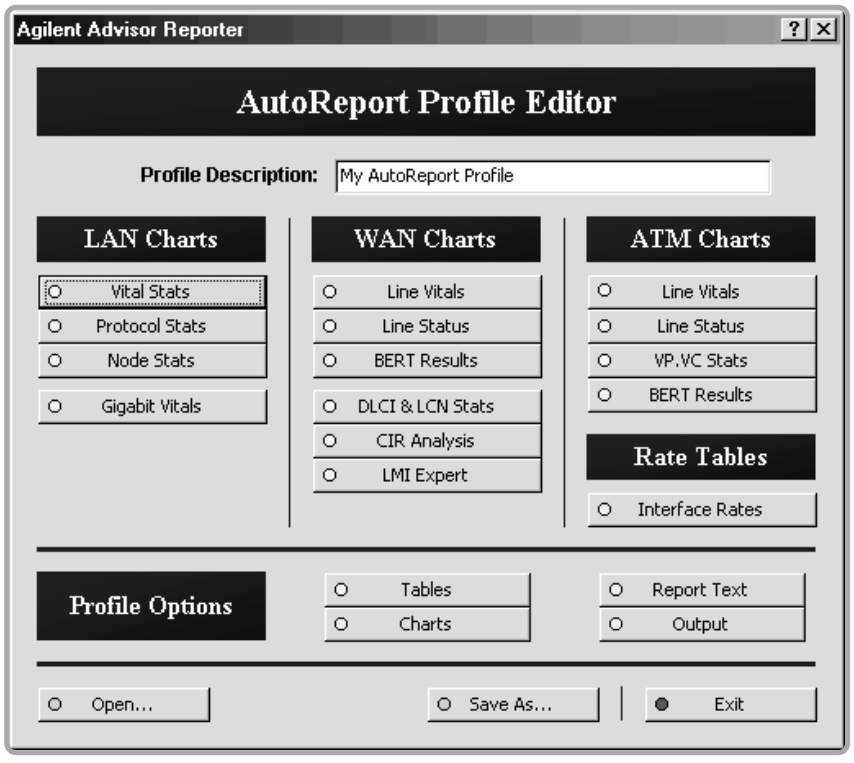
Saves time and money

Can you afford not to have Advisor Reporter working for you?

- Advisor Reporter can help you cost justify your decisions with documentation to back you up.
- Stop saying "If I only knew what the network looked like before this problem happened".
- Advisor Reporter helps you prioritize and plan changes to the network based on a real understanding of the network's dynamics.



Agilent Advisor Reporter's exclusive AutoReport Builder makes reporting as simple as 1, 2, 3.



AutoReport Editor allows you to create and distribute custom AutoReport Profiles with point-and-click ease.

Which Agilent Advisor Measurements are Compatible with Agilent Advisor Reporter?

LAN Measurements

Supported Interfaces

Ethernet, Fast Ethernet, Gigabit Ethernet (NDIS and Undercradle), Token-Ring, FDDI

Supported Measurements

Protocol Vitals
Available on all interfaces except Gigabit Ethernet (Undercradle). Combines vital statistics for Ethernet, Token-Ring or FDDI with TCP/IP, Novell, AppleTalk, Banyan VINES, OSI and DECnet into a single measurement. Individual Protocols can be turned on/off as desired.

Line Vitals
Available on all interfaces except Gigabit Ethernet (Undercradle). Same as Ethernet, Token-Ring or FDDI portion of Protocol Vitals

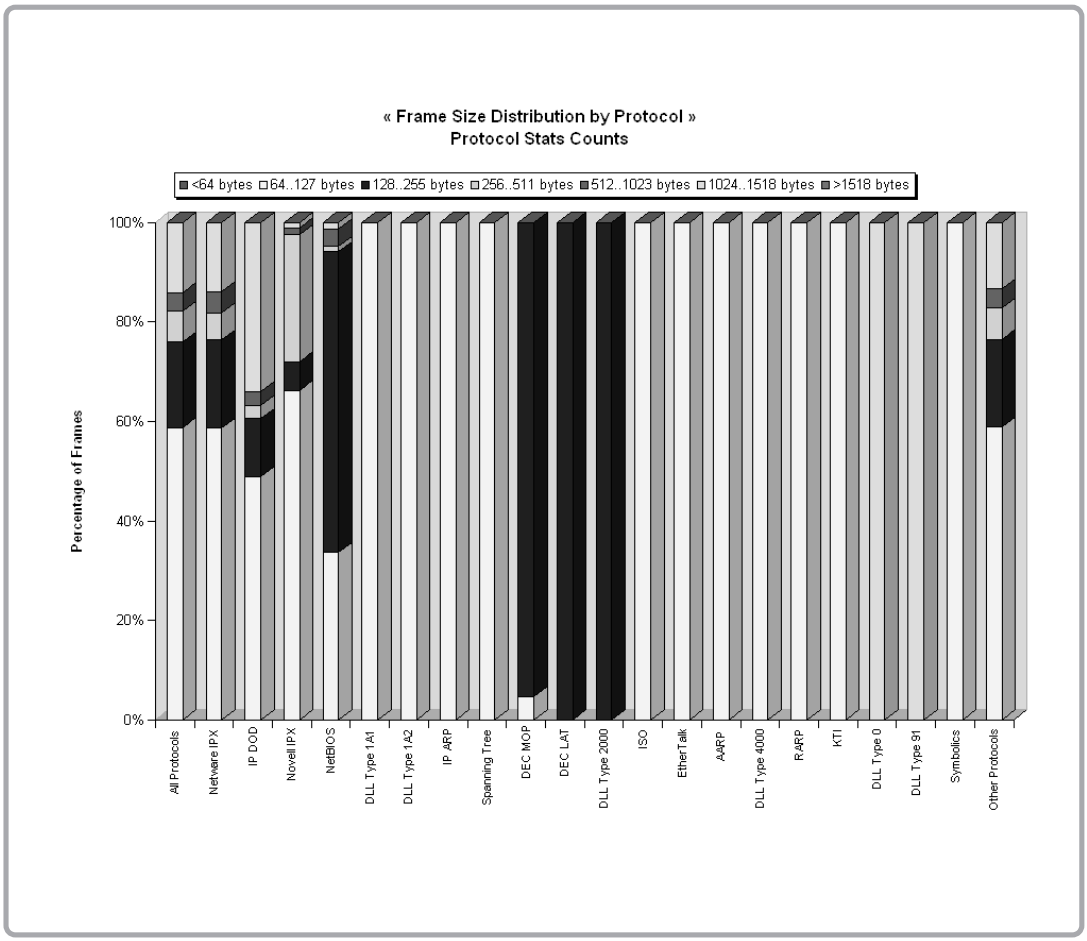
Gigabit Vitals
Available on Gigabit Ethernet (Undercradle) interface. Provides detailed analysis of network utilization and efficiencies, FCS Errors, Xon/Xoff counts, broadcast and multicast frames.

Protocol Stats
This series of measurements provides a detailed breakout of individual protocol types, with specific configurations for:

- All protocols by DLL types and SAPs
- All protocols by major protocol stack
- AppleTalk protocols
- Banyan (VINES) protocols and ports
- Cisco ISL and 802.1q VLAN Ids
- DECnet protocols
- IP protocols and ports
- Novell (IPX) types and sockets
- OSI protocols

All Protocol Stats configs count frames, bytes, average frame length, and DLL Errors, as well as a complete and very useful frame length distribution matrix.

MAC Node Stats
Available on all interfaces except Gigabit Ethernet (Undercradle). Provides detailed statistics by MAC Node Address. A configurable software filter allows this measurement to count only non-errored frames or frames to, from or to/from a specific station address. Separate transmit (Tx) and receive (Rx) counters for frames and bytes combine with transmit counters for errors, broadcasts and multicasts (functional address frames in Token-Ring). Token-Ring configs also count source routing frames (Tx and Rx) and source route broadcasts. FDDI configs count SMT (Tx and Rx), bad fcs, ebit, length error and violation frames as well as SMT bytes.



Agilent Advisor Reporter excels at taking complex network data, like this multiple protocol frame size distribution, and presenting it in ways that are easy to interpret.

LAN Measurements
(Legacy Support for SmallTalk Interfaces)

Supported Interfaces

Ethernet, Fast Ethernet, Token-Ring, FDDI

Supported Measurements

Summary Stats
Provides a general overview of the network, trended over time. All interface configs include basic frame and byte counts, including frame counts for up to 4 protocols and 7 stations. Other interface-specific counters include:

- Ethernet and Fast Ethernet Errors
- Token-Ring Soft Errors, Hard Errors and Source Routing counters
- FDDI Soft Errors, Hard Errors and Ring State counters

Protocol Stats
Provides a detailed breakout of individual protocol types, with many protocol-specific configuration options available. When configured for a Protocol Stacks view, all protocols can be trended over time by major protocol stack for a broad overview.

Other Protocol Stats configurations provide the most detailed breakout of protocols, ports, types, sockets, or IDs, depending on the protocol stack, but support in Internet Reporter is limited to total counts for the duration of the run. Individual Protocol Stats configurations are provided for:

- All protocols by DLL types and SAPs
- All protocols by major protocol stack
- AppleTalk protocols
- Banyan (VINES) protocols and ports
- DECnet protocols
- Cisco ISL VLAN Ids
- IP protocols and ports
- Novell (IPX) types and sockets
- OSI protocols

All Protocol Stats configs count total frames, bytes, average frame length, and DLL errors, as well as a complete and very useful frame length distribution matrix. The Protocol Stats Stack configuration also trends the frame, byte, average frame length, and DLL errors counters.

Top Talkers
Provides detailed statistics by MAC Node Address (or friendly name if configured). Separate transmit (Tx) and receive (Rx) counters for frames and bytes gives a good snapshot of the traffic on the network.

WAN Measurements

Supported Technologies

Frame Relay, X.25, HDLC, SNA-SDLC, PPP, ISDN

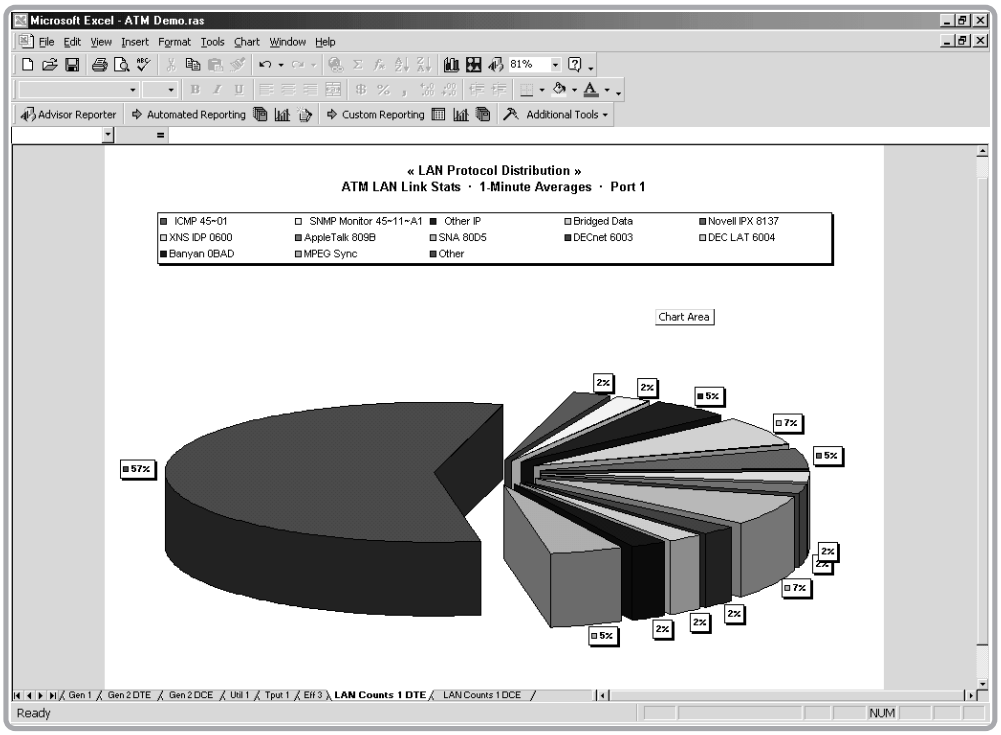
Supported Interfaces

T1, CEPT E1, V-Series, BRI S-T, BRI-U, DS3, HSSI, DDS 4-Wire

Supported Measurements

Line Vitals
This measurement combines a wide range of general statistics together. Its counters include utilization and throughput, frame efficiencies, line errors and interface-specific errors. Additionally, Line Vitals provides 16 highly configurable filters/counters which allow for the capture of network-specific types of traffic or conditions.

Line Status
This measurement provides detailed signaling statistics for T1, E1, BRI U, DS3, E3 and DDS interfaces. BRI U configurations also include a useful EOC Report, while DS3 configurations include FEAC statistics.



Agilent Reporter keeps all related tables and charts together in a single tabbed workbook for quick analysis.

Enhanced DLCI Statistics

This new Agilent Advisor measurement allows you to track up to 1024 Frame Relay DLCI's at the same time. Advisor Reporter can automatically select the most active or you can specify those you want in your report. Counters include basic utilization and throughput as well as DE, FECN, and BECN.

You can also enter CIR values for each DLCI, providing CIR Utilization trending by DLCI. CIR values can even be stored as part of an AutoReport Profile for reuse in other reports.

CIR Analysis

The Agilent Advisor allows service providers and carriers to monitor and analyze the committed information rate of every user channel in the link and simulate controlled traffic as specified in the service contract. Advisor Reporter documents the results of this analysis so that network managers can make appropriate modifications in service levels, and increase or decrease network bandwidth to meet exact customer requirements

LMI Expert Statistics

This measurement allows you to detect network problems through monitoring of the Frame Relay signaling protocol LMI (Local Management Interface). Timers (T391, T392) and Counters (N391, N392, N393) can be tracked along with general LMI related parameters which include Sequence number errors, Single PVC Async Messages, Down PVCs, and CLLM Count.

Channel Statistics

These measurements are available for Frame Relay (DLCI) (pre-Agilent Advisor 11.4) and X.25 (LCN) technologies. Up to 30 virtual circuits can be trended, including general utilization, throughput, and line error counters.

DLCI statistics also include DE, FECN, and BECN counters for each virtual circuit. Advisor Reporter allows you to enter a CIR value for each DLCI, providing CIR Utilization trending by DLCI.

X.25 configurations can also include a complete frame size distribution.

BERT Results

The BERT Results measurement provides fast and reliable documentation of physical layer tests on T1 and E1 interfaces.

ATM Measurements

Supported Interfaces

T1, E1, E3, DS3, STM-1/OC-3c

Supported Measurements

Line Vitals
This measurement combines a wide range of general statistics together. Its counters include busy, idle, and total cells, utilization and throughput, good/errored cell efficiencies, HEC errors and interface-specific errors. Additionally, Line Vitals provides 12 highly configurable filters/counters which allow for the capture of network-specific types of traffic or conditions.

Several pre-defined filters/counters are available on the Agilent Advisor via the Start menu structure to save you the time of creating them yourself. Of these, several are recognized by Advisor Reporter as "built-in" configurations, producing additional interpreted statistics.

Line Status
This measurement provides detailed signaling statistics for all supported interfaces. DS3 and OC-3c configurations also include FEAC statistics.

VP.VC Stats
This measurement from the Agilent Advisor 11.8 allows you to choose from any 30 of the 1024 tracked VP.VCs tracked in the log file. Advisor Reporter has logic to help select the select the Top 10, 20 or 30 VP.VCs automatically for you. Counters track utilization in cells, % of bandwidth, and kbps. Additional statistics are provided for HEC Errors and CLP Bit Set.

BERT Results
The BERT Results measurement provides fast and reliable documentation of both cell-based and frame-based tests on DS3, E3, and STM-1/OC-3c interfaces.

How Can Agilent Advisor Reporter be Tailored to Fit My Needs?

Advisor Reporter provides a wide variety of extremely flexible built-in chart formats. Many charts can be customized, allowing you to chart only the data fields you want.Most importantly, Advisor Reporter's built-in chart formats are designed to be user-friendly, preventing potential costly misinterpretation of network data.

Customizable output

Table, chart, and report output can be customized with several options. Comment lines appear as headers or footers in Excel tables and charts, and on the cover page of Word reports.

- Customizable report titles
- Automatic page scaling
- Automatic or manual chart y-axis scaling
- Rename DTE (Port 1) and DCE (Port 2) labels
- Enter and change frame relay CIR rates for each DLCI
- Plot DCE (Port 1) and DTE (Port 2) statistics together or on separate charts
- Automatic plotting of the top 5 or 10 virtual circuits

Focus-period selection

Advisor Reporter lets you view smaller subsets of data contained in log files. You do not have to sift through data that falls outside of the timeframe you wish to analyze or report on.

International Language Support

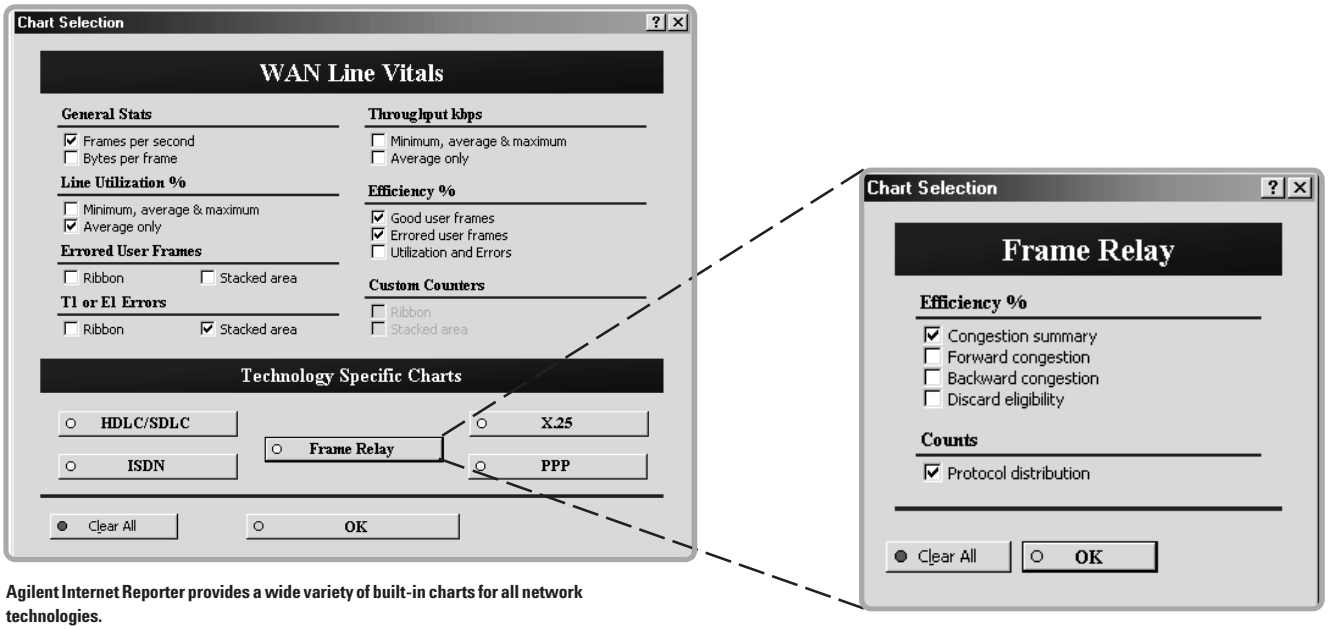
New technology in this release of Advisor Reporter allows you to choose unique languages for both the user interface and report text, making communication across global networks much simpler. Initially, just the English language packs will be available. Shortly thereafter, Spanish and Japanese will be released. Additional languages will follow after that.

Users running Windows NT or 2000 can mix any combination of languages on their system. Users of Western-language Windows 95 and 98 can mix only Western-languages on the same system.

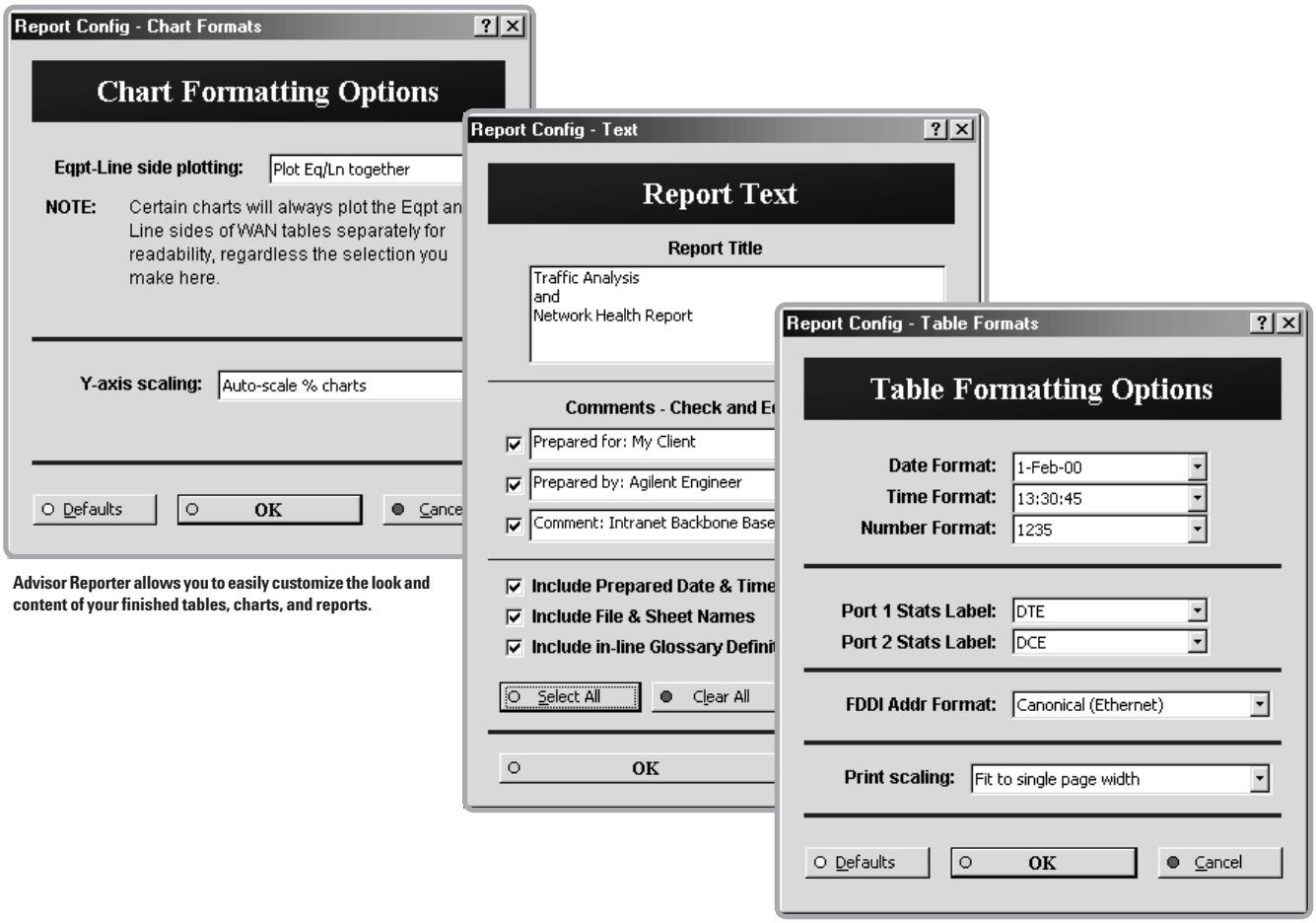
For any language that does not have a language pack available, Advisor Reporter will still work correctly. It will just display text in one of its supported languages.

Advisor Reporter also recognizes the international settings of your Windows environment, even recognizing the default paper size for your printer (i.e. A4). The following date, time, and number format options are also presented according to your country settings:

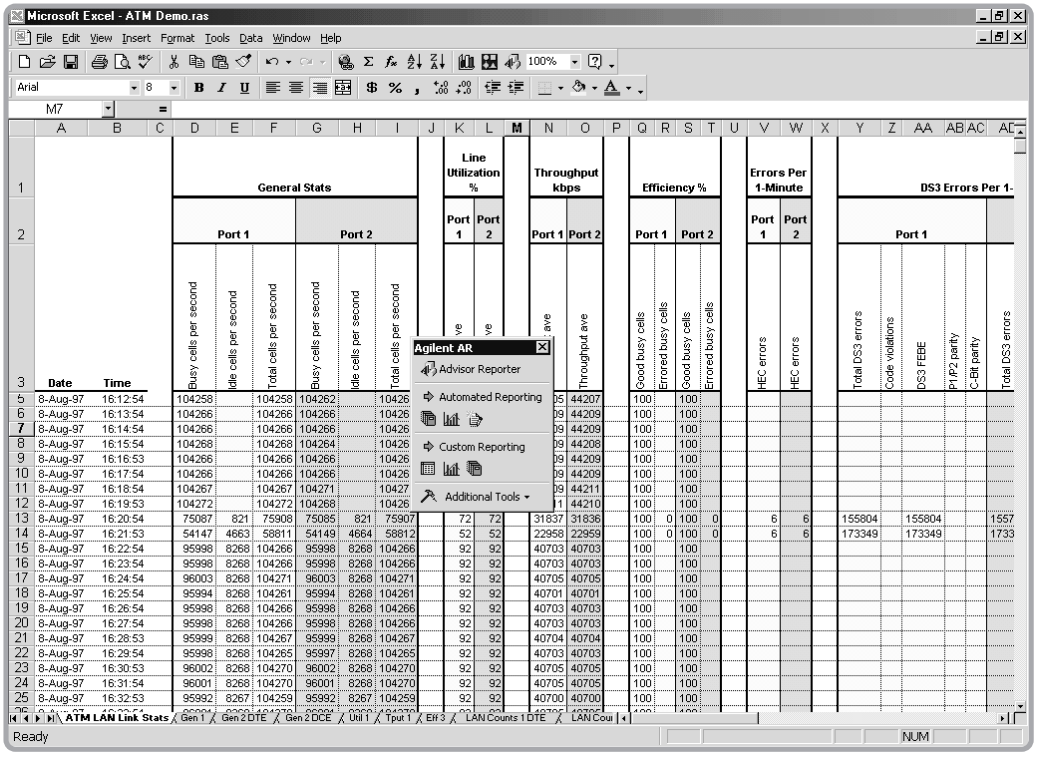
- 3 date formats per country
- 4 time formats per country
- 4 number formats per country



Agilent Internet Reporter provides a wide variety of built-in charts for all network technologies.



Advisor Reporter allows you to easily customize the look and content of your finished tables, charts, and reports.



Advisor Reporter is integrated into Microsoft® Office, with all features conveniently accessable via a docked or floating toolbar.

System Requirements

Data Collection

- **WAN**
  - Agilent Advisor 10.0 minimum (11.4 + for Frame Relay Enhanced DLCI, CIR Analysis, LMI Expert)
- **ATM**
  - Agilent Advisor 9.5 minimum (11.8+ for ATM VP.VC)
- **LAN (Under Windows)**
  - Agilent Advisor 10.0 minimum (11.3 + for Token-Ring and FDDI)
- **LAN (Legacy support for SmallTalk interface)**
  - Agilent Advisor for LAN system software revision A.07.00 minimum (A.08.00 for FDDI Top Talkers)

Data Analysis

- Intel Pentium™-class CPU or greater recommended
- Microsoft Windows® 95, 98, 2000, or NT 4.0 SR3+
- Microsoft® Office 2000 for Windows®
  - Excel and Word components must be installed
  - Most Western and Far East versions are supported (i.e. French, Spanish, German, Italian, Japanese etc.)
- Windows®-supported output device (Color printer highly recommended)
- 3.5" 1.44MB compatible diskette drive
- 6MB free disk space required for Advisor Reporter
- Up to 100MB+ free disk space required for Microsoft Office 2000
- 100MB free disk space minimum recommended for work files
- Internet connection for downloading software updates

Warranty

For software - warranty 90 day replacement only

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Pentium™ is a U.S. trademark of Intel Corporation

Agilent Technologies' Test and Measurement Support, Services, and Assistance

Agilent Technologies aims to maximize the value you receive, while minimizing your risk and problems. We strive to ensure that you get the test and measurement capabilities you paid for and obtain the support you need. Our extensive support resources and services can help you choose the right Agilent products for your applications and apply them successfully. Every instrument and system we sell has a global warranty. Support is available for at least five years beyond the production life of the product. Two concepts underlie Agilent's overall support policy: "Our Promise" and "Your Advantage."

Our Promise
Our Promise means your Agilent test and measurement equipment will meet its advertised performance and functionality. When you are choosing new equipment, we will help you with product information, including realistic performance specifications and practical recommendations from experienced test engineers. When you use Agilent equipment, we can verify that it works properly, help with product operation, and provide basic measurement assistance for the use of specified capabilities, at no extra cost upon request. Many self-help tools are available.

Your Advantage
Your Advantage means that Agilent offers a wide range of additional expert test and measurement services, which you can purchase according to your unique technical and business needs. Solve problems efficiently and gain a competitive edge by contracting with us for calibration, extra-cost upgrades, out-of-warranty repairs, and on-site education and training, as well as design, system integration, project management, and other professional engineering services. Experienced Agilent engineers and technicians worldwide can help you maximize your productivity, optimize the return on investment of your Agilent instruments and systems, and obtain dependable measurement accuracy for the life of those products.

www.agilent.com

Agilent Ordering Information

J3307A Agilent Advisor Reporter LAN/WAN/ATM

Subscription Service

J5474A One year web-based software update service

Education

H7211A-401 Proactive Network Analysis

Warranty and Support Services

Software 90 day media replacement warranty

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http://www.agilent.com/comms/onenetworks

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