UNITED STATES SECURITIES AND EXCHANGE COMMISSION

	washington, D.C. 20343	
	FORM 10-Q	
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ION 13	OR 15(d) OF THE SECURITIES	5 EACHANGE
For the	quarterly period ended August 31,	2019

(Mark One) QUARTERLY REPORT PURSUANT TO SECTI **ACT OF 1934** X 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 (I.R.S. Employer Identification No.) (State or other jurisdiction of incorporation or organization) 14 Oak Park Bedford, Massachusetts 01730 (Address of principal executive offices) (Zip code) (781) 280-4000 (Registrant's telephone number, including area code) Not applicable (Former name or former address, if changed since last report.)

Securities registered pursuant to Section 12(b) of the Act:

Title of each class

Trading Symbol(s)

Name of each exchange on which registered

Common Stock, \$0.01 par value per share

PRGS

The Nasdaq Stock Market LLC

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	\boxtimes		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. \Box

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

As of September 26, 2019, there were 44,785,586 shares of the registrant's common stock, \$.01 par value per share, outstanding.

PART I

FINANCIAL INFORMATION

Signatures

PROGRESS SOFTWARE CORPORATION

FORM 10-Q

FOR THE QUARTERLY PERIOD ENDED AUGUST 31, 2019

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PART I. FINANCIAL INFORMATION

Item 1. Financial Statements (Unaudited)

Condensed Consolidated Balance Sheets

	A	ugust 31, 2019	N	ovember 30, 2018
(In thousands, except share data)				As Adjusted ⁽¹⁾
Assets				
Current assets:		404000		10= 100
Cash and cash equivalents	\$	124,020	\$	105,126
Short-term investments		21,377		34,387
Total cash, cash equivalents and short-term investments		145,397		139,513
Accounts receivable (less allowances of \$674 and \$840, respectively)		63,617		59,715
Unbilled receivables and contract assets		7,376		1,421
Other current assets		19,904		25,080
Assets held for sale				5,776
Total current assets		236,294		231,505
Long-term unbilled receivables and contract assets		9,987		1,811
Property and equipment, net		31,573		30,714
Intangible assets, net		136,381		58,919
Goodwill		432,598		314,992
Deferred tax assets		10,159		966
Other assets		2,933		5,243
Total assets	\$	859,925	\$	644,150
Liabilities and shareholders' equity				
Current liabilities:				
Current portion of long-term debt, net	\$	8,836	\$	5,819
Accounts payable		6,882		10,593
Accrued compensation and related taxes		24,441		25,500
Dividends payable to shareholders		7,003		6,998
Income taxes payable		3,764		1,228
Other accrued liabilities		20,434		12,686
Short-term deferred revenue		143,972		123,210
Total current liabilities		215,332		186,034
Long-term debt, net		287,622		110,270
Long-term deferred revenue		16,554		12,730
Deferred tax liabilities		89		5,799
Other noncurrent liabilities		7,376		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, 44,785,586 shares in 2019 and 45,114,935 shares in 2018		289,488		267,053
Retained earnings		76,486		85,125
Accumulated other comprehensive loss		(33,022)		(28,176)
Total shareholders' equity		332,952		324,002
Total liabilities and shareholders' equity	\$	859,925	\$	644,150
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(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.

Condensed Consolidated Statements of Operations

		Three Mo	onths Ended			Nine Moi	Nine Months Ende		
	A	August 31, August 31, 2019 2018		August 31, 2019		August 3 2018			
(In thousands, except per share data)			As	Adjusted ⁽¹⁾			A	s Adjusted ⁽¹⁾	
Revenue:									
Software licenses	\$	30,686	\$	22,852	\$	83,216	\$	71,432	
Maintenance and services		76,030		69,751		213,044		209,445	
Total revenue		106,716		92,603		296,260		280,877	
Costs of revenue:									
Cost of software licenses		1,204		1,077		3,296		3,571	
Cost of maintenance and services		12,163		10,110		32,182		29,445	
Amortization of acquired intangibles		7,458		5,509		18,997		17,226	
Total costs of revenue		20,825		16,696		54,475		50,242	
Gross profit		85,891		75,907		241,785		230,635	
Operating expenses:									
Sales and marketing		25,177		21,752		72,332		64,838	
Product development		23,126		19,338		64,704		59,405	
General and administrative		13,506		12,218		38,445		35,670	
Amortization of acquired intangibles		7,068		3,319		14,841		9,956	
Fees related to shareholder activist		_		_		_		1,472	
Restructuring expenses		801		135		3,993		2,382	
Acquisition-related expenses		253		42		1,360		128	
Total operating expenses		69,931		56,804		195,675		173,851	
Income from operations		15,960		19,103		46,110		56,784	
Other (expense) income:									
Interest expense		(3,321)		(1,337)		(6,920)		(3,774	
Interest income and other, net		377		322		950		961	
Foreign currency loss, net		(774)		(946)		(2,068)		(2,017	
Total other expense, net		(3,718)		(1,961)		(8,038)		(4,830	
Income before income taxes	_	12,242		17,142		38,072		51,954	
(Benefit) provision for income taxes		(1,315)		2,752		6,932		10,928	
Net income	\$	13,557	\$	14,390	\$	31,140	\$	41,026	
Earnings per share:			_	<u> </u>	_	<u> </u>			
Basic	\$	0.30	\$	0.32	\$	0.70	\$	0.90	
Diluted	\$	0.30	\$	0.32	\$	0.69	\$	0.88	
Weighted average shares outstanding:	Ψ	0.00	-	5.5 _	~	0.00	~	3.30	
Basic		44,716		45,130		44,761		45,730	
Diluted		45,303		45,576		45,292		46,380	
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Cash dividends declared per common share	\$	0.155	\$	0.140	\$	0.465	\$	0.420	
(I)The Company adented ASC 606 effective December 1, 2019 using the full retrocpect				c of Dracontatio				5.120	

⁽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

	Three Months Ended				Nine Months Ended			
	August 31, August 31, 2019 2018		August 31, 2019		Aı	igust 31, 2018		
(In thousands)			As	Adjusted ⁽¹⁾			As	Adjusted ⁽¹⁾
Net income	\$	13,557	\$	14,390	\$	31,140	\$	41,026
Other comprehensive (loss) income, net of tax:								
Foreign currency translation adjustments		(1,961)		(1,950)		(2,512)		(7,137)
Unrealized loss on hedging activity, net of tax benefit of \$820 for the third quarter and first nine months of 2019		(2,528)		_		(2,528)		_
Unrealized gain on investments, net of tax provision of \$6 and \$54 for the third quarter and first nine months of 2019, respectively, and \$18 and \$57 for the third quarter and first nine								
months of 2018, respectively		57		52		194		24
Total other comprehensive loss, net of tax		(4,432)		(1,898)		(4,846)		(7,113)
Comprehensive income	\$	9,125	\$	12,492	\$	26,294	\$	33,913

⁽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

Nine Months Ended August 31, 2019

	Comm	on Stock	– Ada	Additional			ımulated Other		Total
(in thousands)	Number of Shares	Amount	Pa	aid-In apital	Retained Earnings	Comp	rehensive Loss		areholders' Equity
Balance, December 1, 2018 as adjusted ⁽¹⁾	45,115	\$ 451	\$ 2	266,602	\$ 85,125	\$	(28,176)	\$	324,002
Issuance of stock under employee stock purchase plan	141	1		4,044	_		_		4,045
Exercise of stock options	64	1		1,880	_		_		1,881
Vesting of restricted stock units and release of deferred stock units	147	1		(1)	_		_		_
Withholding tax payments related to net issuance of restricted stock units	(37)	_		(1,637)	_		_		(1,637)
Stock-based compensation	_	_		17,411	_		_		17,411
Issuance of shares related to non-compete agreement (Note 6)	44	_		2,000	_		_		2,000
Adjustment due to adoption of ASU 2016-16 (Note 1)	_	_		_	4,781		_		4,781
Dividends declared	_	_		_	(20,825)		_		(20,825)
Treasury stock repurchases and retirements	(688)	(6))	(1,259)	(23,735)		_		(25,000)
Net income	_	_		_	31,140		_		31,140
Other comprehensive loss							(4,846)		(4,846)
Balance, August 31, 2019	44,786	\$ 448	\$ 2	289,040	\$ 76,486	\$	(33,022)	\$	332,952

⁽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 August 31, 2019 Accumulated Common Stock Additional Other Total Number of Paid-In Retained Comprehensive Shareholders' Shares Amount Capital Earnings Loss Equity (in thousands) 44,723 Balance, June 1, 2019 \$ 448 281,745 61,744 \$ (28,590)\$ 315,347 42 Issuance of stock under employee stock purchase plan 1,242 1,242 Exercise of stock options 20 563 563 Vesting of restricted stock units and release of deferred stock units 1 5,490 5,490 Stock-based compensation Out-of-period correction to adoption of ASU 2016-16 8,178 8,178 (Note 1) Dividends declared (6,993)(6,993)Net income 13,557 13,557 Other comprehensive loss (4,432)(4,432)Balance, August 31, 2019 44,786 \$ 448 289,040 76,486 332,952 \$ (33,022) \$

Condensed Consolidated Statements of Shareholders' Equity (cont.)

Nine Months Ended August 31, 2018

	8,									
	Comm	on Sto	ck		11: 1		A	ccumulated		
(in thousands)	Number of Shares	Aı	mount	P	Additional Paid-In Capital	Retained Earnings	Co	Other imprehensive Loss		Total areholders' 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	179		2		4,280	_		_		4,282
Exercise of stock options	162		2		3,556	_		_		3,558
Withholding tax payments related to net issuance of restricted stock units	148		1		(1,942)	_		_		(1,941)
Stock-based compensation	_		_		14,716	_		_		14,716
Adjustment due to adoption of ASU 2016-09	_		_		641	(641)		_		_
Dividends declared	_		_		_	(19,175)		_		(19,175)
Treasury stock repurchases and retirements	(2,637)		(26)		(7,811)	(102,163)		_		(110,000)
Net income	_		_		_	41,026		_		41,026
Other comprehensive income	_		_		_	_		(7,113)		(7,113)
Balance, August 31, 2018 as adjusted ⁽¹⁾	45,133	\$	452	\$	262,803	\$ 98,966	\$	(25,519)	\$	336,702

⁽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 August 31, 2018

	Three World's Ended August 51, 2010										
	Commo	on S	tock						ccumulated		
(in thousands)	Number of Shares		Amount	P	Additional Paid-In Capital		Retained Earnings	Co	Other imprehensive Loss	Sh	Total areholders' Equity
Balance, June 1, 2018 as adjusted ⁽¹⁾	45,503	\$	456	\$	258,244	\$	107,647	\$	(23,621)	\$	342,726
Issuance of stock under employee stock purchase plan	(114)		(1)		1,214		_		_		1,213
Exercise of stock options	109		1		2,032		_		_		2,033
Withholding tax payments related to net issuance of restricted stock units	148		1		(11)		_		_		(10)
Stock-based compensation	_		_		4,566		_		_		4,566
Dividends declared	_		_		_		(6,318)		_		(6,318)
Treasury stock repurchases and retirements	(513)		(5)		(3,242)		(16,753)		_		(20,000)
Net income	_		_		_		14,390		_		14,390
Other comprehensive income	_		_		_		_		(1,898)		(1,898)
Balance, August 31, 2018 as adjusted ⁽¹⁾	45,133	\$	452	\$	262,803	\$	98,966	\$	(25,519)	\$	336,702

⁽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

	Nine Mon	ths Ended
	August 31, 2019	August 31, 2018
(In thousands)		As Adjusted(1)
Cash flows from operating activities:		
Net income	\$ 31,140	\$ 41,026
Adjustments to reconcile net income to net cash provided by operating activities:		
Depreciation and amortization of property and equipment	5,523	5,158
Amortization of intangibles and other	34,637	28,489
Stock-based compensation	17,411	14,716
Loss on disposal of property and equipment	157	201
Deferred income taxes	(6,005)	(2,406)
Allowances for bad debt and sales credits	153	140
Changes in operating assets and liabilities:		
Accounts receivable	(8,604)	19,196
Other assets	6,034	4,465
Accounts payable and accrued liabilities	(3,875)	(20,290)
Income taxes payable	1,654	1,575
Deferred revenue	13,658	4,755
Net cash flows from operating activities	91,883	97,025
Cash flows (used in) from investing activities:		
Purchases of investments	(8,900)	(8,258)
Sales and maturities of investments	21,780	18,495
Purchases of property and equipment	(1,830)	(5,968)
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) from investing activities	(208,102)	4,269
Cash flows from (used in) financing activities:		
Proceeds from stock-based compensation plans	6,347	7,943
Payments for taxes related to net share settlements of equity awards	(1,637)	(1,942)
Repurchases of common stock	(25,000)	(110,000)
Dividend payments to shareholders	(20,819)	(19,472)
Proceeds from the issuance of debt	184,984	_
Payment of principle on long-term debt	(3,427)	(4,641)
Payment of issuance costs for long-term debt	(1,611)	_
Net cash flows from (used in) financing activities	138,837	(128,112)
Effect of exchange rate changes on cash	(3,724)	(7,949)
Net increase (decrease) in cash and cash equivalents	18,894	(34,767)
Cash and cash equivalents, beginning of period	105,126	133,464
Cash and cash equivalents, beginning of period Cash and cash equivalents, end of period		
Cash and Cash equivalents, end of period	\$ 124,020	\$ 98,697

⁽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

		Nine Mo	nths En	ded
	Au	igust 31, 2019	Αι	igust 31, 2018
Supplemental disclosure:				
Cash paid for income taxes, net of refunds of \$1,293 in 2019 and \$889 in 2018	\$	4,821	\$	7,515
Cash paid for interest	\$	5,972	\$	3,096
Non-cash investing and financing activities:				
Total fair value of restricted stock awards, restricted stock units and deferred stock units on date vested	\$	8,190	\$	9,546
Dividends declared	\$	7,003	\$	6,324

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, the flexibility of a cloud-native app dev platform to deliver modern apps, leading data connectivity technology, web content management, business rules, secure file transfer, network monitoring, plus award-winning machine learning that enables cognitive capabilities to be a part of any application. 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 reclassified 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 August 31, 2019, invoicing of our long-term unbilled receivables is expected to occur as follows (in thousands):

2020	\$ 1,001
2021	8,234
2022	752
Total	\$ 9,987

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 \$1.6 million as of August 31, 2019 and insignificant 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 August 31, 2019, the changes in deferred revenue were as follows (in thousands):

Balance, December 1, 2018 As Adjusted ⁽¹⁾	\$ 135,940
Billings and other	320,846
Revenue recognized	(296,260)
Balance, August 31, 2019	\$ 160,526

⁽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 August 31, 2019, transaction price allocated to remaining performance obligations was \$166 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 \$1.2 million as of August 31, 2019 and minimal as of 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. During the preparation of our condensed consolidated financial statements for the three months ended August 31, 2019, we identified that a deferred tax asset of \$8.2 million should also have been recorded upon adoption of this standard at the beginning of the first quarter of fiscal year 2019, with the offset recorded to retained earnings. We determined that the error is not material to the first and second quarters of fiscal year 2019. We also concluded that recording an out-of-period correction would not be material and have therefore corrected this error by recording the \$8.2 million deferred tax asset in our condensed financial statements as of August 31, 2019.

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.

August 31, 2018

		Three Months Ended						Nine Months Ended						
(In thousands, except per share data)	A	s Reported		Adjustments		As Adjusted		As Reported		Adjustments		As Adjusted		
Revenue:														
Software licenses	\$	27,204	\$	(4,352)	\$	22,852	\$	78,986	\$	(7,554)	\$	71,432		
Maintenance and services		68,479		1,272		69,751		206,846		2,599		209,445		
Total revenue		95,683		(3,080)		92,603		285,832		(4,955)		280,877		
Costs of revenue		16,696				16,696		50,242		_		50,242		
Gross Profit		78,987		(3,080)		75,907		235,590		(4,955)		230,635		
Operating expenses		56,804		_		56,804		173,851		_		173,851		
Income from operations		22,183		(3,080)		19,103		61,739		(4,955)		56,784		
Other expense, net		(1,961)		_		(1,961)		(4,830)		_		(4,830)		
Income before income taxes		20,222		(3,080)		17,142		56,909		(4,955)		51,954		
Provision for income taxes		3,476		(724)		2,752		11,848		(920)		10,928		
Net income	\$	16,746	\$	(2,356)	\$	14,390	\$	45,061	\$	(4,035)	\$	41,026		
Earnings per share:														
Basic	\$	0.37	\$	(0.05)	\$	0.32	\$	0.99	\$	(0.09)	\$	0.90		
Diluted	\$	0.37	\$	(0.05)	\$	0.32	\$	0.97	\$	(0.09)	\$	0.88		
Weighted average shares outstanding:														
Basic		45,130		_		45,130		45,730		_		45,730		
Diluted		45,576		_		45,576		46,380		_		46,380		

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 accounting for our cash flow hedges in accordance with the guidance provided in ASU 2017-12.

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 August 31, 2019 is as follows (in thousands):

	Amortized Cost Basis		Unrealized Gains		Unrealized Losses		Fair Value
Cash	\$	116,146	\$	_	\$	_	\$ 116,146
Money market funds		7,874		_		_	7,874
State and municipal bond obligations		8,300		3		_	8,303
U.S. treasury bonds		6,860		21		_	6,881
Corporate bonds		6,179		14		_	6,193
Total	\$	145,359	\$	38	\$	_	\$ 145,397

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):

	August	31,	2019	November 30, 2018			
	Cash and Equivalents		Short-Term Investments		Cash and Equivalents		Short-Term Investments
Cash	\$ 116,146	\$	_	\$	101,316	\$	_
Money market funds	7,874		_		3,810		_
State and municipal bond obligations	_		8,303		_		19,423
U.S. treasury bonds	_		6,881		_		6,705
Corporate bonds	_		6,193		_		8,259
Total	\$ 124,020	\$	21,377	\$	105,126	\$	34,387

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

	1	August 31, 2019	November 30, 2018		
Due in one year or less	\$	16,356	\$	25,051	
Due after one year ⁽¹⁾		5,021		9,336	
Total	\$	21,377	\$	34,387	

Includes state and municipal bond obligations, U.S. treasury bonds, 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 August 31, 2019 or November 30, 2018.

Note 3: Derivative Instruments

Cash Flow Hedge

On July 9, 2019, we entered into an interest rate swap contract with an initial notional amount of \$150.0 million to manage the variability of cash flows associated with approximately one-half of our variable rate debt. The contract matures on April 30, 2024 and requires periodic interest rate settlements. Under this interest rate swap contract, we receive a floating rate based on the greater of 1-month LIBOR or 0.00% and pay a fixed rate of 1.855% on the outstanding notional amount.

We have designated the interest rate swap as a cash flow hedge and assess the hedge effectiveness both at the onset of the hedge and at regular intervals throughout the life of the derivative. To the extent that the interest rate swap is highly effective in offsetting the variability of the hedged cash flows, changes in the fair value of the derivative are included as a component of other comprehensive (loss) income on our condensed consolidated balance sheets. Although we have determined at the onset of the hedge that the interest rate swap will be a highly effective hedge throughout the term of the contract, any portion of the fair value swap subsequently determined to be ineffective will be recognized in earnings. As of August 31, 2019, the fair value of the hedge was a loss of \$3.3 million and included in other noncurrent liabilities on our condensed consolidated balance sheets.

The following table presents our interest rate swap contract where the notional amount reflects the quarterly amortization of the interest rate swap, which is equal to approximately one-half of the corresponding reduction in the balance of our term loan as we make our scheduled principal payments. The fair value of the derivative represents the discounted value of the expected future discounted cash flows for the interest rate swap, based on the amortization schedule and the current forward curve for the remaining term of the contract, as of the date of each reporting period (in thousands):

		August)19		, 2018			
	Notional Value Fa			Fair Value	Notio	onal Value	Fair Value	
Interest rate swap contracts designated as cash flow hedges	\$	149,063	\$	(3,348)	\$	_	\$	_

Forward Contracts

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 days and one year from the date the contract was entered. At August 31, 2019, \$2.9 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 nine months ended August 31, 2019, realized and unrealized losses of \$1.6 million and \$2.9 million, respectively, from our forward contracts were recognized in foreign currency loss, net, on the condensed consolidated statements of operations. In the three and nine months ended August 31, 2018, realized and unrealized losses of \$1.0 million and \$4.1 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):

		August	31, 2	019	November 30, 2018				
	Notional Value			Fair Value		Notional Value		Fair Value	
Forward contracts to sell U.S. dollars	\$	75,096	\$	(2,915)	\$	105,830	\$	(170)	
Forward contracts to purchase U.S. dollars		1,159		5		240		_	
Total	\$	76,255	\$	(2,910)	\$	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 August 31, 2019 (in thousands):

			Fair Value Measurements Using							
	T	otal Fair Value		Level 1 Level 2				Level 3		
Assets										
Money market funds	\$	7,874	\$	7,874	\$	_	\$	_		
State and municipal bond obligations		8,303		_		8,303		_		
U.S. treasury bonds		6,881		_		6,881		_		
Corporate bonds		6,193		_		6,193		_		
Liabilities										
Foreign exchange derivatives		(2,910)		_		(2,910)		_		
Interest rate swap	\$	(3,348)	\$	_	\$	(3,348)	\$	_		

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):

		Using					
	Total Fair Value		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 nine months ended August 31, 2019.

Note 5: Intangible Assets and Goodwill

Intangible Assets

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

		Au	gust 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	\$	(121,937)	\$ 57,664	\$	154,301	\$	(110,959)	\$	43,342
Customer-related	134,242		(68,454)	65,788		67,802		(56,589)		11,213
Trademarks and trade names	27,340		(16,186)	11,154		17,740		(13,376)		4,364
Non-compete agreement	2,000		(225)	1,775		_		_		_
Total	\$ 343,183	\$	(206,802)	\$ 136,381	\$	239,843	\$	(180,924)	\$	58,919

In the three and nine months ended August 31, 2019, amortization expense related to intangible assets was \$14.5 million and \$33.8 million, respectively. In the three and nine months ended August 31, 2018, amortization expense related to intangible assets was \$8.8 million and \$27.2 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 August 31, 2019, is as follows (in thousands):

Remainder of 2019	\$ 14,301
2020	32,678
2021	32,560
2022	25,937
2023	21,860
Thereafter	9,045
Total	\$ 136,381

Goodwill

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

Balance, November 30, 2018	\$ 314,992
Additions	117,651
Translation adjustments	(45)
Balance, August 31, 2019	\$ 432,598

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 nine months ended August 31, 2019 are as follows (in thousands):

				Translation		
	November 30, 2018 Additions		adjustments	August 31, 2019		
OpenEdge	\$	248,987	\$ 117,651	\$ (45)	\$	366,593
Data Connectivity and Integration		19,040	_	_		19,040
Application Development and Deployment		46,965		 		46,965
Total goodwill	\$	314,992	\$ 117,651	\$ (45)	\$	432,598

During the quarter ending August 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 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. The valuation assumptions take into consideration the Company's estimates of customer attrition, technology obsolescence, and revenue growth projections. 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 \$0.2 million and \$0.2 million of amortization expense related to this restricted stock award for the three and nine months ended August 31, 2019, respectively. These amounts are 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. During the three and nine months ended August 31, 2019, we incurred approximately \$0.3 million and \$1.4 million of acquisition-related costs, respectively, which are included in acquisition-related expenses on our condensed consolidated statement of operations.

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 nine months ended August 31, 2019 was approximately \$10.7 million and \$14.0 million, respectively. 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 prepared in accordance with ASC 606.

	Pro Forma					
	Three Mont	hs Ended August 31,				
(In thousands, except per share data)		2018				
Revenue	\$	107,014				
Net income	\$	9,666				
Net income per basic share	\$	0.21				
Net income per diluted share	\$	0.21				

(In thousands, except per share data)	Nine Months I	Forma Ended August 31, 2019	Nine Mo	Pro Forma onths Ended August 31, 2018
Revenue	\$	325,248	\$	316,265
Net income	\$	24,381	\$	17,742
Net income per basic share	\$	0.54	\$	0.39
Net income per diluted share	\$	0.54	\$	0.38

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 August 31, 2019 was 3.75%.

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 August 31, 2019 was \$299.1 million, with \$9.4 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

August 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 August 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 August 31, 2019 and August 31, 2018 and \$0.3 million for the nine months ended August 31, 2019 and August 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 August 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 August 31, 2019.

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

Remainder of 2019	\$ 1,880
2020	11,287
2021	18,813
2022	26,338
2023	33,863
Thereafter	206,938
Total	\$ 299,119

Note 8: Common Stock Repurchases

In the three months ended August 31, 2019, we did not repurchase and retire any shares of our common stock. In the nine months ended August 31, 2019, we repurchased and retired 0.7 million shares for \$25.0 million. In the three and nine months ended August 31, 2018, we repurchased and retired 0.5 million shares for \$20.0 million and 2.6 million shares for \$110.0 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 August 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				Nine Months Ended			
	August 31, 2019		August 31, 2018		August 31, 2019		August 31, 2018	
Cost of maintenance and services	\$	317	\$	(96)	\$	811	\$	419
Sales and marketing		968		762		3,205		2,127
Product development		1,529		1,744		5,393		5,774
General and administrative		2,676		2,156		8,002		6,396
Total stock-based compensation	\$	5,490	\$	4,566	\$	17,411	\$	14,716

Note 10: Accumulated Other Comprehensive Loss

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

				Unrealized (Losses)							
	Foreign Currency Unrealized Losses on Translation Adjustment Hedging Activity		g g		8			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		(2,512)		(2,528)		194		(4,846)			
Balance, August 31, 2019	\$	(30,485)	\$	(2,528)	\$	(9)	\$	(33,022)			

The tax effect on accumulated unrealized losses on hedging activity and unrealized (losses) gains on investments was \$0.8 million as of August 31, 2019 and minimal as of 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):

	Facilities and Severance a			Employee Severance and Related Benefits	Total
Balance, December 1, 2018	\$	307	\$	4	\$ 311
Costs incurred		676		3,317	3,993
Cash disbursements		(527)		(1,608)	(2,135)
Translation adjustments and other		(103)		(3)	(106)
Balance, August 31, 2019	\$	353	\$	1,710	\$ 2,063

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 and nine months ended August 31, 2019, we incurred expenses of \$0.6 million and \$3.3 million, respectively, which are recorded in restructuring expenses on the condensed consolidated statements of operations.

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

	Facilities and S		Employee Severance and Related Benefits		Total
Balance, December 1, 2018	\$ _	\$	_	\$	_
Costs incurred	_		3,313		3,313
Cash disbursements	_		(1,600)		(1,600)
Translation adjustments and other	_		(3)		(3)
Balance, August 31, 2019	\$ _	\$	1,710	\$	1,710

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 \$1.7 million is included in other accrued liabilities on the condensed consolidated balance sheet at August 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 nine 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 nine months ended August 31, 2019, we incurred expenses of \$0.2 million and \$0.7 million, respectively, which are recorded in restructuring expenses on the condensed consolidated statements of operations.

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

Excess Facilities and	Employee Severance and		Total
Other Costs	Related Delietits		10(a)
\$ 307	\$ 4	\$	311
676	4		680
(527)	(8)		(535)
(103)	_		(103)
\$ 353	\$ —	\$	353
\$	Facilities and Other Costs \$ 307 676 (527) (103)	Facilities and Other Costs Severance and Related Benefits \$ 307 \$ 4 676 4 (527) (8) (103) —	Facilities and Other Costs Severance and Related Benefits \$ 307 \$ 4 676 4 (527) (8) (103) —

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 August 31, 2019.

Note 12: Income Taxes

Our income tax provision for the third 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 (11)% in the third quarter of fiscal year 2019 compared to 16% in the third quarter of fiscal year 2018, and 18% in the first nine months of fiscal year 2019 compared to 21% in the same period last year. The primary reason for the decrease in the effective rate as compared to the prior period is that during the preparation of our financial statements for the three months ended August 31, 2019, we identified an error in our income tax provisions for the first and second quarters of fiscal year 2019 related to the tax treatment of an intercompany sale of intellectual property that occurred in fiscal year 2018. As a result of the error, income tax expense was overstated by \$1.1 million and \$2.5 million during the first and second quarters of fiscal year 2019, respectively. We determined that the error was not material to the first and second quarters of fiscal year 2019 and corrected the error by recording an out of period \$3.6 million tax benefit in our financial statements for the period ended August 31, 2019.

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 Mo	nths	Ended		Nine Mor	nths Ended				
	August 31, 2019								August 31 2018		
		As Adjusted ⁽¹⁾		As Adjusted(1)			1	As Adjusted ⁽¹⁾			
Net income	\$	13,557	\$	14,390	\$	31,140	\$	41,026			
Weighted average shares outstanding		44,716		45,130		44,761		45,730			
Dilutive impact from common stock equivalents		587		446		531		650			
Diluted weighted average shares outstanding		45,303		45,576		45,292		46,380			
Basic earnings per share	\$	0.30	\$	0.32	\$	0.70	\$	0.90			
Diluted earnings per share	\$	0.30	\$	0.32	\$	0.69	\$	0.88			

⁽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 1,236,000 shares and 898,000 shares of common stock from the calculation of diluted earnings per share in the three and nine months ended August 31, 2019, respectively, because these awards were anti-dilutive. In the three and nine months ended August 31, 2018, we excluded stock awards representing 690,000 shares and 577,000 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 Mo	nths Ende		Nine Mo	nths Ended		
	Aı	ıgust 31, 2019	August	31, 2018	Aug	ust 31, 2019	Aug	gust 31, 2018
(In thousands)				As Adjusted(1)				s Adjusted ⁽¹⁾
Segment revenue:								
OpenEdge	\$	78,607	\$	68,519	\$	211,679	\$	204,789
Data Connectivity and Integration		8,754		4,563		27,686		17,466
Application Development and Deployment		19,355		19,521		56,895		58,622
Total revenue		106,716		92,603		296,260		280,877
Segment costs of revenue and operating expenses:								
OpenEdge		22,711		16,419		60,123		47,194
Data Connectivity and Integration		1,943		1,520		5,249		4,823
Application Development and Deployment		6,093		7,071		17,067		20,068
Total costs of revenue and operating expenses		30,747		25,010		82,439		72,085
Segment contribution margin:								
OpenEdge		55,896		52,100		151,556		157,595
Data Connectivity and Integration		6,811		3,043		22,437		12,643
Application Development and Deployment		13,262		12,450		39,828		38,554
Total contribution margin		75,969		67,593		213,821		208,792
Other unallocated expenses ⁽²⁾		60,009		48,490		167,711		152,008
Income from operations		15,960		19,103		46,110		56,784
Other expense, net		(3,718)	(1,961		(8,038)			(4,830)
Income before income taxes	\$	12,242	\$	17,142	\$	38,072	\$	51,954

⁽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.

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 Mo	nths Er	nded		Nine Mo	nths Ended		
	A	August 31, August 31, 2019 2018				August 31, 2019	I	August 31, 2018	
(In thousands)			As	Adjusted(1)			As Adjusted(1)		
Performance obligations transferred at a point in time:								_	
Software licenses	\$	30,686	\$	22,852	\$	83,216	\$	71,432	
Performance obligations transferred over time:									
Maintenance		67,611		62,170		190,138		187,412	
Services		8,419		7,581		22,906		22,033	
Total revenue	\$	106,716	\$	92,603	\$	296,260	\$	280,877	

⁽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.

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 Mo	nths	Ended		Nine Mo	nths	ths Ended		
	Au	ıgust 31, 2019		August 31, 2018	August 31, 2019			August 31, 2018		
(In thousands)				As Adjusted ⁽¹⁾				As Adjusted ⁽¹⁾		
North America	\$	61,816	\$	49,756	\$	165,374	\$	149,305		
EMEA		35,109		32,663		102,114		101,008		
Latin America		3,862		4,600		12,431		13,785		
Asia Pacific		5,929		5,584		16,341		16,779		
Total revenue	\$ 106,716			92,603	\$	296,260	\$	280,877		

⁽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 nine months ended August 31, 2019 and August 31, 2018. As of August 31, 2019 and November 30, 2018, no individual customer accounted for 10% or more of our net accounts receivable balance. As of August 31, 2019 and November 30, 2018, no individual foreign country accounted for 10% or more of total consolidated assets.

Note 15: Subsequent Events

On September 26, 2019, we announced that we are reducing our current and ongoing spending levels within our cognitive application product lines, which consist primarily of our DataRPM and Kinvey products. We expect our fiscal fourth quarter results to include a restructuring charge of \$2.0 million to \$4.0 million. This restructuring charge will relate to employee costs, including severance, health benefits and outplacement services (but excluding stock-based compensation).

In connection with this restructuring action, during the fiscal fourth quarter, we will be evaluating the ongoing value of the intangible assets associated with the technologies and trade names obtained in the acquisitions of DataRPM and Kinvey. In accordance with ASC 360-10, we record impairment losses on long-lived assets used in operations when events and circumstances indicate that long-lived assets might be impaired and the undiscounted cash flows estimated to be generated by those assets are less than the carrying amounts of those assets. We are still in the process of evaluating the recoverability of these assets; however, we expect that we will be required to write down these assets to fair value because our estimate of undiscounted cash flows associated with DataRPM and Kinvey may change. As of August 31, 2019, the combined carrying amounts of these intangible assets was \$23.6 million.

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, the flexibility of a cloud-native app dev platform to deliver modern apps, leading data connectivity technology, web content management, business rules, secure file transfer, network monitoring, plus award-winning machine learning that enables cognitive capabilities to be a part of any application. Over 1,700 independent software vendors, 100,000 enterprise customers, and two 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 products and tools enterprises need to build modern, strategic business applications. We offer these products and tools to both new customers and partners as well as our existing partner and customer ecosystems. Our offerings enable developers to build the most modern applications quickly and easily, and include:

- our OpenEdge software, which provides a unified development environment consisting of development tools, application servers, application management tools, an embedded relational database management system and the capability to connect and integrate with other applications and data sources;
- 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. We have adopted a shareholder friendly capital allocation policy that utilizes dividends and share repurchases to return capital to shareholders. Pursuant to our capital allocation strategy that we initially announced in September 2017, we have targeted to return approximately 25% of our annual cash flows from operations to stockholders in the form of dividends. We also intend to repurchase our shares sufficient to offset dilution from our equity plans. We also intend to pursue mergers and acquisitions meeting strict financial criteria, which will enable us to drive significant stockholder returns by providing scale and increased cash flows. We have the flexibility to increase or decrease share repurchases depending on the size and time of future acquisition activity.

In September 2017, our Board of Directors increased the total share repurchase authorization to \$250 million. As of August 31, 2019, there was \$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. In September 2018, the quarterly cash dividend was increased by 11% to \$0.155 per share of common stock. On September 24, 2019, our Board of Directors approved an additional 6% increase to our quarterly cash dividend from \$0.155 to \$0.165 per share of common stock and declared a quarterly dividend of \$0.165 per share of common stock that will be paid on December 16, 2019 to shareholders of record as of the close of business on December 2, 2019. We expect to continue paying quarterly cash dividends in subsequent quarters consistent with our capital allocation strategy.

We expect to continue to evaluate possible acquisitions designed to expand our business and drive significant stockholder returns. 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.

We derive a significant portion of our revenue from international operations, which are primarily conducted in foreign currencies. The impact of foreign exchange rates has had a material impact on revenue in fiscal year 2019. Since approximately one-third of our revenue is denominated in foreign currency, future fluctuations in foreign currency rates may also significantly impact our results.

On September 26, 2019, we announced that we are reducing our current and ongoing spending levels within our cognitive application product lines, which consist primarily of our DataRPM and Kinvey products. We expect our fiscal fourth quarter results to include a restructuring charge of \$2.0 million to \$4.0 million. This restructuring charge will relate to employee costs, including severance, health benefits and outplacement services (but excluding stock-based compensation).

In connection with this restructuring action, during the fiscal fourth quarter, we will be evaluating the ongoing value of the intangible assets associated with the technologies and trade names obtained in the acquisitions of DataRPM and Kinvey. We are still in the process of evaluating the recoverability of these assets; however, we expect that we will be required to write down these assets to fair value because our estimate of undiscounted cash flows associated with DataRPM and Kinvey may change. As of August 31, 2019, the combined carrying amounts of these intangible assets was \$23.6 million.

Results of Operations

Revenue

	Three Mo	onths Ended	Percentage Change			
(In thousands)	August 31, 2019	August 31, 2018	As Reported	Constant Currency		
Revenue	\$ 106,716	\$ 92,603	15%	17%		
	Nine Mor	nths Ended	Percentage	e Change		
		_		Constant		
(In thousands)	August 31, 2019	August 31, 2018	As Reported	Currency		
Revenue	\$ 296,260	\$ 280,877	5%	8%		

Total revenue increased in the third quarter and first nine months of fiscal year 2019 as compared to the same periods last year due primarily to the acquisition of Ipswitch during the second quarter of fiscal year 2019 and an increase in license sales in our Data Connectivity and Integration segment. Ipswitch contributed \$10.7 million and \$14.0 million in revenue in the three and nine month periods ended August 31, 2019, respectively. The increase in total revenue was partially offset by a decrease in our OpenEdge product line license sales, lower Application Development and Deployment professional services revenue, and an unfavorable impact from currency exchange rates in all periods of fiscal year 2019 as compared to the same periods last year.

Software License Revenue

		Three Mo	nths E	Ended	Percentage Change			
(In thousands)	Augu	ıst 31, 2019	Auş	gust 31, 2018	As Reported	Constant Currency		
Software Licenses	\$	30,686	\$	22,852	34%	36%		
As a percentage of total revenue		29%		25%				
		Nine Moi	nths E	inded	Percentage	e Change		
						Constant		
(In thousands)	Augu	ıst 31, 2019	Aug	gust 31, 2018	As Reported	Currency		
Software Licenses	\$	83,216	\$	71,432	16%	19%		
As a percentage of total revenue		28%		25%				

Software license revenue increased in the third quarter and first nine months of fiscal year 2019 as compared to the same periods last year primarily due to the acquisition of Ipswitch during the second quarter of fiscal year 2019 and 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 product line during the third quarter and first nine months of fiscal year 2019 as compared to the same periods last year.

Maintenance and Services Revenue

		Three Mo	nths E	nded	Percentage Change			
(In thousands)	Aug	gust 31, 2019	Aug	ust 31, 2018	As Reported	Constant Currency		
Maintenance	\$	67,611	\$	62,170	9%	10%		
As a percentage of total revenue		63%		67%				
Services		8,419		7,581	11%	12%		
As a percentage of total revenue		8%		8%				
Total maintenance and services revenue	\$	76,030	\$	69,751	9%	10%		
As a percentage of total revenue		71%		<i>7</i> 5%				
		Nine Moi	nths Er	nded	Percentage	e Change		
(In thousands)	——Auş	Nine Mongust 31, 2019		ust 31, 2018	Percentage As Reported	Constant Currency		
(In thousands) Maintenance	Aug \$					Constant		
		gust 31, 2019	Aug	ust 31, 2018	As Reported	Constant Currency		
Maintenance		gust 31, 2019 190,138	Aug	ust 31, 2018 187,412	As Reported	Constant Currency		
Maintenance As a percentage of total revenue		gust 31, 2019 190,138 64%	Aug	ust 31, 2018 187,412 67%	As Reported 1%	Constant Currency 4%		
Maintenance As a percentage of total revenue Services		gust 31, 2019 190,138 64% 22,906	Aug	ust 31, 2018 187,412 67% 22,033	As Reported 1%	Constant Currency 4%		

Maintenance revenue increased in all periods presented primarily due to the acquisition of Ipswitch during the second quarter of fiscal year 2019 and a slight increase in maintenance revenue in our Application Development and Deployment segment. This increase was offset by an unfavorable impact from currency exchange rates on our OpenEdge segment maintenance revenue in all periods of fiscal year 2019 compared to the same periods last year. Services revenue increased in all periods

presented due to an increase in OpenEdge professional services revenue, partially offset by lower professional services revenue generated by our Application Development and Deployment segment.

Revenue by Region

		Three Mo	nths	Ended	Percentage Change			
(In thousands)	Aı	ıgust 31, 2019	Αι	ıgust 31, 2018	As Reported	Constant Currency		
North America	\$	61,816	\$	49,756	24 %	24 %		
As a percentage of total revenue		58%		54%				
Europe, the Middle East and Africa ("EMEA")	\$	35,109	\$	32,663	7 %	11 %		
As a percentage of total revenue		33%		35%				
Latin America	\$	3,862	\$	4,600	(16)%	(13)%		
As a percentage of total revenue		4%		5%				
Asia Pacific	\$	5,929	\$	5,584	6 %	10 %		
As a percentage of total revenue		5%		6%				
		Nine Moi	nths l	Ended	Percentage Change			
(In thousands)	Aı	ıgust 31, 2019	Au	ıgust 31, 2018	As Reported	Constant Currency		
North America	\$	165,374	\$	149,305	11 %	11 %		
As a percentage of total revenue		56%		53%				
EMEA	\$	102,114	\$	101,008	1 %	6 %		
As a percentage of total revenue		34%		36%				
Latin America	\$	12,431	\$	13,785	(10)%	(3)%		
As a percentage of total revenue		4%		5%				
Asia Pacific	\$	16,341	\$	16,779	(3)%	1 %		
As a percentage of total revenue		6%		6%				

The increase in revenue generated in North America in the third quarter and first nine months of fiscal year 2019 was primarily due to the acquisition of Ipswitch during the second quarter of fiscal year 2019 and higher license revenue generated by our Data Connectivity and Integration segment. The increase in revenue generated in EMEA in the third quarter and first nine months of fiscal year 2019 was also due to the acquisition of Ipswitch and higher license revenue generated by our Data Connectivity and Integration segment, partially offset by the unfavorable effect of foreign exchange. The slight decrease in revenue generated in Latin America in all periods was primarily due to license and maintenance revenue decreases in our OpenEdge and Application Development and Deployment segments. The increase in revenue generated in the Asia Pacific region in the third quarter of fiscal year 2019 was due to an increase in license and maintenance revenue in our OpenEdge segment and the slight decrease in the first nine months of fiscal year 2019 was the result of the effect of foreign exchange.

Total revenue generated in markets outside North America represented 44% of total revenue in the first nine 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 nine 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 45% of total revenue.

Revenue by Segment

		Three Mo	nths I	Ended	Percentage Change			
(In thousands)	Aug	ust 31, 2019	Aug	gust 31, 2018	As Reported	Constant Currency		
OpenEdge segment	\$	78,607	\$	68,519	15 %	17 %		
Data Connectivity and Integration segment		8,754		4,563	92 %	92 %		
Application Development and Deployment segment		19,355		19,521	(1)%	(1)%		
Total revenue	\$	106,716	\$	92,603	15 %	17 %		
		Nine Mor	nths E	Ended	Percentage	ge Change		
(In thousands)	Aug	ust 31, 2019	Aug	gust 31, 2018	As Reported	Constant Currency		
OpenEdge segment	\$	211,679	\$	204,789	3 %	6 %		
Data Connectivity and Integration segment		27,686		17,466	59 %	59 %		
Application Development and Deployment segment		56,895		58,622	(3)%	(3)%		
Total revenue	\$	296,260	¢	280,877	5 %	8 %		

Revenue in the OpenEdge segment increased in all periods primarily due to the acquisition of Ipswitch in the second quarter of fiscal year 2019 and an increase in professional services revenue, partially offset by a decrease in our license sales and an unfavorable impact from currency exchange rates. Data Connectivity and Integration revenue increased in all periods primarily due to the timing of certain multi-year renewals by original equipment manufacturers ("OEMs"). Application Development and Deployment revenue decreased in all periods primarily due to lower license and services revenue, partially offset by increased maintenance revenue.

Cost of Software Licenses

			Three	Months End	ed			ded		
(In thousands)	A	ugust 31, 2019	9		Percentage Change	Ā	August 31, 2019	Α	August 31, 2018	Percentage Change
Cost of software licenses	\$	1,204	\$	1,077	12%	\$	3,296	\$	3,571	(8)%
As a percentage of software license revenue		4%		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. During the periods presented above, cost of software licenses remained relatively flat as a percentage of revenue.

Cost of Maintenance and Services

		-	Γhree	Months End	led	Nine Months Ended					
(In thousands)	A	august 31, 2019	, ,		Percentage Change	F	August 31, 2019	P	August 31, 2018	Percentage Change	
Cost of maintenance and services	\$	12,163	\$	10,110	20%	\$	32,182	\$	29,445	9%	
As a percentage of maintenance and services revenue		16%		14%			15%		14%		
As a percentage of total revenue		11%		11%			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

		,	Thre	e Months End	led			Nine	Months End	ed
(In thousands)	A	ugust 31, 2019	ı	August 31, 2018	Percentage Change	1	August 31, 2019	A	August 31, 2018	Percentage Change
Amortization of acquired intangibles	\$	7,458	\$	5,509	35%	\$	18,997	\$	17,226	10%
As a percentage of total revenue		7%		6%			6%		6%	

Amortization of acquired intangibles included in costs of revenue primarily represents the amortization of the value assigned to technology-related intangible assets obtained in business combinations. Amortization of acquired intangibles increased in all periods primarily due to the addition of intangible assets associated with the technologies obtained in connection with the acquisition of Ipswitch in the second quarter of fiscal year 2019.

Gross Profit

		7	Γhre	e Months End	led			Nine	e Months End	ed
(In thousands)	A	ugust 31, 2019	F	August 31, 2018	Percentage Change	1	August 31, 2019	1	August 31, 2018	Percentage Change
Gross profit	\$	85,891	\$	75,907	13%	\$	241,785	\$	230,635	5%
As a percentage of total revenue		80% 82%				82%		82%		

Our gross profit increased in the third quarter and first nine months of fiscal year 2019 primarily due to the increases of license and maintenance revenue, offset slightly by the increase of cost of maintenance and services and the amortization of acquired intangibles, each as described above.

Sales and Marketing

		-	Γhre	e Months End	led			Nine	Months End	ed
(In thousands)	P	August 31, 2019	1	August 31, 2018	Percentage Change	-	August 31, 2019	1	August 31, 2018	Percentage Change
Sales and marketing	\$	25,177	\$	21,752	16%	\$	72,332	\$	64,838	12%
As a percentage of total revenue		24%		23%			24%		23%	

Sales and marketing expenses increased in both the third quarter and first nine months of fiscal year 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.

Product Development

			Thre	ee Months End	ded			Nine	Months End	ed
(In thousands)	F	August 31, 2019		August 31, 2018	Percentage Change	I	August 31, 2019	A	August 31, 2018	Percentage Change
Product development costs	\$	23,126	\$	19,338	20%	\$	64,704	\$	59,405	9%
As a percentage of total revenue		22%		21%			22%		21%	

Product development expenses increased in the third quarter and first nine 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

			Thre	e Months End	led			Nine	Months End	ed
(In thousands)	F	August 31, 2019	1	August 31, 2018	Percentage Change	I	August 31, 2019	F	August 31, 2018	Percentage Change
General and administrative	\$	13,506	\$	12,218	11%	\$	38,445	\$	35,670	8%
As a percentage of total revenue		13%		13%			13%		13%	

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 third quarter and first nine months of fiscal year 2019 as compared to the same periods last year primarily due to higher stock-based compensation expense.

Amortization of Intangibles

			Γhree	Months End	led			Nine	Months End	ed
(In thousands)	A	August 31, 2019		August 31, 2018	Percentage Change		August 31, 2019	August 31, 2018		Percentage Change
Amortization of acquired intangibles	\$	7,068	\$	3,319	113%	\$	14,841	\$	9,956	49%
As a percentage of total revenue		7%		4%			5%		4%	

Amortization of acquired 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, which occurred in the second quarter of fiscal year 2019.

Fees Related to Shareholder Activist

		Т	Three Mo	onths Ende	ed		N	line I	Months Ende	·d
(In thousands)	Au	igust 31, 2019	U	ıst 31,)18	Percentage Change	A	ugust 31, 2019	A	ugust 31, 2018	Percentage Change
Fees related to shareholder activist	\$	_	\$	_	•	\$	_	\$	1,472	*
As a percentage of total revenue		%		—%			—%		1%	

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

		-	Γhree	Months End	led			Nine	Months End	ed
(In thousands)	Aı	ıgust 31, 2019	A	August 31, 2018	Percentage Change	A	august 31, 2019	Α	August 31, 2018	Percentage Change
Restructuring expenses	\$	801	\$	135	493%	\$	3,993	\$	2,382	68%
As a percentage of total revenue		1%		%			1%		1%	

Restructuring expenses recorded in the third quarter and first nine 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.

* Not meaningful

Acquisition-Related Expenses

		Т	Three	Months End	ed			Nine :	Months Ende	ed ed
(In thousands)	Au	igust 31, 2019	A	august 31, 2018	Percentage Change		August 31, 2019	A	august 31, 2018	Percentage Change
Acquisition-related expenses	\$	253	\$	42		* \$	1,360	\$	128	*
As a percentage of total revenue		%		%			%		%	

Acquisition-related costs are expensed as incurred and include those costs incurred as a result of a business combination. 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 third quarter and first nine months of fiscal year 2019 were related to the acquisition of Ipswitch. Acquisition-related expenses in both the third quarter and first nine months of fiscal year 2018 were minimal.

Income from Operations

		Thre	e Months End	ded			Nine	e Months End	led
(In thousands)	August 31, 2019	A	August 31, 2018	Percentage Change	F	August 31, 2019	A	August 31, 2018	Percentage Change
Income from operations	\$ 15,960	\$	19,103	(16)%	\$	46,110	\$	56,784	(19)%
As a percentage of total revenue	15%		21%			16%		20%	

Income from operations decreased in both the third quarter and first nine 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 and maintenance revenue as described above.

Income from Operations by Segment

			Thre	e Months E	nded	Nine Months Ended					
(In thousands)	A	ugust 31, 2019	Α	August 31, 2018	Percentage Change	Ā	August 31, 2019	P	August 31, 2018	Percentage Change	
OpenEdge segment	\$	55,896	\$	52,100	7 %	\$	151,556	\$	157,595	(4)%	
Data Connectivity and Integration segment		6,811		3,043	124 %		22,437		12,643	77 %	
Application Development and Deployment segment		13,262		12,450	7 %		39,828		38,554	3 %	
Other unallocated expenses ⁽¹⁾		(60,009)		(48,490)	(24)%		(167,711)		(152,008)	(10)%	
Income from operations	\$	15,960	\$	19,103	(16)%	\$	46,110	\$	56,784	(19)%	

⁽i)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

			,	Thre	e Months End	ded			Nine	Months End	ed
(In thousands)	_	_	ust 31, 019	I	August 31, 2018	Percentage Change	P	August 31, 2019	I	August 31, 2018	Percentage Change
Interest expense	3	\$ (3,321)	\$	(1,337)	(148)%	\$	(6,920)	\$	(3,774)	(83)%
Interest income and other, net			377		322	17 %		950		961	(1)%
Foreign currency loss, net			(774)		(946)	18 %		(2,068)		(2,017)	(3)%
Total other expense, net	9	\$ (3,718)	\$	(1,961)	(90)%	\$	(8,038)	\$	(4,830)	(66)%
As a percentage of total revenue	_		(3)%		(2)%			(3)%		(2)%	

Other expense, net increased in the third quarter and first nine 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 an increase in the principal balance of our debt, which was used to fund the Ipswitch acquisition.

(Benefit) Provision for Income Taxes

		,	Months End	led	Nine Months Ended					
(In thousands)	Ā	August 31, 2019	A	ugust 31, 2018	Percentage Change	Α	august 31, 2019	F	August 31, 2018	Percentage Change
(Benefit) provision for income taxes	\$	(1,315)	\$	2,752	(148)%	\$	6,932	\$	10,928	(37)%
As a percentage of total revenue		(1)%		3%			2%		4%	

Our effective tax rate was (11)% in the third quarter of fiscal year 2019 compared to 16% in the third quarter of fiscal year 2018, and 18% in the first nine months of fiscal year 2019 compared to 21% in the same period last year. The primary reason for the decrease in the effective rate as compared to the prior period is that during the preparation of our financial statements for the three months ended August 31, 2019, we identified an error in our income tax provisions for the first and second quarters of fiscal year 2019 related to the tax treatment of an intercompany sale of intellectual property that occurred in fiscal year 2018. As a result of the error, income tax expense was overstated by \$1.1 million and \$2.5 million during the first and second quarters of fiscal year 2019, respectively. We determined that the error was not material to the first and second quarters of fiscal year 2019 and corrected the error by recording an out of period \$3.6 million tax benefit in our financial statements for the period ended August 31, 2019.

Net Income

			Thre	e Months End	ded	Nine Months Ended					
(In thousands)	A	August 31, 2019	P	August 31, 2018	Percentage Change	Ā	August 31, 2019		August 31, 2018	Percentage Change	
Net income	\$	13,557	\$	14,390	(6)%	\$	31,140	\$	41,026	(24)%	
As a percentage of total revenue		13%		16%			11%		15%		

Liquidity and Capital Resources

Cash, Cash Equivalents and Short-Term Investments

(In thousands)	A	ugust 31, 2019	No	ovember 30, 2018
Cash and cash equivalents	\$	124,020	\$	105,126
Short-term investments		21,377		34,387
Total cash, cash equivalents and short-term investments	\$	145,397	\$	139,513

The increase in cash, cash equivalents and short-term investments of \$5.9 million from the end of fiscal year 2018 was due to proceeds from the issuance of long-term debt of \$185.0 million, cash inflows from operations of \$91.9 million, proceeds from sale of property and equipment of \$6.1 million, and \$4.7 million in cash received from the issuance of common stock. These cash inflows were offset by payments for acquisitions, net of cash acquired, of \$225.3 million, repurchases of common stock of \$25.0 million, dividend payments of \$20.8 million, payments of debt obligations in the amount of \$5.0 million, the effect of exchange rates on cash of \$3.7 million and purchases of property and equipment of \$1.8 million. Except as described below, there are no limitations on our ability to access our cash, cash equivalents and short-term investments.

As of August 31, 2019, \$25.3 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 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 August 31, 2019. We repurchased and retired 0.7 million shares for \$25.0 million in the nine months ended August 31, 2019. As of August 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. The timing and amount of any shares repurchased will be determined by management based on its evaluation of market conditions and other factors, and the Board of Directors may choose to suspend, expand or discontinue the repurchase 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, the quarterly cash dividend was increased by 11% to \$0.155 per share of common stock. On September 24, 2019, our Board of Directors approved an additional 6% increase to our quarterly cash dividend from \$0.155 to \$0.165 per share of common stock and declared a quarterly dividend of \$0.165 per share of common stock that will be paid on December 16, 2019 to shareholders of record as of the close of business on December 2, 2019. We expect to continue paying quarterly cash dividends in subsequent quarters consistent with our capital allocation strategy.

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 and nine months ended August 31, 2019, we incurred expenses of \$0.6 million and \$3.3 million, respectively, 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 nine months ended August 31, 2019, we incurred expenses of \$0.2 million and \$0.7 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.

Interest Rate Swap

In July 2019, we entered into an interest rate swap contract on an initial notional amount of \$150.0 million to manage the variability of cash flows associated with our variable rate debt (Note 3). The contract matures on April 30, 2024 and requires periodic interest rate settlements.

Cash Flows from Operating Activities

	Nine Months Ended			
(In thousands)	' <u></u>	August 31, 2019		August 31, 2018
Net income	\$	31,140	\$	41,026
Non-cash reconciling items included in net income		51,876		46,298
Changes in operating assets and liabilities		8,867		9,701
Net cash flows from operating activities	\$	91,883	\$	97,025

As described above, the decrease in cash generated from operations in the first nine months of fiscal year 2019 as compared to the first nine 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 nine months of fiscal year 2018 were particularly strong due to a slightly shorter collection cycle as compared to the first nine months of fiscal year 2019. Our gross accounts receivable as of August 31, 2019 increased by \$3.7 million from the end of fiscal year 2018, which is primarily due to the acquisition of Ipswitch. Days sales outstanding (DSO) in accounts receivable was 53 days compared to 43 days in the fiscal third 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 August 31, 2019 increased by \$24.6 million from the end of fiscal year 2018.

Cash Flows used in Investing Activities

	Nine Months Ended			Ended
(In thousands)		August 31, 2019		August 31, 2018
Net investment activity	\$	12,880	\$	10,237
Proceeds from sale of property, plant and equipment, net		6,146		_
Purchases of property and equipment		(1,830)		(5,968)
Payments for acquisitions, net of cash acquired		(225,298)		_
Net cash flows used in investing activities	\$	(208,102)	\$	4,269

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 certain corporate land and building assets in the first nine months of fiscal year 2019. We also purchased \$1.8 million of property and equipment in the first nine months of fiscal year 2019, as compared to \$6.0 million in the first nine months of fiscal year 2018. Most significantly, 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

	Nine Months Ended			inded
(In thousands)	Aı	ıgust 31, 2019	A	August 31, 2018
Proceeds from stock-based compensation plans	\$	6,347	\$	7,943
Proceeds from the issuance of debt		184,984		_
Repurchases of common stock		(25,000)		(110,000)
Payment of principle on long-term debt		(3,427)		(4,641)
Dividend payments to shareholders		(20,819)		(19,472)
Other financing activities		(3,248)		(1,942)
Net cash flows from (used in) financing activities	\$	138,837	\$	(128,112)

During the first nine months of fiscal year 2019, we received \$6.3 million from the exercise of stock options and the issuance of shares under our employee stock purchase plan as compared to \$7.9 million in the first nine months of fiscal year 2018. In addition, in the first nine 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 \$110.0 million in the same period of the prior year. We also made principal payments on our long-term debt of \$3.4 million in the first nine months of fiscal year 2019 compared to \$4.6 million in the same period of the prior year. In addition, we made dividend payments of \$20.8 million to our shareholders during the first nine months of fiscal 2019, as compared to \$19.5 million in the first nine 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 third 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 August 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 August 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. The risk factors set forth below that are marked with an asterisk (*) are new or contain changes to the similarly titled risk factors included in our Annual Report on Form 10-K for the fiscal year ended November 30, 2018. 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 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.

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.

*If our goodwill or amortizable intangible assets become impaired we may be required to record a significant charge to earnings. We acquire other companies and intangible assets and may not realize all the economic benefit from those acquisitions, which could cause an impairment of goodwill or intangibles. We review our amortizable intangible assets for impairment when events or changes in circumstances indicate the carrying value may not be recoverable. We test goodwill for impairment at least annually. Factors that may cause a change in circumstances, indicating that the carrying value of our goodwill or amortizable intangible assets may not be recoverable, include a decline in our stock price and market capitalization, reduced future cash flow estimates, and slower growth rates in industry segments in which we participate. We may be required to record a significant charge in our consolidated financial statements during the period in which any impairment of our goodwill or amortizable intangible assets is determined, negatively affecting our results of operations.

During the fiscal fourth quarter, we will be evaluating the ongoing value of the intangible assets associated with the technologies and trade names obtained in the acquisitions of DataRPM and Kinvey. In accordance with ASC 360-10, we record impairment losses on long-lived assets used in operations when events and circumstances indicate that long-lived assets might be impaired and the undiscounted cash flows estimated to be generated by those assets are less than the carrying amounts of those assets. We are still in the process of evaluating the recoverability of these assets; however, we expect that we will be required to write down these assets to fair value because our estimate of undiscounted cash flows associated with DataRPM and Kinvey may change. As of August 31, 2019, the combined carrying amounts of these intangible assets was \$23.6 million.

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 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 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 third quarter of fiscal year 2019 is as follows (in thousands, except per share and share data):

	Period		Total Number of Shares Purchased		_	je Price Paid r Share	Total Number o Shares Purchased Part of Publicly Announced Plans Programs	as 7	Value o Yet be	oximate Dollar f Shares that May Purchased Under ns or Programs ⁽¹⁾
		June 2019	-	_	\$	_		_	\$	75,000
		July 2019	-	_				—		75,000
		August 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 August 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 Greene
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 nine months ended August 31, 2019, formatted in XBRL (eXtensible Business Reporting Language): (i) Condensed Consolidated Balance Sheets as of August 31, 2019 and November 30, 2018; (ii) Condensed Consolidated Statements of Income for the three and nine months ended August 31, 2019 and 2018; (iii) Condensed Consolidated Statements of Comprehensive Income for the three and nine months ended August 31, 2019 and 2018; (iv) Condensed Consolidated Statements of Cash Flows for the nine months ended August 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

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: October 7, 2019 /s/ YOGESH K. GUPTA

Yogesh K. Gupta

President and Chief Executive Officer

(Principal Executive Officer)

Dated: October 7, 2019 /s/ PAUL A. JALBERT

Paul A. Jalbert

Chief Financial Officer

(Principal Financial Officer and Principal Accounting Officer)

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: October 7, 2019

/s/ YOGESH K. GUPTA

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

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: October 7, 2019

/s/ PAUL A. JALBERT

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

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 August 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: October 7, 2019 Date: October 7, 2019