UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

(Mark One)

x **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended May 31, 2019
or

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _____to _____.

Commission File Number: **0-19417**

PROGRESS SOFTWARE CORPORATION
(Exact name of registrant as specified in its charter)

DELAWARE	**04-2746201**
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification No.)

14 Oak Park
Bedford, Massachusetts 01730
(Address of principal executive offices) (Zip code)

Telephone Number: (781) 280-4000

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes ☒ No ☐

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files). Yes ☒ No ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of “large accelerated filer,” “accelerated filer,” “smaller reporting company,” and "emerging growth company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer	☒		Accelerated filer	☐
Non-accelerated filer	☐	(Do not check if a smaller reporting company)	Smaller reporting company	☐
Emerging growth company	☐			

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☒

As of June 27, 2019, there were 44,725,245 shares of the registrant’s common stock, $.01 par value per share, outstanding.

PROGRESS SOFTWARE CORPORATION

FORM 10-Q

FOR THE QUARTERLY PERIOD ENDED MAY 31, 2019

INDEX

Table of Contents

PART I. FINANCIAL INFORMATION

Item 1. Financial Statements (Unaudited)

Condensed Consolidated Balance Sheets

(In thousands, except share data)	May 31, 2019	November 30, 2018 As Adjusted[(1)]
Assets		
Current assets:		
Cash and cash equivalents	$ 103,249	$ 105,126
Short-term investments	25,304	34,387
Total cash, cash equivalents and short-term investments	128,553	139,513
Accounts receivable (less allowances of $795 and $840, respectively)	52,040	59,715
Unbilled receivables	5,160	1,421
Other current assets	18,553	25,080
Assets held for sale	—	5,776
Total current assets	204,306	231,505
Long-term unbilled receivables	4,488	1,811
Property and equipment, net	32,971	30,714
Intangible assets, net	150,907	58,919
Goodwill	432,623	314,992
Deferred tax assets	1,877	966
Other assets	2,733	5,243
Total assets	$ 829,905	$ 644,150
Liabilities and shareholders' equity		
Current liabilities:		
Current portion of long-term debt, net	$ 7,002	$ 5,819
Accounts payable	9,541	10,593
Accrued compensation and related taxes	20,762	25,500
Dividends payable to shareholders	6,944	6,998
Income taxes payable	3,416	1,228
Other accrued liabilities	20,605	12,686
Short-term deferred revenue	135,929	123,210
Total current liabilities	204,199	186,034
Long-term debt, net	291,194	110,270
Long-term deferred revenue	14,476	12,730
Deferred tax liabilities	70	5,799
Other noncurrent liabilities	4,619	5,315
Commitments and contingencies		
Shareholders' equity:		
Preferred stock, $0.01 par value; authorized, 10,000,000 shares; issued, none	—	—
Common stock, $0.01 par value, and additional paid-in capital; authorized, 200,000,000 shares; issued and outstanding, 44,723,199 shares in 2019 and 45,114,935 shares in 2018	282,193	267,053
Retained earnings	61,744	85,125
Accumulated other comprehensive loss	(28,590)	(28,176)
Total shareholders' equity	315,347	324,002
Total liabilities and shareholders' equity	$ 829,905	$ 644,150

[(1)]The Company adopted the accounting standard related to revenue recognition ("ASC 606") effective December 1, 2018 using the full retrospective method. See Note 1. *Nature of Business and Basis of Presentation* for further information.

See notes to unaudited condensed consolidated financial statements.

Table of Contents

Condensed Consolidated Statements of Operations

	Three Months Ended		Six Months Ended	
	May 31, 2019	May 31, 2018	May 31, 2019	May 31, 2018
(In thousands, except per share data)		As Adjusted[1]		As Adjusted[1]
Revenue:				
Software licenses	$ 29,728	$ 22,526	$ 52,530	$ 48,580
Maintenance and services	70,267	70,338	137,014	139,694
Total revenue	99,995	92,864	189,544	188,274
Costs of revenue:				
Cost of software licenses	925	1,233	2,092	2,494
Cost of maintenance and services	10,580	9,511	20,019	19,335
Amortization of acquired intangibles	6,106	5,899	11,539	11,717
Total costs of revenue	17,611	16,643	33,650	33,546
Gross profit	82,384	76,221	155,894	154,728
Operating expenses:				
Sales and marketing	24,832	21,658	47,155	43,086
Product development	21,688	19,822	41,578	40,067
General and administrative	12,654	12,190	24,939	23,452
Amortization of acquired intangibles	4,585	3,318	7,773	6,637
Fees related to shareholder activist	—	214	—	1,472
Restructuring expenses	2,777	426	3,192	2,247
Acquisition-related expenses	1,107	43	1,107	86
Total operating expenses	67,643	57,671	125,744	117,047
Income from operations	14,741	18,550	30,150	37,681
Other (expense) income:				
Interest expense	(2,210)	(1,272)	(3,599)	(2,437)
Interest income and other, net	344	231	573	639
Foreign currency loss, net	(451)	(243)	(1,294)	(1,071)
Total other expense, net	(2,317)	(1,284)	(4,320)	(2,869)
Income before income taxes	12,424	17,266	25,830	34,812
Provision for income taxes	4,243	4,362	8,247	8,175
Net income	$ 8,181	$ 12,904	$ 17,583	$ 26,637
Earnings per share:				
Basic	$ 0.18	$ 0.28	$ 0.39	$ 0.58
Diluted	$ 0.18	$ 0.28	$ 0.39	$ 0.57
Weighted average shares outstanding:				
Basic	44,611	45,531	44,784	46,030
Diluted	45,287	46,087	45,287	46,781
Cash dividends declared per common share	$ 0.155	$ 0.140	$ 0.310	$ 0.280

[1]The Company adopted ASC 606 effective December 1, 2018 using the full retrospective method. See Note 1. *Nature of Business and Basis of Presentation* for further information.

See notes to unaudited condensed consolidated financial statements.

Condensed Consolidated Statements of Comprehensive Income

(In thousands)	Three Months Ended May 31, 2019	Three Months Ended May 31, 2018 As Adjusted[1]	Six Months Ended May 31, 2019	Six Months Ended May 31, 2018 As Adjusted[1]
Net income	$ 8,181	$ 12,904	$ 17,583	$ 26,637
Other comprehensive (loss) income, net of tax:				
Foreign currency translation adjustments	(2,030)	(9,018)	(551)	(5,187)
Unrealized gain (loss) on investments, net of tax provision of $18 and $48 for the second quarter and first six months of 2019, respectively, and $0 and $39 for the second quarter and first six months of 2018, respectively	54	(1)	137	(28)
Total other comprehensive loss, net of tax	(1,976)	(9,019)	(414)	(5,215)
Comprehensive income	$ 6,205	$ 3,885	$ 17,169	$ 21,422

[1]The Company adopted ASC 606 effective December 1, 2018 using the full retrospective method. See Note 1. *Nature of Business and Basis of Presentation* for further information.

See notes to unaudited condensed consolidated financial statements.

Condensed Consolidated Statements of Shareholders' Equity

	Six Months Ended May 31, 2019					
	Common Stock					
(in thousands)	Number of Shares	Amount	Additional Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive Loss	Total Shareholders' Equity
Balance, December 1, 2018 as adjusted[(1)]	45,115	$ 451	$ 266,602	$ 85,125	$ (28,176)	$ 324,002
Issuance of stock under employee stock purchase plan	99	1	2,802	—	—	2,803
Exercise of stock options	44	—	1,317	—	—	1,317
Vesting of restricted stock units and release of deferred stock units	146	1	(1)	—	—	—
Withholding tax payments related to net issuance of restricted stock units	(37)	—	(1,637)	—	—	(1,637)
Stock-based compensation	—	—	11,922	—	—	11,922
Issuance of shares related to non-compete agreement (Note 6)	44	—	2,000	—	—	2,000
Adjustment due to adoption of ASU 2016-16	—	—	—	(3,397)	—	(3,397)
Dividends declared	—	—	—	(13,832)	—	(13,832)
Treasury stock repurchases and retirements	(688)	(5)	(1,260)	(23,735)	—	(25,000)
Net income	—	—	—	17,583	—	17,583
Other comprehensive loss	—	—	—	—	(414)	(414)
Balance, May 31, 2019	44,723	$ 448	$ 281,745	$ 61,744	$ (28,590)	$ 315,347

[(1)]The Company adopted ASC 606 effective December 1, 2018 using the full retrospective method. See Note 1. *Nature of Business and Basis of Presentation* for further information.

	Three Months Ended May 31, 2019					
	Common Stock					
(in thousands)	Number of Shares	Amount	Additional Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive Loss	Total Shareholders' Equity
Balance, March 1, 2019	44,474	$ 446	$ 272,408	$ 60,462	$ (26,614)	$ 306,702
Issuance of stock under employee stock purchase plan	61	1	1,805	—	—	1,806
Exercise of stock options	35	—	1,049	—	—	1,049
Vesting of restricted stock units and release of deferred stock units	146	1	(1)	—	—	—
Withholding tax payments related to net issuance of restricted stock units	(37)	—	(1,632)	—	—	(1,632)
Stock-based compensation	—	—	6,116	—	—	6,116
Issuance of shares related to non-compete agreement (Note 6)	44	—	2,000	—	—	2,000
Dividends declared	—	—	—	(6,899)	—	(6,899)
Net income	—	—	—	8,181	—	8,181
Other comprehensive loss	—	—	—	—	(1,976)	(1,976)
Balance, May 31, 2019	44,723	$ 448	$ 281,745	$ 61,744	$ (28,590)	$ 315,347

Table of Contents

Condensed Consolidated Statements of Shareholders' Equity (cont.)

	Six Months Ended May 31, 2018					
	Common Stock					
(in thousands)	Number of Shares	Amount	Additional Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive Loss	Total Shareholders' Equity
Balance, December 1, 2017 as adjusted[1]	47,281	$ 473	$ 249,363	$ 179,919	$ (18,406)	$ 411,349
Issuance of stock under employee stock purchase plan	293	3	3,066	—	—	3,069
Exercise of stock options	53	1	1,524	—	—	1,525
Withholding tax payments related to net issuance of restricted stock units	—	—	(1,931)	—	—	(1,931)
Stock-based compensation	—	—	10,150	—	—	10,150
Adjustment due to adoption of ASU 2016-09	—	—	641	(641)	—	—
Dividends declared	—	—	—	(12,858)	—	(12,858)
Treasury stock repurchases and retirements	(2,124)	(21)	(4,569)	(85,410)	—	(90,000)
Net income	—	—	—	26,637	—	26,637
Other comprehensive income	—	—	—	—	(5,215)	(5,215)
Balance, May 31, 2018 as adjusted[1]	45,503	$ 456	$ 258,244	$ 107,647	$ (23,621)	$ 342,726

[1]The Company adopted ASC 606 effective December 1, 2018 using the full retrospective method. See Note 1. *Nature of Business and Basis of Presentation* for further information.

	Three Months Ended May 31, 2018					
	Common Stock					
(in thousands)	Number of Shares	Amount	Additional Paid-In Capital	Retained Earnings	Accumulated Other Comprehensive Loss	Total Shareholders' Equity
Balance, March 1, 2018 as adjusted[1]	46,298	$ 463	$ 254,584	$ 143,292	$ (14,602)	$ 383,737
Issuance of stock under employee stock purchase plan	245	3	1,971	—	—	1,974
Exercise of stock options	30	1	855	—	—	856
Withholding tax payments related to net issuance of restricted stock units	—	—	(1,931)	—	—	(1,931)
Stock-based compensation	—	—	5,580	—	—	5,580
Dividends declared	—	—	—	(6,375)	—	(6,375)
Treasury stock repurchases and retirements	(1,070)	(11)	(2,815)	(42,174)	—	(45,000)
Net income	—	—	—	12,904	—	12,904
Other comprehensive income	—	—	—	—	(9,019)	(9,019)
Balance, May 31, 2018 as adjusted[1]	45,503	$ 456	$ 258,244	$ 107,647	$ (23,621)	$ 342,726

[1]The Company adopted ASC 606 effective December 1, 2018 using the full retrospective method. See Note 1. *Nature of Business and Basis of Presentation* for further information.

Condensed Consolidated Statements of Cash Flows

	Six Months Ended	
	May 31, 2019	May 31, 2018
(In thousands)		As Adjusted[1]
Cash flows from operating activities:		
Net income	$ 17,583	$ 26,637
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization of property and equipment	3,438	3,343
Amortization of intangibles and other	19,900	19,290
Stock-based compensation	11,922	10,150
Loss on disposal of property and equipment	(18)	136
Deferred income taxes	(6,707)	(1,687)
Allowances for bad debt and sales credits	287	103
Changes in operating assets and liabilities:		
Accounts receivable	10,859	19,772
Other assets	7,722	4,614
Accounts payable and accrued liabilities	(4,627)	(18,027)
Income taxes payable	1,937	2,267
Deferred revenue	2,822	7,127
Net cash flows from operating activities	65,118	73,725
Cash flows (used in) from investing activities:		
Purchases of investments	(5,750)	(8,258)
Sales and maturities of investments	14,709	10,723
Purchases of property and equipment	(1,080)	(3,196)
Payments for acquisitions, net of cash acquired	(225,298)	—
Proceeds from sale of property, plant and equipment, net	6,146	—
Net cash flows used in investing activities	(211,273)	(731)
Cash flows from (used in) financing activities:		
Proceeds from stock-based compensation plans	4,303	4,671
Payments for taxes related to net share settlements of equity awards	(1,637)	(1,931)
Repurchases of common stock	(25,000)	(90,000)
Dividend payments to shareholders	(13,886)	(13,101)
Proceeds from the issuance of debt	184,984	—
Payment of principle on long-term debt	(1,547)	(3,094)
Payment of issuance costs for long-term debt	(1,611)	—
Net cash flows from (used in) financing activities	145,606	(103,455)
Effect of exchange rate changes on cash	(1,328)	(5,881)
Net decrease in cash and cash equivalents	(1,877)	(36,342)
Cash and cash equivalents, beginning of period	105,126	133,464
Cash and cash equivalents, end of period	$ 103,249	$ 97,122

[1] The Company adopted ASC 606 effective December 1, 2018 using the full retrospective method. See Note 1. *Nature of Business and Basis of Presentation* for further information.

Condensed Consolidated Statements of Cash Flows, continued

	Six Months Ended	
	May 31, 2019	May 31, 2018
Supplemental disclosure:		
Cash paid for income taxes, net of refunds of $176 in 2019 and $533 in 2018	$ 4,242	$ 3,545
Cash paid for interest	$ 2,990	$ 1,991
Non-cash investing and financing activities:		
Total fair value of restricted stock awards, restricted stock units and deferred stock units on date vested	$ 8,063	$ 9,404
Dividends declared	$ 6,944	$ 6,377

See notes to unaudited condensed consolidated financial statements.

Notes to Condensed Consolidated Financial Statements

Note 1: Basis of Presentation

Company Overview - Progress Software Corporation ("Progress," the "Company," "we," "us," or "our") offers the leading platform for developing and deploying strategic business applications. We enable customers and partners to deliver modern, high-impact digital experiences with a fraction of the effort, time and cost. Progress offers powerful tools for easily building adaptive user experiences across any type of device or touchpoint, award-winning machine learning that enables cognitive capabilities to be a part of any application, the flexibility of a serverless cloud to deploy modern apps, business rules, web content management, plus leading data connectivity technology. Over 1,700 independent software vendors ("ISVs"), 100,000 enterprise customers, and 2 million developers rely on Progress to power their applications.

Our products are generally sold as perpetual licenses, but certain products also use term licensing models and our cloud-based offerings use a subscription-based model. More than half of our worldwide license revenue is realized through relationships with indirect channel partners, principally application partners and original equipment manufacturers ("OEMs"). Application partners are ISVs that develop and market applications using our technology and resell our products in conjunction with sales of their own products that incorporate our technology. OEMs are companies that embed our products into their own software products or devices.

We operate in North America and Latin America (the "Americas"); Europe, the Middle East and Africa ("EMEA"); and the Asia Pacific region, through local subsidiaries as well as independent distributors.

Basis of Presentation and Significant Accounting Policies - We prepared the accompanying unaudited condensed consolidated financial statements pursuant to the rules and regulations of the Securities and Exchange Commission ("SEC") regarding interim financial reporting. Accordingly, they do not include all of the information and footnotes required by accounting principles generally accepted in the United States of America ("GAAP") for complete financial statements and these unaudited financial statements should be read in conjunction with the audited financial statements included in our Annual Report on Form 10-K for the fiscal year ended November 30, 2018, ("Annual Report on Form 10-K for the fiscal year ended November 30, 2018").

We adopted Accounting Standards Update No. 2014-09, *Revenue from Contracts with Customers* ("ASC 606") effective December 1, 2018 using the full retrospective method, which required us to retroactively adjust comparative prior periods to conform to current presentation. See "*Recently Adopted Accounting Pronouncements*" below for further information.

We made no material changes in the application of our significant accounting policies that were disclosed in our Annual Report on Form 10-K for the fiscal year ended November 30, 2018, except as discussed below with respect to our adoption of ASC 606. We have prepared the accompanying unaudited condensed consolidated financial statements on the same basis as the audited financial statements included in our Annual Report on Form 10-K for the fiscal year ended November 30, 2018, and these financial statements include all adjustments, consisting only of normal recurring adjustments, necessary for a fair presentation of the results of the interim periods presented. The operating results for the interim periods presented are not necessarily indicative of the results expected for the full fiscal year.

Use of Estimates

The preparation of financial statements requires management to make estimates and assumptions that affect the amounts reported in the financial statements and accompanying notes. On an on-going basis, management evaluates its estimates and records changes in estimates in the period in which they become known. These estimates are based on historical data and experience, as well as various other assumptions that management believes to be reasonable under the circumstances. The most significant estimates relate to: the timing and amount of revenue recognition, including the determination of the nature and timing of the satisfaction of performance obligations, the standalone selling price of performance obligations, and the transaction price allocated to performance obligations; the realization of tax assets and estimates of tax liabilities; fair values of investments in marketable securities; assets held for sale; intangible assets and goodwill valuations; the recognition and disclosure of contingent liabilities; the collectability of accounts receivable; and assumptions used to determine the fair value of stock-based compensation. Actual results could differ from those estimates.

Revenue Recognition

Revenue Policy

We derive our revenue primarily from software licenses and maintenance and services. Our license arrangements generally contain multiple performance obligations, including software maintenance services. Revenue is recognized when a customer obtains control of promised goods or services in an amount that reflects the consideration that we expect to receive in exchange for those goods or services. When an arrangement contains multiple performance obligations, we account for individual performance obligations separately if they are distinct. We recognize revenue through the application of the following steps: (i) identification of the contract(s) with a customer; (ii) identification of the performance obligations in the contract; (iii) determination of the transaction price; (iv) allocation of the transaction price to performance obligations in the contract; and (v) recognition of revenue when or as we satisfy the performance obligations. Sales taxes collected from customers and remitted to government authorities are excluded from revenue and we do not license our software with a right of return.

Software Licenses

Software licenses are on-premise and fully functional when made available to the customer. As the customer can use and benefit from the license on its own, on-premise software licenses represent distinct performance obligations. Revenue is recognized upfront at the point in time when control is transferred, which is defined as the point in time when the client can use and benefit from the license. Our licenses are sold as perpetual or term licenses, and the arrangements typically contain various combinations of maintenance and services, which are generally accounted for as separate performance obligations. We use the residual approach to allocate the transaction price to our software license performance obligations because, due to the pricing of our licenses being highly variable, they do not have an observable stand-alone selling price ("SSP"). As required, we evaluate the residual approach estimate compared to all available observable data in order to conclude the estimate is representative of its SSP.

Perpetual licenses are generally invoiced upon execution of the contract and payable within 30 days. Term licenses are generally invoiced in advance on an annual basis over the term of the arrangement, which is typically one to three years. Any difference between the revenue recognized and the amount invoiced to the customer is recognized on our consolidated balance sheets as unbilled receivables until the customer is invoiced, at which point the amount is reclassed to accounts receivable.

Maintenance

Maintenance revenue is made up of technical support, bug fixes, and when-and-if available unspecified software upgrades. As these maintenance services are considered to be a series of distinct services that are substantially the same and have the same duration and measure of progress, we have concluded that they represent one combined performance obligation. Revenue is recognized ratably over the contract period. The SSP of maintenance services is a percentage of the net selling price of the related software license, which has remained within a tight range and is consistent with the stand-alone pricing of subsequent maintenance renewals.

Maintenance services are generally invoiced in advance on an annual basis over the term of the arrangement, which is typically one to three years.

Services

Services revenue primarily includes consulting and customer education services. In general, services are distinct performance obligations. Services revenue is generally recognized as the services are delivered to the customer. We apply the practical expedient of recognizing revenue upon invoicing for time and materials-based arrangements as the invoiced amount corresponds to the value of the services provided. The SSP of services is based upon observable prices in similar transactions using the hourly rates sold in stand-alone services transactions. Services are either sold on a time and materials basis or prepaid upfront.

We also offer products via a software-as-a-service ("SaaS") model, which is a subscription-based model. Our customers can use hosted software over the contract period without taking possession of it and the cloud services are available to them throughout the entire term, even if they do not use the service. Revenue related to SaaS offerings is recognized ratably over the contract period. The SSP of SaaS performance obligations is determined based upon observable prices in stand-alone SaaS transactions. SaaS arrangements are generally invoiced in advance on a monthly, quarterly, or annual basis over the term of the arrangement, which is typically one to three years.

Arrangements with Multiple Performance Obligations

When an arrangement contains multiple performance obligations, we account for individual performance obligations separately if they are distinct. We allocate the transaction price to each performance obligation in a contract based on its relative SSP. Although we do not have a history of offering these elements, prior to allocating the transaction price to each performance obligation, we consider whether the arrangement has any discounts, material rights, or specified future upgrades that may represent additional performance obligations. Determining whether products and services are distinct performance obligations and the determination of the SSP may require significant judgment.

Contract Balances

Unbilled Receivables and Contract Assets

The timing of revenue recognition may differ from the timing of customer invoicing. When revenue is recognized prior to invoicing and the right to the amount due from customers is conditioned only on the passage of time, we record an unbilled receivable on our condensed consolidated balance sheets. Our multi-year term license arrangements, which are typically billed annually, result in revenue recognition in advance of invoicing and the recognition of unbilled receivables.

As of May 31, 2019, invoicing of our long-term unbilled receivables is expected to occur as follows (in thousands):

2020	$	525
2021		3,398
2022		565
Total	$	4,488

Contract assets, which arise when revenue is recognized prior to invoicing and the right to the amount due from customers is conditioned on something other than the passage of time, such as the completion of a related performance obligation, were $0.7 million as of May 31, 2019 and minimal as of November 30, 2018. These amounts are included in unbilled receivables or long-term unbilled receivables on our condensed consolidated balance sheets.

Deferred Revenue

Deferred revenue is recorded when revenue is recognized subsequent to customer invoicing. Our deferred revenue balance is primarily made up of deferred maintenance from our OpenEdge and Application Development and Deployment segments.

As of May 31, 2019, the changes in deferred revenue were as follows (in thousands):

Balance, December 1, 2018 As Adjusted[1]	$	135,940
Billings and other		204,009
Revenue recognized		(189,544)
Balance, May 31, 2019	$	150,405

[1]The Company adopted ASC 606 effective December 1, 2018 using the full retrospective method.

Transaction price allocated to remaining performance obligations represents contracted revenue that has not yet been recognized, which includes deferred revenue and amounts that will be invoiced and recognized as revenue in future periods. As of May 31, 2019, transaction price allocated to remaining performance obligations was $154 million. We expect to recognize approximately 90% of the revenue within the next year and the remainder thereafter.

Deferred Contract Costs

Deferred contract costs, which include certain sales incentive programs, are incremental and recoverable costs of obtaining a contract with a customer. Incremental costs of obtaining a contract with a customer are recognized as an asset if the expected benefit of those costs is longer than one year. We have applied the practical expedient to expense costs as incurred for costs to obtain a contract with a customer when the amortization period would have been one year or less. These costs include a large majority of our sales incentive programs as we have determined that annual compensation is commensurate with annual sales activities.

Certain of our sales incentive programs do meet the requirements to be capitalized. Depending upon the sales incentive program and the related revenue arrangement, such capitalized costs are amortized over the longer of (i) the product life, which is generally three to five years; or (ii) the term of the related revenue contract. We determined that a three to five year product life represents the period of benefit that we receive from these incremental costs based on both qualitative and quantitative factors, which include customer contracts, industry norms, and product upgrades. Total deferred contract costs were minimal as of May 31, 2019 and November 30, 2018 and are included in other current assets and other assets on our condensed consolidated balance sheets. Amortization of deferred contract costs is included in sales and marketing expense on our condensed consolidated statement of operations and was minimal in all periods presented.

Recent Accounting Pronouncements

Recently Adopted Accounting Pronouncements

In October 2016, the FASB issued Accounting Standards Update No. 2016-16, *Income Taxes (Topic 740), Intra-Entity Transfers of Assets Other Than Inventory* ("ASU 2016-16"), which requires entities to recognize the income tax consequences of an intra-entity transfer of an asset other than inventory when the transfer occurs. Under prior accounting standards, the recognition of current and deferred income taxes for an intra-entity transfer was prohibited until the asset has been sold to an outside party. We adopted this standard at the beginning of the first quarter of fiscal year 2019. Upon adoption, we reclassified approximately $3.4 million from non-current prepaid taxes, which is included in other assets on our consolidated balance sheet, to retained earnings as of December 1, 2018.

In May 2014, the FASB issued Accounting Standards Update No. 2014-09, *Revenue from Contracts with Customers (Topic 606)* ("ASC 606"). Under this standard, revenue is recognized when a customer obtains control of promised goods or services in an amount that reflects the consideration that the entity expects to receive in exchange for those goods or services. The standard also requires new disclosures regarding the nature, amount, timing, and uncertainty of revenue and cash flows arising from contracts with customers and provides guidance on the recognition of costs related to obtaining customer contracts. We adopted this ASU effective December 1, 2018 in accordance with the full retrospective approach, which required us to retrospectively adjust certain previously reported results in the comparative prior periods presented. Upon adoption, we recorded a cumulative $31 million increase to our 2017 beginning retained earnings balance, a $15 million decrease to deferred revenue, a $28 million increase to unbilled receivables, and a $12 million increase to deferred tax liabilities.

The revenue recognition related to accounting for the following transactions is most impacted by our adoption of this standard:

- **Revenue from term licenses with extended payment terms over the term of the agreement within our Data Connectivity and Integration segment -** Under the applicable revenue recognition guidance for fiscal years 2018 and prior, these transactions were recognized when the amounts were billed to the customer. In accordance with ASC 606, revenue from term license performance obligations is recognized upon delivery and revenue from maintenance performance obligations is expected to be recognized over the contract term. To the extent that we enter into these transactions, revenue from term licenses with extended payment terms will be recognized prior to the customer being billed and we will recognize an unbilled receivable on the balance sheet. Accordingly, the recognition of license revenue is accelerated under ASC 606 as we historically did not recognize revenue until the amounts had been billed to the customer.

- **Revenue from transactions with multiple elements within our Application Development and Deployment segment (i.e., sales of perpetual licenses with maintenance and/or support) -** Under the applicable revenue recognition guidance for fiscal years 2018 and prior, these transactions were recognized ratably over the associated maintenance period as the Company did not have vendor specific objective evidence ("VSOE") for maintenance or support. Under ASC 606, the requirement to have VSOE for undelivered elements that existed under prior guidance is eliminated. Accordingly, the Company will recognize a portion of the sales price as revenue upon delivery of the license instead of recognizing the entire sales price ratably over the maintenance period.

The impact of the adoption of this standard on our previously reported consolidated balance sheet and consolidated statements of operations is as follows:

Consolidated Balance Sheet

	November 30, 2018		
(in thousands)	As Reported	Adjustments	As Adjusted
Assets			
Accounts receivable, net	$ 58,450	$ 1,265	$ 59,715
Short-term unbilled receivables	—	1,421	1,421
Long-term unbilled receivables	—	1,811	1,811
Deferred tax assets	1,922	(956)	966
Other assets[(1)]	580,237	—	580,237
Total assets	$ 640,609	$ 3,541	$ 644,150
Liabilities and shareholders' equity			
Short-term deferred revenue	133,194	(9,984)	123,210
Long-term deferred revenue	15,127	(2,397)	12,730
Deferred tax liabilities	3,797	2,002	5,799
Other liabilities[(2)]	178,409	—	178,409
Retained earnings	71,242	13,883	85,125
Accumulated other comprehensive loss	(28,213)	37	(28,176)
Other equity[(3)]	267,053	—	267,053
Total liabilities and shareholders' equity	$ 640,609	$ 3,541	$ 644,150

[(1)]Includes cash and cash equivalents, short-term investments, other current assets, assets held for sale, property and equipment, net, intangible assets, net, goodwill, and other assets.

[(2)]Includes current portion of long-term debt, net, accounts payable, accrued compensation and related taxes, dividends payable, income taxes payable, other accrued liabilities, long-term debt, net, and other noncurrent liabilities.

[(3)]Includes common stock and additional paid-in capital.

Consolidated Statements of Income

	May 31, 2018					
	Three Months Ended			Six Months Ended		
(In thousands, except per share data)	As Reported	Adjustments	As Adjusted	As Reported	Adjustments	As Adjusted
Revenue:						
Software licenses	$ 26,439	$ (3,913)	$ 22,526	$ 51,782	$ (3,202)	$ 48,580
Maintenance and services	69,663	675	70,338	138,367	1,327	139,694
Total revenue	96,102	(3,238)	92,864	190,149	(1,875)	188,274
Costs of revenue	16,643	—	16,643	33,546	—	33,546
Gross Profit	79,459	(3,238)	76,221	156,603	(1,875)	154,728
Operating expenses	57,671	—	57,671	117,047	—	117,047
Income from operations	21,788	(3,238)	18,550	39,556	(1,875)	37,681
Other expense, net	(1,284)	—	(1,284)	(2,869)	—	(2,869)
Income before income taxes	20,504	(3,238)	17,266	36,687	(1,875)	34,812
Provision for income taxes	5,101	(739)	4,362	8,372	(197)	8,175
Net income	$ 15,403	$ (2,499)	$ 12,904	$ 28,315	$ (1,678)	$ 26,637
Earnings per share:						
Basic	$ 0.34	$ (0.06)	$ 0.28	$ 0.62	$ (0.04)	$ 0.58
Diluted	$ 0.33	$ (0.05)	$ 0.28	$ 0.61	$ (0.04)	$ 0.57
Weighted average shares outstanding:						
Basic	45,531	—	45,531	46,030	—	46,030
Diluted	46,087	—	46,087	46,781	—	46,781

The adoption of ASC 606 had no impact on total cash from or used in operating, financing, or investing activities on our consolidated cash flow statements.

Recently Issued Accounting Pronouncements Not Yet Adopted

In August 2018, the FASB issued Accounting Standards Update No. 2018-15, *Intangibles - Goodwill and Other - Internal-Use Software (Subtopic 350-40), Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract* ("ASU 2018-15"). ASU 2018-15 amends current guidance to align the accounting for costs incurred in a hosting arrangement that is a service contract with the requirements for capitalizing costs associated with developing or obtaining internal-use software. Capitalized implementation costs must be expensed over the term of the hosting arrangement and presented in the same line item in the statement of income as the fees associated with the hosting element (service) of the arrangement. The guidance in ASU 2018-15 is effective for annual reporting periods beginning after December 15, 2019, with early adoption permitted. We are currently accounting for costs incurred in a cloud computing arrangement in accordance with the guidance provided in ASU 2018-15.

In August 2017, the FASB issued Accounting Standards Update No. 2017-12, *Derivatives and Hedging (Topic 815), Targeted Improvements to Accounting for Hedging Activities* ("ASU 2017-12"). ASU 2017-12 intends to better align an entity's risk management activities and financial reporting for hedging relationships through changes to both the designation and measurement guidance for qualifying hedging relationships and the presentation of hedge results. The amendments expand and refine hedge accounting for both nonfinancial and financial risk components and align the recognition and presentation of the effects of the hedging instrument and the hedged item in the financial statements. The guidance in ASU 2017-12 is required for annual reporting periods beginning after December 15, 2018, with early adoption permitted. We are currently evaluating the effect that implementation of this update will have upon adoption on our consolidated financial position and results of operations.

In January 2017, the FASB issued Accounting Standards Update No. 2017-04, *Intangibles - Goodwill and Other (Topic 350), Simplifying the Test for Goodwill Impairment* ("ASU 2017-04"). ASU 2017-04 amends Topic 350 to simplify the subsequent measurement of goodwill by eliminating Step 2 from the goodwill impairment test. This update requires the performance of an annual, or interim, goodwill impairment test by comparing the fair value of a reporting unit with its carrying amount. An impairment charge should be recognized for the amount by which the carrying amount exceeds the reporting unit's fair value. However, the loss recognized should not exceed the total amount of goodwill allocated to that reporting unit. The guidance in ASU 2017-04 is required for annual reporting periods beginning after December 15, 2019, with early adoption permitted. We are currently considering whether to adopt this update prior to the required adoption date.

In February 2016, the FASB issued Accounting Standards Update No. 2016-02, *Leases (Topic 842)* ("ASU 2016-02"), which requires lessees to record most leases on their balance sheets, recognizing a lease liability for the obligation to make lease payments and a right-to-use asset for the right to use the underlying asset for the lease term. The guidance in ASU 2016-02 is required for annual reporting periods beginning after December 15, 2018, with early adoption permitted. We currently expect that most of our operating lease commitments will be subject to the update and recognized as operating lease liabilities and right-of-use assets upon adoption. However, we are currently evaluating the effect that implementation of this update will have upon adoption on our consolidated financial position and results of operations.

Note 2: Cash, Cash Equivalents and Investments

A summary of our cash, cash equivalents and available-for-sale investments at May 31, 2019 is as follows (in thousands):

	Amortized Cost Basis	Unrealized Gains	Unrealized Losses	Fair Value
Cash	$ 99,571	$ —	$ —	$ 99,571
Money market funds	3,678	—	—	3,678
State and municipal bond obligations	11,780	—	(21)	11,759
U.S. treasury bonds	6,554	3	—	6,557
Corporate bonds	6,995	—	(7)	6,988
Total	$ 128,578	$ 3	$ (28)	$ 128,553

A summary of our cash, cash equivalents and available-for-sale investments at November 30, 2018 is as follows (in thousands):

	Amortized Cost Basis	Unrealized Gains	Unrealized Losses	Fair Value
Cash	$ 101,316	$ —	$ —	$ 101,316
Money market funds	3,810	—	—	3,810
State and municipal bond obligations	19,542	—	(119)	19,423
U.S. treasury bonds	6,726	—	(21)	6,705
Corporate bonds	8,329	—	(70)	8,259
Total	$ 139,723	$ —	$ (210)	$ 139,513

Such amounts are classified on our condensed consolidated balance sheets as follows (in thousands):

	May 31, 2019		November 30, 2018	
	Cash and Equivalents	Short-Term Investments	Cash and Equivalents	Short-Term Investments
Cash	$ 99,571	$ —	$ 101,316	$ —
Money market funds	3,678	—	3,810	—
State and municipal bond obligations	—	11,759	—	19,423
U.S. treasury bonds	—	6,557	—	6,705
Corporate bonds	—	6,988	—	8,259
Total	$ 103,249	$ 25,304	$ 105,126	$ 34,387

The fair value of debt securities by contractual maturity is as follows (in thousands):

	May 31, 2019	November 30, 2018
Due in one year or less	$ 21,531	$ 25,051
Due after one year[1]	3,773	9,336
Total	$ 25,304	$ 34,387

[1] Includes state and municipal bond obligations and corporate bonds, which are securities representing investments available for current operations and are classified as current on the condensed consolidated balance sheets.

We did not hold any investments with continuous unrealized losses as of May 31, 2019 or November 30, 2018.

Note 3: Derivative Instruments

We generally use forward contracts that are not designated as hedging instruments to hedge economically the impact of the variability in exchange rates on intercompany accounts receivable and loans receivable denominated in certain foreign currencies. We generally do not hedge the net assets of our international subsidiaries.

All forward contracts are recorded at fair value on the consolidated balance sheets at the end of each reporting period and expire between 30 and one year from the date the contract was entered. At May 31, 2019, $1.5 million was recorded in other accrued liabilities on the condensed consolidated balance sheets. At November 30, 2018, $0.3 million and $0.1 million was recorded in other noncurrent liabilities and other current assets, respectively, on the condensed consolidated balance sheets. In the three and six months ended May 31, 2019, realized and unrealized losses of $2.0 million and $1.3 million, respectively, from our forward contracts were recognized in foreign currency loss, net, on the condensed consolidated statements of operations. In the three and six months ended May 31, 2018, realized and unrealized gains of $6.7 million and $3.1 million, respectively, from our forward contracts were recognized in foreign currency loss, net on the condensed consolidated statements of operations. The losses and gains were substantially offset by realized and unrealized gains and losses on the offsetting positions.

The table below details outstanding foreign currency forward contracts where the notional amount is determined using contract exchange rates (in thousands):

	May 31, 2019		November 30, 2018	
	Notional Value	Fair Value	Notional Value	Fair Value
Forward contracts to sell U.S. dollars	$ 76,602	$ (1,472)	$ 105,830	$ (170)
Forward contracts to purchase U.S. dollars	500	—	240	—
Total	$ 77,102	$ (1,472)	$ 106,070	$ (170)

Note 4: Fair Value Measurements

Recurring Fair Value Measurements

The following table details the fair value measurements within the fair value hierarchy of our financial assets and liabilities at May 31, 2019 (in thousands):

	Total Fair Value	Fair Value Measurements Using Level 1	Level 2	Level 3
Assets				
Money market funds	$ 3,678	$ 3,678	$ —	$ —
State and municipal bond obligations	11,759	—	11,759	—
U.S. treasury bonds	6,557	—	6,557	—
Corporate bonds	6,988	—	6,988	—
Liabilities				
Foreign exchange derivatives	$ (1,472)	$ —	$ (1,472)	$ —

The following table details the fair value measurements within the fair value hierarchy of our financial assets and liabilities at November 30, 2018 (in thousands):

	Total Fair Value	Fair Value Measurements Using Level 1	Level 2	Level 3
Assets				
Money market funds	$ 3,810	$ 3,810	$ —	$ —
State and municipal bond obligations	19,423	—	19,423	—
U.S. treasury bonds	6,705	—	6,705	—
Corporate bonds	8,259	—	8,259	—
Liabilities				
Foreign exchange derivatives	$ (170)	$ —	$ (170)	$ —

When developing fair value estimates, we maximize the use of observable inputs and minimize the use of unobservable inputs. When available, we use quoted market prices to measure fair value. The valuation technique used to measure fair value for our Level 1 and Level 2 assets is a market approach, using prices and other relevant information generated by market transactions involving identical or comparable assets. If market prices are not available, the fair value measurement is based on models that use primarily market based parameters including yield curves, volatilities, credit ratings and currency rates. In certain cases where market rate assumptions are not available, we are required to make judgments about assumptions market participants would use to estimate the fair value of a financial instrument.

Nonrecurring Fair Value Measurements

During the fourth quarter of fiscal year 2018, certain assets were measured at fair value on a nonrecurring basis using significant unobservable inputs (Level 3). Based on the fair value measurement, we recorded a $5.1 million asset impairment charge as of November 30, 2018 related to certain corporate land and building assets previously reported as property and equipment, net that we reclassified to assets held for sale on our consolidated balance sheets. On April 3, 2019, we sold these assets for approximately $5.8 million in net cash proceeds and recognized a net gain on the sale of approximately $0.1 million, which is included in interest income and other, net on our condensed consolidated statements of operations.

The following table presents nonrecurring fair value measurements as of November 30, 2018 (in thousands):

	Total Fair Value	Total Losses
Assets held for sale	$ 5,776	$ 5,147

The fair value measurement of the assets held for sale was measured using third-party valuation models and was determined using an income-based valuation methodology, which includes discounted expected cash flows. As the discounted cash flows represent unobservable inputs, the fair value was classified as a Level 3 measurement within the fair value hierarchy. The expected cash flows include proceeds from the sale, offset by the costs incurred to sell the assets.

We did not have any nonrecurring fair value measurements during the six months ended May 31, 2019.

Note 5: Intangible Assets and Goodwill

Intangible Assets

Intangible assets are comprised of the following significant classes (in thousands):

	May 31, 2019			November 30, 2018		
	Gross Carrying Amount	Accumulated Amortization	Net Book Value	Gross Carrying Amount	Accumulated Amortization	Net Book Value
Purchased technology	$ 179,601	$ (114,703)	$ 64,898	$ 154,301	$ (110,959)	$ 43,342
Customer-related	134,242	(62,543)	71,699	67,802	(56,589)	11,213
Trademarks and trade names	27,340	(14,973)	12,367	17,740	(13,376)	4,364
Non-compete agreement	2,000	(57)	1,943	—	—	—
Total	$ 343,183	$ (192,276)	$ 150,907	$ 239,843	$ (180,924)	$ 58,919

In the three and six months ended May 31, 2019, amortization expense related to intangible assets was $10.7 million and $19.3 million, respectively. In the three and six months ended May 31, 2018, amortization expense related to intangible assets was $9.2 million and $18.4 million, respectively.

The increase in intangible assets during fiscal year 2019 is related to the acquisition of Ipswitch in April 2019 (Note 6).

Future amortization expense for intangible assets as of May 31, 2019, is as follows (in thousands):

Remainder of 2019	$ 28,762
2020	32,679
2021	32,559
2022	25,937
2023	21,860
Thereafter	9,110
Total	$ 150,907

Goodwill

Changes in the carrying amount of goodwill in the six months ended May 31, 2019 are as follows (in thousands):

Balance, November 30, 2018	$ 314,992
Additions	117,651
Translation adjustments	(20)
Balance, May 31, 2019	$ 432,623

The increase in goodwill during fiscal year 2019 is related to the acquisition of Ipswitch in April 2019 (Note 6).

Changes in the goodwill balances by reportable segment in the six months ended May 31, 2019 are as follows (in thousands):

	November 30, 2018	Additions	Translation adjustments	May 31, 2019
OpenEdge	$ 248,987	$ 117,651	$ (20)	$ 366,618
Data Connectivity and Integration	19,040	—	—	19,040
Application Development and Deployment	46,965	—	—	46,965
Total goodwill	$ 314,992	$ 117,651	$ (20)	$ 432,623

During the quarter ending May 31, 2019, no triggering events occurred that would indicate that it is more likely than not that the carrying values of any of our reporting units exceeded their fair values.

Note 6: Business Combinations

Ipswitch Acquisition

On April 30, 2019, we completed the acquisition of all of the outstanding equity interests of Ipswitch, Inc. (“Ipswitch”) from Roger Greene (the “Seller”) pursuant to the Stock Purchase Agreement, dated as of March 28, 2019, by and among Progress, Ipswitch and the Seller. The acquisition was completed for an aggregate purchase price of $225.0 million, subject to certain customary adjustments as further described in the Stock Purchase Agreement (the “Consideration”), which was paid in cash. Pursuant to the Stock Purchase Agreement, $22.5 million of the Consideration was deposited into an escrow account to secure certain indemnification and other potential obligations of the Seller to Progress. The Seller also received an award of approximately $2.0 million in Progress restricted stock as consideration for the Seller entering into a non-competition agreement for three years as set forth in the Stock Purchase Agreement.

Ipswitch enables approximately 24,000 small and medium-sized businesses and enterprises to provide secure data sharing and ensure high-performance infrastructure availability. Through this acquisition, we will bolster our core offerings to small and medium-sized businesses (SMBs) and enterprises, enabling those businesses to respond faster to business demands and to improve productivity. We funded the acquisition through a combination of existing cash resources and a $185.0 million term loan, which is part of a new $401.0 million term loan and revolving credit facility (Note 7).

The consideration has been allocated to Ipswitch’s tangible assets, identifiable intangible assets, and assumed liabilities based on their estimated fair values. The preliminary fair value estimates of the net assets acquired are based upon preliminary calculations and valuations, and those estimates and assumptions are subject to change as we obtain additional information for those estimates during the measurement period (up to one year from the acquisition date). The excess of the total consideration over the tangible assets, identifiable intangible assets, and assumed liabilities was recorded as goodwill.

The allocation of the purchase price is as follows (in thousands):

	Total	Life
Net working capital	$ 6,068	
Property, plant and equipment	4,661	
Purchased technology	33,100	5 Years
Trade name	9,600	5 Years
Customer relationships	66,600	5 Years
Other assets	314	
Deferred revenue	(12,696)	
Goodwill	117,651	
Net assets acquired	$ 225,298	

The preliminary fair value of the intangible assets has been estimated using the income approach in which the after-tax cash flows are discounted to present value. The cash flows are based on estimates used to value the acquisition, and the discount rates applied were benchmarked with reference to the implied rate of return from the transaction model as well as the weighted average cost of capital. Based on the preliminary valuation, the acquired intangible assets are comprised of customer relationships of approximately $66.6 million, existing technology of approximately $33.1 million, and trade names of approximately $9.6 million.

Tangible assets acquired and assumed liabilities were recorded at fair value. The valuation of the assumed deferred revenue was based on our contractual commitment to provide post-contract customer support to Ipswitch customers and future contractual performance obligations under existing hosting arrangements. The fair value of this assumed liability was based on the estimated cost plus a reasonable margin to fulfill these service obligations. A significant portion of the deferred revenue is expected to be recognized in the 12 months following the acquisition.

We recorded the excess of the purchase price over the identified tangible and intangible assets as goodwill. We believe that the investment value of the future enhancement of our product and solution offerings created as a result of this acquisition has principally contributed to a purchase price that resulted in the recognition of $117.7 million of goodwill, which is deductible for tax purposes.

An election was made under Section 338(h)(10) of the Internal Revenue Code for Ipswitch to treat it as selling all of its assets on the acquisition date and then liquidating. As a result, the identifiable intangible assets and goodwill are deductible for tax purposes.

As previously noted, the Seller received a restricted stock award of approximately $2.0 million, subject to continued compliance with the three-year non-compete agreement. We concluded that the restricted stock award is not a compensation arrangement and we recorded the fair value of the award as an intangible asset separate from goodwill. We will recognize intangible asset amortization expense over the term of the agreement, which is 3 years. We recorded $0.1 million of amortization expense related to this restricted stock award for the three months ended May 31, 2019. This amount is recorded in operating expenses on our condensed consolidated statement of operations.

Acquisition-related transaction costs (e.g., legal, due diligence, valuation, and other professional fees) and certain acquisition restructuring and related charges are not included as a component of consideration transferred but are required to be expensed as incurred. We incurred approximately $1.1 million of acquisition-related costs, which are included in acquisition-related expenses in our condensed consolidated statement of operations for the three months ended May 31, 2019.

The operations of Ipswitch are included in our operating results as part of the OpenEdge segment from the date of acquisition. The amount of revenue of Ipswitch included in our unaudited condensed consolidated statement of operations during the three and six months ended May 31, 2019 was approximately $3.3 million. We determined that disclosing the amount of Ipswitch related earnings included in the consolidated statements of operations is impracticable, as certain operations of Ipswitch were integrated into the operations of the Company from the date of acquisition.

Pro Forma Information

The following pro forma financial information presents the combined results of operations of Progress and Ipswitch as if the acquisition had occurred on December 1, 2017 after giving effect to certain pro forma adjustments. The pro forma adjustments reflected herein include only those adjustments that are directly attributable to the Ipswitch acquisition and factually supportable. These pro forma adjustments include (i) a decrease in revenue from Ipswitch due to the beginning balance of deferred revenue being adjusted to reflect the fair value of the acquired balance, (ii) a net increase in amortization expense to record amortization expense for the $111.3 million of acquired identifiable intangible assets and to eliminate historical amortization of Ipswitch intangible assets, (iii) an increase in interest expense to record interest for the period presented as a result of the new credit facility entered into by Progress in connection with the acquisition, and (iv) the income tax effect of the adjustments made at the statutory tax rate of the U.S. (approximately 24.5%). In addition, prior to the acquisition Ipswitch did not pay entity level corporate tax, with the exception of some states, because it was registered as an S-Corporation. Therefore, we applied the statutory tax rate of the U.S. (approximately 24.5%) to the income before tax of Ipswitch as if the acquisition had occurred on December 1, 2017.

The pro forma financial information does not reflect any adjustments for anticipated expense savings resulting from the acquisition and is not necessarily indicative of the operating results that would have actually occurred had the transaction been consummated on December 1, 2017. These results are in accordance with ASC 606.

(In thousands, except per share data)	Pro Forma Three Months Ended May 31, 2019	Pro Forma Three Months Ended May 31, 2018
Revenue	$ 112,234	$ 104,883
Net income	$ 5,926	$ 4,839
Net income per basic share	$ 0.13	$ 0.11
Net income per diluted share	$ 0.13	$ 0.10

(In thousands, except per share data)	Pro Forma Six Months Ended May 31, 2019	Pro Forma Six Months Ended May 31, 2018
Revenue	$ 218,532	$ 209,251
Net income	$ 10,824	$ 8,080
Net income per basic share	$ 0.24	$ 0.18
Net income per diluted share	$ 0.24	$ 0.17

Note 7: Term Loan and Line of Credit

On April 30, 2019, we entered into an amended and restated credit agreement (the "Credit Agreement") with certain lenders (the "Lenders"), which provides for a $301.0 million secured term loan and a $100.0 million secured revolving credit facility. The revolving credit facility may be made available in U.S. Dollars and certain other currencies and may be increased by up to an additional $125.0 million if the existing or additional lenders are willing to make such increased commitments. The revolving credit facility has sublimits for swing line loans up to $25.0 million and for the issuance of standby letters of credit in a face amount up to $25.0 million.

The Credit Agreement modified our prior credit facility by extending the maturity date to April 30, 2024 and extending the principal repayments of the term loan. We borrowed an additional $185.0 million under the term loan as part of this modification. The new term loan was used to partially fund our acquisition of Ipswitch (Note 6) and we expect to use the revolving credit facility for general corporate purposes, which may include acquisitions of other businesses, and may also use it for working capital.

The Credit Agreement replaces our previous credit agreement dated November 20, 2017, which was set to mature on November 20, 2022. Loans under the previous credit agreement could be prepaid before maturity in whole or in part at our option without penalty or premium. At the time we entered into the Credit Agreement, there were no revolving loans and $1.3 million letters of credit outstanding, which were incorporated into the new credit facility.

Interest rates for the term loan and revolving credit facility are based upon our leverage ratio and determined based on an index selected at our option. The rates range from 1.50% to 2.00% above the Eurocurrency rate for Eurocurrency-based borrowings or from 0.50% to 1.00% above the defined base rate for base rate borrowings. Additionally, we may borrow certain foreign currencies at rates set in the same respective range above the London interbank offered interest rates for those currencies. A quarterly commitment fee on the undrawn portion of the revolving credit facility is required and ranges from 0.25% to 0.35% per annum based on our leverage ratio. The interest rate as of May 31, 2019 was 4.06%.

The credit facility matures on April 30, 2024, when all amounts outstanding will be due and payable in full. The revolving credit facility does not require amortization of principal. The outstanding balance of the term loan as of May 31, 2019 was $301.0 million, with $7.5 million due in the next 12 months. The term loan requires repayment of principal at the end of each fiscal quarter, beginning with the fiscal quarter ended August 31, 2019. The principal repayment amounts are in accordance with the following schedule: (i) four payments of $1.9 million each, (ii) four payments of $3.8 million each, (iii) four payments of $5.6 million each, (iv) four payments of $7.5 million each, (v) three payments of $9.4 million each, and (vi) the last payment is of the remaining principal amount. Any amounts outstanding under the term loan thereafter would be due on the maturity date. The term loan may be prepaid before maturity in whole or in part at our option without penalty or premium. As of

May 31, 2019, the carrying value of the term loan approximates the fair value, based on Level 2 inputs (observable market prices in less than active markets), as the interest rate is variable over the selected interest period and is similar to current rates at which we can borrow funds.

Costs incurred to obtain our long-term debt of $1.6 million, along with $1.2 million of unamortized debt issuance costs related to the previous credit agreement, are recorded as debt issuance costs as a direct deduction from the carrying value of the debt liability on our condensed consolidated balance sheets as of May 31, 2019. These costs are being amortized over the term of the debt agreement using the effective interest rate method. Amortization expense related to the debt issuance costs of $0.1 million for the three months ended May 31, 2019 and May 31, 2018 and $0.2 million for the six months ended May 31, 2019 and May 31, 2018, respectively, is recorded in interest expense on our condensed consolidated statements of operations.

Revolving loans may be borrowed, repaid, and reborrowed until April 30, 2024, at which time all amounts outstanding must be repaid. Accrued interest on the loans is payable quarterly in arrears with respect to base rate loans and at the end of each interest rate period (or at each three-month interval in the case of loans with interest periods greater than three months) with respect to Eurocurrency rate loans. We may prepay the loans or terminate or reduce the commitments in whole or in part at any time, without premium or penalty, subject to certain conditions and reimbursement of certain costs in the case of Eurocurrency rate loans. As of May 31, 2019, there were no amounts outstanding under the revolving line and $1.8 million of letters of credit.

We are the sole borrower under the credit facility. Our obligations under the Credit Agreement are secured by substantially all of our assets and each of our material domestic subsidiaries, as well as 100% of the capital stock of our domestic subsidiaries and 65% of the capital stock of our first-tier foreign subsidiaries, in each case, subject to certain exceptions as described in the Credit Agreement. Future material domestic subsidiaries will be required to guaranty our obligations under the Credit Agreement, and to grant security interests in substantially all of their assets to secure such obligations. The Credit Agreement generally prohibits, with certain exceptions, any other liens on our assets, subject to certain exceptions as described in the Credit Agreement.

The Credit Agreement contains customary affirmative and negative covenants, including covenants that limit or restrict our ability to, among other things, grant liens, make investments, make acquisitions, incur indebtedness, merge or consolidate, dispose of assets, pay dividends or make distributions, repurchase stock, change the nature of the business, enter into certain transactions with affiliates and enter into burdensome agreements, in each case subject to customary exceptions for a credit facility of this size and type. We are also required to maintain compliance with a consolidated fixed charge coverage ratio, a consolidated total leverage ratio and a consolidated senior secured leverage ratio. We are in compliance with these financial covenants as of May 31, 2019.

As of May 31, 2019, aggregate principal payments of long-term debt for the next five years and thereafter are (in thousands):

Remainder of 2019	$ 3,762
2020	11,287
2021	18,812
2022	26,338
2023	33,863
Thereafter	206,938
Total	$ 301,000

Note 8: Common Stock Repurchases

In the three months ended May 31, 2019, we did not repurchase and retire any shares of our common stock. In the six months ended May 31, 2019, we repurchased and retired 0.7 million shares for $25.0 million. In the three and six months ended May 31, 2018, we repurchased and retired 1.1 million shares for $45.0 million and 2.1 million shares for $90.0 million, respectively. The shares were repurchased in all periods as part of our Board of Directors authorized share repurchase program.

In September 2017, our Board of Directors increased our total share repurchase authorization to $250.0 million. As of May 31, 2019, there was $75.0 million remaining under this current authorization.

Note 9: Stock-Based Compensation

Stock-based compensation expense reflects the fair value of stock-based awards, less the present value of expected dividends, measured at the grant date and recognized over the relevant service period. We estimate the fair value of each stock-based award on the measurement date using the current market price of the stock, the Black-Scholes option valuation model, or the Monte Carlo Simulation valuation model.

During fiscal year 2017, we granted performance-based restricted stock units that include a three-year market condition under a Long-Term Incentive Plan (“LTIP”) where the performance measurement period is three years. Vesting of the LTIP awards is based on our level of attainment of specified total stockholder return ("TSR") targets relative to the percentage appreciation of a specified index of companies for the respective three-year periods and is also subject to the continued employment of the grantees. In order to estimate the fair value of such awards, we used a Monte Carlo Simulation valuation model.

During the first quarter of fiscal years 2018 and 2019, we granted performance-based restricted stock units that include two performance metrics under the LTIP where the performance measurement period is three years. Vesting of the 2018 and 2019 LTIP awards is as follows: (i) 50% is based on the three-year market condition as described above (TSR), and (ii) 50% is based on achievement of a three-year cumulative performance condition (operating income). In order to estimate the fair value of such awards, we used a Monte Carlo Simulation valuation model for the market condition portion of the award and used the closing price of our common stock on the date of grant, less the present value of expected dividends, for the portion related to the performance condition.

The Black-Scholes and Monte Carlo Simulation valuation models incorporate assumptions as to stock price volatility, the expected life of options or awards, a risk-free interest rate and dividend yield. We recognize stock-based compensation expense related to options and restricted stock units on a straight-line basis over the service period of the award, which is generally 4 years for options and 3 years for restricted stock units. We recognize stock-based compensation expense related to our employee stock purchase plan using an accelerated attribution method.

The following table provides the classification of stock-based compensation as reflected on our condensed consolidated statements of operations (in thousands):

	Three Months Ended		Six Months Ended	
	May 31, 2019	May 31, 2018	May 31, 2019	May 31, 2018
Cost of maintenance and services	$ 250	$ 269	$ 494	$ 515
Sales and marketing	1,190	995	2,238	1,365
Product development	1,936	1,984	3,864	4,030
General and administrative	2,740	2,332	5,326	4,240
Total stock-based compensation	$ 6,116	$ 5,580	$ 11,922	$ 10,150

Note 10: Accumulated Other Comprehensive Loss

The following table summarizes the changes in accumulated balances of other comprehensive loss during the six months ended May 31, 2019 (in thousands):

	Foreign Currency Translation Adjustment	Unrealized (Losses) Gains on Investments	Accumulated Other Comprehensive Loss
Balance, December 1, 2018, as adjusted	$ (27,973)	$ (203)	$ (28,176)
Other comprehensive (loss) income before reclassifications, net of tax	(551)	137	(414)
Balance, May 31, 2019	$ (28,524)	$ (66)	$ (28,590)

The tax effect on accumulated unrealized (losses) gains on investments was minimal as of May 31, 2019 and November 30, 2018.

Note 11: Restructuring Charges

The following table provides a summary of activity for our restructuring actions, which are detailed further below (in thousands):

	Excess Facilities and Other Costs	Employee Severance and Related Benefits	Total
Balance, December 1, 2018	$ 307	$ 4	$ 311
Costs incurred	486	2,706	3,192
Cash disbursements	(305)	(452)	(757)
Translation adjustments and other	(95)	—	(95)
Balance, May 31, 2019	$ 393	$ 2,258	$ 2,651

2019 Restructuring

During the second quarter of fiscal year 2019, we restructured our operations in connection with the acquisition of Ipswitch (Note 6). This restructuring resulted in a reduction in redundant positions, primarily within administrative functions of Ipswitch. We expect to incur additional expenses as part of this action related to employee costs and facility closures as we consolidate offices in various locations during fiscal years 2019 and 2020.

Restructuring expenses incurred to date are related to employee costs, including severance, health benefits and outplacement services (but excluding stock-based compensation).

As part of this fiscal year 2019 restructuring, for the three months ended May 31, 2019, we incurred expenses of $2.7 million, which are recorded in restructuring expenses on the condensed consolidated statements of operations.

A summary of the first three months of fiscal year 2019 activity for this restructuring action is as follows (in thousands):

	Excess Facilities and Other Costs	Employee Severance and Related Benefits	Total
Balance, December 1, 2018	$ —	$ —	$ —
Costs incurred	—	2,702	2,702
Cash disbursements	—	(444)	(444)
Balance, May 31, 2019	$ —	$ 2,258	$ 2,258

Cash disbursements for expenses incurred to date under this restructuring are expected to be made through the second quarter of fiscal year 2020. Accordingly, the balance of the restructuring reserve of $2.3 million is included in other accrued liabilities on the condensed consolidated balance sheet at May 31, 2019.

2017 Restructuring

During fiscal year 2017, we undertook certain operational restructuring initiatives intended to significantly reduce annual costs. As part of this action, management committed to a new strategic plan highlighted by a new product strategy and a streamlined operating approach. To execute these operational restructuring initiatives, we reduced our global workforce by over 20%. These workforce reductions occurred in substantially all functional units and across all geographies in which we operate. We also consolidated offices in various locations during fiscal years 2017 and 2018 and the first six months of fiscal year 2019. We expect to incur additional expenses related to facility closures as part of this restructuring action through fiscal year 2019, but we do not expect these additional costs to be material.

Restructuring expenses are related to employee costs, including severance, health benefits and outplacement services (but excluding stock-based compensation), facilities costs, which include fees to terminate lease agreements and costs for unused space, net of sublease assumptions, and other costs, which include asset impairment charges.

As part of this fiscal year 2017 restructuring, for the three and six months ended May 31, 2019, we incurred expenses of $0.1 million and $0.5 million, respectively, which are recorded in restructuring expenses on the condensed consolidated statements of operations.

A summary of the first six months of fiscal year 2019 activity for this restructuring action is as follows (in thousands):

	Excess Facilities and Other Costs	Employee Severance and Related Benefits	Total
Balance, December 1, 2018	$ 307	$ 4	$ 311
Costs incurred	486	4	490
Cash disbursements	(305)	(8)	(313)
Translation adjustments and other	(95)	—	(95)
Balance, May 31, 2019	$ 393	$ —	$ 393

Cash disbursements for expenses incurred to date under this restructuring are expected to be made through fiscal year 2019. Accordingly, the balance of the restructuring reserve of $0.4 million is included in other accrued liabilities on the condensed consolidated balance sheet at May 31, 2019.

Note 12: Income Taxes

Our income tax provision for the second quarter of fiscal years 2019 and 2018 reflects our estimate of the effective tax rates expected to be applicable for the full fiscal years, adjusted for any discrete events which are recorded in the period in which they occur. The estimates are reevaluated each quarter based on our estimated tax expense for the full fiscal year.

Certain international provisions of the Tax Cuts and Jobs Act became effective for us in fiscal year 2019. The global intangible low-taxed income (“GILTI”) provisions require us to include in our U.S. income tax base foreign subsidiary earnings in excess of an allowable return of the foreign subsidiary’s tangible assets. We expect to be subject to incremental U.S. tax resulting from GILTI inclusions in fiscal year 2019, but we do not expect the impact to be material.

Our effective income tax rate was 34% in the second quarter of fiscal year 2019 compared to 25% in the second quarter of fiscal year 2018, and 32% in the first six months of fiscal year 2019 compared to 23% in the same period last year. The primary reason for the increase in the effective rate as compared to the prior quarter is during the second quarter of 2019 we reevaluated our estimates of the impact of certain international provisions of the Tax Cuts and Jobs Act that resulted in an increase in the effective tax rate for fiscal year 2019. In addition, we recorded a provisional tax benefit amount of $1.4 million in the three months ended February 28, 2018 related to the re-measurement of our U.S. deferred tax balance due to enactment of tax reform in the U.S. that lowered the federal corporate tax rate, which is driving the change over prior year rates.

Our Federal income tax returns have been examined or are closed by statute for all years prior to fiscal year 2015. Our state income tax returns have been examined or are closed by statute for all years prior to fiscal year 2013.

Tax authorities for certain non-U.S. jurisdictions are also examining returns. With some exceptions, we are generally not subject to tax examinations in non-U.S. jurisdictions for years prior to fiscal year 2013.

Note 13: Earnings per share

We compute basic earnings per share using the weighted average number of common shares outstanding. We compute diluted earnings per share using the weighted average number of common shares outstanding plus the effect of outstanding dilutive stock options, restricted stock units and deferred stock units, using the treasury stock method. The following table sets forth the calculation of basic and diluted earnings per share on an interim basis (in thousands, except per share data):

	Three Months Ended		Six Months Ended	
	May 31, 2019	May 31, 2018	May 31, 2019	May 31, 2018
		As Adjusted[1]		As Adjusted[1]
Net income	$ 8,181	$ 12,904	$ 17,583	$ 26,637
Weighted average shares outstanding	44,611	45,531	44,784	46,030
Dilutive impact from common stock equivalents	676	556	503	751
Diluted weighted average shares outstanding	45,287	46,087	45,287	46,781
Basic earnings per share	$ 0.18	$ 0.28	$ 0.39	$ 0.58
Diluted earnings per share	$ 0.18	$ 0.28	$ 0.39	$ 0.57

[1]The Company adopted ASC 606 effective December 1, 2018 using the full retrospective method. See Note 1. *Nature of Business and Basis of Presentation* for further information.

We excluded stock awards representing approximately 545,000 shares and 728,000 shares of common stock from the calculation of diluted earnings per share in the three and six months ended May 31, 2019, respectively, because these awards were anti-dilutive. In the three and six months ended May 31, 2018, we excluded stock awards representing 698,000 shares and 521,000 shares of common stock, respectively, from the calculation of diluted earnings per share as they were anti-dilutive.

Note 14: Business Segments and International Operations

Operating segments are components of an enterprise that engage in business activities for which discrete financial information is available and regularly reviewed by the chief operating decision maker in deciding how to allocate resources and assess performance. Our chief operating decision maker is our Chief Executive Officer.

We operate as three distinct business segments: OpenEdge, Data Connectivity and Integration, and Application Development and Deployment. Ipswitch became part of our OpenEdge business segment as of the date of acquisition.

We do not manage our assets or capital expenditures by segment or assign other income (expense) and income taxes to segments. We manage and report such items on a consolidated company basis. Further, the following expenses are not allocated to our segments as we also manage and report our business in these functional areas on a consolidated basis only: certain product development and corporate sales and marketing expenses, customer support, administration, amortization of intangibles, stock-based compensation, fees related to shareholder activist, restructuring expenses, and acquisition-related expenses.

The following table provides revenue and contribution margin from our reportable segments and reconciles to our consolidated income from continuing operations before income taxes:

	Three Months Ended		Six Months Ended	
	May 31, 2019	May 31, 2018	May 31, 2019	May 31, 2018
(In thousands)		As Adjusted[(1)]		As Adjusted[(1)]
Segment revenue:				
OpenEdge	$ 67,820	$ 69,607	$ 133,072	$ 136,270
Data Connectivity and Integration	12,932	3,411	18,932	12,903
Application Development and Deployment	19,243	19,846	37,540	39,101
Total revenue	99,995	92,864	189,544	188,274
Segment costs of revenue and operating expenses:				
OpenEdge	19,097	15,013	37,412	30,775
Data Connectivity and Integration	1,806	1,674	3,306	3,303
Application Development and Deployment	5,547	6,199	10,974	12,997
Total costs of revenue and operating expenses	26,450	22,886	51,692	47,075
Segment contribution margin:				
OpenEdge	48,723	54,594	95,660	105,495
Data Connectivity and Integration	11,126	1,737	15,626	9,600
Application Development and Deployment	13,696	13,647	26,566	26,104
Total contribution margin	73,545	69,978	137,852	141,199
Other unallocated expenses[(2)]	58,804	51,428	107,702	103,518
Income from operations	14,741	18,550	30,150	37,681
Other expense, net	(2,317)	(1,284)	(4,320)	(2,869)
Income before income taxes	$ 12,424	$ 17,266	$ 25,830	$ 34,812

[(1)]The Company adopted ASC 606 effective December 1, 2018 using the full retrospective method. See Note 1. *Nature of Business and Basis of Presentation* for further information.

[(2)]The following expenses are not allocated to our segments as we manage and report our business in these functional areas on a consolidated basis only: certain product development and corporate sales and marketing expenses, customer support, administration, amortization of intangibles, stock-based compensation, fees related to shareholder activist, restructuring expenses, and acquisition-related expenses.

Our revenues are derived from licensing our products, and from related services, which consist of maintenance, hosting services, and consulting and education. Information relating to revenue from customers by revenue type is as follows (in thousands):

	Three Months Ended		Six Months Ended	
	May 31, 2019	May 31, 2018	May 31, 2019	May 31, 2018
(In thousands)		As Adjusted[(1)]		As Adjusted[(1)]
Performance obligations transferred at a point in time:				
Software licenses	$ 29,728	$ 22,526	$ 52,530	$ 48,580
Performance obligations transferred over time:				
Maintenance	62,528	63,058	122,527	125,242
Services	7,739	7,280	14,487	14,452
Total revenue	$ 99,995	$ 92,864	$ 189,544	$ 188,274

[(1)]The Company adopted ASC 606 effective December 1, 2018 using the full retrospective method. See Note 1. *Nature of Business and Basis of Presentation* for further information.

In the following table, revenue attributed to North America includes sales to customers in the U.S. and sales to certain multinational organizations. Revenue from EMEA, Latin America and the Asia Pacific region includes sales to customers in each region plus sales from the U.S. to distributors in these regions. Information relating to revenue from external customers from different geographical areas is as follows (in thousands):

	Three Months Ended		Six Months Ended	
	May 31, 2019	May 31, 2018	May 31, 2019	May 31, 2018
(In thousands)		As Adjusted[(1)]		As Adjusted[(1)]
North America	$ 57,060	$ 47,351	$ 103,558	$ 99,549
EMEA	33,633	35,049	67,005	68,345
Latin America	4,108	4,243	8,569	9,185
Asia Pacific	5,194	6,221	10,412	11,195
Total revenue	$ 99,995	$ 92,864	$ 189,544	$ 188,274

[(1)]The Company adopted ASC 606 effective December 1, 2018 using the full retrospective method. See Note 1. *Nature of Business and Basis of Presentation* for further information.

No single customer, partner, or country outside of the U.S. has accounted for more than 10% of our total revenue for the three or six months ended May 31, 2019 and May 31, 2018. As of May 31, 2019 and November 30, 2018, no individual customer accounted for 10% or more of our net accounts receivable balance. As of May 31, 2019 and November 30, 2018, no individual foreign country accounted for 10% or more of total consolidated assets.

Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations

Adoption of New Accounting Standards

We adopted the new accounting standard related to revenue recognition ("ASC 606") effective December 1, 2018, using the full retrospective method, which required us to restate prior comparable periods. See Note 1. Nature of Business and Basis of Presentation *for further information.* Management’s Discussion and Analysis of Financial Condition and Results of Operations *has also been adjusted to reflect the full retrospective adoption of ASC 606.*

Critical Accounting Policies

Management’s discussion and analysis of financial condition and results of operations are based upon our consolidated financial statements which have been prepared in accordance with GAAP. We make estimates and assumptions in the preparation of our consolidated financial statements that affect the reported amounts of assets and liabilities, revenue and expenses and related disclosures of contingent assets and liabilities. We base our estimates on historical experience and various other assumptions that are believed to be reasonable under the circumstances. However, actual results may differ from these estimates. The most significant estimates relate to: the timing and amounts of revenue recognition, including the determination of the nature and timing of the satisfaction of performance obligations, the standalone selling price of performance obligations, and the transaction price allocated to performance obligations; the realization of tax assets and estimates of tax liabilities; fair values of investments in marketable securities; assets held for sale; intangible assets and goodwill valuations; the recognition and disclosure of contingent liabilities; the collectability of accounts receivable; and assumptions used to determine the fair value of stock-based compensation. This listing is not a comprehensive list of all of our accounting policies. For further information regarding the application of these and other accounting policies, see Note 1 to our Consolidated Financial Statements in Item 8 of our Annual Report on Form 10-K for the fiscal year ended November 30, 2018.

Revenue Policy

Our contracts with customers often include various combinations of products and services. The determination of whether these products and services are considered to be distinct performance obligations that should be accounted for separately or if they should be combined requires significant judgment. Further, we utilize a variety of estimation methods to determine the appropriate Standalone Selling Price ("SSP") for each product and service. We use the residual approach in allocating the transaction price to each distinct performance obligation. As required, we evaluate the residual approach estimate compared to all available observable data in order to conclude the estimate is representative of its SSP. See Note 1. Nature of Business and Basis of Presentation *for further information.*

Cautionary Note Regarding Forward-Looking Statements

The Private Securities Litigation Reform Act of 1995 contains certain safe harbor provisions regarding forward-looking statements. This Form 10-Q, and other information provided by us or statements made by our directors, officers or employees from time to time, may contain “forward-looking” statements and information, which involve risks and uncertainties. Actual future results may differ materially. Statements indicating that we “believe,” “may,” “could,” “would,” “might,” “should,” “expect,” “intend,” “plan,” “target,” “anticipate” and “continue,” are forward-looking, as are other statements concerning future financial results, product offerings or other events that have not yet occurred. There are a number of factors that could cause actual results or future events to differ materially from those anticipated by the forward-looking statements, including, without limitation: (1) Economic, geopolitical and market conditions can adversely affect our business, results of operations and financial condition, including our revenue growth and profitability, which in turn could adversely affect our stock price. (2) We may fail to achieve our financial forecasts due to such factors as delays or size reductions in transactions, fewer large transactions in a particular quarter, fluctuations in currency exchange rates, or a decline in our renewal rates for contracts. (3) Our ability to successfully manage transitions to new business models and markets, including an increased emphasis on a cloud and subscription strategy, may not be successful. (4) If we are unable to develop new or sufficiently differentiated products and services, or to enhance and improve our existing products and services in a timely manner to meet market demand, partners and customers may not purchase new software licenses or subscriptions or purchase or renew support contracts. (5) We depend upon our extensive partner channel and we may not be successful in retaining or expanding our relationships with channel partners. (6) Our international sales and operations subject us to additional risks that can adversely affect our operating results, including risks relating to foreign currency gains and losses. (7) If the security measures for our software, services or other offerings are compromised or subject to a successful cyber-attack, or if such offerings contain significant coding or configuration errors, we may experience reputational harm, legal claims and financial exposure. (8) We have made acquisitions, including our recent acquisition of Ipswitch, and may make acquisitions in the future, and those acquisitions may not be successful, may involve unanticipated costs or other integration issues or may disrupt our existing *operations. (9) Those factors discussed in Part II, Item 1A (Risk Factors) in this Quarterly Report on Form 10-Q, and in Part I, Item 1A (Risk Factors) in our Annual Report on Form 10-K for the fiscal year ended November 30, 2018. Although we have sought to identify the most significant risks to our business, we cannot predict whether, or to what extent, any of such risks may be realized. We also cannot assure you that we have identified all possible issues which we might face. We undertake no obligation to update any forward-looking statements that we make.*

Use of Constant Currency

Revenue from our international operations has historically represented a substantial portion of our total revenue. As a result, our revenue results have been impacted, and we expect will continue to be impacted, by fluctuations in foreign currency exchange rates. For example, if the local currencies of our foreign subsidiaries strengthen, our consolidated results stated in U.S. dollars are positively impacted.

As exchange rates are an important factor in understanding period to period comparisons, we believe the presentation of revenue growth rates on a constant currency basis enhances the understanding of our revenue results and evaluation of our performance in comparison to prior periods. The constant currency information presented is calculated by translating current period results using prior period weighted average foreign currency exchange rates. These results should be considered in addition to, not as a substitute for, results reported in accordance with GAAP.

Overview

Progress Software Corporation ("Progress," the "Company," "we," "us," or "our") offers the leading platform for developing and deploying strategic business applications. We enable customers and partners to deliver modern, high-impact digital experiences with a fraction of the effort, time and cost. Progress offers powerful tools for easily building adaptive user experiences across any type of device or touchpoint, award-winning machine learning that enables cognitive capabilities to be a part of any application, the flexibility of a serverless cloud to deploy modern apps, business rules, web content management, plus leading data connectivity technology. Over 1,700 ISVs, 100,000 enterprise customers, and 2 million developers rely on Progress to power their applications. We operate as three distinct segments: OpenEdge, Data Connectivity and Integration, and Application Development and Deployment.

The key tenets of our strategic plan and operating model are as follows:

Align Resources to Drive Profitability. Our organizational philosophy and operating principles focus primarily on customer and partner retention and success for our core products and a streamlined operating approach in order to more efficiently drive revenue.

Protect and Strengthen Our Core Business. A key element of our strategy is centered on providing the platform and tools enterprises need to build “cognitive applications,” which we believe are the future of application development. We offer this platform to both new customers and partners as well as our existing partner and customer ecosystems. Our platform for cognitive applications enables developers to build the most modern applications quickly and easily, and includes:

- our leading UI development tools, which enable organizations to easily build engaging user interfaces for any device or front end;
- our NativeScript offering, which allows developers to use JavaScript to build native applications across multiple mobile platforms;
- our modern high productivity application development platform, Progress Kinvey, that is cloud-native, is secure, high-performing, and highly-scalable while supporting all modern user interfaces;
- automated and intuitive machine learning capabilities for accelerating the creation and delivery of cognitive applications;
- our data connectivity and integration capabilities;
- our business logic and rules capabilities; and
- web content management for delivering personalized and engaging digital experiences

This strategy builds on our inherent DNA and our vast experience in application development that we’ve acquired over the past 35 years.

Holistic Capital Allocation Approach. Pursuant to our capital allocation strategy that we announced in September 2017, we have targeted to return approximately 75-80% of our annual cash flows from operations to stockholders in the form of share repurchases and through dividends. We have also adopted a disciplined approach to future mergers and acquisitions. Adopting strict financial criteria for future acquisitions, these acquisitions will enable us to drive significant stockholder returns by providing scale and increased cash flows.

In September 2017, our Board of Directors increased our total share repurchase authorization to $250.0 million. As of May 31, 2019, there is $75.0 million remaining under this current authorization. As discussed further below, we have suspended our stock repurchase program for the remainder of fiscal 2019. We expect to resume share repurchases in fiscal 2020, at a level consistent with our publicly stated capital allocation policy.

We began paying quarterly cash dividends of $0.125 per share of common stock to Progress stockholders in December 2016 and increased the quarterly cash dividend to $0.14 per share in September 2017. On September 21, 2018, our Board of Directors approved an additional 11% increase to our quarterly cash dividend from $0.14 to $0.155 per share of common stock. On June 25, 2019, our Board of Directors declared a quarterly dividend of $0.155 per share of common stock that will be paid on September 16, 2019 to shareholders of record as of the close of business on September 2, 2019. We expect to continue paying quarterly cash dividends in subsequent quarters consistent with our capital allocation strategy. However, we may terminate or modify this program at any time.

On April 30, 2019, we completed the acquisition of all of the outstanding equity interests of Ipswitch, Inc. (“Ipswitch”) for approximately $225 million in cash. We funded the transaction with existing cash on hand and funds secured under a new credit facility. The results of operations of Ipswitch are included in our operating results as part of the OpenEdge business segment from the date of acquisition. Ipswitch provides us with leading network management and secure data file transfer capabilities for small and medium-sized businesses and enterprises. Founded in 1991, Ipswitch serves approximately 24,000 customers in 170 countries. Ipswitch has approximately $75 million in revenue, of which 75% is recurring. Ipswitch has blue-chip customers across all verticals, including finance and banking, healthcare, insurance, retail, government and biotech. In connection with the acquisition of Ipswitch, we have suspended our stock repurchase program for the remainder of fiscal 2019.

In April 2019, we entered into an amended and restated credit agreement, which consists of a $301.0 million term loan and a $100.0 million revolving loan (which may be increased by an additional $125.0 million if the existing or additional lenders are willing to make such increased commitments). This facility matures in April 2024, at which time any amounts outstanding will be due and payable in full. We may wish to borrow additional amounts under the facility in the future to support our operations, including for strategic acquisitions and share repurchases.

We expect to continue to evaluate possible acquisitions and other strategic transactions designed to expand our business. As a result, our expected uses of cash could change, our cash position could be reduced and we may incur additional debt obligations to the extent we complete additional acquisitions. However, we believe that existing cash balances, together with funds generated from operations and amounts available under our credit facility, will be sufficient to finance our operations and meet our foreseeable cash requirements, including quarterly cash dividends to Progress stockholders and stock repurchases, through at least the next twelve months.

We derive a significant portion of our revenue from international operations, which are primarily conducted in foreign currencies. The impact of foreign exchange did not result in a material impact on revenue during fiscal years 2018 or 2017, but since approximately one-third of our revenue is denominated in foreign currency, future fluctuations in foreign currency rates may significantly impact our results.

Results of Operations

Revenue

	Three Months Ended		Percentage Change	
(In thousands)	May 31, 2019	May 31, 2018	As Reported	Constant Currency
Revenue	$ 99,995	$ 92,864	8%	10%

	Six Months Ended		Percentage Change	
(In thousands)	May 31, 2019	May 31, 2018	As Reported	Constant Currency
Revenue	$ 189,544	$ 188,274	1%	3%

Total revenue increased in both the second quarter and the first six months of fiscal year 2019 as compared to the same periods last year due primarily to an increase in license sales in our Data Connectivity and Integration segment and the acquisition of Ipswitch during the second quarter of fiscal year 2019. Ipswitch contributed $3.3 million in revenue to both the three and six month periods ended May 31, 2019.

Software License Revenue

	Three Months Ended		Percentage Change	
(In thousands)	May 31, 2019	May 31, 2018	As Reported	Constant Currency
Software Licenses	$ 29,728	$ 22,526	32%	35%
As a percentage of total revenue	*30%*	*24%*		

	Six Months Ended		Percentage Change	
(In thousands)	May 31, 2019	May 31, 2018	As Reported	Constant Currency
Software Licenses	$ 52,530	$ 48,580	8%	11%
As a percentage of total revenue	*28%*	*26%*		

Software license revenue increased in both the second quarter and the first six months of fiscal year 2019 as compared to the same periods last year primarily due to an increase in license sales in our Data Connectivity and Integration segment. The increase was partially offset by a decline in software license revenue in our OpenEdge and Application Development and Deployment segments during the second quarter and first six months of fiscal year 2019 as compared to the same periods in the prior year.

Maintenance and Services Revenue

	Three Months Ended		Percentage Change	
(In thousands)	May 31, 2019	May 31, 2018	As Reported	Constant Currency
Maintenance	$ 62,528	$ 63,058	(1)%	2%
As a percentage of total revenue	*63%*	*68%*		
Services	7,739	7,280	6 %	8%
As a percentage of total revenue	*8%*	*8%*		
Total maintenance and services revenue	$ 70,267	$ 70,338	— %	2%
As a percentage of total revenue	*70%*	*76%*		

	Six Months Ended		Percentage Change	
(In thousands)	May 31, 2019	May 31, 2018	As Reported	Constant Currency
Maintenance	$ 122,527	$ 125,242	(2)%	—%
As a percentage of total revenue	*65%*	*67%*		
Services	14,487	14,452	— %	2%
As a percentage of total revenue	*8%*	*8%*		
Total maintenance and services revenue	$ 137,014	$ 139,694	(2)%	10%
As a percentage of total revenue	*72%*	*74%*		

Maintenance revenue decreased in all periods primarily due to the unfavorable impact from currency exchange rates. Services revenue increased in the second quarter of fiscal year 2019 as compared to the prior year period due to an increase in professional services revenue generated by our OpenEdge segment, partially offset by lower Application Development and Deployment professional services revenue. Services revenue in the first six months of fiscal year 2019 remained flat as compared to the same period last year.

Revenue by Region

(In thousands)	Three Months Ended		Percentage Change	
	May 31, 2019	May 31, 2018	As Reported	Constant Currency
North America	$ 57,060	$ 47,351	21 %	21 %
As a percentage of total revenue	*57%*	*51%*		
Europe, the Middle East and Africa ("EMEA")	$ 33,633	$ 35,049	(4)%	1 %
As a percentage of total revenue	*34%*	*38%*		
Latin America	$ 4,108	$ 4,243	(3)%	6 %
As a percentage of total revenue	*4%*	*4%*		
Asia Pacific	$ 5,194	$ 6,221	(17)%	(13)%
As a percentage of total revenue	*5%*	*7%*		

(In thousands)	Six Months Ended		Percentage Change	
	May 31, 2019	May 31, 2018	As Reported	Constant Currency
North America	$ 103,558	$ 99,549	4 %	4 %
As a percentage of total revenue	*55%*	*53%*		
EMEA	$ 67,005	$ 68,345	(2)%	3 %
As a percentage of total revenue	*35%*	*36%*		
Latin America	$ 8,569	$ 9,185	(7)%	2 %
As a percentage of total revenue	*5%*	*5%*		
Asia Pacific	$ 10,412	$ 11,195	(7)%	(3)%
As a percentage of total revenue	*5%*	*6%*		

The increase in North America in the second quarter and first six months of fiscal year 2019 was primarily due to higher license revenue generated by our Data Connectivity and Integration segment, as well as increased license and maintenance revenue in our OpenEdge segment. The decrease in revenue generated in EMEA in all periods was primarily due to a decrease in OpenEdge license revenue and the effect of foreign exchange. The decrease in revenue in Latin America in all periods was the result of the effect of foreign exchange. The decrease in revenue generated in the Asia Pacific region in all periods was primarily due to license and maintenance revenue decreases in our OpenEdge segment.

Total revenue generated in markets outside North America represented 45% of total revenue in the first six months of fiscal year 2019 and 47% of total revenue in the same period last year. If exchange rates had remained constant in the first six months of fiscal year 2019 as compared to the exchange rates in effect in the same period of fiscal year 2018, total revenue generated in markets outside North America would have been 47% of total revenue.

Revenue by Segment

(In thousands)	Three Months Ended May 31, 2019	Three Months Ended May 31, 2018	Percentage Change As Reported	Percentage Change Constant Currency
OpenEdge segment	$ 67,820	$ 69,607	(3)%	1 %
Data Connectivity and Integration segment	12,932	3,411	279 %	281 %
Application Development and Deployment segment	19,243	19,846	(3)%	(3)%
Total revenue	$ 99,995	$ 92,864	8 %	10 %

(In thousands)	Six Months Ended May 31, 2019	Six Months Ended May 31, 2018	Percentage Change As Reported	Percentage Change Constant Currency
OpenEdge segment	$ 133,072	$ 136,270	(2)%	1 %
Data Connectivity and Integration segment	18,932	12,903	47 %	47 %
Application Development and Deployment segment	37,540	39,101	(4)%	(4)%
Total revenue	$ 189,544	$ 188,274	1 %	3 %

Revenue in the OpenEdge segment decreased in all periods primarily due to an unfavorable impact of currency exchange rates, offset by the impact of the acquisition of Ipswitch and an increase in professional services revenue. Data Connectivity and Integration revenue increased in all periods primarily due to the timing of certain renewals by original equipment manufacturers ("OEMs"). Application Development and Deployment revenue decreased in all periods primarily due to lower services revenue.

Cost of Software Licenses

(In thousands)	Three Months Ended May 31, 2019	Three Months Ended May 31, 2018	Three Months Ended Percentage Change	Six Months Ended May 31, 2019	Six Months Ended May 31, 2018	Six Months Ended Percentage Change
Cost of software licenses	$ 925	$ 1,233	(25)%	$ 2,092	$ 2,494	(16)%
As a percentage of software license revenue	*3%*	*5%*		*4%*	*5%*	
As a percentage of total revenue	*1%*	*1%*		*1%*	*1%*	

Cost of software licenses consists primarily of costs of royalties, electronic software distribution, duplication, and packaging. Cost of software licenses as a percentage of software license revenue varies from period to period depending upon the relative product mix. The slight decrease in cost of software licenses in both the second quarter and first six months of fiscal year 2019 was a result of lower payments of royalties to third parties as compared to the prior periods.

Cost of Maintenance and Services

(In thousands)	Three Months Ended May 31, 2019	Three Months Ended May 31, 2018	Three Months Ended Percentage Change	Six Months Ended May 31, 2019	Six Months Ended May 31, 2018	Six Months Ended Percentage Change
Cost of maintenance and services	$ 10,580	$ 9,511	11%	$ 20,019	$ 19,335	4%
As a percentage of maintenance and services revenue	*15%*	*14%*		*15%*	*14%*	
As a percentage of total revenue	*11%*	*10%*		*11%*	*10%*	

Cost of maintenance and services consists primarily of costs of providing customer support, consulting, and education. The increase in both periods was primarily due to higher compensation-related costs resulting from an increase in headcount as a result of the acquisition of Ipswitch.

Amortization of Intangibles

	Three Months Ended			Six Months Ended		
(In thousands)	May 31, 2019	May 31, 2018	Percentage Change	May 31, 2019	May 31, 2018	Percentage Change
Amortization of acquired intangibles	$ 6,106	$ 5,899	4%	$ 11,539	$ 11,717	(2)%
As a percentage of total revenue	*6%*	*6%*		*6%*	*6%*	

Amortization of intangibles included in costs of revenue primarily represents the amortization of the value assigned to technology-related intangible assets obtained in business combinations. The increase in the second quarter of fiscal year 2019 was due to the addition of intangible assets associated with the technology obtained in connection with the acquisition of Ipswitch. The decrease in the first six months of fiscal year 2019 as compared to the same period in the prior year was due to the completion of amortization of certain intangible assets acquired in prior years, slightly offset by the addition of intangible assets associated with the acquisition of Ipswitch.

Gross Profit

	Three Months Ended			Six Months Ended		
(In thousands)	May 31, 2019	May 31, 2018	Percentage Change	May 31, 2019	May 31, 2018	Percentage Change
Gross profit	$ 82,384	$ 76,221	8%	$ 155,894	$ 154,728	1%
As a percentage of total revenue	*82%*	*82%*		*82%*	*82%*	

Our gross profit increased in both the second quarter and the first six months of fiscal year 2019 primarily due to the increases of license revenue as well as the decrease in cost of licenses, offset slightly by the increase in cost of maintenance and services, each as described above.

Sales and Marketing

	Three Months Ended			Six Months Ended		
(In thousands)	May 31, 2019	May 31, 2018	Percentage Change	May 31, 2019	May 31, 2018	Percentage Change
Sales and marketing	$ 24,832	$ 21,658	15%	$ 47,155	$ 43,086	9%
As a percentage of total revenue	*25%*	*23%*		*25%*	*23%*	

Sales and marketing expenses increased in both the second quarter of fiscal year 2019 and the first six months of fiscal 2019 as compared to the same periods last year primarily due to increased compensation-related expenses as a result of increased headcount from the acquisition of Ipswitch. The increase was also partially due to higher marketing program costs related to our annual customer and partner conference, which took place during the second quarter of fiscal year 2019.

Product Development

	Three Months Ended			Six Months Ended		
(In thousands)	May 31, 2019	May 31, 2018	Percentage Change	May 31, 2019	May 31, 2018	Percentage Change
Product development costs	$ 21,688	$ 19,822	9%	$ 41,578	$ 40,067	4%
As a percentage of total revenue	*22%*	*21%*		*22%*	*21%*	

Product development expenses increased in both the second quarter and first six months of fiscal year 2019 as compared to the same period last year primarily due to increased compensation-related expenses as a result of increased headcount from the acquisition of Ipswitch.

General and Administrative

	Three Months Ended			Six Months Ended		
(In thousands)	May 31, 2019	May 31, 2018	Percentage Change	May 31, 2019	May 31, 2018	Percentage Change
General and administrative	$ 12,654	$ 12,190	4%	$ 24,939	$ 23,452	6%
As a percentage of total revenue	*13%*	*13%*		*13%*	*12%*	

General and administrative expenses include the costs of our finance, human resources, legal, information systems and administrative departments. General and administrative expenses increased in both the second quarter and first six months of fiscal year 2019 as compared to the same periods last year primarily due to higher stock-based compensation expense.

Amortization of Intangibles

	Three Months Ended			Six Months Ended		
(In thousands)	May 31, 2019	May 31, 2018	Percentage Change	May 31, 2019	May 31, 2018	Percentage Change
Amortization of acquired intangibles	$ 4,585	$ 3,318	38%	$ 7,773	$ 6,637	17%
As a percentage of total revenue	*5%*	*4%*		*4%*	*4%*	

Amortization of intangibles included in operating expenses primarily represents the amortization of value assigned to intangible assets obtained in business combinations other than assets identified as purchased technology. Amortization of acquired intangibles increased in all periods as compared to the same period last year due to the addition of intangible assets obtained in connection with the acquisition of Ipswitch.

Fees Related to Shareholder Activist

	Three Months Ended			Six Months Ended		
(In thousands)	May 31, 2019	May 31, 2018	Percentage Change	May 31, 2019	May 31, 2018	Percentage Change
Fees related to shareholder activist	$ —	$ 214	*	$ —	$ 1,472	*
As a percentage of total revenue	*—%*	*—%*		*—%*	*1%*	

** Not meaningful*

In September 2017, Praesidium Investment Management publicly announced in a Schedule 13D filed with the SEC its disagreement with our strategy and stated that it was seeking changes in the composition of our Board of Directors. In fiscal years 2017 and 2018, we incurred professional and other fees relating to Praesidium's actions. We do not expect to incur additional professional and other fees related to this matter.

Restructuring Expenses

	Three Months Ended			Six Months Ended		
(In thousands)	May 31, 2019	May 31, 2018	Percentage Change	May 31, 2019	May 31, 2018	Percentage Change
Restructuring expenses	$ 2,777	$ 426	552%	$ 3,192	$ 2,247	42%
As a percentage of total revenue	*3%*	*—%*		*2%*	*1%*	

Restructuring expenses recorded in the second quarter and first six months of fiscal year 2019 relate to the restructuring activities that occurred in both fiscal years 2019 and 2017. See Note 11 to the condensed consolidated financial statements for additional details, including types of expenses incurred and the timing of future expenses and cash payments. See also the Liquidity and Capital Resources section of this Item 2, Management's Discussion and Analysis of Financial Condition and Results of Operations.

Acquisition-Related Expenses

(In thousands)	Three Months Ended May 31, 2019	Three Months Ended May 31, 2018	Percentage Change	Six Months Ended May 31, 2019	Six Months Ended May 31, 2018	Percentage Change
Acquisition-related expenses	$ 1,107	$ 43	*	$ 1,107	$ 86	*
As a percentage of total revenue	*1%*	*—%*		*1%*	*—%*	

** Not meaningful*

Acquisition-related costs are expensed as incurred and include those costs incurred as a result of business combinations. These costs consist of professional service fees, including third-party legal and valuation-related fees, as well as retention fees, including earn-out payments treated as compensation expense. Acquisition-related expenses in both the second quarter and first six months of fiscal year 2019 were related to the acquisition of Ipswitch. Acquisition-related expenses in both the second quarter and first six months of fiscal year 2018 were minimal.

Income from Operations

(In thousands)	Three Months Ended May 31, 2019	Three Months Ended May 31, 2018	Percentage Change	Six Months Ended May 31, 2019	Six Months Ended May 31, 2018	Percentage Change
Income from operations	$ 14,741	$ 18,550	(21)%	$ 30,150	$ 37,681	(20)%
As a percentage of total revenue	*15%*	*20%*		*16%*	*20%*	

Income from operations decreased in both the second quarter and first six months of fiscal year 2019 as compared to the same periods last year primarily due to increases in operating expenses, amortization of acquired intangible assets, restructuring expenses and acquisition expenses recorded in fiscal year 2019 as a result of the acquisition of Ipswitch, which was partially offset by the increase in license revenue as described above.

Income from Operations by Segment

(In thousands)	Three Months Ended May 31, 2019	Three Months Ended May 31, 2018	Percentage Change	Six Months Ended May 31, 2019	Six Months Ended May 31, 2018	Percentage Change
OpenEdge segment	$ 48,723	$ 54,594	(11)%	$ 95,660	$ 105,495	(9)%
Data Connectivity and Integration segment	11,126	1,737	541 %	15,626	9,600	63 %
Application Development and Deployment segment	13,696	13,647	— %	26,566	26,104	2 %
Other unallocated expenses[(1)]	(58,804)	(51,428)	(14)%	(107,702)	(103,518)	(4)%
Income from operations	$ 14,741	$ 18,550	(21)%	$ 30,150	$ 37,681	(20)%

[(1)]Note that the following expenses are not allocated to our segments as we manage and report our business in these functional areas on a consolidated basis only: certain product development and corporate sales and marketing expenses, customer support, administration, amortization of acquired intangibles, stock-based compensation, fees related to shareholder activist, restructuring, and acquisition-related expenses.

Other (Expense) Income, Net

	Three Months Ended			Six Months Ended		
(In thousands)	May 31, 2019	May 31, 2018	Percentage Change	May 31, 2019	May 31, 2018	Percentage Change
Interest expense	$ (2,210)	$ (1,272)	(74)%	$ (3,599)	$ (2,437)	(48)%
Interest income and other, net	344	231	49 %	573	639	(10)%
Foreign currency loss, net	(451)	(243)	(86)%	(1,294)	(1,071)	(21)%
Total other expense, net	$ (2,317)	$ (1,284)	(80)%	$ (4,320)	$ (2,869)	(51)%
As a percentage of total revenue	*(2)%*	*(1)%*		*(2)%*	*(2)%*	

Other expense, net increased in both the second quarter and first six months of fiscal year 2019 as compared to the same periods last year primarily due to an increase in interest expense. The change in interest expense is a result of the increase in the principal balance of our debt, which was used to partially fund the Ipswitch acquisition.

Provision for Income Taxes

	Three Months Ended			Six Months Ended		
(In thousands)	May 31, 2019	May 31, 2018	Percentage Change	May 31, 2019	May 31, 2018	Percentage Change
Provision for income taxes	$ 4,243	$ 4,362	(3)%	$ 8,247	$ 8,175	1%
As a percentage of total revenue	*4%*	*5%*		*4%*	*4%*	

Our effective rate was 34% in the second quarter of fiscal year 2019 compared to 25% in the second quarter of fiscal year 2018, and 32% in the first six months of fiscal year 2019 compared to 23% in the same period last year. During the second quarter of 2019 we updated our estimates of the impact of certain international provisions of the Tax Cuts and Jobs Act based on updated guidance issued by the Treasury Department (IRS) that resulted in an increase in the effective tax rate for fiscal year 2019. In addition, we recorded a provisional tax benefit amount of $1.4 million in the three months ended February 28, 2018 related to the re-measurement of our U.S. deferred tax balance due to enactment of tax reform in the U.S. that lowered the federal corporate tax rate.

Net Income

	Three Months Ended			Six Months Ended		
(In thousands)	May 31, 2019	May 31, 2018	Percentage Change	May 31, 2019	May 31, 2018	Percentage Change
Net income	$ 8,181	$ 12,904	(37)%	$ 17,583	$ 26,637	(34)%
As a percentage of total revenue	*8%*	*14%*		*9%*	*14%*	

Liquidity and Capital Resources

Cash, Cash Equivalents and Short-Term Investments

(In thousands)		May 31, 2019		November 30, 2018
Cash and cash equivalents	$	103,249	$	105,126
Short-term investments		25,304		34,387
Total cash, cash equivalents and short-term investments	$	128,553	$	139,513

The decrease in cash, cash equivalents and short-term investments of $11.0 million from the end of fiscal year 2018 was due to payments for acquisitions, net of cash acquired, of $225.3 million, repurchases of common stock of $25.0 million, dividend payments of $13.9 million, payments of debt obligations in the amount of $3.1 million, the effect of exchange rates on cash of $1.3 million, and purchases of property and equipment of $1.1 million. These cash outflows were partially offset by proceeds from the issuance of long-term debt of $185.0 million, cash inflows from operations of $65.1 million, proceeds from sale of property and equipment of $6.1 million, and $4.3 million in cash received from the issuance of common stock. Except as described below, there are no limitations on our ability to access our cash, cash equivalents and short-term investments.

As of May 31, 2019, $29.7 million of our cash, cash equivalents and short-term investments was held by our foreign subsidiaries. Foreign cash includes unremitted foreign earnings, which are invested indefinitely outside of the U.S. As such, it is not available to fund our domestic operations. If we were to repatriate these earnings, we may be subject to income tax withholding in certain tax jurisdictions and a portion of the repatriated earnings may be subject to U.S. income tax. However, we do not anticipate that this would have a material adverse impact on our liquidity.

Share Repurchase Program

In September 2017, our Board of Directors increased our total share repurchase authorization to $250.0 million. In fiscal year 2018, we repurchased and retired 2.9 million shares of our common stock for $120.0 million. We did not repurchase and retire any shares of our common stock in the three months ended May 31, 2019. We repurchased and retired 0.7 million shares for $25.0 million in the six months ended May 31, 2019. As of May 31, 2019, there was $75.0 million remaining under this current authorization.

In connection with the acquisition of Ipswitch, we have suspended our stock repurchase program for the remainder of fiscal 2019. We expect to resume share repurchases in fiscal 2020, at a level consistent with our publicly stated capital allocation policy. However, we may terminate this program at any time.

Dividends

We began paying quarterly cash dividends of $0.125 per share of common stock to Progress stockholders in December 2016 and increased the quarterly cash dividend to $0.14 per share in September 2017. In September 2018, our Board of Directors approved an additional 11% increase to our quarterly cash dividend from $0.14 to $0.155 per share of common stock. On June 25, 2019, our Board of Directors declared a quarterly dividend of $0.155 per share of common stock that will be paid on September 16, 2019 to shareholders of record as of the close of business on September 2, 2019. We expect to continue paying quarterly cash dividends in subsequent quarters consistent with our capital allocation strategy. However, we may terminate or modify this program at any time.

Restructuring Activities

During the second quarter of fiscal year 2019, we restructured our operations in connection with the acquisition of Ipswitch (Note 6). This restructuring resulted in a reduction in redundant positions, primarily within administrative functions of Ipswitch. We expect to incur additional expenses as part of this action related to employee costs and facility closures as we consolidate offices in various locations during fiscal years 2019 and 2020.

As part of this fiscal year 2019 restructuring, for the three months ended May 31, 2019, we incurred expenses of $2.7 million, which are recorded in restructuring expenses on the condensed consolidated statements of operations.

During fiscal year 2017, we undertook certain operational restructuring initiatives intended to significantly reduce annual costs. As part of this action, management committed to a new strategic plan highlighted by a new product strategy and a streamlined operating approach. To execute these operational restructuring initiatives, we reduced our global workforce by over 20%. These workforce reductions occurred in substantially all functional units and across all geographies in which we operate. We also consolidated offices in various locations during fiscal years 2017 and 2018 and the first quarter of fiscal year 2019. We expect to incur additional expenses related to facility closures as part of this restructuring action through fiscal year 2019, but we do not expect these additional costs to be material.

As part of this fiscal year 2017 restructuring, for the three and six months ended May 31, 2019, we incurred expenses of $0.1 million and $0.5 million, respectively, which are recorded in restructuring expenses on the condensed consolidated statements of operations.

Credit Facility

In April 2019, we entered into an amended and restated credit agreement, which consists of a $301.0 million term loan and a $100.0 million revolving loan, which may be increased by an additional $125.0 million if the existing or additional lenders are willing to make such increased commitments (Note 7). This facility matures in April 2024, at which time any amounts outstanding will be due and payable in full. We may wish to borrow additional amounts under the facility in the future to support our operations, including for strategic acquisitions and share repurchases.

Cash Flows from Operating Activities

	Six Months Ended	
(In thousands)	May 31, 2019	May 31, 2018
Net income	$ 17,583	$ 26,637
Non-cash reconciling items included in net income	28,822	31,335
Changes in operating assets and liabilities	18,713	15,753
Net cash flows from operating activities	$ 65,118	$ 73,725

As described above, the decrease in cash generated from operations in the first six months of fiscal year 2019 as compared to the first six months of fiscal year 2018 was primarily due to lower operating income, partially offset by the changes in operating assets and liabilities as compared to last year. Cash flows in the first six months of fiscal year 2018 were particularly strong due to a slightly shorter collection cycle as compared to the first six months of fiscal year 2019. Our gross accounts receivable as of May 31, 2019 decreased by $7.7 million from the end of fiscal year 2018, which is primarily due to strong collections in the first six months of fiscal year 2019, offset by the acquisition of Ipswitch. Days sales outstanding (DSO) in accounts receivable was 42 days compared to 40 days in the fiscal second quarter of 2018 due to the timing of billings in the quarter and the acquisition of Ipswitch. In addition, our total deferred revenue as of May 31, 2019 increased by $14.5 million from the end of fiscal year 2018.

Cash Flows used in Investing Activities

	Six Months Ended	
(In thousands)	May 31, 2019	May 31, 2018
Net investment activity	$ 8,959	$ 2,465
Proceeds from sale of property, plant and equipment, net	6,146	—
Purchases of property and equipment	(1,080)	(3,196)
Payments for acquisitions, net of cash acquired	(225,298)	—
Net cash flows used in investing activities	$ (211,273)	$ (731)

Net cash outflows and inflows of our net investment activity are generally a result of the timing of our purchases and maturities of securities, which are classified as cash equivalents or short-term securities. In addition, we sold $6.1 million of property and equipment in the first six months of fiscal year 2019. We purchased $1.1 million of property and equipment in the first six months of fiscal year 2019, as compared to $3.2 million in the first six months of fiscal year 2018. Most significantly, however, we acquired Ipswitch during the second quarter of fiscal year 2019 for a net cash amount of $225.3 million.

Cash Flows from (used in) Financing Activities

	Six Months Ended	
(In thousands)	May 31, 2019	May 31, 2018
Proceeds from stock-based compensation plans	$ 4,303	$ 4,671
Proceeds from the issuance of debt	184,984	—
Repurchases of common stock	(25,000)	(90,000)
Payment of principle on long-term debt	(1,547)	(3,094)
Dividend payments to shareholders	(13,886)	(13,101)
Other financing activities	(3,248)	(1,931)
Net cash flows from (used in) financing activities	$ 145,606	$ (103,455)

During the first six months of fiscal year 2019, we received $4.3 million from the exercise of stock options and the issuance of shares under our employee stock purchase plan as compared to $4.7 million in the first six months of fiscal year 2018. Significantly, in the first six months of fiscal year 2019, we received proceeds from the issuance of debt of $185.0 million as compared to none in the same period of the prior year. Further, we repurchased $25.0 million of our common stock under our share repurchase plan compared to $90.0 million in the same period of the prior year. We also made principal payments on our long-term debt of $1.5 million in the first six months of fiscal year 2019 compared to $3.1 million in the same period of the prior year. In addition, we made dividend payments of $13.9 million to our shareholders during the first six months of fiscal 2019, as compared to $13.1 million in the first six months of fiscal 2018.

Indemnification Obligations

We include standard intellectual property indemnification provisions in our licensing agreements in the ordinary course of business. Pursuant to our product license agreements, we will indemnify, hold harmless, and agree to reimburse the indemnified party for losses suffered or incurred by the indemnified party, generally business partners or customers, in connection with certain patent, copyright or other intellectual property infringement claims by third parties with respect to our products. Other agreements with our customers provide indemnification for claims relating to property damage or personal injury resulting from the performance of services by us or our subcontractors. Historically, our costs to defend lawsuits or settle claims relating to such indemnity agreements have been insignificant. Accordingly, the estimated fair value of these indemnification provisions is immaterial.

Liquidity Outlook

We believe that existing cash balances, together with funds generated from operations and amounts available under our credit facility, will be sufficient to finance our operations and meet our foreseeable cash requirements through at least the next twelve months. We do not contemplate a need for any foreign repatriation of the earnings which are deemed invested indefinitely outside of the U.S. Our foreseeable cash needs include our planned capital expenditures, debt repayments, quarterly cash dividends, share repurchases, acquisitions, lease commitments, restructuring obligations and other long-term obligations.

Legal and Other Regulatory Matters

See discussion regarding legal and other regulatory matters in Part II, Item 1. Legal Proceedings.

Off-Balance Sheet Arrangements

Our only significant off-balance sheet commitments relate to operating lease obligations. Future annual minimum rental lease payments are detailed in Note 9 of the Notes to Consolidated Financial Statements in our Annual Report on Form 10-K for the fiscal year ended November 30, 2018. We have no “off-balance sheet arrangements” within the meaning of Item 303(a)(4) of Regulation S-K.

Contractual Obligations

There have been no material changes to our contractual obligations disclosed in tabular format in our Annual Report on Form 10-K for the fiscal year ended November 30, 2018.

Recent Accounting Pronouncements

Refer to Note 1 - Nature of Business and Basis of Presentation (Part I, Item 1 of this Form 10-Q) for further discussion.

Item 3. Quantitative and Qualitative Disclosures About Market Risk

During the second quarter of fiscal year 2019, there were no significant changes to our quantitative and qualitative disclosures about market risk. Please refer to Part II, Item 7A. Quantitative and Qualitative Disclosures about Market Risk included in our Annual Report on Form 10-K for the fiscal year ended November 30, 2018 for a more complete discussion of the market risks we encounter.

Item 4. Controls and Procedures

(a) Evaluation of disclosure controls and procedures

Our management maintains disclosure controls and procedures as defined in Rule 13a-15(e) and 15d-15(e) under the Securities and Exchange Act of 1934, as amended (the “Exchange Act”) that are designed to provide reasonable assurance that information required to be disclosed in our reports filed or submitted under the Exchange Act is processed, recorded, summarized and reported within the time periods specified in the SEC's rules and forms, and that such information is accumulated and communicated to management, including our Chief Executive Officer and Chief Financial Officer (our principal executive officer and principal financial officer, respectively), as appropriate, to allow for timely decisions regarding required disclosure.

Our management, including our Chief Executive Officer and Chief Financial Officer, carried out an evaluation of the effectiveness of our disclosure controls and procedures as of the end of the period covered by this report. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective to ensure that the information required to be disclosed in the reports filed or submitted by us under the Exchange Act was recorded, processed, summarized and reported within the requisite time periods and that such information was accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate to allow for timely decisions regarding required disclosure.

(b) Changes in internal control over financial reporting

Our management, including our Chief Executive Officer and Chief Financial Officer, evaluated our “internal control over financial reporting” as defined in Exchange Act Rule 13a-15(f) to determine whether any changes in our internal control over financial reporting occurred during the fiscal quarter ended May 31, 2019 that materially affected, or are reasonably likely to materially affect, our internal control over financial reporting. Based on that evaluation, there were no changes in our internal control over financial reporting during the fiscal quarter ended May 31, 2019 that have materially affected, or are reasonably likely to materially affect our internal control over financial reporting. We implemented internal controls to ensure we adequately evaluated our contracts and properly assessed the impact of ASC 606 on our financial statements to facilitate our adoption of it on December 1, 2018. There were no material changes to our internal control over financial reporting due to the adoption of ASC 606.

PART II. OTHER INFORMATION

Item 1. Legal Proceedings

We are subject to various legal proceedings and claims, either asserted or unasserted, which arise in the ordinary course of business. While the outcome of these claims cannot be predicted with certainty, management does not believe that the outcome of any of these legal matters will have a material effect on our financial position, results of operations or cash flows.

Item 1A. Risk Factors

We operate in a rapidly changing environment that involves certain risks and uncertainties, some of which are beyond our control. There have been no material changes in our assessment of our risk factors from those set forth in our Annual Report on Form 10-K for the fiscal year ended November 30, 2018. For convenience, such risk factors are included below. The risks discussed below could materially affect our business, financial condition and future results. The risks described below are not the only risks facing us. Additional risks and uncertainties not currently known to us or that we currently deem to be insignificant also may materially and adversely affect our business, financial condition or operating results in the future.

Our revenue and quarterly results may fluctuate, which could adversely affect our stock price. We have experienced, and may in the future experience, significant fluctuations in our quarterly operating results that may be caused by many factors. These factors include:

- changes in demand for our products;
- introduction, enhancement or announcement of products by us or our competitors;
- market acceptance of our new products;
- the growth rates of certain market segments in which we compete;
- size and timing of significant orders;
- a high percentage of our revenue is generated in the third month of each fiscal quarter and any failure to receive, complete or process orders at the end of any quarter could cause us to fall short of our revenue targets;
- budgeting cycles of customers;
- mix of distribution channels;
- mix of products and services sold;
- mix of international and North American revenues;
- fluctuations in currency exchange rates;
- changes in the level of operating expenses;
- changes in management;
- restructuring programs;
- changes in our sales force;
- completion or announcement of acquisitions by us or our competitors;
- customer order deferrals in anticipation of new products announced by us or our competitors; and
- general economic conditions in regions in which we conduct business.

Revenue forecasting is uncertain, and the failure to meet our forecasts could result in a decline in our stock price. Our revenues, particularly new software license revenues, are difficult to forecast. We use a pipeline system to forecast revenues and trends in our business. Our pipeline estimates may prove to be unreliable either in a particular quarter or over a longer period of time, in part because the conversion rate of the pipeline into contracts can be difficult to estimate and requires management judgment. A variation in the conversion rate could cause us to plan or budget incorrectly and result in a material adverse impact our business or our planned results of operations. Furthermore, most of our expenses are relatively fixed, including costs of personnel and facilities. Thus, an unexpected reduction in our revenue, or failure to achieve the anticipated rate of growth, would have a material adverse effect on our profitability. If our operating results do not meet our publicly stated guidance or the expectations of investors, our stock price may decline.

We recognize a substantial portion of our revenue from sales made through third parties, including our application partners, distributors/resellers, and OEMs, and adverse developments in the businesses of these third parties or in our relationships with them could harm our revenues and results of operations. Our future results depend in large part upon our continued successful distribution of our products through our application partner, distributor/reseller, and OEM channels. The activities of these third parties are not within our direct control. Our failure to manage our relationships with these third parties effectively could impair the success of our sales, marketing and support activities. A reduction in the sales efforts, technical capabilities or financial viability of these parties, a misalignment of interest between us and them, or a termination of our relationship with a major application partner, distributor/reseller, or OEM could have a negative effect on our sales and financial results. Any adverse effect on any of our application partners', distributors'/resellers', or OEMs' businesses related to competition, pricing and other factors could also have a material adverse effect on our business, financial condition and operating results.

Changes in accounting principles and guidance, or their interpretation or implementation, may materially adversely affect our reported results of operations or financial position. We prepare our consolidated financial statements in accordance with accounting principles generally accepted in the United States of America ("GAAP") These principles are subject to interpretation by the SEC and various bodies formed to create and interpret appropriate accounting principles and guidance. A change in these principles or guidance, or in their interpretations, may have a significant effect on our reported results, as well as our processes and related controls.

For example, in May 2014, the Financial Accounting Standards Board (the "FASB") issued Accounting Standards Update No. 2014-09, Revenue from Contracts with Customers (Topic 606) ("ASC 606"). ASC 606 outlines a single comprehensive model for entities to use in accounting for revenue arising from contracts with customers and supersedes prior revenue recognition guidance, including industry-specific guidance. This new standard is both technical and complex. The Company adopted ASC 606 effective December 1, 2018 and adjusted prior period consolidated financial statements to reflect full retrospective adoption, beginning with our Quarterly Report on Form 10-Q for the first quarter of 2019. For a discussion of the impact that the implementation of ASC 606 had on our consolidated financial statements and related disclosures, see Note 1. *Nature of Business and Basis of Presentation*.

A failure of our information technology systems, including the implementation of our new financial systems platform, could have a material adverse effect on our business. A failure or prolonged interruption in our information technology systems, or any difficulty encountered in upgrading our systems or implementing new systems, that compromises our ability to meet our customers' needs, or impairs our ability to record, process and report accurate information could have a material adverse effect on our financial condition.

We are implementing a new financial systems platform which will assist with the collection, storage, management and interpretation of data from our business activities to support future growth and to integrate significant processes. Our financial systems platform is critical to our ability to accurately maintain books and records, record transactions, provide important information to our management and prepare our consolidated financial statements. Financial systems platform implementations are complex and time-consuming and involve significant expenditures on system software and implementation activities, as well as changes in business processes.

As part of the implementation of our new financial systems platform, certain changes to our processes and procedures have and will continue to occur. These changes will result in changes to our internal control over financial reporting. This new platform is designed to strengthen our internal financial controls by automating certain manual processes and standardizing business processes and reporting across our organization. However, any disruptions, delays or deficiencies in the design and implementation of a new financial systems platform could adversely affect our ability to operate our business. Additionally, if the new platform does not operate as intended, the effectiveness of our internal control over financial reporting could be adversely affected or our ability to assess it adequately could be further impacted.

Weakness in the U.S. and international economies may result in fewer sales of our products and may otherwise harm our business. We are subject to risks arising from adverse changes in global economic conditions, especially those in the U.S., Europe and Latin America. If global economic conditions weaken, credit markets tighten and/or financial markets become unstable, customers may delay, reduce or forego technology purchases, both directly and through our application partners and OEMs. This could result in reductions in sales of our products, longer sales cycles, slower adoption of new technologies and increased price competition. Further, deteriorating economic conditions could adversely affect our customers and their ability to pay amounts owed to us. Any of these events would likely harm our business, results of operations, financial condition or cash flows.

Our international operations expose us to additional risks, and changes in global economic and political conditions could adversely affect our international operations, our revenue and our net income. Approximately 45% of our total revenue is generated from sales outside North America. Political and/or financial instability, oil price shocks and armed conflict in various regions of the world can lead to economic uncertainty and may adversely impact our business. For example, the announcement of the Referendum of the United Kingdom's (the "U.K.") Membership of the European Union ("E.U.") (referred to as "Brexit"), advising for the exit of the U.K. from the E.U., resulted in significant volatility in global stock markets and currency exchange rate fluctuations. If customers' buying patterns, decision-making processes, timing of expected deliveries and timing of new projects unfavorably change due to economic or political conditions, there would be a material adverse effect on our business, financial condition and operating results.

Other potential risks inherent in our international business include:

- longer payment cycles;
- credit risk and higher levels of payment fraud;
- greater difficulties in accounts receivable collection;
- varying regulatory and legal requirements;
- compliance with international and local trade, labor and export control laws;
- compliance with U.S. laws such as the Foreign Corrupt Practices Act, and local laws prohibiting bribery and corrupt payments to government officials;
- restrictions on the transfer of funds;
- difficulties in developing, staffing, and simultaneously managing a large number of varying foreign operations as a result of distance, legal impediments and language and cultural differences;
- reduced or minimal protection of intellectual property rights in some countries;
- laws and business practices that favor local competitors or prohibit foreign ownership of certain businesses;
- changes in U.S. or foreign trade policies or practices that increase costs or restrict the distribution of products;
- seasonal reductions in business activity during the summer months in Europe and certain other parts of the world;
- economic instability in emerging markets; and
- potentially adverse tax consequences.

Any one or more of these factors could have a material adverse effect on our international operations, and, consequently, on our business, financial condition and operating results.

Fluctuations in foreign currency exchange rates could have an adverse impact on our financial condition and results of operations. Changes in the value of foreign currencies relative to the U.S. dollar could adversely affect our results of operations and financial position. For example, during periods in which the value of the U.S. dollar strengthens in comparison to certain foreign currencies, particularly in Europe, Brazil and Australia, our reported international revenue is reduced because foreign currencies translate into fewer U.S. dollars. As approximately one-third of our revenue is denominated in foreign currencies, our revenue results have been impacted, and we expect will continue to be impacted, by fluctuations in foreign currency exchange rates.

We seek to reduce our exposure to fluctuations in exchange rates by entering into foreign exchange forward contracts to hedge certain actual and forecasted transactions of selected currencies (mainly in Europe, Brazil, India and Australia). Our currency hedging transactions may not be effective in reducing any adverse impact of fluctuations in foreign currency exchange rates. Further, the imposition of exchange or price controls or other restrictions on the conversion of foreign currencies could have a material adverse effect on our business.

Technology and customer requirements evolve rapidly in our industry, and if we do not continue to develop new products and enhance our existing products in response to these changes, our business could be harmed. Ongoing enhancements to our product sets will be required to enable us to maintain our competitive position and the competitive position of our application partners, distributors/resellers, and OEMs. We may not be successful in developing and marketing enhancements to our products on a timely basis, and any enhancements we develop may not adequately address the changing needs of the marketplace. Overlaying the risks associated with our existing products and enhancements are ongoing technological developments and rapid changes in customer and partner requirements. Our future success will depend upon our ability to develop and introduce in a timely manner new products that take advantage of technological advances and respond to new customer and partner requirements. We may not be successful in developing new products incorporating new technology on a timely basis, and any new products we develop may not adequately address the changing needs of the marketplace or may not be accepted by the market. Failure to develop new products and product enhancements that meet market needs in a timely manner could have a material adverse effect on our business, financial condition and operating results.

We are substantially dependent on our Progress OpenEdge products. We derive a significant portion of our revenue from software license and maintenance revenue attributable to our Progress OpenEdge product set. Accordingly, our future results depend on continued market acceptance of OpenEdge. If new technologies emerge that are superior to, or are more responsive to customer requirements than, OpenEdge such that we are unable to maintain OpenEdge's competitive position within its marketplace, our business, financial condition and operating results may be materially adversely affected.

We have made significant investments in furtherance of our cognitive applications strategy and these investments may not generate the revenues we expect, which could adversely affect our business and financial results. Our cognitive applications strategy is focused on providing the platform and tools enterprises need to build next generation applications that drive their businesses, known as “cognitive applications.” Beginning in 2017, we have made significant investments in furtherance of our cognitive applications strategy, including three acquisitions.

We cannot guarantee that our cognitive applications strategy is the right one or that we will be effective in executing this strategy. Our strategy may not succeed for a number of reasons, including, but not limited to: general economic risks, execution risks with acquisitions, competitiveness in and the dynamic nature of the markets in which we operate, execution risks around product development, market acceptance of new products and services and risks associated with the adoption of, and demand for, our model in general. If one or more of the foregoing risks were to materialize, our business, results of operations and ability to achieve sustained profitability could be adversely affected.

The increased emphasis on a cloud strategy may give rise to risks that could harm our business. We are devoting significant resources to the development of cloud-based technologies and service offerings where we have a limited operating history. Our cloud strategy requires continued investment in product development and cloud operations as well as a change in the way we price and deliver our products. Many of our competitors may have advantages over us due to their larger presence, larger developer network, deeper experience in the cloud-based computing market, and greater sales and marketing resources. It is uncertain whether these strategies will prove successful or whether we will be able to develop the infrastructure and business models more quickly than our competitors. Our cloud strategy may give rise to a number of risks, including the following:

- if new or current customers desire only perpetual licenses, we may not be successful in selling subscriptions;
- although we intend to continue to support our perpetual license business, the increased emphasis on a cloud strategy may raise concerns among our installed customer base;
- we may be unsuccessful in achieving our target pricing;
- our revenues might decline over the short or long term as a result of this strategy;
- our relationships with existing partners that resell perpetual licenses may be damaged;
- increased risk of security breaches; and
- we may incur costs at a higher than forecasted rate as we enhance and expand our cloud operations.

We face various risks in connection with our acquisition of Ipswitch. On April 30, 2019, we completed our acquisition of Ipswitch. We face various risks in connection with this acquisition, including the effects of disruption from the transaction making it more difficult to maintain relationships with employees, licensees, other business partners or governmental entities, other business effects, including the effects of industry, economic or political conditions outside of our control, transaction costs, actual or contingent liabilities, diversion of management, uncertainties as to whether anticipated synergies will be realized and uncertainties as to whether Ipswitch’s business will be successfully integrated with our business. Any one or more of these factors could have a material adverse effect on the combined business, our results of operations and our financial condition.

We may make additional acquisitions or investments in new businesses, products or technologies that involve additional risks, which could disrupt our business or harm our financial condition, results of operations or cash flows. We may make acquisitions of businesses or investments in companies that offer complementary products, services and technologies. Any acquisitions that we do complete involve a number of risks, including the risks of assimilating the operations and personnel of acquired companies, realizing the value of the acquired assets relative to the price paid, distraction of management from our ongoing businesses and potential product disruptions associated with the sale of the acquired company’s products. In addition, an acquisition may not further our business strategy as we expected, may not result in revenue growth to the degree we expected or at all or may not achieve expected synergies, any of which could adversely affect our business or operating results and potentially cause impairment to assets that we recorded as a part of an acquisition including intangible assets and goodwill. These factors could have a material adverse effect on our business, financial condition, operating results and cash flows. The consideration we pay for any future acquisitions could include our stock. As a result, future acquisitions could cause dilution to existing stockholders and to earnings per share.

The segments of the software industry in which we participate are intensely competitive, and our inability to compete effectively could harm our business. We experience significant competition from a variety of sources with respect to the marketing and distribution of our products. Many of our competitors have greater financial, marketing or technical resources than we do and may be able to adapt more quickly to new or emerging technologies and changes in customer requirements or to devote greater resources to the promotion and sale of their products than we can. Increased competition could make it more difficult for us to maintain our market presence or lead to downward pricing pressure.

In addition, the marketplace for new products is intensely competitive and characterized by low barriers to entry. For example, an increase in market acceptance of open source software may cause downward pricing pressures. As a result, new competitors possessing technological, marketing or other competitive advantages may emerge and rapidly acquire market share. In addition, current and potential competitors may make strategic acquisitions or establish cooperative relationships among themselves or with third parties, thereby increasing their ability to deliver products that better address the needs of our prospective customers. Current and potential competitors may also be more successful than we are in having their products or technologies widely accepted. We may be unable to compete successfully against current and future competitors, and our failure to do so could have a material adverse effect on our business, prospects, financial condition and operating results.

We rely on the experience and expertise of our skilled employees, and must continue to attract and retain qualified technical, marketing and managerial personnel in order to succeed. Our future success will depend in a large part upon our ability to attract and retain highly skilled technical, managerial, sales and marketing personnel. There is significant competition for such personnel in the software industry. We may not continue to be successful in attracting and retaining the personnel we require to develop new and enhanced products and to continue to grow and operate profitably.

Our periodic workforce restructurings can be disruptive. We have in the past restructured or made other adjustments to our workforce in response to management changes, product changes, performance issues, changes in strategy, acquisitions and other internal and external considerations. In the past, these restructurings have resulted in increased restructuring costs and have temporarily reduced productivity. These effects could recur in connection with any future restructurings or we may not achieve or sustain the expected growth or cost savings benefits of any such restructurings, or do so within the expected timeframe. As a result, our revenues and other results of operations could be negatively affected.

The loss of technology licensed from third parties could adversely affect our ability to deliver our products. We utilize certain technology that we license from third parties, including software that is integrated with internally developed software and used in our products to perform key functions. This technology, or functionally similar technology, may not continue to be available on commercially reasonable terms in the future, or at all. The loss of any significant third-party technology license could cause delays in our ability to deliver our products or services until equivalent technology is developed internally or equivalent third-party technology, if available, is identified, licensed and integrated.

Our business practices with respect to the collection, use and management of personal information could give rise to operational interruption, liabilities or reputational harm as a result of governmental regulation, legal requirements or industry standards relating to consumer privacy and data protection. As regulatory focus on privacy issues continues to increase and worldwide laws and regulations concerning the handling of personal information expand and become more complex, potential risks related to data collection and use within our business will intensify. For example, the E.U. and the United States ("U.S.") formally entered into a framework in July 2016 that provides a mechanism for companies to transfer data from E.U. member states to the U.S. This framework, called the Privacy Shield, is intended to address shortcomings identified by the Court of Justice of the E.U. in the previous E.U.-U.S. Safe Harbor Framework, which the Court of Justice invalidated in October 2015. The Privacy Shield and other data transfer mechanisms are likely to be reviewed by the European courts, which may lead to uncertainty about the legal basis for data transfers to the U.S. or interruption of such transfers. In the event any court blocks transfers to or from a particular jurisdiction on the basis that no transfer mechanisms are legally adequate, this could give rise to operational interruption in the performance of services for customers and internal processing of employee information, regulatory liabilities or reputational harm. In addition, U.S. and foreign governments have enacted or are considering enacting legislation or regulations, or may in the near future interpret existing legislation or regulations, in a manner that could significantly impact our ability and the ability of our customers and data partners to collect, augment, analyze, use, transfer and share personal and other information that is integral to certain services we provide.

Regulators globally are also imposing greater monetary fines for privacy violations. For example, in 2016, the E.U. adopted a law governing data practices and privacy called the General Data Protection Regulation (GDPR), which became effective in May 2018. The law establishes new requirements regarding the handling of personal data. Non-compliance with the GDPR may result in monetary penalties of up to 4% of worldwide revenue. The GDPR and other changes in laws or regulations associated with the enhanced protection of certain types of sensitive data, such as healthcare data or other personal information, could greatly increase our cost of providing our products and services or even prevent us from offering certain services in jurisdictions that we operate.

Additionally, public perception and standards related to the privacy of personal information can shift rapidly, in ways that may affect our reputation or influence regulators to enact regulations and laws that may limit our ability to provide certain products. Any failure, or perceived failure, by us to comply with U.S. federal, state, or foreign laws and regulations, including laws and regulations regulating privacy, data security, or consumer protection, or other policies, public perception, standards, self-regulatory requirements or legal obligations, could result in lost or restricted business, proceedings, actions or fines brought against us or levied by governmental entities or others, or could adversely affect our business and harm our reputation.

If our products contain software defects or security flaws, it could harm our revenues and expose us to litigation. Our products, despite extensive testing and quality control, may contain defects or security flaws, especially when we first introduce them or when new versions are released. We may need to issue corrective releases of our software products to fix any defects or errors. The detection and correction of any security flaws can be time consuming and costly. Errors in our software products could affect the ability of our products to work with other hardware or software products, delay the development or release of new products or new versions of products, adversely affect market acceptance of our products and expose us to potential litigation. If we experience errors or delays in releasing new products or new versions of products, such errors or delays could have a material adverse effect on our revenue.

We could incur substantial cost in protecting our proprietary software technology or if we fail to protect our technology, which would harm our business. We rely principally on a combination of contract provisions and copyright, trademark, patent and trade secret laws to protect our proprietary technology. Despite our efforts to protect our proprietary rights, unauthorized parties may attempt to copy aspects of our products or to obtain and use information that we regard as proprietary. Policing unauthorized use of our products is difficult. Litigation may be necessary in the future to enforce our intellectual property rights, to protect our trade secrets or to determine the validity and scope of the proprietary rights of others. This litigation could result in substantial costs and diversion of resources, whether or not we ultimately prevail on the merits. The steps we take to protect our proprietary rights may be inadequate to prevent misappropriation of our technology; moreover, others could independently develop similar technology.

We could be subject to claims that we infringe intellectual property rights of others, which could harm our business, financial condition, results of operations or cash flows. Third parties could assert infringement claims in the future with respect to our products and technology, and such claims might be successful. Litigation relating to any such claims could result in substantial costs and diversion of resources, whether or not we ultimately prevail on the merits. Any such litigation could also result in our being prohibited from selling one or more of our products, unanticipated royalty payments, reluctance by potential customers to purchase our products, or liability to our customers and could have a material adverse effect on our business, financial condition, operating results and cash flows.

If our security measures are breached, our products and services may be perceived as not being secure, customers may curtail or stop using our products and services, and we may incur significant legal and financial exposure. Our products and services involve the storage and transmission of our customers' proprietary information and may be vulnerable to unauthorized access, computer viruses, cyber-attacks, distributed denial of service attacks and other disruptive problems. Due to the actions of outside parties, employee error, malfeasance, or otherwise, an unauthorized party may obtain access to our data or our customers' data, which could result in its theft, destruction or misappropriation. Security risks in recent years have increased significantly given the increased sophistication and activities of hackers, organized crime, including state-sponsored organizations and nation-states, and other outside parties. Cyber threats are continuously evolving, increasing the difficulty of defending against them. While we have implemented security procedures and controls to address these threats, our security measures could be compromised or could fail. Any security breach or unauthorized access could result in significant legal and financial exposure, increased costs to defend litigation, indemnity and other contractual obligations, government fines and penalties, damage to our reputation and our brand, and a loss of confidence in the security of our products and services that could potentially have an adverse effect on our business and results of operations. Breaches of our network could disrupt our internal systems and business applications, including services provided to our customers. Additionally, data breaches could compromise technical and proprietary information, harming our competitive position. We may need to spend significant capital or allocate significant resources to ensure effective ongoing protection against the threat of security breaches or to address security related concerns. If an actual or perceived breach of our security occurs, the market perception of the effectiveness of our security measures could be harmed and we could lose customers. In addition, our insurance coverage may not be adequate to cover all costs related to cybersecurity incidents and the disruptions resulting from such events.

We may have exposure to additional tax liabilities. As a multinational corporation, we are subject to income taxes in the U.S. and various foreign jurisdictions. Significant judgment is required in determining our global provision for income taxes and other tax liabilities. In the ordinary course of a global business, there are many intercompany transactions and calculations where the ultimate tax determination is uncertain. Our income tax returns are routinely subject to audits by tax authorities. Although we regularly assess the likelihood of adverse outcomes resulting from these examinations to determine our tax estimates, a final determination of tax audits that is inconsistent with such assessments or tax disputes could have an adverse effect on our financial condition, results of operations and cash flows.

We are also subject to non-income taxes, such as payroll, sales, use, value-added, net worth, property and goods and services taxes in the U.S. and various foreign jurisdictions. We are regularly under audit by tax authorities with respect to these non-income taxes and may have exposure to additional non-income tax liabilities, which could have an adverse effect on our results of operations, financial condition and cash flows.

In addition, our future effective tax rates could be favorably or unfavorably affected by changes in tax rates, changes in the valuation of our deferred tax assets or liabilities, or changes in tax laws or their interpretation. Such changes could have a material adverse impact on our financial results.

We are required to comply with certain financial and operating covenants under our credit facility and to make scheduled debt payments as they become due; any failure to comply with those covenants or to make scheduled payments could cause amounts borrowed under the facility to become immediately due and payable or prevent us from borrowing under the facility. In April 2019, we entered into an amended and restated credit agreement, which consists of a $301.0 million term loan and a $100.0 million revolving loan (which may be increased by an additional $125.0 million if the existing or additional lenders are willing to make such increased commitments). This facility matures in April 2024, at which time any amounts outstanding will be due and payable in full. We may wish to borrow additional amounts under the facility in the future to support our operations, including for strategic acquisitions and share repurchases.

We are required to comply with specified financial and operating covenants and to make scheduled repayments of our term loan, which may limit our ability to operate our business as we otherwise might operate it. Our failure to comply with any of these covenants or to meet any payment obligations under the facility could result in an event of default which, if not cured or waived, would result in any amounts outstanding, including any accrued interest and unpaid fees, becoming immediately due and payable. We might not have sufficient working capital or liquidity to satisfy any repayment obligations in the event of an acceleration of those obligations. In addition, if we are not in compliance with the financial and operating covenants at the time we wish to borrow funds, we will be unable to borrow funds.

Our annual operating cash flows may not be sufficient to enable us to meet our targeted capital allocation policy, which could decrease our investors expected return on investment in Progress stock. In September 2017, we announced a new capital allocation strategy in which we are targeting to return approximately 75-80% of annual cash flows from operations to stockholders through share repurchases and through dividends. Meeting these targets requires us to generate consistent cash flow and have available capital in an amount sufficient to enable us to continue investing in our business. We may not meet these targets if we do not generate the operating cash flows we expect, if we use our available cash to satisfy other priorities, if we have insufficient funds available to make such repurchases and/or dividends or if we are unable to borrow funds under our credit facility.

Our common stock price may continue to be volatile, which could result in losses for investors. The market price of our common stock, like that of other technology companies, is volatile and is subject to wide fluctuations in response to quarterly variations in operating results, announcements of technological innovations or new products by us or our competitors, changes in financial estimates by securities analysts or other events or factors. Our stock price may also be affected by broader market trends unrelated to our performance. As a result, purchasers of our common stock may be unable at any given time to sell their shares at or above the price they paid for them.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

Items 2(a) and 2(b) are not applicable.

(c) Stock Repurchases

Information related to the repurchases of our common stock by month in the second quarter of fiscal year 2019 is as follows (in thousands, except per share and share data):

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of Publicly Announced Plans or Programs	Approximate Dollar Value of Shares that May Yet be Purchased Under the Plans or Programs[1]
March 2019	—	$ —	—	$ 75,000
April 2019	—	—	—	75,000
May 2019	—	—	—	75,000
Total	—	$ —	—	$ 75,000

(1) In September 2017, our Board of Directors increased our total share repurchase authorization to $250.0 million. As of May 31, 2019, there was $75.0 million remaining under this authorization. In connection with the acquisition of Ipswitch, we are suspending our stock repurchase program for the remainder of fiscal 2019. We expect to resume share repurchases in fiscal 2020, at a level consistent with our publicly stated capital allocation policy.

Item 6. Exhibits

The following exhibits are filed or furnished as part of this Quarterly Report on Form 10-Q:

Exhibit No.	Description
2.1***	Stock Purchase Agreement, dated March 28, 2019, by and among Progress Software Corporation, Ipswitch, Inc. and Roger Green
3.1*	Amended and Restated Bylaws, as amended March 19, 2019
10.1****	Second Amended and Restated Credit Agreement, dated as of April 30, 2019, by and among Progress Software Corporation, each of the lenders party thereto, JPMorgan Chase Bank, N.A., as Administrative Agent, Wells Fargo Bank, N.A. and Citizens Bank, N.A., as Syndication Agents, and Bank of America, N.A., Citibank, N.A., Silicon Valley Bank, Santander Bank, N.A. and TD Bank, N.A., as Documentation Agents, and JPMorgan Chase Bank, N.A., as Sole Bookrunner and Sole Lead Arranger
10.1*****	2019 Fiscal Year Compensation Program for Non-Employee Directors
31.1*	Certification of the Chief Executive Officer Pursuant to Section 302 of the Sarbanes-Oxley Act – Yogesh K. Gupta
31.2*	Certification of the Chief Financial Officer Pursuant to Section 302 of the Sarbanes-Oxley Act – Paul A. Jalbert
32.1**	Certification Pursuant to Section 906 of the Sarbanes-Oxley Act
101	The following materials from Progress Software Corporation’s Quarterly Report on Form 10-Q for the three and six months ended May 31, 2019, formatted in XBRL (eXtensible Business Reporting Language): (i) Condensed Consolidated Balance Sheets as of May 31, 2019 and November 30, 2018; (ii) Condensed Consolidated Statements of Income for the three and six months ended May 31, 2019 and 2018; (iii) Condensed Consolidated Statements of Comprehensive Income for the three and six months ended May 31, 2019 and 2018; (iv) Condensed Consolidated Statements of Cash Flows for the six months ended May 31, 2019 and 2018; and (v) Notes to Condensed Consolidated Financial Statements.

* Filed herewith
** Furnished herewith
*** Incorporated by reference to Exhibit 2.1 of our Current Report on Form 8-K filed on April 1, 2019
**** Incorporated by reference to Exhibit 10.1 of our Current Report on Form 8-K filed on May 1, 2019
***** Incorporated by reference to Exhibit 10.1 of our Quarterly Report on Form 10-Q for the quarter ended February 28, 2019 filed on April 5, 2019

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

PROGRESS SOFTWARE CORPORATION
(Registrant)

Dated:	July 9, 2019	/s/ YOGESH K. GUPTA
		Yogesh K. Gupta
		President and Chief Executive Officer
		(Principal Executive Officer)
Dated:	July 9, 2019	/s/ PAUL A. JALBERT
		Paul A. Jalbert
		Chief Financial Officer
		(Principal Financial Officer and Principal Accounting Officer)

Exhibit 3.1

AMENDED AND RESTATED BYLAWS

OF

PROGRESS SOFTWARE CORPORATION

(A DELAWARE CORPORATION)

(as amended March 19, 2019)

ARTICLE I

OFFICES

Section 1. Registered Office. The registered office of the corporation in the State of Delaware shall be in the City of Wilmington, County of New Castle.

Section 2. Other Offices. The corporation shall also have and maintain an office or principal place of business at such place as may be fixed by the Board of Directors, and may also have offices at such other places, both within and without the State of Delaware as the Board of Directors may from time to time determine or the business of the corporation may require.

ARTICLE II

CORPORATE SEAL

Section 3. Corporate Seal. The Board of Directors may adopt a corporate seal. The corporate seal shall consist of a die bearing the name of the corporation and the inscription, "Corporate Seal-Delaware." Said seal may be used by causing it or a facsimile thereof to be impressed or affixed or reproduced or otherwise.

ARTICLE III

STOCKHOLDERS' MEETINGS

Section 4. Place Of Meetings. Meetings of the stockholders of the corporation may be held at such place, either within or without the State of Delaware, as may be determined from time to time by the Board of Directors. The Board of Directors may, in its sole discretion, determine that the meeting shall not be held at any place, but may instead be held solely by means of remote communication as provided under the Delaware General Corporation Law ("***DGCL***").

Section 5. Annual Meetings.

(a) The annual meeting of the stockholders of the corporation, for the purpose of election of directors and for such other business as may properly come before it, shall be held on such date and at such time as may be designated from time to time by the Board of Directors. Nominations of persons for election to the Board of Directors of the corporation and the proposal of business to be considered by the stockholders may be made at an annual meeting of stockholders: (i) pursuant to the corporation's notice of meeting of stockholders (with respect to business other than nominations); (ii) brought specifically by or at the direction of the Board of Directors; or (iii) by any stockholder of the corporation who was a stockholder of record at the time of giving the stockholder's notice provided for in Section 5(b) below, who is entitled to vote at the meeting and who complied with the notice procedures set forth in Section 5. For the avoidance of doubt, clause (iii) above shall be the exclusive means for a stockholder to make nominations and submit other business (other than matters properly included in the corporation's notice of meeting of stockholders and proxy statement under Rule 14a-8 under the Securities Exchange Act of 1934, as amended, and the rules and regulations thereunder (the "***1934 Act***")) before an annual meeting of stockholders.

(b) At an annual meeting of the stockholders, only such business shall be conducted as is a proper matter for stockholder action under Delaware law and as shall have been properly brought before the meeting.

(i) For nominations for the election to the Board of Directors to be properly brought before an annual meeting by a stockholder pursuant to clause (iii) of Section 5(a) of these Bylaws, the stockholder must deliver written notice to the Secretary at the principal executive offices of the corporation on a timely basis as set forth in Section 5(b)(iii) and must update and supplement such written notice on a timely basis as set forth in Section 5(c). Such stockholder’s notice shall set forth: (A) as to each nominee such stockholder proposes to nominate at the meeting: (1) the name, age, business address and residence address of such nominee, (2) the principal occupation or employment of such nominee, (3) the class and number of shares of each class of capital stock of the corporation which are owned of record and beneficially by such nominee, (4) the date or dates on which such shares were acquired and the investment intent of such acquisition, (5) a statement whether such nominee, if elected, intends to tender, promptly following such person's failure to receive the required vote for election or re-election at the next meeting at which such person would face election or re-election, an irrevocable resignation effective upon acceptance of such resignation by the Board of Directors, and (6) such other information concerning such nominee as would be required to be disclosed in a proxy statement soliciting proxies for the election of such nominee as a director in an election contest (even if an election contest is not involved), or that is otherwise required to be disclosed pursuant to Section 14 of the 1934 Act and the rules and regulations promulgated thereunder (including such person’s written consent to being named as a nominee and to serving as a director if elected); and (B) the information required by Section 5(b)(iv). The corporation may require any proposed nominee to furnish such other information as it may reasonably require to determine the eligibility of such proposed nominee to serve as an independent director of the corporation or that could be material to a reasonable stockholder’s understanding of the independence, or lack thereof, of such proposed nominee.

(ii) Other than proposals sought to be included in the corporation’s proxy materials pursuant to Rule 14(a)-8 under the 1934 Act, for business other than nominations for the election to the Board of Directors to be properly brought before an annual meeting by a stockholder pursuant to clause (iii) of Section 5(a) of these Bylaws, the stockholder must deliver written notice to the Secretary at the principal executive offices of the corporation on a timely basis as set forth in Section 5(b)(iii), and must update and supplement such written notice on a timely basis as set forth in Section 5(c). Such stockholder’s notice shall set forth: (A) as to each matter such stockholder proposes to bring before the meeting, a brief description of the business desired to be brought before the meeting, the reasons for conducting such business at the meeting, and any material interest (including any anticipated benefit of such business to any Proponent (as defined below) other than solely as a result of its ownership of the corporation’s capital stock, that is material to any Proponent individually, or to the Proponents in the aggregate) in such business of any Proponent; and (B) the information required by Section 5(b)(iv).

(iii) To be timely, the written notice required by Section 5(b)(i) or 5(b)(ii) must be received by the Secretary at the principal executive offices of the corporation not later than the close of business on the ninetieth (90^{th}) day nor earlier than the close of business on the one hundred twentieth (120^{th}) day prior to the first anniversary of the preceding year’s annual meeting; *provided*, *however*, that, subject to the last sentence of this Section 5(b)(iii), in the event that the date of the annual meeting is advanced more than thirty (30) days prior to or delayed by more than thirty (30) days after the anniversary of the preceding year’s annual meeting, notice by the stockholder to be timely must be so received not earlier than the close of business on the one hundred twentieth (120^{th}) day prior to such annual meeting and not later than the close of business on the later of the ninetieth (90^{th}) day prior to such annual meeting or the tenth (10^{th}) day following the day on which public announcement of the date of such meeting is first made. In no event shall an adjournment or a postponement of an annual meeting for which notice has been given, or the public announcement thereof has been made, commence a new time period for the giving of a stockholder’s notice as described above.

(iv) The written notice required by Section 5(b)(i) or 5(b)(ii) shall also set forth, as of the date of the notice and as to the stockholder giving the notice and the beneficial owner, if any, on whose behalf the nomination or proposal is made (each, a “***Proponent***” and collectively, the “***Proponents***”): (A) the name and address of each Proponent, as they appear on the corporation’s books; (B) the class, series and number of shares of the corporation that are owned beneficially and of record by each Proponent;

(C) a description of any agreement, arrangement or understanding (whether oral or in writing) with respect to such nomination or proposal between or among any Proponent and any of its affiliates or associates, and any others (including their names) acting in concert, or otherwise under the agreement, arrangement or understanding, with any of the foregoing; (D) a representation that the Proponents are holders of record or beneficial owners, as the case may be, of shares of the corporation entitled to vote at the meeting and intend to appear in person or by proxy at the meeting to nominate the person or persons specified in the notice (with respect to a notice under Section 5(b)(i)) or to propose the business that is specified in the notice (with respect to a notice under Section 5(b)(ii)); (E) a representation as to whether the Proponents intend to deliver a proxy statement and form of proxy to holders of a sufficient number of holders of the corporation's voting shares to elect such nominee or nominees (with respect to a notice under Section 5(b)(i)) or to carry such proposal (with respect to a notice under Section 5(b)(ii)); (F) to the extent known by any Proponent, the name and address of any other stockholder supporting the proposal on the date of such stockholder's notice; and (G) a description of all Derivative Transactions (as defined below) by each Proponent during the previous twelve (12) month period, including the date of the transactions and the class, series and number of securities involved in, and the material economic terms of, such Derivative Transactions.

For purposes of Sections 5 and 6, a "***Derivative Transaction***" means any agreement, arrangement, interest or understanding entered into by, or on behalf or for the benefit of, any Proponent or any of its affiliates or associates, whether record or beneficial:

(w) the value of which is derived in whole or in part from the value of any class or series of shares or other securities of the corporation,

(x) which otherwise provides any direct or indirect opportunity to gain or share in any gain derived from a change in the value of securities of the corporation,

(y) the effect or intent of which is to mitigate loss, manage risk or benefit of security value or price changes, or

(z) which provides the right to vote or increase or decrease the voting power of, such Proponent, or any of its affiliates or associates, with respect to any securities of the corporation,

which agreement, arrangement, interest or understanding may include, without limitation, any option, warrant, debt position, note, bond, convertible security, swap, stock appreciation right, short position, profit interest, hedge, right to dividends, voting agreement, performance-related fee or arrangement to borrow or lend shares (whether or not subject to payment, settlement, exercise or conversion in any such class or series), and any proportionate interest of such Proponent in the securities of the corporation held by any general or limited partnership, or any limited liability company, of which such Proponent is, directly or indirectly, a general partner or managing member.

(c) A stockholder providing written notice required by Section 5(b)(i) or (ii) shall update and supplement such notice in writing, if necessary, so that the information provided or required to be provided in such notice is true and correct in all material respects as of (i) the record date for the meeting and (ii) the date that is five (5) business days prior to the meeting and, in the event of any adjournment or postponement thereof, five (5) business days prior to such adjourned or postponed meeting. In the case of an update and supplement pursuant to clause (i) of this Section 5(c), such update and supplement shall be received by the Secretary at the principal executive offices of the corporation not later than five (5) business days after the record date for the meeting. In the case of an update and supplement pursuant to clause (ii) of this Section 5(c), such update and supplement shall be received by the Secretary at the principal executive offices of the corporation not later than two (2) business days prior to the date for the meeting, and, in the event of any adjournment or postponement thereof, two (2) business days prior to such adjourned or postponed meeting.

(d) Notwithstanding anything in Section 5(b)(iii) to the contrary, in the event that the number of directors is increased and there is no public announcement of the appointment of a director to fill such vacancy, or, if no appointment was made, of such vacancy, made by the corporation at least ten (10) days before the last day a stockholder may deliver a notice of nomination in accordance with Section 5(b)(iii), a stockholder's notice required by this Section 5 and which complies with the requirements in Section 5(b)(i), other than the timing requirements in Section 5(b)(iii), shall also be considered timely, but only with respect to nominees for any new positions created by such increase, if it shall be received by the Secretary at the principal executive offices of the corporation not later than the close of business on the tenth (10th) day following the day on which such public announcement is first made by the corporation.

(e) A person shall not be eligible for election or re-election as a director unless the person is nominated either in accordance with clause (ii) of Section 5(a), or in accordance with clause (iii) of Section 5(a). Except as otherwise required by law, the chairperson of the meeting shall have the power and duty to determine whether a nomination or any business proposed to be brought before the meeting was made, or proposed, as the case may be, in accordance with the procedures set forth in these Bylaws and, if any proposed nomination or business is not in compliance with these Bylaws, or the Proponent does not act in accordance with the representations in Sections 5(b)(iv)(D) and 5(b)(iv)(E), to declare that such proposal or nomination shall not be presented for stockholder action at the meeting and shall be disregarded, notwithstanding that proxies in respect of such nominations or such business may have been solicited or received.

(f) Notwithstanding the foregoing provisions of this Section 5, in order to include information with respect to a stockholder proposal in the proxy statement and form of proxy for a stockholders' meeting, a stockholder must also comply with all applicable requirements of the 1934 Act and the rules and regulations thereunder. Nothing in these Bylaws shall be deemed to affect any rights of stockholders to request inclusion of proposals in the corporation's proxy statement pursuant to Rule 14a-8 under the 1934 Act; *provided*, *however*, that any references in these Bylaws to the 1934 Act or the rules and regulations thereunder are not intended to and shall not limit the requirements applicable to proposals and/or nominations to be considered pursuant to Section 5(a)(iii) of these Bylaws.

(g) For purposes of Sections 5 and 6,

(i) "***public announcement***" shall mean disclosure in a press release reported by the Dow Jones News Service, Associated Press or comparable national news service or in a document publicly filed by the corporation with the Securities and Exchange Commission pursuant to Section 13, 14 or 15(d) of the 1934 Act; and

(ii) "***affiliates***" and "***associates***" shall have the meanings set forth in Rule 405 under the Securities Act of 1933, as amended (the "***1933 Act***").

Section 6. Special Meetings.

(a) Special meetings of the stockholders of the corporation may be called, for any purpose as is a proper matter for stockholder action under Delaware law, by (i) the Chairperson of the Board of Directors, (ii) the Chief Executive Officer, (iii) the Board of Directors pursuant to a resolution adopted by a majority of the total number of authorized directors (whether or not there exist any vacancies in previously authorized directorships at the time any such resolution is presented to the Board of Directors for adoption), or (iv) the Secretary, or in case of the death, absence, incapacity or refusal of the Secretary, by any other officer, upon written application of one or more stockholders who hold at least forty percent (40%) in interest of the capital stock of the corporation entitled to vote at such meeting.

(b) The Board of Directors shall determine the time and place, if any, of such special meeting. Upon determination of the time and place, if any, of the meeting, the Secretary shall cause a notice of meeting to be given to the stockholders entitled to vote, in accordance with the provisions of Section 7 of these Bylaws. No business may be transacted at such special meeting otherwise than specified in the notice of meeting.

(c) Nominations of persons for election to the Board of Directors may be made at a special meeting of stockholders at which directors are to be elected (i) by or at the direction of the Board of Directors or (ii) by any stockholder of the corporation who is a stockholder of record at the time of giving notice provided for in this paragraph, who shall be entitled to vote at the meeting and who delivers written notice to the Secretary of the corporation setting forth the information required by Section 5(b)(i). In the event the corporation calls a special meeting of stockholders for the purpose of electing one or more directors to the Board of Directors, any such stockholder of record may nominate a person or persons (as the case may be), for election to such position(s) as specified in the corporation's notice of meeting, if written notice setting forth the information required by Section 5(b)(i) of these Bylaws shall be received by the Secretary at the principal executive offices of the corporation not later than the close of business on the later of the ninetieth (90th) day prior to such meeting or the tenth (10th) day following the day on which public announcement is first made of the date of the special meeting and of the nominees proposed by the Board of Directors to be elected at such meeting. The stockholder shall also update and supplement such information as required under Section 5(c). In no event shall an adjournment or a postponement of a special meeting for which notice has been given, or the public announcement thereof has been made, commence a new time period for the giving of a stockholder's notice as described above.

(d) Notwithstanding the foregoing provisions of this Section 6, a stockholder must also comply with all applicable requirements of the 1934 Act and the rules and regulations thereunder with respect to matters set forth in this Section 6. Nothing in these Bylaws shall be deemed to affect any rights of stockholders to request inclusion of proposals in the corporation's proxy statement pursuant to Rule 14a-8 under the 1934 Act; *provided*, *however*, that any references in these Bylaws to the 1934 Act or the rules and regulations thereunder are not intended to and shall not limit the requirements applicable to nominations for the election to the Board of Directors to be considered pursuant to Section 6(c) of these Bylaws.

Section 7. Notice Of Meetings. Except as otherwise provided by law, notice, given in writing or by electronic transmission, of each meeting of stockholders shall be given not less than ten (10) nor more than sixty (60) days before the date of the meeting to each stockholder entitled to vote at such meeting, such notice to specify the place, if any, date and hour, in the case of special meetings, the purpose or purposes of the meeting, and the means of remote communications, if any, by which stockholders and proxy holders may be deemed to be present in person and vote at any such meeting. If mailed, notice is given when deposited in the United States mail, postage prepaid, directed to the stockholder at such stockholder's address as it appears on the records of the corporation. Notice of the time, place, if any, and purpose of any meeting of stockholders may be waived in writing, signed by the person entitled to notice thereof, or by electronic transmission by such person, either before or after such meeting, and will be waived by any stockholder by his attendance thereat in person, by remote communication, if applicable, or by proxy, except when the stockholder attends a meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Any stockholder so waiving notice of such meeting shall be bound by the proceedings of any such meeting in all respects as if due notice thereof had been given.

Section 8. Quorum. At all meetings of stockholders, except where otherwise provided by statute or by the Certificate of Incorporation, or by these Bylaws, the presence, in person, by remote communication, if applicable, or by proxy duly authorized, of the holders of a majority of the outstanding shares of stock entitled to vote shall constitute a quorum for the transaction of business. In the absence of a quorum, any meeting of stockholders may be adjourned, from time to time, either by the chairperson of the meeting or by vote of the holders of a majority of the shares represented thereat, but no other business shall be transacted at such meeting. The stockholders present at a duly called or convened meeting, at which a quorum is present, may continue to transact business until adjournment, notwithstanding the withdrawal of enough stockholders to leave less than a quorum. Except as otherwise provided by statute or by applicable stock exchange rules, or by the Certificate of Incorporation or these Bylaws, in all matters other than the election of directors, the affirmative vote of the majority of shares present in person, by remote communication, if applicable, or represented by proxy at the meeting and entitled to vote generally on the subject matter shall be the act of the stockholders. Except as otherwise provided by statute, the Certificate of Incorporation or these Bylaws, directors shall be elected by a plurality of the votes of the shares present in person, by remote communication, if applicable, or represented by proxy at the meeting and entitled to vote generally on the election of directors. Where a separate vote by a class or classes or series is required, except where otherwise provided by the statute or by the Certificate of Incorporation or these Bylaws, a majority of the outstanding shares of such class or classes or series, present in person, by remote communication, if applicable, or represented by proxy duly authorized, shall constitute a quorum entitled to take action with respect to that vote on that matter. Except where otherwise provided by statute or by the Certificate of Incorporation or these Bylaws, the affirmative vote of the majority (plurality, in the case of the election of directors) of shares of such class or classes or series present in person, by remote communication, if applicable, or represented by proxy at the meeting shall be the act of such class or classes or series.

Section 9. Adjournment And Notice Of Adjourned Meetings. Any meeting of stockholders, whether annual or special, may be adjourned from time to time either by the chairperson of the meeting or by the vote of a majority of the shares present in person, by remote communication, if applicable, or represented by proxy at the meeting. When a meeting is adjourned to another time or place, if any, notice need not be given of the adjourned meeting if the time and place, if any, thereof are announced at the meeting at which the adjournment is taken. At the adjourned meeting, the corporation may transact any business which might have been transacted at the original meeting. If the adjournment is for more than thirty (30) days or if after the adjournment a new record date is fixed for the adjourned meeting, a notice of the adjourned meeting shall be given to each stockholder of record entitled to vote at the meeting.

Section 10. Voting Rights. For the purpose of determining those stockholders entitled to vote at any meeting of the stockholders, except as otherwise provided by law, only persons in whose names shares stand on the stock records of the corporation on the record date, as provided in Section 12 of these Bylaws, shall be entitled to vote at any meeting of stockholders. Every person entitled to vote shall have the right to do so either in person, by remote communication, if applicable, or by an agent or agents authorized by a proxy granted in accordance with Delaware law. An agent so appointed need not be a stockholder. No proxy shall be voted after three (3) years from its date of creation unless the proxy provides for a longer period.

Section 11. Joint Owners Of Stock. If shares or other securities having voting power stand of record in the names of two (2) or more persons, whether fiduciaries, members of a partnership, joint tenants, tenants in common, tenants by the entirety, or otherwise, or if two (2) or more persons have the same fiduciary relationship respecting the same shares, unless the Secretary is given written notice to the contrary and is furnished with a copy of the instrument or order appointing them or creating the relationship wherein it is so provided, their acts with respect to voting shall have the following effect: (a) if only one (1) votes, his act binds all; (b) if more than one (1) votes, the act of the majority so voting binds all; (c) if more than one (1) votes, but the vote is evenly split on any particular matter, each faction may vote the securities in question proportionally, or may apply to the Delaware Court of Chancery for relief as provided in the DGCL, Section 217(b). If the instrument filed with the Secretary shows that any such tenancy is held in unequal interests, a majority or even-split for the purpose of subsection (c) shall be a majority or even-split in interest.

Section 12. List Of Stockholders. The Secretary shall prepare and make, at least ten (10) days before every meeting of stockholders, a complete list of the stockholders entitled to vote at said meeting, arranged in alphabetical order, showing the address of each stockholder and the number of shares registered in the name of each stockholder. Such list shall be open to the examination of any stockholder, for any purpose germane to the meeting, (a) on a reasonably accessible electronic network, provided that the information required to gain access to such list is provided with the notice of the meeting, or (b) during ordinary business hours, at the principal place of business of the corporation. In the event that the corporation determines to make the list available on an electronic network, the corporation may take reasonable steps to ensure that such information is available only to stockholders of the corporation. The list shall be open to examination of any stockholder during the time of the meeting as provided by law.

Section 13. Action Without Meeting. No action shall be taken by the stockholders except at an annual or special meeting of stockholders called in accordance with these Bylaws, and no action shall be taken by the stockholders by written consent or by electronic transmission.

Section 14. Organization.

(a) At every meeting of stockholders, the Chairperson of the Board of Directors, or, if a Chairperson has not been appointed or is absent, the Chief Executive Officer, or if no Chief Executive Officer is then serving or is absent, the President, or, if the President is absent, a chairperson of the meeting chosen by a majority in interest of the stockholders entitled to vote, present in person or by proxy, shall act as chairperson. The Chairperson of the Board may appoint the Chief Executive Officer as chairperson of the meeting. The Secretary, or, in his or her absence, an Assistant Secretary or other officer or other person directed to do so by the chairperson of the meeting, shall act as secretary of the meeting.

(b) The Board of Directors of the corporation shall be entitled to make such rules or regulations for the conduct of meetings of stockholders as it shall deem necessary, appropriate or convenient. Subject to such rules and regulations of the Board of Directors, if any, the chairperson of the meeting shall have the right and authority to prescribe such rules, regulations and procedures and to do all such acts as, in the judgment of such chairperson, are necessary, appropriate or convenient for the proper conduct of the meeting, including, without limitation, establishing an agenda or order of business for the meeting, rules and procedures for maintaining order at the meeting and the safety of those present, limitations on participation in such meeting to stockholders of record of the corporation and their duly authorized and constituted proxies and such other persons as the chairperson shall permit, restrictions on entry to the meeting after the time fixed for the commencement thereof, limitations on the time allotted to questions or comments by participants and regulation of the opening and closing of the polls for balloting on matters which are to be voted on by ballot. The date and time of the opening and closing of the polls for each matter upon which the stockholders will vote at the meeting shall be announced at the meeting. Unless and to the extent determined by the Board of Directors or the chairperson of the meeting, meetings of stockholders shall not be required to be held in accordance with rules of parliamentary procedure.

ARTICLE IV
DIRECTORS

Section 15. Number And Term Of Office. The authorized number of directors of the corporation shall be fixed in accordance with the Certificate of Incorporation. Directors need not be stockholders unless so required by the Certificate of Incorporation. If for any cause, the directors shall not have been elected at an annual meeting, they may be elected as soon thereafter as convenient at a special meeting of the stockholders called for that purpose in the manner provided in these Bylaws.

Section 16. Powers. The powers of the corporation shall be exercised, its business conducted and its property controlled by the Board of Directors, except as may be otherwise provided by statute or by the Certificate of Incorporation.

Section 17. Term. Each director shall serve until his successor is duly elected and qualified or until his earlier death, resignation or removal. No decrease in the number of directors constituting the Board of Directors shall shorten the term of any incumbent director.

Section 18. Vacancies. Unless otherwise provided in the Certificate of Incorporation, and subject to the rights of the holders of any series of Preferred Stock or as otherwise provided by applicable law, any vacancies on the Board of Directors resulting from death, resignation, disqualification, removal or other causes and any newly created directorships resulting from any increase in the number of directors shall, unless the Board of Directors determines by resolution that any such vacancies or newly created directorships shall be filled by stockholders, be filled only by the affirmative vote of a majority of the directors then in office, even though less than a quorum of the Board of Directors, or by a sole remaining director, and not by the stockholders, *provided*, *however*, that whenever the holders of any class or classes of stock or series thereof are entitled to elect one or more directors by the provisions of the Certificate of Incorporation, vacancies and newly created directorships of such class or classes or series shall, unless the Board of Directors determines by resolution that any such vacancies or newly created directorships shall be filled by stockholders, be filled by a majority of the directors elected by such class or classes or series thereof then in office, or by a sole remaining director so elected, and not by the stockholders. Any director elected in accordance with the preceding sentence shall hold office for the remainder of the full term of the director for which the vacancy was created or occurred and until such director's successor shall have been elected and qualified. A vacancy in the Board of Directors shall be deemed to exist under this Bylaw in the case of the death, removal or resignation of any director.

Section 19. Resignation. Any director may resign at any time by delivering his or her notice in writing or by electronic transmission to the Secretary, such resignation to specify whether it will be effective at a particular time. If no such specification is made, the Secretary, in his or her discretion, may either (a) require confirmation from the director prior to deeming the resignation effective, in which case the resignation will be deemed effective upon receipt of such confirmation, or (b) deem the resignation effective at the time of delivery of the resignation to the Secretary. When one or more directors shall resign from the Board of Directors, effective at a future date, a majority of the directors then in office, including those who have so resigned, shall have power to fill such vacancy or vacancies, the vote thereon to take effect when such resignation or resignations shall become effective, and each Director so chosen shall hold office for the unexpired portion of the term of the Director whose place shall be vacated and until his successor shall have been duly elected and qualified.

Section 20. Removal. Subject to any limitation imposed by law, any individual director or directors may be removed with or without cause by the affirmative vote of the holders of at least sixty-six and two-thirds percent (66 2/3%) of the voting power of all then outstanding shares of capital stock of the corporation entitled to vote generally at an election of directors, voting together as a single class.

Section 21. Meetings.

(a) **Regular Meetings.** Unless otherwise restricted by the Certificate of Incorporation, regular meetings of the Board of Directors may be held at any time or date and at any place within or without the State of Delaware which has been designated by the Board of Directors and publicized among all directors, either orally or in writing, by telephone, including a voice-messaging system or other system designed to record and communicate messages, facsimile, telegraph or telex, or by electronic mail or other electronic means. No further notice shall be required for regular meetings of the Board of Directors.

(b) **Special Meetings.** Unless otherwise restricted by the Certificate of Incorporation, special meetings of the Board of Directors may be held at any time and place within or without the State of Delaware whenever called by the Chairperson of the Board, the Chief Executive Officer or a majority of the total number of authorized directors.

(c) **Meetings by Electronic Communications Equipment.** Any member of the Board of Directors, or of any committee thereof, may participate in a meeting by means of conference telephone or other communications equipment by means of which all persons participating in the meeting can hear each other, and participation in a meeting by such means shall constitute presence in person at such meeting.

(d) **Notice of Special Meetings.** Notice of the time and place of all special meetings of the Board of Directors shall be orally or in writing, by telephone, including a voice messaging system or other system or technology designed to record and communicate messages, facsimile, telegraph or telex, or by electronic mail or other electronic means, during normal business hours, at least twenty-four (24) hours before the date and time of the meeting. If notice is sent by US mail, it shall be sent by first class mail, charges prepaid, at least three (3) days before the date of the meeting. Notice of any meeting may be waived in writing, or by electronic transmission, at any time before or after the meeting and will be waived by any director by attendance thereat, except when the director attends the meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened.

(e) **Waiver of Notice.** The transaction of all business at any meeting of the Board of Directors, or any committee thereof, however called or noticed, or wherever held, shall be as valid as though it had been transacted at a meeting duly held after regular call and notice, if a quorum be present and if, either before or after the meeting, each of the directors not present who did not receive notice shall sign a written waiver of notice or shall waive notice by electronic transmission. All such waivers shall be filed with the corporate records or made a part of the minutes of the meeting.

Section 22. Quorum And Voting.

(a) Unless the Certificate of Incorporation requires a greater number, and except with respect to questions related to indemnification arising under Section 44 for which a quorum shall be one-third of the exact number of directors fixed from time to time, a quorum of the Board of Directors shall consist of a majority of the exact number of directors fixed from time to time by the Board of Directors in accordance with the Certificate of Incorporation; *provided, however,* at any meeting whether a quorum be present or otherwise, a majority of the directors present may adjourn from time to time until the time fixed for the next regular meeting of the Board of Directors, without notice other than by announcement at the meeting.

(b) At each meeting of the Board of Directors at which a quorum is present, all questions and business shall be determined by the affirmative vote of a majority of the directors present, unless a different vote be required by law, the Certificate of Incorporation or these Bylaws.

Section 23. Action Without Meeting. Unless otherwise restricted by the Certificate of Incorporation or these Bylaws, any action required or permitted to be taken at any meeting of the Board of Directors or of any committee thereof may be taken without a meeting, if all members of the Board of Directors or committee, as the case may be, consent thereto in writing or by electronic transmission, and such writing or writings or transmission or transmissions are filed with the minutes of proceedings of the Board of Directors or committee. Such filing shall be in paper form if the minutes are maintained in paper form and shall be in electronic form if the minutes are maintained in electronic form.

Section 24. Fees And Compensation. Directors shall be entitled to such compensation for their services as may be approved by the Board of Directors, including, if so approved, by resolution of the Board of Directors, a fixed sum and expenses of attendance, if any, for attendance at each regular or special meeting of the Board of Directors and at any meeting of a committee of the Board of Directors. Nothing herein contained shall be construed to preclude any director from serving the corporation in any other capacity as an officer, agent, employee, or otherwise and receiving compensation therefor.

Section 25. Committees.

(a) **Executive Committee.** The Board of Directors may appoint an Executive Committee to consist of one (1) or more members of the Board of Directors. The Executive Committee, to the extent permitted by law and provided in the resolution of the Board of Directors shall have and may exercise all the powers and authority of the Board of Directors in the management of the business and affairs of the corporation, and may authorize the seal of the corporation to be affixed to all papers which may require it; but no such committee shall have the power or authority in reference to (i) approving or adopting, or recommending to the stockholders, any action or matter (other than the election or removal of directors) expressly required by the DGCL to be submitted to stockholders for approval, or (ii) adopting, amending or repealing any Bylaw of the corporation.

(b) **Other Committees.** The Board of Directors may, from time to time, appoint such other committees as may be permitted by law. Such other committees appointed by the Board of Directors shall consist of one (1) or more members of the Board of Directors and shall have such powers and perform such duties as may be prescribed by the resolution or resolutions creating such committees, but in no event shall any such committee have the powers denied to the Executive Committee in these Bylaws.

(c) **Term.** The Board of Directors, subject to any requirements of any outstanding series of Preferred Stock and the provisions of subsections (a) or (b) of this Section 25, may at any time increase or decrease the number of members of a committee or terminate the existence of a committee. The membership of a committee member shall terminate on the date of his death or voluntary resignation from the committee or from the Board of Directors. The Board of Directors may at any time for any reason remove any individual committee member and the Board of Directors may fill any committee vacancy created by death, resignation, removal or increase in the number of members of the committee. The Board of Directors may designate one or more directors as alternate members of any committee, who may replace any absent or disqualified member at any meeting of the committee, and, in addition, in the absence or disqualification of any member of a committee, the member or members thereof present at any meeting and not disqualified from voting, whether or not he or they constitute a quorum, may unanimously appoint another member of the Board of Directors to act at the meeting in the place of any such absent or disqualified member.

(d) **Meetings.** Unless the Board of Directors shall otherwise provide, regular meetings of the Executive Committee or any other committee appointed pursuant to this Section 25 shall be held at such times and places as are determined by the Board of Directors, or by any such committee, and when notice thereof has been given to each member of such committee, no further notice of such regular meetings need be given thereafter. Special meetings of any such committee may be held at any place which has been determined from time to time by such committee, and may be called by any Director who is a member of such committee, upon notice to the members of such committee of the time and place of such special meeting given in the manner provided for the giving of notice to members of the Board of Directors of the time and place of special meetings of the Board of Directors. Notice of any special meeting of any committee may be waived in writing or by electronic transmission at any time before or after the meeting and will be waived by any director by attendance thereat, except when the director attends such special meeting for the express purpose of objecting, at the beginning of the meeting, to the transaction of any business because the meeting is not lawfully called or convened. Unless otherwise provided by the Board of Directors in the resolutions authorizing the creation of the committee, a majority of the authorized number of members of any such committee shall constitute a quorum for the transaction of business, and the act of a majority of those present at any meeting at which a quorum is present shall be the act of such committee.

Section 26. Duties of Chairperson of the Board of Directors. The Chairperson of the Board of Directors, if appointed and when present, shall preside at all meetings of the stockholders and the Board of Directors. The Chairperson of the Board of Directors shall perform other duties commonly incident to the office and shall also perform such other duties and have such other powers, as the Board of Directors shall designate from time to time.

Section 27. Organization. At every meeting of the directors, the Chairperson of the Board of Directors, or, if a Chairperson has not been appointed or is absent, the Chief Executive Officer (if a director), or, if a Chief Executive Officer is absent, the President (if a director), or if the President is absent, the most senior Vice President (if a director), or, in the absence of any such person, a chairperson of the meeting chosen by a majority of the directors present, shall preside over the meeting. The Secretary, or in his absence, any Assistant Secretary or other officer, director or other person directed to do so by the person presiding over the meeting, shall act as secretary of the meeting.

ARTICLE V

OFFICERS

Section 28. Officers Designated. The officers of the corporation shall include, if and when designated by the Board of Directors, the Chief Executive Officer, the President, one or more Vice Presidents, the Secretary, the Chief Financial Officer and the Treasurer. The Board of Directors may also appoint one or more Assistant Secretaries and Assistant Treasurers and such other officers and agents with such powers and duties as it shall deem necessary. The Board of Directors may assign such additional titles to one or more of the officers as it shall deem appropriate. Any one person may hold any number of offices of the corporation at any one time unless specifically prohibited therefrom by law. The salaries and other compensation of the officers of the corporation shall be fixed by or in the manner designated by the Board of Directors.

Section 29. Tenure And Duties Of Officers.

(a) **General.** All officers shall hold office at the pleasure of the Board of Directors and until their successors shall have been duly elected and qualified, unless sooner removed. Any officer elected or appointed by the Board of Directors may be removed at any time by the Board of Directors. If the office of any officer becomes vacant for any reason, the vacancy may be filled by the Board of Directors.

(b) **Duties of Chief Executive Officer.** The Chief Executive Officer shall preside at all meetings of the stockholders and at all meetings of the Board of Directors (if a director), unless the Chairperson of the Board of Directors has been appointed and is present. Unless an officer has been appointed Chief Executive Officer of the corporation, the President shall be the chief executive officer of the corporation and shall, subject to the control of the Board of Directors, have general supervision, direction and control of the business and officers of the corporation. To the extent that a Chief Executive Officer has been appointed and no President has been appointed, all references in these Bylaws to the President shall be deemed references to the Chief Executive Officer. The Chief Executive Officer shall perform other duties commonly incident to the office and shall also perform such other duties and have such other powers, as the Board of Directors shall designate from time to time.

(c) **Duties of President.** The President shall preside at all meetings of the stockholders and at all meetings of the Board of Directors (if a director), unless the Chairperson of the Board of Directors or the Chief Executive Officer has been appointed and is present. Unless another officer has been appointed Chief Executive Officer of the corporation, the President shall be the chief executive officer of the corporation and shall, subject to the control of the Board of Directors, have general supervision, direction and control of the business and officers of the corporation. The President shall perform other duties commonly incident to the office and shall also perform such other duties and have such other powers, as the Board of Directors shall designate from time to time.

(d) **Duties of Vice Presidents.** A Vice President may assume and perform the duties of the President in the absence or disability of the President or whenever the office of President is vacant. A Vice President shall perform other duties commonly incident to their office and shall also perform such other duties and have such other powers as the Board of Directors or the Chief Executive Officer, or, if the Chief Executive Officer has not been appointed or is absent, the President shall designate from time to time.

(e) **Duties of Secretary.** The Secretary shall attend all meetings of the stockholders and of the Board of Directors and shall record all acts and proceedings thereof in the minute book of the corporation. The Secretary shall give notice in conformity with these Bylaws of all meetings of the stockholders and of all meetings of the Board of Directors and any committee thereof requiring notice. The Secretary shall perform all other duties provided for in these Bylaws and other duties commonly incident to the office and shall also perform such other duties and have such other powers, as the Board of Directors shall designate from time to time. The Chief Executive Officer, or if no Chief Executive Officer is then serving, the President may direct any Assistant Secretary or other officer to assume and perform the duties of the Secretary in the absence or disability of the Secretary, and each Assistant Secretary shall perform other duties commonly incident to the office and shall also perform such other duties and have such other powers as the Board of Directors or the Chief Executive Officer, or if no Chief Executive Officer is then serving, the President shall designate from time to time.

(f) **Duties of Chief Financial Officer.** The Chief Financial Officer shall keep or cause to be kept the books of account of the corporation in a thorough and proper manner and shall render statements of the financial affairs of the corporation in such form and as often as required by the Board of Directors or the Chief Executive Officer, or if no Chief Executive Officer is then serving, the President. The Chief Financial Officer, subject to the order of the Board of Directors, shall have the custody of all funds and securities of the corporation. The Chief Financial Officer shall perform other duties commonly incident to the office and shall also perform such other duties and have such other powers as the Board of Directors or the Chief Executive Officer, or if no Chief Executive Officer is then serving, the President shall designate from time to time. To the extent that a Chief Financial Officer has been appointed and no Treasurer has been appointed, all references in these Bylaws to the Treasurer shall be deemed references to the Chief Financial Officer. The President may direct the Treasurer, if any, or any Assistant Treasurer, or the controller or any assistant controller to assume and perform the duties of the Chief Financial Officer in the absence or disability of the Chief Financial Officer, and each Treasurer and Assistant Treasurer and each controller and assistant controller shall perform other duties commonly incident to the office and shall also perform such other duties and have such other powers as the Board of Directors or the Chief Executive Officer, or if no Chief Executive Officer is then serving, the President shall designate from time to time.

(g) **Duties of Treasurer.** Unless another officer has been appointed Chief Financial Officer of the corporation, the Treasurer shall be the chief financial officer of the corporation and shall keep or cause to be kept the books of account of the corporation in a thorough and proper manner and shall render statements of the financial affairs of the corporation in such form and as often as required by the Board of Directors or the Chief Executive Officer, or if no Chief Executive Officer is then serving, the President, and, subject to the order of the Board of Directors, shall have the custody of all funds and securities of the corporation. The Treasurer shall perform other duties commonly incident to the office and shall also perform such other duties and have such other powers as the Board of Directors or the Chief Executive Officer, or if no Chief Executive Officer is then serving, the President and Chief Financial Officer (if not Treasurer) shall designate from time to time.

Section 30. Delegation Of Authority. The Board of Directors may from time to time delegate the powers or duties of any officer to any other officer or agent, notwithstanding any provision hereof.

Section 31. Resignations. Any officer may resign at any time by giving notice in writing or by electronic transmission to the Board of Directors or to the Chief Executive Officer, or if no Chief Executive Officer is then serving, the President or to the Secretary. Any such resignation shall be effective when received by the person or persons to whom such notice is given, unless a later time is specified therein, in which event the resignation shall become effective at such later time. Unless otherwise specified in such notice, the acceptance of any such resignation shall not be necessary to make it effective. Any resignation shall be without prejudice to the rights, if any, of the corporation under any contract with the resigning officer.

Section 32. Removal. Any officer may be removed from office at any time, either with or without cause, by the affirmative vote of a majority of the directors in office at the time, or by the unanimous written consent of the directors in office at the time, or by any committee or by the Chief Executive Officer or by other superior officers upon whom such power of removal may have been conferred by the Board of Directors.

ARTICLE VI

EXECUTION OF CORPORATE INSTRUMENTS AND VOTING OF SECURITIES OWNED BY THE CORPORATION

Section 33. Execution Of Corporate Instruments. The Board of Directors may, in its discretion, determine the method and designate the signatory officer or officers, or other person or persons, to execute on behalf of the corporation any corporate instrument or document, or to sign on behalf of the corporation the corporate name without limitation, or to enter into contracts on behalf of the corporation, except where otherwise provided by law or these Bylaws, and such execution or signature shall be binding upon the corporation.

All checks and drafts drawn on banks or other depositaries on funds to the credit of the corporation or in special accounts of the corporation shall be signed by such person or persons as the Board of Directors shall authorize so to do.

Unless authorized or ratified by the Board of Directors or within the agency power of an officer, no officer, agent or employee shall have any power or authority to bind the corporation by any contract or engagement or to pledge its credit or to render it liable for any purpose or for any amount.

Section 34. Voting Of Securities Owned By The Corporation. All stock and other securities of other corporations owned or held by the corporation for itself, or for other parties in any capacity, shall be voted, and all proxies with respect thereto shall be executed, by the person authorized so to do by resolution of the Board of Directors, or, in the absence of such authorization, by the Chairperson of the Board of Directors, the Chief Executive Officer, the President, or any Vice President.

ARTICLE VII

SHARES OF STOCK

Section 35. Form And Execution Of Certificates. The shares of the corporation shall be represented by certificates, or shall be uncertificated if so provided by resolution or resolutions of the Board of Directors. Certificates for the shares of stock, if any, shall be in such form as is consistent with the Certificate of Incorporation and applicable law. Every holder of stock in the corporation represented by certificate shall be entitled to have a certificate signed by or in the name of the corporation by the Chairperson of the Board of Directors, or the President or any Vice President and by the Treasurer or Assistant Treasurer or the Secretary or Assistant Secretary, certifying the number of shares owned by him in the corporation. Any or all of the signatures on the certificate may be facsimiles. In case any officer, transfer agent, or registrar who has signed or whose facsimile signature has been placed upon a certificate shall have ceased to be such officer, transfer agent, or registrar before such certificate is issued, it may be issued with the same effect as if he were such officer, transfer agent, or registrar at the date of issue.

Section 36. Lost Certificates. A new certificate or certificates shall be issued in place of any certificate or certificates theretofore issued by the corporation alleged to have been lost, stolen, or destroyed, upon the making of an affidavit of that fact by the person claiming the certificate of stock to be lost, stolen, or destroyed. The corporation may require, as a condition precedent to the issuance of a new certificate or certificates, the owner of such lost, stolen, or destroyed certificate or certificates, or the owner's legal representative, to agree to indemnify the corporation in such manner as it shall require or to give the corporation a surety bond in such form and amount as it may direct as indemnity against any claim that may be made against the corporation with respect to the certificate alleged to have been lost, stolen, or destroyed.

Section 37. Transfers.

(a) Transfers of record of shares of stock of the corporation shall be made only upon its books by the holders thereof, in person or by attorney duly authorized, and, in the case of stock represented by certificate, upon the surrender of a properly endorsed certificate or certificates for a like number of shares.

(b) The corporation shall have power to enter into and perform any agreement with any number of stockholders of any one or more classes of stock of the corporation to restrict the transfer of shares of stock of the corporation of any one or more classes owned by such stockholders in any manner not prohibited by the DGCL.

Section 38. Fixing Record Dates.

(a) In order that the corporation may determine the stockholders entitled to notice of or to vote at any meeting of stockholders or any adjournment thereof, the Board of Directors may fix a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted by the Board of Directors, and which record date shall, subject to applicable law, not be more than sixty (60) nor less than ten (10) days before the date of such meeting. If no record date is fixed by the Board of Directors, the record date for determining stockholders entitled to notice of or to vote at a meeting of stockholders shall be at the close of business on the day next preceding the day on which notice is given, or if notice is waived, at the close of business on the day next preceding the day on which the meeting is held. A determination of stockholders of record entitled to notice of or to vote at a meeting of stockholders shall apply to any adjournment of the meeting; provided, however, that the Board of Directors may fix a new record date for the adjourned meeting.

(b) In order that the corporation may determine the stockholders entitled to receive payment of any dividend or other distribution or allotment of any rights or the stockholders entitled to exercise any rights in respect of any change, conversion or exchange of stock, or for the purpose of any other lawful action, the Board of Directors may fix, in advance, a record date, which record date shall not precede the date upon which the resolution fixing the record date is adopted, and which record date shall be not more than sixty (60) days prior to such action. If no record date is fixed, the record date for determining stockholders for any such purpose shall be at the close of business on the day on which the Board of Directors adopts the resolution relating thereto.

Section 39. Registered Stockholders. The corporation shall be entitled to recognize the exclusive right of a person registered on its books as the owner of shares to receive dividends, and to vote as such owner, and shall not be bound to recognize any equitable or other claim to or interest in such share or shares on the part of any other person whether or not it shall have express or other notice thereof, except as otherwise provided by the laws of Delaware.

ARTICLE VIII

OTHER SECURITIES OF THE CORPORATION

Section 40. Execution Of Other Securities. All bonds, debentures and other corporate securities of the corporation, other than stock certificates (covered in Section 35), may be signed by the Chairperson of the Board of Directors, the President or any Vice President, or such other person as may be authorized by the Board of Directors, and the corporate seal impressed thereon or a facsimile of such seal imprinted thereon and attested by the signature of the Secretary or an Assistant Secretary, or the Chief Financial Officer or Treasurer or an Assistant Treasurer; *provided, however,* that where any such bond, debenture or other corporate security shall be authenticated by the manual signature, or where permissible facsimile signature, of a trustee under an indenture pursuant to which such bond, debenture or other corporate security shall be issued, the signatures of the persons signing and attesting the corporate seal on such bond, debenture or other corporate security may be the imprinted facsimile of the signatures of such persons. Interest coupons appertaining to any such bond, debenture or other corporate security, authenticated by a trustee as aforesaid, shall be signed by the Treasurer or an Assistant Treasurer of the corporation or such other person as may be authorized by the Board of Directors, or bear imprinted thereon the facsimile signature of such person. In case any officer who shall have signed or attested any bond, debenture or other corporate security, or whose facsimile signature shall appear thereon or on any such interest coupon, shall have ceased to be such officer before the bond, debenture or other corporate security so signed or attested shall have been delivered, such bond, debenture or other corporate security nevertheless may be adopted by the corporation and issued and delivered as though the person who signed the same or whose facsimile signature shall have been used thereon had not ceased to be such officer of the corporation.

ARTICLE IX
DIVIDENDS

Section 41. Declaration Of Dividends. Dividends upon the capital stock of the corporation, subject to the provisions of the Certificate of Incorporation and applicable law, if any, may be declared by the Board of Directors pursuant to law at any regular or special meeting. Dividends may be paid in cash, in property, or in shares of the capital stock, subject to the provisions of the Certificate of Incorporation and applicable law.

Section 42. Dividend Reserve. Before payment of any dividend, there may be set aside out of any funds of the corporation available for dividends such sum or sums as the Board of Directors from time to time, in their absolute discretion, think proper as a reserve or reserves to meet contingencies, or for equalizing dividends, or for repairing or maintaining any property of the corporation, or for such other purpose as the Board of Directors shall think conducive to the interests of the corporation, and the Board of Directors may modify or abolish any such reserve in the manner in which it was created.

ARTICLE X

FISCAL YEAR

Section 43. Fiscal Year. The fiscal year of the corporation shall be fixed by resolution of the Board of Directors.

ARTICLE XI

INDEMNIFICATION

Section 44. Indemnification of Directors, Executive Officers, Other Officers, Employees and Other Agents.

(a) **Directors and executive officers.** The corporation shall indemnify its directors and executive officers (for the purposes of this Article XI, "***executive officers***" shall have the meaning defined in Rule 3b-7 promulgated under the 1934 Act) to the extent not prohibited by the DGCL or any other applicable law; *provided, however,* that the corporation may modify the extent of such indemnification by individual contracts with its directors and executive officers; and, *provided, further,* that the corporation shall not be required to indemnify any director or executive officer in connection with any proceeding (or part thereof) initiated by such person unless (i) such indemnification is expressly required to be made by law, (ii) the proceeding was authorized by the Board of Directors of the corporation, (iii) such indemnification is provided by the corporation, in its sole discretion, pursuant to the powers vested in the corporation under the DGCL or any other applicable law or (iv) such indemnification is required to be made under subsection (d).

(b) **Other Officers, Employees and Other Agents.** The corporation shall have power to indemnify its other officers, employees and other agents as set forth in the DGCL or any other applicable law. The Board of Directors shall have the power to delegate the determination of whether indemnification shall be given to any such person except executive officers to such officers or other persons as the Board of Directors shall determine.

(c) **Expenses.** The corporation shall advance to any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that he is or was a director or executive officer, of the corporation, or is or was serving at the request of the corporation as a director or executive officer of another corporation, partnership, joint venture, trust or other enterprise, prior to the final disposition of the proceeding, promptly following request therefor, all expenses incurred by any director or executive officer in connection with such proceeding provided, however, that if the DGCL requires, an advancement of expenses incurred by a director or executive officer in his or her capacity as a director or executive officer (and not in any other capacity in which service was or is rendered by such indemnitee, including, without limitation, service to an employee benefit plan) shall be made only upon delivery to the corporation of an undertaking (hereinafter an "***undertaking***"), by or on behalf of such indemnitee, to repay all amounts so advanced if it shall ultimately be determined by final judicial decision from which there is no further right to appeal (hereinafter a "***final adjudication***") that such indemnitee is not entitled to be indemnified for such expenses under this section or otherwise.

Notwithstanding the foregoing, unless otherwise determined pursuant to paragraph (e) of this section, no advance shall be made by the corporation to an executive officer of the corporation (except by reason of the fact that such executive officer is or was a director of the corporation in which event this paragraph shall not apply) in any action, suit or proceeding, whether civil, criminal, administrative or investigative, if a determination is reasonably and promptly made (i) by a majority vote of directors who were not parties to the proceeding, even if not a quorum, or (ii) by a committee of such directors designated by a majority vote of such directors, even though less than a quorum, or (iii) if there are no such directors, or such directors so direct, by independent legal counsel in a written opinion, that the facts known to the decision-making party at the time such determination is made demonstrate clearly and convincingly that such person acted in bad faith or in a manner that such person did not believe to be in or not opposed to the best interests of the corporation.

(d) **Enforcement.** Without the necessity of entering into an express contract, all rights to indemnification and advances to directors and executive officers under this Bylaw shall be deemed to be contractual rights and be effective to the same extent and as if provided for in a contract between the corporation and the director or executive officer. Any right to indemnification or advances granted by this section to a director or executive officer shall be enforceable by or on behalf of the person holding such right in any court of competent jurisdiction if (i) the claim for indemnification or advances is denied, in whole or in part, or (ii) no disposition of such claim is made within ninety (90) days of request therefor. To the extent permitted by law, the claimant in such enforcement action, if successful in whole or in part, shall be entitled to be paid also the expense of prosecuting the claim. In connection with any claim for indemnification, the corporation shall be entitled to raise as a defense to any such action that the claimant has not met the standards of conduct that make it permissible under the DGCL or any other applicable law for the corporation to indemnify the claimant for the amount claimed. In connection with any claim by an executive officer of the corporation (except in any action, suit or proceeding, whether civil, criminal, administrative or investigative, by reason of the fact that such executive officer is or was a director of the corporation) for advances, the corporation shall be entitled to raise a defense as to any such action clear and convincing evidence that such person acted in bad faith or in a manner that such person did not believe to be in or not opposed to the best interests of the corporation, or with respect to any criminal action or proceeding that such person acted without reasonable cause to believe that his conduct was lawful. Neither the failure of the corporation (including its Board of Directors, independent legal counsel or its stockholders) to have made a determination prior to the commencement of such action that indemnification of the claimant is proper in the circumstances because he has met the applicable standard of conduct set forth in the DGCL or any other applicable law, nor an actual determination by the corporation (including its Board of Directors, independent legal counsel or its stockholders) that the claimant has not met such applicable standard of conduct, shall be a defense to the action or create a presumption that claimant has not met the applicable standard of conduct. In any suit brought by a director or executive officer to enforce a right to indemnification or to an advancement of expenses hereunder, the burden of proving that the director or executive officer is not entitled to be indemnified, or to such advancement of expenses, under this section or otherwise shall be on the corporation.

(e) **Non-Exclusivity of Rights.** The rights conferred on any person by this Bylaw shall not be exclusive of any other right which such person may have or hereafter acquire under any applicable statute, provision of the Certificate of Incorporation, Bylaws, agreement, vote of stockholders or disinterested directors or otherwise, both as to action in his official capacity and as to action in another capacity while holding office. The corporation is specifically authorized to enter into individual contracts with any or all of its directors, officers, employees or agents respecting indemnification and advances, to the fullest extent not prohibited by the DGCL, or by any other applicable law.

(f) **Survival of Rights.** The rights conferred on any person by this Bylaw shall continue as to a person who has ceased to be a director or executive officer or officer, employee or other agent and shall inure to the benefit of the heirs, executors and administrators of such a person.

(g) **Insurance.** To the fullest extent permitted by the DGCL or any other applicable law, the corporation, upon approval by the Board of Directors, may purchase insurance on behalf of any person required or permitted to be indemnified pursuant to this section.

(h) **Amendments.** Any repeal or modification of this section shall only be prospective and shall not affect the rights under this Bylaw in effect at the time of the alleged occurrence of any action or omission to act that is the cause of any proceeding against any agent of the corporation.

(i) **Saving Clause.** If this Bylaw or any portion hereof shall be invalidated on any ground by any court of competent jurisdiction, then the corporation shall nevertheless indemnify each director and executive officer to the full extent not prohibited by any applicable portion of this section that shall not have been invalidated, or by any other applicable law. If this section shall be invalid due to the application of the indemnification provisions of another jurisdiction, then the corporation shall indemnify each director and executive officer to the full extent under any other applicable law.

(j) **Certain Definitions.** For the purposes of this Bylaw, the following definitions shall apply:

(i) The term “***proceeding***” shall be broadly construed and shall include, without limitation, the investigation, preparation, prosecution, defense, settlement, arbitration and appeal of, and the giving of testimony in, any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative.

(ii) The term "***expenses***" shall be broadly construed and shall include, without limitation, court costs, attorneys' fees, witness fees, fines, amounts paid in settlement or judgment and any other costs and expenses of any nature or kind incurred in connection with any proceeding.

(iii) The term the "***corporation***" shall include, in addition to the resulting corporation, any constituent corporation (including any constituent of a constituent) absorbed in a consolidation or merger which, if its separate existence had continued, would have had power and authority to indemnify its directors, officers, and employees or agents, so that any person who is or was a director, officer, employee or agent of such constituent corporation, or is or was serving at the request of such constituent corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, shall stand in the same position under the provisions of this section with respect to the resulting or surviving corporation as he would have with respect to such constituent corporation if its separate existence had continued.

(iv) References to a "***director***," "***executive officer***," "***officer***," "***employee***," or "***agent***" of the corporation shall include, without limitation, situations where such person is serving at the request of the corporation as, respectively, a director, executive officer, officer, employee, trustee or agent of another corporation, partnership, joint venture, trust or other enterprise.

(v) References to "***other enterprises***" shall include employee benefit plans; references to "***fines***" shall include any excise taxes assessed on a person with respect to an employee benefit plan; and references to "***serving at the request of the corporation***" shall include any service as a director, officer, employee or agent of the corporation which imposes duties on, or involves services by, such director, officer, employee, or agent with respect to an employee benefit plan, its participants, or beneficiaries; and a person who acted in good faith and in a manner he reasonably believed to be in the interest of the participants and beneficiaries of an employee benefit plan shall be deemed to have acted in a manner "***not opposed to the best interests of the corporation***" as referred to in this section.

ARTICLE XII

NOTICES

Section 45. Notices.

(a) **Notice To Stockholders.** Written notice to stockholders of stockholder meetings shall be given as provided in Section 7 herein. Without limiting the manner by which notice may otherwise be given effectively to stockholders under any agreement or contract with such stockholder, and except as otherwise required by law, written notice to stockholders for purposes other than stockholder meetings may be sent by US mail or nationally recognized overnight courier, or by facsimile, telegraph or telex or by electronic mail or other electronic means.

(b) **Notice To Directors.** Any notice required to be given to any director may be given by the method stated in subsection (a), as otherwise provided in these Bylaws with notice other than one which is delivered personally to be sent to such address as such director shall have filed in writing with the Secretary, or, in the absence of such filing, to the last known address of such director.

(c) **Affidavit Of Mailing.** An affidavit of mailing, executed by a duly authorized and competent employee of the corporation or its transfer agent appointed with respect to the class of stock affected, or other agent, specifying the name and address or the names and addresses of the stockholder or stockholders, or director or directors, to whom any such notice or notices was or were given, and the time and method of giving the same, shall in the absence of fraud, be prima facie evidence of the facts therein contained.

(d) **Methods of Notice.** It shall not be necessary that the same method of giving notice be employed in respect of all recipients of notice, but one permissible method may be employed in respect of any one or more, and any other permissible method or methods may be employed in respect of any other or others.

(e) **Notice To Person With Whom Communication Is Unlawful.** Whenever notice is required to be given, under any provision of law or of the Certificate of Incorporation or Bylaws of the corporation, to any person with whom communication is unlawful, the giving of such notice to such person shall not be required and there shall be no duty to apply to any governmental authority or agency for a license or permit to give such notice to such person. Any action or meeting which shall be taken or held without notice to any such person with whom communication is unlawful shall have the same force and effect as if such notice had been duly given. In the event that the action taken by the corporation is such as to require the filing of a certificate under any provision of the DGCL, the certificate shall state, if such is the fact and if notice is required, that notice was given to all persons entitled to receive notice except such persons with whom communication is unlawful.

(f) **Notice to Stockholders Sharing an Address.** Except as otherwise prohibited under DGCL, any notice given under the provisions of DGCL, the Certificate of Incorporation or the Bylaws shall be effective if given by a single written notice to stockholders who share an address if consented to by the stockholders at that address to whom such notice is given. Such consent shall have been deemed to have been given if such stockholder fails to object in writing to the corporation within sixty (60) days of having been given notice by the corporation of its intention to send the single notice. Any consent shall be revocable by the stockholder by written notice to the corporation.

ARTICLE XIII
AMENDMENTS

Section 46. Amendments. Subject to the limitations set forth in Section 44(h) of these Bylaws or the provisions of the Certificate of Incorporation, the Board of Directors is expressly empowered to adopt, amend or repeal the Bylaws of the corporation. Any adoption, amendment or repeal of the Bylaws of the corporation by the Board of Directors shall require the approval of a majority of the authorized number of directors. The stockholders also shall have power to adopt, amend or repeal the Bylaws of the corporation; *provided, however,* that, in addition to any vote of the holders of any class or series of stock of the corporation required by law or by the Certificate of Incorporation, such action by stockholders shall require the affirmative vote of the holders of at least sixty-six and two-thirds percent (66-2/3%) of the voting power of all of the then-outstanding shares of the capital stock of the corporation entitled to vote generally in the election of directors, voting together as a single class.

*** * * * ***

Effective March 19, 2019

Exhibit 31.1

CERTIFICATION

I, Yogesh K. Gupta, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Progress Software 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 control 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 audit committee of registrant's board of directors (or persons performing the equivalent function):

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: July 9, 2019

/s/ YOGESH K. GUPTA

Yogesh K. Gupta
President and Chief Executive Officer
(Principal Executive Officer)

Exhibit 31.2

CERTIFICATION

I, Paul A. Jalbert, certify that:

1. I have reviewed this Quarterly Report on Form 10-Q of Progress Software 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 control 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 audit committee of registrant’s board of directors (or persons performing the equivalent function):

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: July 9, 2019

/s/ PAUL A. JALBERT

Paul A. Jalbert
Chief Financial Officer
(Principal Financial Officer)

Exhibit 32.1

Certification Pursuant To 18 U.S.C. Section 1350, As Adopted Pursuant To Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the Quarterly Report on Form 10-Q of Progress Software Corporation (the Company) for the three months ended May 31, 2019, as filed with the Securities and Exchange Commission on the date hereof (the Report), each of the undersigned, Yogesh K. Gupta, President and Chief Executive Officer, and Paul A. Jalbert, Chief Financial Officer, of the Company, certifies, to the best knowledge and belief of the signatory, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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 the Company.

/s/ YOGESH K. GUPTA	/s/ PAUL A. JALBERT
President and Chief Executive Officer	Chief Financial Officer
Date: July 9, 2019	Date: July 9, 2019