



**PTC PREPARED REMARKS
FIRST QUARTER FISCAL 2019
January 23, 2019**

Please refer to the "Important Disclosures" section of these prepared remarks for important information about our operating metrics (including Subscription ACV, License and Subscription Bookings, and Subscription % of Bookings), GAAP and non-GAAP definitions, and other important disclosures. Additional financial information is provided in the PTC Financial Data Tables posted with these prepared remarks to PTC's Investor Relations website at investor.ptc.com.

Any reference to "total recurring software revenue" or "recurring software revenue" means the sum of subscription revenue and support revenue. Any reference to "total software revenue" or "software revenue" means the sum of subscription revenue, support revenue and perpetual license revenue. "Subscription revenue" includes cloud services revenue.

We adopted ASC 606 on October 1, 2018, which impacted our reported financial results, including the timing and classification of revenue. For comparability purposes, and unless otherwise specified, the amounts included in the commentary below refer to results under ASC 605 as shown in our financial statements, including the notes thereto.

Q1'19 ASC 605 Results vs. October 24, 2018 Guidance

Operating Measures	Guidance		Results
In millions	Q1'19 Low	Q1'19 High	Actual
License and Subscription Bookings	\$100	\$110	\$101
Subscription ACV	\$38	\$41	\$29
Subscription % of Bookings	76%	74%	58%

Financial Measures	GAAP Guidance		GAAP Results	Non-GAAP Guidance		Non-GAAP Results	Non-GAAP at Guidance Mix ⁽¹⁾
	Q1'19 Low	Q1'19 High		Q1'19 Low	Q1'19 High		
In millions, except per share amounts							
Subscription Revenue	\$141	\$144	\$148	\$141	\$144	\$148	\$148
Perpetual Support Revenue	\$113	\$114	\$109	\$113	\$114	\$109	\$109
Total Recurring Revenue	\$254	\$258	\$258	\$254	\$258	\$258	\$258
Perpetual License Revenue	\$24	\$28	\$42	\$24	\$28	\$42	\$25
Total Software Revenue	\$278	\$286	\$299	\$278	\$286	\$299	\$283
Professional Services Revenue	\$40	\$40	\$39	\$40	\$40	\$40	\$40
Total Revenue	\$318	\$326	\$339	\$318	\$326	\$339	\$322
Operating Expense	\$231	\$234	\$230	\$179	\$182	\$179	\$179
Operating Margin	1%	4%	10%	21%	22%	28%	24%
Tax Rate	30%	30%	18%	19%	18%	19%	19%
EPS	(\$0.04)	\$0.00	\$0.16	\$0.37	\$0.42	\$0.57	\$0.46

⁽¹⁾ Operating measure that adjusts Non-GAAP results to a midpoint guidance mix of 75% vs. actual Q1'19 mix of 58% and includes other adjustments as described in "Important Disclosures" set forth below.



Key Highlights of Operating Measures

Operating Measures remain the same under ASC 605 and 605.

In millions	Q1'19	YoY	YoY CC	Management Comments
License and Subscription Bookings	\$101	-3%	0%	<ul style="list-style-type: none"> Q1'19 bookings of \$101M was within our guidance range of \$100M to \$110M, but at the low end, impacted by 9 deals totaling more than \$20M that slipped from Q1, including 2 larger US Government deals totaling approximately \$2M that slipped due to the shutdown. While it would be convenient to blame the slipped deals on the economy, we don't believe that to be the case. With hindsight, it appears the more likely cause was our go-to-market realignment activities during the quarter, impacting our sales organization's ability to get a fast-enough start to the new year, and we ran out of time. We saw continued strength across the product portfolio, with notable strength in CAD. Our base business (Channel and Direct deals below \$1M) was solid, growing mid-teens YoY. Notable large competitive customer wins include BMW and Huawei. Geographically, we saw strength in APAC due to last time buys associated with the discontinuation of new perpetual license sales and due to some large strategic competitive wins. Excluding the perpetual upside, APAC grew double digits. Americas and EMEA bookings were impacted by the 9 large deals that slipped from Q1.
Subscription ACV	\$29	-15%	-13%	<ul style="list-style-type: none"> Q1'19 new subscription ACV of \$29M was \$9M below the low end of our guidance range of \$38M to \$41M due to more than \$10M of subscription ACV pushing out of Q1 from the 9 slipped deals referenced above.
Subscription % of Bookings	58%	-8%	-8%	<ul style="list-style-type: none"> Q1'19 subscription mix was below the guidance range of 74%-76% due to the 9 slipped deals mentioned above combined with \$15M of perpetual upside. Now that our subscription transition is complete, we expect a subscription mix well into the 90's for the rest of the year.



Q1'19 ASC 606 and ASC 605 Results Bridge

All references are to GAAP revenue, unless otherwise noted.

We adopted ASC 606 on October 1, 2018, which impacted our reported financial results, including the timing and classification of revenue.

In millions, except per share amounts	ASC 606	ASC 605	Variance	Management Comments
Subscription Revenue	\$141	\$148	(\$7)	<ul style="list-style-type: none"> ~(\$65M) retained earnings impact + ~\$59M upfront recognition of new and renewal bookings.
Perpetual Support Revenue	\$110	\$109	\$1	<ul style="list-style-type: none"> Re-allocation of transaction price based on the stand-alone selling price of performance obligations.
Perpetual License Revenue	\$42	\$42	-	<ul style="list-style-type: none"> No variance.
Software Revenue	\$293	\$299	(\$6)	<ul style="list-style-type: none"> ~(\$65M) retained earnings impact + ~\$59M upfront recognition of new and renewal bookings + ~\$1M re-allocation of transaction price based on the stand-alone selling price of performance obligations.
Professional Services Revenue	\$41	\$39	\$2	<ul style="list-style-type: none"> ~\$2M re-allocation of transaction price based on the stand-alone selling price of performance obligations.
Total Revenue	\$335	\$339	(\$4)	<ul style="list-style-type: none"> ~(\$65M) retained earnings impact + ~\$59M upfront recognition of new and renewal bookings + ~\$3M re-allocation of transaction price based on the stand-alone selling price of performance obligations.
<u>Cost of Revenue:</u>				
GAAP	\$77	\$75	\$2	<ul style="list-style-type: none"> Related primarily to deferred cost treatment under 606, related to professional services deferred costs.
Non-GAAP	\$68	\$65	\$3	
<u>Gross Margin:</u>				
GAAP	77%	78%	-100bps	<ul style="list-style-type: none"> Reflects the above differences.
Non-GAAP	80%	81%	-100bps	
<u>Operating Expense:</u>				
GAAP	\$227	\$230	(\$3)	<ul style="list-style-type: none"> Reflects pre-606 commission amortization offset by deferral of ongoing commission expense under 606.
Non-GAAP	\$176	\$179	(\$3)	
<u>Operating Margin:</u>				
GAAP	9%	10%	-100bps	<ul style="list-style-type: none"> Reflects the above differences.
Non-GAAP	27%	28%	-100bps	
<u>Tax Rate:</u>				
GAAP	(3%)	18%	(2100bps)	<ul style="list-style-type: none"> Reflects the differences in pre-tax earnings in each individual taxing jurisdiction, and the tax rates and tax attributes in each jurisdiction.
Non-GAAP	18%	19%	(100bps)	
Shares Outstanding	120	120	-	<ul style="list-style-type: none"> No variance.
<u>EPS:</u>				
GAAP	\$0.18	\$0.16	\$0.02	<ul style="list-style-type: none"> Reflects the differences above.
Non-GAAP	\$0.56	\$0.57	(\$0.01)	
Free Cash Flow	(\$9)	(\$9)	-	<ul style="list-style-type: none"> No variance.
Adjusted Free Cash Flow	(\$1)	(\$1)	-	



Key Highlights of Quarterly ASC 605 Financial Measures

All references are to GAAP revenue, unless otherwise noted.

We adopted ASC 606 on October 1, 2018, which impacted our reported financial results, including the timing and classification of revenue. The table below discusses our financial results as reported under ASC 605 for comparability purposes.

In millions, except per share amounts	Q1'19	YoY	YoY CC	Management Comments
Software Revenue	\$299	13%	15%	<ul style="list-style-type: none"> Software revenue growth of 15% YoY CC, driven by 13% CC growth in recurring software revenue. Q1'19 was 1 day shorter than Q1'18, negatively impacting recurring software revenue and total software revenue growth by just over 100 bps.
Total Revenue	\$339	10%	12%	<ul style="list-style-type: none"> Total revenue grew at a lower rate than software revenue due to our strategy of leveraging our services partner ecosystem, which led to a 5% decline in professional services revenue YoY. Q1 this year was 1 day shorter than last year, so revenue growth figures are negatively impacted by just over 100 basis points.
EPS: GAAP Non-GAAP	\$0.16 \$0.57	36% 86%	40% 90%	<ul style="list-style-type: none"> GAAP EPS improved by \$0.04 YoY in Q1'19 due to a combination of revenue growth and disciplined expense management, which more than offset increases in stock compensation and restructuring charges. Non-GAAP EPS improved by \$0.26 YoY in Q1'19, due to 13% CC growth in recurring software revenue and lower spending (both COGS and Operating Expense), partially offset by higher income tax expense (driven primarily by a change in accounting rules) and higher outstanding shares. Non-GAAP EPS at guidance mix would have been \$.46, which would have been \$.04 above the high end of our guidance range.
Free Cash Flow Adjusted Free Cash Flow	(\$9) (\$1)	NM NM	NM NM	<ul style="list-style-type: none"> Free cash flow was (\$9M), as expected, and included \$8M of cash payments under our restructuring plan announced last quarter and an elevated level of capex related to our new Boston HQ. Note that about ¼ of our full year capex estimate was in Q1, due to the HQ buildout. We have significant cash outflows in our first quarter, when we pay our annual bonuses, high Q4 commissions, withholding taxes on annual RSU grants, and a 6-month bond interest payment.



ASC 605 Software Revenue Performance by Group

All references are to GAAP revenue, unless otherwise noted.

We adopted ASC 606 on October 1, 2018, which impacted our reported financial results, including the timing and classification of revenue. The table below discusses our financial results as reported under ASC 605 for comparability purposes.

In millions	Q1'19	YoY	YoY CC	Management Comments
Solutions Software Revenue	\$265	11%	13%	<ul style="list-style-type: none"> Solutions recurring software revenue grew 9% YoY (11% YoY CC), negatively impacted by just over 100 bps by one less day in the quarter. Recurring software revenue growth is expected to accelerate due to the compounding benefit of a subscription business model, driving accelerated total software revenue growth.
IoT Software Revenue	\$34	30%	31%	<ul style="list-style-type: none"> IoT software revenue grew 31% CC YoY, driven by 35% CC recurring software revenue growth. Recurring IoT software revenue growth reflects continued strong IoT bookings growth over the past several years.

ASC 605 Software Revenue Performance by Region

All references are to GAAP revenue, unless otherwise noted.

We adopted ASC 606 on October 1, 2018, which impacted our reported financial results, including the timing and classification of revenue. The table below discusses our financial results as reported under ASC 605 for comparability purposes.

In millions	Q1'19	YoY	YoY CC	Management Comments
Americas Software Revenue	\$123	9%	9%	<ul style="list-style-type: none"> Americas recurring software revenue grew double-digits (for the third consecutive quarter); this impact to software revenue was partially offset by a 27% CC decline in perpetual revenue with the end of life of perpetual in the Americas on 1/1/18.
Europe Software Revenue	\$100	0%	2%	<ul style="list-style-type: none"> Recurring software revenue grew 11% CC, despite 1 less day in the quarter, negatively impacting growth by just over 100 bps. Perpetual license revenue declined 63% YoY CC, due to the perpetual end of life in Europe on 1/1/18.
APAC Software Revenue	\$76	49%	53%	<ul style="list-style-type: none"> APAC recurring software revenue grew more than 20% CC. Perpetual license more than doubled, due to last time buys associated with the discontinuation of perpetual licenses as of January 1, 2019 and some large competitive wins.



ASC 605 Operating Performance

We adopted ASC 606 on October 1, 2018, which impacted our reported financial results, including the timing and classification of revenue. The table below discusses our financial results as reported under ASC 605 for comparability purposes.

In millions	Q1'19	Management Comments
Operating Expense: GAAP Non-GAAP	\$230 \$179	<ul style="list-style-type: none"> GAAP and Non-GAAP operating expenses were slightly below the low end of our guidance range due primarily to effective cost discipline and, to a lesser extent, timing between quarters.
Operating Margin: GAAP Non-GAAP	10% 28%	<ul style="list-style-type: none"> GAAP operating margin of 10% was 600-basis points above the high end of our guidance range due to higher than expected perpetual license revenue and lower spending. Non-GAAP operating margin of 28% was 600-basis points above the high end of our guidance range due to higher than expected perpetual license revenue and lower spending. On a mix-adjusted basis, non-GAAP operating margin would have been 24%, 200 basis points above the high end of guidance, and an increase of 800 basis points year over year.
Tax Rate: GAAP Non-GAAP	18% 19%	<ul style="list-style-type: none"> In line with guidance.



Other Highlights in Quarterly and Annual Operating Performance

- For Q1'19, ASC 605 annualized recurring revenue (ARR) was approximately \$1,045 million, which grew 13% or \$117 million year-over-year and grew 3% or \$33 million sequentially. ASC 605 ARR has now grown double-digits for eight consecutive quarters.
- Total Deferred Revenue consists of Billed Deferred Revenue and Unbilled Deferred Revenue. In Q1'19, Total Deferred Revenue grew 16% year-over-year. Total Deferred Revenue fluctuates quarterly based upon the contractual billings dates in our recurring revenue contracts, the length of renewal contracts (one-year or multi-year), as compared to the amount of revenue recognized ratably during the period. Note that the increase in deferred revenue is not due to a longer average new subscription contract duration, which remained at approximately 2 years.

(in millions)	Q1'19 12/29/18	Q4'18 9/30/18	Q1'18 12/30/17	Q/Q % Change	Y/Y % Change
ASC 605 Billed Deferred Revenue	\$496	\$499	\$432	(1%)	15%
ASC 605 Unbilled Deferred Revenue	\$864	\$911	\$738	(5%)	17%
ASC 605 Total Deferred Revenue	\$1,360	\$1,410	\$1,170	(4%)	16%

- Billed Deferred Revenue grew 15% year-over-year. Billed Deferred Revenue primarily relates to software agreements invoiced to customers for which the revenue has not yet been recognized. Billed Deferred Revenue fluctuates quarterly based upon the contractual billings dates in our recurring revenue contracts, the timing of our fiscal reporting periods, and FX. Q1'19 ended on December 29th while Q1'18 ended on December 30th.
- Unbilled Deferred Revenue grew 17% year-over-year. Unbilled deferred revenue is the aggregate of booked orders for license, support and subscription (including multi-year subscription contracts with start dates after October 1, 2018 that are subject to a limited annual cancellation right) for which the associated revenue has not been recognized and the customer has not been invoiced. We generally do not invoice prior to the contractual subscription start or anniversary date. We do not record Unbilled Deferred Revenue on our Consolidated Balance Sheet; such amounts are recorded as Deferred Revenue when we invoice the customer. Note that the increase in unbilled deferred revenue is not due to a longer average new subscription contract duration, which remained at approximately 2 years.
- Cash, cash equivalents, and marketable securities totaled \$333 million as of December 29, 2018.
- As of December 29, 2018, gross borrowings totaled \$783 million, including \$500 million of senior notes and \$283 million outstanding under our revolving credit facility. Under our revolving credit facility, our leverage covenant is limited to 4.5 times adjusted EBITDA. Further, if our leverage covenant ratio exceeds 3.25 times adjusted EBITDA, our stock repurchases are limited to \$100 million in a year. Our leverage ratio at the end of Q1'19 was 2.3. As of December 29, 2018, we had approximately \$400 million available to borrow under the credit facility.
- Effective January 1, 2019, new software licenses are available globally only by subscription, with the primary exception being Kepware.



Q2'19 and FY'19 Guidance

Our Q2'19 and FY'19 guidance includes the following general considerations:

- We are more cautious about the macroeconomic environment; however, we have not changed our total bookings guidance. Our new guidance assumes that full year perpetual bookings will be \$12 million above our prior guidance, driven by Q1, which will be offset by \$12 million lower subscription bookings than our prior guidance. Nine deals totaling more than \$20 million in bookings slipped from Q1 into our Q2 forecast, including about \$2 million of US Government large deals that slipped due to the shutdown, and closure of some of those deals appears imminent. However, we do not believe it would be prudent to assume we “catch up” fully relative to our full year subscription bookings for the deals that slipped out of Q1. Instead, we assume the “catch up” is less than half of the \$20M+ slippage.
- Currencies have been volatile over the past year, and as a result we estimate that for the full-year FY'19, based upon current rates, FX is an approximate 200 basis point headwind to our reported bookings and revenue growth, with a more acute impact in the first half of the fiscal year.

Q2'19 and FY'19 Operating Guidance-ASC 606 and ASC 605

Operating Measures remain the same under ASC 605 and 605

In millions	Q2'19 Low	Q2'19 High	FY'19 Low	FY'19 High	Management Comments
Subscription ACV	\$50	\$55	\$216	\$224	<ul style="list-style-type: none"> • We decreased FY'19 guidance by ~\$6M at the midpoint, based on Q1'19 performance and our outlook for the remainder of the year. • FY'19 guidance is up 24% to 29% YoY CC, based on continued adoption of our subscription offerings and the discontinuation of new perpetual license sales (except for Kepware) which went into effect January 1, 2019. • Q2'19 guidance is up 34% to 49% YoY CC compared to Q2'18.
Total Bookings	\$107	\$120	\$500	\$520	<ul style="list-style-type: none"> • We are maintaining our total booking guidance for FY'19, based on Q1'18 performance and our outlook for the remainder of the year, despite more caution on the macro. • We have factored in the perpetual bookings upside offset by more caution on the economic backdrop, resulting in a \$12 million increase in perpetual bookings guidance and a \$12 million decrease in subscription bookings guidance. • FY'19 bookings guidance is up 10% to 14% YoY CC compared to FY'18. • Q2'19 bookings guidance represents 12% to 25% YoY CC growth compared to Q2'18.
Subscription % of Bookings	93%	93%	86%	86%	<ul style="list-style-type: none"> • We now expect 86% of our bookings to be subscription in FY'19. This compares to a mix of 76% in FY'18. There is no change to our mix assumptions for the balance of fiscal '19. We expect to exit the year in Q4 with mix in the mid-90s.



Q2 and FY'19 Financial Guidance – ASC 606

Please refer to the “ASC 606 Adoption” presentation posted on our investor relations website for additional details on our ASC 606 guidance.

In millions except per share amounts

Financial Measures	Q2'19 Low	Q2'19 High	FY'19 Low	FY'19 High
Total Subscription Revenue	\$ 130	\$ 141	\$ 581	\$ 622
Perpetual Support Revenue	105	106	432	433
Total Recurring Revenue	\$235	\$247	\$1,013	\$1,055
Perpetual License Revenue	9	10	62	70
Total Software Revenue	244	257	1,075	1,125
Professional Services Revenue	39	41	170	170
Total Revenue	\$ 283	\$ 298	\$ 1,245	\$ 1,295
Operating Expense (GAAP)	\$ 237	\$ 238	\$ 899	\$ 903
Operating Expense (Non-GAAP)	178	179	724	728
Operating Margin (GAAP)	(12%)	(6%)	2%	5%
Operating Margin (Non-GAAP)	12%	17%	19%	22%
Tax Rate (GAAP)	30%	30%	30%	30%
Tax Rate (Non-GAAP)	19%	18%	19%	17%
Shares Outstanding	120	120	119	119
EPS (GAAP)	\$ (0.27)	\$(0.17)	\$ (0.10)	\$ 0.18
EPS (Non-GAAP)	\$ 0.15	\$ 0.27	\$ 1.35	\$ 1.70
Free Cash Flow			\$ 265	\$ 275
Adjusted Free Cash Flow			\$ 290	\$ 300

The second quarter and fiscal 2019 non-GAAP operating margin and non-GAAP EPS guidance exclude the estimated items outlined in the table below, as well as any tax effects and discrete tax items (which are not known nor reflected). Adjusted free cash flow excludes \$25 million of restructuring payments related to our Q1'19 workforce realignment and headquarters relocation. From a cash perspective, the free rent and estimated sublease income on Seaport headquarters total approximately \$30 million, as compared to the estimated net cash flows of \$29 million on the Needham headquarters.

<i>In millions</i>	Q2'19	FY'19
Effect of acquisition accounting on fair value of acquired deferred revenue	\$0	(\$1)
Acquisition related charges	\$0	\$1
Restructuring and headquarters relocation charges ⁽¹⁾	24	42
Intangible asset amortization expense	13	51
Stock-based compensation expense	32	121
Total Estimated Pre-Tax GAAP adjustments	\$ 69	\$ 214

⁽¹⁾ Includes our Q1'19 workforce realignment and charges related to our headquarters relocation. The headquarters relocation charges include accelerated depreciation expense associated with exiting the Needham headquarters facility and relocating to our new worldwide headquarters in the Boston Seaport District, which occurred in January 2019. Because the Needham lease will not expire until November 2022, we have been seeking to sublease that space, but have not yet done so. As a result, we will bear overlapping rent obligations for those premises and, in Q2, expect to incur a restructuring charge of approximately \$24 million, based on the net present value of remaining lease commitments net of estimated sublease income. From a cash perspective, the free rent and estimated sublease income on Seaport headquarters total approximately \$30 million, as compared to the estimated net cash flows of \$29 million on the Needham headquarters. Additionally, we will incur other costs associated with the move which will be recorded as incurred.



Q2'19 and FY'19 Financial Guidance – ASC 605

In millions	Q2'19 Low	Q2'19 High	FY'19 Low	FY'19 High	Management Comments
Subscription Revenue	\$156	\$160	\$670	\$677	<ul style="list-style-type: none"> We decreased the high end of the FY'19 guidance by \$3M. FY'19 guidance is up 43% to 44% YoY CC compared to FY'18. Q2'19 guidance is up 43% to 46% YoY CC compared to Q2'18.
Perpetual Support Revenue	\$106	\$106	\$430	\$433	<ul style="list-style-type: none"> We decreased FY'19 guidance by \$8M, driven primarily by Support conversions.
Total Recurring Software Revenue	\$262	\$266	\$1,100	\$1,110	<ul style="list-style-type: none"> We decreased FY'19 guidance by \$9M at the midpoint to reflect slightly lower expected subscription bookings and the later timing of those bookings in the year. FY'19 guidance is up 15% to 16% YoY CC compared to FY'18. Recurring software revenue is expected to be 94% of total software revenue for the year. Q2'19 guidance is up 14% to 16% YoY CC compared to Q2'18.
Perpetual License Revenue	\$9	\$10	\$67	\$70	<ul style="list-style-type: none"> We increased FY'19 guidance by \$12M at the midpoint, to factor in Q1'19 performance. FY'19 guidance is down 38% YoY at the midpoint compared to FY'18 due to the end of life of perpetual. Q2'19 guidance is down 59% YoY at the midpoint compared to Q2'18 due to the end of life of perpetual. New perpetual licenses are no longer available as of January 1, 2019, with Kepware being the primary exception.
Software Revenue	\$271	\$276	\$1,167	\$1,180	<ul style="list-style-type: none"> We increased the low end of FY'19 guidance by \$7M, based on Q1'19 performance and our outlook for the remainder of the year. FY'19 guidance is up 10% to 11% YoY CC compared to FY'18 despite a higher subscription mix by 1000 bps, and recurring software revenue is up 15% to 16% YoY CC compared to FY'18. Q2'19 guidance is up 8% to 10% YoY CC compared to Q2'18, despite a 1,500 bps higher subscription mix, and recurring software revenue is up 14% to 16% YoY CC compared to Q2'18.
Professional Services Revenue	\$39	\$39	\$158	\$160	<ul style="list-style-type: none"> We decreased the low end of FY'19 guidance by ~\$2M, based on Q1'19 performance and our outlook for the remainder of the year. FY'19 guidance is down 6% YoY at the midpoint compared to FY'18 due to fewer large services engagements as we continue to emphasize more standard implementations of our products, execute on our strategy of growing our service partner ecosystem, and focus on expanding our professional services gross margins. Q2'19 guidance is down 15% YoY compared to Q2'18.
Total Revenue	\$310	\$315	\$1,325	\$1,340	<ul style="list-style-type: none"> We increased FY'19 guidance by ~\$3M, based on Q1'19 performance and our outlook for the remainder of the year. FY'19 guidance is up 8% to 9% YoY CC compared to FY'18. Q2'19 guidance is up 5% to 7% YoY CC compared to Q2'18, despite a 1,500 bps increase in the subscription mix.



Q2'19 and FY'19 Financial Guidance – ASC 605, Continued

In millions	Q2'19 Low	Q2'19 High	FY'19 Low	FY'19 High	Management Comment
Operating Expense: GAAP Non-GAAP	\$238	\$241	\$923	\$928	<ul style="list-style-type: none"> GAAP Operating Expense guidance has been increased to reflect the \$24M restructuring related to the Needham facility lease. We expect to record the Needham restructuring in fiscal Q2'19. From a cash perspective, the free rent and estimated sublease income on Seaport headquarters total approximately \$30 million, as compared to the estimated net cash flows of \$29 million on the Needham headquarters. We decreased FY'19 non-GAAP guidance by \$2M, due to effective cost discipline. FY'19 non-GAAP guidance is up 4% to 5% YoY CC compared to FY'18. While our long-term model targets non-GAAP operating expense growth about half of bookings growth, FY'19 growth is below that target.
Operating Margin: GAAP Non-GAAP	(3%)	(2%)	6%	7%	<ul style="list-style-type: none"> The \$24M restructuring related to the Needham facility will have a 100bps negative impact on the previous FY GAAP Op margin. We expect to record the Needham restructuring in fiscal Q2'19. We are increasing our FY'19 non-GAAP operating margin guidance ~100 basis points due to higher revenue and tighter spending control in both COGS and Opex. FY'19 non-GAAP guidance is up ~500 bps YoY; Q2'19 non-GAAP guidance is up 175 bps YoY at the midpoint.
Tax Rate: GAAP Non-GAAP	30%	30%	30%	30%	<ul style="list-style-type: none"> Both GAAP and non-GAAP guidance are based on current estimates.
Shares Outstanding:	120	120	119	119	<ul style="list-style-type: none"> Both GAAP and non-GAAP guidance are based on current estimates.
EPS: GAAP Non-GAAP	(\$0.13)	(\$0.10)	\$0.25	\$0.32	<ul style="list-style-type: none"> We are decreasing GAAP EPS guidance by \$0.07 to reflect the \$24M restructuring related to the Needham facility. We expect to record the Needham restructuring in fiscal Q2'19. We increased FY'19 non-GAAP guidance by \$0.10 based on Q1'19 performance and current estimates. FY'19 non-GAAP EPS is up 23% to 30% YoY CC compared to FY'18. Q2'19 non-GAAP EPS is up 7% YoY CC at the midpoint compared to Q2'18.
Free Cash Flow Adjusted Free Cash Flow			\$265	\$275	<ul style="list-style-type: none"> We increased Free Cash Flow guidance by \$10 million to reflect our increased non-GAAP EPS outlook. We continue to expect capex of around \$40 million this fiscal year, and we expect capex to decline back down to historical levels of around \$30M in fiscal '20. Guidance also includes approximately \$25M of payments for restructuring, \$17M related to workforce realignment and \$8M of net cash payments related to our Needham facility lease, both of which are excluded from Adjusted Free Cash Flow. We expect to record the Needham restructuring in fiscal Q2'19.



The second quarter and fiscal 2019 non-GAAP operating margin and non-GAAP EPS guidance exclude the estimated items outlined in the table below, as well as any tax effects and discrete tax items (which are not known nor reflected). Adjusted free cash flow excludes \$25 million of restructuring payments related to our Q1'19 workforce realignment and headquarters relocation. From a cash perspective, the free rent and estimated sublease income on Seaport headquarters total approximately \$30 million, as compared to the estimated net cash flows of \$29 million on the Needham headquarters.

<i>In millions</i>	Q2'19	FY'19
Effect of acquisition accounting on fair value of acquired deferred revenue	\$0	(\$1)
Acquisition related charges	\$0	\$1
Restructuring and headquarters relocation charges ⁽¹⁾	24	42
Intangible asset amortization expense	13	51
Stock-based compensation expense	32	121
Total Estimated Pre-Tax GAAP adjustments	\$ 69	\$ 214

⁽¹⁾ Includes our Q1'19 workforce realignment and charges related to our headquarters relocation. The headquarters relocation charges include accelerated depreciation expense associated with exiting the Needham headquarters facility and relocating to our new worldwide headquarters in the Boston Seaport District, which occurred in January 2019. Because the Needham lease will not expire until November 2022, we have been seeking to sublease that space, but have not yet done so. As a result, we will bear overlapping rent obligations for those premises and, in Q2, expect to incur a restructuring charge of approximately \$24 million, based on the net present value of remaining lease commitments net of estimated sublease income. From a cash perspective, the free rent and estimated sublease income on Seaport headquarters total approximately \$30 million, as compared to the estimated net cash flows of \$29 million on the Needham headquarters. Additionally, we will incur other costs associated with the move which will be recorded as incurred.

Long-Range Targets (Non-GAAP) – ASC 605

Given the strength of our FY'18 performance, and our guidance for FY'19, we believe PTC is well positioned to achieve the updated long-term financial targets that we shared on our Q4'18 earnings call.

Our long-range, Non-GAAP targets for FY'23 are below. Please note that these targets are included in a long-term operating model presentation posted on our investor relations website at investor.ptc.com. Future GAAP operating margin and EPS targets are not provided as those GAAP measures include amounts that are not known or predictable.

- o \$2.4 billion in total revenue, growing mid-teens
- o \$2.2 billion of software revenue, growing mid-teens
- o 95% subscription mix, yielding 98% recurring software revenue
- o Non-GAAP operating margin of 37%
- o Non-GAAP EPS of \$6.30, and
- o Free cash flow of \$850 million

Important Disclosures

Reporting metrics and non-GAAP definitions – Management believes certain operating measures and non-GAAP financial measures provide additional meaningful information that should be considered when assessing our performance. These measures should be considered in addition to, not as a substitute for, the reported GAAP results.

Software licensing model – A majority of our software sales historically were perpetual licenses, where customers own the software license. Typically, our customers choose to pay for ongoing support, which includes the right to software upgrades and technical support, and attach rates on support are in the high 90% range with retention rates also in the 90% range. For fiscal 2016 through the first quarter of fiscal 2019,



a majority of our new license bookings have consisted of subscriptions, which is recognized ratably under ASC 605. Under a subscription, customers pay a periodic fee for the continuing right to use our software, including access to technical support. They may also elect to use our cloud services and have us manage the application. We began offering subscription pricing as an option for most PTC products in Q1 FY'15, and as of January 1, 2019, we will no longer offer new perpetual licenses, with the primary exception being Kepware. We believe subscription has proved attractive to customers as it: (1) increases customer flexibility and opportunity to change their mix of licenses; (2) lowers the initial purchase commitment; and (3) allows customers to use operating rather than capital budgets. Over a four to five-year period we believe the value of a subscription is likely to exceed that of a perpetual license, assuming similar seat counts. Under ASC 605, Initial revenue, operating margin, and EPS is lower as subscription revenue is not recognized in its entirety up front as perpetual license is. However, because we are in the latter stages of our subscription transition, under ASC 605, we expect revenue, operating margin and EPS to accelerate going forward.

Bookings Metrics – We offer both perpetual and subscription licensing options to our customers, as well as monthly software rentals for certain products. Given the difference in revenue recognition between the sale of a perpetual software license and a subscription, we use bookings for internal planning, forecasting and reporting of new license and cloud services transactions.

In order to normalize between perpetual and subscription licenses, we define subscription bookings as the subscription annualized contract value (subscription ACV) of new subscription contracts multiplied by a conversion factor of 2. We arrived at the conversion factor of 2 by considering a number of variables including pricing, support, length of term, and renewal rates. We define subscription ACV as the total value of a new subscription contract (which may include annual values that increase over time) divided by the term of the contract (in days) multiplied by 365. If the term of the subscription contract is less than a year, and is not associated with an existing contract, the booking is equal to the total contract value. Beginning in Q3'18, minimum ACV commitments under our Strategic Alliance Agreement with Rockwell Automation are included in subscription ACV if the period-to-date minimum ACV commitment exceeds actual ACV sold under the Agreement.

License and subscription bookings equal subscription bookings (as described above) plus perpetual license bookings. Because subscription bookings is a metric we use to approximate the value of subscription sales if sold as perpetual licenses, it does not represent the actual revenue that will be recognized with respect to subscription sales or that would be recognized if the sales were perpetual licenses, nor does the annualized value of monthly software rental bookings represent the value of any such booking.

Annualized Recurring Revenue (ARR) - To help investors understand and assess the success of our subscription transition, we provide an Annualized Recurring Revenue operating measure. Annualized Recurring Revenue (ARR) for a given quarter is calculated by dividing the portion of non-GAAP software revenue attributable to subscription and support for the quarter by the number of days in the quarter and multiplying by 365. (A related metric is Subscription ARR, which is calculated by dividing the portion of non-GAAP revenue attributable to subscription for the quarter by the number of days in the quarter and multiplying by 365.) ARR should be viewed independently of revenue and deferred revenue as it is an operating measure and is not intended to be combined with or to replace either of those items. ARR is not a forecast of future revenue, which can be impacted by contract expiration and renewal rates, and does not include revenue reported as perpetual license or professional services revenue in our consolidated statement of income. Subscription and support revenue and ARR disclosed in a quarter can be impacted by multiple factors, including but not limited to (1) the timing of the start of a contract or a renewal, including the impact of on-time renewals, support win-backs, and support conversions, which may vary by quarter, (2) the ramping of committed monthly payments under a subscription agreement over time, and (3) multiple other contractual factors with the customer including other elements sold with the subscription or support contract. These factors can result in variability in disclosed ARR.



Navigate Allocation -- Revenue and bookings for Navigate, a ThingWorx-based IoT solution for PLM are allocated 50% to Solutions and 50% to IoT.

Foreign Currency Impacts on our Business – We have a global business, with Europe and Asia historically representing approximately 60% of our revenue, and fluctuation in foreign currency exchange rates can significantly impact our results. We do not forecast currency movements; rather we provide detailed constant currency commentary. We employ a hedging strategy to limit our exposure to currency risk.

Constant Currency Change Measure (YoY CC) – Year-over-year changes in revenue on a constant currency basis compare reported results excluding the effect of any hedging converted into U.S. dollars based on the corresponding prior year's foreign currency exchange rates to reported results for the comparable prior year period.

Important Information about Non-GAAP References

PTC provides non-GAAP supplemental information to its financial results. We use these non-GAAP measures, and we believe that they assist our investors, to make period-to-period comparisons of our operational performance because they provide a view of our operating results without items that are not, in our view, indicative of our core operating results. We believe that these non-GAAP measures help illustrate underlying trends in our business, and we use the measures to establish budgets and operational goals, communicated internally and externally, for managing our business and evaluating our performance. We believe that providing non-GAAP measures affords investors a view of our operating results that may be more easily compared to the results of peer companies. In addition, compensation of our executives is based in part on the performance of our business based on these non-GAAP measures. However, non-GAAP information should not be construed as an alternative to GAAP information as the items excluded from the non-GAAP measures often have a material impact on our financial results and such items often recur. Management uses, and investors should consider, non-GAAP measures in conjunction with our GAAP results.

Non-GAAP revenue, non-GAAP operating expense, non-GAAP operating margin, non-GAAP gross profit, non-GAAP gross margin, non-GAAP net income and non-GAAP EPS exclude the effect of the following items: fair value of acquired deferred revenue, fair value adjustment to deferred services cost, stock-based compensation, amortization of acquired intangible assets, acquisition-related charges included in general and administrative costs, restructuring charges, and income tax adjustments. Additional information about the items we exclude from our non-GAAP financial measures and the reasons we exclude them can be found in "Non-GAAP Financial Measures" of our Annual Report on Form 10-K for the fiscal year ended September 30, 2018.

A reconciliation of non-GAAP measures to GAAP results is provided within these prepared remarks.

PTC also provides information on "free cash flow" and "adjusted free cash flow" to enable investors to assess our ability to generate cash without incurring additional external financings and to evaluate our performance against our announced long-term goal of returning approximately 40% of our free cash flow to shareholders via stock repurchases. Free cash flow is net cash provided by (used in) operating activities less capital expenditures; adjusted free cash flow is free cash flow excluding restructuring payments and certain identified non-ordinary course payments. Free cash flow and adjusted free cash flow are not measures of cash available for discretionary expenditures.

Forward-Looking Statements

Statements in this document that are not historic facts, including statements about our future financial and growth expectations and targets, are forward-looking statements that involve risks and uncertainties that could cause actual results to differ materially from those projected. These risks include: the macroeconomic and/or global manufacturing climates may deteriorate due to, among other factors, the U.S. government



shutdown, the focus on technology transactions with non-U.S. entities and potential expanded prohibitions, and ongoing trade tensions and tariffs; customers may not purchase our solutions or convert existing support contracts to subscription when or at the rates we expect; our businesses, including our Internet of Things (IoT) business, and Augmented Reality businesses, may not expand and/or generate the revenue we expect; foreign currency exchange rates may vary from our expectations and thereby affect our reported revenue and expense; the mix of revenue between license & subscription solutions, support and professional services could be different than we expect, which could impact our EPS results; our transition to subscription-only licensing could adversely affect sales and revenue; sales of our solutions as subscriptions may not have the longer-term effect on revenue and earnings that we expect; bookings associated with minimum ACV commitments under our Strategic Alliance Agreement with Rockwell Automation may not result in subscription contracts sold through to end-user customers; our strategic initiatives and investments may not generate the revenue we expect; we may be unable to expand our partner ecosystem as we expect and our partners may not generate the revenue we expect; we may be unable to generate sufficient operating cash flow to return 40% of free cash flow to shareholders and other uses of cash or our credit facility limits or other matters could preclude share repurchases. In addition, our assumptions concerning our future GAAP and non-GAAP effective income tax rates are based on estimates and other factors that could change, including the geographic mix of our revenue, expenses and profits. Other risks and uncertainties that could cause actual results to differ materially from those projected are detailed from time to time in reports we file with the Securities and Exchange Commission, including our most recent Annual Report on Form 10-K and Quarterly Reports on Form 10-Q.



PTC Inc.
NON-GAAP FINANCIAL MEASURES AND RECONCILIATIONS (UNAUDITED)
(in thousands, except per share data)

	Three Months Ended		
	December 29, 2018	December 29, 2018	December 30, 2017
	ASC 606	ASC 605	ASC 605
GAAP revenue	\$ 334,689	\$ 338,757	\$ 306,644
Fair value adjustment of acquired deferred subscription revenue	66	66	117
Fair value adjustment of acquired deferred services revenue	207	207	246
Non-GAAP revenue	<u>\$ 334,962</u>	<u>\$ 339,030</u>	<u>\$ 307,007</u>
GAAP gross margin	\$ 257,337	\$ 263,561	\$ 223,609
Fair value adjustment of acquired deferred revenue	273	273	363
Fair value adjustment to deferred services cost	(85)	(85)	(104)
Stock-based compensation	3,111	3,111	2,927
Amortization of acquired intangible assets included in cost of revenue	6,717	6,717	6,675
Non-GAAP gross margin	<u>\$ 267,353</u>	<u>\$ 273,577</u>	<u>\$ 233,470</u>
GAAP operating income	\$ 30,044	\$ 33,182	\$ 17,316
Fair value adjustment of acquired deferred revenue	273	273	363
Fair value adjustment to deferred services cost	(85)	(85)	(104)
Stock-based compensation	29,407	29,407	18,331
Amortization of acquired intangible assets included in cost of revenue	6,717	6,717	6,675
Amortization of acquired intangible assets	5,936	5,936	7,821
Acquisition-related and other transactional charges included in general and administrative costs	419	419	7
Restructuring charges, net	16,586	16,586	105
Headquarters relocation charges	1,907	1,907	-
Non-GAAP operating income ⁽¹⁾	<u>\$ 91,204</u>	<u>\$ 94,342</u>	<u>\$ 50,514</u>
GAAP net income	\$ 20,985	\$ 19,248	\$ 13,877
Fair value adjustment of acquired deferred revenue	273	273	363
Fair value adjustment to deferred services cost	(85)	(85)	(104)
Stock-based compensation	29,407	29,407	18,331
Amortization of acquired intangible assets included in cost of revenue	6,717	6,717	6,675
Amortization of acquired intangible assets	5,936	5,936	7,821
Acquisition-related and other transactional charges included in general and administrative costs	419	419	7
Restructuring charges, net	16,586	16,586	105
Headquarters relocation charges	1,907	1,907	-
Income tax adjustments ⁽²⁾	(14,855)	(12,141)	(11,000)
Non-GAAP net income	<u>\$ 67,290</u>	<u>\$ 68,267</u>	<u>\$ 36,075</u>
GAAP diluted earnings per share	\$ 0.18	\$ 0.16	\$ 0.12
Fair value adjustment of acquired deferred revenue	-	-	-
Stock-based compensation	0.25	0.25	0.16
Amortization of acquired intangibles	0.11	0.11	0.12
Acquisition-related and other transactional charges	-	-	-
Restructuring charges, net	0.14	0.14	-
Headquarters relocation charges	0.02	0.02	-
Income tax adjustments	(0.12)	(0.10)	(0.09)
Non-GAAP diluted earnings per share	<u>\$ 0.56</u>	<u>\$ 0.57</u>	<u>\$ 0.31</u>

(1) Operating margin impact of non-GAAP adjustments:

	Three Months Ended		
	December 29, 2018	December 29, 2018	December 30, 2017
	ASC 606	ASC 605	ASC 605
GAAP operating margin	9.0%	9.8%	5.7%
Fair value adjustment of acquired deferred revenue	0.1%	0.1%	0.1%
Fair value adjustment to deferred services cost	0.0%	0.0%	0.0%
Stock-based compensation	8.8%	8.7%	6.0%
Amortization of acquired intangibles	3.8%	3.7%	4.7%
Acquisition-related and other transactional charges	0.1%	0.1%	0.0%
Restructuring charges, net	5.0%	4.9%	0.0%
Headquarters relocation charges	0.6%	0.6%	0.0%
Non-GAAP operating margin	<u>27.2%</u>	<u>27.8%</u>	<u>16.5%</u>

(2) We have recorded a full valuation allowance against our U.S. net deferred tax assets. As we are profitable on a non-GAAP basis, the 2019 and 2018 non-GAAP tax provisions are being calculated assuming there is no valuation allowance. Income tax adjustments reflect the tax effects of non-GAAP adjustments which are calculated by applying the applicable tax rate by jurisdiction to the non-GAAP adjustments listed above. We have recorded the impact of the Tax Cuts and Jobs Act in our Q1'18 GAAP earnings, resulting in a non-cash benefit of approximately \$7 million. We have excluded this benefit from our non-GAAP results.