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INTRODUCTION

Welcome to the 4Q01 Voice Over IP Monitor Report.

In the fourth quarter of 2001, The Eastern Management Group observed a surge in VoIP's share of the total US CPE market from 14.2% to 20.5%. VoIP accounted for 672,065 lines out of a total of 3,283,738 US CPE lines shipped in 4Q01.

The TDM CPE market contracted in terms of line volume from 3Q01 to 4Q01, even as the US economy reversed its earlier move into negative GDP growth. We conclude that this was in part due to a recent shift in corporate expenditure away from telecommunications systems and toward corporate security and business continuity, following the attacks of September 11.

Our research shows that enterprises recognize that distributed VoIP systems can play an important role within business continuity strategies in a way that traditional TDM systems cannot, and that an important part of the growth in VoIP can be attributed directly to the catastrophic events of 9/11. Thus, the substitution from TDM to VoIP systems has been so strong that the VoIP portion of the US CPE market has still continued to grow at its meteoric rate.

COMPANIES COVERED IN THIS REPORT

As in the 3Q01 report, we have divided the VoIP CPE market into the following categories:

(1) IP-LAN

This is IP-telephony over Ethernet with or without IP-trunking capabilities. (It is a pure IP solution sometimes known as Ethernet telephony)

(2) IP-TDM (IP-enabled PBX and KTS)

This covers traditional TDM CPE (PBX and KTS equipment) that has been IP-enabled for IP-phones and/or IP-trunking.

The classification of vendors in the 4Q01 report is shown on the next page, with shipments being classified as reported by the vendors. However, Vertical Networks and Alcatel were both reclassified for 4Q01, following discussions with those vendors.

Mitel's IP-LAN shipments are being reported in 4Q01, for the first time, in addition to the company's IP-TDM shipments. Intecom's and Vodavi's VoIP shipments are also being reported for the first time for 4Q01. As a result of discussions with NEC, NEC's IP-TDM lines (which are IP-enabled PBX and KTS) are being counted within this report, but the corresponding systems are not counted here (and instead have been counted in the 4Q01 Monitor Report for PBX, KTS, and Centrex).

	IP-LAN	IP-TDM
3Com	X	
Alcatel	X	
Altigen	X	
Avaya	X	X
Cisco	X	
Comdial		X
Intecom		X
Mitel	X	X
NEC		X
Nortel	X	X
Shoreline	X	
Siemens	X	
Sphere Communications	X	
Vertical Networks		X
Vodavi		X
Other	X	X

HIGHLIGHTS & CONCLUSIONS

Nortel was the most successful US VoIP competitor in the fourth quarter of 2001. Nortel, the number two player within the US TDM market, leveraged its success in TDM to win top place in the enterprise VoIP market from Cisco. Nortel raised its market share from 20.9% of VoIP lines in 3Q01 to 23.3%, in 4Q01. Similarly, 3Com increased its VoIP market share in the US from 12.0% to 16.1%, while Mitel more than doubled its share from 2.2% to 4.9%. Cisco still dominates IP-LAN telephony, but its overall VoIP market share fell from 33.2% to 21.8%. Although Avaya's VoIP market share decreased in 4Q01 from 10.8% to 8.5%, it succeeded in securing the top position in the US total CPE market (covering both TDM and VoIP CPE).

As in the previous quarter, the 4Q01 rate of VoIP penetration was greatest in the largest size segment (4000+ lines), followed by the 100-200 line segment. By contrast, the VoIP vendors were least successful overall in penetrating the 2 – 40 line segment – suggesting that small enterprises might still be reluctant to invest in VoIP systems or that the net benefit of VoIP implementation might be lowest in smaller installations. If either case is true, then a particularly significant market opportunity may exist within the 2 – 40 line segment for an agile VoIP player.

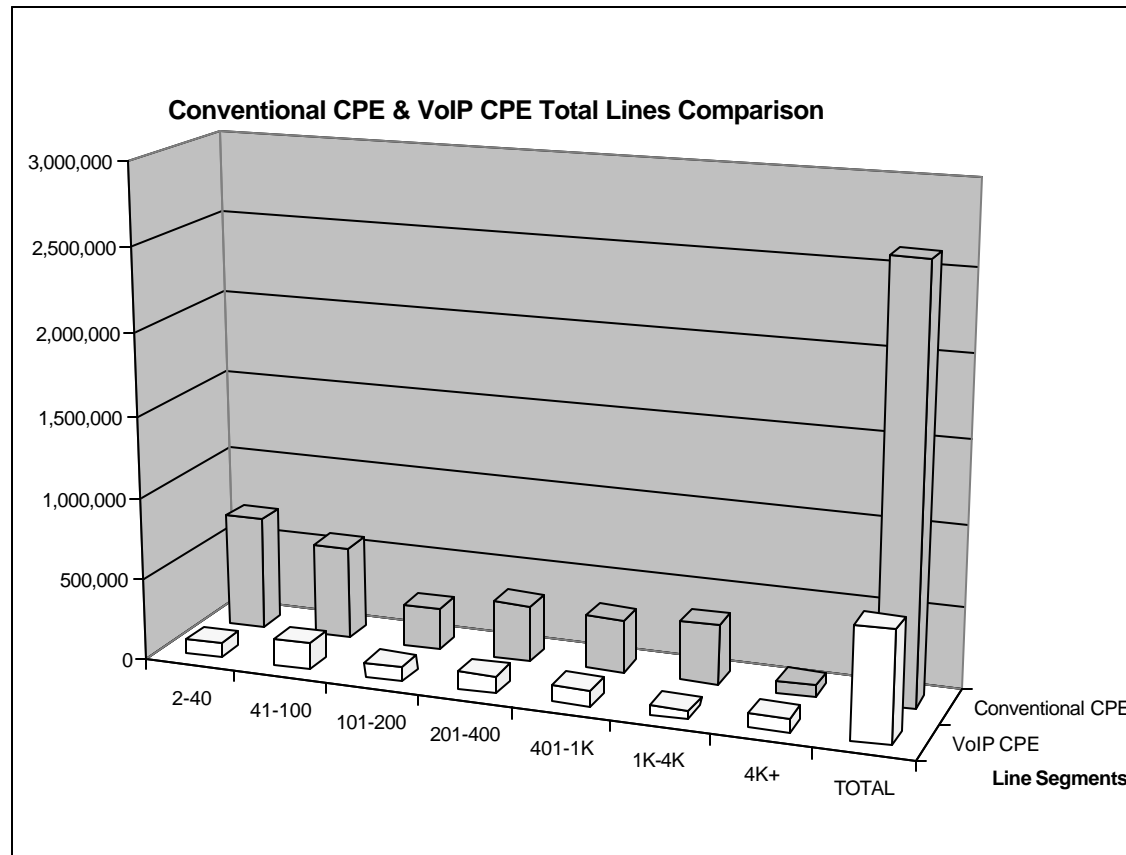
We believe that developments taking place outside the traditional CPE industry will continue to reshape enterprise telecommunications, and will give rise to new competitors and a competitive shakeout among existing players. For example, the inclusion of the Session Initiation Protocol (SIP) VoIP protocol within the latest Windows XP operating system places a SIP phone on every desktop, and provides users with a compelling alternative to traditional phone systems.

We also expect that similar developments will result in increasing alliances between traditional telephone equipment vendors, and software and data networking players such as Microsoft and Cisco. Ultimately, the expertise needed to succeed in converging voice/data networks will require major strengths in voice *and* data: even the largest vendors from voice or data alone won't be able to dominate the converging market without developing or acquiring complementary strengths.

TOTAL CPE LINES BY SEGMENT: 4Q01

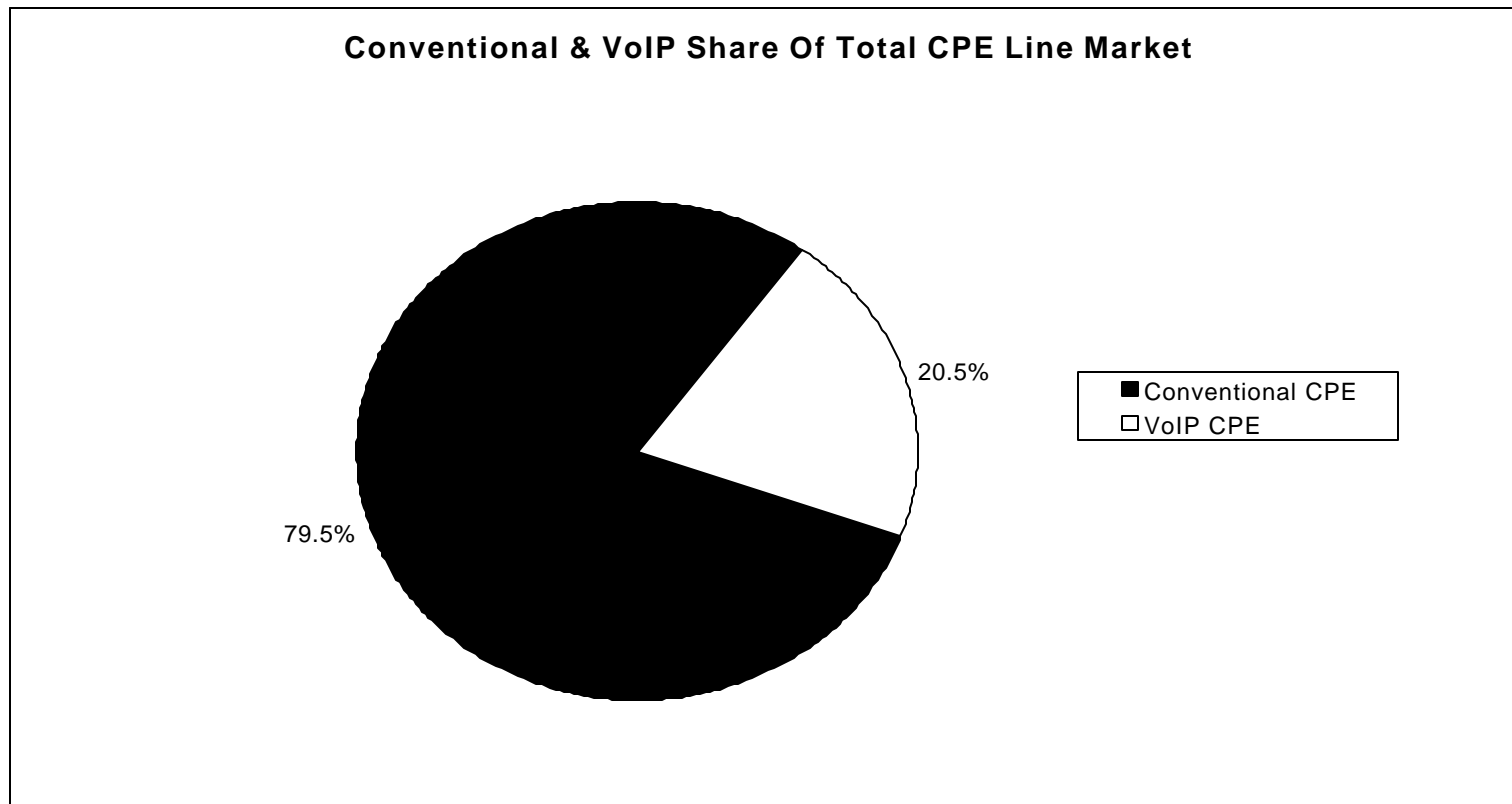


	2-40	41-100	101-200	201-400	401-1K	1K-4K	4K+	TOTAL
VoIP CPE	91,242	160,653	88,929	103,732	96,194	50,578	80,737	672,065
Conventional CPE	690,612	570,463	253,406	343,233	323,218	362,031	68,710	2,611,673
TOTAL CPE LINES	781,854	731,116	342,335	446,965	419,412	412,609	149,447	3,283,738



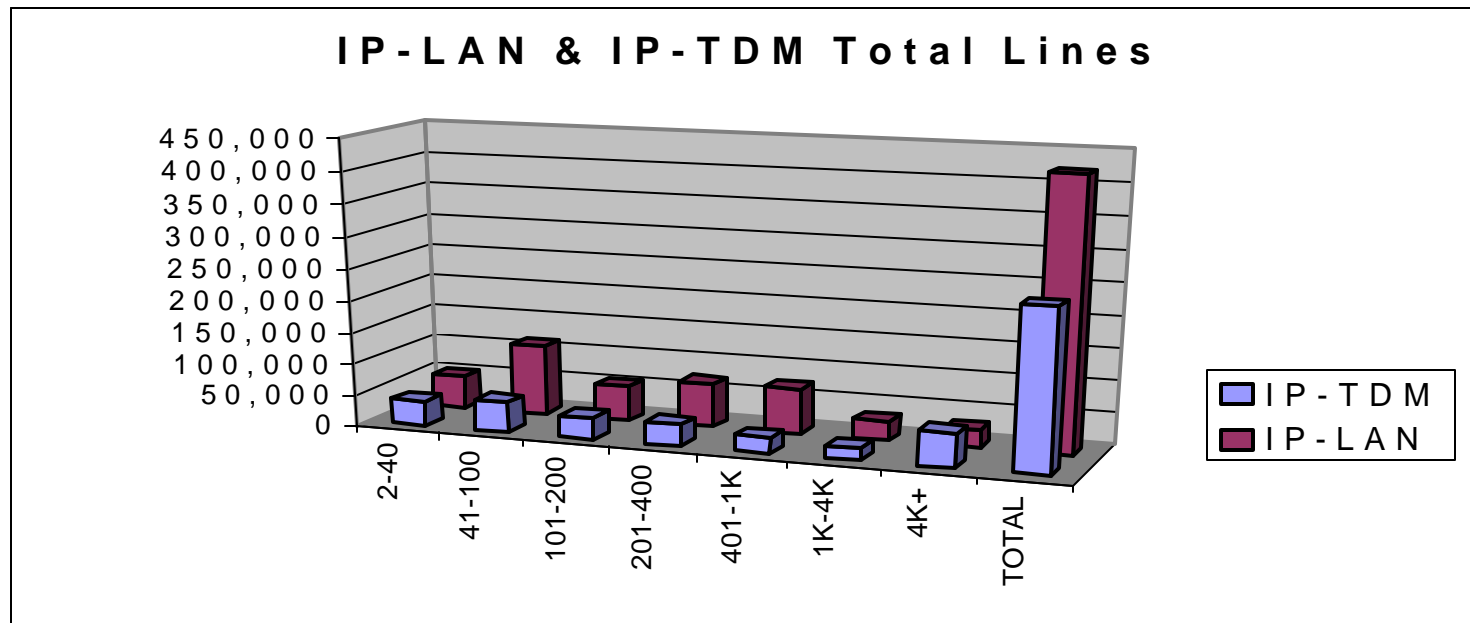
LINE SHARE OF TOTAL CPE BY SEGMENT : 4Q01

	2-40	41-100	101-200	201-400	401-1K	1K-4K	4K+	TOTAL
Conventional CPE	88.3%	78.0%	74.0%	76.8%	77.1%	87.7%	46.0%	79.5%
VoIP CPE	11.7%	22.0%	26.0%	23.2%	22.9%	12.3%	54.0%	20.5%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%



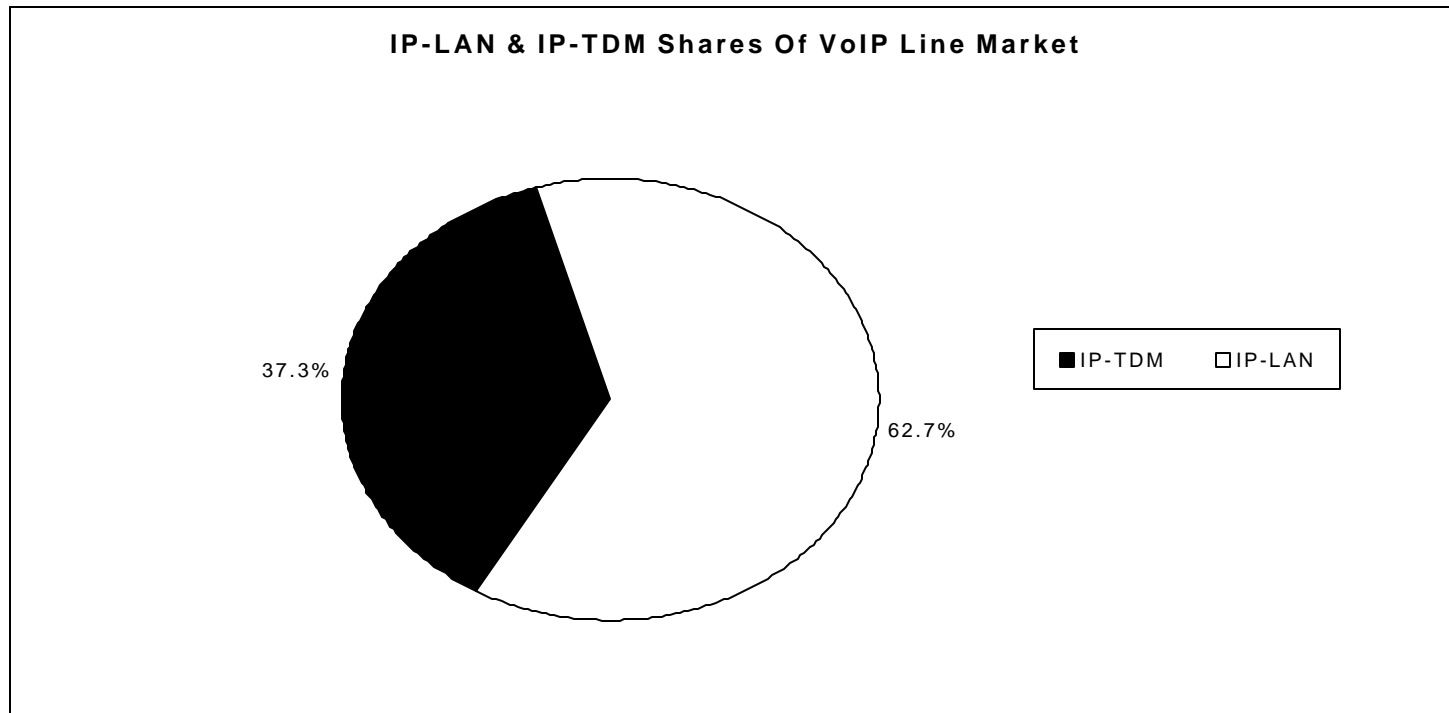
COMPARISON OF IP-LAN & IP-TDM TOTAL LINES 4Q01

	2-40	41-100	101-200	201-400	401-1K	1K-4K	4K+	TOTAL
IP-TDM	39,200	47,753	33,295	33,785	24,276	19,232	53,238	250,779
IP-LAN	52,042	112,900	55,634	69,947	71,918	31,346	27,499	421,286
TOTAL	91,242	160,653	88,929	103,732	96,194	50,578	80,737	672,065



IP-LAN & IP-TDM SHARE OF TOTAL VoIP LINES 4Q01

	2-40	41-100	101-200	201-400	401-1K	1K-4K	4K+	TOTAL
IP-TDM	43.0%	29.7%	37.4%	32.6%	25.2%	38.0%	65.9%	37.3%
IP-LAN	57.0%	70.3%	62.6%	67.4%	74.8%	62.0%	34.1%	62.7%
	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%



Total CPE Shipments By Vendor / Size Segments: 4Q01

TOTAL TDM AND VoIP LINES

	2-40	41-100	101-200	201-400	401-1K	1K-4K	4K+	TOTAL
3Com	20,000	28,800	13,000	23,600	23,000	0	0	108,400
Alcatel	600	800	2,000	3,000	7,000	0	0	13,400
Altigen	7,666	9,837	4,257	0	0	0	0	21,760
Avaya	140,749	154,983	105,693	170,209	132,164	172,054	0	875,852
Cisco	0	5,405	20,761	28,369	33,479	30,686	27,499	146,199
Comdial	41,816	31,872	0	0	0	0	0	73,688
eOn Comm	204	6,312	14,859	0	0	0	0	21,375
Ericsson	0	530	2,316	4,035	7,444	0	0	14,325
Hitachi	0	2,289	4,788	1,908	4,802	3,366	0	17,153
Intecom	0	0	0	653	5,896	21,431	51,638	79,618
Inter-Tel	24,036	107,865	0	0	0	0	0	131,901
Iwatsu	12,874	10,040	0	0	0	0	0	22,914
Mitel	25,103	37,385	26,957	26,955	12,650	7,900	0	136,950
NEC	91,269	44,908	17,221	10,371	15,794	22,930	7,992	210,485
Nortel	129,889	169,552	84,557	117,715	107,359	102,509	60,901	772,482
Panasonic	84,229	0	0	0	0	0	0	84,229
Samsung	60,988	8,217	0	0	0	0	0	69,205
Shoreline	248	288	408	760	1,152	0	0	2,856
Siemens	4,720	11,781	30,792	44,184	59,594	48,278	0	199,349
Sphere	0	1,416	3,390	4,236	5,298	660	0	15,000
Tadiran	6,670	20,279	5,336	1,067	0	0	0	33,352
Toshiba	45,795	36,778	0	0	0	0	0	82,573
Vertical	21,398	906	347	0	0	0	0	22,651
Vodavi	43,202	27,253	4	0	0	0	0	70,459
Other	20,398	13,620	5,649	9,903	3,780	2,795	1,417	57,562
TOTAL	781,854	731,116	342,335	446,965	419,412	412,609	149,447	3,283,738

VoIP CPE Shipments By Vendor / Size Segments: 4Q01

TOTAL LINES

	2-40	41-100	101-200	201-400	401-1K	1K-4K	4K+	TOTAL
3Com	20,000	28,800	13,000	23,600	23,000	0	0	108,400
Alcatel	600	800	2,000	3,000	7,000	0	0	13,400
Altigen	7,666	9,837	4,257	0	0	0	0	21,760
Avaya	1,816	21,459	13,471	13,471	7,214	0	0	57,431
Cisco	0	5,405	20,761	28,369	33,479	30,686	27,499	146,199
Comdial	2,304	0	0	0	0	0	0	2,304
Intecom	0	0	0	653	752	10,432	51,638	63,475
Mitel	3,652	15,936	6,806	6,806	0	0	0	33,200
NEC	219	308	220	55	55	274	0	1,131
Nortel	26,364	68,056	18,237	18,237	15,695	8,526	1,600	156,715
Shoreline	248	288	408	760	1,152	0	0	2,856
Siemens	2,423	2,339	2,052	905	630	0	0	8,349
Sphere	0	1,416	3,390	4,236	5,298	660	0	15,000
Vertical	21,398	906	347	0	0	0	0	22,651
Vodavi	15	82	4	0	0	0	0	101
Other	4,537	5,021	3,976	3,640	1,919	0	0	19,093
TOTAL	91,242	160,653	88,929	103,732	96,194	50,578	80,737	672,065

VoIP CPE Shipments By Vendor / Size Segments: 4Q01

TOTAL LINES MARKET SHARE

	2-40	41-100	101-200	201-400	401-1K	1K-4K	4K+	TOTAL
3Com	21.9%	17.9%	14.6%	22.8%	23.9%	0.0%	0.0%	16.1%
Alcatel	0.7%	0.5%	2.2%	2.9%	7.3%	0.0%	0.0%	2.0%
Altigen	8.4%	6.1%	4.8%	0.0%	0.0%	0.0%	0.0%	3.2%
Avaya	2.0%	13.4%	15.1%	13.0%	7.5%	0.0%	0.0%	8.5%
Cisco	0.0%	3.4%	23.3%	27.3%	34.8%	60.7%	34.1%	21.8%
Comdial	2.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%
Intecom	0.0%	0.0%	0.0%	0.6%	0.8%	20.6%	64.0%	9.4%
Mitel	4.0%	9.9%	7.7%	6.6%	0.0%	0.0%	0.0%	4.9%
NEC	0.2%	0.2%	0.2%	0.1%	0.1%	0.5%	0.0%	0.2%
Nortel	28.9%	42.4%	20.5%	17.6%	16.3%	16.9%	2.0%	23.3%
Shoreline	0.3%	0.2%	0.5%	0.7%	1.2%	0.0%	0.0%	0.4%
Siemens	2.7%	1.5%	2.3%	0.9%	0.7%	0.0%	0.0%	1.2%
Sphere	0.0%	0.9%	3.8%	4.1%	5.5%	1.3%	0.0%	2.2%
Vertical	23.5%	0.6%	0.4%	0.0%	0.0%	0.0%	0.0%	3.4%
Vodavi	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other	5.0%	3.1%	4.5%	3.5%	2.0%	0.0%	0.0%	2.8%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

VoIP CPE Shipments By Vendor / Size Segments: 4Q01

TOTAL SYSTEMS

	2-40	41-100	101-200	201-400	401-1K	1K-4K	4K+	TOTAL
3Com	745	452	143	142	50	0	0	1,532
Alcatel	23	14	12	8	8	0	0	65
Altigen	319	170	33	0	0	0	0	522
Avaya	97	304	109	65	14	0	0	589
Cisco	0	116	201	123	70	17	5	532
Comdial	96	0	0	0	0	0	0	96
Intecom	0	0	0	2	1	6	5	14
Mitel	142	261	45	21	0	0	0	469
NEC	0	0	0	0	0	0	0	0
Nortel	624	935	0	0	0	0	0	1,559
Shoreline	29	5	0	4	2	0	0	40
Siemens	304	35	14	3	1	0	0	357
Sphere	0	15	20	14	7	1	0	57
Vertical	746	26	3	0	0	0	0	775
Vodavi	2	11	0	0	0	0	0	13
Other	173	74	23	9	5	0	0	284
TOTAL	3,300	2,418	603	391	158	24	10	6,904

VoIP CPE Shipments By Vendor / Size Segments: 4Q01

TOTAL SYSTEMS MARKET SHARE

	2-40	41-100	101-200	201-400	401-1K	1K-4K	4K+	TOTAL
3Com	22.6%	18.7%	23.7%	36.3%	31.6%	0.0%	0.0%	22.2%
Alcatel	0.7%	0.6%	2.0%	2.0%	5.1%	0.0%	0.0%	0.9%
Altigen	9.7%	7.0%	5.5%	0.0%	0.0%	0.0%	0.0%	7.6%
Avaya	2.9%	12.6%	18.1%	16.6%	8.9%	0.0%	0.0%	8.5%
Cisco	0.0%	4.8%	33.3%	31.5%	44.3%	70.4%	50.0%	7.7%
Comdial	2.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%
Intecom	0.0%	0.0%	0.0%	0.5%	0.6%	24.9%	50.0%	0.2%
Mitel	4.3%	10.8%	7.5%	5.4%	0.0%	0.0%	0.0%	6.8%
NEC	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Nortel	18.9%	38.7%	0.0%	0.0%	0.0%	0.0%	0.0%	22.6%
Shoreline	0.9%	0.2%	0.0%	1.0%	1.3%	0.0%	0.0%	0.6%
Siemens	9.2%	1.4%	2.3%	0.8%	0.6%	0.0%	0.0%	5.2%
Sphere	0.0%	0.6%	3.3%	3.6%	4.4%	4.1%	0.0%	0.8%
Vertical	22.6%	1.1%	0.5%	0.0%	0.0%	0.0%	0.0%	11.2%
Vodavi	0.1%	0.5%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Other	5.2%	3.1%	3.8%	2.3%	3.2%	0.6%	0.0%	4.1%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

IP-LAN Shipments By Vendor / Size Segments: 4Q01

TOTAL SYSTEMS

	2-40	41-100	101-200	201-400	401-1K	1K-4K	4K+	TOTAL
3Com	745	452	143	142	50	0	0	1,532
Alcatel	23	14	12	8	8	0	0	65
Altigen	319	170	33	0	0	0	0	522
Avaya	7	73	26	26	4	0	0	136
Cisco	0	116	201	123	70	17	5	532
Mitel	105	208	35	17	0	0	0	365
Nortel	624	935	0	0	0	0	0	1,559
Shoreline	29	5	0	4	2	0	0	40
Siemens	304	35	14	3	1	0	0	357
Sphere	0	15	20	14	7	1	0	57
Other	98	50	17	5	4	0	0	174
TOTAL	2,254	2,073	501	342	146	18	5	5,339

IP-LAN Shipments By Vendor / Size Segments: 4Q01

TOTAL SYSTEMS MARKET SHARE

	2-40	41-100	101-200	201-400	401-1K	1K-4K	4K+	TOTAL
3Com	33.1%	21.8%	28.5%	41.5%	34.2%	0.0%	0.0%	28.7%
Alcatel	1.0%	0.7%	2.4%	2.3%	5.5%	0.0%	0.0%	1.2%
Altigen	14.2%	8.2%	6.6%	0.0%	0.0%	0.0%	0.0%	9.8%
Avaya	0.3%	3.5%	5.2%	7.6%	2.7%	0.0%	0.0%	2.5%
Cisco	0.0%	5.6%	40.1%	36.0%	47.9%	94.1%	100.0%	10.0%
Mitel	4.7%	10.0%	7.0%	5.0%	0.0%	0.0%	0.0%	6.8%
Nortel	27.7%	45.1%	0.0%	0.0%	0.0%	0.0%	0.0%	29.2%
Shoreline	1.3%	0.2%	0.0%	1.2%	1.4%	0.0%	0.0%	0.7%
Siemens	13.5%	1.7%	2.8%	0.9%	0.7%	0.0%	0.0%	6.7%
Sphere	0.0%	0.7%	4.0%	4.1%	4.8%	5.5%	0.0%	1.1%
Other	4.3%	2.4%	3.4%	1.5%	2.7%	0.4%	0.0%	3.3%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

IP-LAN Shipments By Vendor / Size Segments: 4Q01

TOTAL LINES

	2-40	41-100	101-200	201-400	401-1K	1K-4K	4K+	TOTAL
3Com	20,000	28,800	13,000	23,600	23,000	0	0	108,400
Alcatel	600	800	2,000	3,000	7,000	0	0	13,400
Altigen	7,666	9,837	4,257	0	0	0	0	21,760
Avaya	731	7,897	2,801	2,801	395	0	0	14,625
Cisco	0	5,405	20,761	28,369	33,479	30,686	27,499	146,199
Mitel	2,618	11,424	4,879	4,879	0	0	0	23,800
Nortel	15,590	42,093	0	0	0	0	0	57,683
Shoreline	248	288	408	760	1,152	0	0	2,856
Siemens	2,423	2,339	2,052	905	630	0	0	8,349
Sphere	0	1,416	3,390	4,236	5,298	660	0	15,000
Other	2,166	2,601	2,086	1,397	964	0	0	9,214
TOTAL	52,042	112,900	55,634	69,947	71,918	31,346	27,499	421,286

IP-LAN Shipments By Vendor / Size Segments: 4Q01

TOTAL LINES MARKET SHARE

	2-40	41-100	101-200	201-400	401-1K	1K-4K	4K+	TOTAL
3Com	38.4%	25.5%	23.4%	33.7%	32.0%	0.0%	0.0%	25.7%
Alcatel	1.2%	0.7%	3.6%	4.3%	9.7%	0.0%	0.0%	3.2%
Altigen	14.7%	8.7%	7.7%	0.0%	0.0%	0.0%	0.0%	5.2%
Avaya	1.4%	7.0%	5.0%	4.0%	0.5%	0.0%	0.0%	3.5%
Cisco	0.0%	4.8%	37.3%	40.6%	46.6%	97.9%	100.0%	34.7%
Mitel	5.0%	10.1%	8.8%	7.0%	0.0%	0.0%	0.0%	5.6%
Nortel	30.0%	37.3%	0.0%	0.0%	0.0%	0.0%	0.0%	13.7%
Shoreline	0.5%	0.3%	0.7%	1.1%	1.6%	0.0%	0.0%	0.7%
Siemens	4.7%	2.1%	3.7%	1.3%	0.9%	0.0%	0.0%	2.0%
Sphere	0.0%	1.3%	6.1%	6.1%	7.4%	2.1%	0.0%	3.6%
Other	4.2%	2.3%	3.7%	2.0%	1.3%	0.0%	0.0%	2.2%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

IP-LAN Shipments By Vendor / Size Segments: 4Q01

ADD-ON LINES

	2-40	41-100	101-200	201-400	401-1K	1K-4K	4K+	TOTAL
3Com	1,000	2,800	1,000	1,600	0	0	0	6,400
Alcatel	123	164	410	615	1,435	0	0	2,747
Altigen	0	0	0	0	0	0	0	0
Avaya	0	0	0	0	0	0	0	0
Cisco	0	422	177	2,669	2,886	2,476	2,299	10,929
Mitel	0	0	0	0	0	0	0	0
Nortel	0	0	0	0	0	0	0	0
Shoreline	148	192	144	312	168	0	0	964
Siemens	601	625	550	185	130	0	0	2,091
Sphere	0	252	604	724	958	532	0	3,070
Other	304	400	284	196	120	0	0	1,304
TOTAL	2,176	4,855	3,169	6,301	5,697	3,008	2,299	27,505

IP-LAN Shipments By Vendor / Size Segments: 4Q01

ADD-ON LINES MARKET SHARE

	2-40	41-100	101-200	201-400	401-1K	1K-4K	4K+	TOTAL
3Com	46.0%	57.7%	31.6%	25.4%	0.0%	0.0%	0.0%	23.3%
Alcatel	5.7%	3.4%	12.9%	9.8%	25.2%	0.0%	0.0%	10.0%
Altigen	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Avaya	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Cisco	0.0%	8.7%	5.6%	42.4%	50.7%	82.3%	100.0%	39.7%
Mitel	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Nortel	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Shoreline	6.8%	4.0%	4.5%	5.0%	2.9%	0.0%	0.0%	3.5%
Siemens	27.6%	12.9%	17.4%	2.9%	2.3%	0.0%	0.0%	7.6%
Sphere	0.0%	5.2%	19.1%	11.5%	16.8%	17.7%	0.0%	11.2%
Other	14.0%	8.2%	9.0%	3.1%	2.1%	0.0%	0.0%	4.7%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

IP-LAN Shipments By Vendor / Size Segments: 4Q01

NEW LINES

	2-40	41-100	101-200	201-400	401-1K	1K-4K	4K+	TOTAL
3Com	19,000	26,000	12,000	22,000	23,000	0	0	102,000
Alcatel	477	636	1,590	2,385	5,565	0	0	10,653
Altigen	7,666	9,837	4,257	0	0	0	0	21,760
Avaya	731	7,897	2,801	2,801	395	0	0	14,625
Cisco	0	4,983	20,584	25,700	30,593	28,210	25,200	135,270
Mitel	2,618	11,424	4,879	4,879	0	0	0	23,800
Nortel	15,590	42,093	0	0	0	0	0	57,683
Shoreline	100	96	264	448	984	0	0	1,892
Siemens	1,822	1,714	1,502	720	500	0	0	6,258
Sphere	0	1,164	2,786	3,512	4,340	1,288	0	13,090
Other	1,862	2,201	1,802	1,201	844	0	0	7,910
TOTAL	49,866	108,045	52,465	63,646	66,221	29,498	25,200	394,941

IP-LAN Shipments By Vendor / Size Segments: 4Q01

NEW LINES MARKET SHARE

	2-40	41-100	101-200	201-400	401-1K	1K-4K	4K+	TOTAL
3Com	38.1%	24.1%	22.9%	34.6%	34.7%	0.0%	0.0%	25.8%
Alcatel	1.0%	0.6%	3.0%	3.7%	8.4%	0.0%	0.0%	2.7%
Altigen	15.4%	9.1%	8.1%	0.0%	0.0%	0.0%	0.0%	5.5%
Avaya	1.5%	7.3%	5.3%	4.4%	0.6%	0.0%	0.0%	3.7%
Cisco	0.0%	4.6%	39.2%	40.4%	46.2%	95.6%	100.0%	34.3%
Mitel	5.3%	10.6%	9.3%	7.7%	0.0%	0.0%	0.0%	6.0%
Nortel	31.3%	39.0%	0.0%	0.0%	0.0%	0.0%	0.0%	14.6%
Shoreline	0.2%	0.1%	0.5%	0.7%	1.5%	0.0%	0.0%	0.5%
Siemens	3.7%	1.6%	2.9%	1.1%	0.8%	0.0%	0.0%	1.6%
Sphere	0.0%	1.1%	5.3%	5.5%	6.6%	4.4%	0.0%	3.3%
Other	3.7%	2.0%	3.4%	1.9%	1.3%	0.0%	0.0%	2.0%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

IP-TDM Shipments By Vendor / Size Segments: 4Q01

TOTAL SYSTEMS

	2-40	41-100	101-200	201-400	401-1K	1K-4K	4K+	TOTAL
Avaya	90	231	83	39	10	0	0	453
Comdial	96	0	0	0	0	0	0	96
Intecom	0	0	0	2	1	6	5	14
Mitel	37	53	10	4	0	0	0	104
NEC	0	0	0	0	0	0	0	0
Nortel	0	0	0	0	0	0	0	0
Vertical	746	26	3	0	0	0	0	775
Vodavi	2	11	0	0	0	0	0	13
Other	75	24	6	4	1	0	0	110
TOTAL	1,046	345	102	49	12	6	5	1,565

IP-TDM Shipments By Vendor / Size Segments: 4Q01

TOTAL SYSTEMS MARKET SHARE

	2-40	41-100	101-200	201-400	401-1K	1K-4K	4K+	TOTAL
Avaya	8.6%	67.0%	81.4%	79.6%	83.3%	0.0%	0.0%	28.9%
Comdial	9.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	6.1%
Intecom	0.0%	0.0%	0.0%	4.1%	8.3%	98.8%	100.0%	0.9%
Mitel	3.5%	15.4%	9.8%	8.2%	0.0%	0.0%	0.0%	6.6%
NEC	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Nortel	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Vertical	71.3%	7.5%	2.9%	0.0%	0.0%	0.0%	0.0%	49.5%
Vodavi	0.2%	3.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.8%
Other	7.2%	7.0%	5.9%	8.2%	8.3%	1.2%	0.0%	7.0%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

IP-TDM Shipments By Vendor / Size Segments: 4Q01

TOTAL LINES

	2-40	41-100	101-200	201-400	401-1K	1K-4K	4K+	TOTAL
Avaya	1,085	13,562	10,670	10,670	6,819	0	0	42,806
Comdial	2,304	0	0	0	0	0	0	2,304
Intecom	0	0	0	653	752	10,432	51,638	63,475
Mitel	1,034	4,512	1,927	1,927	0	0	0	9,400
NEC	219	308	220	55	55	274	0	1,131
Nortel	10,774	25,963	18,237	18,237	15,695	8,526	1,600	99,032
Vertical	21,398	906	347	0	0	0	0	22,651
Vodavi	15	82	4	0	0	0	0	101
Other	2,371	2,420	1,890	2,243	955	0	0	9,879
TOTAL	39,200	47,753	33,295	33,785	24,276	19,232	53,238	250,779

IP-TDM Shipments By Vendor / Size Segments: 4Q01

TOTAL LINES MARKET SHARE

	2-40	41-100	101-200	201-400	401-1K	1K-4K	4K+	TOTAL
Avaya	2.8%	28.4%	32.0%	31.6%	28.1%	0.0%	0.0%	17.1%
Comdial	5.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.9%
Intecom	0.0%	0.0%	0.0%	1.9%	3.1%	54.2%	97.0%	25.3%
Mitel	2.6%	9.4%	5.8%	5.7%	0.0%	0.0%	0.0%	3.7%
NEC	0.6%	0.6%	0.7%	0.2%	0.2%	1.4%	0.0%	0.5%
Nortel	27.5%	54.4%	54.8%	54.0%	64.7%	44.3%	3.0%	39.5%
Vertical	54.6%	1.9%	1.0%	0.0%	0.0%	0.0%	0.0%	9.0%
Vodavi	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other	6.0%	5.1%	5.7%	6.6%	3.9%	0.0%	0.0%	3.9%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

IP-TDM Shipments By Vendor / Size Segments: 4Q01

ADD-ON LINES

	2-40	41-100	101-200	201-400	401-1K	1K-4K	4K+	TOTAL
Avaya	223	2,784	2,190	2,190	1,400	0	0	8,788
Comdial	1,106	0	0	0	0	0	0	1,106
Intecom	0	0	0	5	6	82	404	497
Mitel	372	1,624	694	694	0	0	0	3,384
NEC	48	100	92	23	23	114	0	400
Nortel	6,518	15,707	11,033	11,033	9,495	5,158	968	59,912
Vertical	510	22	8	0	0	0	0	540
Vodavi	6	34	2	0	0	0	0	42
Other	1,355	1,320	1,100	1,302	410	0	0	5,487
TOTAL	10,138	21,591	15,119	15,247	11,334	5,354	1,372	80,156

IP-TDM Shipments By Vendor / Size Segments: 4Q01

ADD-ON LINES MARKET SHARE

	2-40	41-100	101-200	201-400	401-1K	1K-4K	4K+	TOTAL
Avaya	2.2%	12.9%	14.5%	14.4%	12.4%	0.0%	0.0%	11.0%
Comdial	10.9%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	1.4%
Intecom	0.0%	0.0%	0.0%	0.0%	0.1%	1.5%	29.4%	0.6%
Mitel	3.7%	7.5%	4.6%	4.6%	0.0%	0.0%	0.0%	4.2%
NEC	0.5%	0.5%	0.6%	0.2%	0.2%	2.1%	0.0%	0.5%
Nortel	64.3%	72.7%	73.0%	72.4%	83.8%	96.3%	70.6%	74.7%
Vertical	5.0%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.7%
Vodavi	0.1%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Other	13.4%	6.1%	7.3%	8.5%	3.6%	0.0%	0.0%	6.8%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

IP-TDM Shipments By Vendor / Size Segments: 4Q01

NEW LINES

	2-40	41-100	101-200	201-400	401-1K	1K-4K	4K+	TOTAL
Avaya	862	10,778	8,479	8,479	5,419	0	0	34,018
Comdial	1,198	0	0	0	0	0	0	1,198
Intecom	0	0	0	648	746	10,350	51,234	62,978
Mitel	662	2,888	1,233	1,233	0	0	0	6,016
NEC	171	208	128	32	32	160	0	731
Nortel	4,256	10,256	7,204	7,204	6,200	3,368	632	39,120
Vertical	20,888	884	339	0	0	0	0	22,111
Vodavi	9	48	2	0	0	0	0	59
Other	1,016	1,100	790	941	545	0	0	4,392
TOTAL	29,062	26,162	18,175	18,537	12,942	13,878	51,866	170,623

IP-TDM Shipments By Vendor / Size Segments: 4Q01

NEW LINES MARKET SHARE

	2-40	41-100	101-200	201-400	401-1K	1K-4K	4K+	TOTAL
Avaya	3.0%	41.2%	46.7%	45.7%	41.9%	0.0%	0.0%	19.9%
Comdial	4.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.7%
Intecom	0.0%	0.0%	0.0%	3.5%	5.8%	74.6%	98.8%	36.9%
Mitel	2.3%	11.0%	6.8%	6.7%	0.0%	0.0%	0.0%	3.5%
NEC	0.6%	0.8%	0.7%	0.2%	0.2%	1.2%	0.0%	0.4%
Nortel	14.6%	39.2%	39.6%	38.9%	47.9%	24.3%	1.2%	22.9%
Vertical	71.9%	3.4%	1.9%	0.0%	0.0%	0.0%	0.0%	13.0%
Vodavi	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other	3.5%	4.2%	4.3%	5.1%	4.2%	0.0%	0.0%	2.6%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%