

# EXHIBIT E

North America US  
Technology Infrastructure & Systems Mgt Software

14 October 2003

# SCO Group, Inc. (The)

Reuters: **SCOX.N** Exchange: **NASDAQ** Ticker: **SCOX**

## A call (option) to arms

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### Initiating coverage with a Buy rating and a \$45 price target

We view SCOX as a call option on a substantial lawsuit against IBM and the potential to capitalize on Linux. Investors should consider an investment in SCOX as extremely high risk and volatile.

### We view SCOX as a synthetic call option

Investors with an appetite for risk should, in our view, see an investment in SCO Group as the equivalent of a call option – with most of the risks and rewards often associated with options. The IBM lawsuit and the potential for Linux licensing deals offer plenty to be excited about, while failure could render the shares worthless, in our view.

### Drawing economics out of Linux through lawsuits and licensing

SCO could prove to be one of the biggest beneficiaries of the Linux movement. If SCO is successful at licensing its intellectual property (IP), fixed costs and a small share count would create huge EPS leverage.

### Sensitivity analysis drives earnings, success is binary, risks huge

Our CY03 revenue and earnings estimates are \$82.0 million and \$1.00, respectively and CY04 estimates \$116.5 million and \$2.29. Our model is driven by a sensitivity analysis, which hinges on the potential for Linux licensees. The shares currently trade at less than 7x our CY04 estimate. Risks are numerous and the shares should be considered speculative.

#### Forecasts and ratios

Year End Oct 31	2002A	2003E	2004E
1Q EPS (US\$)	-0.19	0.00	0.12
2Q EPS (US\$)	-0.20	0.28	0.31
3Q EPS (US\$)	-0.11	0.20	0.64
4Q EPS (US\$)	0.00	0.39	0.76
FY EPS (US\$)	-0.50	0.87	1.84
CY P/E	NM	16.0x	7.0x
EV/EBITDA	NM	16.7x	8.2x
Rev (US\$)	64	77	106
Est. source licenses	NM	2	4
Est. RTU licenses (mm)	NM	0	230

Source: Deutsche Bank Estimates and Company data

Deutsche Bank

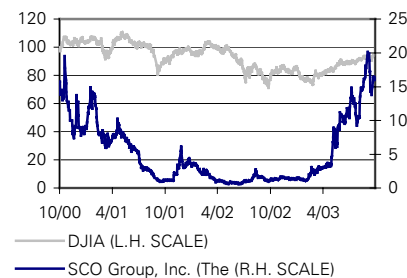


### Initiation of Coverage

#### Buy

Price at 13 October 2003 (US\$)	16.01
Price target - 12mth (US\$)	45.00
52-week range (US\$)	21.00 - 1.00

#### Price/Price relative



Performance (%)	1m	3m	12m
Absolute	-3.4%	47.1%	1392.7%
DJIA	2.7%	7.1%	28.4%

#### Stock data

Market cap (US\$)	267.30
Shares outstanding (m)	16.20
Free float	45%
Avg. daily volume ('000)	283.00
Beta	4.02
CY03 P/E-to-growth	7.2x
DJIA	9,630.9
Index membership	NASDAQ
Major shareholders:	40%

### Deutsche Bank Securities Inc.

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Investors should consider this report as only a single factor in making their investment decision.

DISCLOSURES AND ANALYST CERTIFICATIONS ARE LOCATED AT THE END OF THE BODY OF THIS RESEARCH

Model updated: 10 October 2003

**Equity Research**

**North America**

**US**

**Systems Management Software**

**SCO Group**

Reuters code **SCOX.OQ**

**Buy**

Price as at 13-Oct **US\$16.01**

Target price **US\$45.00**

Company website

www.sco.com

**Company description**

The SCO Group (formerly, Caldera) is a software company, based in Lindon, Utah. It owns the copyrights and contracts to the UNIX system V operating system, through its 2001 acquisition of Tarantella (formerly, Santa Cruz Operation). These contracts are at the heart of a \$3B intellectual property (IP) lawsuit with IBM. SCO is looking to leverage its IP assets by licensing indemnified versions of Linux operating systems, either through partnerships or directly with customers.

**Research Team**

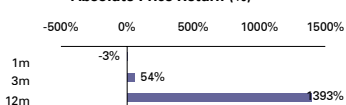
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**Absolute Price Return (%)**



52-week High/Low: **US\$20.15 - 1.09**

Market Cap (m) **USD 235**

**EUR 199**

**Company identifiers**

Bloomberg **SCOX UR**

Cusip **78403A106**

SEDOL **2855907**

Source: Company data, DB estimates

**Y/E 31 October**

	99/00	00/01	01/02	02/03E	03/04E	04/05E
<b>SUMMARY</b>						
Headline EPS (US\$)	-1.70	-1.79	-0.50	0.87	1.84	1.94
P/E ratio Headline (x)	nm	nm	nm	18.8	8.9	8.5
Headline EPS growth (%)	nm	nm	nm	nm	110.8	5.5
EPS FD (US\$)	-4.76	-10.92	-1.93	0.84	1.57	1.69
P/E ratio FD (x)	nm	nm	nm	19.6	10.5	9.7
Operating CFPS (US\$)	-2.65	-3.33	-0.82	1.17	2.18	2.32
Free CFPS (US\$)	-2.82	-3.46	-0.84	1.12	2.13	2.28
P/CFPS (x)	nm	nm	nm	14.0	7.5	7.1
DPS (US\$)	0.00	0.00	0.00	0.00	0.00	0.00
Dividend yield (%)	0.0	0.0	0.0	0.0	0.0	0.0
BV/Share (US\$)	12.42	2.88	0.63	2.25	4.26	6.43
Price/BV (x)	1.13	0.42	2.07	7.31	3.86	2.55
Weighted average shares (m)	8	12	13	12	13	13
Average market cap (USD m)	327	84	23	196	196	196
Enterprise Value (USD m)	236	61	17	175	148	117
EV/Sales	55.23	1.51	0.26	2.27	1.40	1.09
EV/EBITDA	nm	nm	nm	9.8	4.5	3.3
EV/EBIT	nm	nm	nm	13.2	5.2	3.7
EV/Adj capital employed	20.6	5.1	9.8	30.4	25.6	20.3

**PROFIT & LOSS (USD m)**

Sales revenue	4	40	64	77	106	107
Operating EBITDA	-31	-121	-18	18	33	36
Depreciation	1	13	6	5	5	5
Amortisation	0	0	0	0	0	0
EBIT	-32	-134	-24	13	28	31
Net interest income (expense)	0	0	0	0	0	0
Associates/affiliates	0	0	0	0	0	0
Investment and other income	5	3	0	0	0	0
Exceptionals/extraordinary	0	0	0	0	0	0
Income tax expense	0	1	0	1	2	2
Minorities/preference dividends	12	0	0	0	0	0
Net profit	-39	-131	-25	12	26	29

**CASH FLOW (USD m)**

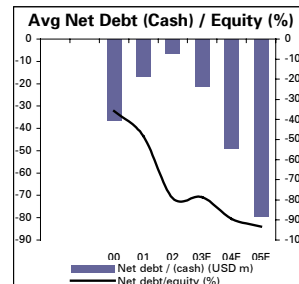
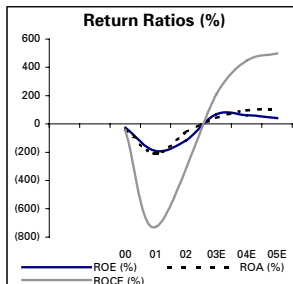
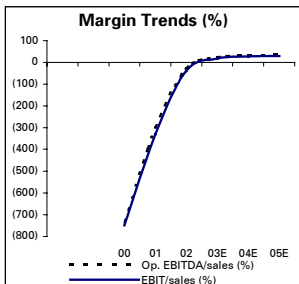
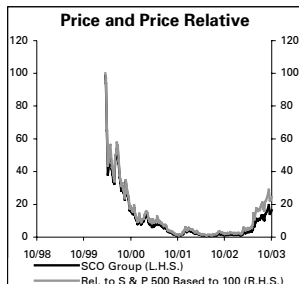
Cash flow from operations	-22	-40	-11	14	28	31
Capex	-1	-2	0	-1	-1	-1
Free cash flow	-23	-42	-11	13	27	30
Other investing activities	-46	25	5	-2	0	0
Cash flow from investing	-47	23	5	-2	-1	-1
Equity raised/(bought back)	105	0	-4	2	0	0
Dividends paid	0	0	0	0	0	0
Net inc/(dec) in borrowings	0	0	-5	0	0	0
Other financing cash flows	0	0	0	1	0	0
Cash flow from financing	105	1	-9	2	0	0
Net cash flow	36	-16	-14	15	28	30
Movement in net debt/(cash)	-36	16	9	-15	-28	-30

**BALANCE SHEET (USD m)**

Cash and other liquid assets	37	21	7	21	49	79
Tangible fixed assets	2	6	2	2	2	2
Goodwill	0	0	0	0	0	0
Other intangible assets	0	18	11	10	10	10
Associates/investments	54	6	0	0	0	0
Other assets	15	25	18	15	15	15
Total assets	107	75	37	48	76	106
Interest bearing debt	0	4	0	0	0	0
Other liabilities	5	36	29	21	21	21
Total liabilities	5	40	29	21	21	21
Shareholders' equity	102	35	8	27	55	85
Minorities	0	0	0	0	0	0
Total shareholders' equity	102	35	8	27	55	85
Net working capital	-2	-12	-13	-9	-9	-9

**RATIO ANALYSIS**

Sales growth - pcp (%)	nm	846.2	58.9	20.3	36.9	1.5
Op. EBITDA/sales (%)	-735.1	-298.6	-28.7	23.2	31.2	33.5
EBIT/sales (%)	-748.7	-330.4	-37.6	17.2	26.8	29.2
Payout ratio (%)	nm	nm	nm	0.0	0.0	0.0
ROA (%)	-38.1	-209.9	-58.0	41.6	96.6	107.0
ROE (%)	-26.3	-192.0	-116.3	68.4	63.5	41.1
ROCE (%)	-41.0	-730.0	nm	207.9	448.5	496.9
Return on Adj Capital Employed (%)	-278.9	nm	nm	212.4	451.8	500.2
Capex/sales (%)	33.8	3.8	0.3	0.8	0.6	0.6
Capex/depreciation (x)	2.5	0.1	0.0	0.1	0.1	0.1
Net debt/(cash)	-37	-17	-7	-21	-49	-79
Net debt/equity (%)	-35.8	-48.4	-79.1	-78.6	-89.5	-93.2
Net interest cover (x)	nm	nm	nm	2209.9	2364.9	2612.7



# Investment thesis

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## Outlook

We are initiating coverage of the SCO Group with a Buy recommendation and a target price of \$45, which represents 180%+ upside potential from the current price level of roughly \$16. We consider this investment to be risky and speculative and we encourage investors to view this as the equivalent of a call option on a substantial lawsuit against IBM Corporation and Linux adoption. Investors looking to own this stock should consider it an extremely high-risk investment that may yield a substantial return or may collapse in value. We would fully expect extreme volatility in the stock, with movements of +/- 20% in a single day.

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## Valuation

We believe the company can earn EPS of \$1.00 in CY03 and \$2.29 per share in CY04 off recent licensing arrangements for UNIX and the pipeline for other licensing opportunities in the future. A relatively small share count, combined with a tight rein on expenses, provides for significant operating leverage. Currently we are modeling peak earnings for the company in FY04 and forecasting a moderate downturn in licensing, revenue and earnings for FY05. Nonetheless, the company trades at a multiple of 7x our CY04 EPS estimate. In our opinion this reflects two issues – (1) the lack of market knowledge into the current earnings power of the company, and (2) the market's doubts on the reality of such earnings. Our target price of \$45 is based on a 20x multiple of our CY04 EPS estimate of \$2.29.

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## Risks

The largest risk is that SCO Group's claims be without legal merit. We are not lawyers and are not attempting to predict the outcome of this legal case, however, should this lawsuit be without merit, it would be a huge blow to the shares. We believe the stock will be extremely volatile, due to constant newsflow and a small share count. Swings of +/- 20% in a single day could be expected. A lawsuit against a large and rich company such as IBM is a dangerous undertaking, and it could cause SCO to overextend its legal reach and budget. In addition, SCO is being sued by Red Hat. This lawsuit is a risk and we imagine SCO could be the focus of other lawsuits, as its legal actions could be interfering with Linux business at many companies. Finally, the company is angering the Linux community, which could prove to hurt business down the road.

# Key investment issues

***SCOX share price can be viewed as a premium for a call option. Upside is significant, downside is potential loss of premium.***

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## **We view SCOX as a synthetic call option**

Investors with an appetite for risk should see an investment in SCO Group as the equivalent of a call option – with most of the risks and rewards often associated with options. The stock is currently trading at approximately \$16 or less than 7x our CY04 EPS estimate of \$2.29. The SCO Group is suing IBM Corporation for allegedly violating their legal agreements with regards to the UNIX system V (a highly-used version of UNIX) operating distribution. The trial has a scheduled court date in the spring of 2005. SCO is suing IBM for \$3 billion plus potential punitive damages. In the event that the SCO Group were to win the trial and be awarded the \$3 billion (an outcome we view as highly unlikely), the company would have a cash award of over \$185 per diluted share. Needless to say, the stock would realize some significant upside from its current price. In the event the company were to lose outright, we believe the company's ongoing value would be marginal and well below the current valuation. An alternative way to look at the SCOX situation is as a straddle as opposed to a pure call. Rather than assuming the stock goes to zero, the management could decide to strike more aggressive licensing arrangements with key vendors and perhaps settle all issues with IBM at a bargain price. On such a strategy, we would expect the stock to support a higher price than zero, perhaps \$15 per share. In summary, while the downside risk is to zero, from the current market capitalization of \$200 million, the upside potential is equally spectacular.

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## **This volatile call option doesn't likely expire before spring 2005**

The value of this synthetic call option will vary tremendously depending on the assessed likelihood of some sort of settlement. The fact that Microsoft and Sun both struck licensing arrangements with SCO Group (different contracts related to UNIX) has boosted the company's stock price some 1900% so far this year, putting it among the best performing stocks on Nasdaq. The company is attempting to "monetize" part of its claim before the court trial by striking licensing arrangements with large enterprises and potential hardware OEM vendors. We believe the company was in licensing discussions with Hewlett Packard over a UNIX distribution license for its hardware distributed with Linux, but that these discussions broke down over an acceptable pricing arrangement by the two parties. Any incremental licensing arrangements that appear to give the SCO Group's legal claims validity will drive the stock substantially higher, in our view.

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## **Linux is big business**

The Linux operating system has gone from a hobbyist effort 10 years ago to a true, viable alternative to UNIX and Windows NT in enterprises. Linux is being so rapidly adopted in enterprises specifically because it is a close substitute for UNIX, which tended to be run on very expensive proprietary hardware. Linux adoption is one of the few bright spots over the past several years of downtrodden IT spending. As such, investors are constantly looking for pure ways to play this movement. Red Hat Software (RHAT, Hold, \$10 target price) is one such way, but at 60x next year's EPS numbers, the stock remains early stage in terms of established margins and profitability. If the SCO Group's assertions, discussed in the following sections, prove fully or even partially correct, then they may represent the most direct and significant way to extract monetary value from the Linux movement.

## Background on Linux and why the SCO lawsuit is so material

The SCO Group is a small-cap stock that generally has not been a stellar performer up until this year. The company, whose legal business name trace back to "Caldera Systems, Inc", was formerly a distributor of the Linux operating system. Subsequently through a series of acquisition and divestiture moves over the past 10 years, the SCO Group ended up owning the rights to the UNIX operating system.

***SCO owns the UNIX system V copyrights and licensing contracts. It claims Linux has benefited from its intellectual property.***

AT&T, through a wholly-operated subsidiary (Unix Systems Laboratories) developed the UNIX operating system and licensed its usage to companies and universities. In 1993 Novell Corporation acquired the rights to the UNIX source code and contracts through a \$750 million purchase from AT&T via Novell stock. Two years later, in 1995, SCO acquired the UNIX system V assets from Novell including the underlying UNIX software code developed by AT&T, all legal claims and contracts between AT&T and its licensees as well as the binary and source code of UNIX rights and copyrights. In the original transaction between Novell and SCO, there was substantial ambiguity in the contract wording such that an additional amendment ("amendment X") was later added to clarify SCO's sole ownership position. AT&T and IBM entered an original agreement in September 1985 where IBM became a licensee of UNIX from AT&T. Subsequently, IBM and SCO have a legal, binding relationship that defines IBM's rights and responsibilities with regards to the UNIX system V operating system.

Linux is taking off as corporations seek hardware savings. A very large, tectonic shift has been occurring in the server market where companies are shifting servers formerly based on relatively expensive, proprietary hardware and UNIX to Intel-based Servers which are extremely low-cost to purchase. They have increasingly adopted the Linux operating system, an open-source "free" operating system to run on these servers. The primary attraction of Linux is that it closely resembles UNIX and allows companies that have a significant investment in UNIX software to migrate this over to Linux at relatively low cost. Additionally, as larger companies have expertise in UNIX, they are able to re-deploy this expertise in a Linux environment. Given the momentum of Linux in the marketplace, and the precipitous drop in interest for UNIX, the value of UNIX has been eroded substantially.

SCO Group, the owner of UNIX copyrights and licensing agreements, contends in its legal documents that it has been injured by a very explicit and deliberate attempt by IBM (among others) to destroy the value of UNIX. They contend that IBM sought to compete with other UNIX vendors (such as Sun, Hewlett Packard, SGI and others) by providing a free operating system alternative combined with IBM services. If this argument has merit, then it becomes clear that IBM has also attempted to undermine the market power and presence of Microsoft's operating system alternative to UNIX, Windows NT.

The SCO Group contends that IBM "tainted" Linux through its efforts at trying to prop up Linux and make it an enterprise alternative to UNIX by contributing a source code that was a derivative work of Unix System V. IBM, for its part, does not view its contributions as derivative works of UNIX, but has publicly conceded that it has contributed substantial code and engineering effort to the Linux movement.

SCO has recently revoked IBM's license for UNIX that is used as the basis for its AIX business. SCO contends that IBM has violated its UNIX agreement, and SCO has the right to terminate the contract with proper notice. IBM counter claims that its license is not revocable. Ultimately the courts will decide all of this.

***SCO sues IBM for \$3 billion on claims that IBM broke its UNIX license and is responsible for much of this IP misappropriation into Linux.***

If SCO Group's claims are substantiated and IBM found at fault, the implications would be widespread. First, IBM would likely face significant legal damage charges not only based on their code contribution, but on their entire AIX business for two years (estimated time between license cut-off and the trial). We estimate the revenue associated with this business to be well in excess of \$10 billion per year. This revenue could be the basis for a punitive damage award. Additionally, if the Linux code base is deemed to be tainted, then SCO would be free to seek damages against the millions of users of the Linux operating system. Given the rate of approximately 1 million new servers per year, and the current installed base of servers, the case could easily involve over 3 million servers. Larger enterprises would likely have to pay SCO a UNIX license to legally run Linux.

We believe the above "home run" scenario is highly unlikely simply because the stakes are so enormous, that IBM and other potential defendants would likely settle the case before it came to a conclusion in trial. Nonetheless, it is the potential implications of this suit that make the SCO Group stock a disproportionate play relative to the company's \$200 million market capitalization.

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### **SCO's claims against IBM are in the definition of derivative work**

At issue is whether IBM has created a "derivative" work of UNIX V with its efforts under AIX and Dynix (Sequent, acquired by IBM) development, and if so, whether it then had the rights to distribute that work to the public domain. There is little question that IBM has made significant contributions to the Linux operating system, with a particular emphasis on providing Linux with key enterprise scaleable technology so as to be able to compete against commercial offerings from Unix vendors and Microsoft. This has been substantiated in public commentary by various members of IBM senior management over the past several years. It is also public knowledge that IBM and SCO carried out joint development work on a version of UNIX for the Intel 64-bit architecture. IBM subsequently abandoned this effort in 2001 in favor of a separate Linux effort.

The jury will have to decide if IBM did create what would be considered a "derivative work" of UNIX in its efforts with AIX and Dynix and whether it then had the right to contribute this code into the public domain and Linux code base. The SCO Group also alleges that IBM has transferred methods and concepts, not simply direct-copied code, into the Linux development effort. We don't have the legal expertise to make a judgement on these matters, but it is clear that both sides feel very strongly that they are in the right. The majority of the press and highly emotional and outspoken critics of the company claim that SCO's claims are without merit. Putting all the rhetoric and emotions aside, given the potential stakes, we have our doubts about the IBM lawsuit actually getting to trial in 2005. Nonetheless, SCO has little to lose by waging this battle, and sentiment around SCO's chances of legal success is likely to swing dramatically causing huge volatility in the stock.

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### **Don't discount a potential takeout**

A takeout of the company remains an alternative exit for investors, particularly if the firm is able to slow down the adoption of Linux among major enterprises. A takeout price of \$1 billion, the price signaled acceptable by the SCO management, would be \$76 per share, substantially above the current price. While IBM has steadfastly refused to negotiate any potential new contract with SCO, we continue to believe it could be a buyer of last resort for the company should its case look stronger over the next 18 months. Our current survey work of CIOs does not indicate that SCO's legal claims have materially slowed down current or planned adoption of Linux. But

should such a slowdown occur, affected parties could be motivated to buy out SCO and simply to put the issue to rest.

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### **Perhaps some catalysts before the trial in 2005**

The bulk of the legal claim/counterclaim activity around the IBM case has been completed at this point. We now are in the 18 months runup and associated speculation before this particular case moves towards the courts. We would fully expect SCO management to lay out additional cases against potential other UNIX licensees that it believes have violated the UNIX distribution agreements of the past.

Possible catalysts for the stock include potential UNIX licensing transactions by hardware box vendors, copyright infringement lawsuits against large enterprises deploying Linux, an early dismissal of the Red Hat lawsuit against SCO and additional lawsuits against hardware OEM Vendors (such as Silicon Graphics). The timing of these potential catalysts are totally unpredictable.

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### **Risks**

Our thesis that SCOX shares can be viewed as a call option implies that investors are paying the current share price as a premium. Should the legal case and the company's efforts to arrange licensing agreements not come to fruition, the investment could wind up worthless. The upside potential is clearly huge, should the SCO be able to monetize its UNIX assets. An alternative way to look at the SCOX situation is as a straddle as opposed to a pure call. Rather than assuming the stock goes to zero, the management could decide to strike more aggressive licensing arrangements with key ox vendors and perhaps settle all issues with IBM at a bargain price. Given this strategy, we would expect the stock to support a higher price than zero, perhaps \$15 per share.

SCOX has frustrated the "Linux community", and should it not prevail (in its legal claims or in selling UNIX/Linux licenses), then the company could shut its doors. Notably, the company's web site has already been the target of at least two "denial of service" attacks.

Lawsuits are expensive and typically protracted. A lawsuit against a large and rich company such as IBM is a risky undertaking, and it could cause SCO to overextend its legal reach and budget. The company is also being sued by Red Hat. This lawsuit is a risk and we imagine SCO could be the focus of other lawsuits.

It is also important to note that we expect this stock to be extremely volatile, due to constant newsflow and a small share count. Swings of +/- 20% in a single day could be expected.



# History of UNIX

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## The origins of UNIX

The origins of the UNIX operating system are traced back to the mid-1960s when GE and Bell Labs worked together at MIT on a mainframe timesharing system called Multics (Multiplexed Information and Computing Service). This group effort revolved around the desire to create an interactive, useable computer and file system that would support many users and simultaneous tasks. Mainframes (the standard in the very high-end of computing) were so expensive that demand for a cheaper operating system was ripe, and Bell Labs wanted a computing solution to power its huge telecommunications business. Although Multics was having some success, Bell Labs pulled out of the project and began working on its own alternative system. It was this research team, led by Ken Thompson and Dennis Ritchie that would create the initial UNIX operating system.

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## The creation of the C programming language improves UNIX

UNIX was originally implemented in assembler language on a DEC (Digital Equipment Corporation) PDP-7 machine, but was then ported to a newer PDP-11 machine. Thompson wanted UNIX to be written in a high-level language so his team actually developed the language. The language was initially called "B", but would become known as "C" after a number of key features were added, most importantly, the compiler. In 1972, the team painstakingly rewrote UNIX in C. During the mid-1970s UNIX transitioned from being an architecture and a set of tools into an actual operating system that would enable multiple users to simultaneously use a computer's resources.

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## UNIX hits the commercial market: BSD and System V are born

Prior to its 1981 break-up, AT&T (the parent of Bell Labs) agreed that it would not engage in commercial computing activities. Thus the company was willing to license UNIX at an incredibly low cost. In 1976-77 Ken Thompson taught a course on UNIX at UC Berkeley. Students and professors alike became huge advocates of the system and it was during this time in academia that UNIX gained a groundswell of popularity. Berkeley enthusiasts continued to make enhancements to UNIX even after Thompson returned to Bell Labs. These enhancements included tailoring the system for specific monitors, printers, storage systems, as well as support for the networking protocol TCP/IP. It was these enhancements that were eventually incorporated into the Berkeley Software Distribution (BSD) version 4.2 of UNIX, which proved to be a key standard release. While BSD was being developed in academia, AT&T was still working on its own version of UNIX (we will come back to this in the section AT&T vs. BSD). But the key point is, as students graduated and moved into the commercial world, they brought with them the knowledge of and passion for UNIX. The business use for UNIX was born.

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## Why UNIX became so successful

UNIX became and remains today one of the most highly-regarded operating systems in the world. The key reasons for this popularity relate to the reliability, extensibility and robust performance power of the OS. The program rarely requires repair, and performs well under large loads of simultaneous users. As it proved its reliability, a huge number of applications and relational databases were written for

UNIX. Many credit UNIX as being the key predecessor to the Internet, as it was the first system to enable e-mail and was the foundation for the creation of TCP/IP protocols. Another benefit of UNIX was the relative ease at which it could be ported to different hardware. Finally, it is a much cheaper alternative to mainframes for high-end computing.

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### **UNIX splits into multiple flavors**

In the 1980s AT&T licensed UNIX system V to companies like Hewlett-Packard, Sun Microsystems, Silicon Graphics, and IBM. Each of these companies then made modifications to this version, basically tweaking the code to work well with their own processor chips. These microchips were specially designed to handle intensive enterprise-level computing requirements. For example Sun made its version work very well with its SPARC chip while IBM's version worked especially well on its Power PC chip. This caused UNIX to fragment and become proprietary. Buying an IBM server would mean that you would run IBM's version of UNIX, dubbed AIX (Sun's is called Solaris and HP's is called UX). These flavors of UNIX were designed to make each respective server run faster. Customers soon found themselves in the position of vendor lock-in, due to the incompatibility of the UNIX flavors, and although UNIX machines were relatively cheap vis-à-vis mainframes, they could still be considered expensive.

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### **AT&T vs. BSDI: The original operating system lawsuit**

After the AT&T breakup in 1982, the company had more freedom to compete in different industries and began to market UNIX commercially. Two big problems existed. First, AT&T had been licensing UNIX for a long time to many licensees, allowing the horses to leave before they attempted to close the barn door. Second, among all these releases, there was no common set of standard interfaces; it was fragmented. AT&T made a final push to try to capitalize on its invention. In 1986, AT&T registered the name UNIX as a Trademark and received copyright certifications of and registration on UNIX software. It copyrighted 32V in 1992. BSD, which had licensed 32V of UNIX in 1979, had already made a number of its own derivative works and passed them along, through the UC Berkeley Regents Computer Sciences Research Group (CSRG). In order to run BSD, you had to have a license from AT&T, however. AT&T started to raise the costs of its licenses substantially. BSD wanted to free UNIX from AT&T so removed the AT&T 32V code from the kernel and had users rewrite the utilities and libraries. BSD formed a group to sell this product (Net2) dubbed BSDI. AT&T (through its UNIX Systems Laboratories subsidiary) sued BSDI in April 1992. AT&T alleged that Net2 included the 32V code, and BSDI counter-sued claiming copyright violation. In 1993, AT&T sold UNIX to Novell for \$750 million in stock and left the legal wrangling to Novell. In 1994 Novell and Berkeley settled, with terms that while sealed, were widely viewed as being favorable to Berkeley.

# UNIX, Linux, SCO and IBM

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## SCO's work with UNIX on the Intel architecture

Most of the other UNIX vendors had focused on a non Intel-oriented chipset, because the x86 architecture was inadequate for enterprise needs. Most viewed the chipset as not being enterprise ready by any stretch. That said, in 1983 SCO delivered its first packaged UNIX system (SCO XENIX system V) built for the Intel 8086 8088. This was SCO's flavor of UNIX. SCO focused its solution on this "niche" market because it felt there was some demand (driven by hardware savings) for less-demanding applications that could get by on a lower-powered chip. This product was dubbed SCO OpenServer, and companies like McDonald's would use it as their computing platform in their stores, which had rather simple requirements (tracking sales, linking inventory etc). SCO modified its OpenServer over the years to run especially well on the Intel chips, and there are over 4,000 applications today which have been written by developers especially for this server.

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## How SCO got UNIX: a chronology of System V ownership

In addition to its work with the OpenServer, SCO acquired all right, title and interest in and to the UNIX Software Code. After AT&T sold UNIX to Novell in 1993, Novell renamed UNIX UnixWare. In 1995, SCO acquired the UNIX software designed for the Intel processor as well as UnixWare from Novell. In acquiring UNIX from Novell, SCO acquired the licensing agreements for the UNIX OS software source code, object code and related schematics, documentation, derivative works, and the sale of binary and source code licenses. It is this acquisition that is at the heart of SCO's lawsuit with IBM.

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## Project Monterey and its significance

SCO worked on upgrading UnixWare to work on Intel processors (between 1995 and 1998, after its acquisition from Novell). Thus SCO was prepared to go to market with a high-end UNIX operating system on cheap Intel processors, in addition to its lower-end version of SCO OpenServer. Enter Project Monterey. According to SCO, around this time IBM approached it to jointly develop a new 64-bit UNIX-based OS for Intel processors. This joint development was known as Project Monterey. SCO claims that it was during the development of Project Monterey, that IBM attained trade secrets, schematics and design information around SCO's work with UnixWare for Intel based processors. In May 2001, IBM scuttled Project Monterey, a huge setback for SCO. IBM then began to focus on the Linux operating system

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## The birth and evolution of Linux

Linux stands for a combination of the word UNIX and the first name of its creator, Linus Torvalds. Recognizing how the Intel based processor was become a standard, in 1991 Torvalds attempted to write a version of UNIX on his IBM PC. Of critical importance, Torvalds created a C compiler for Linux, which effectively opened up the library of C programs created for the UNIX system. He began to store the program and share it with other programmers by posting a request for reviews on a Helsinki University of Technology discussion board. A brief note on the board in August 1991 started the wave "I'm doing a (free) operating system (just a hobby, won't be a big professional like gnu) for 386 (486) AT clones... I'd like any feedback on things people like/dislike in minix, as my OS resembles it somewhat." His work,

which could be downloaded FTP protocol, became known as Linux. Linux gained an early footing, as the fragmentation and expense of UNIX became cumbersome and annoying to developers. It was this dedicated work of volunteer programmers that led to the birth and evolution of Linux. Eric Raymond wrote an influential essay "*The Cathedral and the Bazaar*" (O'Reilly & Associates; 1 edition, October 1999) in which he analyzed Linux. It was in this work where Raymond spoke of the benefits of having numerous people review the code for quality

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### **Robert Stallman starts GNU and a new form of free licensing**

In 1983 Richard Stallman, long-time advocate of free software for the world, began a group called GNU is Not UNIX (GNU). His goal was to give it away for free to everyone who wanted it. He did not like the direction in which software was heading, specifically the use of nondisclosure and software licensing agreements. At MIT, Stallman used a "clean room" – (free of outside code influence) to create the GNU C compiler. Stallman then created a legal agreement to enforce his views on software and protect the rights of his creation. This document is called the General Public License (GPL).

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### **Understanding the GPL**

The GNU GPL is the most common form of license for open source (free) software. Stallman (and his lawyers) created a license, which placed his work into the public domain and required all those who use and re-distribute it to put their modifications into the public domain as well. The most important piece of the GPL is that if any part of the GNU is used, then the entire modified software product becomes subject to the GPL – thus making free software out of proprietary software. Users of GPL software must provide their source code if they release their modification outside of their own organization. Companies can charge fees for things like services or support of the software (e.g. Red Hat, SuSE, IBM). Many consider that SCO's distribution of Linux (which would have included its own proprietary software it is now suing IBM over) effectively made that proprietary software part of the public domain. SCO insists that it did not know that UNIX system V software was in Linux at the time of its own Linux distributions. Further, the company states that if a company inadvertently distributes its copyright material, that copyright law still protects them.

# SCO vs. IBM reviewed

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## Recent history of legal proceedings

On 22 January 2003, SCO issued a press release announcing the creation of a new business called SCOSource, which would license its intellectual property (IP), starting with SCO System V for Linux. This was the first indication that the company was looking into legal actions. It was also on this date that the company hired David Boies of the law firm of Boies, Schiller and Flexner (discussed below) to research and advise SCO on the company's IP. On 7 March 2003, SCO sued IBM claiming that the latter had breached its contractual obligations to SCO by incorporating or inducing others to incorporate SCO's IP into Linux. SCO requested damages in an amount no less than \$1 billion. IBM responded to the lawsuit on 30 April denying most of the claims.

Having seriously angered the Linux community, SCO's website was the recipient of a Denial of Service (DOS) attack on 2 May. IBM and SCO continued to file court documents in the following months. In May, SCO sent letters to 1,500 of the world's largest companies notifying them that use of the Linux operating system may be a violation of SCO's IP. The company terminated IBM's right to use UNIX System V for its AIX product and on 31 July terminated the UNIX license with Sequent (which was acquired by IBM). In August 2003, Red Hat sued SCO, seeking declaratory judgment that Linux does not infringe on SCO's IP. In the middle of September, SCO filed a response and a motion to dismiss the Red Hat lawsuit. In an amended complaint filed in June SCO added more claims against IBM, and tripled damages to at least \$3 billion. In the April quarter, the company signed two license agreements around its UNIX IP, one with SUN and another with Microsoft. SUN's was a "clean up" license to cover items outside the scope of Sun's initial UNIX license. Sun receive a total 223K warrants in conjunction with the full \$10mm license it signed in FQ2.

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## SCO hires the law firm of Boies, Schiller and Flexner

SCO is using the law firm of Boies, Schiller and Flexner in its legal action against IBM. David Boies' history as a lawyer goes deep into the roots of both IBM and software. One of his first and most important cases was the 13-year legal battle between the US Department of Justice (DOJ) and IBM, where Mr. Boies served as counsel for IBM. He was successful at having the DOJ drop its entire case against IBM. In 1998-2000 he joined forces with his prior opponent and served as special trial counsel for the DOJ against Microsoft, and was responsible for some of the DOJ's early victories in the case. Continuing his trend of changing sides, Boies is now taking on IBM on behalf of SCO.

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## HP offers indemnification to Linux customers

In October 2003, HP announced plans to offer indemnification against any Linux lawsuit for customers that buy an HP server or workstation running Linux after October 1, 2003. Existing HP customers are covered as long as they bought the software directly from HP and have not changed the source code. IBM followed up by refusing to offer indemnification, implying that indemnification with cumbersome restrictions (not modifying the source code) is really worthless

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## **"Amendment X" - can SCO revoke IBM's UNIX license?**

A critical part of the lawsuit revolves around SCO's right to revoke IBM's UNIX license, which is required for the AIX distribution. The legal language in dispute revolves around "Amendment X", a 1996 modification of the original IBM/AT&T contract, which grants IBM "irrevocable" and "perpetual" rights to Unix. This appears to support IBM. SCO points to the following sentence of the amendment which reads, "Notwithstanding the above, the irrevocable nature of the above rights will in no way be construed to limit...SCO's rights to enjoin or otherwise prohibit IBM from violating...SCO's rights under this amendment." SCO claims that because IBM has improperly distributed the UNIX system V code into Linux, that it has violated SCO's rights, which allows SCO to terminate the UNIX agreement. Again, this is another legal issue that will be a critical point to any lawsuit.

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### **SCO's claim**

The entire SCOX filing is printed in Appendix 1 (*see our accompanying electronic document*).

We are reviewing this filing here with the important stipulation that we are not lawyers and are not attempting to determine the legitimacy or outcome of this lawsuit. Our discussion is only an attempt to summarize SCO's legal filing against IBM.

In this filing, SCO claims that it acquired the rights from AT&T (by acquiring it from Novell, which had acquired it from AT&T) for the UNIX operating System, and that it is the current owner of UNIX software. It claims that (through this acquisition) it has licensed to IBM a limited use of UNIX. Basically, SCO believes that IBM has misused and misappropriated SCO's proprietary software by perpetuating key portions of it into Linux.

The filing gives a history of UNIX, (much of which IBM's filing denies) in points 10-23.

SCO asserts that it has worked for a long time to create a lower-end version of UNIX that would work on Intel processors in points 24-35.

In points 36-41, SCO asserts that the creation of shared libraries is so random, that "the mathematical probability of a customer being able to recreate the SCO OpenServer Shared Libraries without unauthorized access to or use of the source code ... is nil".

In points 42-49 SCO asserts that it purchased the rights to UNIX, which Novell had renamed UnixWare, and how it claims to have spent three years and significant sums engineering it for high-end computing on Intel processors.

The company reviews the history of IBM/SCO's joint development effort, Project Monterey, in points 50-55.

Points 56-68, are full of legalese which explains the nature of the UNIX licensing agreements SCO acquired from Novell.

Points 69-73 explain the importance of the UNIX operating system.

Points 74-86 discuss the beginnings of and the current market for Linux as well as the General Public License (GPL). It is here where SCO claims that "Prior to IBM's

involvement, Linux was the software equivalent of a bicycle. UNIX was the software equivalent of a luxury car.”

**Points 87-103 are certainly the most interesting and worth reading in their entirety.** They discuss what SCO refers to as “IBM’s scheme”. SCO asserts that it was in an ideal market position, as UNIX is a market standard in enterprise computing and cheaper Intel processor chips were becoming more powerful. According to SCO, IBM sought to move the corporate enterprise computing market to a services model based on free software on Intel processors. This move, SCO claims, would give IBM a great advantage over its competitors whose revenue models were based on software licensing and hardware sales, rather than services. SCO claims that it was during Project Monterey that IBM gained its knowledge of UNIX on Intel processors, and then over time transferred this knowledge into the Linux development community.

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### **IBM’s response reviewed**

IBM’s entire response is also in Appendix 2 (*again, see our accompanying electronic document*).

In the first section of IBM’s response, the company “denies” or claims insufficient information “to form a belief of the truth” to almost every point in SCO’s claim. IBM then states 10 defenses to the claims and files counterclaims. The defenses are as follows:

- (1) The complaint fails to state a claim upon which relief can be granted.
- (2) SCO's claims are barred because IBM has not engaged in any unlawful or unfair business practices, and IBM's conduct was privileged, performed in the exercise of an absolute right, proper and/or justified.
- (3) SCO lacks standing to pursue its claims against IBM.
- (4) SCO's claims are barred, in whole or in part, by the applicable statutes of limitations.
- (5) SCO's claims are barred, in whole or in part, by the economic-loss doctrine or the independent-duty doctrine.
- (6) SCO's claims are barred by the doctrines of laches and delay.
- (7) SCO's claims are barred by the doctrines of waiver, estoppel and unclean hands.
- (8) SCO's claims are, in whole or in part, pre-empted by federal law.
- (9) SCO's claims are improperly venued in this district.
- (10) SCO has failed, in whole or in part, to mitigate its alleged damages.

The counterclaims assert that SCO is attempting to extract windfall profits for its unjust enrichment by misusing purported rights to the UNIX operating system to threaten the destruction of the AIX and Linux operating systems. IBM also claims that SCO is infringing on at least four of IBM’s patents. IBM then provides its own view of the events and facts.

In points 8-11, IBM reviews its history of licensing UNIX from AT&T and then its creation of its own version of UNIX, called AIX, which used considerable resources and created millions of lines of original code. It claims that not all of the rights that AT&T once had have been passed down to SCO.

In points 12-16 IBM describes SCO as a company that began as a developer and distributor of Linux, under the GNU GPL. The GPL, IBM claims, means that SCO is prohibited from asserting certain proprietary rights (e.g. the right to collect license fees) over any source code distributed under the terms of the GPL.

In points 17-19, IBM reviews its history as a participant in the Linux community.

In points 20-21, IBM discusses how SCO's business has been failing to create a solid Linux business. IBM describes SCO as an unprofitable company until its present scheme to extract windfall profits from UNIX. IBM claims SCO's new business model is litigation.

Points 22-24 also provide for interesting reading as IBM points to its view of "SCO's scheme". The premise is that, while much of the UNIX technology is already available without restriction to the general public, that SCO is creating a fear, uncertainty and doubt (FUD) campaign to make it appear that it has the rights to both UNIX and Linux.

In points 25-27, IBM provides a history of SCO's recent engagement in lawsuits and a letter-writing campaign to 1,500 companies threatening litigation.

Points 28-31 provide an overview of how IBM believes SCO has made false public statements and used both the media and analysts as a means to promote its falsehoods.

Points 32-35 discuss how Novell (which sold the UNIX rights to SCO) believes that SCO does not have the right to revoke IBM's license, under the previously discussed "Amendment X".

Points 36-41 state that SCO has not clarified its claims with specifics, but rather is attempting to create FUD, and is misleading people about AIX.

Point 42 says that SCO, is infringing on four IBM patents. IBM then goes through its counter claims of (1) Breach of contract, (2) Lanham act violation (false statements) (3) Unfair competition (4) Intentional interference with prospective economic relations (5) Unfair and deceptive trade practices (6) Breach of the GNU General Public License(7-10), four counterclaims of patent infringement.



# Company overview

## Company description

SCO was originally incorporated as Caldera Systems in 1998 and went public in March 2000. In May, 2001, a holding company called Caldera International, Inc. was formed and all of the assets and operations of the server and professional services groups of Tarantella acquired, which was formerly known as The Santa Cruz Operation, Inc. Among the assets acquired from Tarantella, were source code, copyrights and contracts to UNIX. These were the contracts that had initially been developed by AT&T Bell Labs and include over 30,000 licensing and sublicensing agreements that have been entered into with approximately 6,000 entities. These licenses led to the development of several proprietary UNIX-based operating systems. SCO believes that Sun's Solaris, IBM's AIX, SGI's IRIX, HP's UX, Fujitsu's ICL DRS/NX, Siemens' SINIX, Data General's DG-UX, and Sequent's DYNIX/Ptx are all derivatives of the original UNIX source code now part of SCO. In May 2003 the company changed its name to the SCO Group. SCO is based in Lindon, Utah.

## Balance sheet and other company information

SCO had \$16mm in cash and restricted cash as of last quarter. Last quarter the company's DSO were 33 days, although they have been as high as 67 this fiscal year. Excluding the licensing deals, about 30% of SCO's revenues are direct, with the remaining 70% through a broad group of partners and resellers. The company has 25 domestic sales people and 40 worldwide. From a geographic perspective, (again, excluding licensing) international revenues are slightly less than 50%.

## Share sales

According to SCO management, company executives have only sold roughly 160-170K shares since the March 2003 timeframe. CEO Darl McBride has 800K options, according to the company, and has not sold any shares. The company's policy is that senior executives must have a 10b5-1 automatic selling plan in place in order to complete sales.

**Figure 1: Insider holdings**

Holder	Relationship	Shares/Options	% Ownership	Filing date
CANOPY GROUP INC	Venture firm	5,492,834	34%	07-08-03
DARL MCBRIDE	CEO	800,000	5%	Company info
ROBERT BENCH	CFO	249,480	2%	08-08-03
CHRIS SONTAG	VP of SCOsource	200,000	1%	Company info
REGINALD CHARLES BROUGHTON	Sr. VP	100,000	1%	09-09-03
RALPH J YARRO III	Board of Directors	70,175	<1%	05-16-03
EDWARD E IACOBUCCI	Board of Directors	57,500	<1%	05-16-03
MICHAEL P OLSON	VP, Controller	51,830	<1%	09-11-03
THOMAS RAIMONDI JR	Board of Directors	47,500	<1%	06-02-03
STEVE CAKEBREAD	Board of Directors	42,292	<1%	05-16-03
BAWA OPINDER	Former VP	22,916	<1%	03-31-03
R DUFF THOMPSON	Board of Directors	22,500	<1%	03-31-03
JEFF F HUNSAKER	VP, Intl Marketing	15,494	<1%	08-25-03
BRUCE GRANT JR	Director of SCOx	7,856	<1%	07-08-03
DARCY MOTT	Board of Directors	337	<1%	05-16-03

Source: Deutsche Bank estimates and company data, Factset

### Warrants

The company has also issued a number of warrants over the past year. We do not believe this type of warrant issuance will continue as it has into the future. The company has issued about 223,000 warrants (\$1.83 price) to Sun Microsystems, in conjunction with the license agreement. It has also issued 200,000 to Morgan Keegan (\$1.47 price) for consulting, financial services. Finally it issued 25,000 to a consultant. All of these warrants are in the fully diluted share count, which as of FQ3 (Jul) stood at 16.2 million shares.

### Board of directors

SCO has an eight-member board of directors, with only one true insider. Two of the members are executives at The Canopy Group, which owns roughly 40% of the shares. A brief profile of the directors follows.

- **Darl C. McBride**, Insider, CEO
- **Ralph J. Yarro III**, President of The Canopy Group, which owns roughly 40% of SCOX.
- **Steve Cakebread**, CEO of Salesforce.com and formerly CFO of Autodesk
- **Edward E. Iacobucci**, co-founder of Citrix Systems
- **R. Duff Thompson**, Managing General Partner of EsNet, Ltd., an investment group and formerly an SVP of the Corporate Development Group of Novell
- **Darcy Mott**, VP, Treasurer and CFO of The Canopy Group, which owns roughly 40% of SCOX.
- **K. Fred Skousen**, Ph.D., CPA, Advancement Vice President at BYU.
- **Thomas P. Raimondi, Jr.**, President and CEO of MTI Technology Corporation

# Revenue overview

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## Revenue streams

SCO can be viewed as having three possible revenue streams. The largest and most critical for valuation is the SCOSource initiative. The other revenue streams relate to ongoing operating systems sales and the potential for SCOx.

### SCOSource licensing

SCOSource is the revenue stream from the IP licensing program launched in January 2003. This business has two possible revenue contributors, (1) Source license deals and (2) right to use (RTU) license deals.

The source license deals, which enable licensees to work with the System V code in their own products, are typically large deals where timing is difficult to predict. SCOX signed a large licensing agreement with SUN (estimated \$10mm recognized over three quarters) and Microsoft (estimated \$16mm recognized over three quarters). SCO estimates there could be close to 15 of these types of deals. These source license agreements could encompass historical license misuse, future license use, or both.

The second part of SCOSource that appears interesting is the potential RTU license on each Linux server shipped. With 1mm or so Linux servers per year being shipped, this represents a potentially huge component to future revenues. As yet, the company has signed up one Fortune 100 company, although we believe they have been in negotiations with many more companies. SCOSource RTU licenses currently list for \$699, but as of October it will jump to \$1,399 per server. Should the company sign a huge distribution agreement with a large hardware manufacturer (HP, Dell etc), we imagine the price per server would be more along the lines of \$200. Please see our discussion on the SCOSource licensing sensitivity analysis.

### Ongoing operating systems

OpenServer and UnixWare are currently the largest components of SCO's revenue. The company plans to continue investments in these core UNIX operating systems and believes that the revenue from these products will continue to represent a significant portion of its product revenue over the next few quarters. The company should be releasing some new versions of these products next year.

### SCOx

SCOx is a technology framework that is not yet delivering revenues for the company and not expected to for almost a year. It represents the company's web services strategy built on SCO's operating systems, ebusiness services, and standards such as XML and SOAP.

# Financial model and analysis

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## Run through of the model and detailed sensitivity analysis

SCO's model hinges on SCOsource, in our view. Accordingly, we provide the following sensitivity analysis using four key variables, (1) number of source licensing transactions, (2) price of source licensing transactions (3) number of RTU licenses, and (4) price of RTU licenses. Notably, our current model is the one that uses the conservative assumptions.

First, on the number of source licensing transactions, we believe there are potentially 15 deals that could be done (large OS distributors). We would expect these licensing transactions to range in size from \$5 to \$20 million with revenue typically recognized over three quarters.

Second, on the RTU licenses, we would expect it would take some time before the company could attach an RTU license to the roughly one million Linux servers being shipped per year. We expect these licenses could range between \$100 to \$300 per server, and would most likely be around \$200 (although we model \$100 for conservative sake). We believe a single deal with a large hardware manufacturer, could start a chain reaction, based on there being a large competitive advantage to delivering an "indemnified" Linux machine. As a backup plan, SCO has threatened to sue large Linux customers in an attempt to enforce compliance with its copyrights. We believe this is a last resort approach, as it would create significant customer ill-will, which may be happening anyway, and be expensive to pursue.

### Possible outcomes from legal case against IBM

The legal case has numerous possible outcomes, here are the two extremes: (1) SCO's suit is thrown out and the company is swamped with lawsuits and legal bills, or (2) the company is awarded \$3 billion. We associate the first scenario as pushing SCO's stock to zero. This is the worst possible outcome, and definitely the risk in the story. On the other hand, a \$3 billion award equates to \$185 per diluted share. We believe that our sensitivity analysis offers a more likely set of outcomes, however the legal case should be considered, in our view.

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## Sensitivity analysis

Using the variables and a relatively flat fixed cost structure, we have created a number of scenarios to evaluate revenue and earnings impact. We have assumed a worst and best case scenario, and provide three alternative scenarios in the middle ground. The details of this sensitivity analysis can be seen in Figure 2. More details follow on the next page.

**Figure 2: Source license and RTU license sensitivity analysis FY04, FY05**

Scenarios	Worst case	Scenario 1	Scenario 2	Scenario 3	Best Case
Source license deals	0	2	4	8	15
Average source license size	\$0	\$10mm	\$10mm	\$10mm	\$10mm
RTU licensed servers, in 000 (FY04 & 05)	0	200	650	900	2,000
Average RTU license per server	\$0	\$100	\$100	\$100	\$200
<b>Results</b>					
FY04 Revenue	\$52.7	\$79.4	\$105.7	\$116.8	\$222.7
FY04 Pro forma EPS	(\$0.11)	\$0.85	\$1.84	\$2.22	\$6.16
FY05 Revenue	\$55.4	\$68.7	\$107.4	\$151.4	\$422.1
FY05 Pro forma EPS	(\$0.08)	\$0.43	\$1.94	\$3.64	\$14.14

Source: Deutsche Bank estimates and company data

#### **Worst case (no source license agreements or RTU deals)**

- **Assumptions:** SCO signs no source or RTU licensing deals.
- **Results:** Revenue for FY04 and FY05 would be \$52.7mm and \$55.4mm, with respective EPS losses of (\$0.11) and (\$0.08).

#### **Scenario 1 (two source licenses and slow RTU license uptake)**

- **Assumptions:** The company signs two source licenses for an average \$10mm each in FY04 and FY05. The company also recognizes a \$100 RTU license for 200,000 Linux servers in FY04 and FY05.
- **Results:** Revenue for FY04 and FY05 would be \$79.4mm and \$68.7mm, with respective EPS of \$0.85 and \$0.43.

#### **Scenario 2 (four source licenses and improved RTU license uptake)**

- **Assumptions:** The company signs four source licenses for an average \$10mm each in FY04 and FY05. The company also recognizes a \$100 RTU license for 650,000 servers in FY04 and FY05.
- **Results:** Revenue for FY04 and FY05 would be \$105.7mm and \$107.4mm, with respective EPS of \$1.84 and \$1.94.

#### **Scenario 3 (eight source licenses and strong RTU license uptake)**

- **Assumptions:** The company signs eight source licenses for an average \$10mm each in FY04 and in FY05. The company also recognizes a \$100 RTU license for 900,000 Linux servers shipped in FY04 and FY05.
- **Results:** Revenue for FY04 and FY05 would be \$116.8mm and \$151.4mm, with respective EPS of \$2.22 and \$3.64.

#### **Best case Scenario: (15 source license deals and huge RTU license uptake)**

- **Assumptions:** The company signs fifteen source licenses for an average \$10mm each in FY04 and FY05. The company also recognizes a \$100 RTU license for 2,000,000 Linux servers in FY04 and FY05.
- **Results:** Revenue for FY04 and FY05 would be \$222.7mm and \$422.1mm, with respective EPS of \$6.16 and \$14.14.



Figure 4: SCOX balance sheet

SCO Group Balance Sheet (in millions) (FY Ends Oct 31)	TOT FY'01	TOT FY'02	Jan-03 Q1'03	Apr-03 Q2'03	Jul-03 Q3'03	Oct-03 Q4'03E	TOT FY'03E	Jan-04 Q1'04E	Apr-04 Q2'04E	Jul-04 Q3'04E	Oct-04 Q4'04E	TOT FY'04E	TOT FY'05E
<b>ASSETS</b>													
<b>Current assets</b>													
Cash and equivalents	20,541	6,589	4,942	10,015	14,661	21,254	21,254	21,229	26,031	35,788	48,941	48,941	79,424
Restricted cash	1,894	1,428	1,250	1,779	1,428	1,428	1,428	1,428	1,428	1,428	1,428	1,428	1,428
Available for sale securities	5,943	0	0	0	0	0	0	0	0	0	0	0	0
Accounts receivable, net	16,742	8,622	9,489	8,793	7,398	7,398	7,398	7,398	7,398	7,398	7,398	7,398	7,398
Other current assets	3,438	4,483	3,902	4,392	2,943	2,943	2,943	2,943	2,943	2,943	2,943	2,943	2,943
<b>Total current assets</b>	<b>48,558</b>	<b>21,122</b>	<b>19,583</b>	<b>24,979</b>	<b>26,430</b>	<b>33,023</b>	<b>33,023</b>	<b>32,998</b>	<b>37,800</b>	<b>47,557</b>	<b>60,710</b>	<b>60,710</b>	<b>91,193</b>
Net PPE	6,116	2,021	1,742	1,564	1,561	1,561	1,561	1,561	1,561	1,561	1,561	1,561	1,561
Goodwill, net	2,278	0			1,166		0					0	0
Intangibles, net	15,408	11,258	10,473	9,689	10,265	10,265	10,265	10,265	10,265	10,265	10,265	10,265	10,265
Other assets	2,499	3,005	2,064	1,640	3,210	3,210	3,210	3,210	3,210	3,210	3,210	3,210	3,210
<b>Total assets</b>	<b>74,859</b>	<b>37,406</b>	<b>33,862</b>	<b>37,872</b>	<b>42,632</b>	<b>48,059</b>	<b>48,059</b>	<b>48,034</b>	<b>52,836</b>	<b>62,593</b>	<b>75,746</b>	<b>75,746</b>	<b>106,229</b>
<b>LIABILITIES AND EQUITY</b>													
<b>Current liabilities</b>													
Accounts payable	2,881	2,467	2,051	1,978	1,788	1,788	1,788	1,788	1,788	1,788	1,788	1,788	1,788
Royalty payable (Novell)	1,894	1,428	1,250	1,779	1,428	1,428	1,428	1,428	1,428	1,428	1,428	1,428	1,428
Accrued payroll and benefits	7,013	4,089	3,043	3,619	3,312	3,312	3,312	3,312	3,312	3,312	3,312	3,312	3,312
Other accrued liabilities, other current liabilities	7,221	7,632	5,700	5,709	5,559	5,559	5,559	5,559	5,559	5,559	5,559	5,559	5,559
Deferred revenue	8,241	10,056	9,802	9,218	6,822	6,822	6,822	6,822	6,822	6,822	6,822	6,822	6,822
Taxes payable	1,353	1,113	922	758	846	846	846	846	846	846	846	846	846
Current portion of note payable to Tarantella	3,845	0	0	0	0	0	0	0	0	0	0	0	0
Payable to Tarantella, Santa Cruz	537	0	0	0	0	0	0	0	0	0	0	0	0
Other royalties payable	1,172	669	601	464	668	668	668	668	668	668	668	668	668
<b>Total current liabilities</b>	<b>34,157</b>	<b>27,454</b>	<b>23,369</b>	<b>23,525</b>	<b>20,423</b>	<b>20,423</b>	<b>20,423</b>	<b>20,423</b>	<b>20,423</b>	<b>20,423</b>	<b>20,423</b>	<b>20,423</b>	<b>20,423</b>
Note payable to Tarantella, net of curr.	3,724	0				0	0					0	0
Long-term liabilities	2,201	1,625	2,340	618	611	611	611	611	611	611	611	611	611
<b>Total liabilities</b>	<b>40,082</b>	<b>29,079</b>	<b>25,709</b>	<b>24,143</b>	<b>21,034</b>	<b>21,034</b>	<b>21,034</b>	<b>21,034</b>	<b>21,034</b>	<b>21,034</b>	<b>21,034</b>	<b>21,034</b>	<b>21,034</b>
Minority interest	173	150	150	150	150	150	150	150	150	150	150	150	150
Common Stock	34,604	8,177	8,003	13,579	21,448	26,875	26,875	26,850	31,652	41,409	54,562	54,562	85,045
<b>Total stockholders equity (deficit)</b>	<b>34,777</b>	<b>8,327</b>	<b>8,153</b>	<b>13,729</b>	<b>21,598</b>	<b>27,025</b>	<b>27,025</b>	<b>27,000</b>	<b>31,802</b>	<b>41,559</b>	<b>54,712</b>	<b>54,712</b>	<b>85,195</b>
<b>Total liabilities and stockholders equity</b>	<b>74,859</b>	<b>37,406</b>	<b>33,862</b>	<b>37,872</b>	<b>42,632</b>	<b>48,059</b>	<b>48,059</b>	<b>48,034</b>	<b>52,836</b>	<b>62,593</b>	<b>75,746</b>	<b>75,746</b>	<b>106,229</b>
<b>ANALYSIS</b>													
DSO	80	50	63	37	33	30	30	36	28	22	20	20	26
Cash per share	\$2.36	\$0.62	\$0.55	\$0.86	\$0.99	\$1.39	\$1.39	\$1.30	\$1.58	\$2.16	\$2.93	\$2.93	\$4.65
Deferred	\$8,241	\$10,056	\$9,802	\$9,218	\$6,822	\$6,822	\$6,822	\$6,822	\$6,822	\$6,822	\$6,822	\$6,822	\$6,822
Sequential change in deferred	\$683	(\$1,222)	(\$254)	(\$584)	(\$2,396)	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Growth in deferred (y/y)	2428%	22%	11%	19%	(40%)	(32%)	(32%)	(30%)	(26%)	0%	0%	0%	0%
Growth in deferred (q/q)	nm	nm	(3%)	(6%)	(26%)	0%	nm	0%	0%	0%	0%	nm	nm
Working capital	14,401	(6,332)	(3,786)	1,454	6,007	12,600	12,600	12,575	17,377	27,134	40,287	40,287	70,770
Growth in working capital (y/y)	(84%)	(144%)	(148%)	(71%)	(253%)	(299%)	(299%)	(432%)	1095%	352%	220%	220%	76%
Current ratio	0.4x	-0.2x	-0.2x	0.1x	0.3x	0.6x	0.6x	0.6x	0.9x	1.3x	2.0x	2.0x	3.5x
Book value per share	\$2.89	\$0.65	\$0.73	\$1.00	\$1.33	\$1.66	\$1.66	\$1.65	\$1.93	\$2.51	\$3.28	\$3.28	\$4.99
ROA (ttm)	(111%)	(62%)	(39%)	(7%)	12%	29%	29%	31%	29%	37%	41%	41%	31%
ROE (ttm)	(167%)	(274%)	(170%)	(24%)	28%	55%	55%	56%	50%	58%	59%	59%	39%

Source: Deutsche Bank estimates and company data

Figure 5: SCOX cash flow statement

SCO Group Cash Flow Statement (FY Ends Oct 31)	TOT FY'01	TOT FY'02	Jan-03 Q1'03	Apr-03 Q2'03	Jul-03 Q3'03	Oct-03 Q4'03E	TOT FY'03E	Jan-04 Q1'04E	Apr-04 Q2'04E	Jul-04 Q3'04E	Oct-04 Q4'04E	TOT FY'04E	TOT FY'05E
<b>Cash flow from operating activities</b>													
<b>Net gain (loss)</b>	<b>(131,357)</b>	<b>(24,877)</b>	<b>(724)</b>	<b>4,500</b>	<b>3,096</b>	<b>5,121</b>	<b>11,993</b>	<b>776</b>	<b>4,011</b>	<b>9,401</b>	<b>11,681</b>	<b>25,870</b>	<b>28,664</b>
Adjustments to reconcile non-cash operating activities													
Amort of goodwill and intangibles	10,664	3,187	785	784	979	783	3,331	785	784	979	783	3,331	3,331
Depreciation and amortization	2,204	2,555	341	263	211	513	1,328	341	263	211	513	1,328	1,328
Loss on disposition, write down of long lived asse	73,700	1,796											
Stock based comp	1,373	1,012	157	461	309	597	1,524	157	461	309	597	1,524	1,524
Equity in loss of affiliate	648	50	25	75	71	50	221	25	75	71	50	221	221
Write-down of investment	8,309	1,180											
Issuance of common stock and options for service		113	55		39		94	55		39		94	94
Amortization of debt discount	247	208											
In process R/D	1,500												
Loss on disposal of assets	165												
Accrued interest converted to equity													
Gain on sale of assets to ebiz													
Changes in operating assets and liabilities, net of effect of acq.													
Accounts receivable	(8,137)	8,120	(867)	519	1,395	2,332	3,379	(867)	519	1,395	2,332	3,379	3,379
Other current assets	(666)	(145)	1,906	(713)	(339)	197	1,051	1,906	(713)	(339)	197	1,051	1,051
Other assets	(903)	(1,387)	(94)	587	647	(1,884)	(744)	(94)	587	647	(1,884)	(744)	(744)
Accounts payable	378	(414)	(416)	199	(190)	791	384	(416)	199	(190)	791	384	384
Payable to Tarantella	(361)	27											
Accrued salaries and benefits	2,134	(2,924)	(1,046)	1,028	(307)	(495)	(820)	(1,046)	1,028	(307)	(495)	(820)	(820)
Other current liabilities	985	411	(1,022)	(1,012)	(252)	258	(2,028)	(1,022)	(1,012)	(252)	258	(2,028)	(2,028)
Deferred revenue	(2,849)	1,815	(254)	(584)	(2,396)	(1,222)	(4,456)	(254)	(584)	(2,396)	(1,222)	(4,456)	(4,456)
Taxes payable	297	(240)	(191)	240	88	(68)	69	(191)	240	88	(68)	69	69
Other royalties payable	410	(503)	(68)	(137)	204	383	382	(68)	(137)	204	383	382	382
Other long-term liabilities	1,194	(576)	(195)	(708)	(7)	(751)	(1,661)	(195)	(708)	(7)	(751)	(1,661)	(1,661)
<b>Net cash provided by (used in ) operating activities</b>	<b>(40,065)</b>	<b>(10,592)</b>	<b>(1,608)</b>	<b>5,502</b>	<b>3,548</b>	<b>6,605</b>	<b>14,047</b>	<b>(108)</b>	<b>5,013</b>	<b>9,853</b>	<b>13,165</b>	<b>27,924</b>	<b>30,718</b>
<b>Cash flows from investing activities</b>													
Purchase of property and equipments	(1,520)	(206)	(17)	(311)	(196)	(112)	(636)	(17)	(311)	(196)	(112)	(636)	(636)
Acquisitions, net of acquisiton costs and cash rec	(23,005)	(100)											
Purchase of avail for sale securities	(5,866)												
Proceeds from sale of equipment, avail for sale se	53,629	5,943											
Investment in non-marketable securities		(350)	(350)	350									
Advance to Tarantella, Inc.													
Cash payment to Caldera													
Deferred acquisition costs													
Sale of Lineo, Inc. Common													
Investment in and loans to Vista				(450)	(500)		(950)						
Cash paid in asset acquisitions				(666)			(666)						
<b>Net cash used in investing activities</b>	<b>23,238</b>	<b>5,287</b>	<b>(367)</b>	<b>(1,077)</b>	<b>(696)</b>	<b>(112)</b>	<b>(2,252)</b>	<b>(17)</b>	<b>(311)</b>	<b>(196)</b>	<b>(112)</b>	<b>(636)</b>	<b>(636)</b>
<b>Cash flows from financing activities</b>													
Repayments of long-term debt		(5,000)											
Proceeds from sale of common stock from ESP	126	291	57		179		236						
Purchase of common shares		(4,584)											
Proceeds from exercise of common stock	303	295	124	101	1,218	100	1,543	100	100	100	100	400	400
Issuance of warrant				500	150		650						
Borrowing from major stockholder													
Repayment of borrowings from long-term stockholder													
Proceeds from sale of common stock, net of offering													
Proceeds from Series B Convertible preferred													
Minority interest in subsidiary	173												
<b>Net cash provided by financing activities</b>	<b>602</b>	<b>(8,998)</b>	<b>181</b>	<b>601</b>	<b>1,547</b>	<b>100</b>	<b>2,429</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>100</b>	<b>400</b>	<b>400</b>
<b>Net increase in cash and cash equivalents</b>	<b>(16,225)</b>	<b>(14,303)</b>	<b>(1,794)</b>	<b>5,026</b>	<b>4,399</b>	<b>6,593</b>	<b>14,224</b>	<b>(25)</b>	<b>4,802</b>	<b>9,757</b>	<b>13,153</b>	<b>27,688</b>	<b>30,482</b>
Effect of foreign exchange	206	351	147	102	192		441						
<b>Cash and cash equivalents, beginning of period</b>	<b>36,560</b>	<b>20,541</b>	<b>6,589</b>	<b>4,942</b>	<b>10,070</b>	<b>14,661</b>	<b>6,589</b>	<b>21,254</b>	<b>21,229</b>	<b>26,031</b>	<b>35,788</b>	<b>21,254</b>	<b>48,941</b>
<b>Cash and cash equivalents, end of period</b>	<b>20,541</b>	<b>6,589</b>	<b>4,942</b>	<b>10,070</b>	<b>14,661</b>	<b>21,254</b>	<b>21,254</b>	<b>21,229</b>	<b>26,031</b>	<b>35,788</b>	<b>48,941</b>	<b>48,941</b>	<b>79,424</b>

Source: Deutsche Bank estimates and company data



**Disclosures**

## Additional Information Available upon Request

**Disclosure checklist**

<b>Company</b>	<b>Ticker</b>	<b>Recent Price</b>	<b>Disclosure</b>
SCO Group, Inc. (The)	SCOX	\$16.01	None

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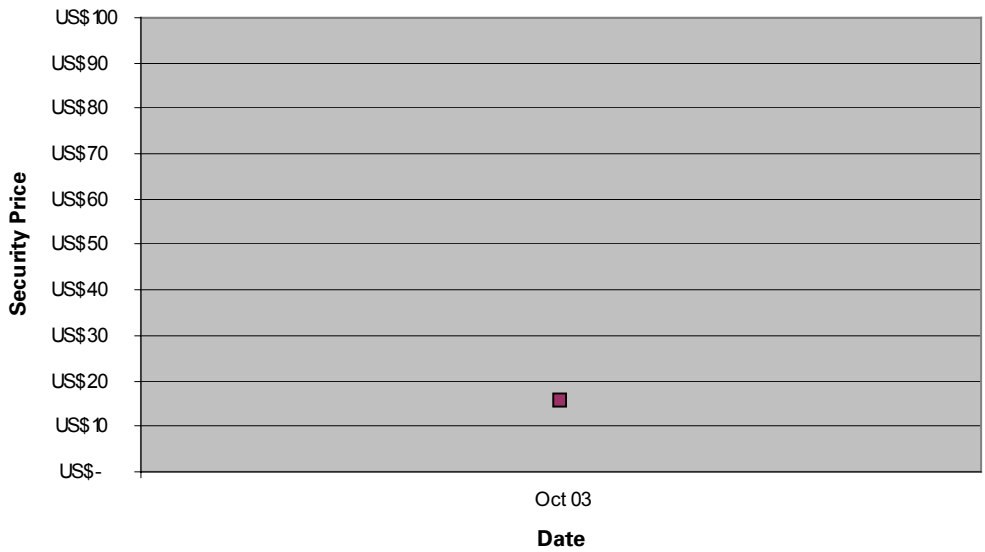
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Brian Skiba, Matthew Kelly

**Historical Recommendations and Target Price: SCO Group, Inc. (The) (SCOX)**

(as of 10/14/2003)



Previous Recommendations

- Strong Buy
- Buy
- Market Perform
- Underperform
- Not Rated
- Suspended Rating

Current Recommendations

- Buy
- Hold
- Sell
- Not Rated
- Suspended Rating

\*New Recommendation Structure as of September 9, 2002

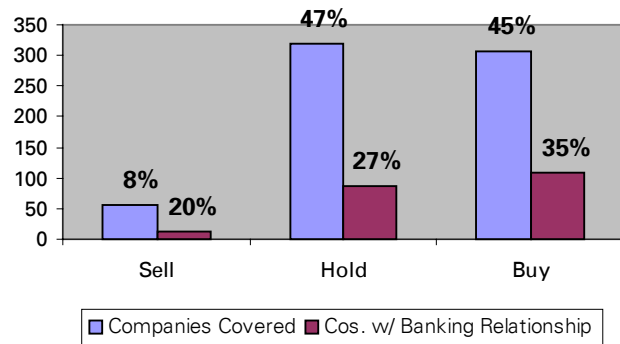
1. Initiating Coverage BUY. Target Price USD\$45.00 2.

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