

International Subsidiaries	Place of Incorporation
Sun Microsystems Scotland Holding LP	Scotland
Sun Microsystems Scotland Limited	Scotland
Sun Microsystems Scotland LP	Scotland
Oracle SRBIJA CRNA GORA d.o.o.	Serbia
G-Log Pte Ltd.	Singapore
GoldenGate Software Asia Pacific Pte. Ltd.	Singapore
Haley (Singapore) Pte. Ltd.	Singapore
Hyperion Software Pte. Ltd.	Singapore
Hyperion Solutions Asia Pte. Ltd.	Singapore
Mantas Singapore Pte. Ltd.	Singapore
Oracle Corporation Singapore Pte. Ltd.	Singapore
Oracle Financial Services Consulting Pte. Ltd.	Singapore
Oracle Financial Services Software Pte. Ltd.	Singapore
Oracle Singapore Holdings Pte. Ltd.	Singapore
Sun Microsystems Pte. Ltd.	Singapore
Oracle Slovensko spol. s.r.o.	Slovakia
Sun Microsystems Slovakia, s.r.o.	Slovakia
Oracle Software d.o.o. Ljubljana	Slovenia
Oracle Corporation (South Africa)(Pty) Limited	South Africa
Oracle Empowerment (Pty) Ltd.	South Africa
Sun Microsystems (South Africa) (Pty) Limited	South Africa
Oracle Iberica, S.R.L.	Spain
Sun Microsystems Iberica, S.A.U.	Spain
MySQL AB	Sweden
Oracle Svenska AB	Sweden
Sun Microsystems AB	Sweden
Oracle GmbH	Switzerland
Oracle Software (Schweiz) GmbH	Switzerland
Plumtree Software GmbH	Switzerland
Sun Microsystems (Schweiz) AG	Switzerland
J.D. Edwards (Taiwan) Company Ltd.	Taiwan
PeopleSoft Taiwan Ltd. Co.	Taiwan
Sun Microsystems Taiwan Limited	Taiwan
Oracle Corporation (Thailand) Company Limited	Thailand
Sun Microsystems (Thailand) Limited	Thailand
Oracle Bilgisayar Sistemleri Limited Sirketi	Turkey
Oracle Bilgi Sistemleri Sanayi Ve Ticaret Limited Sirketi	Turkey
Sun Microsystems (Bilgisayar Sistemleri) Limited Sirketi	Turkey

International Subsidiaries	Place of Incorporation
Sun Microsystems Ukraine LLC	Ukraine
PeopleSoft Middle East FZ-LLC	United Arab Emirates
Siebel Systems Middle East FZ-LLC	United Arab Emirates
Acsera Limited	United Kingdom
Advanced Visual Technology	United Kingdom
Advanced Visual Technology Americas	United Kingdom
Haley (Europe)	United Kingdom
Mantas Limited	United Kingdom
MySQL UK Ltd.	United Kingdom
Oracle Corporation Nominees Limited	United Kingdom
Oracle Corporation UK Holdings Limited	United Kingdom
Oracle Corporation UK Limited	United Kingdom
Oracle Corporation UK Trustee Company Limited	United Kingdom
Oracle EMEA Management	United Kingdom
Oracle Sun Acquisition	United Kingdom
Oracle Sun Integration Limited	United Kingdom
Pertmaster Limited	United Kingdom
Primavera UK Acquisition Limited	United Kingdom
Relsys UK Limited	United Kingdom
Siebel Systems UK	United Kingdom
Skywire Software	United Kingdom
Sun Microsystems Holdings Limited	United Kingdom
Sun Microsystems Limited	United Kingdom
Oracle de Venezuela, C.A.	Venezuela
Sun Microsystems de Venezuela, S.A.	Venezuela
Oracle Vietnam Pte. Ltd.	Vietnam

**CONSENT OF ERNST & YOUNG LLP,
INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We consent to the incorporation by reference in the following Registration Statements:

Form S-3	333-166643	
Form S-8	333-164734	Sun Microsystems, Inc. 2007 Omnibus Incentive Plan, Sun Microsystems, Inc. 1990 Long-Term Equity Incentive Plan, Sun Microsystems, Inc. Equity Compensation Acquisition Plan, Sun Microsystems, Inc. 1988 Directors' Stock Option Plan, Sun Microsystems, Inc. 1997 French Stock Option Plan, Afara Websystems, Inc. 2000 Equity Incentive Plan, Cobalt Networks, Inc. Amended and Restated 1997 Employee Stock Plan, Forte Software, Inc. 1996 Stock Option Plan, Forte Software, Inc. 1997 Stock Option Plan, Gridware, Inc. 2000 Equity Incentive Plan, HighGround Systems, Inc. Stock Option Plan, InnoSoft International, Inc. 1992 Stock Incentive Plan, InnoSoft International, Inc. 1999 Equity Incentive Plan, Isopia Inc. Stock Option Plan, Kealia, Inc. Amended and Restated 2001 Stock Plan, Large Storage Configurations, Incorporated 1992 Stock Option Plan, MySQL AB Global Share Option Plan 2005, Neogent, Inc. 2001 Stock Incentive Plan, Pirus Networks, Inc. 2000 Stock Option Plan, SeeBeyond Technology Corporation 1998 Stock Plan, SevenSpace, Inc. Amended and Restated 2000 Stock Incentive Plan, Star Division Corporation 1998 Stock Plan, Amended and Restated Storage Technology Corporation 1995 Equity Participation Plan, Storage Technology Corporation 2004 Long Term Incentive Plan, Tarantella, Inc. 2002 Incentive Stock Option Plan, Tarantella, Inc. 2003 Stock Option Plan, Waveset Technologies, Inc. Amended and Restated 2000 Stock Plan, Silver Creek Systems, Inc. 2003 Equity Incentive Plan
Form S-8	333-163147	GoldenGate Software, Inc. 2002 Equity Incentive Plan, as amended
Form S-8	333-157758	Primavera Software, Inc. Amended and Restated 2006 Stock Option Plan
Form S-8	333-153660	AdminServer, Inc. 2003 Stock Option Plan
Form S-8	333-151045	BEA Systems, Inc. 1995 Flexible Stock Incentive Plan, BEA Systems, Inc. 1997 Stock Incentive Plan, BEA Systems, Inc. 2000 Non-Qualified Stock Incentive Plan, BEA Systems, Inc. 2006 Stock Incentive Plan, The Theory Center Amended and Restated 1999 Stock Option/Stock Issuance Plan, Plumtree Software, Inc. 1997 Equity Incentive Plan, Plumtree Software, Inc. 2002 Stock Plan
Form S-8	333-147400	Bridgestream 1999 Stock Plan, Logical Apps, Inc. 2003 Equity Incentive Plan
Form S-8	333-145162	Agile Software Corporation 1995 Stock Option Plan, Agile Software Corporation 2000 Nonstatutory Stock Option Plan, The Digital Market, Inc. 1995 Stock Plan

Form S-8	333-142776	Hyperion Solutions Corporation 2004 Equity Incentive Plan, Hyperion Solutions Corporation 1999 Stock Option Plan, Hyperion Solutions Corporation 1995 Stock Option/Stock Issuance Plan, Hyperion Solutions Corporation 1992 Stock Option Plan, Hyperion Software Corporation 1991 Stock Plan, Hyperion Software Corporation 1991 Stock Plan, Decisioneering, Inc. 1997 Stock Option Plan, SQRIBE 1995 Stock Option Plan, Hyperion Software Corporation 1991 Non-Employee Director Stock Option Plan, Brio Software, Inc. 2000 Non-Executive Director Stock Option Plan, Brio Software, Inc. 1998 Stock Option Plan, Brio Software, Inc. 1998 Directors' Stock Option Plan, Brio Software, Inc. 1998 Non-Executive Stock Option Plan, Arbor Software Corporation 1995 Stock Option/Stock Issuance Plan
Form S-8	333-142225	Hyperion Solutions Corporation 2004 Equity Incentive Plan, Hyperion Solutions Corporation 1995 Stock Option/Stock Issuance Plan and the Arbor Software Corporation 1995 Stock Option/Stock Issuance Plan
Form S-8	333-139901	Stellent, Inc. 1994-1997 Stock Option and Compensation Plan, InfoAccess, Inc. 1990 Stock Option Plan as amended September 29, 1999, InfoAccess, Inc. 1995 Stock Option Plan as amended September 29, 1999, Stellent, Inc. 1999 Employee Stock Option and Compensation Plan, Stellent, Inc. 2000 Stock Incentive Plan, Stellent, Inc. Amended and Restated 2000 Employee Stock Incentive Plan, Stellent, Inc. Amended and Restated 1997 Directors Stock Option Plan, Optika Imaging Systems, Inc. 1994 Stock Option /Stock Issuance Plan, Amendment to Optika Imaging Systems, Inc. 1994 Stock Option/Stock Issuance Plan, Optika Inc. 2000 Non-Officer Stock Incentive Plan, Optika Inc. 2003 Equity Incentive Plan, Amendment to Optika Inc. 2003 Equity Incentive Plan, Stellent, Inc. 2005 Equity Incentive Plan, French Annex to the Stellent, Inc. 2000 Stock Incentive Plan
Form S-8	333-139875	MetaSolv, Inc. 1992 Stock Option Plan, MetaSolv, Inc. Long-Term Incentive Plan
Form S-8	333-138694	SPL WorldGroup Holdings, LLC 2005 Option Plan, SPL WorldGroup Holdings, LLC 2004 Equity Incentive Plan
Form S-8	333-136275	Portal Software, Inc. 1999 Stock Incentive Plan, Portal Software, Inc. 2000 Supplemental Stock Option Plan, Portal Software, Inc. 1995 Stock Option/Stock Issuance Plan (as amended and succeeded by the 1999 Stock Incentive Plan)
Form S-8	333-131988	Siebel Systems, Inc. 1996 Equity Incentive Plan, Siebel Systems, Inc. 1996 Supplemental Stock Option, Siebel Systems, Inc. 1998 Equity Incentive Plan, InterActive WorkPlace, Inc. 1996 Stock Option Plan, Janna Systems Inc. Amended and Restated Share Compensation Plan, nQuire Software, Inc. 1997 Employee Stock Option and Compensation Plan, OnLink Technologies, Inc. 1998 Stock Option Plan, OnTarget, Inc. 1999 Stock Award Plan, OpenSite Technologies, Inc. 1998 Stock Option Plan, Sales.Com, Inc. 1999 Equity Incentive Plan, Options Granted Outside of Sales.com, Inc. 1999 Equity Incentive Plan, SalesRepsOnline.com, Inc. 2000 Stock Option/Stock Issuance Plan, Scopus Technology, Inc. 1991 Stock Option Plan, Scopus Technology, Inc. 1995 Director Option Plan
Form S-8	333-131427	Oracle Corporation Amended and Restated 2000 Long-Term Equity Incentive Plan, Oracle Corporation Amended and Restated 1993 Directors' Stock Plan, Oracle Corporation 1991 Long-Term Incentive Plan, as amended, Oracle Corporation Employee Stock Purchase Plan (1992), as amended and restated, ProfitLogic, Inc. Second Amended and Restated 1999 Stock Incentive Plan, as amended, Peoplesoft, Inc. Amended and Restated 1989 Stock Plan, Peoplesoft, Inc. 2001 Stock Plan, Peoplesoft, Inc. 2000 Nonstatutory Stock Option Plan, Peoplesoft, Inc. 1992 Directors' Stock Option Plan, Peoplesoft, Inc. 2003 Directors Stock Plan, Intrepid Systems, Inc. 1992 Stock Option Plan, J.D. Edwards & Company 1992 Incentive Stock Option Plan, J.D. Edwards & Company 1992 Nonqualified Stock Option Plan, J.D. Edwards & Company 1997 Equity Incentive Plan, J.D. Edwards & Company 2003

Equity Incentive Plan, Red Pepper Software Company 1993 Stock Option Plan, Skillsvillage 1999 Stock Plan, Teamscape Corporation 1998 Stock Plan, Trimark Technologies, Inc. 1993 Stock Option Plan, The Vantive Corporation Amended and Restated 1991 Stock Option Plan, The Vantive Corporation 1997 Nonstatutory Stock Option Plan, Oracle Corporation 1993 Deferred Compensation Plan, Oracle Corporation 401(k) Savings and Investment Plan

of our reports dated June 30, 2010, with respect to the consolidated financial statements and schedule of Oracle Corporation, and the effectiveness of internal control over financial reporting of Oracle Corporation, included in this Annual Report (Form 10-K) of Oracle Corporation for the year ended May 31, 2010.

/s/ ERNST & YOUNG LLP

San Francisco, California
June 30, 2010

CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT

I, Lawrence J. Ellison, certify that:

1. I have reviewed this annual report on Form 10-K of Oracle Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the Finance and Audit Committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: June 30, 2010

By: /s/ LAWRENCE J. ELLISON

Lawrence J. Ellison
Chief Executive Officer and Director

CERTIFICATION PURSUANT TO SECTION 302 OF THE SARBANES-OXLEY ACT

I, Jeff Epstein, certify that:

1. I have reviewed this annual report on Form 10-K of Oracle Corporation;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
 - a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
 - b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
 - d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the Finance and Audit Committee of the registrant's board of directors (or persons performing the equivalent functions):
 - a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
 - b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: June 30, 2010

By: /s/ JEFF EPSTEIN

Jeff Epstein
Executive Vice President and
Chief Financial Officer

CERTIFICATION PURSUANT TO SECTION 906 OF THE SARBANES-OXLEY ACT

The certification set forth below is being submitted in connection with the report on Form 10-K of Oracle Corporation for the purpose of complying with Rule 13a-14(b) or Rule 15d-14(b) of the Securities Exchange Act of 1934 and Section 1350 of Chapter 63 of Title 18 of the United States Code.

Lawrence J. Ellison, the Chief Executive Officer of Oracle Corporation, and Jeff Epstein, the Chief Financial Officer of Oracle Corporation, each certifies that, to the best of his knowledge:

1. the Report fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
2. the information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of Oracle Corporation.

Date: June 30, 2010

By: /s/ LAWRENCE J. ELLISON

Lawrence J. Ellison
Chief Executive Officer and Director

Date: June 30, 2010

By: /s/ JEFF EPSTEIN

Jeff Epstein
Executive Vice President and
Chief Financial Officer

CONSOLIDATED BALANCE SHEETS

CONSOLIDATED BALANCE SHEETS (in \$ millions)	05/31/2010	05/31/2009
Assets:		
Current assets:		
Cash and cash equivalents	\$ 9,914	\$ 8,995
Marketable securities	8,555	3,629
Trade receivables, net of allowances for doubtful accounts of \$305 and \$270 as of May 31, 2010 and 2009, respectively	5,585	4,430
Inventories	259	0
Deferred tax assets	1,159	661
Prepaid expenses and other current assets	1,532	866
Total current assets	27,004	18,581
Non-current assets:		
Property, plant and equipment, net	2,763	1,922
Intangible assets: software support agreements and related relationships, net	2,903	3,411
Intangible assets: other, net	6,418	3,858
Goodwill	20,425	18,842
Other assets	2,065	802
Total non-current assets	34,574	28,835
Total assets	61,578	47,416
Liabilities and Stockholders' Equity:		
Current liabilities:		
Notes payable, current and other current borrowings	3,145	1,001
Accounts payable	775	271
Accrued compensation and related benefits	1,895	1,409
Deferred revenues	5,900	4,592
Other current liabilities	2,976	1,876
Total current liabilities	14,691	9,149
Non-current liabilities:		
Notes payable and other non-current borrowings	11,510	9,237
Income taxes payable	2,695	2,423
Deferred tax liabilities	424	480
Other non-current liabilities	1,059	682
Total non-current liabilities	15,688	12,822
Oracle Corporation stockholders' equity:		
Preferred stock, \$0.01 par value-authorized: 1.0 shares; outstanding: none	0	0
Common stock, \$0.01 par value and additional paid in capital-authorized: 11,000 shares; outstanding: 5,026 shares and 5,005 shares as of May 31, 2010 and May 31, 2009, respectively	14,648	12,980
Retained earnings	16,146	11,894
Accumulated other comprehensive income	4	216
Total Oracle Corporation stockholders' equity	30,798	25,090
Noncontrolling interests	401	355
Total equity	31,199	25,445
Total liabilities and equity	\$ 61,578	\$ 47,416

CONSOLIDATED BALANCE SHEETS PARENTHETICAL

CONSOLIDATED BALANCE SHEETS PARENTHETICAL (USD \$ in Millions) except Per Share Data	05/31/2010	05/31/2009
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Statement line items

Allowance for doubtful accounts receivable	\$ 305	\$ 270
Preferred stock par or stated value per share	\$ 0.01	\$ 0.01
Preferred stock shares authorized	1	1
Preferred stock shares outstanding	0	0
Common stock par or stated value per share	\$ 0.01	\$ 0.01
Common stock shares authorized	11,000	11,000
Common stock shares outstanding	5,026	5,005

CONSOLIDATED STATEMENTS OF OPERATIONS

CONSOLIDATED STATEMENTS OF OPERATIONS (USD \$MM, Millions) except Per Share Data	12 Months Ended 03/31/2010	12 Months Ended 03/31/2009	12 Months Ended 03/31/2008
Statement line items			
Revenues:			
Software revenues:			
New software licenses	\$ 7,533	\$ 7,123	\$ 7,515
Software license updates and product support revenue	13,092	11,754	10,328
Software revenues	20,625	18,877	17,843
Hardware systems revenues:			
Hardware systems products revenue	1,506	0	0
Hardware systems support revenue	784	0	0
Hardware systems revenues	2,290	0	0
Services revenues	3,905	4,375	4,587
Total revenues	26,820	23,252	22,430
Operating Expenses:			
Sales and marketing	5,080	4,638	4,679
Software license updates and product support costs	1,063	1,088	997
Hardware systems products costs	880	0	0
Hardware systems support costs	423	0	0
Services costs	3,398	3,706	3,984
Research and development	3,254	2,767	2,741
General and administrative	911	785	808
Amortization of intangible assets	1,973	1,713	1,212
Acquisition related and other	154	117	124
Restructuring	622	117	41
Total operating expenses	17,758	14,931	14,586
Operating income	9,062	8,321	7,844
Interest expense	(754)	(630)	(394)
Non-operating income (expense), net	(65)	143	384
Income before provision for income taxes	8,243	7,834	7,834
Provision for income taxes	2,108	2,241	2,313
Net Income	\$ 6,135	\$ 5,593	\$ 5,521
Earnings per share:			
Earnings per share, basic	\$ 1.22	\$ 1.1	\$ 1.08
Earnings per share, diluted	\$ 1.21	\$ 1.09	\$ 1.06
Weighted average common shares outstanding:			
Weighted average common shares outstanding, basic	5,014	5,070	5,133
Weighted average common shares outstanding, diluted	5,073	5,130	5,229
Dividends declared per common share	\$ 0.2	\$ 0.05	\$ 0

CONSOLIDATED STATEMENTS OF CASH FLOWS

CONSOLIDATED STATEMENTS OF CASH FLOWS (USD \$ in Millions)	12 Months Ended 05-31-2010	12 Months Ended 05-31-2009	12 Months Ended 05-31-2008
Statement line items			
Cash Flows From Operating Activities:			
Net income	\$ 6,135	\$ 5,593	\$ 5,521
Adjustments to reconcile net income to net cash provided by operating activities:			
Depreciation	298	263	268
Amortization of intangible assets	1,973	1,713	1,212
Allowances for doubtful accounts receivable	143	118	164
Deferred income taxes	(511)	(395)	(135)
Stock-based compensation	436	355	369
Tax benefits on the exercise of stock options and vesting of restricted stock-based awards	203	252	588
Excess tax benefits on the exercise of stock options and vesting of restricted stock-based awards in operating activities	(110)	(194)	(454)
Other, net in operating activities	13	185	18
Changes in operating assets and liabilities, net of effects from acquisitions:			
(Increase) decrease in trade receivables, net	(362)	336	(825)
Decrease in inventories	73	0	0
Decrease (increase) in prepaid expenses and other assets	340	145	(191)
Decrease in accounts payable and other liabilities	(360)	(691)	(153)
(Decrease) increase in income taxes payable	(79)	142	368
Increase in deferred revenues	489	433	652
Net cash provided by operating activities	<u>8,681</u>	<u>8,255</u>	<u>7,402</u>
Cash Flows From Investing Activities:			
Purchases of marketable securities and other investments	(15,703)	(9,315)	(5,624)
Proceeds from maturities and sales of marketable securities and other investments	11,220	8,404	4,281
Acquisitions, net of cash acquired	(5,606)	(1,159)	(7,643)
Capital expenditures	(230)	(529)	(243)
Proceeds from sale of property	0	0	153
Net cash used for investing activities	<u>(10,319)</u>	<u>(2,599)</u>	<u>(9,076)</u>
Cash Flows From Financing Activities:			
Payments for repurchases of common stock	(992)	(3,972)	(2,023)
Proceeds from issuances of common stock	874	760	1,288
Payment of dividends to stockholders	(1,004)	(250)	0
Proceeds from borrowings, net of issuance costs	7,220	0	6,171
Repayments of borrowings	(3,582)	(1,004)	(2,560)
Excess tax benefits on the exercise of stock options and vesting of restricted stock-based awards in financing activities	110	194	454
Distributions to noncontrolling interests	(59)	(53)	(49)
Other, net in financing activities	97	(97)	0
Net cash provided by (used for) financing activities	<u>2,664</u>	<u>(4,422)</u>	<u>3,281</u>
Effect of exchange rate changes on cash and cash equivalents	(107)	(501)	437
Net increase in cash and cash equivalents	919	733	2,044
Cash and cash equivalents at beginning of period	8,995	8,262	6,218
Cash and cash equivalents at end of period	9,914	8,995	8,262
Non-cash investing and financing transactions:			
Fair value of stock options and restricted stock-based awards assumed in connection with acquisitions	100	1	240

Source: ORACLE CORP. 10-K, July 01, 2010

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Decrease in unsettled repurchases of common stock	0	(12)	(23)
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Supplemental schedule of cash flow data:

Cash paid for income taxes	2,488	2,170	1,687
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Cash paid for interest	\$ 652	\$ 627	\$ 347
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CONSOLIDATED STATEMENTS OF EQUITY

Balance Sheet as of 5/31/08	Common Stock	Common Stock, Additional Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Income	Total Equity - Common Stock Holders	Noncontrolling Interests	Total
Beginning balances at 2007-05-31	\$ 0	\$ 10,293	\$ 6,223	\$ 403	\$ 16,919	\$ 316	\$ 17,235
Common stock issued under stock-based compensation plans	0	1,229	0	0	1,229	0	1,229
Common stock issued under stock purchase plans	0	59	0	0	59	0	59
Assumption of stock-based compensation plan awards in connection with acquisitions	0	240	0	0	240	0	240
Stock-based compensation in consolidated statements of equity	0	367	0	0	367	0	367
Repurchase of common stock	0	(214)	(1,786)	0	(2,000)	0	(2,000)
Tax benefit from stock plans	0	472	0	0	472	0	472
Adjustment to retained earnings upon adoption of revised guidance for income taxes	0	0	3	0	3	0	3
Other, net in consolidated statements of equity	0	0	0	0	0	7	7
Distributions to noncontrolling interests in consolidated statements of equity	0	0	0	0	0	(49)	(49)
Net unrealized loss on defined benefit plans, net of tax	(9)	0	0	(9)	(9)	0	(9)
Foreign currency translation	300	0	0	300	300	35	335
Net unrealized losses on derivative financial instruments, net of tax	(77)	0	0	(77)	(77)	0	(77)
Net unrealized gain on marketable securities, net of tax	1	0	0	1	1	0	1
Net income in consolidated statements of equity	5,521	0	5,521	0	5,521	60	5,581
Comprehensive income	5,736	0	0	0	0	0	0
Ending balances at 2008-05-31	0	12,446	9,961	618	23,025	369	23,394
Beginning balances at 2008-05-31	0	12,446	9,961	618	23,025	369	23,394
Common stock issued under stock-based compensation plans	0	696	0	0	696	0	696
Common stock issued under stock purchase plans	0	64	0	0	64	0	64
Assumption of stock-based compensation plan awards in connection with acquisitions	0	1	0	0	1	0	1
Stock-based compensation in consolidated statements of equity	0	348	0	0	348	0	348
Repurchase of common stock	0	(550)	(3,410)	0	(3,960)	0	(3,960)
Cash dividends declared	0	0	(250)	0	(250)	0	(250)
Tax benefit from stock plans	0	56	0	0	56	0	56
Other, net in consolidated statements of equity	0	(81)	0	0	(81)	(37)	(118)
Distributions to noncontrolling interests in consolidated statements of equity	0	0	0	0	0	(53)	(53)
Net unrealized loss on defined benefit plans, net of tax	(14)	0	0	(14)	(14)	0	(14)
Foreign currency translation	(350)	0	0	(350)	(350)	(8)	(358)
Net unrealized losses on derivative financial instruments, net of tax	(39)	0	0	(39)	(39)	0	(39)
Net unrealized gain on marketable securities, net of tax	1	0	0	1	1	0	1
Net income in consolidated statements of equity	5,593	0	5,593	0	5,593	84	5,677
Comprehensive income	5,191	0	0	0	0	0	0
Ending balances at 2009-05-31	0	12,980	11,894	216	25,090	355	25,445
Beginning balances at 2009-05-31	0	12,980	11,894	216	25,090	355	25,445
Common stock issued under stock-based compensation plans	0	812	0	0	812	0	812
Common stock issued under stock purchase plans	0	62	0	0	62	0	62
Assumption of stock-based compensation plan awards in connection with acquisitions	0	100	0	0	100	0	100
Stock-based compensation in consolidated statements of equity	0	440	0	0	440	0	440
Repurchase of common stock	0	(112)	(880)	0	(992)	0	(992)
Cash dividends declared	0	0	(1,004)	0	(1,004)	0	(1,004)
Tax benefit from stock plans	0	268	0	0	268	0	268
Other, net in consolidated statements of equity	0	98	1	0	99	1	100
Distributions to noncontrolling interests in consolidated statements of equity	0	0	0	0	0	(59)	(59)
Net unrealized loss on defined benefit plans, net of tax	(35)	0	0	(35)	(35)	0	(35)
Foreign currency translation	(171)	0	0	(171)	(171)	9	(162)

Net unrealized losses on derivative financial instruments, net of tax	(6)	0	0	(6)	(6)	0	(6)
Net income in consolidated statements of equity	6,135	0	6,135	0	6,135	95	6,230
Comprehensive income	5,923	0	0	0	0	0	0
Ending balances at 2010-05-31	\$ 0	\$ 14,648	\$ 16,146	\$ 4	\$ 30,798	\$ 401	\$ 31,199

CONSOLIDATED STATEMENTS OF EQUITY PARENTHETICAL

CONSOLIDATED STATEMENTS OF EQUITY PARENTHETICAL (USD \$)	12 Months Ended 05/31/2010	12 Months Ended 05/31/2009	12 Months Ended 05/31/2008
Common Stock and Additional Paid in Capital			
Beginning common stock shares outstanding	5,005	5,150	5,107
Common stock issued under stock-based compensation plans (shares)	60	76	137
Common stock issued under stock purchase plans (shares)	3	3	3
Repurchase of common stock (shares)	(43)	(226)	(97)
Other, net (shares)	1	2	0
Ending common stock shares outstanding	5,026	5,005	5,150
Beginning common stock shares outstanding	5,005		
Ending common stock shares outstanding	5,026	5,005	

ORGANIZATION AND SIGNIFICANT ACCOUNTING POLICIES

ORGANIZATION AND SIGNIFICANT ACCOUNTING POLICIES
(USD \$)

12 Months Ended
05/31/2010

ORGANIZATION AND SIGNIFICANT ACCOUNTING POLICIES

1. ORGANIZATION AND SIGNIFICANT ACCOUNTING POLICIES

We develop, manufacture, market, distribute and service database and middleware software as well as applications software designed to help our customers manage and grow their business operations. Database and middleware software is used for the secure storage, retrieval and manipulation of all forms of software-based data, and for developing and deploying applications on the internet and on corporate intranets. Applications software is used to automate business processes and to provide business intelligence. We also offer software license updates and product support contracts that provide our customers with rights to unspecified product upgrades and maintenance releases issued during the support period, as well as technical support assistance.

On January 26, 2010, we completed our acquisition of Sun Microsystems, Inc. (Sun), a provider of hardware systems, software and services, for \$7.3 billion. As a result of our acquisition of Sun, we entered into a new hardware systems business. Our hardware systems business consists of two operating segments: (1) hardware systems products, which consists primarily of computer server and storage product offerings, and (2) hardware systems support, which provides customers with unspecified software updates for the software components that are essential to the functionality of our hardware systems and storage products and can include product repairs, maintenance services and technical support services.

We also offer software and non-software related services including consulting, On Demand, and education.

Basis of Financial Statements

The consolidated financial statements include our accounts and the accounts of our wholly- and majority-owned subsidiaries. As a result of our adoption of the Financial Accounting Standards Board's (FASB) new accounting guidance for noncontrolling interests as contained in ASC 810, *Consolidation*, as of the beginning of fiscal 2010, we retrospectively classified noncontrolling interest positions of certain of our consolidated entities as a separate component of consolidated equity from the equity attributable to Oracle's stockholders for all periods presented. The noncontrolling interests in our net income were not significant to our consolidated results for the periods presented and therefore have been included as a component of non-operating income (expense), net in our consolidated statements of operations. Intercompany transactions and balances have been eliminated. Certain other prior year balances have been reclassified to conform to the current year presentation. Such reclassifications did not affect total revenues, operating income or net income.

Use of Estimates

Our consolidated financial statements are prepared in accordance with U.S. generally accepted accounting principles (GAAP) as set forth in the FASB's Accounting Standards Codification (ASC) and consider the various staff accounting bulletins and other applicable guidance issued by the U.S. Securities and Exchange Commission (SEC). These accounting principles require us to make certain estimates, judgments and assumptions. We believe that the estimates, judgments and assumptions upon which we rely are reasonable based upon information available to us at the time that these estimates, judgments and assumptions are made. These estimates, judgments and assumptions can affect the reported amounts of assets and liabilities as of the date of the financial statements as well as the reported amounts of revenues and expenses during the periods presented. To the extent there are material differences between these estimates, judgments or assumptions and actual results, our consolidated financial statements will be affected. In many cases, the accounting treatment of a particular transaction is specifically dictated by GAAP and does not require management's judgment in its application. There are also areas in which management's judgment in selecting among available alternatives would not produce a materially different result.

Revenue Recognition

Our sources of revenues include: (1) software, which includes new software license revenues and software license updates and product support revenues; (2) hardware systems, which includes the sale of hardware systems products including computer servers and storage products, and hardware systems support revenues; and (3) services, which include software and hardware related services including consulting, On Demand and education revenues.

Revenue Recognition for Software Products and Software Related Services (Software Elements)

New software license revenues represent fees earned from granting customers licenses to use our database, middleware and applications software, and exclude revenues derived from software license updates, which are included in software license updates and product support revenues. While the basis for software license revenue recognition is substantially governed by the accounting guidance contained in ASC 985-605, *Software-Revenue Recognition*, we exercise judgment and use estimates in connection with the determination of the amount of software and services revenues to be recognized in each accounting period.

For software license arrangements that do not require significant modification or customization of the underlying software, we recognize new software license revenues when: (1) we enter into a legally binding arrangement with a customer for the license of

software; (2) we deliver the products; (3) customer payment is deemed fixed or determinable and free of contingencies or significant uncertainties; and (4) collection is probable. Substantially all of our new software license revenues are recognized in this manner.

Substantially all of our software license arrangements do not include acceptance provisions. However, if acceptance provisions exist as part of public policy, for example, in agreements with government entities where acceptance periods are required by law, or within previously executed terms and conditions that are referenced in the current agreement and are short-term in nature, we generally recognize revenues upon delivery provided the acceptance terms are perfunctory and all other revenue recognition criteria have been met. If acceptance provisions are not perfunctory (for example, acceptance provisions that are long-term in nature or are not included as standard terms of an arrangement), revenues are recognized upon the earlier of receipt of written customer acceptance or expiration of the acceptance period.

The vast majority of our software license arrangements include software license updates and product support contracts, which are entered into at the customer's option and are recognized ratably over the term of the arrangement, typically one year. Software license updates provide customers with rights to unspecified software product upgrades, maintenance releases and patches released during the term of the support period. Product support includes internet access to technical content, as well as internet and telephone access to technical support personnel. Software license updates and product support contracts are generally priced as a percentage of the net new software license fees. Substantially all of our customers renew their software license updates and product support contracts annually.

Revenue Recognition for Multiple-Element Arrangements - Software Products and Software Related Services (Software Arrangements)

We often enter into arrangements with customers that purchase both software related products and services from us at the same time, or within close proximity of one another (referred to as software related multiple-element arrangements). Such software related multiple-element arrangements include the sale of our software products, software license updates and product support contracts and other software related services whereby software license delivery is followed by the subsequent or contemporaneous delivery of the other elements. For those software related multiple-element arrangements, we have applied the residual method to determine the amount of license revenues to be recognized pursuant to ASC 985-605. Under the residual method, if fair value exists for undelivered elements in a multiple-element arrangement, such fair value of the undelivered elements is deferred with the remaining portion of the arrangement consideration recognized upon delivery of the software license or services arrangement. We allocate the fair value of each element of a software related multiple-element arrangement based upon its fair value as determined by our vendor specific objective evidence (VSOE - described further below), with any remaining amount allocated to the software license.

Revenue Recognition for Hardware Systems Products and Hardware Systems Related Services (Nonsoftware Elements)

Revenues from the sale of hardware systems products represent amounts earned primarily from the sale of computer servers and storage products. Our revenue recognition policy for these nonsoftware deliverables is based upon the accounting guidance contained in ASC 605, *Revenue Recognition*, and we exercise judgment and use estimates in connection with the determination of the amount of hardware systems products and hardware systems related services revenues to be recognized in each accounting period. Revenues from the sales of hardware products are recognized when: (1) persuasive evidence of an arrangement exists; (2) we deliver the products and passage of the title to the buyer occurs; (3) the sale price is fixed or determinable; and (4) collection is reasonably assured. Revenues that are not recognized at the time of sale because the foregoing conditions are not met are recognized when those conditions are subsequently met. When applicable, we reduce revenues for estimated returns or certain other incentive programs where we have the ability to sufficiently estimate the effects of these items. Where an arrangement is subject to acceptance criteria and the acceptance provisions are not perfunctory (for example, acceptance provisions that are long-term in nature or are not included as standard terms of an arrangement), revenues are recognized upon the earlier of receipt of written customer acceptance or expiration of the acceptance period. Our hardware systems support offerings generally provide customers with software updates for the software components that are essential to the functionality of our systems and storage products and can also include product repairs, maintenance services, and technical support services. Hardware systems support contracts are entered into at the customer's option and are recognized ratably over the contractual term of the arrangements.

Revenue Recognition for Multiple-Element Arrangements - Hardware Systems Products and Hardware Systems Related Services (Nonsoftware Arrangements)

In the third quarter of fiscal 2010, we early adopted the provisions of Accounting Standards Update No. 2009-13, *Revenue Recognition (Topic 605) Multiple-Deliverable Revenue Arrangements* (ASU 2009-13) and Accounting Standards Update 2009-14, *Software (Topic 985)—Certain Revenue Arrangements that Include Software Elements* (ASU 2009-14). ASU 2009-13 amended existing accounting guidance for revenue recognition for multiple-element arrangements. To the extent a deliverable within a multiple-element arrangement is not accounted for pursuant to other accounting standards, including ASC 985-605, *Software-Revenue Recognition*, ASU 2009-13 establishes a selling price hierarchy that allows for the use of an estimated selling price (ESP) to determine the allocation of arrangement consideration to a deliverable in a multiple element arrangement where neither VSOE nor third-party evidence (TPE) is available for that deliverable. ASU 2009-14 modifies the scope of ASC 985-605 to

exclude tangible products containing software components and nonsoftware components that function together to deliver the product's essential functionality. In addition, ASU 2009-14 provides guidance on how a vendor should allocate arrangement consideration to nonsoftware and software deliverables in an arrangement where the vendor sells tangible products containing software components that are essential in delivering the tangible product's functionality.

As a result of our early adoption of ASU 2009-13 and ASU 2009-14, we applied the provisions of these accounting standards updates as of the beginning of fiscal 2010. The impact of our adoption of ASU 2009-13 and ASU 2009-14 was not material to our results of operations for fiscal 2010.

We enter into arrangements with customers that purchase both nonsoftware related products and services from us at the same time, or within close proximity of one another (referred to as nonsoftware multiple-element arrangements). Each element within a nonsoftware multiple-element arrangement is accounted for as a separate unit of accounting provided the following criteria are met: the delivered products or services have value to the customer on a standalone basis; and for an arrangement that includes a general right of return relative to the delivered products or services, delivery or performance of the undelivered product or service is considered probable and is substantially controlled by us. We consider a deliverable to have standalone value if the product or service is sold separately by us or another vendor or could be resold by the customer. Further, our revenue arrangements generally do not include a general right of return relative to the delivered products. Where the aforementioned criteria for a separate unit of accounting are not met, the deliverable is combined with the undelivered element(s) and treated as a single unit of accounting for the purposes of allocation of the arrangement consideration and revenue recognition. For those units of accounting that include more than one deliverable but are treated as a single unit of accounting, we generally recognize revenues over the delivery period. For the purposes of revenue classification of the elements that are accounted for as a single unit of accounting, we allocate revenue to hardware systems and services based on a rational and consistent methodology utilizing our best estimate of fair value of such elements.

For our nonsoftware multiple-element arrangements, we allocate revenue to each element based on a selling price hierarchy at the arrangement inception. The selling price for each element is based upon the following selling price hierarchy: VSOE if available, TPE if VSOE is not available, or ESP if neither VSOE nor TPE is available (a description as to how we determine VSOE, TPE and ESP is provided below). If a tangible hardware systems product includes software, we determine whether the tangible hardware systems product and the software work together to deliver the product's essential functionality and, if so, the entire product is treated as a nonsoftware deliverable. The total arrangement consideration is allocated to each separate unit of accounting for each of the nonsoftware deliverables using the relative selling prices of each unit based on the aforementioned selling price hierarchy. We limit the amount of revenue recognized for delivered elements to an amount that is not contingent upon future delivery of additional products or services or meeting of any specified performance conditions.

To determine the selling price in multiple-element arrangements, we establish VSOE of selling price using the price charged for a deliverable when sold separately and for software license updates and product support and hardware systems support, based on the renewal rates offered to customers. For nonsoftware multiple element arrangements, TPE is established by evaluating similar and interchangeable competitor products or services in standalone arrangements with similarly situated customers. If we are unable to determine the selling price because VSOE or TPE doesn't exist, we determine ESP for the purposes of allocating the arrangement by considering several external and internal factors including, but not limited to, pricing practices, margin objectives, competition, geographies in which we offer our products and services, internal costs and stage of the product lifecycle. The determination of ESP is made through consultation with and approval by our management, taking into consideration our go-to-market strategy. As our, or our competitors', pricing and go-to-market strategies evolve, we may modify our pricing practices in the future, which could result in changes to our determination of VSOE, TPE and ESP. As a result, our future revenue recognition for multiple-element arrangements could differ materially from our results in the current period. Selling prices are analyzed on an annual basis or more frequently if we experience significant changes in our selling prices.

Revenue Recognition Policies Applicable to both Software and Nonsoftware Elements
Revenue Recognition for Multiple-Element Arrangements - Arrangements with Software and Nonsoftware Elements

We also enter into multiple-element arrangements that may include a combination of our various software related and nonsoftware related products and services offerings including hardware systems products, hardware systems support, new software licenses, software license updates and product support, consulting, On Demand and education. In such arrangements, we first allocate the total arrangement consideration based on the relative selling prices of the software group of elements as a whole and to the nonsoftware elements. We then further allocate consideration within the software group to the respective elements within that group following the guidance in ASC 985-605 and our policies described above. After the arrangement consideration has been allocated to the elements, we account for each respective element in the arrangement as described above.

Other Revenue Recognition Policies Applicable to Software and Nonsoftware Elements

Many of our software arrangements include consulting implementation services sold separately under consulting engagement contracts and are included as a part of our services business. Consulting revenues from these arrangements are generally accounted for separately from new software license revenues because the arrangements qualify as

services transactions as defined in ASC 985-605. The more significant factors considered in determining whether the revenues should be accounted for separately include the nature of services (i.e. consideration of whether the services are essential to the functionality of the licensed product), degree of risk, availability of services from other vendors, timing of payments and impact of milestones or acceptance criteria on the realizability of the software license fee. Revenues for consulting services are generally recognized as the services are performed. If there is a significant uncertainty about the project completion or receipt of payment for the consulting services, revenues are deferred until the uncertainty is sufficiently resolved. We estimate the proportional performance on contracts with fixed or "not to exceed" fees on a monthly basis utilizing hours incurred to date as a percentage of total estimated hours to complete the project. If we do not have a sufficient basis to measure progress towards completion, revenues are recognized when we receive final acceptance from the customer. When total cost estimates exceed revenues, we accrue for the estimated losses immediately using cost estimates that are based upon an average fully burdened daily rate applicable to the consulting organization delivering the services. The complexity of the estimation process and factors relating to the assumptions, risks and uncertainties inherent with the application of the proportional performance method of accounting affects the amounts of revenues and related expenses reported in our consolidated financial statements. A number of internal and external factors can affect our estimates, including labor rates, utilization and efficiency variances and specification and testing requirement changes. On Demand is comprised of Oracle On Demand and Advanced Customer Services and is a part of our services business. Oracle On Demand services are offered as standalone arrangements or as a part of arrangements to customers buying new software licenses or hardware systems products and services. Our On Demand services provide multi-featured software and hardware management and maintenance services for our software and hardware systems products delivered at our data center facilities, select partner data centers or customer facilities. Advanced Customer Services provide customers with services to architect, implement and manage customer IT environments including software and hardware systems product management services, industry-specific solution support centers and remote and on-site expert services. Depending upon the nature of the arrangement, revenues from On Demand services are recognized as services are performed or ratably over the term of the service period, which is generally one year or less.

Education revenues are a part of our services business and include instructor-led, media-based and internet-based training in the use of our software and hardware products. Education revenues are recognized as the classes or other education offerings are delivered.

If an arrangement contains multiple elements and does not qualify for separate accounting for the product and service transactions, then new software license revenues and/or hardware systems products revenues, including the costs of hardware systems products, are generally recognized together with the services based on contract accounting using either the percentage-of-completion or completed-contract method. Contract accounting is applied to any bundled software, hardware systems and services arrangements: (1) that include milestones or customer specific acceptance criteria that may affect collection of the software license or hardware systems product fees; (2) where consulting services include significant modification or customization of the software or hardware systems product; (3) where significant consulting services are provided for in the software license contract or hardware systems product contract without additional charge or are substantially discounted; or (4) where the software license or hardware systems product payment is tied to the performance of consulting services. For the purposes of revenue classification of the elements that are accounted for as a single unit of accounting, we allocate revenues to software and nonsoftware elements based on a rational and consistent methodology utilizing our best estimate of fair value of such elements.

We also evaluate arrangements with governmental entities containing "fiscal funding" or "termination for convenience" provisions, when such provisions are required by law, to determine the probability of possible cancellation. We consider multiple factors, including the history with the customer in similar transactions, the "essential use" of the software or hardware systems products and the planning, budgeting and approval processes undertaken by the governmental entity. If we determine upon execution of these arrangements that the likelihood of cancellation is remote, we then recognize revenues once all of the criteria described above have been met. If such a determination cannot be made, revenues are recognized upon the earlier of cash receipt or approval of the applicable funding provision by the governmental entity.

We assess whether fees are fixed or determinable at the time of sale and recognize revenues if all other revenue recognition requirements are met. Our standard payment terms are net 30 days. However, payment terms may vary based on the country in which the agreement is executed. Payments that are due within six months are generally deemed to be fixed or determinable based on our successful collection history on such arrangements, and thereby satisfy the required criteria for revenue recognition.

While most of our arrangements for sales within our software and hardware systems businesses include short-term payment terms, we have a standard practice of providing long-term financing to creditworthy customers through our financing division. Since fiscal 1989, when our financing division was formed, we have established a history of collection, without concessions, on these receivables with payment terms that generally extend up to five years from the contract date. Provided all other revenue recognition criteria have been met, we recognize new software license revenues and hardware systems products revenues for these arrangements upon delivery, net of any payment discounts from financing transactions. We have generally sold receivables financed through our financing division on a non-recourse basis to third party financing institutions

and we classify the proceeds from these sales as cash flows from operating activities in our consolidated statements of cash flows. We account for the sales of these receivables as "true sales" as defined in ASC 860, *Transfers and Servicing*.

In addition, we sell hardware products to leasing companies that, in turn, lease these products to end-users. In transactions where the leasing companies have no recourse to us in the event of default by the end-user, we recognize revenue at point of shipment or point of delivery, depending on the shipping terms and if all the other revenue recognition criteria have been met. In arrangements where the leasing companies have more than insignificant recourse to us in the event of default by the end-user (defined as recourse leasing), we recognize both the product revenue and the related cost of the product as the payments are made to the leasing company by the end-user, generally ratably over the lease term.

Our customers include several of our suppliers and on rare occasion, we have purchased goods or services for our operations from these vendors at or about the same time that we have sold our products to these same companies (Concurrent Transactions). Software license agreements or sales of hardware systems that occur within a three-month time period from the date we have purchased goods or services from that same customer are reviewed for appropriate accounting treatment and disclosure. When we acquire goods or services from a customer, we negotiate the purchase separately from any sales transaction, at terms we consider to be at arm's length, and settle the purchase in cash. We recognize new software license revenues or hardware systems product revenues from Concurrent Transactions if all of our revenue recognition criteria are met and the goods and services acquired are necessary for our current operations.

Business Combinations

In fiscal 2010, we adopted ASC 805, *Business Combinations*, which revised the accounting guidance that we were required to apply for our acquisitions in comparison to prior fiscal years. The underlying principles are similar to the previous guidance and require that we recognize separately from goodwill the assets acquired and the liabilities assumed, generally at their acquisition date fair values. Goodwill as of the acquisition date is measured as the excess of consideration transferred and the net of the acquisition date fair values of the assets acquired and the liabilities assumed. While we use our best estimates and assumptions as a part of the purchase price allocation process to accurately value assets acquired and liabilities assumed at the acquisition date, our estimates are inherently uncertain and subject to refinement. As a result, during the measurement period, which may be up to one year from the acquisition date, we record adjustments to the assets acquired and liabilities assumed, with the corresponding offset to goodwill. Upon the conclusion of the measurement period or final determination of the values of assets acquired or liabilities assumed, whichever comes first, any subsequent adjustments are recorded to our consolidated statements of operations.

As a result of adopting the revised accounting guidance provided for by ASC 805 as of the beginning of fiscal 2010, certain of our policies differ when accounting for acquisitions in fiscal 2010 and prospective periods in comparison to the accounting for acquisitions in fiscal 2009 and prior periods, including:

- the fair value of in-process research and development is recorded as an indefinite-lived intangible asset until the underlying project is completed, at which time the intangible asset is amortized over its estimated useful life, or abandoned, at which time the intangible asset is expensed (prior to fiscal 2010, in-process research and development was expensed at the acquisition date);
- the direct transaction costs associated with the business combination are expensed as incurred (prior to fiscal 2010, direct transaction costs were included as a part of the purchase price);
- the costs to exit or restructure certain activities of an acquired company are accounted for separately from the business combination (prior to fiscal 2010, these restructuring and exist costs were included as a part of the assumed obligations in deriving the purchase price allocation); and
- any changes in estimates associated with income tax valuation allowances or uncertain tax positions after the measurement period are generally recognized as income tax expense with application of this policy also applied prospectively to all of our business combinations regardless of the acquisition date (prior to fiscal 2010, any such changes were generally included as a part of the purchase price allocation indefinitely). Costs to exit or restructure certain activities of an acquired company or our internal operations are accounted for as one-time termination and exit costs pursuant to ASC 420, *Exit or Disposal Cost Obligations*, and, as noted above, are accounted for separately from the business combination. A liability for a cost associated with an exit or disposal activity is recognized and measured at its fair value in our consolidated statement of operations in the period in which the liability is incurred. When estimating the fair value of facility restructuring activities, assumptions are applied regarding estimated sub-lease payments to be received, which can differ materially from actual results. This may require us to revise our initial estimates which may materially affect our results of operations and financial position in the period the revision is made.

For a given acquisition, we generally identify certain pre-acquisition contingencies as of the acquisition date and may extend our review and evaluation of these pre-acquisition contingencies throughout the measurement period (up to one year from the acquisition date) in order to obtain sufficient information to assess whether we include these contingencies as a part of the purchase price allocation and, if so, to determine the estimated amounts.

If we determine that a pre-acquisition contingency (non-income tax related) is probable in nature and estimable as of the acquisition date, we record our best estimate for such a contingency as a part of the preliminary purchase price allocation. We often continue to gather information for and evaluate our pre-acquisition contingencies throughout the measurement period and if we make changes to the amounts recorded or if we identify

additional pre-acquisition contingencies during the measurement period, such amounts will be included in the purchase price allocation during the measurement period and, subsequently, in our results of operations.

In addition, uncertain tax positions and tax related valuation allowances assumed in connection with a business combination are initially estimated as of the acquisition date and we reevaluate these items quarterly with any adjustments to our preliminary estimates being recorded to goodwill provided that we are within the measurement period and we continue to collect information in order to determine their estimated values. Subsequent to the measurement period or our final determination of the tax allowance's or contingency's estimated value, changes to these uncertain tax positions and tax related valuation allowances will affect our provision for income taxes in our consolidated statement of operations and could have a material impact on our results of operations and financial position.

Marketable and Non-Marketable Securities

In accordance with ASC 320, *Investments—Debt and Equity Securities*, and based on our intentions regarding these instruments, we classify substantially all of our marketable debt and equity securities as available-for-sale. Marketable debt and equity securities are reported at fair value, with all unrealized gains (losses) reflected net of tax in stockholders' equity. If we determine that an investment has an other than temporary decline in fair value, we recognize the investment loss in non-operating income (expense), net in the accompanying consolidated statements of operations. We periodically evaluate our investments to determine if impairment charges are required. We hold investments in certain non-marketable equity securities in which we do not have a controlling interest or significant influence. These equity securities are recorded at cost and included in other assets in the accompanying consolidated balance sheets. If based on the terms of our ownership of these non-marketable securities we determine that we exercise significant influence on these non-marketable securities, we apply the requirements of ASC 323, *Investments—Equity Method and Joint Ventures* to account for such investments. Our non-marketable securities are subject to periodic impairment reviews and we recorded impairment losses of \$17 million related to non-marketable equity securities and other investments in fiscal 2010. Losses related to non-marketable equity securities and other investments were nominal in fiscal 2009 and 2008.

Fair Value of Financial Instruments

We apply the provisions of ASC 820, *Fair Value Measurements and Disclosures*, to our financial instruments that we are required to carry at fair value pursuant to other accounting standards, including our marketable debt and equity securities and our derivative financial instruments. We have not applied the fair value option to those financial instruments that we are not required to carry at fair value pursuant to other accounting standards, including our senior notes outstanding.

The additional disclosures regarding our fair value measurements are included in Note 4.

Allowances for Doubtful Accounts

We record allowances for doubtful accounts based upon a specific review of all significant outstanding invoices. For those invoices not specifically reviewed, provisions are provided at differing rates, based upon the age of the receivable, the collection history associated with the geographic region that the receivable was recorded in and current economic trends.

Concentrations of Credit Risk

Financial instruments that are potentially subject to concentrations of credit risk consist primarily of cash and cash equivalents, marketable securities and trade receivables. Our cash and cash equivalents are generally held with a number of large, diverse financial institutions worldwide to reduce the amount of exposure to any single financial institution. Investment policies have been implemented that limit purchases of marketable debt securities to investment grade securities. We do not require collateral to secure accounts receivable. The risk with respect to trade receivables is mitigated by credit evaluations we perform on our customers, the short duration of our payment terms for the significant majority of our customer contracts and by the diversification of our customer base. No single customer accounted for 10% or more of our total revenues in fiscal 2010, 2009 or 2008.

Inventories

Inventories are stated at the lower of cost or market value. Cost is computed using standard cost, which approximates actual cost, on a first-in, first-out basis. We evaluate our ending inventories for estimated excess quantities and obsolescence. This evaluation includes analysis of sales levels by product and projections of future demand within specific time horizons (generally six months or less). Inventories in excess of future demand are written down and charged to the provision for inventories, which is a component of hardware systems products expenses. In addition, we assess the impact of changing technology to our inventories and we write down inventories that are considered obsolete. At the point of the loss recognition, a new, lower-cost basis for that inventory is established, and subsequent changes in facts and circumstances do not result in the restoration or increase in that newly established cost basis.

Other Receivables

Other receivables represent value-added tax and sales tax receivables associated with the sale of our products and services to third parties. Other receivables are included in prepaid expenses and other current assets in our consolidated balance sheets and totaled \$733 million and \$555 million at May 31, 2010 and 2009, respectively.

Property, Plant and Equipment

Property, plant and equipment is stated at the lower of cost or realizable value, net of accumulated depreciation. Depreciation is computed using the straight-line method based on estimated useful lives of the assets, which range from one to fifty years. Leasehold improvements are amortized over the lesser of estimated useful lives or lease terms, as

appropriate. Property, plant and equipment is periodically reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. We did not recognize any significant property impairment charges in fiscal 2010, 2009 or 2008.

Goodwill, Intangible Assets and Impairment Assessments

Goodwill represents the excess of the purchase price in a business combination over the fair value of net tangible and intangible assets acquired. Intangible assets that are not considered to have an indefinite useful life are amortized over their useful lives, which range from one to ten years. Each period we evaluate the estimated remaining useful life of purchased intangible assets and whether events or changes in circumstances warrant a revision to the remaining period of amortization.

The carrying amounts of these assets are periodically reviewed for impairment (at least annually for goodwill and indefinite lived intangible assets) and whenever events or changes in circumstances indicate that the carrying value of these assets may not be recoverable. The goodwill impairment analysis is comprised of two steps. In the first step, we compare the fair value of each reporting unit to its carrying value. Our reporting units are consistent with the reportable segments identified in Note 16 below. If the fair value of the reporting unit exceeds the carrying value of the net assets assigned to that unit, goodwill is not considered impaired and we are not required to perform further testing. If the carrying value of the net assets assigned to the reporting unit exceeds the fair value of the reporting unit, then we must perform the second step of the impairment test in order to determine the implied fair value of the reporting unit's goodwill. If the carrying value of a reporting unit's goodwill exceeds its implied fair value, then we would record an impairment loss equal to the difference. Recoverability of finite lived intangible assets is measured by comparison of the carrying amount of each asset to the future undiscounted cash flows the asset is expected to generate. Recoverability of indefinite lived intangible assets is measured by comparison of the carrying amount of the asset to the future discounted cash flows the asset is expected to generate. If the asset is considered to be impaired, the amount of any impairment is measured as the difference between the carrying value and the fair value of the impaired asset. We did not recognize any goodwill or intangible asset impairment charges in fiscal 2010, 2009 or 2008.

Derivative Financial Instruments

During fiscal 2010, 2009 and 2008, we used derivative financial instruments to manage foreign currency and interest rate risks. We account for these instruments in accordance with ASC 815, *Derivatives and Hedging*, which requires that every derivative instrument be recorded on the balance sheet as either an asset or liability measured at its fair value as of the reporting date. ASC 815 also requires that changes in our derivatives' fair values be recognized in earnings, unless specific hedge accounting and documentation criteria are met (i.e. the instruments are accounted for as hedges). We recorded the effective portions of the gain or loss on derivative financial instruments that were designated as cash flow hedges or net investment hedges in accumulated other comprehensive income in the accompanying consolidated balance sheets. The offset to gain or loss on derivative financial instruments that were designated as fair value hedges were recorded to the item for which the risk is being hedged. Any ineffective or excluded portion of a designated cash flow hedge or net investment hedge, and gains or losses on our fair value hedges are recognized in earnings.

We adopted the disclosure requirements of ASC 815 during fiscal 2009 and have provided these disclosures prospectively from the year of adoption in Note 11.

Legal Contingencies

We are currently involved in various claims and legal proceedings. Quarterly, we review the status of each significant matter and assess our potential financial exposure. For legal and other contingencies that are not a part of a business combination, if the potential loss from any claim or legal proceeding is considered probable and the amount can be reasonably estimated, we accrue a liability for the estimated loss. A description of our accounting policies associated with contingencies assumed as a part of a business combination is provided under "Business Combinations" above.

Shipping Costs

Our shipping and handling costs for hardware systems products sales are included in hardware systems products expenses for all periods presented.

Foreign Currency

We transact business in various foreign currencies. In general, the functional currency of a foreign operation is the local country's currency. Consequently, revenues and expenses of operations outside the United States are translated into U.S. Dollars using weighted average exchange rates while assets and liabilities of operations outside the United States are translated into U.S. Dollars using exchange rates at the balance sheet date. The effects of foreign currency translation adjustments are included in stockholders' equity as a component of accumulated other comprehensive income in the accompanying consolidated balance sheets. Foreign currency transaction (losses) gains, net which include the effects of our derivative financial instruments, are included in non-operating income (expenses), net in our consolidated statements of operations and were \$(148) million, \$(55) million and \$40 million in fiscal 2010, 2009 and 2008, respectively.

Stock-Based Compensation

We account for share-based payments, including grants of employee stock options and restricted stock-based awards and purchases under employee stock purchase plans, in accordance with ASC 718, *Compensation-Stock Compensation*, which requires that share-based payments (to the extent they are compensatory) be recognized in our consolidated statements of operations based on their fair values and the estimated number of shares we ultimately expect will vest. In addition, we have applied certain of the provisions of the SEC's Staff Accounting Bulletin No. 107 (Topic 14), as amended, that is also made a part of ASC 718, in our accounting for stock-based compensation. We

recognize stock-based compensation expense on a straight-line basis over the service period of the award, which is generally four years.

We record deferred tax assets for stock-based compensation plan awards that result in deductions on our income tax returns based on the amount of stock-based compensation recognized and the statutory tax rate in the jurisdiction in which we will receive a tax deduction. We have adopted and apply the alternative transition method as defined within ASC 718 to calculate the excess tax benefits available for use in offsetting future tax shortfalls and to determine the excess tax benefits from stock-based compensation that we reclassify as cash flows from financing activities.

Advertising

All advertising costs are expensed as incurred. Advertising expenses, which are included within sales and marketing expenses, were \$75 million, \$71 million and \$81 million in fiscal 2010, 2009 and 2008, respectively.

Research and Development

All research and development costs are expensed as incurred. Costs eligible for capitalization under ASC 985-20, *Software-Costs of Software to be Sold, Leased or Marketed*, were not material to our consolidated financial statements in fiscal 2010, 2009 or 2008.

Acquisition Related and Other Expenses

Acquisition related and other expenses consist of personnel related costs for transitional and certain other employees, stock-based compensation expenses, integration related professional services, certain business combination adjustments after the measurement period or purchase price allocation period has ended, and certain other operating expenses (income), net. Stock-based compensation included in acquisition related and other expenses resulted from unvested options or restricted stock-based awards assumed from acquisitions whereby vesting was accelerated upon termination of the employees pursuant to the original terms of those options or restricted stock-based awards. As a result of our adoption of the FASB's revised accounting guidance for business combinations as of the beginning of fiscal 2010, certain acquisition related and other expenses are now recorded as expenses in our statements of operations that would previously have been included as a part of the consideration transferred and capitalized as a part of the accounting for our acquisitions pursuant to previous accounting rules, primarily direct transaction costs such as professional services fees.

(in millions)	Year Ended May 31,		
	2010	2009	2008
Transitional and other employee related costs	\$ 66	\$ 45	\$ 32
Stock-based compensation	15	15	112
Professional fees and other, net	68	35	31
Business combination adjustments, net	5	22	6
Gain on sale of property	—	—	(57)
Total acquisition related and other expenses	\$ 154	\$ 117	\$ 124

In fiscal 2008, we sold certain of our land and buildings for \$153 million in cash.

Concurrent with the sale, we leased the property back from the buyer for a period of up to three years. We have accounted for this transaction in accordance with ASC 840, *Leases* and ASC 360, *Property, Plant and Equipment*. We deferred \$19 million of the gain on the sale representing the present value of the operating lease commitment and recognized a gain of approximately \$57 million for fiscal 2008. The deferred portion of the gain was recognized as a reduction of rent expense over the operating lease term.

Non-Operating Income (Expense), net

Non-operating income (expense), net consists primarily of interest income, net foreign currency exchange gains (losses), the noncontrolling interests in the net profits of our majority-owned subsidiaries (Oracle Financial Services Software Limited and Oracle Japan), and net other income (losses), including net realized gains and losses related to all of our investments and net unrealized gains and losses related to the small portion of our investment portfolio that we classify as trading.

(in millions)	Year Ended May 31,		
	2010	2009	2008
Interest income	\$ 122	\$ 279	\$ 337
Foreign currency (losses) gains, net	(148)	(55)	40
Noncontrolling interests in income	(95)	(84)	(60)
Other income, net	56	3	67
Total non-operating income (expense), net	\$ (65)	\$ 143	\$ 384

Included in non-operating income (expense), net were net foreign currency losses in fiscal 2010 relating to our Venezuelan subsidiary's operations. Effective December 1, 2009, we designated our Venezuelan subsidiary as "highly inflationary" in accordance with ASC 830, *Foreign Currency Matters*, and began using the U.S. Dollar as the subsidiary's new functional currency. During fiscal 2010, the Venezuelan government devalued its currency and we recognized \$81 million of foreign currency losses due to the remeasurement of certain assets and liabilities and conversion of certain cash balances of our Venezuelan subsidiary into U.S. Dollars.

Income Taxes

We account for income taxes in accordance with ASC 740, *Income Taxes*. Deferred income taxes are recorded for the expected tax consequences of temporary differences between the tax bases of assets and liabilities for financial reporting purposes and amounts recognized for income tax purposes. We record a valuation allowance to reduce our deferred tax assets to the amount of future tax benefit that is more likely than not to be realized.

At the beginning of fiscal 2008, we adopted revised guidance contained in ASC 740 to account for our uncertain tax positions. The revised guidance contains a two-step approach to recognizing and measuring uncertain tax positions taken or expected to be

taken in a tax return. The first step is to determine if the weight of available evidence indicates that it is more likely than not that the tax position will be sustained in an audit, including resolution of any related appeals or litigation processes. The second step is to measure the tax benefit as the largest amount that is more than 50% likely to be realized upon ultimate settlement. We recognize interest and penalties related to uncertain tax positions in our provision for income taxes line of our consolidated statements of operations.

A description of our accounting policies associated with tax related contingencies and valuation allowances assumed as a part of a business combination is provided under "Business Combinations" above.

Recent Accounting Pronouncements

Milestone Method of Revenue Recognition: In April 2010, the FASB issued Accounting Standards Update No. 2010-17, *Revenue Recognition—Milestone Method (Topic 605) - Revenue Recognition* (ASU 2010-17). ASU 2010-17 provides guidance on defining the milestone and determining when the use of the milestone method of revenue recognition for research or development transactions is appropriate. It provides criteria for evaluating if the milestone is substantive and clarifies that a vendor can recognize consideration that is contingent upon achievement of a milestone as revenue in the period in which the milestone is achieved, if the milestone meets all the criteria to be considered substantive. ASU 2010-17 is effective for us in fiscal 2012 and should be applied prospectively. Early adoption is permitted. If we were to adopt ASU 2010-17 prior to the first quarter of fiscal 2012, we must apply it retrospectively to the beginning of the fiscal year of adoption and to all interim periods presented. We are currently evaluating the impact of the pending adoption of ASU 2010-17 on our consolidated financial statements.

Disclosure Requirements Related to Fair Value Measurements: In January 2010, the FASB issued Accounting Standards Update No. 2010-06, *Improving Disclosures about Fair Value Measurements (Topic 820)—Fair Value Measurements and Disclosures* (ASU 2010-06), to add additional disclosures about the different classes of assets and liabilities measured at fair value, the valuation techniques and inputs used, the activity in Level 3 fair value measurements, and the transfers between Levels 1, 2, and 3 (as defined in Note 4 below). Certain provisions of this update will be effective for us in fiscal 2012 and we are currently evaluating the impact of the pending adoption of this standards update on our consolidated financial statements.

Transfers of Financial Assets: In June 2009, the FASB issued and subsequently codified Accounting Standards Update No. 2009-16, *Transfers and Servicing (Topic 860)—Accounting for Transfers of Financial Assets* (ASU 2009-16). ASU 2009-16 eliminates the concept of a "qualifying special-purpose entity" with regards to transfer of financial assets and changes the requirements for derecognizing financial assets. We will adopt this new accounting standards update in fiscal 2011 and are currently evaluating the impact of its pending adoption on our consolidated financial statements.

Variable Interest Entities: In June 2009, the FASB issued and subsequently codified Accounting Standards Update No. 2009-17, *Consolidations (Topic 810)—Improvements to Financial Reporting by Enterprises Involved with Variable Interest Entities* (ASU 2009-17). ASU 2009-17 amends the evaluation criteria to identify the primary beneficiary of a variable interest entity as provided pursuant to existing accounting standards and requires ongoing reassessments of whether an enterprise is the primary beneficiary of the variable interest entity. We will adopt ASU 2009-17 in fiscal 2011 and are currently evaluating the impact of its pending adoption on our consolidated financial statements.

ACQUISITIONS

ACQUISITIONS (USD \$)	12 Months Ended 05/31/2010
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ACQUISITIONS 2.ACQUISITIONS

Acquisition of Sun Microsystems, Inc.

On January 26, 2010 we completed our acquisition of Sun Microsystems, Inc., a provider of hardware systems, software and services, by means of a merger of one of our wholly owned subsidiaries with and into Sun such that Sun became a wholly owned subsidiary of Oracle. We acquired Sun to, among other things, expand our product offerings by adding Sun's existing hardware systems business and broadening our software and services offerings. We have included the financial results of Sun in our consolidated financial statements from the date of acquisition. For fiscal 2010, we estimate that Sun's contribution to our total revenues was \$2.8 billion, which included allocations of revenues from our software and services businesses that were not separately identifiable due to our integration activities. For fiscal 2010, Sun reduced our operating income by \$620 million, which included management's allocations and estimates of revenues and expenses that were not separately identifiable due to our integration activities, intangible asset amortization, restructuring expenses and stock-based compensation expenses.

The total purchase price for Sun was approximately \$7.3 billion and was comprised of:

(in millions, except per share amounts)

Acquisition of approximately 757 million shares of outstanding common stock of Sun at \$9.50 per share in cash	\$ 7,196
Fair values of stock options and restricted stock-based awards assumed	99
Total purchase price	\$ 7,295

The fair values of stock options assumed were estimated using a Black-Scholes-Merton option-pricing model. The fair values of invested Sun stock options and restricted stock-based awards as they relate to post combination services will be recorded as operating expense over the remaining service periods, while the fair values of vested stock options and restricted stock-based awards, as they relate to pre combination services, are included in the total purchase price.

Preliminary Purchase Price Allocation

Pursuant to our business combinations accounting policy, the total purchase price for Sun was allocated to the preliminary net tangible and intangible assets based upon their preliminary fair values as of January 26, 2010 as set forth below. The excess of the purchase price over the preliminary net tangible assets and intangible assets was recorded as goodwill. The preliminary allocation of the purchase price was based upon a preliminary valuation and our estimates and assumptions are subject to change within the measurement period (up to one year from the acquisition date). The primary areas of the preliminary purchase price allocation that are not yet finalized relate to the fair values of certain tangible assets and liabilities acquired, certain legal matters, income and non-income based taxes and residual goodwill. We expect to continue to obtain information to assist us in determining the fair values of the net assets acquired at the acquisition date during the measurement period. Our preliminary purchase price allocation for Sun is as follows:

(in millions)

Cash, cash equivalents and marketable securities	\$ 2,571
Trade receivables	1,120
Inventories	331
Goodwill	1,291
Intangible assets	3,347
In-process research and development	415
Other assets	2,035
Deferred tax assets, net	1,250
Accounts payable and other liabilities	(3,950)
Deferred revenues	(1,115)
Total preliminary purchase price	\$ 7,295

We generally do not expect the goodwill recognized to be deductible for income tax purposes.

Valuations of Intangible Assets Acquired

The following table sets forth the components of intangible assets acquired in connection with the Sun acquisition:

(Dollars in millions)	Fair Value	Useful Life
Hardware systems support agreements and related relationships	\$ 771	7 years
Developed technology	1,349	4 years
Core technology	534	4 years
Customer relationships	467	3 years
Trademarks	226	7 years
Total intangible assets subject to amortization	3,347	
In-process research and development	415	N.A.
Total intangible assets	\$ 3,762	

Hardware systems support agreements and related relationships and customer relationships represent the fair values of the underlying relationships and agreements with Sun's customers. Developed technology represents the fair values of Sun products that have reached technological feasibility and are a part of Sun's product lines. Core technology represents the fair values of the Sun processes, patents and trade secrets related to the design and development of Sun's products. This proprietary know-how can be leveraged to develop new technology and improve our existing products. Trademarks represent the fair values of brand and name recognition associated with the marketing of Sun's products and services. In-process research and development represents the fair values of incomplete Sun research and development projects that had not reached technological feasibility as of the date of acquisition.

Preliminary Pre-Acquisition Contingencies Assumed

We have evaluated and continue to evaluate pre-acquisition contingencies relating to Sun that existed as of the acquisition date. We have preliminarily determined that certain of these pre-acquisition contingencies are probable in nature and estimable as of the acquisition date and, accordingly, have preliminarily recorded our best estimates for these contingencies as a part of the preliminary purchase price allocation for Sun. We continue to gather information for and evaluate substantially all pre-acquisition contingencies that we have assumed from Sun. If we make changes to the amounts recorded or identify additional pre-acquisition contingencies during the remainder of the measurement period, such amounts recorded will be included in the purchase price allocation during the measurement period and, subsequently, in our results of operations.

Other Fiscal 2010 Acquisitions and Proposed Acquisition of Phase Forward Incorporated and Others

During fiscal 2010, we acquired other companies and purchased certain technology and development assets to expand our product and services offerings. These acquisitions were not significant individually or in the aggregate. We have included the financial results of these companies in our consolidated results from their respective acquisition dates. The preliminary purchase price allocations for each of these acquisitions were based upon a preliminary valuation and our estimates and assumptions for certain of these acquisitions are subject to change as we obtain additional information for our estimates during the respective measurement periods. The primary areas of those purchase price allocations that are not yet finalized relate to identifiable intangible assets, certain legal matters, income and non-income based taxes and residual goodwill.

Separately, in the fourth quarter of fiscal 2010, we agreed to acquire Phase Forward Incorporated, a provider of applications for life sciences companies and healthcare providers, for \$17.00 per share in cash, amounting to approximately \$810 million. Our proposed acquisition of Phase Forward is subject to stockholder and regulatory approval and other customary closing conditions. In addition, we agreed to acquire certain other companies for amounts that are not material to our business.

Fiscal 2009 Acquisitions

During fiscal 2009, we acquired several companies and purchased certain technology and development assets to expand our product offerings. These acquisitions were not individually significant. We have included the financial results of these companies in our consolidated results from their respective acquisition dates. In the aggregate, the total purchase price for these acquisitions was approximately \$1.2 billion, which consisted of approximately \$1.2 billion in cash, \$1 million for the fair value of stock options and restricted stock-based awards assumed and \$13 million for transaction costs. In allocating the total purchase price for these acquisitions based on estimated fair values, we recorded \$708 million of goodwill, \$587 million of identifiable intangible assets, \$96 million of net tangible liabilities (resulting primarily from deferred tax and restructuring liabilities assumed as a part of these transactions) and \$10 million of in-process research and development.

Fiscal 2008 Acquisitions

BEA Systems, Inc.

We acquired BEA Systems, Inc. on April 29, 2008 by means of a merger of one of our wholly-owned subsidiaries with and into BEA such that BEA became a wholly-owned subsidiary of Oracle. We acquired BEA to, among other things, expand our offering of middleware products. We have included the financial results of BEA in our consolidated financial results effective April 29, 2008.

The total purchase price for BEA was \$8.6 billion which consisted of \$8.3 billion in cash paid to acquire the outstanding common stock of BEA, \$225 million for the fair value of BEA stock options and restricted stock-based awards assumed and \$10 million for acquisition related transaction costs. In allocating the purchase price based on estimated fair values, we recorded approximately \$4.5 billion of goodwill, \$3.3 billion of identifiable intangible assets, \$733 million of net tangible assets and \$17 million of in-process research and development.

Other Fiscal 2008 Acquisitions

During fiscal 2008, we acquired several other companies and purchased certain technology and development assets. Our fiscal 2008 acquisitions, other than BEA, were not significant individually or in the aggregate. We have included the effects of these transactions in our results of operations prospectively from the respective dates of the acquisitions.

Unaudited Pro Forma Financial Information

The unaudited pro forma financial information in the table below summarizes the combined results of operations for Oracle, Sun and certain other companies that we acquired since the beginning of fiscal 2009 (which were collectively significant for the purposes of unaudited pro forma financial information disclosure) as though the companies were combined as of the beginning of fiscal 2009. The pro forma financial information for all periods presented also includes the business combination accounting effects resulting from these acquisitions including our amortization charges from acquired intangible assets (certain of which are preliminary), the elimination of certain goodwill and intangible asset impairment charges incurred by Sun, stock-based compensation charges for unvested stock options and restricted stock-based awards assumed, adjustments to interest expense for borrowings and the related tax effects as though the aforementioned companies were combined as of the beginning of fiscal 2009. The pro forma financial information as presented below is for informational purposes only and is not indicative of the results of operations that would have been achieved if the acquisitions and any borrowings undertaken to finance these acquisitions had taken place at the beginning of fiscal 2009.

The unaudited pro forma financial information for fiscal 2010 combined the historical results of Oracle for fiscal 2010, the historical results of Sun for the eight months ended September 27, 2009 (due to differences in reporting periods) and the historical results for certain other companies that we acquired since the beginning of fiscal 2010 based upon their respective previous reporting periods, the dates that these companies were acquired by us, and the effects of the pro forma adjustments listed above.

The unaudited pro forma financial information for fiscal 2009 combined the historical results of Oracle for fiscal 2009, the historical results of Sun for the year ended June 30, 2009 (due to differences in reporting periods) and the historical results of certain other companies that we acquired since the beginning of fiscal 2009 based upon their respective previous reporting periods and the dates these companies were acquired by us, and the effects of the pro forma adjustments listed above. The unaudited pro forma financial information was as follows for fiscal 2010 and 2009:

(in millions, except per share data)	Year Ended May 31,	
	2010	2009
Total revenues	\$ 33,550	\$ 34,831
Net income	\$ 5,656	\$ 4,639
Basic earnings per share	\$ 1.13	\$ 0.91
Diluted earnings per share	\$ 1.11	\$ 0.90

CASH, CASH EQUIVALENTS AND MARKETABLE SECURITIES

CASH, CASH EQUIVALENTS AND MARKETABLE SECURITIES (USD \$)	3 Months Ended 05/31/2010
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CASH, CASH EQUIVALENTS AND MARKETABLE SECURITIES

3. CASH, CASH EQUIVALENTS AND MARKETABLE SECURITIES

Cash and cash equivalents primarily consist of deposits held at major banks, money market funds, Tier-1 commercial paper, U.S. Treasury obligations, U.S. government agency and government sponsored enterprise obligations, and other securities with original maturities of 90 days or less. Marketable securities primarily consist of time deposits held at major banks, Tier-1 commercial paper, corporate notes, U.S. Treasury obligations and U.S. government agency and government sponsored enterprise debt obligations and certain other securities.

The amortized principal amounts of our cash, cash equivalents and marketable securities approximated their fair values at May 31, 2010 and 2009. We use the specific identification method to determine any realized gains or losses from the sale of our marketable securities classified as available-for-sale. Such realized gains and losses were insignificant for fiscal 2010, 2009 and 2008. The following table summarizes the components of our cash equivalents and marketable securities held, substantially all of which were classified as available-for-sale:

(in millions)	May 31,	
	2010	2009
Money market funds	\$ 2,423	\$ 467
U.S. Treasury, U.S. government and U.S. government agency debt securities	3,010	4,078
Commercial paper, corporate debt securities and other	5,634	2,700
Total investments	\$ 11,067	\$ 7,245
Investments classified as cash equivalents	\$ 2,512	\$ 3,616
Investments classified as marketable securities	\$ 8,555	\$ 3,629

Substantially all of our marketable security investments held as of May 31, 2010 mature within one year. Our investment portfolio is subject to market risk due to changes in interest rates. We place our investments with high credit quality issuers as described above and, by policy, limit the amount of credit exposure to any one issuer. As stated in our investment policy, we are averse to principal loss and seek to preserve our invested funds by limiting default risk, market risk and reinvestment risk.

FAIR VALUE MEASUREMENTS

FAIR VALUE MEASUREMENTS
(USD \$)

12 Months Ended
05/31/2010

FAIR VALUE MEASUREMENTS

4. FAIR VALUE MEASUREMENTS

We perform fair value measurements in accordance with the guidance provided by ASC 820, *Fair Value Measurements and Disclosures*. ASC 820 defines fair value as the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. When determining the fair value measurements for assets and liabilities required to be recorded at fair value, we consider the principal or most advantageous market in which we would transact and consider assumptions that market participants would use when pricing the asset or liability, such as inherent risk, transfer restrictions, and risk of nonperformance.

ASC 820 establishes a fair value hierarchy that requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. An asset's or liability's categorization within the fair value hierarchy is based upon the lowest level of input that is significant to the fair value measurement. ASC 820 establishes three levels of inputs that may be used to measure fair value:

- Level 1: quoted prices in active markets for identical assets or liabilities;
- Level 2: inputs other than Level 1 that are observable, either directly or indirectly, such as quoted prices in active markets for similar assets or liabilities, quoted prices for identical or similar assets or liabilities in markets that are not active, or other inputs that are observable or can be corroborated by observable market data for substantially the full term of the assets or liabilities; or
- Level 3: unobservable inputs that are supported by little or no market activity and that are significant to the fair values of the assets or liabilities.

Assets and Liabilities Measured at Fair Value on a Recurring Basis

Our assets and liabilities measured at fair value on a recurring basis, excluding accrued interest components, consisted of the following types of instruments (Level 1 and 2 inputs are defined above):

(in millions)	May 31, 2010			May 31, 2009		
	Fair Value Measurements Using Input Types			Fair Value Measurements Using Input Types		
	Level 1	Level 2	Total	Level 1	Level 2	Total
Assets:						
Money market funds	\$ 2,423	\$ —	\$ 2,423	\$ 467	\$ —	\$ 467
U.S. Treasury, U.S. government and U.S. government agency debt securities	3,010	—	3,010	4,078	—	4,078
Commercial paper debt securities	—	3,378	3,378	—	1,365	1,365
Corporate debt securities and other	—	2,256	2,256	—	1,335	1,335
Derivative financial instruments	—	33	33	—	—	—
Total assets	\$ 5,433	\$ 5,667	\$ 11,100	\$ 4,545	\$ 2,700	\$ 7,245
Liabilities:						
Derivative financial instruments	\$ —	\$ —	\$ —	\$ —	\$ 35	\$ 35
Total liabilities	\$ —	\$ —	\$ —	\$ —	\$ 35	\$ 35

Our valuation techniques used to measure the fair values of our money market funds and U.S. Treasury, U.S. government and U.S. government agency debt securities, that were classified as Level 1 in the table above, were derived from quoted market prices as substantially all of these instruments have maturity dates (if any) within one year from our date of purchase and active markets for these instruments exist. Our valuation techniques used to measure the fair values of all other instruments listed in the table above, generally all of which mature within one year and the counterparties to which have high credit ratings, were derived from the following: non-binding market consensus prices that are corroborated by observable market data, quoted market prices for similar instruments, or pricing models, such as discounted cash flow techniques, with all significant inputs derived from or corroborated by observable market data. Our discounted cash flow techniques used observable market inputs, such as LIBOR-based yield curves, and currency spot and forward rates. Our cash and cash equivalents, marketable securities and derivative financial instruments are recognized and measured at fair value in our consolidated financial statements. Based on the trading prices of our \$14.62 billion and \$10.25 billion borrowings, which included senior notes and commercial paper notes, that were outstanding as of May 31, 2010 and May 31, 2009, respectively, and the interest rates we could obtain for other borrowings with similar terms at those dates, the estimated fair values of our borrowings at May 31, 2010 and May 31, 2009 were \$15.90 billion and \$10.79 billion, respectively.

INVENTORIES

INVENTORIES (USD \$)	12 Months Ended 05/31/2010
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INVENTORIES

5. INVENTORIES

Inventories consisted of the following as of May 31, 2010 (insignificant as of May 31, 2009):

(in millions)	May 31, 2010
Raw materials	\$ 95
Work-in-process	43
Finished goods	121
Total	\$ 259

PROPERTY, PLANT AND EQUIPMENT

PROPERTY, PLANT AND EQUIPMENT (USD \$)	12 Months Ended 05/31/2010
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PROPERTY, PLANT AND EQUIPMENT

6. PROPERTY, PLANT AND EQUIPMENT

Property, plant and equipment, net consisted of the following:

(Dollars in millions)	Estimated Useful Lives	May 31,	
		2010	2009
Computer, network, machinery and equipment	1-5 years	\$ 1,400	\$ 1,213
Buildings and improvements	1-50 years	1,995	1,579
Furniture and fixtures	3-10 years	406	388
Land	—	757	515
Automobiles	5 years	3	5
Construction in progress	—	87	126
Total property, plant and equipment	1-50 years	4,648	3,826
Accumulated depreciation		(1,885)	(1,904)
Total property, plant and equipment, net		\$ 2,763	\$ 1,922

INTANGIBLE ASSETS AND GOODWILL

INTANGIBLE ASSETS AND GOODWILL (USD \$)	3 Months Ended May 31, 2010
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INTANGIBLE ASSETS AND GOODWILL

7. INTANGIBLE ASSETS AND GOODWILL

The changes in intangible assets for fiscal 2010 and the net book value of intangible assets at May 31, 2010 and 2009 were as follows:

	Intangible Assets, Gross			Accumulated Amortization			Intangible Assets, Net Weighted		
	May 31, 2009	Additions	May 31, 2010	May 31, 2009	Expense	May 31, 2010	May 31, 2009	May 31, 2010	Average Useful Life
Software support agreements and related relationships	\$ 5,012	\$ 66	\$ 5,078	\$(1,601)	\$(574)	\$(2,175)	\$ 3,411	\$ 2,903	9 years
Hardware systems support agreements and related relationships	—	759	759	—	(29)	(29)	—	730	7 years
Developed technology	3,844	1,494	5,338	(1,925)	(811)	(2,736)	1,919	2,602	5 years
Core technology	1,502	609	2,111	(687)	(277)	(964)	815	1,147	5 years
Customer relationships	1,284	481	1,765	(320)	(234)	(554)	964	1,211	7 years
Trademarks	273	231	504	(113)	(48)	(161)	160	343	7 years
Total intangible assets subject to amortization	11,915	3,640	15,555	(4,646)	(1,973)	(6,619)	7,269	8,936	
In-process research and development	—	385	385	—	—	—	—	385	N.A.
Total	\$ 11,915	\$ 4,025	\$ 15,940	\$(4,646)	\$(1,973)	\$(6,619)	\$ 7,269	\$ 9,321	

Total amortization expense related to our intangible assets was \$2.0 billion, \$1.7 billion and \$1.2 billion in fiscal 2010, 2009 and 2008, respectively. As of May 31, 2010, estimated future amortization expense related to our intangible assets subject to amortization was \$2.3 billion in fiscal 2011, \$2.0 billion in fiscal 2012, \$1.6 billion in fiscal 2013, \$1.4 billion in fiscal 2014, \$1.0 billion in fiscal 2015 and \$638 million thereafter.

The changes in the carrying amounts of goodwill, which is generally not deductible for tax purposes, by operating segment for fiscal 2010 and 2009 were as follows:

(in millions)	New Software Licenses		Software License Updates and Product Support		Hardware Systems Support		Services		Other ⁽¹⁾		Total
Balances as of May 31, 2008	\$ 4,058	\$ 8,028	\$ —	\$ 1,550	\$ 4,355	\$ 17,991					
Allocation of goodwill ⁽¹⁾	1,258	2,907	—	190	(4,355)	—					
Goodwill from acquisitions	373	283	—	56	—	712					
Goodwill adjustments ⁽²⁾	27	116	—	(4)	—	139					
Balances as of May 31, 2009	5,716	11,334	—	1,792	—	18,842					
Goodwill from acquisitions	217	490	891	2	—	1,600					
Goodwill adjustments for acquisitions consummated since the beginning of fiscal 2010 ⁽²⁾	7	17	32	—	—	56					
Goodwill adjustments for acquisitions consummated prior to fiscal 2010 ⁽²⁾	55	(39)	—	(89)	—	(73)					
Balances as of May 31, 2010	\$ 5,995	\$ 11,802	\$ 923	\$ 1,705	\$ —	\$ 20,425					

⁽¹⁾ Represents the goodwill allocation associated with certain acquisitions that was allocated to our software business operating segments and services business upon the completion of certain valuations.

⁽²⁾ Pursuant to our business combinations accounting policy, we record goodwill adjustments for the effect on goodwill of changes to net assets acquired during the measurement or purchase price allocation period (either of which can be up to one year from the date of an acquisition). Goodwill adjustments for our services business includes \$82 million that primarily relates to the reclassification of goodwill associated with certain acquired product offerings to our new software licenses operating segment. Goodwill adjustments for acquisitions consummated since the beginning of fiscal 2010 were generally balance sheet related with insignificant effects to our previously reported operating results.

NOTES PAYABLE AND OTHER BORROWINGS

NOTES PAYABLE AND OTHER BORROWINGS (USD \$)	12 Months Ended 05/31/2010
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NOTES PAYABLE AND OTHER BORROWINGS

8. NOTES PAYABLE AND OTHER BORROWINGS

Notes payable and other borrowings consisted of the following:
(Dollars in millions)

	May 31, 2010	May 31, 2009
Floating rate senior notes due May 2010	\$ —	\$ 1,000
Commercial paper notes (effective interest rate of 0.28%)	881	—
5.00% senior notes due January 2011, net of discount of \$1 and \$3 as of May 31, 2010 and 2009, respectively	2,249	2,247
4.95% senior notes due April 2013	1,250	1,250
3.75% senior notes due July 2014, net of fair value adjustment of \$33 ⁽¹⁾	1,533	—
5.25% senior notes due January 2016, net of discount of \$6 and \$7 as of May 31, 2010 and 2009, respectively	1,994	1,993
5.75% senior notes due April 2018, net of discount of \$1 as of May 31, 2010 and 2009	2,499	2,499
5.00% senior notes due July 2019, net of discount of \$6 as of May 31, 2010	1,744	—
6.50% senior notes due April 2038, net of discount of \$2 as of May 31, 2010 and 2009	1,248	1,248
6.125% senior notes due July 2039, net of discount of \$8 as of May 31, 2010	1,242	—
Capital leases	15	1
Total borrowings	\$ 14,655	\$ 10,238
Notes payable, current and other current borrowings	\$ 3,145	\$ 1,001
Notes payable, non-current and other non-current borrowings	\$ 11,510	\$ 9,237

⁽¹⁾ Refer to Note 11 for a description of our accounting for fair value hedges

Senior Notes and Other

In July 2009, we issued \$4.5 billion of fixed rate senior notes comprised of \$1.5 billion of 3.75% notes due July 2014 (2014 Notes), \$1.75 billion of 5.00% notes due July 2019 (2019 Notes) and \$1.25 billion of 6.125% notes due July 2039 (2039 Notes). We issued these senior notes for general corporate purposes and for our acquisition of Sun and acquisition related expenses.

In April 2008, we issued \$5.0 billion of fixed rate senior notes, of which \$1.25 billion of 4.95% senior notes is due April 2013 (2013 Notes), \$2.5 billion of 5.75% senior notes is due April 2018 (2018 Notes), and \$1.25 billion of 6.50% senior notes is due April 2038 (2038 Notes). We issued these senior notes to finance the acquisition of BEA and for general corporate purposes.

In May 2007, we issued \$2.0 billion of floating rate senior notes, of which \$1.0 billion was due and paid in May 2009 and \$1.0 billion was due and paid in May 2010. We had also entered into certain variable to fixed interest rate swap agreements related to these senior notes, which settled as of the same dates the notes were repaid (see Note 11).

In January 2006, we issued \$5.75 billion of senior notes, of which \$2.25 billion of 5.00% senior notes due 2011 (2011 Notes) and \$2.0 billion of 5.25% senior notes due 2016 (2016 Notes and together with the 2011 Notes, Original Senior Notes) remained outstanding as of May 31, 2010 and 2009. In June 2006, we completed a registered exchange offer with substantially identical terms to the Original Senior Notes. The effective interest yields of the 2011 Notes, 2013 Notes, 2014 Notes, 2016 Notes, 2018 Notes, 2019 Notes, 2038 Notes and 2039 Notes (collectively, the Senior Notes) at May 31, 2010 were 5.08%, 4.96%, 3.75%, 5.32%, 5.76%, 5.05%, 6.52% and 6.19%, respectively. Interest is payable semi-annually for the Senior Notes. In September 2009, we entered into interest rate swap agreements that have the economic effect of modifying the fixed interest obligations associated with the 2014 Notes so that the interest payable on these notes effectively became variable (1.44% at May 31, 2010; see Note 11 for additional information). All of the Senior Notes may be redeemed at any time, subject to payment of a make-whole premium.

The Senior Notes rank pari passu with the Commercial Paper Notes (defined below) that we have issued, any other notes we may issue in the future pursuant to the CP Program described below and all existing and future senior indebtedness of Oracle Corporation. All existing and future liabilities of the subsidiaries of Oracle Corporation will be effectively senior to the Senior Notes and our Commercial Paper Notes. Separately, shortly after the closing of our acquisition of Sun we repaid, in full, \$700 million of Sun's legacy convertible notes in the third quarter of fiscal 2010.

We were in compliance with all debt-related covenants at May 31, 2010. Future principal payments for all of our borrowings, including borrowings pursuant to our CP Program described below, at May 31, 2010 were as follows: \$3.1 billion in fiscal 2011, none in fiscal 2012, \$1.3 billion in fiscal 2013, none in fiscal 2014, \$1.5 billion in fiscal 2015 and \$8.8 billion thereafter.

Commercial Paper Program & Commercial Paper Notes

We entered into a commercial paper program in February 2006 (amended in May 2008) via dealer agreements with Banc of America Securities LLC and JP Morgan Securities, Inc. and an Issuing and Paying Agency Agreement entered into in February 2006 with JPMorgan Chase Bank, National Association (CP Program). On May 11, 2010, we reduced the overall capacity of our CP Program from \$5.0 billion to \$3.0 billion after our March 17, 2009 \$2.0 billion 364-day revolving credit agreement terminated pursuant to its terms (see additional discussion below).

During fiscal 2010, 2009 and 2008, we issued \$2.8 billion, none and \$1.2 billion of unsecured short-term commercial paper notes (Commercial Paper Notes), respectively, pursuant to the CP Program, which allows us to issue and sell unsecured short-term promissory notes pursuant to a private placement exemption from the registration requirements under federal and state securities laws. As of May 31, 2010, we had \$881 million of Commercial Paper Notes outstanding at a weighted average yield, including issuance costs, of 0.28% that mature at various dates through July 15, 2010 (none outstanding as of May 31, 2009). We back-stop these notes with our revolving credit agreement and therefore, as of May 31, 2010, we consider that we have \$2.1 billion of capacity remaining under our reduced CP Program.

Revolving Credit Agreements

On March 16, 2010, our \$2.0 billion, 364-Day Revolving Credit Agreement dated March 17, 2009, among Oracle; the lenders named therein; Wachovia Bank, National Association, as administrative agent; BNP Paribas as syndication agent; the documentation agents named therein; and Wachovia Capital Markets, LLC, and BNP Paribas Securities Corp., as joint lead arrangers and joint bookrunners (the 2009 Credit Agreement), terminated pursuant to its terms. No debt was outstanding pursuant to the 2009 Credit Agreement as of its date of termination.

As of May 31, 2010, we had a \$3.0 billion, five-year Revolving Credit Agreement with certain lenders that we entered into in March 2006 (the 2006 Credit Agreement). The 2006 Credit Agreement provides for unsecured revolving credit facilities, which can also be used to back-stop any Commercial Paper Notes (defined above) that we may issue and for working capital and other general corporate purposes. Subject to certain conditions stated in the 2006 Credit Agreement, we may borrow, prepay and re-borrow amounts under the facilities at any time during the term of the 2006 Credit Agreement. Interest for the 2006 Credit Agreement is based on either (a) a LIBOR-based formula or (b) a formula based on Wells Fargo's prime rate or on the federal funds effective rate. Any amounts drawn pursuant to the 2006 Credit Agreement are due on March 14, 2011. No amounts were outstanding pursuant to the 2006 Credit Agreement as of May 31, 2010 and 2009 and a total of \$3.0 billion remained available.

The 2006 Credit Agreement contains certain customary representations and warranties, covenants and events of default, including the requirement that our total net debt to total capitalization ratio not exceed 45%. If any of the events of default occur and are not cured within applicable grace periods or waived, any unpaid amounts under the 2006 Credit Agreement may be declared immediately due and payable and the 2006 Credit Agreement may be terminated. We were in compliance with the Credit Agreements' covenants as of May 31, 2010.

RESTRUCTURING ACTIVITIES

RESTRUCTURING ACTIVITIES
(USD \$)

12 Months Ended
05/31/2010

RESTRUCTURING ACTIVITIES

9. RESTRUCTURING ACTIVITIES

Sun Restructuring Plan

During the third quarter of fiscal 2010, our management approved, committed to and initiated a plan to restructure our operations due to our acquisition of Sun (the Sun Restructuring Plan) in order to improve the cost efficiencies in our merged operations. Our management subsequently amended the Sun Restructuring Plan to reflect additional actions that we expect to take to improve the cost efficiencies in our merged operations. The total estimated restructuring costs associated with the Sun Restructuring Plan are \$1.1 billion consisting primarily of employee severance expenses, abandoned facilities obligations and contract termination costs. The restructuring costs will be recorded to the restructuring expense line item within our consolidated statements of operations as they are recognized. We recorded \$342 million of restructuring expenses in connection with the Sun Restructuring Plan during fiscal 2010 and we expect to incur the majority of the approximately \$755 million of remaining expenses pursuant to the Sun Restructuring Plan through the calendar year 2011. Any changes to the estimates of executing the Sun Restructuring Plan will be reflected in our future results of operations.

Fiscal 2009 Oracle Restructuring Plan

During the third quarter of fiscal 2009, our management approved, committed to and initiated plans to restructure and further improve efficiencies in our operations (the 2009 Plan). Our management subsequently amended the 2009 Plan to reflect additional actions that we implemented over the course of fiscal 2010. The total estimated restructuring costs associated with the 2009 Plan are \$453 million and will be recorded to the restructuring expense line item within our consolidated statements of operations as they are recognized. In fiscal 2010, we recorded \$286 million of restructuring expenses and in fiscal 2009 we recorded \$85 million of restructuring expenses in connection with the 2009 Plan. We expect to incur the remaining \$82 million during our fiscal 2011. Any changes to the estimates of executing the 2009 Plan will be reflected in our future results of operations.

Acquisition Related Restructuring Plans Adopted Prior to Fiscal 2010

Included in the other restructuring plans line in the fiscal 2010 and 2009 activity tables below and in the total restructuring plans line for the fiscal 2008 activity table below are certain restructuring plans that relate to companies that we acquired prior to our adoption of the revised business combinations accounting guidance contained in ASC 805 as of the beginning of fiscal 2010. Costs related to these restructuring plans were originally recognized as liabilities assumed in each of the respective business combinations and included in the allocation of the cost to acquire these companies and, accordingly, have resulted in an increase to goodwill. Our restructuring expenses may change as our management executes the approved plans. Future decreases to the estimates of executing these acquisitions related restructuring plans will be recorded as an adjustment to goodwill indefinitely. Increases to the estimates of the acquisition related restructuring plans will be recorded to operating expenses.

Summary of All Plans

Fiscal 2010 Activity

(in millions)

	Accrued May 31, 2009 ⁽²⁾	Initial Costs ⁽³⁾	Year Ended May 31, 2010 Adj. to Cost ⁽⁴⁾	Cash Payments	Others ⁽⁵⁾	Accrued May 31, 2010 ⁽²⁾	Total Costs Accrued to Date	Total Expected Program Costs
Sun Restructuring Plan								
New software licenses	\$ —	\$ 6	\$ —	\$ (1)	\$ —	\$ 5	\$ 6	\$ 88
Software license updates and product support	—	6	—	(3)	—	3	6	89
Hardware systems business	—	61	—	(19)	—	42	61	98
Services	—	11	—	(3)	—	8	11	152
General and administrative and other ⁽¹⁾	—	258	—	(222)	(7)	29	258	670
Total Sun Restructuring	\$ —	\$ 342	\$ —	\$ (248)	\$ (7)	\$ 87	\$ 342	\$ 1,097

Fiscal 2009 Oracle Restructuring Plan

New software licenses	\$ 12	\$ 106	\$ 4	\$ (98)	\$ (4)	\$ 20	\$ 140	\$ 162
Software license updates and product support	—	3	(2)	(4)	3	—	2	21
Services	22	128	2	(104)	(15)	33	165	206
Other ⁽¹⁾	13	49	(4)	(34)	—	24	64	64
Total Fiscal 2009 Oracle Restructuring	\$ 47	\$ 286	\$ —	\$ (240)	\$ (16)	\$ 77	\$ 371	\$ 453
Total other restructuring plans	\$ 342	\$ 6	\$ (84)	\$ (157)	\$ 275	\$ 382		
Total restructuring plans⁽⁶⁾	\$ 389	\$ 634	\$ (84)	\$ (645)	\$ 252	\$ 546		

Fiscal 2009 Activity

(in millions)

	Accrued May 31, 2008 ⁽²⁾	Initial Costs ⁽³⁾	Year Ended May 31, 2009 Adj. To Cost ⁽⁴⁾	Cash Payments	Other ⁽⁵⁾	Accrued May 31, 2009 ⁽²⁾
Fiscal 2009 Oracle Restructuring Plan						
New software licenses	\$ —	\$ 30	\$ —	\$ (18)	\$ —	\$ 12
Software license updates and product support	—	1	—	(1)	—	—
Services	—	35	—	(13)	—	22
Other ⁽¹⁾	—	19	—	(6)	—	13
Total Fiscal 2009 Oracle Restructuring	\$ —	\$ 85	\$ —	\$ (38)	\$ —	\$ 47
Total other restructuring plans	\$ 568	\$ 26	\$ (12)	\$ (215)	\$ (25)	\$ 342
Total restructuring plans⁽⁶⁾	\$ 568	\$ 111	\$ (12)	\$ (253)	\$ (25)	\$ 389

Fiscal 2008 Activity

(in millions)

	Accrued May 31,	Initial	Year Ended May 31, 2008 Adj. To	Cash	Others ⁽⁵⁾	Accrued May 31,
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	2007	Costs ⁽³⁾	Cost ⁽⁴⁾	Payments	2008 ⁽²⁾
Total restructuring plans ⁽⁶⁾	\$ 459	\$ 272	\$ 10	\$ (184)	\$ 11 \$ 568

⁽¹⁾ Other includes severance costs related to operating segments that were not individually or collectively significant, facilities related restructuring expenses and contract termination costs.

⁽²⁾ Accrued restructuring for our most significant restructuring plans at May 31, 2010 and 2009 was \$546 million and \$389 million, respectively. The balances at May 31, 2010 and 2009 include \$290 million and \$203 million recorded in other current liabilities, respectively, and \$256 million and \$186 million recorded in other non-current liabilities, respectively.

⁽³⁾ Initial costs recorded for the respective restructuring plans.

⁽⁴⁾ All plan adjustments are changes in estimates whereby all increases in costs are generally recorded to operating expenses in the period of adjustment with decreases in the costs of our Oracle-based plans and the Sun Restructuring Plan being recorded to operating expenses and decreases in costs of our acquisition related plans adopted prior to fiscal 2010 or assumed from Sun recorded as adjustments to goodwill.

⁽⁵⁾ Represents foreign currency translation, other adjustments and accrued restructuring plan liabilities of \$275 million that were assumed from our acquisition of Sun during fiscal 2010.

⁽⁶⁾ Restructuring plans included in this footnote represent those plans that management has deemed the most significant.

DEFERRED REVENUES

DEFERRED REVENUES (USD \$)	12 Months Ended 05/31/2010
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DEFERRED REVENUES 10. DEFERRED REVENUES

Deferred revenues consisted of the following:

(in millions)	May 31,	
	2010	2009
Software license updates and product support	\$ 4,618	\$ 4,158
Hardware systems support	537	—
Services	376	243
New software licenses	330	191
Hardware systems products	39	—
Deferred revenues, current	5,900	4,592
Deferred revenues, non-current (in other non-current liabilities)	388	204
Total deferred revenues	\$ 6,288	\$ 4,796

Deferred software license updates and product support revenues and deferred hardware systems support revenues represent customer payments made in advance for annual support contracts. Software license updates and product support contracts and hardware systems support contracts are typically billed on a per annum basis in advance and revenues are recognized ratably over the support periods. Deferred services revenues include prepayments for consulting, On Demand and education services. Revenue for these services is recognized as the services are performed. Deferred new software license revenues typically result from undelivered products or specified enhancements, customer specific acceptance provisions, software license transactions that cannot be segmented from consulting services, amongst other reasons. Deferred hardware systems product revenues typically result from sales to customers, including channel partners and resellers, where revenue recognition criteria have not been met, transactions involving customer specific acceptance provisions or transactions that cannot be segmented from consulting services. In connection with the purchase price allocations related to our acquisitions, we have estimated the fair values of the support obligations assumed. The estimated fair values of the support obligations assumed were determined using a cost build-up approach. The cost build-up approach determines fair value by estimating the costs relating to fulfilling the obligations plus a normal profit margin. The sum of the costs and operating profit approximates, in theory, the amount that we would be required to pay a third party to assume the support obligations. These fair value adjustments reduce the revenues recognized over the support contract term of our acquired contracts.

DERIVATIVE FINANCIAL INSTRUMENTS

DERIVATIVE FINANCIAL INSTRUMENTS
(USD \$)

12 Months Ended
05/31/2010

DERIVATIVE FINANCIAL INSTRUMENTS

11. DERIVATIVE FINANCIAL INSTRUMENTS

We adopted the disclosure requirements of ASC 815 during fiscal 2009 and have provided these disclosures prospectively from the year of adoption.

Interest Rate Swap Agreements

Fair Value Hedges

In September 2009, we entered into interest rate swap agreements that have the economic effect of modifying the fixed interest obligations associated with the 2014 Notes (as defined in Note 8) so that the interest payable on these notes effectively became variable based on LIBOR. The critical terms of the interest rate swap agreements and the 2014 Notes match, including the notional amounts and maturity dates. Accordingly, we have designated these swap agreements as qualifying hedging instruments and are accounting for them as fair value hedges pursuant to ASC 815. These transactions are characterized as fair value hedges for financial accounting purposes because they protect us against changes in the fair value of our fixed rate borrowings due to benchmark interest rate movements. The changes in fair values of these interest rate swap agreements are recognized as interest expense in our consolidated statements of operations with the corresponding amounts included in other assets or other non-current liabilities in our consolidated balance sheets. The amount of net gain (loss) attributable to the risk being hedged is recognized as interest expense in our consolidated statement of operations with the corresponding amount included in notes payable and other non-current borrowings. The periodic interest settlements, which occur at the same interval as the 2014 Notes, are recorded as interest expense.

We do not use any interest rate swap agreements for trading purposes.

Cash Flow Hedges

In relation to the variable interest obligations associated with our senior notes that were due and paid in May 2010 and May 2009 (Floating Rate Notes), we entered into certain variable to fixed interest rate swap agreements to manage the economic effects of the variable interest obligations and designated these agreements as qualifying cash flow hedges. Upon payment of the Floating Rate Notes in May 2010 and May 2009, we also settled the interest rate swap agreements associated with these notes and no arrangements were outstanding as of May 31, 2010. The unrealized losses on these interest rate swap agreements were included in accumulated other comprehensive income and the corresponding fair value payables were included in other current liabilities in our consolidated balance sheet. The periodic interest settlements, which occurred at the same interval as the Floating Rate Notes were recorded as interest expense.

Net Investment Hedges

Periodically, we hedge net assets of certain of our international subsidiaries using foreign currency forward contracts to offset the translation and economic exposures related to our foreign currency-based investments in these subsidiaries. These contracts have been designated as net investment hedges pursuant to ASC 815. We entered into these net investment hedges for all of fiscal 2009 and the majority of fiscal 2010. We suspended this program during our fourth quarter of fiscal 2010 and, as of May 31, 2010, we have no contracts outstanding (one contract was outstanding as of May 31, 2009 in Japanese Yen with a nominal fair value and notional amount of \$694 million).

We used the spot method to measure the effectiveness of our net investment hedges. Under this method for each reporting period, the change in fair value of the forward contracts attributable to the changes in spot exchange rates (the effective portion) was reported in accumulated other comprehensive income on our consolidated balance sheet and the remaining change in fair value of the forward contract (the ineffective portion, if any) was recognized in non-operating income (expense), net, in our consolidated statement of operations. We recorded settlements under these forward contracts in a similar manner. The fair values of both the effective and ineffective portions were recorded to our consolidated balance sheet as prepaid expenses and other current assets for amounts receivable from the counterparties or other current liabilities for amounts payable to the counterparties.

Foreign Currency Forward Contracts Not Designated as Hedges

We transact business in various foreign currencies and are subject to risks associated with the effects of certain foreign currency exposures. We have a program that primarily utilizes foreign currency forward contracts to offset these risks associated with foreign currency exposures. Our program may be suspended from time to time. This program was active for the majority of fiscal 2010 and was suspended during our fourth quarter of fiscal 2010. When this program is active, we enter into foreign currency forward contracts so that increases or decreases in our foreign currency exposures are offset by gains or losses on the foreign currency forward contracts in order to mitigate the risks and volatility associated with our foreign currency transactions. Our foreign currency exposures typically arise from intercompany sublicense fees and other intercompany transactions that are expected to be cash settled in the near term. Although we have suspended our historical foreign currency forward contract program as of May 31, 2010, our subsidiaries continue to enter into cross-currency transactions and create cross-currency exposures via intercompany arrangements and we expect that these transactions and exposures will continue. Our ultimate realized gain or loss with respect to currency fluctuations will generally depend on the size and type of cross-currency transactions that we enter into, the currency exchange rates associated with these exposures and changes in those rates, whether we have entered into foreign currency forward contracts to offset these exposures and other factors.

Historically, we have neither used these foreign currency forward contracts for trading purposes nor have designated these forward contracts as hedging instruments pursuant to ASC 815. Accordingly, we recorded the fair value of these contracts as of the end of our reporting period to our consolidated balance sheet with changes in fair value recorded in our consolidated statement of operations. The balance sheet classification for the fair values of these forward contracts was prepaid expenses and other current assets for unrealized gains and other current liabilities for unrealized losses. The statement of operations classification for the fair values of these forward contracts was non-operating income (expense), net, for both realized and unrealized gains and losses. As of May 31, 2010, we had a nominal amount of foreign currency forward contracts outstanding. As of May 31, 2009, the notional amounts of the forward contracts we held to purchase and sell U.S. Dollars in exchange for other major international currencies were \$860 million and \$1.1 billion, respectively, and the notional

amounts of the foreign currency forward contracts we held to purchase European Euros in exchange for other major international currencies were €142 million (\$198 million).

The effects of derivative instruments on our consolidated financial statements were as follows as of or for each of the respective periods presented below (amounts presented exclude any income tax effects):

Fair Value of Derivative Instruments in Consolidated Balance Sheets

(in millions)	May 31, 2010		May 31, 2009	
	Balance Sheet Location	Fair Value	Balance Sheet Location	Fair Value
Interest rate swap agreement designated as cash flow hedge	Not applicable	\$ —	Other current liabilities	\$ 35
Interest rate swap agreements designated as fair value hedges	Other assets	\$ 33	Not applicable	\$ —
Foreign currency forward contracts not designated as hedges	Prepaid expenses and other current assets	\$ —	Other current liabilities	\$ —

Effects of Derivative Instruments on Income and Other Comprehensive Income (OCI)

(in millions)	Amount of Gain (Loss) Recognized in Accumulated OCI on Derivative (Effective Portion) Year Ended May 31,		Location and Amount of Gain (Loss) Reclassified from Accumulated OCI into Income (Effective Portion) Year Ended May 31,		Location and Amount of Gain (Loss) Recognized in Income on Derivative (Ineffective Portion and Amount Excluded from Effectiveness Testing) Year Ended May 31,	
	2010	2009	2010	2009	2010	2009

Cash flow hedges:						
Interest rate swap	\$ —	\$ 3	Interest expense	\$ (41)	\$ (47)	Non operating income (expense), net
Net investment hedges:						
Foreign currency forward contract	\$ (37)	\$ (63)	Not applicable	\$ —	\$ —	Non-operating income (expense), net

(in millions)	Location and Amount of Gain (Loss) Recognized in Income on Derivative Year Ended May 31, 2010		Location and Amount of Gain (Loss) on Hedged Item Recognized in Income Attributable to Risk Being Hedged Year Ended May 31, 2010	
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Fair value hedges:					
Interest rate swaps		Interest expense	\$ 33	Interest expense	\$ (33)

(in millions)	Location and Amount of Gain (Loss) Recognized in Income on Derivative Year Ended May 31, 2010		Location and Amount of Gain (Loss) Recognized in Income on Derivative Year Ended May 31, 2009	
Derivatives not designated as hedges:				
Foreign currency forward contracts		Non-operating income (expense), net	\$ (35)	\$ 3

COMMITMENTS AND CONTINGENCIES

COMMITMENTS AND CONTINGENCIES (USD \$)	12 Months Ended 05/31/2010
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COMMITMENTS AND CONTINGENCIES

12. COMMITMENTS AND CONTINGENCIES

Lease Commitments

We lease certain facilities, furniture and equipment under operating leases. As of May 31, 2010, future minimum annual operating lease payments and future minimum payments to be received from non-cancelable subleases were as follows:

(in millions)	
Fiscal 2011	\$ 511
Fiscal 2012	376
Fiscal 2013	257
Fiscal 2014	157
Fiscal 2015	103
Thereafter	293
Future minimum operating lease payments	1,697
Less: minimum payments to be received from non-cancelable subleases	(214)
Total future minimum operating lease payments, net	\$ 1,483

Lease commitments include future minimum rent payments for facilities that we have vacated pursuant to our restructuring and merger integration activities, as discussed in Note 9. We have approximately \$386 million in facility obligations, net of estimated sublease income and other costs, in accrued restructuring for these locations in our consolidated balance sheet at May 31, 2010.

Rent expense was \$318 million, \$293 million and \$276 million for fiscal 2010, 2009 and 2008, respectively, net of sublease income of approximately \$73 million, \$69 million and \$57 million, respectively. Certain lease agreements contain renewal options providing for an extension of the lease term.

Unconditional Purchase Obligations

In the ordinary course of business, we enter into certain unconditional purchase obligations with our suppliers, which are agreements that are enforceable, legally binding and specify terms, including: fixed or minimum quantities to be purchased; fixed, minimum or variable price provisions; and the approximate timing of the payment. As a result of our acquisition of Sun, we utilize several external manufacturers to manufacture sub-assemblies for our products and to perform final assembly and testing of finished products. We also obtain individual components for our products from a variety of individual suppliers based on projected demand information. Such purchase commitments are based on our forecasted component and manufacturing requirements and typically provide for fulfillment within agreed upon lead-times and/or commercially standard lead-times for the particular part or product and have been included in this amount. Routine arrangements for other materials and goods that are not related to our external manufacturers and certain other suppliers and that are entered into in the ordinary course of business are not included in the amounts below as they are generally entered into in order to secure pricing or other negotiated terms and are difficult to quantify in a meaningful way. As of May 31, 2010, our unconditional purchase obligations approximate to \$684 million for fiscal 2011, \$27 million for fiscal 2012, \$19 million for fiscal 2013, \$6 million for fiscal 2014, \$3 million for fiscal 2015 and \$3 million thereafter.

As described in Note 2, we also have a commitment to acquire certain companies for cash consideration that we expect to pay upon the closing of these acquisitions. As described in Note 8, we have notes payable and other borrowings outstanding of \$14.7 billion that mature at various future dates.

Guarantees

Our software and hardware systems product sales agreements generally include certain provisions for indemnifying customers against liabilities if our products infringe a third party's intellectual property rights. To date, we have not incurred any material costs as a result of such indemnifications and have not accrued any liabilities related to such obligations in our consolidated financial statements. Certain of our product sales agreements also include provisions indemnifying customers against liabilities in the event we breach confidentiality or service level requirements. It is not possible to determine the maximum potential amount under these indemnification agreements due to our limited and infrequent history of prior indemnification claims and the unique facts and circumstances involved in each particular agreement.

Our software license and hardware systems products agreements also generally include a warranty that our products will substantially operate as described in the applicable program documentation for a period of one year after delivery. We also warrant that services we perform will be provided in a manner consistent with industry standards for a period of 90 days from performance of the service.

We occasionally are required, for various reasons, to enter into financial guarantees with third parties in the ordinary course of our business including, among others, guarantees related to foreign exchange trades, taxes, import licenses and letters of credit on behalf of parties we conduct business with. Such agreements have not had a material effect on our results of operations, financial position or cash flows.

STOCKHOLDERS' EQUITY

STOCKHOLDERS' EQUITY (USD \$)	3 Months Ended 05/31/2010
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STOCKHOLDERS' EQUITY

13. STOCKHOLDERS' EQUITY

Stock Repurchases

Our Board of Directors has approved a program for us to repurchase shares of our common stock. On October 20, 2008, we announced that our Board of Directors approved the expansion of our repurchase program by \$8.0 billion and as of May 31, 2010, approximately \$5.3 billion was available for share repurchases pursuant to our stock repurchase program. We repurchased 43.3 million shares for \$1.0 billion (including 0.5 million shares for \$12 million that were repurchased but not settled), 225.6 million shares for \$4.0 billion and 97.3 million shares for \$2.0 billion in fiscal 2010, 2009 and 2008, respectively under the applicable repurchase programs authorized.

Our stock repurchase authorization does not have an expiration date and the pace of our repurchase activity will depend on factors such as our working capital needs, our cash requirements for acquisitions and dividend payments, our debt repayment obligations or repurchase of our debt, our stock price, and economic and market conditions. Our stock repurchases may be effected from time to time through open market purchases or pursuant to a Rule 10b5-1 plan. Our stock repurchase program may be accelerated, suspended, delayed or discontinued at any time.

Dividends on Common Stock

During fiscal 2010, our Board of Directors declared cash dividends of \$0.20 per share of our outstanding common stock, which we paid during the same period.

In June 2010, our Board of Directors declared a quarterly cash dividend of \$0.05 per share of outstanding common stock payable on August 4, 2010 to stockholders of record as of the close of business on July 14, 2010. Future declarations of dividends and the establishment of future record and payment dates are subject to the final determination of our Board of Directors.

Accumulated Other Comprehensive Income

The following table summarizes, as of each balance sheet date, the components of our accumulated other comprehensive income, net of income taxes (income tax effects were insignificant for all periods presented):

(in millions)	May 31,	
	2010	2009
Foreign currency translation gains, net	\$ 169	\$ 340
Unrealized losses on derivative financial instruments, net	(131)	(125)
Unrealized gains on marketable securities, net	4	4
Unrealized losses on defined benefit plan, net	(38)	(3)
Total accumulated other comprehensive income	\$ 4	\$ 216

EMPLOYEE BENEFIT PLANS

EMPLOYEE BENEFIT PLANS
(USD \$)

12 Months Ended
May 31, 2010

EMPLOYEE BENEFIT PLANS

14. EMPLOYEE BENEFIT PLANS

Stock-based Compensation Plans

Stock Option Plans

In fiscal 2001, we adopted the 2000 Long-Term Equity Incentive Plan (the 2000 Plan), which replaced the 1991 Long-Term Equity Incentive Plan (the 1991 Plan) and provides for the issuance of non-qualified stock options and incentive stock options, as well as stock purchase rights, stock appreciation rights and long-term performance awards to our eligible employees, officers, and directors who are also employees or consultants, independent consultants and advisers. Under the terms of the 2000 Plan, options to purchase common stock generally are granted at not less than fair market value, become exercisable as established by the Board (generally 25% annually over four years under our current practice), and generally expire no more than ten years from the date of grant. Options granted under the 1991 Plan were granted with similar terms. If options outstanding under the 1991 Plan are forfeited, repurchased, or otherwise terminate without the issuance of stock, the shares underlying such options will also become available for future awards under the 2000 Plan. As of May 31, 2010, options to purchase 301 million shares of common stock were outstanding under both plans, of which 144 million were vested. Approximately 197 million shares of common stock were available for future awards under the 2000 Plan. To date, we have not issued any stock purchase rights, stock appreciation rights, restricted stock-based awards or long-term performance awards under the 2000 Plan.

In fiscal 1993, the Board adopted the 1993 Directors' Stock Option Plan (the Directors' Plan), which provides for the issuance of non-qualified stock options to non-employee directors. The Director's Plan has from time to time been amended and restated. In fiscal 2010, the Director's Plan was further amended to increase the amounts of annual stock option grants to the Chair of the Compensation Committee of the Board. Under the terms of the Directors' Plan, options to purchase 8 million shares of common stock were reserved for issuance, options are granted at not less than fair market value, become exercisable over four years, and expire no more than ten years from the date of grant. The Directors' Plan provides for automatic grants of options to each non-employee director upon first becoming a director and thereafter on an annual basis, as well as automatic nondiscretionary grants for chairing certain Board committees. The Board has the discretion to replace any automatic option grant under the Directors' Plan with awards of restricted stock, restricted stock units or other stock-based awards. The number of shares subject to any such stock award will be no more than the equivalent value of the options, as determined on any reasonable basis by the Board, which would otherwise have been granted under the applicable automatic option grant. The Board will determine the particular terms of any such stock awards at the time of grant, but the terms will be consistent with those of options, as described below, granted under the Directors' Plan with respect to vesting or forfeiture schedules and treatment on termination of status as a director. At May 31, 2010, options to purchase approximately 3 million shares of common stock were outstanding under the 1993 Directors' Plan, of which approximately 2 million were vested. Approximately 2 million shares are available for future option awards under this plan of which a lesser portion than the total may be used for grants other than options.

In connection with certain of our acquisitions, including Sun, BEA, PeopleSoft, Siebel and Hyperion, we assumed all of the outstanding stock options and other stock awards of each acquiree's respective stock plans. These stock options and other stock awards generally retain all of the rights, terms and conditions of the respective plans under which they were originally granted. As of May 31, 2010, options to purchase 48 million shares of common stock and 4 million shares of restricted stock were outstanding under these plans.

The following table summarizes stock option activity for our last three fiscal years ended May 31, 2010:

(in millions, except exercise price)	Options Outstanding	
	Shares Under Option	Weighted Average Exercise Price
Balance, May 31, 2007	434	\$ 13.65
Granted	61	\$ 20.49
Assumed	36	\$ 17.24
Exercised	(135)	\$ 9.12
Canceled	(18)	\$ 20.83
Balance, May 31, 2008	378	\$ 16.37
Granted	69	\$ 20.53
Assumed	1	\$ 6.54
Exercised	(76)	\$ 9.31
Canceled	(13)	\$ 25.14
Balance, May 31, 2009	359	\$ 18.32
Granted	72	\$ 21.23
Assumed	23	\$ 55.77
Exercised	(60)	\$ 14.03
Canceled	(42)	\$ 43.93
Balance, May 31, 2010	352	\$ 18.84

Options outstanding that have vested and that are expected to vest as of May 31, 2010 are as follows:

	Outstanding Options (in millions)	Weighted Average Exercise Price	Weighted Average Remaining Contract Term (in years)	In-the-Money Options as of May 31, 2010 (in millions)	Aggregate Intrinsic Value ⁽¹⁾ (in millions)
Vested	192	\$ 17.44	4.24	172	\$ 1,372
Expected to vest ⁽²⁾	145	\$ 20.44	8.15	140	340
Total	337	\$ 18.73	5.93	312	\$ 1,712

⁽¹⁾ The aggregate intrinsic value was calculated based on the gross difference between our closing stock price on the last trading day of fiscal 2010 of \$22.57 and the exercise prices for all in-the-money options outstanding, excluding tax effects.

⁽²⁾ The unrecognized compensation expense calculated under the fair value method for shares expected to vest (unvested shares net of expected forfeitures) as of May 31, 2010 was approximately \$709 million and is expected to be recognized over a weighted average period of 2.56 years.

Approximately 15 million shares outstanding as of May 31, 2010 are not expected to vest.

Stock-Based Compensation Expense and Valuation of Stock Options and Restricted Stock-Based Awards

Stock-based compensation is included in the following operating expense line items in our consolidated statements of operations:

(in millions)	Year Ended May 31,		
	2010	2009	2008
Sales and marketing	\$ 81	\$ 67	\$ 51
Software license updates and product support	17	13	10
Hardware systems products	3	—	—
Hardware systems support	2	—	—
Services	14	12	13
Research and development	172	155	114
General and administrative	132	93	69
Acquisition related and other	15	15	112
Total stock-based compensation	436	355	369
Estimated income tax benefit included in provision for income taxes	(146)	(122)	(128)
Total stock-based compensation, net of estimated income tax benefit	\$ 290	\$ 233	\$ 241

We estimate the fair value of our share-based payments using the Black-Scholes-Merton option-pricing model, which was developed for use in estimating the fair value of traded options that have no vesting restrictions and are fully transferable. Option valuation models, including the Black-Scholes-Merton option-pricing model, require the input of assumptions, including stock price volatility. Changes in the input assumptions can materially affect the fair value estimates and ultimately how much we recognize as stock-based compensation expense. The fair values of our stock options were estimated at the date of grant or date of acquisition for options assumed in a business combination. The weighted average input assumptions used and resulting fair values were as follows for fiscal 2010, 2009 and 2008:

	Year Ended May 31,		
	2010	2009	2008
Expected life (in years)	4.7	5.3	5.0
Risk-free interest rate	2.1%	3.3%	4.6%
Volatility	31%	37%	29%
Dividend yield	0.9%	—	—
Weighted-average fair value per share	\$ 5.21	\$ 7.93	\$ 7.53

The expected life input is based on historical exercise patterns and post-vesting termination behavior, the risk-free interest rate input is based on United States Treasury instruments and the volatility input is calculated based on the implied volatility of our longest-term, traded options. Our expected dividend yield was zero prior to our first dividend declaration on March 18, 2009 as we did not historically pay cash dividends on our common stock and did not anticipate doing so for the foreseeable future for grants issued prior to March 18, 2009. For grants issued subsequent to March 18, 2009, we used an annualized dividend yield based on the per share dividend declared by our Board of Directors.

Tax Benefits from Exercise of Stock Options and Vesting of Restricted Stock-Based Awards

Total cash received as a result of option exercises was approximately \$812 million, \$696 million and \$1.2 billion for fiscal 2010, 2009 and 2008, respectively. The aggregate intrinsic value of options exercised and vesting of restricted stock-based awards was \$647 million, \$807 million and \$2.0 billion for fiscal 2010, 2009 and 2008, respectively. In connection with these exercises and vesting of restricted stock-based awards, the tax benefits realized by us were \$203 million, \$252 million and \$588 million for fiscal 2010, 2009 and 2008, respectively. Of the total tax benefits received, we classified excess tax benefits from stock-based compensation of \$110 million, \$194 million and \$454 million as cash flows from financing activities rather than cash flows from operating activities for fiscal 2010, 2009 and 2008, respectively.

Employee Stock Purchase Plan

We have an Employee Stock Purchase Plan (Purchase Plan) and have amended the Purchase Plan such that employees can purchase shares of common stock at a price per share that is 95% of the fair market value of Oracle stock as of the end of the semi-annual option period. As of May 31, 2010, 75 million shares were reserved for future issuances under the Purchase Plan. We issued 3 million shares under the Purchase Plan in each of fiscal 2010, 2009 and 2008.

Defined Contribution and Other Postretirement Plans

We offer various defined contribution plans for our U.S. and non-U.S. employees. Total defined contribution plan expense was \$282 million, \$258 million and \$234 million for fiscal 2010, 2009 and 2008, respectively. The number of plan participants in our defined contribution plans has generally increased in recent years primarily as a result of additional eligible employees from our acquisitions.

In the United States, regular employees can participate in the Oracle Corporation 401(k) Savings and Investment Plan (Oracle 401(k) Plan). Participants can generally contribute up to 40% of their eligible compensation on a per-pay-period basis as defined by the plan document or by the section 402(g) limit as defined by the United States Internal Revenue Service (IRS). We match a portion of employee contributions, currently 50% up to 6% of compensation each pay period, subject to maximum aggregate matching amounts. Our contributions to the plan, net of forfeitures, were \$90 million, \$78 million and \$80 million in fiscal 2010, 2009 and 2008, respectively.

We also offer non-qualified deferred compensation plans to certain key employees whereby they may defer a portion of their annual base and/or variable compensation until retirement or a date specified by the employee in accordance with the plans. Deferred compensation plan assets and liabilities were approximately \$216 million and \$176 million as of May 31, 2010 and 2009, respectively, and are presented in other assets and other non-current liabilities in the accompanying consolidated balance sheets.

We sponsor certain defined benefit pension plans that are offered primarily by certain of our foreign subsidiaries. Many of these plans were assumed through our acquisitions. We deposit funds for these plans with insurance companies, third-party trustees, or into government-managed accounts consistent with local regulatory requirements, as applicable. Our total defined benefit plan pension expense was \$29 million for fiscal 2010 (insignificant for fiscal 2009 and 2008). The aggregate projected benefit obligation and aggregate net funded status (net liability) of our defined benefit plans were \$636 million and \$196 million as of May 31, 2010, respectively.

INCOME TAXES

INCOME TAXES
(USD \$)

12 Month Ended
05/31/2010

INCOME TAXES

15. INCOME TAXES

The following is a geographical breakdown of income before the provision for income taxes:

(in millions)	Year Ended May 31,		
	2010	2009	2008
Domestic	\$ 4,282	\$ 3,745	\$ 3,930
Foreign	3,961	4,089	3,904
Total income before provision for income taxes	\$ 8,243	\$ 7,834	\$ 7,834

The provision for income taxes consisted of the following:

(Dollars in millions)	Year Ended May 31,		
	2010	2009	2008
Current provision:			
Federal	\$ 1,307	\$ 1,341	\$ 1,325
State	299	361	231
Foreign	1,013	934	892
Total current provision	2,619	2,636	2,448
Deferred benefit:			
Federal	(380)	(177)	(96)
State	(76)	(52)	(24)
Foreign	(55)	(166)	(15)
Total deferred benefit	(511)	(395)	(135)
Total provision for income taxes	\$ 2,108	\$ 2,241	\$ 2,313
Effective income tax rate	25.6%	28.6%	29.5%

The provision for income taxes differed from the amount computed by applying the federal statutory rate to our income before provision for income taxes as follows:

(in millions)	Year Ended May 31,		
	2010	2009	2008
Tax provision at statutory rate	\$ 2,885	\$ 2,742	\$ 2,742
Foreign earnings at other than United States rates	(672)	(673)	(569)
State tax expense, net of federal benefit	161	201	135
Settlements and releases from judicial decisions and statute expirations, net	(315)	25	(20)
Other, net	49	(54)	25
Total provision for income taxes	\$ 2,108	\$ 2,241	\$ 2,313

The components of our deferred tax liabilities and assets were as follows:

(in millions)	May 31,	
	2010	2009
Deferred tax liabilities:		
Unrealized gain on stock	\$ (130)	\$ (130)
Unremitted earnings of foreign subsidiaries	(100)	(117)
Acquired intangible assets	(1,748)	(1,831)
Depreciation and amortization	(24)	—
Other	—	(1)
Total deferred tax liabilities	\$ (2,002)	\$ (2,079)
Deferred tax assets:		
Accruals and allowances	\$ 629	\$ 492
Employee compensation and benefits	649	401
Differences in timing of revenue recognition	67	141
Depreciation and amortization	—	219
Tax credit and net operating loss carryforwards	2,916	1,201
Other	250	44
Total deferred tax assets	\$ 4,511	\$ 2,498
Valuation allowance	\$ (649)	\$ (137)
Net deferred tax assets	\$ 1,860	\$ 282
Recorded as:		
Current deferred tax assets	\$ 1,159	\$ 661
Non-current deferred tax assets (in other assets)	1,267	145
Current deferred tax liabilities (in other current liabilities)	(142)	(44)
Non-current deferred tax liabilities	(424)	(480)
Net deferred tax assets	\$ 1,860	\$ 282

We provide for United States income taxes on the undistributed earnings and the other outside basis temporary differences of foreign subsidiaries unless they are considered indefinitely reinvested outside the United States. At May 31, 2010, the amount of temporary differences related to undistributed earnings and other outside basis temporary differences of investments in foreign subsidiaries upon which United States income taxes have not been provided was approximately \$13.0 billion and \$4.7 billion, respectively. If these undistributed earnings were repatriated to the United States, or if the other outside basis differences were recognized in a taxable transaction, they would generate foreign tax credits that would reduce the federal tax liability associated with the foreign dividend or the otherwise taxable transaction. Assuming a full utilization of the foreign tax credits, the potential deferred tax liability associated with these temporary differences of undistributed earnings and other outside basis temporary differences would be approximately \$3.6 billion and \$1.5 billion, respectively.

Our net deferred tax assets increased from \$282 million as of May 31, 2009 to \$1.9 billion as of May 31, 2010, primarily as a result of our acquisition of Sun. We believe it is more likely than not that the net deferred tax assets will be realized in the foreseeable future. Realization of our net deferred tax assets is dependent upon our generation of sufficient taxable income in future years in appropriate tax jurisdictions to obtain benefit from the reversal of temporary differences, net operating loss carryforwards, and tax credit carryforwards. The amount of deferred tax assets considered realizable is subject to adjustment in future periods if estimates of future taxable income change.

The valuation allowance was \$649 million at May 31, 2010 and \$137 million at May 31, 2009. The net increase is primarily attributable to deferred taxes of Sun, principally state and foreign attributes. Substantially all of the valuation allowance relates to tax assets established in purchase accounting. Any subsequent reduction of that portion of the valuation allowance and the recognition of the associated tax benefits associated with our acquisitions will be recorded to our provision for income taxes subsequent to our final determination of the valuation allowance or the conclusion of the measurement period (as defined above), whichever comes first.

At May 31, 2010, we had federal net operating loss carryforwards of approximately \$1.6 billion. These losses expire in various years between fiscal 2012 and fiscal 2029, and are subject to limitations on their utilization. We had state net operating loss carryforwards of approximately \$3.8 billion, which expire between fiscal 2011 and fiscal 2029, and are subject to limitations on their utilization. We had foreign net operating loss carryforwards of approximately \$1.3 billion, which are subject to limitations on their utilization. Approximately \$1.2 billion of these net operating losses are not currently subject to expiration dates. The remainder, approximately \$90 million, expires between fiscal 2011 and fiscal 2030. We had tax credit carryforwards of approximately \$1.2 billion, which are subject to limitations on their utilization. Approximately \$405 million of these tax credit carryforwards are not currently subject to expiration dates. The remainder, approximately \$791 million, expires in various years between fiscal 2011 and fiscal 2029.

We classify our unrecognized tax benefits as either current or non-current income taxes payable in the accompanying consolidated balance sheets. The aggregate changes in the balance of our gross unrecognized tax benefits, including acquisitions, were as follows:

(in millions)	Year Ended May 31,		
	2010	2009	2008
Gross unrecognized tax benefits as of June 1	\$ 2,262	\$ 1,693	\$ 1,251
Increases related to tax positions from prior fiscal years	94	434	256
Decreases related to tax positions from prior fiscal years	(491)	(86)	(5)
Increases related to tax positions taken during current fiscal year	813	370	180
Settlements with tax authorities	(88)	(41)	(20)
Lapses of statutes of limitation	(48)	(25)	(24)
Other, net	(15)	(83)	55
Total gross unrecognized tax benefits as of May 31	\$ 2,527	\$ 2,262	\$ 1,693

As of May 31, 2010, \$1.9 billion of unrecognized benefits would affect our effective tax rate if recognized. We recognized interest and penalties related to uncertain tax positions in our provision for income taxes line of our consolidated statements of operations of \$3 million during fiscal 2010. The amount of interest and penalties accrued as of May 31, 2010 was \$576 million.

During fiscal 2010, the provision for income taxes was reduced due to recent judicial decisions, including the March 2010 U.S. Court of Appeals Ninth Circuit ruling in *Xilinx v. Commissioner*, and settlements with various worldwide tax authorities.

Domestically, U.S. federal and state taxing authorities are currently examining income tax returns of Oracle and various acquired entities for years through fiscal 2008. Many issues are at an advanced stage in the examination process, the most significant of which include the deductibility of certain royalty payments, issues related to certain capital gains and losses, extraterritorial income exemptions, domestic production activity deductions, stewardship deductions, stock-based compensation and foreign tax credits taken. Other issues are related to years with expiring statutes of limitation. With all of these domestic audit issues considered in the aggregate, we believe it was reasonably possible that, as of May 31, 2010, the gross unrecognized tax benefits related to these audits could decrease (whether by payment, release, or a combination of both) in the next 12 months by as much as \$399 million (\$353 million net of offsetting tax benefits). Our U.S. federal and, with some exceptions, our state income tax returns have been examined for all years prior to fiscal 2000, and we are no longer subject to audit for those periods.

Internationally, tax authorities for numerous non-U.S. jurisdictions are also examining returns affecting our unrecognized tax benefits. We believe it was reasonably possible that, as of May 31, 2010, the gross unrecognized tax benefits, could decrease (whether by payment, release, or a combination of both) by as much as \$187 million (\$53 million net of offsetting tax benefits) in the next 12 months, related primarily to transfer pricing and a technical matter of corporate restructuring, which would be affected by the possible passage of favorable legislation. With some exceptions, we are generally no longer subject to tax examinations in non-U.S. jurisdictions for years prior to fiscal 1998.

We believe that we have adequately provided for any reasonably foreseeable outcomes related to our tax audits and that any settlement will not have a material adverse effect on our consolidated financial position or results of operations. However, there can be no assurances as to the possible outcomes.

We previously negotiated three successive unilateral Advance Pricing Agreements with the IRS that cover many of our intercompany transfer pricing issues and preclude the IRS from making a transfer pricing adjustment within the scope of the agreements. These agreements are effective for fiscal years through May 31, 2006. We have submitted to the IRS a request for another renewal of this Advance Pricing Agreement for the years ending May 31, 2007 through May 31, 2011. However, these agreements do not cover all elements of our transfer pricing and do not bind tax authorities outside the United States. We have finalized two bilateral Advance Pricing Agreements, one of which was effective for the years ending May 31, 2002 through May 31, 2006 and we have submitted a request for a renewal of this agreement for the years ending May 31, 2007 through May 31, 2011. There can be no guarantee that such negotiations will result in an agreement. The additional bilateral agreement covers the period from June 1, 2001 through January 25, 2008.

SEGMENT INFORMATION

SEGMENT INFORMATION (USD \$)	12 Months Ended 05-31-2010
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SEGMENT INFORMATION

16. SEGMENT INFORMATION

ASC 280, *Segment Reporting*, establishes standards for reporting information about operating segments. Operating segments are defined as components of an enterprise about which separate financial information is available that is evaluated regularly by the chief operating decision maker, or decision making group, in deciding how to allocate resources and in assessing performance. Our chief operating decision maker is our Chief Executive Officer. We are organized geographically and by line of business. While our Chief Executive Officer evaluates results in a number of different ways, the line of business management structure is the primary basis for which the allocation of resources and financial results are assessed. As a result of our acquisition of Sun, we entered into a new hardware systems business with two operating segments as described further below. We have three businesses—software, hardware systems and services—which are further divided into seven operating segments. Our software business is comprised of two operating segments: (1) new software licenses and (2) software license updates and product support. Our hardware systems business is comprised of two operating segments: (1) hardware systems products and (2) hardware systems support. Our services business is comprised of three operating segments: (1) consulting, (2) On Demand and (3) education.

The new software licenses line of business is engaged in the licensing of database and middleware software as well as our applications software. Database and middleware software includes database management software, application server software, business intelligence software, identification and access management software, content management software, portal and user interaction software, Service-Oriented Architecture and business process management software, data integration software and development tools. As a result of our acquisition of Sun, we acquired certain software technologies that expanded and enhanced our existing database and middleware software product offerings, including Java, which is a global software development platform used in a wide range of computers, networks and devices. Applications software provides enterprise information that enables companies to manage their business cycles and provide intelligence in functional areas such as customer relationship management, financials, human resources, maintenance management, manufacturing, marketing, order fulfillment, product lifecycle management, enterprise project portfolio management, enterprise performance management, procurement, sales, services, enterprise resource planning and supply chain planning.

The software license updates and product support line of business provides customers with rights to unspecified software product upgrades and maintenance releases, internet access to technical content, as well as internet and telephone access to technical support personnel during the support period.

The hardware systems products line of business consists primarily of computer server and storage product offerings. Most of our computer servers are based on our SPARC family of microprocessors and on Intel Xeon microprocessors. Our servers range from high performance computing servers to cost efficient, entry-level servers, and run with our Solaris Operating System, Linux and certain other operating systems environments. Our storage products are designed to securely manage, protect, archive and restore customers' data assets and consist of tape, disk and networking solutions for open systems and mainframe server environments. Customers that purchase our hardware systems products may also elect to purchase our hardware systems support offerings. Our hardware systems support offerings provide customers with software updates for the software components that are essential to the functionality of our hardware systems and storage products and can include product repairs, maintenance services, and technical support services.

The consulting line of business primarily provides services to customers in business strategy and analysis, business process simplification, solutions integration and the implementation, enhancement and upgrade of our database, middleware and applications software. On Demand includes Oracle On Demand and Advanced Customer Services. Oracle On Demand provides multi-featured software and hardware management and maintenance services for customers that are delivered at our data center facilities, select partner data centers or customer facilities. Advanced Customer Services consists of solution lifecycle management services, industry-specific solution support centers, hardware systems expert services, packaged offerings that support the installation and optimization of our hardware products and remote and on-site expert services. The education line of business provides instructor-led, media-based and internet-based training in the use of our software and hardware products.

We do not track our assets by operating segments. Consequently, it is not practical to show assets by operating segments results. The following table presents a summary of our businesses' and operating segments' results:

(in millions)	Year Ended May 31,		
	2010	2009	2008
New software licenses:			
Revenues ⁽¹⁾	\$ 7,525	\$ 7,112	\$ 7,501
Sales and distribution expenses	3,980	4,006	4,040
Margin ⁽²⁾	\$ 3,545	\$ 3,106	\$ 3,461
Software license updates and product support:			
Revenues ⁽¹⁾	\$ 13,175	\$ 11,997	\$ 10,507
Software license update and product support expenses	958	1,012	933
Margin ⁽²⁾	\$ 12,217	\$ 10,985	\$ 9,574
Total software business:			
Revenues ⁽¹⁾	\$ 20,700	\$ 19,109	\$ 18,008
Expenses ⁽²⁾	4,938	5,018	4,973
Margin ⁽²⁾	\$ 15,762	\$ 14,091	\$ 13,035
Hardware systems products:			
Revenues	\$ 1,493	\$ —	\$ —
Hardware systems products expenses	850	—	—
Sales and distribution expenses	307	—	—
Margin ⁽²⁾	\$ 336	\$ —	\$ —
Hardware systems support:			
Revenues ⁽¹⁾	\$ 912	\$ —	\$ —
Hardware systems support expenses	408	—	—
Margin ⁽²⁾	\$ 504	\$ —	\$ —
Total hardware systems business:			
Revenues ⁽¹⁾	\$ 2,405	\$ —	\$ —
Expenses ⁽²⁾	1,565	—	—
Margin ⁽²⁾	\$ 840	\$ —	\$ —

Consulting: Revenues ⁽¹⁾	\$ 2,705	\$ 3,221	\$ 3,454
Services expenses ⁽²⁾	2,319	2,686	2,914
Margin	\$ 386	\$ 535	\$ 540
On Demand: Revenues ⁽¹⁾	\$ 887	\$ 780	\$ 695
Services expenses ⁽²⁾	679	566	569
Margin	\$ 208	\$ 214	\$ 126
Education: Revenues ⁽¹⁾	\$ 337	\$ 385	\$ 452
Services expenses ⁽²⁾	247	282	314
Margin	\$ 90	\$ 103	\$ 138
Total services business: Revenues ⁽¹⁾	\$ 3,929	\$ 4,386	\$ 4,601
Services expenses ⁽²⁾	3,245	3,534	3,797
Margin	\$ 684	\$ 852	\$ 804
Totals: Revenues ⁽¹⁾	\$ 27,034	\$ 23,495	\$ 22,609
Expenses ⁽²⁾	9,748	8,552	8,770
Margin	\$ 17,286	\$ 14,943	\$ 13,839

(1) Operating segment revenues differ from the external reporting classifications due to certain software license products that are classified as service revenues for management reporting purposes. Software license updates and product support revenues for management reporting included \$86 million, \$243 million and \$179 million of revenues that we did not recognize in the accompanying consolidated statements of operations in fiscal 2010, 2009 and 2008, respectively. In addition, we did not recognize hardware systems support revenues related to hardware systems support contracts that would have otherwise been recorded by Sun as an independent entity, in the amount of \$128 million in fiscal 2010. See Note 10 for an explanation of these adjustments and the following table for a reconciliation of operating segment revenues to total revenues.

(2) The margins reported reflect only the direct controllable costs of each line of business and do not include allocations of product development, information technology, marketing and partner programs, and corporate and general and administrative expenses incurred in support of the lines of business. Additionally, the margins do not reflect the amortization of intangible assets, acquisition related and other expenses, restructuring costs, or stock-based compensation.

The following table reconciles operating segment revenues to total revenues as well as operating segment margin to income before provision for income taxes:

(in millions)	Year Ended May 31,		
	2010	2009	2008
Total revenues for reportable segments	\$ 27,034	\$ 23,495	\$ 22,609
Software license updates and product support revenues ⁽¹⁾	(86)	(243)	(179)
Hardware systems support revenues ⁽¹⁾	(128)	—	—
Total revenues	\$ 26,820	\$ 23,252	\$ 22,430
Total margin for reportable segments	\$ 17,286	\$ 14,943	\$ 13,839
Software license updates and product support revenues ⁽¹⁾	(86)	(243)	(179)
Hardware systems support revenues ⁽¹⁾	(128)	—	—
Hardware systems products expenses ⁽²⁾	(29)	—	—
Product development and information technology expenses	(3,479)	(2,984)	(3,012)
Marketing and partner program expenses	(503)	(439)	(460)
Corporate and general and administrative expenses	(755)	(634)	(677)
Amortization of intangible assets	(1,973)	(1,713)	(1,212)
Acquisition related and other	(154)	(117)	(124)
Restructuring	(622)	(117)	(41)
Stock-based compensation	(421)	(340)	(257)
Interest expense	(754)	(630)	(394)
Non-operating income (expense), net	(139)	108	351
Income before provision for income taxes	\$ 8,243	\$ 7,834	\$ 7,834

(1) Software license updates and product support revenues for management reporting include \$86 million, \$243 million and \$179 million of revenues that we did not recognize in the accompanying condensed consolidated statements of operations for fiscal 2010, 2009 and 2008, respectively. In addition, we did not recognize hardware systems support revenues related to hardware systems support contracts that would have otherwise been recorded by Sun as an independent entity, in the amount of \$128 million for fiscal 2010. See Note 10 for an explanation of these adjustments and this table for a reconciliation of operating segment revenues to total revenues.

(2) Represents the effects of fair value adjustments to our inventories acquired from Sun that were sold to customers in the periods presented. Business combination accounting rules require us to account for inventories assumed from our acquisitions at their fair values. The amount included in hardware systems products expenses above is intended to adjust these expenses to the hardware systems products expenses that would have been otherwise recorded by Sun as a standalone entity upon the sale of these inventories. If we assume inventories in future acquisitions, we will be required to assess their fair values, which may result in fair value adjustments to those inventories.

Geographic Information

Disclosed in the table below is geographic information for each country that comprised greater than three percent of our total revenues for fiscal 2010, 2009 or 2008.

(in millions)	As of and for the Year Ended May 31,					
	2010		2009		2008	
	Revenues	Long Lived Assets ⁽¹⁾	Revenues	Long Lived Assets ⁽¹⁾	Revenues	Long Lived Assets ⁽¹⁾
United States	\$ 11,472	\$ 2,141	\$ 10,190	\$ 1,466	\$ 9,650	\$ 1,465
United Kingdom	1,685	136	1,587	89	1,655	110
Japan	1,349	505	1,189	485	1,068	207
Germany	1,112	20	956	5	983	9
France	965	24	856	8	858	21
Canada	888	10	737	13	737	15
Other countries	9,349	660	7,737	462	7,479	532
Total	\$ 26,820	\$ 3,496	\$ 23,252	\$ 2,528	\$ 22,430	\$ 2,359

(1) Long-lived assets exclude goodwill, intangible assets, equity investments and deferred taxes, which are not allocated to specific geographic locations as it is impracticable to do so.

EARNINGS PER SHARE

EARNINGS PER SHARE (USD \$)	12 Months Ended 05/31/2010
--------------------------------	-------------------------------

EARNINGS PER SHARE

17. EARNINGS PER SHARE

Basic earnings per share is computed by dividing net income for the period by the weighted average number of common shares outstanding during the period. Diluted earnings per share is computed by dividing net income for the period by the weighted average number of common shares outstanding during the period, plus the dilutive effect of outstanding stock options and restricted stock-based awards and shares issuable under the employee stock purchase plan using the treasury stock method. The following table sets forth the computation of basic and diluted earnings per share:

(in millions, except per share data)	Year Ended May 31,		
	2010	2009	2008
Net income	\$ 6,135	\$ 5,593	\$ 5,521
Weighted average common shares outstanding	5,014	5,070	5,133
Dilutive effect of employee stock plans	59	60	96
Diluted weighted average common shares outstanding	5,073	5,130	5,229
Basic earnings per share	\$ 1.22	\$ 1.10	\$ 1.08
Diluted earnings per share	\$ 1.21	\$ 1.09	\$ 1.06
Shares subject to anti-dilutive stock options and restricted stock-based awards excluded from calculation ⁽¹⁾	141	173	98

⁽¹⁾ These weighted shares relate to anti-dilutive stock options and restricted stock-based awards as calculated using the treasury stock method (described above) and could be dilutive in the future. See Note 14 for information regarding the exercise prices of our outstanding, unexercised options.

LEGAL PROCEEDINGS

LEGAL PROCEEDINGS
(USD)

12 Month Ended
05/31/2010

LEGAL PROCEEDINGS

18. LEGAL PROCEEDINGS

Securities Class Action

Stockholder class actions were filed in the United States District Court for the Northern District of California against us and our Chief Executive Officer on and after March 9, 2001. Between March 2002 and March 2003, the court dismissed plaintiffs' consolidated complaint, first amended complaint and a revised second amended complaint. The last dismissal was with prejudice. On September 1, 2004, the United States Court of Appeals for the Ninth Circuit reversed the dismissal order and remanded the case for further proceedings. The revised second amended complaint named our Chief Executive Officer, our then Chief Financial Officer (who currently is Chairman of our Board of Directors) and a former Executive Vice President as defendants. This complaint was brought on behalf of purchasers of our stock during the period from December 14, 2000 through March 1, 2001. Plaintiffs alleged that the defendants made false and misleading statements about our actual and expected financial performance and the performance of certain of our applications products, while certain individual defendants were selling Oracle stock in violation of federal securities laws. Plaintiffs further alleged that certain individual defendants sold Oracle stock while in possession of material non-public information. Plaintiffs also allege that the defendants engaged in accounting violations. On July 26, 2007, defendants filed a motion for summary judgment, and plaintiffs filed a motion for partial summary judgment against all defendants and a motion for summary judgment against our Chief Executive Officer. On August 7, 2007, plaintiffs filed amended versions of these motions. On October 5, 2007, plaintiffs filed a motion seeking a default judgment against defendants or various other sanctions because of defendants' alleged destruction of evidence. A hearing on all these motions was held on December 20, 2007. On April 7, 2008, the case was reassigned to a new judge. On June 27, 2008, the court ordered supplemental briefing on plaintiffs' sanctions motion. On September 2, 2008, the court issued an order denying plaintiffs' motion for partial summary judgment against all defendants. The order also denied in part and granted in part plaintiffs' motion for sanctions. The court denied plaintiffs' request that judgment be entered in plaintiffs' favor due to the alleged destruction of evidence, and the court found that no sanctions were appropriate for several categories of evidence. The court found that sanctions in the form of adverse inferences were appropriate for two categories of evidence: e-mails from our Chief Executive Officer's account, and materials that had been created in connection with a book regarding our Chief Executive Officer. The court then denied defendants' motion for summary judgment and plaintiffs' motion for summary judgment against our Chief Executive Officer and directed the parties to revise and re-file these motions to clearly specify the precise contours of the adverse inferences that should be drawn, and to take these inferences into account with regard to the propriety of summary judgment. The court also directed the parties to address certain legal issues in the briefing. On October 13, 2008, the parties participated in a court-ordered mediation, which did not result in a settlement. On October 20, 2008, defendants filed a motion for summary judgment, and plaintiffs filed a motion for summary judgment against our Chief Executive Officer. The parties also filed several motions challenging the admissibility of the testimony of various expert witnesses. Opposition briefs were filed on November 17, 2008, and reply briefs were filed on December 12, 2008. A hearing on all these motions was held on February 13, 2009.

On June 16, 2009, the court issued an order granting defendants' motion for summary judgment and denying plaintiffs' motion for summary judgment against our Chief Executive Officer, and it entered a judgment dismissing the entire case with prejudice. On July 14, 2009, plaintiffs filed a notice of appeal. Plaintiffs filed their opening appellate brief on November 30, 2009. Defendants filed their opposition brief on February 4, 2010, and plaintiffs filed their reply on March 15, 2010. The court has scheduled oral argument on this appeal for July 13, 2010. Plaintiffs seek unspecified damages plus interest, attorneys' fees and costs, and equitable and injunctive relief. We believe that we have meritorious defenses against this action, and we will continue to vigorously defend it.

EpicRealm/Parallel Networks Intellectual Property Litigation

On June 30, 2006, we filed a declaratory judgment action against EpicRealm Licensing, LP ("EpicRealm") in the United States District Court, District of Delaware, seeking a judicial declaration of noninfringement and invalidity of U.S. Patent Nos. 5,894,554 (the '554 Patent) and 6,415,335B1 (the '335 Patent). We filed the lawsuit following the resolution of an indemnification claim by one of our customers related to EpicRealm's assertion of the '554 Patent and '335 Patent against the customer in a patent infringement case in the United States District Court for the Eastern District of Texas.

On April 13, 2007, EpicRealm filed an Answer and Counterclaim in which it: (1) denies our noninfringement and invalidity allegations; (2) alleges that we have willfully infringed, and are willfully infringing, the '554 Patent and '335 Patent; and (3) requests a permanent injunction, an award of unspecified money damages, interest, attorneys' fees, and costs. On May 7, 2007, we filed an Answer to EpicRealm's infringement counterclaim, denying EpicRealm's infringement allegations and asserting affirmative defenses. In August 2007, the patents-in-suit were sold to Parallel Networks, LLC, which thereafter substituted in as the defendant in place of EpicRealm.

The parties have completed discovery and filed briefing on claim construction and summary judgment motions. A Markman hearing and oral argument on summary judgment motions were held October 3, 2008. A court-ordered mediation was held on October 8, 2008, which did not result in a settlement. On December 4, 2008, the court issued an order granting summary judgment that our Web Cache, Internet Application Server, and RAC Database do not infringe the patents. The court also denied our motion for summary judgment that the patents are invalid, and denied in part and granted in part Parallel Networks's motion for summary judgment that certain prior art references do not invalidate the patents through anticipation. Trial was scheduled to begin on January 12, 2009, on issues of invalidity and inequitable conduct. On December 23, 2008, the parties reached an agreement allowing Parallel Networks to immediately appeal the court's summary judgment order and preserving Oracle's invalidity and inequitable conduct claims in the event that the matter is remanded for trial at a later time. On January 23, 2009, Parallel Networks filed a notice of appeal. A court-ordered mediation was held on June 1, 2009, which did not result in a settlement. The appellate court heard oral argument on December 10, 2009 after full briefing. On April 28, 2010, the Federal Circuit issued a decision vacating the district court's grant of summary judgment of noninfringement in Oracle's favor and remanding the case to the district court for further proceedings. On May 28, 2010, Oracle filed a Petition for Rehearing with the Federal Circuit which was denied on June 11, 2010. We believe that we have meritorious defenses against this action, and we will continue to vigorously defend it.

SAP Intellectual Property Litigation

On March 22, 2007, Oracle Corporation, Oracle USA, Inc. and Oracle International Corporation (collectively, Oracle) filed a complaint in the United States District Court for the Northern District of California against SAP AG, its wholly owned subsidiary, SAP America, Inc., and its wholly owned subsidiary, TomorrowNow, Inc., (collectively, the SAP Defendants) alleging violations of the Federal Computer Fraud and Abuse Act and the California Computer Data Access and Fraud Act, civil conspiracy, trespass, conversion, violation of the California Unfair Business Practices Act, and intentional and negligent interference with prospective economic advantage. Oracle alleged that SAP unlawfully accessed Oracle's Customer Connection support website and improperly took and used Oracle's intellectual property, including software code and knowledge management solutions. The complaint seeks unspecified damages and preliminary and permanent injunctive relief. On June 1, 2007, Oracle filed its First Amended Complaint,

adding claims for infringement of the federal Copyright Act and breach of contract, and dropping the conversion and separately pled conspiracy claims. On July 2, 2007 the SAP Defendants' filed their Answer and Affirmative Defenses, acknowledging that TomorrowNow had made some "inappropriate downloads" and otherwise denying the claims alleged in the First Amended Complaint. The parties are engaged in discovery and continue to negotiate a Preservation Order. At case management conferences held on February 12, 2008 and April 24, 2008, Oracle advised the Court that Oracle intended to file a Second Amended Complaint, based on new facts learned during the course of discovery.

On July 28, 2008, Oracle filed a Second Amended Complaint, which added additional allegations based on facts learned during discovery. Among the new allegations contained in the Second Amended Complaint, Oracle alleges that TomorrowNow's business model relied on illegal copies of Oracle's underlying software applications and that TomorrowNow used these copies as generic software environments that TomorrowNow then used to create fixes and updates, to service customers and to train employees. The Second Amended Complaint also alleges that these practices may have extended to other Oracle products, including Siebel products. On October 8, 2008, Oracle filed a Third Amended Complaint pursuant to stipulation. The Third Amended Complaint made some changes relating to the Oracle plaintiff entities (removing Oracle Corporation and adding Oracle Systems Corporation, Oracle EMEA Ltd., and J.D. Edwards Europe Ltd.) but did not change the substantive allegations. On October 15, 2008, the SAP Defendants filed a motion to dismiss portions of the Third Amended Complaint, and after full briefing, the court heard oral argument on November 26, 2008. On December 15, 2008, the court issued an order granting in part and denying in part the motion. The court dismissed with prejudice the claims asserted by plaintiffs JD Edwards Europe Ltd. and Oracle Systems Corporation, and denied the motion in all other respects. The parties are in the process of concluding discovery.

On July 15, 2009, Oracle filed a motion for leave to file a Fourth Amended Complaint to add claims for infringement of Oracle's Siebel software and database programs. The Court granted Oracle's motion and Oracle filed its Fourth Amended Complaint on August 18, 2009. The SAP Defendants filed an Answer to Oracle's Fourth Amended Complaint on August 26, 2009.

On August 26, 2009, the SAP Defendants filed an early motion for summary judgment directed to Oracle's damages theory. After full briefing, the motion was heard on October 28, 2009. By order dated January 28, 2010, SAP's motion for partial summary judgment was denied.

On March 3, 2010, the SAP Defendants and Oracle each filed motions for partial summary judgment. Opposition briefs were filed on March 31, 2010, and reply briefs were filed April 14, 2010. The Court heard oral argument on the motions for partial summary judgment on May 5, 2010, but has not yet ruled on the motions.

Trial is scheduled to begin on November 1, 2010.

Other Litigation

We are party to various other legal proceedings and claims, either asserted or unasserted, which arise in the ordinary course of business, including proceedings and claims that relate to acquisitions we have completed or to companies we have acquired or are attempting to acquire. While the outcome of these matters cannot be predicted with certainty, we do not believe that the outcome of any of these claims or any of the above mentioned legal matters will have a materially adverse effect on our consolidated financial position, results of operations or cash flows.

VALUATION AND QUALIFYING ACCOUNTS

VALUATION AND QUALIFYING ACCOUNTS
(USD \$)

12 Months Ended
05/31/2010

VALUATION AND QUALIFYING ACCOUNTS

SCHEDULE II

ORACLE CORPORATION

VALUATION AND QUALIFYING ACCOUNTS

(in millions) Beginning Balance Additions Charged to Operations or Other Accounts Write-offs Translation Adjustments and Other Ending Balance

	Beginning Balance	Additions Charged to Operations or Other Accounts	Write-offs	Translation Adjustments and Other	Ending Balance
Trade Receivable Allowances					
Year Ended:					
May 31, 2008	\$ 306	164	(182)	15	\$ 303
May 31, 2009	\$ 303	118	(128)	(23)	\$ 270
May 31, 2010	\$ 270	143	(92)	(16)	\$ 305

Document Information

Document Information (1-31-10)	10-K Monthly Period (05-31-2010)
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Document Type 10-K

Document Period End Date	2010-05-31
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Amendment Flag false

Entity Information

Entity Information (USD \$)	12 Month Ended 05-31-2010	06-30-2010	01-30-2009
Entity Registrant Name	Oracle Corporation		
Entity Central Index Key	0001341439		
Current Fiscal Year End Date	--05-31		
Entity Well-known Seasoned Issuer	Yes		
Entity Voluntary Filers	No		
Entity Current Reporting Status	Yes		
Entity Filer Category	Large Accelerated Filer		
Entity Public Float			\$ 85,417,000,000
Entity Common Stock, Shares Outstanding	5,026,247,000		
Document Fiscal Year Focus	2,010		
Document Fiscal Period Focus	FY		

Exhibit L

FILED UNDER SEAL

Exhibit M

FILED UNDER SEAL

Exhibit N

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News Press Release

Microsoft Reaches Agreement to Settle Contract Dispute With Sun Microsystems

Microsoft Corp. today an agreement with Sun Microsystems to settle both the October 1997 lawsuit filed by Sun and the Microsoft counter suit in the dispute over the Java technology license agreement between the two companies.

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REDMOND, Wash., Jan. 23, 2001 — Microsoft Corp. today announced an agreement with Sun Microsystems to settle both the October 1997 lawsuit filed by Sun and the Microsoft counter suit in the dispute over the Java technology license agreement between the two companies.

"Microsoft is very pleased with the successful conclusion of this litigation," said Tom Burt, deputy general counsel for litigation at Microsoft. "This settlement will not impact our customers or current products in any way and will allow us to focus our time and resources on what we do best: developing great software."

The technology license and distribution agreement was signed by the parties in March 1996 and was due to expire in two months. Under the terms of the settlement, the existing technology license agreement between the two companies is terminated. Microsoft can continue to ship all current products and those in beta containing Sun's technology for a period of seven years and in return agrees to pay Sun \$20 million. Microsoft agreed not to use Sun's Java Compatible trademark, which it has not done since 1998.

The license agreement and the settlement agreement confirm Microsoft's freedom to independently develop technology that competes with Sun's technology.

"This settlement is great news for the industry and Microsoft as it means we can focus all our resources to help enable the next generation of software with Web Services," said Sanjay Parthasarathy, vice president of the Platform Strategy Group at Microsoft. "The Microsoft .NET platform is the best way to build, deliver and aggregate Web Services, and Microsoft is committed to helping software developers build Web Services with whatever programming language is most appropriate for their particular needs."

About Microsoft

Founded in 1975, Microsoft (Nasdaq "MSFT") is the worldwide leader in software, services and Internet technologies for personal and business computing. The company offers a wide range of products and services designed to empower people through great software -- any time, any place and on any device.

#####

Microsoft is a registered trademark of Microsoft Corp. in the United States and/or other countries.

The names of actual companies and products mentioned herein may be the trademarks of their respective owners.

For more information, press only:

Jim Cullinan, Microsoft Corp., (425) 703-5913, jcull@microsoft.com

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Rapid Response Team
Waggener Edstrom Worldwide
(503) 443-7070

Related Items

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Exhibit O

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Settlement Agreement and Mutual Limited Release

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WHEREAS , Sun Microsystems, Inc. ("Sun") filed suit against Microsoft Corporation ("Microsoft") on October 7, 1997 in the United States District Court for the Northern District of California, Case Number C97-20884 RMW (PVT) (the "Action");

WHEREAS , Microsoft timely answered Suns complaint and filed counterclaims against Sun in the Action;

NOW THEREFORE , the parties agree as follows:

1. Definitions .

2. 1. As used herein, "Sun" means Sun Microsystems, Inc. and all of its Subsidiaries.
2. As used herein, "Microsoft" means Microsoft Corporation and all of its Subsidiaries.
3. As used herein, "Subsidiary" means a corporation, partnership, limited liability company, unincorporated association, or other entity (i) greater than 50% of whose combined voting power of the total issued and outstanding voting stock (representing the right to vote for the election of directors or other management authority) is, now or hereafter, owned or controlled, directly or indirectly, by a party hereto (a "Parent"), and is actually controlled or managed by such Parent, or (ii) which does not have outstanding shares or securities, as may be the case in a partnership or limited liability company, but greater than 50% of whose ownership as equity interest is, now or hereafter, owned or controlled, directly or indirectly, by a Parent and is actually managed or controlled by such Parent.
4. As used herein, "Intellectual Property Rights" shall mean all intellectual property rights worldwide arising under statutory or common law, and whether or not perfected, including, without limitation, all (i) patents and patent applications owned or licensable by Sun or Microsoft; (ii) rights associated with works of authorship including copyrights, copyright applications, copyright registrations, mask work rights, mask work applications, mask work registrations; (iii) rights relating to the protection of trade secrets and confidential information; (iv) any right analogous to those set forth in this paragraph and any other proprietary rights relating to intangible property (other than trademark, trade dress, or service mark rights); and (v) divisions, continuations, renewals, reissues and extensions of the foregoing (as and to the extent applicable) now existing, hereafter filed, issued or acquired.
5. As used herein, a "Critical Customer Defect" is any software flaw in a licensed binary implementation that is independently reported by a third party customer and that causes data loss, data corruption, frequent software crashes, or significant errors, such that it substantially interferes with such customers ability to use a licensed JDK 1.1.4-level binary implementation to perform or achieve the functionality specified therefor in Microsofts Reference Documentation.
6. As used herein, a "Security Hole" is any software flaw, irrespective of whether it is independently reported by a third party customer, that causes a licensed JDK 1.1.4-level binary implementation to fail to conform to the security features specified therefor in Microsofts Reference Documentation.
7. As used herein, "Microsofts Reference Documentation" shall mean the Microsoft Developer Tools Interoperability Kit Version 1.1 attached hereto as Exhibit A, and the Microsoft April 2000 MSDN developer library documentation for Microsofts JDK 1.1.4-level binary implementation contained on the compact discs referenced in Exhibit B.

Press Resources

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3. **Acknowledgment of Termination** . Sun notified Microsoft that Sun was terminating the TLDA. Microsoft replied that Suns termination was wrongful and without legal foundation. To settle the pending litigation, Microsoft agrees that the TLDA is terminated but the parties agree that Microsofts consent is not an admission of any breach of the TLDA by Microsoft, any wrongdoing by Microsoft or the existence of any liability of Microsoft to Sun.
4. **Termination of Surviving Licenses and Obligations** . The parties further agree that:
 5.
 1. Such TLDA obligations and rights as survive termination of the TLDA by Sun, including (without limitation) any and all perpetual licenses granted therein by either party, are hereby terminated and extinguished, except for such surviving rights and obligations as either party may have to the other pursuant to article 7 and section 8.1 of the TLDA, and
 2. Suns termination of the TLDA does not terminate, revoke or impair in any way licenses granted during the term of the TLDA by Microsoft to third parties that are consistent with the terms of the TLDA or this Settlement Agreement to use or distribute Microsoft products licensed under the TLDA, and all such third party licenses of Microsoft shall continue in full force and effect pursuant to the valid provisions of such licenses.
6. **Permanent Injunction** . Microsoft hereby consents and agrees to the entry by the Court of a permanent injunction in the form attached hereto as Exhibit C.
7. **Payment** . Microsoft shall pay to Sun, by January 25, 2001, the sum of Twenty Million Dollars (\$20,000,000).
8. **Limited Licenses** . As limited herein, Sun grants to Microsoft:
 9.
 1. A limited license under Suns Intellectual Property Rights, during the period ending January 2, 2008, to continue to distribute without modification in currently shipping commercial products, all as listed on Exhibit D attached, the JDK 1.1.4-level binary implementations identified in Exhibit E attached, but only insofar as such binary implementations do not alter or add in any way to the functionality and features of the JDK 1.1.4-level binary implementation that was present in the Windows 2000 First Commercial Release ("Windows 2000 FCR 1.1.4 binary implementation"), as modified in accordance with the Delta List attached hereto as Exhibit F (which exhibit is designated as confidential by Microsoft pursuant to paragraph 3(a) above);
 2. Subject to and conditioned on Microsofts compliance with all of the provisions of paragraph 7(c), a limited license under Suns Intellectual Property Rights, during the period ending January 2, 2004, to use Suns JDK 1.1.4-level source code, for Microsofts internal use only, for the sole purpose of making such limited modifications to the JDK 1.1.4-level binary implementations licensed herein under paragraphs 6(a), 6(b) or 6(c) as are necessary to correct only Critical Customer Defects or Security Holes, and only insofar as such modified implementations satisfy the limitations set forth in paragraph 7 below;
 3. Subject to and conditioned on Microsofts compliance with all of the provisions of paragraph 7(c), a limited license under Suns Intellectual Property Rights, during the period ending January 2, 2004, to incorporate the JDK 1.1.4-level binary implementations licensed under paragraphs 6(a) or 6(b) above in successor versions of the products identified in Exhibit D, as said exhibit may be amended pursuant to paragraph 8, but only insofar as such modified implementations and products satisfy the limitations set forth in paragraph 7 below;
 4. Subject to and conditioned on Microsofts compliance with all of the provisions of paragraph 7(c), a limited license under Suns Intellectual Property Rights, during the period ending January 2, 2008, to distribute the products identified in paragraph 6(c) above, but only insofar as such products satisfy the limitations set forth in paragraph 7 below;
 5. A limited license under Suns Intellectual Property Rights, during the period ending January 2, 2008, to grant, with respect to Microsofts currently shipping VJ+ +6.0 or SDK for JAVA, a sublicense in the form attached as Exhibit G to redistribute the files listed in Exhibit G, but only insofar as such products satisfy the limitations set forth in paragraph 7 below;
 6. A limited license under Suns Intellectual Property Rights, during the period ending January 2, 2008, to distribute in Microsofts currently shipping standalone VJ+ +6.0 and SDK for JAVA products only such portion of the JDK 1.1.4-level source code as is

currently shipping in such products, but only insofar as such products and source code satisfy the limitations set forth in paragraph 7 below:

7. A limited license under Suns Intellectual Property Rights, during the period ending January 2, 2004, for Microsofts internal use only, to use Suns JCK 1.1.4 compatibility test suite for the sole purpose of confirming that products and binary implementations licensed under this paragraph 6 satisfy the limitations of paragraph 7 below;
8. A limited license under Suns Intellectual Property Rights, during the period ending January 2, 2004, to continue to distribute without modification Microsofts currently existing inventory of products listed on Exhibit H that contain pre-JDK 1.1-level binary implementations, provided that:
 9. 1. such products are not manufactured by Microsoft after March 31, 2001, and
 2. the license to modify granted in paragraphs 6(b) and (c) above shall not apply to such products;
10. A limited license under Suns Intellectual Property Rights, during the period ending January 2, 2004, to continue to distribute without modification such currently existing Microsoft products as are listed on Exhibit D that currently contain a JDK 1.1.1-, 1.1.2- or 1.1.3-level binary implementation, provided that:
 11. 1. the license to modify granted in paragraphs 6(b) and (c) above shall not apply to such products or binary implementations, and
 2. if a product containing a JDK 1.1.1-, 1.1.2- or 1.1.3-level binary implementation is modified in any respect, Microsoft will replace the JDK 1.1.1-, 1.1.2- or 1.1.3-level binary implementation in such product with a JDK 1.1.4-level binary implementation licensed under paragraphs 6(a) or 6(b) herein prior to any commercial distribution of such modified product.
10. License Limitations . The basic intent of the licenses granted in paragraph 6 above is to permit Microsoft to continue to distribute its current products "as is." The limited license granted in paragraph 6(b) above to modify the JDK 1.1.4level binary implementations listed on Exhibit D is intended by Sun and Microsoft to allow Microsoft to correct Critical Customer Defects or Security Holes only.
11. 1. The licenses granted in paragraph 6 above expressly exclude any right or license, and nothing in this Agreement or in the definitions of "Critical Customer Defect" or "Security Hole" shall be construed to grant Microsoft any right or license, under Suns Intellectual Property Rights to develop or distribute any product that otherwise would be licensed under paragraph 6 above that:
 2. 1. Adds to any binary implementation licensed under paragraph 6 new or different functionality to that specified in Microsofts Reference Documentation;
 2. Adds to any binary implementation licensed under paragraph 6 new or different semantics to those specified in Microsofts Reference Documentation;
 3. Enhances the performance of any binary implementation licensed under paragraph 6 relative to the performance of the pre-existing Windows 2000 FCR 1.1.4 binary implementation (as modified in accordance with the Delta List attached as Exhibit F), except such enhancement as is incidental to and not the purpose for a correction of a Critical Customer Defect or Security Hole;
 4. Alters the number, names or formats of the binary files comprising any binary implementation licensed under paragraph 6 relative to the number, names or formats of the binary files comprising the pre-existing Windows 2000 FCR 1.1.4 binary implementation (as modified in accordance with the Delta List attached as Exhibit F);
 5. Alters the manner in which any binary implementation licensed under paragraph 6 is integrated with any other technology relative to the manner in which the pre-existing Windows 2000 FCR 1.1.4 binary implementation (as modified in accordance with the Delta List attached as Exhibit F) is integrated with any other technology;
 6. Integrates, into any other technology, any element or piece of any binary implementation that is licensed under paragraph 6 and which uses Suns

Intellectual Property Rights;

7. Use the JAVA class libraries licensed under paragraph 6 in conjunction with:
 8.
 1. Any virtual machine or compiler other than those licensed under paragraph 6 above; or
 2. Any Microsoft .NET runtime, including any .NET common language runtime;
 9. Alters or adds to the meaning or semantics of the content passed through any of the Microsoft compiler directives (for example @dll, @com, and @security) beyond that specified in Microsofts Reference Documentation;
 10. Alters or adds to the meaning or semantics of Microsofts "delegate" or "multicast" keywords beyond that specified in Microsofts Reference Documentation;
 11. Implements any change or modification to the JAVA language as specified in Suns published specification of the JDK 1.1.4-level version of the JAVA language beyond those specified in Microsofts Reference Documentation; or
 12. Alters or adds to the methods or means by which the Windows 2000 FCR 1.1.4 binary implementation (as modified in accordance with the Delta List attached as Exhibit F) effects calls between JAVA language code running in a JDK 1.1.4-level binary implementation and code running elsewhere ("bridging"). Examples of currently existing bridging include (1) Suns "ActiveX Bridge for JAVABeans" and (2) Microsofts "COM to JAVA" bridge. An example of unauthorized bridging would be connecting JAVA language code running in a JDK 1.1.4 binary implementation to the .Net framework.
3. The limited licenses granted in paragraphs 6(b) through (g) above are restricted to only such products and such binary implementations as pass Suns JCK 1.1.4 compatibility test suite prior to any commercial distribution by Microsoft, except that Sun hereby agrees to exempt Microsofts @dll, @com, and @security compiler directives, and its "delegate" and "multicast" keywords, from compliance with the Compiler Output Requirement of the JCK 1.1.4 test suite provided that any product implementing these extensions conforms to and does not alter or add in any way to Microsofts published specification for such compiler directives and keywords as contained in Microsofts Reference Documentation. Sun further agrees that the products and implementations licensed under paragraphs 6(b) through (g) shall be exempt from any test in Suns 1.1.4 compatibility test suite listed on Exhibit I or that Sun hereafter designates, at any time during the term of the licenses granted herein, as an excluded test. For purposes of testing any JDK 1.1.4-level binary implementation pursuant to this paragraph 7(b), Microsoft will include the JAVA packages identified in Exhibit K.
 4. Microsoft shall document each modification made to any licensed binary implementation pursuant to paragraph 6(b) above and notify Sun in writing thereof as follows:
 1. Prior to any commercial distribution of any JDK 1.1.4-level binary implementation that has been modified or altered to correct a Critical Customer Defect or Security Hole, Microsoft shall first:
 1. Create a detailed written English language description of the Critical Customer Defect or Security Hole to be corrected, the change in programming made to effect such correction, and all known and intended effects of such correction; and
 2. Have a senior Microsoft engineer review the written description and source code of the modification(s) made to correct each Critical Customer Defect or Security Hole and certify in writing that all such modification(s) comply with this Agreement and the limitations and obligations it contains.
 3. At least quarterly within thirty (30) days following the end of each calendar quarter, Microsoft shall provide to Sun the written description and written certification for each modification made to correct a Critical Customer Defect or Security Hole during the quarter.

Microsoft shall make reasonable efforts to answer any reasonable questions or

4. concerns Sun may communicate in writing to Microsoft concerning any modification made by Microsoft within thirty (30) days of its receipt of such communication from Sun.
5. Unless Sun notifies Microsoft within sixty (60) days of receipt of any quarterly description and certification provided by Microsoft in accordance with this paragraph 7(c) that a change documented and certified by Microsoft is unacceptable to Sun, each such change as is documented and certified by Microsoft shall be deemed to be accepted by Sun as compliant with this Settlement Agreement.
12. **Exhibit D** . Microsoft shall prepare and deliver Exhibit D to Sun within forty-five (45) days hereof, identifying each product listed by its product name and version number. If, prior to March 31, 2001, Microsoft learns that it inadvertently omitted from Exhibit D any product that was shipping as of the date of this Settlement Agreement, Exhibit D shall be amended to include the name and version of such product. If, subsequent to March 31, 2001, Microsoft wishes to add any additional product version that was shipping as of the date of this Settlement Agreement, but was inadvertently omitted from Exhibit D, it may do so by paying to Sun the sum of One Hundred Thousand Dollars (\$100,000.00) per product version added.
13. **Exhibit F** . Microsoft represents that it has made a thorough and diligent investigation and based thereon, to the best of Microsofts knowledge and belief, Exhibit F contains a complete, accurate summary of each change made in each JDK 1.1.4-level binary implementation included on Exhibit E that alters or adds in any way to the functionality or features in the Windows 2000 FCR 1.1.4 binary implementation, or that otherwise fails to meet any limitation of paragraph 7 relative to said Windows 2000 FCR 1.1.4 binary implementation. If, prior to March 31, 2001, Microsoft learns that it omitted from Exhibit F any change required to be disclosed therein, it shall promptly provide to Sun a written description of each such change and pay to Sun the sum of Twenty Thousand Dollars (\$20,000) for each such previously undisclosed change. Unless Sun notifies Microsoft within sixty (60) days of receipt of any correction provided hereunder that any previously undisclosed change described in such corrected documentation is unacceptable to Sun, such change shall be deemed accepted by Sun as an amendment to Exhibit F as of the date of this Settlement Agreement.
14. **Exhibit H** . Microsoft shall prepare and deliver Exhibit H to Sun, within forty-five (45) days hereof, identifying each product listed by its product name, version number, and the build number of the pre-1.1.4 binary implementation it contains.
15. **Exhibit J** . Microsoft represents that Exhibit J contains a complete and accurate report of the compatibility testing performed on the binary implementations identified therein using Suns JCK test suite and exclude list attached as Exhibit I.
16. **Failure To Provide Documentation** . If, subsequent to its provision of a quarterly report to Sun pursuant to paragraph 7(c), Microsoft becomes aware that such quarterly report fails accurately or completely to describe in accordance with paragraph 7(c) any programming change made by Microsoft, Microsoft shall, within thirty (30) days of its awareness thereof, notify Sun of such error or failure, provide Sun with corrected, complete documentation for each previously undocumented change (including any certification required under this Settlement Agreement) and pay to Sun the sum of Twenty Thousand Dollars (\$20,000) for each programming change made pursuant to paragraph 6(b) that was previously undocumented by Microsoft in violation of paragraph 7(c). If Microsoft corrects an error or omission in a quarterly report provided to Sun pursuant to paragraph 7(c) in its report for the next subsequent quarter, such correction, together with the payment required herein, shall cure any such failure of Microsoft to comply with the documentation requirements of paragraph 7(c). If Microsoft fails to correct an error or omission in a quarterly report provided pursuant to paragraph 7(c) in its report for the next subsequent quarter, any subsequent correction made by Microsoft, together with the payment required herein, shall cure only such omissions or errors of Microsoft to comply with the documentation requirements of paragraph 7(c) as were inadvertent. Unless Sun notifies Microsoft within sixty (60) days of receipt of any correction provided hereunder that a programming change described and certified by Microsoft in such corrected documentation is unacceptable to Sun, such change shall be deemed accepted by Sun as compliant with the restrictions of paragraphs 6 and 7 of this Settlement Agreement effective as of the date of this Settlement Agreement.
17. **Notice and Cure** . In the event that Sun becomes aware that Microsoft has, during the term of this Agreement, used in any binary implementation or product licensed under paragraph 6 any Intellectual Property Rights of Sun in the JDK 1.1.4-level technology beyond the scope of the licenses granted herein, Sun may provide written notice thereof to Microsoft, whereupon Microsoft shall have thirty (30) days from the date of such notice of default to notify Sun in

writing whether Microsoft will promptly cure such default and if so, the actions it will take to effect such cure. If, within thirty (30) days of any notice of default from Sun, Microsoft notifies Sun in writing that it will promptly cure such default, it shall have sixty (60) days thereafter in which to effect a cure.

18. **Termination** . If Microsoft fails to commit within thirty (30) days of a written notice of default from Sun that Microsoft will cure its use of Sun's Intellectual Property Rights in the JDK-1.1.4 level technology beyond the scope of the licenses granted herein, or if Microsoft fails to cure such default within ninety (90) days of such notice from Sun, Sun shall, effective as of the date of notice of default from Sun, have the right to terminate the licenses granted to Microsoft in paragraphs 6(b), (c), (d) and (g) above with respect to all products and binary implementations modified by Microsoft subsequent to the date of termination by Sun. In the event of such termination by Sun:
19. 1. The licenses granted under paragraphs 6(a), (e), (f), (h) and (i) will continue in full force and effect in accordance with their terms, notwithstanding any such termination by Sun;
2. The license granted under paragraph 6(d) shall survive until December 15, 2007, but limited only to such products as were commercially distributed by Microsoft in accordance with the limitations of paragraphs 6(d) and 7 prior to the date of notice of default from Sun; and
3. The licenses granted under paragraphs 6(b) and (c) shall terminate as of the date of Sun's notice of default.
20. **Independent Development** . Each party reserves whatever right it may have to develop or distribute technology that does not infringe the Intellectual Property Rights of the other party. The foregoing sentence notwithstanding, the licenses granted herein to make or distribute the binary implementations referenced in paragraph 6 above shall be subject to the limitations and conditions set forth in paragraphs 6 and 7.
21. **No Implied License** . Nothing in this Settlement Agreement grants any right or license to or under the Intellectual Property Rights of Sun, except as expressly provided in paragraph 6 above, and no other right or license shall be implied or inferred from any provision of this Settlement Agreement or from any conduct of the parties.
22. **Mutual Limited Release of Claims** .
23. 1. **Released Claims And Counterclaims** . Subject to Sun's reservation of antitrust claims in paragraph 17(b) below and Microsoft's reservation of antitrust counterclaims in paragraph 17(c) below, Sun and Microsoft hereby release only such claims and counterclaims as each party has against the other based upon the acts or omissions of either party prior to the date of this Agreement that were the subject of this Action. Microsoft specifically releases any claim or counterclaim it may have against Sun for damages or other injury arising out of the entry of any injunctive relief against Microsoft in connection with this Action. Sun and Microsoft further agree that the claims and counterclaims asserted in this Action shall be dismissed with prejudice, and hereby consent to entry of judgment by the Court in substantially the form attached hereto as Exhibit C.
2. **Sun's Unreleased Antitrust Claims** . Paragraph 17(a) above notwithstanding, Sun reserves and does not release or dismiss any claims arising under antitrust laws it may have against Microsoft, including such claims as may be based in whole or in part on some or all of the facts underlying any of the claims released and dismissed in paragraph 17(a) above.
3. **Microsoft's Unreleased Antitrust Counterclaims** . Paragraph 17(a) above notwithstanding, Microsoft reserves and does not release or dismiss any counterclaim arising under antitrust laws it may have against Sun in response to and based on any claim made against Microsoft by Sun pursuant to paragraph 17(b) above, including such counterclaims as may be based in whole or in part on some or all of the facts underlying any of the claims released and dismissed in paragraph 17(a) above.
4. **Unreleased Defenses** . Neither party releases or dismisses any defense to any Unreleased Antitrust Claim or Unreleased Antitrust Counterclaim, other than the defense that this Settlement Agreement or Exhibit C bars or precludes the assertion of such Unreleased Antitrust Claim or Unreleased Antitrust Counterclaim.

Dissolution . Except as provided in Exhibit C, Sun and Microsoft hereby request the

5. Court to dissolve all injunctions previously entered by the Court.

24. *Ownership Rights* . Nothing in this Agreement is intended to expand or diminish the ownership or intellectual property rights of either party in the licensed binary implementations or licensed products.

25. *Notices* . All notices must be in writing and delivered either in person or by certified mail or registered mail, postage prepaid, return receipt requested, to the person(s) and addresses specified below. Such notice will be effective upon receipt.

Sun	Microsoft
Sun Microsystems, Inc. 901 San Antonio Road Palo Alto, California 94306 Attn: Vice President, JAVA Software	Microsoft Corporation One Microsoft Way Redmond, Washington 98052 Attn: Vice President, Internet Platform & Tools Div.
with a copy to:	with a copy to:
Sun Microsystems, Inc. 901 San Antonio Road MS PAL01-501 Palo Alto, CA 94306 Attn: General Counsel	Microsoft Corporation One Microsoft Way Redmond, Washington 98052 Attn: Law & Corp. Affairs

1. *Integration* . This document sets forth the complete, final and exclusive statement of the parties agreement and may not be modified or altered in any respect except by a written instrument signed by a duly authorized representative of each party hereto.

This Agreement is executed and shall be effective this 22nd day of January 2001.

SUN MICROSYSTEMS, INC.MICROSOFT CORPORATION

By: Patricia Sueltz By: Sanjay Parthasarathy
 Executive Vice President, Vice President,
 Software Systems Group Platform Strategy Group

Exhibit List

ExhibitDescription

A	Microsoft Developer Tools Interoperability Kit Version 1.1 (done)	1(g)
B	MSDN April 2000 Developer Library CDs (done)	1(g)
C	Permanent Injunction (done)	4
D	Licensed Product List (due 45 days after signing)	6(a)
E	Licensed Binary Implementation List (Microsoft to supply)	6(a)
F	Delta List (done)	6(a)
G	VJ++ 6.0 Sublicense and Redistributable List (Microsoft to supply)	6(e)

H List of Pre-JDK 1.1 Licensed Products (due 45 days after signing) 6(h)

I	JCK 1.1.4 Exclude List (Sun to supply)	7(b)
J	Microsoft JCK Test Results (Microsoft to supply)	11
K	Additional JAVA Packages for JCK Testing (Microsoft to supply)	7(b)

UNITED STATES DISTRICT COURT NORTHERN DISTRICT OF CALIFORNIA

SUN MICROSYSTEMS, INC ., No. C 97-20884 RMW (PVT)
a Delaware corporation,

Order For Entry Of Judgment

Plaintiff,

v.

MICROSOFT CORPORATION ,

a Washington corporation,

Defendant.

The parties having executed the attached Settlement Agreement, dated December 19, 2000, in which they mutually consent to judgment as set forth below, and the Court having reviewed and approved said Agreement, it is hereby adjudged and ordered as follows:

1. Microsoft, its officers, agents, servants, employees, attorneys, and those in active concert or participation with them who receive actual notice of this order by personal service or otherwise, are permanently enjoined from using or displaying, directly or indirectly, on or in connection with the advertising, distribution, sale, or promotion of any Microsoft product, Suns "JAVA COMPATIBLE® " trademark or any other mark, logo, or identification that imitates or simulates said "JAVA COMPATIBLE® " trademark in a manner that is likely to deceive or cause confusion or mistake.
2. Except as set forth above, all injunctions previously entered herein are hereby vacated, and the security posted by Sun with respect to all injunctions, including the March 24, 1998 preliminary injunction for trademark infringement, shall be withdrawn and returned to Sun by the Clerk of the Court.
3. Except as set forth above, judgment shall enter herein dismissing with prejudice and without costs the claims released by the parties in the attached Settlement Agreement.

IT IS SO ORDERED.

DATED: January ____, 2001

RONALD M. WHYTE
United States District Court Judge

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Exhibit P

FILED UNDER SEAL

Exhibit Q

FILED UNDER SEAL

Exhibit R

FILED UNDER SEAL

Exhibit S

[« Back to Android.com](#)

Check out the timeline to learn what's happened with Android so far and what's coming up in the future.

Open Handset Alliance announces Android November 5th, 2007

34 mobile and technology leaders come together to form the [Open Handset Alliance](#). They announce Android, the world's first truly open and complete mobile platform. First phones scheduled to ship in second half of 2008.

Early look SDK released November 12th, 2007

Developers get the opportunity to provide feedback and shape the [SDK](#)'s development.



Android Developer Challenge I April 17th, 2008

1,788 submissions received on this date. [20 winners](#) announced on Aug 28th. \$5 million in total awarded to developers for great Android applications.



Android Market announced August 28th, 2008

[Open content distribution system](#) to connect users and developers.



T-Mobile G1 September 23rd, 2008

World's first Android-powered phone [announced](#). Phones available to

consumers starting October 22.

Android 1.0 SDK release 1 available

September 23rd, 2008

Developers have access to first [1.0 compatible SDK](#).



Android Open Source Project

October 21st, 2008

Source code is released.



More to come... stay tuned!

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Exhibit T

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This story appeared on JavaWorld at
<http://www.javaworld.com/javaworld/jw-02-2011/110204-android-market.html>

Developers hail improvements to Android Market

Developers say the addition of a browser-based store and in-app payments will get more users to download applications and encourage development

By Mikael Ricknäs, IDG News Service, 02/04/11

Google's improvements to the [Android Market](#) application store, including the addition of a [browser-based store and in-app payments](#), are being hailed as a big step in the right direction by analysts and developers.

So far, Market has been the most criticized part of the Android ecosystem, according to Ben Wood, director of research at CCS Insight.

[Also on InfoWorld: [Chrome OS vs. Android 3.0: Which platform will prevail?](#) | Learn how to manage iPhones, Androids, BlackBerrys, and other smartphones in InfoWorld's 20-page [Mobile Management Deep Dive PDF](#) special report. | Keep up on key mobile developments and insights with the [Mobile Edge blog](#) and [Mobilize newsletter](#).]

"Developers felt they haven't been able to monetize it in the way they have on Apple's App Store," said Wood.

The browser-based version of Android Market will make it easier to discover new applications, according to Google. Previously the store was only available via a mobile phone client.

Users can also send applications directly to their Android device and share applications with friends through Twitter, Google said.

It is the latest in a line of improvements Google has been making over the last couple of months, including a new Android Market client and longer description texts for applications.

"[Google] finally realized that there was a severe need to improve the Market, and that is good news," said Android developer Konrad Hübner said via e-mail.

His favorite new feature is the ability to select an application, which then can be pushed automatically to a phone. Installing applications that way is "much more comfortable than the iTunes hassle," Hübner said.

He isn't alone in thinking that the over-the-air installation of applications is a step forward. It is much

smoother than downloading apps into iTunes on a desktop and then synching them with an iPhone, according to Fredrik Andersson, founder and business developer at Swedish consultancy Kondensator.

An important part of the marketing of applications is distribution via social networks and the ability install directly after making a first impression, Andersson said via e-mail.

He is looking forward to using in-app payments, which allows developers to make money from selling virtual goods or upgrades within their applications.

The big challenge is to help users to find what they need among the myriad of apps available, according to Andersson. But that goes for Apple and the App Store, as well, he said.

On Wednesday, Google also demonstrated [Android 3.0](#) or Honeycomb, the upcoming version of the OS that has been tailor-made for tablets, expected to help products like Motorola's Xoom and LG's G-Slate compete with Apple's iPad.

The increased competition will encourage the development of all platforms, and consumers will be able to benefit from that. The arrival of Android 3.0-based tablets will also allow Kondensator to develop new services that, for example, take advantage of the larger displays that tablets offer, Andersson said.

A recent survey of apps developers conducted by Appcelerator -- whose Titanium platform can be used to develop cross-platform, native applications -- and IDC showed a growing interest in Android-based tablets. Interest jumped 12 points in three months to 74 percent of respondents saying they are "very interested" in developing for these devices, according to the survey.

The Market improvements come at a key time for Android. On Monday, market research company Canalis said Android had passed Symbian to become the most popular smartphone OS.

"Android has been a phenomenal success, probably beyond the wildest dreams that Google had for it," said Wood.

The success of Android is the result of a wide variety of products, from low-end to high-end smartphones with very different hardware specifications. The next step should be the ability to target particular applications for certain devices, and allow them to take full advantage of dual-core processors and hardware acceleration. That is absolutely critical now, according to Wood.

Send news tips and comments to mikael_ricknas@idg.com.

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Exhibit U

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Google unveils 10 huge improvements in 'FroYo,' Android 2.2

By [Tim Conneally](#) | Published May 20, 2010, 1:05 PM

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At Google I/O this morning, the topic of discussion was mobile; specifically, the Android mobile platform. As of this morning, there are more than 60 consumer devices running on Android, more than 100,000 new activations per day, 50,000 apps in the Android marketplace, and 180,000 registered developers working on apps. Not too shabby.

As the platform continues its rapid growth, Google has announced a number of very significant improvements will be coming to the next version, numbered 2.2 but nicknamed "FroYo," which address key issues Android has dealt with in the past.

1) Improved Speed -- Just as it was rumored, the next version of Android will have a JIT compiler, responsible for a significant (2x-5x) speed boost.

2) Better Enterprise Support -- The platform has lagged behind Windows Mobile and BlackBerry in terms of enterprise functionality, but FroYo will include over 20 new enterprise features. These include better Exchange support, with auto-discovery, improved security, and GAL lookup, and new device admin

APIs.

3) Cloud-to-Device API -- Google services, Chrome extensions, and soon-to-be released Chrome apps will be able to sync with your Android device. If you need directions from Google Maps, it can be sent directly.

4) Tethering -- This was also a rumored feature for a few weeks. The feature will be in the "settings" menu, and clicking "portable wi-fi hotspot."

5) New Browser -- The Javascript interpreter in Chrome will be used in FroYo's native browser, offering a 2x-3x Javascript performance boost. Google's Vic Gundotra said it will be the fastest mobile browser available.

6) Install apps on SD memory -- One of the main problems people had with Android was that you could not install apps on your removable memory card, you were limited to the device's physical memory, which in some cases was quite limited. In FroYo, apps can be moved to, and launched from, the phone's SD card.

Featured Stories



Apple and Nokia settle patent dispute, but who wins?

Today, Nokia announced that it had resolved all patent claims with Apple, which will pay on-going royalties to the Finnish phone maker. Apple also will make a one-time payment to Nokia. Terms of the agreement were not disclosed.



"Restart to Safari" mode turns Mac into overpriced web terminal

The latest beta of OS X 10.7 "Lion" has a feature to boot into Safari and only the browser. It's not useless, but it's not a good use of a Mac.



How much does it cost to migrate a government agency to the cloud?

This week, NOAA announced it is migrating to the cloud, and outlined how much it will cost taxpayers.



Is it child abuse to give my kid a Chromebook?

Larry Seltzer says: My nine year-old daughter already uses Gmail on a Google Apps account. I'm thinking of teaching her writing this summer. The next logical question: Should she get a Chromebook?

White Papers



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Almost 700 businesses in North America and Europe were independently surveyed to understand wheth...



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7) Flash 10.1 and AIR support -- This one is not a surprise, as Adobe and Google have both said this would be coming.

8) Web-based Android Market -- Without a doubt one of the weakest aspects of consuming apps on the Android Platform was that you were limited to only seeing what was shown on your mobile device's screen, which in most cases is not very appealing.

9) App auto-updating -- When an app you downloaded gets updated, you would get a notification that there was an update available in the Market. You'd have to navigate to the market and click OK three or four times per update just to get it installed. In FroYo, there will be an "Update All" icon, and the ability to check "allow automatic updating" when you download a new app. Apps can be purchased on the Web-based store and synced down to your Android device.

10) Music Sync -- Even though it's got a decent media player, Android devices have never had the music power that iPhone has with its built-in iPod functionality. With FroYo, however, users will be able to sync their local music collection with their Android device and stream wirelessly.

Like Confirm 144 143 Tweet 40 Comments

Comments

View comments by with a score of at least

bthis
May 22, 2010 - 10:35 PM

Is Google really releasing this major update with out addressing Android's major Bluetooth Voice Dialing failure? That's beyond irresponsible, way past-anti-customer. Two year old ROKRs have this basic functionality and Google can't step up with a fix after all this time!? Shame on Google.

Score: 0

Post Reply

bthis
May 22, 2010 - 10:40 PM

WRONG, BTHIS! According to the Android Developer's site feature list (<http://developer.android...ights.html#UserFeatures>):

New Platform Technologies
Media framework

- * New media framework (Stagefright) that supports local file playback and HTTP progressive streaming
- * Continued support for OpenCore in Android 2.2

Bluetooth

- * Voice dialing over Bluetooth
- * Ability to share contacts with other phones
- * Support for Bluetooth enabled car and desk docks
- * Improved compatibility matrix with car kits and headsets

Yee-hah!

Score: 0

Post Reply

preinterpost
May 24, 2010 - 11:19 AM

Hmm... Who besides UPS and cab drivers or 'underprivileged minorities' trying to show off that they can afford a cell phone cares about bluetooth head sets?

Score: -3

Post Reply

dracodos
May 21, 2010 - 10:58 AM

Below viewing hreshold. [Show](#)
"Maybe you should do the same, eh dracodos?"

i'm sorry, were you talking to me?

Score: -4

Post Reply

Niro
No sorry I meant bopb99...

Score: -3

Latest News

If you're a juror, don't 'friend' the defendant
From the Department of Incredible Stupidity: A juror in a drug trial in the UK will stand trial herself this week for sending messages to a defendant through Facebook, causing the trial itself to collapse.

10" touchscreen monitor + 4" Linux PC = MimoPlug
Mimo Monitors, the company best recognized for its USB-powered touchscreen mini-monitors released an equally miniature Plug computer on Monday called MimoPlug.

HP executive shakeup prioritizes China, India, and the cloud
Market-leading IT company Hewlett-Packard (HP) announced Monday that it will be reorganizing its corporate structure to fit with the strategy shift it announced last March. Moving forward, HP is prioritizing three businesses -- hybrid cloud solutions, connected devices, and Management/Security/Analytics software -- and this executive shift is a reflection of that.

Facebook plans early 2012 IPO, say sources
Facebook is reportedly set to go public in early 2012, becoming the latest company to cash in on what seems to be a renewed frenzy surrounding technology stocks.

Microsoft builds mini Twitter analytics app for Excel 2010 and PowerPivot
Microsoft has released a tool called Microsoft Analytics for Twitter that lets users build their own mini Twitter analytics engine with a the Excel 2010 add-in PowerPivot.

Nvidia closes deal with Icera, acquires baseband tech for Tegra 2
Another major move in the mobile processor space took place on Monday as Nvidia announced it had completed its acquisition of Icera, a wireless modem company dealing specializing in baseband technology for smartphones and tablets.

Mozilla Nightly Tester Tools: When you don't mind getting cut on the bleeding edge
Firefox and Thunderbird are now moving along fast development cycles, and there are lots of geeks willing to test early, unstable builds. Mozilla has a toolset for the earliest, riskiest adopters.

May 21, 2010 - 11:13 AM



[Post Reply](#)

bopb99

May 21, 2010 - 9:42 AM
edited

The OpenGL ES API improvements in this release are a bigger thing for me than 1 - 5.

Score: 0



[Post Reply](#)

nightops

May 21, 2010 - 8:26 AM

Hmmm...glad my 2 year with ATT is up this year...freedom of choice without ETF is nice. I'll be looking forward to seeing how this stacks up against the upcoming iPhone with OS 4.0.

Score: -1



[Post Reply](#)

Adrian79

May 21, 2010 - 12:36 PM

you honestly think this has a chance to run smoother, look better, etc. than the upcoming iPhone? I'm sure you will be extending your contract for 2 more years lol just like me come late June :P

Score: 0



[Post Reply](#)

jackamus

May 20, 2010 - 8:51 PM

OMG... An actual article on software.. I am shocked....

Score: 0



[Post Reply](#)

ghammer

May 20, 2010 - 4:48 PM

If only someone would launch 4G in Indy...

Score: -3



[Post Reply](#)

dreadlox

May 20, 2010 - 4:07 PM

Hehe - it's fun to notice all the Apple-fanboys clicking frenetically on all the thumbs-down-icons on these fantastic news on Android :) Not a single comment here has a positive score LOL!

Score: 14



[Post Reply](#)

HydrantHunter

May 20, 2010 - 5:03 PM

No kidding! I can't help but wonder if some Android-fanboys aren't also pitching in, though. Seems like any opinion that suggests room for improvement gets knocked down at least 2 points.

Score: 7



I gave your comment a +1, but someone else apparently needed to feel good about themselves and already voted your comment back to 0 while I typed this. Too funny.

[Post Reply](#)

Niro

Below viewing threshold. [Show](#)

Score: -17

jfplopes

May 20, 2010 - 3:45 PM

Yes the above features are cool but frankly most important to me is how they merged the Android platform with traditional HTML content. Stuff like using google translate to translate live tv in real time.
Or embedding voice search into a web page. Sending any content from a web page to an android device. That's what I think is a step up from what the competition has today.

Score: 2



[Post Reply](#)

lonechicken

May 20, 2010 - 3:30 PM

Hopefully the music player itself is better. On my Droid, I get dropouts whenever I receive a text or any notification. Even when I turn off sounds for notifications. Crossfading control between songs would be nice too.

Score: -1



[Post Reply](#)

Niro

Weird, my wife's Droid doesn't get any

Score: 2

May 20, 2010 - 4:01 PM dropouts...but the default music player sure is ugly.  | 

[Post Reply](#)

Adrian79
May 21, 2010 - 12:37 PM stop lying the droid is way better than iphone :P **Score: -2**
 | 

[Post Reply](#)

Adrian79
May 21, 2010 - 12:41 PM stop lying droid music player is nicer than iphone :P **Score: -2**
 | 

I'm just helping out the droid fanboys spread the love

[Post Reply](#)

HydrantHunter
May 20, 2010 - 2:59 PM **Score: -1**
 | 

The JIT compiler, Apps2SD, auto-updating, and faster browser definitely have my attention. Still no improvements to bluetooth, though? I was hoping they'd finally focus on the 'phone' part instead of the 'gadget' part. It would be more than nice to have true hands-free voice dialing via bluetooth and the ability to hear custom ring tones through bluetooth instead of a generic tone that does nothing to identify who's calling. As a 'phone' my old RAZR v3 beats the pants off both my Android 'phones'. Bummer :(

[Post Reply](#)

samiup
May 20, 2010 - 2:03 PM cool news, cant wait to test drive it :) **Score: 1**
 | 

[Post Reply](#)

PC_Tool Below viewing hreshold. [Show](#) **Score: -5**

Niro
May 20, 2010 - 1:41 PM You mean you think they'll reserve the more effecient JIT compiler only for the faster processors that need it the least? Yea that makes sense... **Score: -3**
 | 

[Post Reply](#)

PC_Tool Below viewing threshold. [Show](#) **Score: -10**

Niro
May 20, 2010 - 2:24 PM *edited* LOL wow...offended easily? Must be that time of month.... **Score: -3**
 | 

"I wouldn't be the least bit surprised to find the update only available on the 1Ghz android devices"...

Considering one of the MAJOR improvements of this update is speed increase due to JIT, makes this update that much more valuable to slower processors...which would make me very surprised to find the update only available on the 1Ghz+ android devices.

Seriously PC...maybe rest is in order for you? You seem sensitive...

OH sorry I made an assumption about the amount of sleep you get and you didn't mention sleep in your post! Don't get too mad again please!!

[Post Reply](#)

dracodos
May 20, 2010 - 3:01 PM PC_Tool: i know what you mean..They want users to have a "reason" to upgrade their devices to something a bit newer. Not pushing an OS update that has some "wanted" features to older devices would give users a reason to buy a new handset **Score: 0**
 | 

(thus signing a new contract).

I have heard though that adobe is saying that the minimum requirements for flash 10.1 to run well on an android device is 600mhz. The Eris is 528mhz, can't recall what the Droid CPU speed is though.. A tool like SetCPU would make that point moot, but i would like to see a benchmark comparison between a 528mhz CPU (Eris) and a device that runs at 600mhz or higher.

Post Reply

bopb99

May 20, 2010 - 3:05 PM

Then why are the older Android versions very abundant on some phones that according to your logic shouldn't be, care to answer Niro? You, Niro, should look at how markets evolve with this kind of stuff. Search about the 2TB bootable drive limit. It's a more pressing issue but do the companies get stuff sorted out? No they don't!!
AAAAAAAAAAAAAAAAARRRRRRRRRRRRRRRRRRRRRRGGGGGGGGGGGGHHHHHH!!!!!!!

Score: -3



Post Reply

PC_Tool

Below viewing threshold. [Show](#)

Score: -6

Niro

May 20, 2010 - 3:58 PM
edited

"Sure...because the wireless carriers have been known to be "so" benevolent.... How's that G1 doing with it's abundant Android updates?"

Score: -3



It seems to be doign well if you feel like upgrading it on your own...

<http://denraf.be/content...-android-21-g1adp1dream>

Anyway from what i understand google is planning on making android upgradeable through the android market place, and MS is going to use the MS Update site for updates to it's WM7 platform.

"But but but...how will carriers force you to buy new phones now?!?!?"

Did my prediction of your next post annoy you? Getting so annoyed by some random guys slightly sarcastic post on some site...Cute, PC.

"You, Niro, should look at how markets evolve with this kind of stuff."

Maybe you should do the same, eh dracodos?

Post Reply

PC_Tool

Below viewing threshold. [Show](#)

Score: -7

Niro

May 20, 2010 - 8:02 PM

"Looks like you really do need a new crystal ball."

Score: -1



Not sure what you mean there, PC...crystal balls are used to predict a future without factual backing...I, however. said they're changing the way updates are rolled out, which is fact, didn't even have to dig in my closet to pull out my crystal ball for that one.

Looks like you really do need to learn how to read actual news...you might find yourself surprised less often.

Post Reply

PC_Tool

May 21, 2010 - 9:23 AM

""Looks like you really do need a new crystal ball."

Score: -3



Not sure what you mean there, PC...crystal balls are used to predict a future without factual

backing"

"But but but...how will carriers force you to buy new phones now?!?!?"

Did my prediction of your next post annoy you?

Huh... clear things up for ya?

Looks like I need to stop reading your comments...I might find myself having to explain basic reading comprehension less often. :)

[Post Reply](#)

bopb99

May 21, 2010 - 9:46 AM

And how is google going to force the carriers then?
Looks like your crystal ball needs some new insights.
It is also revealing you don't know as much about this as you should be confident to talk about.

Score: -2



[Post Reply](#)

Niro

May 21, 2010 - 10:16 AM
edited

Below viewing threshold. [Show](#)

"And how is google going to force the carriers then?"

Score: -4



hm Bob?

Force the carriers to what? submit to their sexual desires?

I'm not making things up, you can go ahead and use the google machine to look it up. Google will use the android store to update their phones, and MS has already said the MS Update site will be used to update their phones...taking it out of carriers hands. I suppose carriers can still micro manage certain things maybe (like tethering?), but OS updates to the phone will be out of their hands...much like the iphone is now...not so hard to understand...I guess for you it's mind boggling though.

"It is also revealing you don't know as much about this as you should be confident to talk about."

Hey PC...can you teach me the reading comprehension skills required to understand this sentence?

Thanks.

[Post Reply](#)

PC_Tool

May 21, 2010 - 11:31 AM

Sorry, Niro... While I know the words themselves are English, well...

Score: -2



Yeah. ;)

[Post Reply](#)

gorgeth

May 21, 2010 - 12:36 PM

The problem is that google has not been "forcing" updates at all on any devices once they are out they are up to the carrier and the device maker .. and in traditional cell phone style, the rollout of android updates has been.. horrible across the board.. IE it doesn't matter what the update does, or how much it improves or doesn't improve the devices.. the carriers would rather you toss your old device in the bin and grab a fancy new one.. rather than updating the old.. (this is not limited to any particular brand or OS on phones.. its merely industry standard behavior)

Score: -2



[Post Reply](#)

gorgeth

May 21, 2010 - 12:56 PM

You are aware that that is not about versioning of the base operating system, merely about them

Score: -2



moving the bulk of the "apps" that are installed by default to the app store, and stripping down the actual "android base" to a much smaller core, so that they could iterate the builtin apps faster and not have to deal with "carrier approval/testing red tape" just to do minor updates to apps that are included.

If you're on 2.2 you will still require a carrier/manufacture update to go to 2.3/3.0 whatever. in addition HTC will still not be updating sense on every minor tweak that is done, nor will motorola be tweaking "motoblur" for every minor update, as such you will still be relying on carrier/manufacture when it comes to "will my XXX from htc/moto ever move off of android 1.5/1.6 or will i be forced into buying Droid 2.0 to get a relatively recent vintage of the OS?"

Reading the articles and info on s*** before you post in fanboy style could have prevented this entire thread from devolving into this mess.

Here's the "details" regarding android changes..

Today android consists of the kernel, the drivers that are manufacturer specific, and the "apps" that are included.. these are basically monolithic releases .. 1.5 is all of the above, 1.6 updates everything, etc.

There is also 2 more layers of stuff on top of this such as HTC's sense and motorola's MotoBlur which are built to a specific snapshot of android and are NOT updated via the app store today or in the future) As well as any carrier specific apps, customizations, whatever they tend to do (be it tmobile adding in a myfaves app, or partner specific apps whatever) these are also generally NOT installable through the app store.

In the future there will be 4 layers rather than 3:

Android Core will be the key to version numbers this will *not* for example include anything that GOOGLE chooses to be an app, but it will include stuff that google wants to hold close.. for example.. the Browser may be an App in our minds, but if google chooses they can keep it in the core OS.. this layer will still require testing/verification/certification by both carriers and manufacturers before release, as well as a flashing procedure to update.. IE not available from the android market today or in the future.

Android Apps layer will be all the stuff google wants to take out of the current releases of "android" and put into the android market so they can be iterated as needed (at present there's not a lot here and it will likely still require the android core layer to be carrier updated before you can update to for example a "new and sexy browser/dialer/contact app")

Motoblur and Sense will still be tied to a core revision of android, and will likely change far slower than either of the above layers (insert other lesser known "total mods" for android in this level, today these updates tend to be infrequent and major changes are only done with new models and rarely backported (as was seen in touchFLO and the other windows mobile skins) these updates are likely to be "flash rom updates" as with the core android OS and released in sync with them.

Carrier branding/partner apps rarely see much

changes, and are generally released in concert with the above core/skin updates since all 3 of these tend to be done at once IE Android goes from 1.6 to 2.1 htc/moto/samsung update their skins, then the carrier branded apps are updated to work with the previous 2 (usually require a rom update/certification/etc

In short of the 4 layers of "android" exactly 1 small portion is being moved to the "market update" model, and even then its unlikely that those updates will survive between major version changes of the underlying core (you wont be able to install ultrasexynew JIT compiler on 1.6 if it requires 2.2 even if they move that to the market.

[Post Reply](#)

dracodos

May 20, 2010 - 1:31 PM

I can only HOPE that Verizon will, at the very least, deploy this update to the Droid Eris, even if it would be the last official update from them. Ther's just too many GOOD changes in this latest version: ie better exchange support, the 2x speed increase, built in apps2sd like feature, and full flash support!

Score: 0



[Post Reply](#)

borisof007

May 20, 2010 - 1:20 PM

Nice! Can't wait for a number of these features, namely the speed increase (JIT), browser speed increase, and auto updating (hitting OK 20 times a day is getting annoying). Not to take away from Flash 10.1, tethering, and installing apps on the SD card :)

Score: 1



[Post Reply](#)

mapexpert

May 28, 2010 - 8:18 AM

I am a web developer and had a 2 month project testing both solutions after reading the outcome of the IMFA regarding European business mapping providers.

Score: 0



I noted that the free Google solution took twice as long to develop, had only basic Geocoding and everything else had to be developed from scratch I.e. criteria search, database management. Still Google business customers both paid (up to £7800) a year and free (if the solution will not be re sold (i.e. vehichle tracking) have no access to the UK postcode data from the royal mail as Google are no licensed (hence the often appalling accuracy) with only 4 digit postcode verification.

In a positive, Google is a pretty basic platform and for the most part is free to use and widely available and recognised.

The API platform from ViaMichelin (used a mixture of javascript skills) was offered to me on a free trial for 45 days and took only a few weeks to complete, Geocoding for address verification was included (so ideal for store finder, reserve and collect, etc and gave me access to live human support (to see what else I could do with their api). They provided me a platform with full Europe coverage and geocoded Ireland which Google could not offer for a price cheaper than the Google enterprise and premier.

Bing fell behind when it came to customer support as it was non existent and the former multimap owned company owned by microsoft took just over the 2 months to get back to me.

Like for like, The new ViaMichelin API solution wins, For a basic solution use Google, for business's looking for real quality use Viamichelin

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Exhibit V

March 9, 2011 by admin



Android 2 has not worked all that well with tablets. One of the main reasons is that the operating system is not optimized for larger screens. Even Google itself has admitted that apps made for Android 2.x doesn't look overly attractive when presented on displays significantly larger than those of a smartphone.

Android 3.0 Honeycomb changes that and Google has made a great effort to get the operating system adapted for tablets. The interface is also completely revised and there are very few similarities compared to earlier versions of Android.

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[7-Inch Honeycomb Tablets from ASUS and](#)
[ViewSonic](#)
[Top 10 Android Tablets 2011](#)




Here are some of the top reasons why Android 3.0 is gearing up to be a worthwhile competitor to Apple's iOS running on the iPad:

1. Improved Widgets

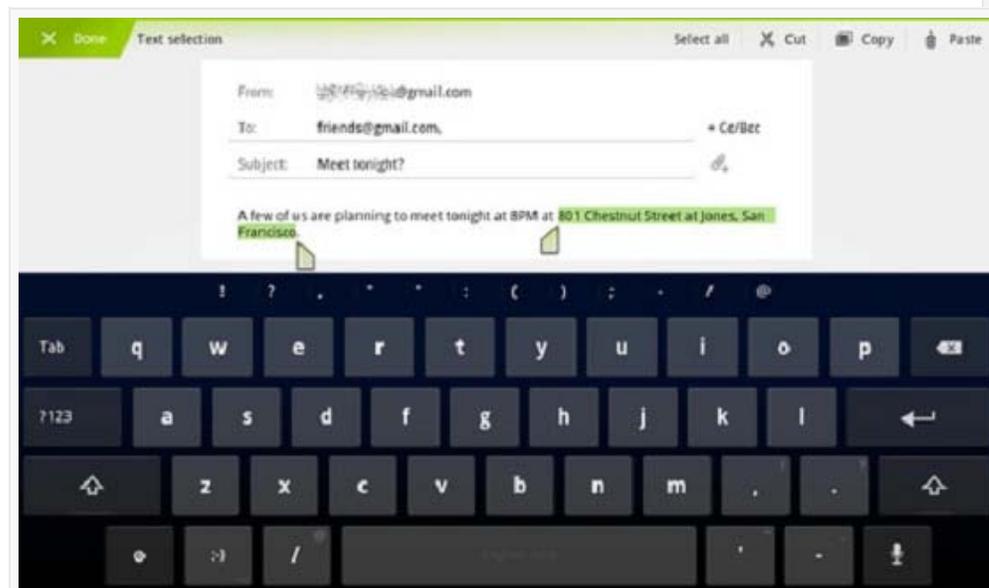
While widgets are certainly not new to Android, the support for them is greatly enhanced in Android 3.0. By having widgets installed on your home screen they offer a quick overview of information that is updated in real time, such as weather and social networking.

2. Better browsing with tabs

Android 3.0 supports tabbed browsing, unlike iOS. This means a more desktop-like practical experience with quick and easy switching between different websites with only one press on the screen. There is also no limit to how many tabs you have open.

3. Better Navigation

Instead of using hardware buttons on earlier versions of the operating system, Android 3.0 uses virtual buttons for navigation. It provides more flexibility and better functionality for the tablet for a variety of uses, including switching to and from landscape mode.



4. Enhanced Keyboard

The Virtual Keyboard in Android 3.0 has received a considerable facelift. The keys have a better design and location compared to Android 2.x. There is also a dedicated button to

quickly creat voice recordings.

5. System Overview

System Messages have also improved significantly in Android 3.0. By clicking on an icon at the bottom of the screen, a box appears with all the system messages. All system icons are clickable, which makes it easy to quickly change settings in the operating system.

No related posts.

Android 3.0

Share the knowledge!



Exhibit W

FILED UNDER SEAL

Exhibit X

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Thread: j2me compatibility between different manufacturers

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Thread 1

j2me compatibility between different manufacturers - 2002-11-14 08:55

rolfsmeds 

Registered User



Join Date: Mar 2003

Posts: 1

Are J2ME applications designed for Nokia phones from other manufacturers?

RE: j2me compatibility between different manufacturers - 2002-11-14 16:03

LongSteve 

Regular Contributor



Join Date: Mar 2003

Location: UK

Posts: 231

In theory yes.

You should be able to write a Java ME application for compatible devices.

The practice however is far from that. In theory, you are going to fall short of the opportunity. You get differences in screen sizes, different bugs in the implementation, different interpretations of the specifications.

That's a very negative picture, I'm so glad to hear the differences, you can program with the tools, produce versions of your program for any platform, just not as simple as Sun would like you to think any platform.

<p>+ Reply to Thread</p>	<p>Cheers, Steve</p>
--------------------------	--------------------------

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Exhibit Y

Russell Beattie
(<http://www.russellbeattie.com/blog>)

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(<http://feeds.russellbeattie.com/russellbeattieweblog>)

Lack of MIDP Quality Control And Standardization Sucks (<http://www.russellbeattie.com/blog/1005717>)

Posted Saturday, January 10, 2004 10:19 am

More on J2ME: Steve at Burning Door reviews the first couple of MIDP 2.0 phones and [doesn't get much joy](http://www.burningdoor.com/steve/archives/000324.html) (<http://www.burningdoor.com/steve/archives/000324.html>). I'm with him. We ran into this very problem below just yesterday at work and it *sucked*: ... the list of known issues in the nokia 6600 MIDP implementation are atrocious. Nokia uses SUN's Monty VM in their implementation so some of these things are perhaps not their fault, but it definitely shows a lack of testing and a rush to market. Understood but not totally forgivable in this market. I don't know if the P900 uses this VM or another VM.

There are other things that definitely are their fault from a lack of testing. A prime example is not implementing the MIDlet.platformRequest() method which is new and has prevented my feed reader from running on this phone. Calling this method with the right parameters is supposed to either make a phone call or launch the default browser. It currently crashes the 6600 - and unless Nokia provides a way for users to update their own firmware, it's going to leave a whole lot of phones that don't really support MIDP2.0. Couldn't they have gotten a programmer to pull an all-nighter and gotten this right? The sun was probably up all night anyway in Finland since this was released in the Summer. Not supporting the platformRequest was a real bummer. But the worst bit is the way the app that uses the call fails: It crashes! Urgh! Try the API call the first time and it doesn't do anything. Click again, and it kills the app "App. closed MontyThread - 6 KERN-EXEC 3!" Are you kidding me?!?! I've run into this type of crappy J2ME implementation before on the Nokia 3650 with the sockets problems I had, but that was using an "unsupported feature." This is a MIDP 2.0 requirement and it *crashes* the app. No errors, no recovery.

I don't get it, I really don't. *None* of the MIDP games I have from my 7650/3650 work properly on the 6600. WHY?? And now we're trying to do development using the new spec which is supposed to help with many of these problems, and the phone dies. That sucks.

And the reality is this same game is played per phone out there. That's insane. It's nuts enough to "write once, debug everywhere" when you're talking about PC platforms, of which there's just a handful. Now we're talking about *hundreds* of Java phones. And this type of behavior is classic - where the app crashes, or just doesn't respond to an API call, rather than gracefully die or error out. So you can't put a few lines of code in your app to test for phone versions or gracefully back out of problems. No, you've to got write and test for each phone (or really series of phones, since the 7650/3650/N-Gage are about the same) and deliver essentially a different app. Yes, there's a ton of code reuse, however there's also massive problems with branching your codebase and keeping track of different updates, bug fixes etc.

Anyways, I probably wouldn't be sooo annoyed if that one feature wasn't so useful (shelling out to a WAP Browser from within your J2ME app), but when they screw up so badly on one of the most useful new features of MIDP 2.0, you just know that the whole J2ME process is just broken.

That PDF of issues from Nokia is an embarrassment to them and to Sun. This is Nokia's *flagship* phone, and its Java support blows chunks. How much more of sign do you need?

-Russ

< Previous (<http://www.russellbeattie.com/blog/1005701>) Next (<http://www.russellbeattie.com/blog/1005739>) >

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Exhibit Z

Odi's astoundingly incomplete notes

[New entries](#) | [Code](#)

J2ME sucks

I have recently changed jobs. Now I find myself writing code for mobile devices - speak cell phones. What I did not know before is:

- [J2ME](#) replaces the JDK and only supports a tiny subset of the 1.4 API.
- Not even all language constructs may be used on a cell phone VM. For instance there is no float or double type if the cell phone has no [FPU](#).
- The emulator of the J2ME tool kit is a piece of crap
- Usability of cell phones sucks a great deal

All this is very frustrating. After years of evolution of the Java platform we are finally back to stone age. I have to emulate floating point maths! I can not use `java.text.*` to parse and format dates even though every silly phone has a built-in organizer! No collections - only this stupid `Vector` class! No reflection! Emulation on a 1.6 GHz machine is slower than on the embedded cell phone hardware! I can not profile my applications in real time but have to use the emulator built-in profiler (which is crap)! The emulator is completely skinnable to look like any bloody phone in the universe but it's usability is that of Word Perfect for DOS from 1988. Oh thou mobile device vendors, please tell me why I would want to write code for a platform that poor.

posted on 2005-07-25 20:37 CEST in [Code](#) | [7 comments](#) | [permalink](#)

mobbies suck anyway...

I guess you're building a smokescreen in pretending to work in stone age. Be honest and admit that your sitting on a bonanza and that your programming adult content. Obviously, a market with \$42800000000.-. However, mobbies still suck.

mad

<http://news.bbc.co.uk/2/hi/technology/4717627.stm>

Logistics software actually... very boring.

Don't be gross. I'd been a logistics engineer for many years. Unfortunately, it's a highly underrated field. However, this makes it the perfect place for re-framing and re-imagine. Everyone can make flashy things with flashy tools. But who can create true beauty out of mud. Odi, this is your chance to become the god of logistics.

mad

"Boring" compared to "adult content" :-)

I almost completely agree... so, now you can imagine what I had to do during the last 2 years. No wonder that the code sucks (of course not only because of that ;-)

if j2me is successfull google would not relase a product named anroid. I love java , but client side java sucks in every platform (applet , j2me , desktop)

javacream.blogspot.com

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Exhibit AA



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- Java.com
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- Oracle Fusion Middleware
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- Enterprise Performance Management
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- For Midsized Companies
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- On Demand
- Support
- Oracle University

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- See All ...

Oracle Customer Successes

Partners

- Knowledge Zones
- Sales Kits
- Oracle Validated Integrations

Spotlight

- Cloud Computing
- Virtualization
- Oracle Fusion Applications
- Oracle Solaris 11



Acquisitions

- Sun
- BEA
- Hyperion
- JD Edwards EnterpriseOne
- PeopleSoft Enterprise
- Primavera
- See All ...

• Downloads

Application Development

Database

Database 11g

Application Development Express Edition

MySQL

Business Intelligence

Instant Client

Cloud Computing Express Edition

See All ...

Communications

Middleware

Database Performance

Availability (incl. WebLogic)

JRockit

Data Warehouse

See All ...

NET

Enterprise Management

Enterprise Manager

Dynamic Performance

Language Application Testing

See All ...

Embedded

Server and Storage Systems

See All ...

Enterprise

Linux and VM

Enterprise Architecture

See All ...

Java ME Tools: The State of the Union, Q2 2009

By Bruce Hopkins, June 2009

This article demonstrates that Java ME developers have a wide array of choices -- in addition to the full-featured Java ME SDK (which replaces the well-known Wireless Toolkit) -- to create and test applications.

Contents

- Sun Java ME SDK 3.0
- NetBeans 6.5 IDE
- MOTODEV Studio for Java ME
- Nokia S60, S40, and NFC SDKs
- BlackBerry JDE 4.7
- Sony Ericsson SDK 2.5 for Java ME
- LG SDK 1.2 for Java ME
- Java ME SDK Comparison Matrix

Conclusion

Let's say that you've come up with an idea for a great Java ME application--in fact, the next killer Java ME application. And let's also say that your new application will use some of the cool new graphical and multimedia features in the JavaFX APIs. If so, then which SDKs that are available today support JavaFX Mobile development? If more than one SDK supports JavaFX, then what's the difference between them, if any?

- Developer Tools
 - SQL Developer
 - JDeveloper and ADF
 - Developer Tools for Visual Studio
 - Enterprise Pack for Eclipse
 - NetBeans IDE
 - See All ...

- Applications
 - E-Business Suite,
 - PeopleSoft, JD Edwards,
 - Siebel CRM
 - Agile
 - Autovue
 - See All ...

- Popular Downloads
 - Java for Developers
 - Java for Your Computer
 - JavaFX
 - Oracle Solaris
 - MySQL
 - Fusion Middleware 11g
 - Database 11g

- Free Open Source Software
- Partner Demo Software

• Store

- Database
 - Oracle Database
 - Oracle Database Media Pack
 - Oracle Database Management Packs
 - MySQL
 - Berkeley DB
 - Oracle Database Lite
 - See All ...

- Infrastructure
 - Oracle Linux
 - Virtualization

- Applications
 - Oracle Crystal Ball
 - Autovue
 - Primavera

Solaris

- Enterprise Management
 - Database Management
 - Applications Management
 - Business Intelligence Management

- Middleware
 - Oracle WebLogic Server
 - Application Server and Application Grid
 - Business Intelligence Technology
 - Development Tools
 - Data Integration
 - See All ...

All Products

Oracle Price Lists

Partners

- License and Sales Agreements
- Ordering Portal (POP)
- Distribute Oracle Products
- Register a Referral
- Pricing and Licensing

Enterprise Management

- Support
 - Now, let's say that your idea incorporates and leverages some of the security features provided by the Security and Trust Services API (SATSA). If so, then which SDKs that are available today allow you to compile your application using those APIs? Additionally, what if you want to create a Java ME game that renders OpenGL ES scene graphs? How can you determine which Java ME SDKs provide support for OpenGL ES development? As you can see from the Oracle Premier Support page, the Java ME platform is huge, robust, and versatile--it allows you to create compelling 3D games, mobile streaming media players, as well as advanced customer service business applications that can connect you back to the enterprise.

Java Unbreakable Linux

- Support
 - Therefore, the purpose of this article is to give you a representative sample of the Java ME tools that are available, and provide a brief run-down of their features and benefits. This article concludes with a Java ME API compatibility matrix, which can serve as a handy reference tool in the months to come.

My Oracle Support

Service Communities

Architectures

Knowledgebase

SQL & Service Requests

Documentation

Server and Storage Administration

Acquired Company Support

Server and Storage Administration

Global Support Contacts

Development Support Tools

Systems Hardware and Architecture

Life Cycle Support Policy

Virtualization Support Policies

Sun Java ME SDK 3.0

The Sun Java ME SDK 3.0 is considered the de facto standard SDK when it comes to mobile application development. The Java ME SDK is the culmination of the very popular Java Wireless Toolkit for CLDC and the Java Toolkit for CDC. Now integrated as a single product, the Java ME SDK allows developers to create Java ME applications for the following JVM platforms:

- CLDC/MIDP: The common JVM configuration for hundreds of millions of mobile phones
- CDC/FP/PBP/AGUI: The JVM configuration for high-end smart phones and other devices
- CDC/FP/PBP/BD-J: The JVM configuration for Blu-ray Disc players

The Java ME SDK is one of the few SDKs available that is device agnostic. (However, it does provide various generic device implementations so you can debug and test your application.) Starting with a device-agnostic SDK is an advantage, since it allows you to develop and debug the application before it is made device specific. To target your application to a specific Java ME implementation, add that specific implementation to the Java ME SDK using the Platform Manager. Figure 1 is a screenshot of the Java ME SDK 3.0 showing the capabilities of the default emulated JavaFX phone.

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- Training

Course Schedule

Product Training

Training Formats

- Classroom
- Live Virtual
- Self-Study CD-ROM
- Self-Paced Online
- User Adoption Services
- See All ...

Learning Paths

Training by Job Role

Certification Program

- Become Certified
- Certification Paths
- Purchase a Voucher
- See All ...

Training Locations

Contact Oracle University

Partners

- Education and Enablement
- Knowledge Zones

- Partners

Explore Specialized Partners

Find an Oracle Partner

- Oracle Validated Integrations

Find a Specialized Partner

Why Partner

- Membership Resources
- Partner Levels
- Specialization Overview

Become a Partner

Knowledge Zones

Do Business With Oracle

Talk to a Partner Expert

Partner-Only Events

Partners (login required)

Education and Enablement

Sales Resources

- Pricing and Licensing
- Sales Kits
- Ordering Portal (POP)

Marketing Resources

- Download Logos
- Manage Solutions Catalog
- Submit Success Story
- Marketing Kits

Manage Membership

Partner News and Events

Partner Support

Partner Developer Tools

- About

Company Information

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- Board of Directors
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- Corporate Governance
- Oracle Insight
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Careers

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Acquisitions

- News and Events
 - Events
 - Newsroom
 - Oracle Magazine
 - Profit Magazine
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- Partners
 - Partner-Only Events
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Figure 1 - Java ME SDK 3.0 Newsletters

The Java ME SDK now includes an IDE, so you can develop and test your applications within the same application environment. Be sure to note that the Java ME SDK does not support the development of JavaFX applications, but it does include support for JavaFX 1.1 phones (one with a touch screen and one without) to allow you to run and test your JavaFX Mobile applications. To create JavaFX Mobile applications, you need to use the NetBeans IDE, which is also available in the SDK. One of the major differences between the EA (early access) release and the production release of the Java ME SDK 3.0 is the process you use to configure the SDK for Blu-ray development. The production version now includes the BD-J libraries in the distribution, so developers can create and compile Blu-ray applications as part of the IDE. Previously, you had to go through a manual process to add the BD-J libraries (commonly referred to as "BD-J" or "BD-J libraries") to the Java ME SDK. This of course means that now there are no barriers to entry for any Java developer to get started in Blu-ray application development.

One of the most useful features in the Java ME SDK 3.0 is the ability to perform on-device debugging for your applications. To use this feature of the SDK, you need a Windows Mobile 6 device. As you can imagine, the debugger VM gives you the ability to step through your application while it's running on a real device, which can be extremely useful when you're trying to debug an issue that won't show up in an emulator, but will show up when deployed on a real device.

NetBeans 6.5 IDE

If you need to work on the visual aspect of your mobile application, the NetBeans 6.5 IDE provides you with several viable options. First of all, if you're creating a JavaFX Mobile application, NetBeans is the premier SDK that will allow you to author, edit, compile, and test JavaFX applications. As you might already know, the basic tenet of JavaFX is to give developers the ability to create not only desktop applications, but web-based and mobile applications as well, using the same API framework. Figure 2 depicts how easy it is to change the properties of your JavaFX project to test it in a web, desktop, or mobile context.

- SOA
- Virtualization
- See All ...
- Sample Code
- Oracle Mix
- TechCast Live
- Oracle Magazine

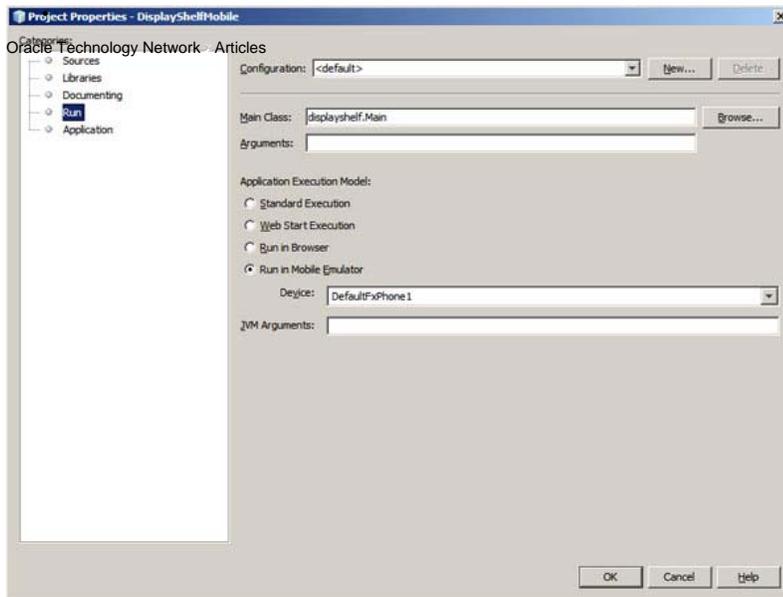


Figure 2 - NetBeans 6.5 IDE Allows JavaFX Developers to Run Their Applications in Multiple Contexts

The NetBeans 6.5 IDE also includes the Mobility Visual Designer. The Mobility Visual Designer is a WYSIWYG (what you see is what you get) tool that gives developers the ability to drag-and-drop in order to create the flow and screens of their mobile application. The following is a list of displayable items that are included in the `org.netbeans.microedition` package, which comes included in the Mobility Visual Designer:

- Alert
- File Browser
- Form
- List
- Login Screen
- PIM Browser
- SMS Composer
- Splash Screen
- Text Box
- Wait Screen

The Mobility Visual Designer also has extensive support for SVG graphics, which allows you to easily create mobile applications that can render vector graphics or play SVG animations. Figure 3 is a screenshot of the Mobility Visual Designer in the NetBeans 6.5 IDE.

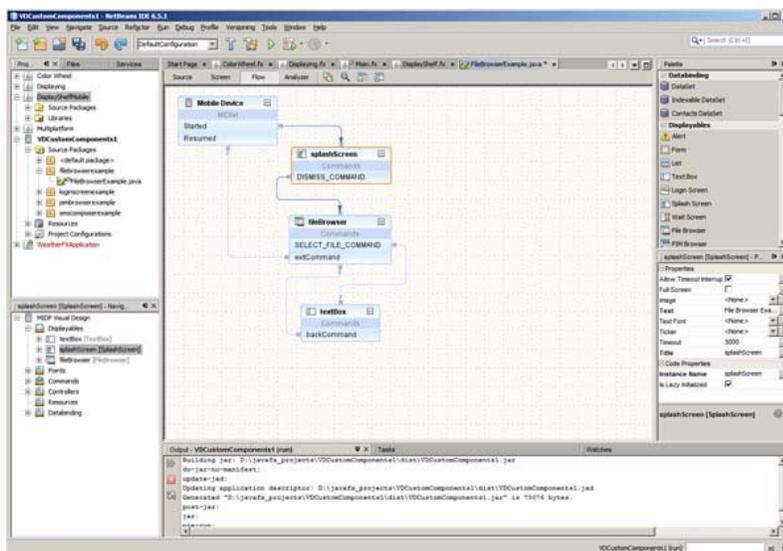


Figure 3 - NetBeans 6.5 IDE Visual Mobility Designer

MOTODEV Studio for Java ME

The MOTODEV Studio for Java ME is a Java ME SDK that gives developers several new and exciting features to author, edit, and test mobile applications. As you would expect, the MOTODEV Studio includes some features that are specific for Motorola Java ME devices, but it also includes some external services that are useful when testing any Java ME application, for instance:

- Bluetooth Service
- Landmark Storage
- Location Service
- Remote Control (Bluetooth)

- SIM Configuration
- SIP Proxy
- WMA Server

The external services provided by the MOTODEV Studio for Java ME allow you to simulate realistic external events without necessitating the deployment of your application to a real mobile device. For instance, the Bluetooth Service incorporates the Rocco Bluetooth simulator, which allows you to create simulated Bluetooth devices within the environment of the MOTODEV Studio. Figure 4 is a screenshot of the Bluetooth Service in action.

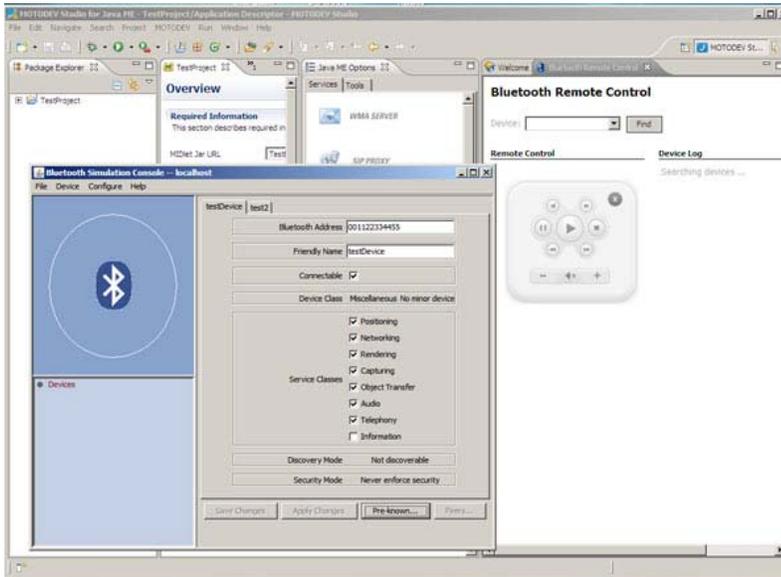


Figure 4 - Bluetooth Simulator Service in the MOTODEV Studio for Java ME

Now if you're targeting your application for any specific Motorola handset or mobile device, the MOTODEV Studio provides some very useful features, such as complete device profiles for all handsets as well as a device capability matrix to indicate which capabilities each device supports. (IDEN devices are not supported.) The MOTODEV Studio also allows you to perform on-device debugging to real Motorola handsets if you have a supported handset and a USB cable.

Nokia S60, S40, and NFC SDKs

For Java ME developers, Nokia provides three SDKs to enable the development of the next-generation mobile and wireless applications. The S60 SDK includes tools such as an SVG to SVG-Tiny converter, which is very useful if you plan to use the JSR 226 API in your mobile application to display vector graphics. Just like some of the tools mentioned previously, the S60 SDK provides a framework for on-device debugging, but the S60 SDK provides an additional capability that the others don't provide: redirected `System.out` and `System.err` statements. For traditional Java SE or Java EE applications, you get the luxury of looking at your `System.out` and `System.err` statements to get an idea of what's going on in your application without having to use a debugger. Therefore, having the ability to view your `System.out` and `System.err` statements from a mobile handset is a very useful feature. The S40 SDK includes the Nokia Connectivity Framework, which is a handy tool that allows you to simulate both Bluetooth and SMS messages sent to your emulated application.

If you're looking to get started with wireless smart card development, you're going to get excited about tools provided in the S40 Nokia 6212 NFC SDK. The S40 Nokia 6212 NFC SDK not only supports the JSR 257 API, but also allows you to simulate the presence and absence of virtual smart cards. The SDK also supports OMNIKEY and PEGODA smart card readers that are connected to your desktop computer. This enables you to quickly prototype your application and test it with real NFC smart cards. Figure 5 is a screenshot of the S40 Nokia 6212 NFC SDK.

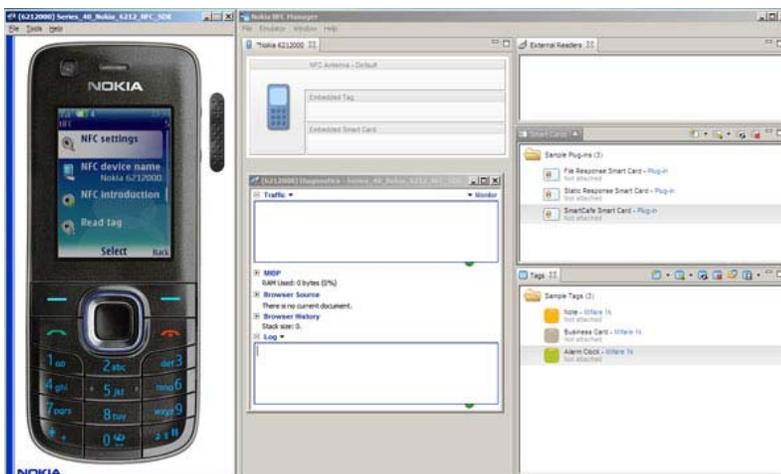


Figure 5 - S40 Nokia 6212 NFC SDK

BlackBerry JDE 4.7

The BlackBerry JDE 4.7 provides a comprehensive environment to develop and test mobile applications that run on BlackBerry handsets. To aid developers with their individual projects, the BlackBerry JDE 4.7 includes more than 50 example projects that use and leverage the implemented Java ME JSR APIs and the additional BlackBerry APIs. The additional BlackBerry APIs are a powerful feature-set that allow the developer to perform a host of tasks, such as manipulating the built-in web browser, data compression, controlling the video recorder, and advanced data encryption. The JDE 4.7 comes bundled with a simulator for the BlackBerry 9500/9530 devices, which was one of the first Java-enabled devices to incorporate touch input, so the included simulator is capable of reacting to the following events:

- The presence of a USB connection
- The presence of a headset
- The presence of a holster
- Touch input from the user
- Changes in orientation (tilting the device)
- Battery levels
- The insertion or removal of an SD card
- Incoming voice calls
- Changes in GPS location
- Usage of the camera

Figure 6 shows a screenshot of the BlackBerry JDE 4.7.



Figure 6 - BlackBerry JDE 4.7

Sony Ericsson SDK 2.5 for Java ME

If you want to focus on full-featured JSR implementations, you should take the time to play with the Sony Ericsson SDK 2.5 for Java ME. This is especially the case if you need a Java ME implementation that supports all of the JSR 177 Security and Trust Services API (SATSA) optional packages:

- SATSA APDU: For basic communication with Java Card applets on the SIM card
- SATSA Crypto: For encryption
- SATSA PKI: For digital signatures
- SATSA JCRMI: For RMI communication with Java Card applets on the SIM card

The Sony Ericsson SDK 2.5 for Java ME also provides extensive support for 3D graphics and animation with its support for JSR 184 (Mobile 3D Graphics), JSR 239 (Java Binding for OpenGL ES), and Mascot Capsule API. Additionally, if you are looking for ways to capitalize on your intellectual property, the Sony Ericsson SDK 2.5 for Java ME is one of the few SDKs that support JSR 229 Java Payment API. Figure 7 depicts the Sony Ericsson SDK 2.5 when integrated into the NetBeans 6.5 IDE.

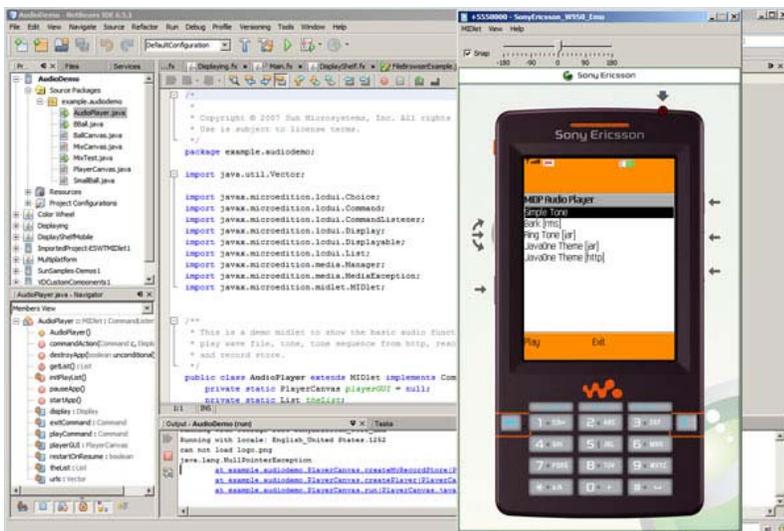


Figure 7 - Sony Ericsson SDK 2.5 for Java ME

LG SDK 1.2 for Java ME

The LG SDK 1.2 for Java ME is definitely the "new kid on the block" when it comes to Java ME SDKs. (The first version was released in late 2008.) However, this SDK does not lack in features or Java ME JSR API support. In fact, if you have any digital content (such as images, audio, or video) that you want to protect and to securely distribute to your users and customers, then you really should consider using LG SDK 1.2 for Java ME, because it's the only Java ME SDK that provides an implementation for the JSR 300, the DRM API. The LG SDK 1.2 for Java ME is based on the older Wireless Toolkit, so it provides the ability to compile, build, and test Java ME applications. It doesn't include an IDE, so you can't use it create or edit your code. However, like most of the SDKs presented in this article, it does provide a Java Platform that's compatible with the NetBeans IDE, so you can plug this SDK into NetBeans to gain all the benefits of an IDE, such as editing and debugging your code.

Like some of the other SDKs presented in this article, the LG SDK 1.2 allows you to simulate external events such as these to your emulated application:

- Changes in the file system
- Changes in your location
- Payment transactions
- Changes in the state of contactless devices

The LG SDK 1.2 also features a handy SVG viewer and player so that you can test your SVG graphics before embedding them into your application. Figure 8 shows a screenshot of an example application running in the LG SDK 1.2 for Java ME.

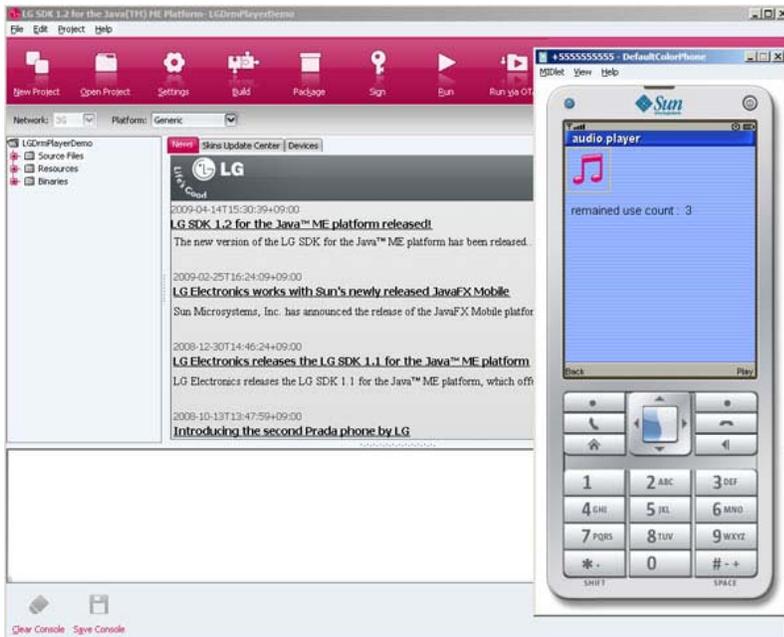


Figure 8 - LG SDK 1.2 for Java ME

Java ME SDK Comparison Matrix

Table 1 shows a list of all the Java ME SDKs and tools that are evaluated in this article, with an entry for API support for each one. Note that the NetBeans IDE supports multiple Java configurations, so its entries in this matrix apply to when it is configured with the Java ME SDK 3.0.

Table 1. Java ME API Comparison Matrix

JSR API Support	Java ME SDK 3.0	NetBeans IDE 6.5 for Java ME	MOTODEV Studio for Java ME	Nokia S60 Edition SDK	Nokia S40 Edition SDK	Nokia S40 NFC SDK	Nokia 6212 JDE 4.7	BlackBerry SDK 2.5	Sony Ericsson SDK 2.5	LG SDK 1.2 for Java ME
JSR 66 RMI	-	-	-	-	-	-	-	-	-	-
JSR 75 PDA	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
JSR 82 Bluetooth	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
JSR 118 MIDP 2.1	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
JSR 135 Mobile Media 1.2	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
JSR 139 CLDC 1.1	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
JSR 169 JDBC	-	-	-	-	-	-	-	-	-	-
JSR 172 Web Services	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
JSR 177 Security and Trust Services	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
JSR 179 Location	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
JSR 180 SIP	YES	YES	YES	-	-	-	-	YES	YES	YES
JSR 184 Mobile 3D Graphics	YES	YES	YES	YES	YES	YES	-	YES	YES	YES
JSR 185 JTWI 1.0	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
JSR 195 Information Module	-	-	-	-	-	-	-	-	-	-
JSR 205 Wireless Messaging 2.0	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
JSR 209 AGUI	YES	YES	-	-	-	-	-	-	-	-
JSR 211 Content Handler	YES	YES	YES	-	YES	YES	YES	YES	YES	YES
JSR 217 Personal Basis Profile 1.1	YES	YES	-	-	-	-	-	-	-	-
JSR 218 CDC 1.1	YES	YES	-	-	-	-	-	-	-	-
JSR 219 Foundation Profile 1.1	YES	YES	-	-	-	-	-	-	-	-
JSR 226 Scalable 2D Vector Graphics	YES	YES	YES	YES	YES	YES	YES	YES	YES	YES
JSR 229 Payment	YES	YES	-	-	-	-	-	YES	YES	YES
JSR 234 Advanced Multimedia Supplements	YES	YES	YES	YES	YES	YES	-	YES	YES	YES
JSR 238 Mobile Internationalization	YES	YES	YES	-	-	-	-	YES	YES	YES
JSR 239 Java Binding for OpenGL ES	YES	YES	YES	-	-	-	-	YES	YES	YES
JSR 248 MSA 1.0	YES	YES	YES	-	YES	YES	-	YES	YES	YES
JSR 256 Mobile Sensor	YES	YES	-	-	-	-	-	YES	YES	YES
JSR 257 Contactless Communication	-	-	-	-	-	YES	-	-	-	YES
JSR 271 MIDP 3	-	-	-	-	-	-	-	-	-	-
JSR 280 XML	YES	YES	-	-	-	-	-	-	-	-
JSR 300 DRM	-	-	-	-	-	-	-	-	-	YES
Other Java API Support										
BD-J	YES	YES	-	-	-	-	-	-	-	-
JavaFX 1.1	YES	YES	-	-	-	-	-	-	-	-
LWUIT	YES	YES	-	-	-	-	-	-	-	-
Security (JAAS)	YES	YES	-	-	-	-	-	-	-	-
Security (JCE)	YES	YES	-	-	-	-	-	-	-	-
Security (JSSE)	YES	YES	-	-	-	-	-	-	-	-
NetBeans Mobile Components	-	YES	-	-	-	-	-	-	-	-
G24	-	-	YES	-	-	-	-	-	-	-
MOTO2MOTO	-	-	YES	-	-	-	-	-	-	-
Motorola APIs	-	-	-	-	-	-	-	-	-	-
Nokia UI API	-	-	-	YES	YES	YES	-	YES	-	-
eSWT API	-	-	-	YES	-	-	-	-	-	-
IAP Info	-	-	-	YES	-	-	-	-	-	-
BlackBerry API	-	-	-	-	-	-	YES	-	-	-
Mascot Capsule API	-	-	-	-	-	-	-	YES	-	-

Conclusion

Whew! As you can see, Java ME is a full-featured platform, with a device-agnostic SDK, that enables developers to control nearly every aspect of a mobile device. As a result of this article, you should have a basic understanding of some of the many Java ME tools that are available as of Q2 2009. You should also refer to the API matrix in the coming months when you need to decide about a mobile platform based upon its API support. Did you notice that none of the Java ME tools support the MIDP 3.0 API? Rest assured, this will change very soon, and you can expect MIDP 3.0 support when this article is updated.

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Sun starts bidding adieu to mobile-specific Java

by [Stephen Shankland](#)

SAN

FRANCISCO--One area where Sun Microsystems' Java caught on was in mobile phones, but a leader of the project is working to eventually replace the mobile-specific version of the software.

Java Standard Edition (SE), geared for desktop computers, will gradually supplant Java Micro Edition (ME) as technology improvements let more computing power be packed into smaller devices, said [James Gosling, the Sun vice president often called the father of Java](#).

"We're trying to converge everything to the Java SE specification. Cell phones and TV set-top boxes are growing up," Gosling said at a Java media event here Wednesday. "That convergence is going to take years."

The prime example of the trend is [Sun's own JavaFX Mobile](#), software Sun got through its SavaJe acquisition and which the company hopes mobile phone makers will embrace. JavaFX Mobile includes almost all of Java SE, though it's missing a few pieces such as [CORBA](#) (brace yourself: Common Object Request Broker Architecture) for getting software to work with other programs across a network.

Sun's Java expectation dovetails with recent trends, most notably Apple's [iPhone](#), which architecturally is much more an Apple computer writ small than a mobile phone writ large. In particular, Apple uses a version of its regular [Safari](#) Web browser so users will have as much of the desktop Internet experience as possible.

At the same time, [Intel is working to bring x86 processors that run PCs into mobile gadgets](#). It's in cohorts with open-source efforts including [Ubuntu Mobile](#) and [Mobile Firefox](#).

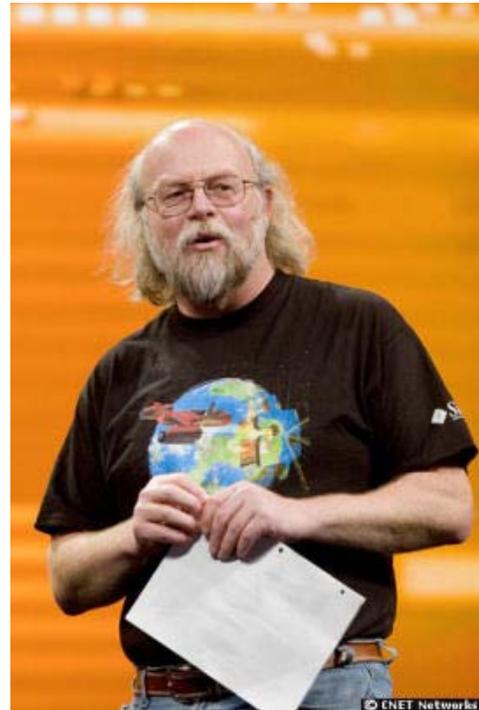
The move to Java SE won't happen overnight. Rich Green, Sun's executive vice president of software, said he expects smart phones using various pared-down versions of Java to stay in the market for at least a decade.

But the shift already was under way. "All the work in Java ME had been pushing it closer and closer to Java SE," Gosling said.

Defragmenting mobile Java

Moving to Java SE could help fix one nagging problem with Java ME: fragmentation.

Java ME is a collection of abilities--basic ones and higher-level options layered on top--each defined by a detailed description called a Java specification request. For Java ME, there are a large



Sun Vice President James Gosling speaks in May at the JavaOne conference in San Francisco.

(Credit: James Martin/CNET News.com)

number of these JSRs for various features. That posed a challenge to Java's original tagline, "write once, run anywhere."

The tagline came about because a program written in Java could in principle run on any computer that had a Java virtual machine. The JVM is a software foundation that lets a generic Java program run on a particular computer. But with the multiplicity of Java ME extensions, there was often little guarantee that a program written for one mobile phone would work on another.

Java SE has a much richer basic set of abilities, so using it instead of Java ME could at least in principle restore some of Java's promise of software portability.

JavaFX mobile is one component of a multipronged effort called [JavaFX that Sun announced in May at its JavaOne conference](#).

"JavaFX is probably the largest and most complex software engineering effort Sun has ever done," Gosling said. Here's a quick tour of the JavaFX components:

Tour de Java FX jargon

Unless you're a serious Java nerd, and maybe even if you are, Sun's latest nomenclature is a crazy hodge-podge of terms. Java SE--OK, that's been around for nearly a decade, we can handle it. Though there was some numbering madness a few years ago, Sun seems to have settled on the current version being Java SE 6. But let's work outward from there.

First comes Java 6 Update N, formerly called the [Consumer Java Runtime Environment \(JRE\)](#). This is an attempt to make Java SE easier on the average computer user, chiefly through improvements to the plug-in that Web browsers use to deal with Web pages using Java.

Among the Update N features: It preloads Java when the computer boots to avoid the excruciating delay when you encounter a Java Web page. It installs faster by loading only a bare-minimum kernel--typically less than 4MB--that gets things started and then updates itself with the full 12MB Java software collection. It takes advantage of Windows' Direct3D graphics abilities. And it includes a more graphically modern user interface that gives a unified look across multiple operating system.

Update N should go into beta testing in December and be available a few months later, said Chet Haase, Sun's Java SE client architect.

Atop Update N comes [JavaFX Script](#). This is a new scripting language geared specifically for fancy user interface actions such as transparency and other effects that are difficult with the prevailing Web browser scripting language, JavaScript (which contrary to what its name may imply isn't based on Java). JavaFX Script is geared toward use more by design types than

engineers, Gosling said.

Of course, you can't have a script without something to understand it. Thus there's [JavaFX compiler](#) to translate people's code into instructions the computer can execute.

Last is the aforementioned Java FX Mobile. This software is in part a reaction to gripes by Java ME developers who wanted a more unified foundation, Gosling said. Another difference compared to Java ME is that Sun will deliver it as a prewritten binary program; Java ME typically comes as source code that programmers must compile into something useful.

Potshots at the competition

Gosling and Java have been at the vanguard of an idea that in a way is just coming back into vogue: rich Internet applications, which is software that runs in a Web browser but comes with a lot more pizzazz and capability than bland Web pages.

Java caught on as a way to run server software and to run games on mobile phones, but one original promise of Java was turning a Web browser into a foundation for sophisticated software. (If you're having flashbacks to Netscape taking on Microsoft Windows and the resulting federal antitrust case, just breathe deeply for a moment to settle down.)

But much of the rich Internet application action is happening with software such as Ajax, the [Adobe Integrated Runtime \(nee Apollo\)](#) and [Microsoft's Silverlight](#) and [Google Gears](#).

Gosling thinks JavaFX has a chance, too, though, listing several advantages he believes it has: a richer user interface, faster performance, a robust and well accepted language and better abilities when a computer is disconnected from a network.

And security, he adds. Adobe's AIR is designed to let programs work like regular PC software, but Gosling thinks the approach unwise. "It's a petri dish for viruses. Security is really hard to implement well."

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Stephen Shankland writes about a wide range of technology and products, but has a particular focus on browsers and digital photography. He joined CNET News in 1998 and since then also has covered Google, Yahoo, servers, supercomputing, Linux and open-source software and science.

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Android vs Windows Mobile vs Java ME: a comparative study of mobile development environmentsFull Text:  Pdf  Buy this ArticleAuthors: [Tor-Morten Grønli](#) NITH / Brunel University, NITH Oslo, Norway
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In this paper we look at three mobile development environments: Windows Mobile, Java ME and Android. Through platform comparison, the different environments are examined closely and strengths and weaknesses are brought to life. In all three environments example applications are written to compare the environments in action on respective devices. Environment specific deployment files are created to illustrate amount of boilerplate code and overhead during deployment. Different key areas such as implementation aspects, performance aspects and quality assurance are compared to give an in depth overview of the status of the different platforms. Our results show that although the three environments are similar in some aspects they still represent three distinctive fields each with their respective characteristics. Through our code examples and platform comparison we come to the conclusion that the Windows Mobile and Android platform provides a better development environment, whereas Java ME still struggles with poor emulator support and incompatible implementations. The main features they have in common are also seen in trends directly visible in the programming languages such as unit testing, language features and end user distribution strategies. Big differences are highlighted when inspecting community environments, hardware abilities and platform maturity. This will have large influence on the choice of development platform for creating novel assistive environment applications.

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