PTC INC.
Form 10-Q
May 02, 2018

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

FORM 10-Q

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF
THE SECURITIES EXCHANGE ACT OF 1934
For the quarterly period ended March 31, 2018
Commission File Number: 0-18059

PTC Inc.
(Exact name of registrant as specified in its charter)

Massachusetts	04-2866152
(State or other jurisdiction of incorporation or organization)	(I.R.S. Employer Identification Number)

140 Kendrick Street, Needham, MA 02494
(Address of principal executive offices, including zip code)
(781) 370-5000
(Registrant’s telephone number, including area code)

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 þ No ¨
Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes þ No ¨
Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, 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 þ	Accelerated filer ¨	Non-accelerated filer (Do not check if a smaller reporting company) ¨	Smaller reporting company ¨
			Emerging growth company ¨

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

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ¨ No þ
There were 115,386,106 shares of our common stock outstanding on April 30, 2018.

PTC Inc.
INDEX TO FORM 10-Q
For the Quarter Ended March 31, 2018

		Page Number
Part I—FINANCIAL INFORMATION		
Item 1.	Unaudited Condensed Consolidated Financial Statements:	
	Consolidated Balance Sheets as of March 31, 2018 and September 30, 2017	1
	Consolidated Statements of Operations for the three and six months ended March 31, 2018 and April 1, 2017	2
	Consolidated Statements of Comprehensive Income (Loss) for the three and six months ended March 31, 2018 and April 1, 2017	3
	Consolidated Statements of Cash Flows for the six months ended March 31, 2018 and April 1, 2017	4
	Notes to Condensed Consolidated Financial Statements	5
Item 2.	Management’s Discussion and Analysis of Financial Condition and Results of Operations	25
Item 3.	Quantitative and Qualitative Disclosures about Market Risk	48
Item 4.	Controls and Procedures	48
Part II—OTHER INFORMATION		
Item 1A.	Risk Factors	49
Item 6.	Exhibits	49
Signature		50

PART I—FINANCIAL INFORMATION

ITEM 1. UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS

PTC Inc.
CONSOLIDATED BALANCE SHEETS
(in thousands, except per share data)
(unaudited)

	March 31, 2018	September 30, 2017
ASSETS		
Current assets:		
Cash and cash equivalents	$299,776	$ 280,003
Short term marketable securities	22,797	18,408
Accounts receivable, net of allowance for doubtful accounts of $746 and $1,062 at March 31, 2018 and September 30, 2017, respectively	127,151	152,299
Prepaid expenses	62,094	49,913
Other current assets	137,342	165,933
Total current assets	649,160	666,556
Property and equipment, net	59,210	63,600
Goodwill	1,191,603	1,182,772
Acquired intangible assets, net	230,030	257,908
Long term marketable securities	32,467	31,907
Deferred tax assets	129,862	123,166
Other assets	36,482	34,475
Total assets	$2,328,814	$ 2,360,384
LIABILITIES AND STOCKHOLDERS' EQUITY		
Current liabilities:		
Accounts payable	$29,918	$ 35,160
Accrued expenses and other current liabilities	73,631	80,761
Accrued compensation and benefits	82,544	110,957
Accrued income taxes	15,952	5,735
Deferred revenue	487,281	446,296
Total current liabilities	689,326	678,909
Long term debt	642,837	712,406
Deferred tax liabilities	5,704	17,880
Deferred revenue	10,496	12,611
Other liabilities	52,727	53,142
Total liabilities	1,401,090	1,474,948
Commitments and contingencies (Note 13)		
Stockholders' equity:		
Preferred stock, $0.01 par value; 5,000 shares authorized; none issued	—	—
Common stock, $0.01 par value; 500,000 shares authorized; 116,338 and 115,333 shares issued and outstanding at March 31, 2018 and September 30, 2017, respectively	1,163	1,153
Additional paid-in capital	1,618,588	1,609,030
Accumulated deficit	(629,597)	(650,840)
Accumulated other comprehensive loss	(62,430)	(73,907)
Total stockholders' equity	927,724	885,436
Total liabilities and stockholders' equity	$2,328,814	$ 2,360,384

The accompanying notes are an integral part of the condensed consolidated financial statements.

PTC Inc.
CONSOLIDATED STATEMENTS OF OPERATIONS
(in thousands, except per share data)
(unaudited)

	Three months ended		Six months ended	
	March 31, 2018	April 1, 2017	March 31, 2018	April 1, 2017
Revenue:				
Subscription	$112,931	$65,780	$212,939	$120,142
Support	126,683	141,718	257,880	293,196
Total recurring revenue	239,614	207,498	470,819	413,338
Perpetual license	22,839	27,372	56,824	61,751
Total subscription, support and license revenue	262,453	234,870	527,643	475,089
Professional services	45,430	45,170	86,884	91,278
Total revenue	307,883	280,040	614,527	566,367
Cost of revenue:				
Cost of license and subscription revenue	23,119	20,555	47,495	40,685
Cost of support revenue	23,030	22,576	45,230	45,393
Total cost of software revenue	46,149	43,131	92,725	86,078
Cost of professional services revenue	37,482	38,699	73,864	77,867
Total cost of revenue	83,631	81,830	166,589	163,945
Gross margin	224,252	198,210	447,938	402,422
Operating expenses:				
Sales and marketing	98,330	87,777	197,645	178,467
Research and development	62,194	57,710	126,163	115,624
General and administrative	33,353	36,800	68,357	73,495
Amortization of acquired intangible assets	7,895	7,946	15,716	16,013
Restructuring and other charges, net	114	464	219	6,749
Total operating expenses	201,886	190,697	408,100	390,348
Operating income	22,366	7,513	39,838	12,074
Interest expense	(10,379)	(11,725)	(20,426)	(22,040)
Interest income and other expense, net	(441)	3,156	(1,395)	2,407
Income (loss) before income taxes	11,546	(1,056)	18,017	(7,559)
Provision (benefit) for income taxes	3,624	48	(3,782)	2,686
Net income (loss)	$7,922	$(1,104)	$21,799	$(10,245)
Earnings (loss) per share—Basic	$0.07	$(0.01)	$0.19	$(0.09)
Earnings (loss) per share—Diluted	$0.07	$(0.01)	$0.19	$(0.09)
Weighted average shares outstanding—Basic	116,241	115,709	115,986	115,498
Weighted average shares outstanding—Diluted	117,905	115,709	117,780	115,498

The accompanying notes are an integral part of the condensed consolidated financial statements.

PTC Inc.
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME (LOSS)
(in thousands)
(unaudited)

	Three months ended		Six months ended	
	March 31, 2018	April 1, 2017	March 31, 2018	April 1, 2017
Net income (loss)	$7,922	$(1,104)	$21,799	$(10,245)
Other comprehensive income (loss), net of tax:				
Unrealized hedge gain (loss) arising during the period, net of tax of $0.3 million and $0.1 million in the second quarter of 2018 and 2017, respectively, and $0.4 million and $0.4 million in the first six months of 2018 and 2017, respectively	(2,046)	(515)	(2,959)	2,522
Net hedge (gain) loss reclassified into earnings, net of tax of $0.2 million and $0.1 million in the second quarter of 2018 and 2017, respectively, and $0.3 million and $0.1 million in the first six months of 2018 and 2017, respectively	1,511	(496)	2,084	(852)
Unrealized gain (loss) on hedging instruments	(535)	(1,011)	(875)	1,670
Foreign currency translation adjustment, net of tax of $0 for each period	7,540	4,992	12,769	(13,660)
Unrealized gain (loss) on marketable securities, net of tax of $0 for each period	(267)	68	(446)	(71)
Amortization of net actuarial pension loss included in net income, net of tax of $0.2 million in both the second quarter of 2018 and 2017, and $0.3 million and $0.4 million in the first six months of 2018 and 2017, respectively	386	574	757	1,090
Change in unamortized pension loss during the period related to changes in foreign currency	(465)	(312)	(728)	1,378
Other comprehensive income (loss)	6,659	4,311	11,477	(9,593)
Comprehensive income (loss)	$14,581	$3,207	$33,276	$(19,838)

The accompanying notes are an integral part of the condensed consolidated financial statements.

PTC Inc.
CONSOLIDATED STATEMENTS OF CASH FLOWS
(in thousands)
(unaudited)

	Six months ended	
	March 31, 2018	April 1, 2017
Cash flows from operating activities:		
Net income (loss)	$21,799	$(10,245)
Adjustments to reconcile net income (loss) to net cash provided (used) by operating activities:		
Depreciation and amortization	42,727	42,683
Stock-based compensation	35,357	39,565
Non-cash portion of restructuring charges	—	260
Other non-cash items, net	189	479
Loss on disposal of fixed assets	22	—
Changes in operating assets and liabilities, excluding the effects of acquisitions:		
Accounts receivable	32,027	15,373
Accounts payable and accrued expenses	(9,474)	11,183
Accrued compensation and benefits	(29,656)	(51,769)
Deferred revenue	59,027	27,457
Accrued income taxes	(14,134)	(14,680)
Other current assets and prepaid expenses	(7,540)	(11,424)
Other noncurrent assets and liabilities	5,931	(20,332)
Net cash provided by operating activities	136,275	28,550
Cash flows from investing activities:		
Additions to property and equipment	(11,139)	(14,789)
Purchase of intangible asset	(3,000)	—
Purchases of short- and long-term marketable securities	(13,794)	(3,420)
Proceeds from maturities of short- and long-term marketable securities	8,240	4,700
Acquisitions of businesses, net of cash acquired	(3,000)	—
Proceeds from sales of investments	—	15,218
Net cash provided (used) by investing activities	(22,693)	1,709
Cash flows from financing activities:		
Borrowings under credit facility	50,000	100,000
Repayments of borrowings under credit facility	(120,000)	(140,000)
Proceeds from issuance of common stock	7,472	3,978
Credit facility origination costs	—	(184)
Contingent consideration	(3,176)	(2,711)
Payments of withholding taxes in connection with vesting of stock-based awards	(33,942)	(19,166)
Net cash used in financing activities	(99,646)	(58,083)
Effect of exchange rate changes on cash and cash equivalents	5,837	(6,795)
Net increase (decrease) in cash and cash equivalents	19,773	(34,619)
Cash and cash equivalents, beginning of period	280,003	277,935
Cash and cash equivalents, end of period	$299,776	$243,316

The accompanying notes are an integral part of the condensed consolidated financial statements.

PTC Inc.
NOTES TO CONDENSED CONSOLIDATED FINANCIAL STATEMENTS
(unaudited)

1. Basis of Presentation

General

The accompanying unaudited condensed consolidated financial statements include the accounts of PTC Inc. and its wholly owned subsidiaries and have been prepared by management in accordance with accounting principles generally accepted in the United States of America and in accordance with the rules and regulations of the Securities and Exchange Commission regarding interim financial reporting. Accordingly, they do not include all the information and footnotes required by generally accepted accounting principles for complete financial statements. While we believe that the disclosures presented are adequate in order to make the information not misleading, these unaudited quarterly financial statements should be read in conjunction with our annual consolidated financial statements and related notes included in our Annual Report on Form 10-K for the fiscal year ended September 30, 2017. In the opinion of management, the accompanying unaudited condensed consolidated financial statements contain all adjustments, consisting only of those of a normal recurring nature, necessary for a fair statement of our financial position, results of operations and cash flows at the dates and for the periods indicated. The September 30, 2017 Consolidated Balance Sheet included herein is derived from our audited consolidated financial statements.

Unless otherwise indicated, all references to a year mean our fiscal year, which ends on September 30. Our fiscal quarters end on a Saturday following a thirteen-week calendar, and may result in different quarter end dates year to year. The second quarter of 2018 ended on March 31, 2018 and the second quarter of 2017 ended on April 1, 2017. The results of operations for the six months ended March 31, 2018 are not necessarily indicative of the results expected for the remainder of the fiscal year.

Reclassifications

Effective with the beginning of the third quarter of 2017, we are reporting cost of license and subscription revenue separately from cost of support revenue and are presenting cost of revenue in three categories: 1) cost of license and subscription revenue, 2) cost of support revenue, and 3) cost of professional services revenue. Cost of license and subscription includes the cost of perpetual and subscription licenses; cost of support includes the cost of supporting both perpetual and subscription licenses. Costs of revenue for previous periods in the accompanying Consolidated Statements of Operations are presented on a basis consistent with the current period presentation.

Effective at the beginning of fiscal 2018, in accordance with the adoption of ASU 2016-09, Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting, excess tax benefits are now classified as an operating activity on the statement of cash flows rather than as a financing activity. The prior period excess tax benefits have been reclassified for comparability.

Segments

In fiscal 2017, we had three operating and reportable segments: (1) the Solutions Group, which included license, subscription, support and cloud services revenue for our core CAD, SLM and PLM products; (2) the IoT Group, which included license, subscription, support and cloud services revenue for our IoT, analytics and augmented reality solutions; and (3) Professional Services, which included consulting, implementation and training revenue.

With a change in our organizational structure to streamline our operations, we merged our Solution Group segment with our IoT Group segment and revised the information that our chief executive officer, who is also our chief operating decision maker ("CODM"), regularly reviews for purposes of allocating resources and assessing performance. As a result, effective with the beginning of the first quarter of fiscal 2018, we changed our operating and reportable segments from three to two: (1) Software Products, which includes license, subscription and related support revenue (including updates and technical support) for all our products; and (2) Professional Services, which includes consulting, implementation and training services.

Revenue and operating income in Note 10. Segment Information have been reclassified to conform to the current period presentation.

Recent Accounting Pronouncements

Recently Adopted Accounting Pronouncements

Stock Compensation

In March 2016, the FASB issued ASU No. 2016-09, Compensation - Stock Compensation (Topic 718): Improvements to Employee Share-Based Payment Accounting. We adopted ASU No. 2016-09 in the first quarter of 2018. Effective with the adoption, stock-based compensation excess tax benefits or deficiencies are reflected in the Consolidated Statements of Operations as a component of the provision for income taxes when the awards vest or are settled. Previously they were recognized in equity. Upon adoption, under the modified retrospective transition method, we recognized the previously unrecognized excess tax benefits of $37.0 million as increases in deferred tax assets for tax loss carryovers and tax credits, $36.9 million of which were offset by an increase in our U.S. valuation allowance. Additionally, on our Consolidated Statements of Cash Flows excess tax benefits from stock-based awards will no longer be separately classified as a financing activity apart from other income tax, and will be presented as an operating activity. As a result of the adoption of ASU 2016-09, the Consolidated Statement of Cash Flows for the six months ended April 1, 2017 was adjusted as follows: a $0.1 million increase to net cash provided by operating activities and a $0.1 million decrease to net cash used in financing activities.

Finally, we have elected to account for forfeitures as they occur, rather than estimate expected forfeitures, which resulted in a cumulative effect adjustment of $0.7 million to reduce retained earnings as of October 1, 2017.

Pending Accounting Pronouncements

Derivative Financial Instruments

In August 2017, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) No. 2017-12, "Derivatives and Hedging (Topic 815) Targeted Improvements to Accounting for Hedging Activities", which amends and simplifies existing guidance to allow companies to more accurately present the economic effects of risk management activities in the financial statements. The guidance is effective for annual reporting periods beginning after December 15, 2018 (our fiscal 2020) including interim reporting periods within those annual reporting periods and early adoption is permitted. We are currently evaluating the impact of the new guidance on our consolidated financial statements.

Income Taxes

In October 2016, the FASB issued ASU 2016-16, Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory (“ASU 2016-16”). The purpose of ASU 2016-16 is to simplify the income tax accounting of an intra-entity transfer of an asset other than inventory and to record its effect when the transfer occurs. The guidance is effective for annual reporting periods beginning after December 15, 2017 (our fiscal 2019) including interim reporting periods within those annual reporting periods and early adoption is permitted. We are currently evaluating the impact of the new guidance on our consolidated financial statements. We expect to record a net deferred tax asset of approximately $77 million upon adoption, primarily relating to deductible amortization of intangible assets in Ireland. Post adoption, our effective tax rate will no longer include the benefit of this amortization, which is reflected in our effective tax rate reconciliation under the current guidance.

Leases

In February 2016, the FASB issued ASU No. 2016-02, Leases (Topic 842), which will replace the existing guidance in ASC 840, Leases. The updated standard aims to increase transparency and comparability among organizations by requiring lessees to recognize lease assets and lease liabilities on the balance sheet and to disclose important information about leasing arrangements. ASU 2016-02 is effective for annual periods beginning after December 15, 2018 (our fiscal 2020) and interim periods within those annual periods. Early adoption is permitted and modified retrospective application is required. We are currently evaluating the impact of the new guidance on our consolidated financial statements.

Revenue Recognition

In May 2014, the FASB issued ASU No. 2014-09, Revenue from Contracts with Customers: Topic 606 (ASU 2014-09). ASU 2014-09 supersedes nearly all existing revenue recognition guidance under U.S. GAAP.

The FASB has also issued additional standards to provide clarification and implementation guidance on ASU 2014-09.

The core principle of ASU 2014-09 is to recognize revenue when promised goods or services are transferred to a customer in an amount that reflects the consideration that is expected to be received for those goods or services. Under the new guidance, an entity is required to evaluate revenue recognition through a five-step process: (1) identifying a contract with a customer; (2) identifying the performance obligations in the contract; (3) determining the transaction price; (4) allocating the transaction price to the performance obligations in the contract; and (5) recognizing revenue when (or as) the entity satisfies a performance obligation. The standard also requires disclosure of the nature, amount, timing and uncertainty of revenue and cash flows arising from contracts with customers. In applying the principles of ASU 2014-09, it is possible more judgment and estimates may be required within the revenue recognition process than is required under existing U.S. GAAP, including identifying performance obligations, estimating the amount of variable consideration to include in the transaction price, and estimating the value of each performance obligation to allocate the total transaction price to each separate performance obligation.

ASU 2014-09 is effective for us in our first quarter of fiscal 2019. Companies may adopt ASU 2014-09 using either the retrospective method, under which each prior reporting period is presented under ASU 2014-09, with the option to elect certain permitted practical expedients, or the modified retrospective method, under which a company adopts ASU 2014-09 from the beginning of the year of initial application with no restatement of comparative periods, with the cumulative effect of initially applying ASU 2014-09 recognized at the date of initial application, with certain additional required disclosures. We currently expect to adopt ASU 2014-09 using the modified retrospective method. While we are continuing to assess the impact of the new standard, we currently believe the most significant impact relates to accounting for our subscription arrangements that include term-based on-premise software licenses bundled with support. Under current GAAP, revenue attributable to these subscription licenses is recognized ratably over the term of the arrangement because VSOE does not exist for the undelivered support element as it is not sold separately. Under the new standard, the requirement to have VSOE for undelivered elements to enable the separation of revenue for the delivered software licenses is eliminated. Accordingly, under the new standard we will be required to recognize as revenue a portion of the subscription fee upon delivery of the software license. We currently expect revenue related to our perpetual licenses and related support contracts, professional services and cloud offerings to remain substantially unchanged. Due to the complexity of certain of our contracts, the actual revenue recognition treatment required under the new standard may be dependent on contract-specific terms and, therefore, may vary in some instances.

Upon implementation of the new standard in fiscal 2019, we expect to make prospective revisions to contract terms with our customers that will result in shortening the initial, non-cancellable term of our multi-year subscriptions to one year for contracts entered into or renewed after October 1, 2018. This change will result in annual contractual periods for most of our software subscriptions, the license portion of which will be recognized at the beginning of each annual contract period upon delivery of the licenses and the support portion of which will be recognized ratably over the one-year contractual period. As a result, we anticipate one year of subscription revenue will be recognized for each contract each year; however, more of the revenue will be recognized in the quarter that the contract period begins and less will be recognized in the subsequent three quarters of the contract than under the current accounting rules.

Under the modified retrospective method, we will evaluate each contract that is ongoing on the adoption date as if that contract had been accounted for under ASU 2014-09 from contract inception. Some license revenue related to subscription arrangements that would have been recognized in future periods under current GAAP will be recast under ASU 2014-09 as if the revenue had been recognized in prior periods. Under this transition method, we will not adjust historical reported revenue amounts. Instead, the revenue that would have been recognized under this method prior to the adoption date will be an adjustment to retained earnings and will not be recognized as revenue in future periods as previously expected. Because we expect that license revenue associated with subscription contracts will be recognized up front instead of over time under ASU 2014-09, we expect some portion of our deferred revenue to be adjusted to retained earnings upon adoption, which we expect will be a material amount. During the first year of adoption, we will record and disclose the amount of this retained earnings

adjustment and intend to provide supplemental disclosure of how this revenue would have been recognized under the current rules.

Another significant provision under ASU 2014-09 includes the capitalization and amortization of costs associated with obtaining a contract, such as sales commissions. Currently, we expense sales commissions in the period incurred. Under ASU 2014-09, direct and incremental costs to acquire a contract are capitalized and amortized using a systematic basis over the pattern of transfer of the goods and services to which the asset relates. While we are continuing to assess the impact of this provision of ASU 2014-09, we likely will be required to capitalize incremental costs such as commissions and amortize those costs over the period the capitalized assets are expected to contribute to future cash flows.

Furthermore, we have made and will continue to make investments in systems and processes to enable timely and accurate reporting under the new standard. We currently expect that necessary operational and internal control structural changes will be implemented prior to the adoption date.

2. Deferred Revenue and Related Customer Receivables

Deferred Revenue

Deferred revenue primarily relates to software agreements billed to customers for which the subscription and support services have not yet been provided. The liability associated with performing these subscription and support services is included in deferred revenue and, if not yet paid, the related customer receivable is included in prepaid expenses and other current assets. Billed but uncollected support and subscription-related amounts included in other current assets at March 31, 2018 and September 30, 2017 were $132.1 million and $160.9 million, respectively.

3. Restructuring and Other Charges

Restructuring Charges (Credits)

In fiscal 2016, we initiated a plan to restructure our workforce and consolidate select facilities to reduce our cost structure and to realign our investments with what we believe to be our higher growth opportunities. The actions resulted in total restructuring charges of $84.7 million, primarily associated with termination benefits associated with approximately 800 employees. This restructuring plan is substantially complete.

The following table summarizes restructuring accrual activity for the six months ended March 31, 2018:

	Employee severance and related benefits	Facility closures and related costs	Total
	(in thousands)		
October 1, 2017	$1,736	$4,508	$6,244
Credit to operations, net	(395)	(339)	(734)
Cash disbursements	(1,120)	(806)	(1,926)
Foreign exchange impact	22	(47)	(25)
Accrual, March 31, 2018	$243	$3,316	$3,559

The following table summarizes restructuring accrual activity for the six months ended April 1, 2017:

	Employee severance and related benefits	Facility closures and related costs	Total
	(in thousands)		
October 1, 2016	$35,177	$1,431	$36,608
Charges to operations, net	2,861	3,888	6,749
Cash disbursements	(28,060)	(880)	(28,940)
Other non-cash charges	—	(260)	(260)
Foreign exchange impact	(1,002)	(6)	(1,008)
Accrual, April 1, 2017	$8,976	$4,173	$13,149

Of the accrual for facility closures and related costs, as of March 31, 2018, $1.9 million is included in accrued expenses and other current liabilities and $1.4 million is included in other liabilities in the Consolidated Balance Sheets. The accrual for facility closures is net of assumed sublease income of $3.4 million. The accrual for employee severance and related benefits is included in accrued compensation and benefits in the Consolidated Balance Sheets.

Other - Headquarters relocation charges

Headquarters relocation charges represent accelerated depreciation expense recorded in anticipation of exiting our current headquarters facility. In 2019, we will be moving into a new worldwide headquarters in the Boston Seaport District, and we will be vacating our current headquarters space. Because our current headquarters lease will not expire until November 2022, we are seeking to sublease that space. If we are unable to sublease our current headquarters space for an amount at least equal to our rent obligations under the current headquarters lease, we will bear overlapping rent obligations for those premises and will be required to record a charge related to any rent shortfall. A charge for such shortfall will be recorded in the earlier of the period that we cease using the space (which will likely occur in the second quarter of our fiscal 2019) or the period we exit the lease contract. Additionally, we will incur other costs associated with the move which will be recorded as incurred. In the second quarter of 2018, we incurred an incremental $1.0 million of accelerated depreciation expense related to shortening the estimated useful lives of leasehold improvements in our current facility.

4. Stock-based Compensation

We measure the cost of employee services received in exchange for restricted stock unit (RSU) awards based on the fair value of RSU awards on the date of grant. That cost is recognized over the period during which an employee is required to provide service in exchange for the award.

Our equity incentive plan provides for grants of nonqualified and incentive stock options, common stock, restricted stock, RSUs and stock appreciation rights to employees, directors, officers and consultants. We award RSUs as the principal equity incentive awards, including performance-based awards that are earned based on achievement of performance criteria established by the Compensation Committee of our Board of Directors. Each RSU represents the contingent right to receive one share of our common stock.

Beginning in the first quarter of 2018, we account for forfeitures as they occur, rather than estimate expected forfeitures.

Our employee stock purchase plan (ESPP), initiated in the fourth quarter of 2016, allows eligible employees to contribute up to 10% of their base salary, up to a maximum of $25,000 per year and subject to other plan limitations, toward the purchase of our common stock at a discounted price. The purchase price of the shares on each purchase date is equal to 85% of the lower of the fair market value of our common stock on the first and last trading days of each offering period. The ESPP is qualified under Section 423 of the Internal Revenue Code. We estimate the fair value of each purchase right under the ESPP on the date of grant using the Black-Scholes option valuation model and use the straight-line attribution approach to record the expense over the six-month offering period.

Restricted stock unit activity for the six months ended March 31, 2018	Shares	Weighted Average Grant Date Fair Value (Per Share)
	(in thousands)	
Balance of outstanding restricted stock units October 1, 2017	3,487	$ 45.57
Granted (1)	1,355	$ 62.86
Vested	(1,376)	$ 44.42
Forfeited or not earned	(471)	$ 51.37
Balance of outstanding restricted stock units March 31, 2018	2,995	$ 53.03

(1) Restricted stock granted includes 184,000 shares from prior period TSR awards that were earned upon achievement of the performance criteria and vested in November 2018.

Grant Period	Restricted Stock Units Performance-based RSUs (1)	Service-based RSUs (2)
	(Number of Units in thousands)	
First six months of 2018	461	710

(1) Substantially all the performance-based RSUs were granted to our executive officers. Approximately 189,000 shares are eligible to vest based upon annual performance measures, measured over a three-year period. RSUs not earned for a period may be earned in the third period. An additional 250,000 shares are eligible to vest based upon a 2018 performance measure. To the extent earned, those performance-based RSUs will vest in three substantially equal installments on November 15, 2018, November 15, 2019 and November 15, 2020, or the date the Compensation Committee determines the extent to which the applicable performance criteria have been achieved for each performance period.

(2) The service-based RSUs were granted to employees, our executive officers and our directors. Substantially all service-based RSUs will vest in three substantially equal annual installments on or about the anniversary of the date of grant.

Compensation expense recorded for our stock-based awards was classified in our Consolidated Statements of Operations as follows:

	Three months ended		Six months ended	
	March 31, 2018	April 1, 2017	March 31, 2018	April 1, 2017
	(in thousands)			
Cost of license and subscription revenue	$408	$314	$821	$607
Cost of support revenue	690	1,355	1,498	2,499
Cost of professional services revenue	1,669	1,539	3,375	2,995
Sales and marketing	5,038	4,130	9,917	7,751
Research and development	3,383	3,951	6,343	6,948
General and administrative	5,838	10,288	13,403	18,765
Total stock-based compensation expense	$17,026	$21,577	$35,357	$39,565

Stock-based compensation expense includes $1.0 million and $2.1 million in the second quarter and first six months of 2018, respectively, and $0.7 million and $1.3 million in the second quarter and first six months of 2017, respectively, related to the ESPP.

5. Earnings per Share (EPS) and Common Stock

EPS

Basic EPS is calculated by dividing net income by the weighted average number of shares outstanding during the period. Diluted EPS is calculated by dividing net income by the weighted average

10

number of shares outstanding plus the dilutive effect, if any, of outstanding RSUs using the treasury stock method. The calculation of the dilutive effect of outstanding equity awards under the treasury stock method includes consideration of unrecognized compensation expense as additional proceeds.

Calculation of Basic and Diluted EPS	Three months ended		Six months ended	
	March 31, 2018	April 1, 2017	March 31, 2018	April 1, 2017
	(in thousands, except per share data)			
Net income (loss)	$7,922	$(1,104)	$21,799	$(10,245)
Weighted average shares outstanding—Basic	116,241	115,709	115,986	115,498
Dilutive effect of restricted stock units	1,664	—	1,794	—
Weighted average shares outstanding—Diluted	117,905	115,709	117,780	115,498
Earnings (loss) per share—Basic	$0.07	$(0.01)	$0.19	$(0.09)
Earnings (loss) per share—Diluted	$0.07	$(0.01)	$0.19	$(0.09)

There were no antidilutive shares for the six months ended March 31, 2018. Total antidilutive shares were 1.8 million for the six months ended April 1, 2017. For the six months ended April 1, 2017 the diluted net loss per share is the same as the basic net loss per share as the effects of all our potential common stock equivalents are antidilutive, because we reported a loss for the period.

Common Stock Repurchases

Our Articles of Organization authorize us to issue up to 500 million shares of our common stock. Our Board of Directors periodically authorizes the repurchase of shares of our common stock. Our Board of Directors has authorized us to repurchase up to $500 million of our common stock from October 1, 2017 through September 30, 2020. We did not repurchase any shares in the second quarter and first six months of either 2018 or 2017. As described in Note 14 - Subsequent Events, in the third quarter of fiscal 2018 we entered into a $100 million accelerated share repurchase agreement. All shares of our common stock repurchased are automatically restored to the status of authorized and unissued.

6. Goodwill and Intangible Assets

In 2017, we had three operating and reportable segments: (1) Solutions Group, (2) IoT Group and (3) Professional Services. Effective with the beginning of the first quarter of 2018, we changed our operating and reportable segments from three to two: (1) Software Products and (2) Professional Services. We assess goodwill for impairment at the reporting unit level. Our reporting units are determined based on the components of our operating segments that constitute a business for which discrete financial information is available and for which operating results are regularly reviewed by segment management. Our reporting units are the same as our operating segments.

As of March 31, 2018, goodwill and acquired intangible assets in the aggregate attributable to our Software Products segment was $1,391.0 million and our Professional Services segment was $30.6 million. As of September 30, 2017, goodwill and acquired intangible assets in the aggregate attributable to our Software Products segment was $1,410.0 million and our Professional Services segment was $30.6 million. Acquired intangible assets are reviewed for impairment whenever events or changes in circumstances indicate that the carrying value of the asset may not be recoverable. We evaluate goodwill for impairment in the third quarter of our fiscal year, or on an interim basis if an event occurs or circumstances change that would, more likely than not, reduce the fair value of a reporting segment below its carrying value. Factors that could trigger an impairment review include significant under-performance relative to historical or projected future operating results, significant changes in our use of the acquired assets or the strategy for our overall business, significant negative industry or economic trends, a significant decline in our stock price for a sustained period and a reduction of our market capitalization relative to net book value. We completed our annual goodwill impairment review as of July 1, 2017 and we also completed a qualitative assessment of our goodwill by reporting unit prior to the change in our segments described above and concluded that no impairment charge was required as of those dates.

Goodwill and acquired intangible assets consisted of the following:

	March 31, 2018			September 30, 2017		
	Gross Carrying Amount	Accumulated Amortization	Net Book Value	Gross Carrying Amount	Accumulated Amortization	Net Book Value
	(in thousands)					
Goodwill (not amortized)			$1,191,603			$1,182,772
Intangible assets with finite lives (amortized) (1):						
Purchased software	$365,904	$ 243,809	$122,095	$362,955	$ 228,377	$134,578
Capitalized software	22,877	22,877	—	22,877	22,877	—
Customer lists and relationships	362,895	259,569	103,326	359,932	241,554	118,378
Trademarks and trade names	19,270	14,661	4,609	19,138	14,186	4,952
Other	4,096	4,096	—	4,030	4,030	—
	$775,042	$ 545,012	$230,030	$768,932	$ 511,024	$257,908
Total goodwill and acquired intangible assets			$1,421,633			$1,440,680

(1) The weighted-average useful lives of purchased software, customer lists and relationships, and trademarks and trade names with a remaining net book value are 9 years, 10 years, and 10 years, respectively.

Goodwill

Changes in goodwill presented by reportable segments were as follows:

	Software Products	Professional Services	Total
	(in thousands)		
Balance, October 1, 2017	$1,152,917	$ 29,855	$1,182,772
Acquisition	4,350	—	4,350
Foreign currency translation adjustment	4,368	113	4,481
Balance, March 31, 2018	$1,161,635	$ 29,968	$1,191,603

Amortization of Intangible Assets

The aggregate amortization expense for intangible assets with finite lives was classified in our Consolidated Statements of Operations as follows:

	Three months ended		Six months ended	
	March 31, 2018	April 1, 2017	March 31, 2018	April 1, 2017
	(in thousands)			
Amortization of acquired intangible assets	$7,895	$7,946	$15,716	$16,013
Cost of license and subscription revenue	6,556	6,389	13,231	12,777
Total amortization expense	$14,451	$14,335	$28,947	$28,790

7. Fair Value Measurements

Fair value is defined as the price that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. When determining the fair value measurements for assets and liabilities required to be recorded at fair value, we consider the principal or most advantageous market in which we would transact and consider assumptions that market participants would use when pricing the asset or liability, such as inherent risk, transfer restrictions, and risk of nonperformance. Generally accepted accounting principles prescribe a fair value hierarchy that requires an entity to maximize the use of observable inputs and minimize the use of unobservable inputs when measuring fair value. A financial instrument's categorization within the fair

value hierarchy is based upon the lowest level of input that is significant to the fair value measurement. Three levels of inputs that may be used to measure fair value:

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

A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement.

Money market funds, time deposits and corporate notes/bonds are classified within Level 1 of the fair value hierarchy because they are valued based on quoted market prices in active markets.

Certificates of deposit, commercial paper and certain U.S. government agency securities are classified within Level 2 of the fair value hierarchy. These instruments are valued based on quoted prices in markets that are not active or based on other observable inputs consisting of market yields, reported trades and broker/dealer quotes.

The principal market in which we execute our foreign currency contracts is the institutional market in an over-the-counter environment with a relatively high level of price transparency. The market participants usually are large financial institutions. Our foreign currency contracts' valuation inputs are based on quoted prices and quoted pricing intervals from public data sources and do not involve management judgment. These contracts are typically classified within Level 2 of the fair value hierarchy.

The fair value of our contingent consideration arrangements is determined based on our evaluation of the probability and amount of any earn-out that will be achieved based on expected future performances by the acquired entities. These arrangements are classified within Level 3 of the fair value hierarchy.

Our significant financial assets and liabilities measured at fair value on a recurring basis as of March 31, 2018 and September 30, 2017 were as follows:

	March 31, 2018			
	Level 1	Level 2	Level 3	Total
	(in thousands)			
Financial assets:				
Cash equivalents	$82,291	$—	$—	$82,291
Marketable securities				
Certificates of deposit	—	219	—	219
Corporate notes/bonds	52,650	—	—	52,650
U.S. government agency securities	—	2,395	—	2,395
Forward contracts	—	827	—	827
	$134,941	$3,441	$—	$138,382
Financial liabilities:				
Contingent consideration related to acquisitions	$—	$—	$6,743	$6,743
Forward contracts	—	4,837	—	4,837
	$—	$4,837	$6,743	$11,580

	September 30, 2017			
	Level 1	Level 2	Level 3	Total
	(in thousands)			
Financial assets:				
Cash equivalents	$49,845	$—	$—	$49,845
Marketable securities				
Certificates of deposit	—	240	—	240
Corporate notes/bonds	47,673	—	—	47,673
U.S. government agency securities	—	2,402	—	2,402
Forward contracts	—	1,163	—	1,163
	$97,518	$3,805	$—	$101,323
Financial liabilities:				
Contingent consideration related to acquisitions	$—	$—	$8,400	$8,400
Forward contracts	—	4,347	—	4,347
	$—	$4,347	$8,400	$12,747

Changes in the fair value of Level 3 contingent consideration liability associated with our acquisitions were as follows:

	Contingent Consideration		
	(in thousands)		
	Kepware	Other	Total
Balance, October 1, 2017	$8,400	$—	$8,400
Addition to contingent consideration	—	2,100	2,100
Payment of contingent consideration	(3,757)	—	(3,757)
Balance, March 31, 2018	$4,643	$2,100	$6,743

	Contingent Consideration		
	(in thousands)		
	ColdLight	Kepware	Total
Balance, October 1, 2016	$2,500	$17,070	$19,570
Change in present value of contingent consideration	—	148	148
Payment of contingent consideration	(1,250)	(1,800)	(3,050)
Balance, April 1, 2017	$1,250	$15,418	$16,668

In the Consolidated Balance Sheet as of March 31, 2018, $5.7 million of the contingent consideration liability is included in accrued expenses and other current liabilities with the remaining $1.1 million in other liabilities.

Of the $3.8 million payments in the first six months of 2018, $3.2 million represents the fair value of the liabilities recorded at the acquisition date and is included in financing activities in the Consolidated Statements of Cash Flows. Of the $3.1 million payments in the first six months of 2017, $2.7 million represents the fair value of the liabilities recorded at the acquisition date and is included in financing activities in the Consolidated Statements of Cash Flows.

In connection with our acquisition of Kepware, the former shareholders were eligible to receive additional consideration of up to $18.0 million, which was contingent on the achievement of certain Financial Performance, Product Integration and Business Integration targets (as defined in the Stock Purchase Agreement) within 24 months from April 1, 2016. If such targets were achieved within the defined 12 month, 18 month and 24 month earn-out periods, the consideration corresponding to each target would be earned and payable in cash. The estimated undiscounted range of outcomes for the contingent consideration was $16.9 million to $18.0 million at the acquisition date. As of March 31, 2018,

our estimate of the liability was $4.6 million, net of $13.4 million in payments made since the date of acquisition.

8. Marketable Securities

The amortized cost and fair value of marketable securities as of March 31, 2018 and September 30, 2017 were as follows:

	March 31, 2018			
	Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value
	(in thousands)			
Certificates of deposit	$220	$ —	$ (1)	$219
Corporate notes/bonds	53,225	—	(575)	52,650
U.S. government agency securities	2,408	—	(13)	2,395
	$55,853	$ —	$ (589)	$55,264

September 30, 2017

Amortized cost	Gross unrealized gains	Gross unrealized losses	Fair value