



PTC PREPARED REMARKS
THIRD QUARTER FISCAL 2019
July 24, 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 impacts 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.

Q3’19 ASC 605 Results vs. April 24, 2019 Guidance

Operating Measures	Guidance		Results
In millions	Q3’19 Low	Q3’19 High	Actual
License and Subscription Bookings	\$110	\$120	\$109
Subscription ACV	\$51	\$55	\$49
Subscription % of Bookings	92%	92%	91%

Financial Measures	GAAP Guidance		GAAP Results	Non-GAAP Guidance		Non-GAAP Results
	Q3’19 Low	Q3’19 High		Q3’19 Low	Q3’19 High	
In millions, except per share amounts						
Subscription Revenue	\$166	\$170	\$172	\$166	\$170	\$172
Perpetual Support Revenue	\$105	\$105	\$100	\$105	\$105	\$100
Total Recurring Revenue	\$271	\$275	\$271	\$271	\$275	\$271
Perpetual License Revenue	\$9	\$10	\$11	\$9	\$10	\$11
Total Software Revenue	\$280	\$285	\$282	\$280	\$285	\$282
Professional Services Revenue	\$40	\$40	\$40	\$40	\$40	\$41
Total Revenue	\$320	\$325	\$322	\$320	\$325	\$323
Operating Expense	\$221	\$223	\$209	\$190	\$192	\$190
Operating Margin	5%	7%	10%	18%	19%	19%
Tax Rate	30%	30%	47%	19%	18%	18%
EPS	\$0.03	\$0.07	\$0.10	\$0.31	\$0.36	\$0.36

Totals may not tie due to rounding



Key Highlights of Operating Measures

Operating Measures remain the same under ASC 605 and 605.

In millions	Q3'19	YoY	YoY CC	Q3 YTD	YoY	YoY CC	Management Comments
License and Subscription Bookings	\$109	-3%	-1%	\$323	2%	6%	<ul style="list-style-type: none"> Q3'19 bookings of \$109M was impacted by approximately \$1M due to Fx. Bookings at guidance due primarily to weaker channel performance following the end of perpetual license sales in certain regions. We saw continued strength in IoT, surpassing bookings for each of CAD and PLM for the second consecutive quarter. Core PLM had solid growth YoY and sequentially, driven by expansions in the direct side of the business. Geographically, we saw strength across all our product lines in Americas regions.
Subscription ACV	\$49	13%	16%	\$129	11%	15%	<ul style="list-style-type: none"> Q3'19 new subscription ACV of \$49M was \$2M below the low end of the guidance range due to the reasons described above.
Subscription % of Bookings	91%			80%			<ul style="list-style-type: none"> Q3'19 subscription mix was slightly below the guidance of 92% due to a slight increase in perpetual license bookings within the Productivity Zone where we offer perpetual licensing on certain legacy products.



Q3'19 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 impacts 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	\$144	\$172	(\$28)	<ul style="list-style-type: none"> \$51M of in-quarter revenue acceleration associated with the license portion of subscriptions, offset by \$78M of acceleration of the license portion of subscriptions from prior periods (~\$50M of which impacted retained earnings upon the adoption of ASC 606) and revenue reallocations.
Perpetual Support Revenue	\$100	\$100	-	<ul style="list-style-type: none"> No variance
Perpetual License Revenue	\$9	\$11	(\$2)	<ul style="list-style-type: none"> Revenue reallocations
Total Software Revenue	\$253	\$282	(\$29)	<ul style="list-style-type: none"> \$51M of in-quarter revenue acceleration associated with the license portion of subscriptions, offset by \$78M of acceleration of the license portion of subscriptions from prior periods (~\$50M of which impacted retained earnings upon the adoption of ASC 606) and revenue reallocations.
Professional Services Revenue	\$42	\$40	\$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	\$295	\$322	(\$27)	<ul style="list-style-type: none"> \$51M of in-quarter revenue acceleration associated with the license portion of subscriptions, offset by \$78M of acceleration of the license portion of subscriptions from prior periods (~\$50M of which impacted retained earnings upon the adoption of ASC 606) and revenue reallocations.
<u>Cost of Revenue:</u>				
GAAP	\$83	\$81	\$2	<ul style="list-style-type: none"> Related primarily to 606 professional services deferred costs.
Non-GAAP	\$73	\$72	\$1	
<u>Gross Margin:</u>				
GAAP	72%	75%	(300 bps)	<ul style="list-style-type: none"> Reflects the above differences.
Non-GAAP	75%	78%	(300 bps)	
<u>Operating Expense:</u>				
GAAP	\$203	\$209	(\$6)	<ul style="list-style-type: none"> Reflects the effect of commission amortization under 606, offset by deferral of current commission payments under 606.
Non-GAAP	\$184	\$190	(\$6)	
<u>Operating Margin:</u>				
GAAP	3%	10%	(700 bps)	<ul style="list-style-type: none"> Reflects the above differences.
Non-GAAP	13%	19%	(600 bps)	
<u>Tax Rate:</u>				
GAAP	NM	47%	NM	<ul style="list-style-type: none"> The ASC 606 GAAP Tax Rate is not meaningful due to the very low pre-tax 606 loss. Related primarily to difference in geographic mix.
Non-GAAP	4%	18%	(1400bps)	
Diluted Shares Outstanding	116	117	(1)	<ul style="list-style-type: none"> Related to net loss under ASC 606 vs. net income under ASC 605.
<u>EPS:</u>				
GAAP	(\$0.13)	\$0.10	(\$0.23)	<ul style="list-style-type: none"> Reflects the above differences.
Non-GAAP	\$0.23	\$0.36	(\$0.13)	
Free Cash Flow	\$59	\$59	-	<ul style="list-style-type: none"> No variance
Adjusted Free Cash Flow	\$63	\$63	-	



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 impacts 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	Q3'19	YoY	YoY CC	Management Comments
Software Revenue	\$282	3%	6%	<ul style="list-style-type: none"> Software revenue growth of 6% YoY CC was driven by 13% CC growth in recurring software revenue. Software revenue was negatively impacted by the 1,300 bps increase in subscription mix YoY.
Total Revenue	\$322	2%	6%	<ul style="list-style-type: none"> Total revenue growth of 6% YoY CC was adversely impacted by the subscription mix shift referenced above.
EPS: GAAP Non-GAAP	\$0.10 \$0.36	(31%) -	(18%) 9%	<ul style="list-style-type: none"> GAAP EPS declined by \$0.04 YoY in Q3'19 primarily due to an increase in tax expense offset by revenue growth. Non-GAAP EPS increased 9% YoY CC despite a 1,300 bps increase in subscription mix.
Free Cash Flow Adjusted Free Cash Flow	\$59 \$63	42% 49%	NA NA	<ul style="list-style-type: none"> Free cash flow was \$59M and included \$3M of cash payments for the quarter under our restructuring plan inclusive of our headquarters relocation. Adjusted free cash flow excludes the \$3M of cash payments for the quarter under our restructuring plan inclusive of our headquarters relocation.



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 impacts 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	Q3'19	YoY	YoY CC	Management Comments
Solutions Software Revenue	\$244	1%	4%	<ul style="list-style-type: none"> Total solutions software revenue growth of 4% YoY CC was driven by strength in recurring solutions software revenue, which grew 11% YoY CC. Growth in recurring solutions software revenue was partially offset by a 1,700 bps increase in subscription mix.
IoT Software Revenue	\$38	21%	24%	<ul style="list-style-type: none"> IoT software revenue grew 24% CC YoY, driven by 38% YoY CC growth in IoT subscription revenue. A 500 bps increase in subscription mix partially offset the growth in recurring IoT software revenue. Recurring IoT software revenue growth reflects continued strong IoT bookings growth over the past several years. Q3'19 was a very strong quarter for new IoT bookings, which surpassed each of CAD and PLM bookings for the second consecutive quarter.

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 impacts 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	Q3'19	YoY	YoY CC	Management Comments
Americas Software Revenue	\$131	11%	11%	<ul style="list-style-type: none"> Software revenue grew 11% with notable strength in subscription revenue.
Europe Software Revenue	\$103	2%	9%	<ul style="list-style-type: none"> Software revenue in Europe grew 9% YoY CC, driven by a 43% YoY CC increase in subscription software revenue. Recurring software revenue was 12% YoY CC. A 700 bps increase in subscription mix partially offset the growth in recurring software revenue.
APAC Software Revenue	\$48	(13%)	(10%)	<ul style="list-style-type: none"> APAC software revenue declined 10% YoY CC due to a 91% decline in perpetual license revenue following the end of life of perpetual licenses on 1/1/19. APAC recurring software revenue grew 19% YoY CC driven by notable strength in subscription revenue.



ASC 605 Operating Performance

We adopted ASC 606 on October 1, 2018, which impacts 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	Q3'19	Management Comments
<u>Operating Expense:</u> GAAP Non-GAAP	 \$209 \$190	<ul style="list-style-type: none"> • GAAP operating expenses were below the low end of our guidance range due primarily to a decrease in stock-based compensation. • Non-GAAP operating expenses were at the low end of our guidance range due primarily to effective cost discipline.
<u>Operating Margin:</u> GAAP Non-GAAP	 10% 19%	<ul style="list-style-type: none"> • GAAP and Non-GAAP operating margins were above and at the high end of the guidance ranges respectively due primarily to effective cost discipline.
<u>Tax Rate:</u> GAAP Non-GAAP	 47% 18%	<ul style="list-style-type: none"> • GAAP tax rate of 47% is due to certain discrete items. • Non-GAAP tax rate was in line with guidance.



Other Highlights in Quarterly and Annual Operating Performance

- For Q3'19, ASC 605 annualized recurring revenue (ARR) was approximately \$1,088 million, which grew \$94 million year over year. This represents 9% growth year over year or 13% on a constant currency basis.
- Total deferred revenue consists of billed deferred revenue and unbilled deferred revenue. In Q3'19, total deferred revenue grew \$105 million year over year. Total deferred revenue fluctuates quarterly based upon the contractual billing 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 most of our renewals have been for a one-year term. Renewing a multi-year subscription contract with a one year renewal term reduces the growth in total deferred revenue. Also, note that the increase in deferred revenue is not due to a longer average new subscription contract duration, which remained at approximately 2 years.

<u>(in millions)</u>	Q3'19 6/29/19	Q2'19 3/30/19	Q3'18 6/30/18
ASC 605 Billed Deferred Revenue	\$551	\$554	\$484
ASC 605 Unbilled Deferred Revenue	\$764	\$769	\$726
ASC 605 Total Deferred Revenue	\$1,315	\$1,323	\$1,210

- Billed deferred revenue grew 14% 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 billing dates in our recurring revenue contracts, the timing of our fiscal reporting periods, and FX. Q3'19 ended on June 29th while Q3'18 ended on June 30th.
- Unbilled deferred revenue grew 5% 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.
- Cash, cash equivalents, and marketable securities totaled \$322 million as of June 29, 2019. In Q3, we used \$25 million to repurchase 287,000 shares at an average price of \$87. We also retired 3 million shares at no cost related to the ASR initiated in the fourth quarter of fiscal 2018. In addition, we paid down \$40 million towards our revolving credit facility.
- As of June 29, 2019, net borrowings totaled \$699 million, including \$500 million of senior notes and \$199 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 Q3'19 was 1.9 and we had approximately \$482 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.



Q4'19 and FY'19 Guidance

Our Q4'19 and FY'19 guidance includes the following general considerations:

- In Q1'19 we introduced the end of life for perpetual licenses in the APAC region which resulted in a pull-forward of bookings from later in fiscal 2019. These last-time buys have unfavorably impacted current demand primarily in the APAC channel.
- We have converted many of our large VPA (volume purchase agreement) customers to subscription. For customers that did not convert, we increased the support run-rate. This increase in the support price boosted ARR growth but did not contribute to incremental new bookings. As the customers who did not convert come up for support renewal again, we get another chance to try to convert them to subscription. However, we are seeing a much lower hit rate on this second pass, as these customers are less incented to convert given that they've already accepted the higher support pricing. We will need to adjust the offering, but in the meantime this YoY slowdown in large VPA conversions cost us a few more points of bookings growth.
- The fourth quarter is our seasonally strongest bookings quarter driven by large mega deals (greater than \$5 million). We are not anticipating that we close any mega deals in the fourth quarter.
- At the beginning of the fiscal year we made the strategic decision to begin managing several of our smaller mature businesses for profit growth instead of revenue and bookings growth given the dynamics of these markets. These are markets where we focus on providing great solutions for a targeted set of customers, verticals, and use cases, but our strategy is not for broader market penetration given the high growth IoT and AR market opportunity for PTC. Accordingly, we planned for lower FY'19 bookings in these "productivity zone" businesses.

Q4'19 and FY'19 Operating Guidance-ASC 606 and ASC 605

Operating Measures remain the same under ASC 605 and 605

In millions	Q4'19 Low	Q4'19 High	FY'19 Low	FY'19 High	Management Comments
Subscription ACV	\$62	\$67	\$192	\$197	<ul style="list-style-type: none"> • We decreased FY'19 guidance by ~17M at the midpoint. We do not anticipate closing any mega deals during what typically is our seasonally strongest quarter. We are also factoring in a more modest contribution from conversions, which historically have been the strongest in our fourth quarter. In addition, we anticipate weaker channel performance in certain regions.
Total Bookings	\$135	\$145	\$458	\$468	<ul style="list-style-type: none"> • We are decreasing our total bookings guidance for FY'19 by \$32M at the midpoint. The decrease includes the items described above and the \$5 million Q3 booking underachievement compared to the midpoint of guidance. • FY'19 bookings guidance is up 1% to 3% YoY CC compared to FY'18.
Subscription % of Bookings	93%	93%	84%	84%	<ul style="list-style-type: none"> • We now expect 84% of our bookings to be subscription in FY'19. This compares to a mix of 76% in FY'18. We expect to exit the year with mix of 93% in Q4.



Q4 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 ⁽¹⁾	Q4'19 Low	Q4'19 High	FY'19 Low	FY'19 High
Total Subscription Revenue	\$181	\$190	\$601	\$609
Perpetual Support Revenue	\$97	\$99	\$412	\$414
Total Recurring Revenue	\$278	\$289	\$1,013	\$1,024
Perpetual License Revenue	\$9	\$11	\$70	\$72
Total Software Revenue	\$287	\$300	\$1,083	\$1,096
Professional Services Revenue	\$41	\$43	\$166	\$168
Total Revenue	\$328	\$343	\$1,249	\$1,264
Operating Expense (GAAP)	\$216	\$218	\$880	\$882
Operating Expense (Non-GAAP)	\$186	\$188	\$723	\$725
Operating Margin (GAAP)	9%	12%	4%	5%
Operating Margin (Non-GAAP)	21%	24%	19%	20%
Tax Rate (GAAP)	0%	0%	70%	70%
Tax Rate (Non-GAAP)	16%	16%	16%	16%
Shares Outstanding	116	116	118	118
EPS (GAAP)	\$0.16	\$0.28	\$0.01	\$0.05
EPS (Non-GAAP)	\$0.42	\$0.52	\$1.43	\$1.53
Free Cash Flow			\$235	\$245
Adjusted Free Cash Flow			\$260	\$270

⁽¹⁾ The fourth quarter and fiscal 2019 non-GAAP operating expense, 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 workforce realignment and headquarters relocation.

<i>In millions</i>	Q4'19	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⁾	\$0	\$45
Intangible asset amortization expense	\$13	\$51
Stock-based compensation expense	\$27	\$98
Total Estimated Pre-Tax GAAP adjustments	\$40	\$196

⁽¹⁾ Includes \$16 million related to our workforce realignment recorded in the first quarter of 2019 and \$29 million recorded in the first and second quarters of 2019 related to lease commitments and 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.



Q4'19 and FY'19 Financial Guidance – ASC 605

Revenue growth rate references are compared to previous year's Non-GAAP revenue, unless otherwise noted.

In millions	Q4'19 Low	Q4'19 High	FY'19 Low	FY'19 High	Management Comments
Subscription Revenue	\$183	\$188	\$665	\$670	<ul style="list-style-type: none"> We increased guidance by ~\$1M at the midpoint due to higher subscription bookings guidance. FY'19 guidance is up 42% to 43% YoY CC. Q4'19 guidance is up 34% to 38% YoY CC.
Perpetual Support Revenue	\$98	\$100	\$410	\$412	<ul style="list-style-type: none"> We decreased guidance by ~\$13M due to support conversions and to changes in our late support renewal policies.
Total Recurring Software Revenue	\$281	\$288	\$1,076	\$1,083	<ul style="list-style-type: none"> We decreased FY'19 guidance by ~\$12M at the midpoint due to support conversions and lower than expected subscription bookings. FY'19 guidance is up 13% to 14% YoY CC. Recurring software revenue is expected to be 94% of total software revenue for the year. Q4'19 guidance is up 11% to 14% YoY CC.
Perpetual License Revenue	\$9	\$10	\$73	\$74	<ul style="list-style-type: none"> We increased FY'19 guidance by ~\$2M, driven by perpetual sales in certain legacy businesses. FY'19 guidance is down 32% YoY CC at the midpoint due to the end of life of perpetual licenses. Q4'19 guidance is down 68% YoY CC at the midpoint due to the end of life of perpetual licenses as of January 1, 2019, with Kepware being the primary exception.
Total Software Revenue	\$290	\$298	\$1,148	\$1,156	<ul style="list-style-type: none"> We decreased the FY'19 guidance by ~\$11M at the midpoint, based upon our performance YTD and our bookings outlook for the remainder of the year. FY'19 guidance is up 8% to 9% YoY CC despite a higher subscription mix of 800 bps, and recurring software revenue is expected to be up 13% to 14% YoY CC. Q4'19 guidance is up 3% to 6% YoY CC, despite a 1,200 bps higher subscription mix, and expected recurring software revenue is up 11% to 14% YoY CC.
Professional Services Revenue	\$40	\$40	\$159	\$159	<ul style="list-style-type: none"> We increased the FY'19 guidance by ~\$3M based on Q3'19 performance and our outlook for the remainder of the year. FY'19 guidance is down ~3% YoY CC at the midpoint due to fewer large services engagements in our core businesses 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. Q4'19 guidance is up ~1% YoY CC.
Total Revenue	\$330	\$338	\$1,307	\$1,315	<ul style="list-style-type: none"> We decreased FY'19 guidance by \$6M-\$10M, driven by, lower expected software revenue as described above offset by higher professional services revenue. FY'19 guidance is up 7% YoY CC, despite an 800 bps increase in the subscription mix. Q4'19 guidance is up 3% to 5% YoY CC, despite a 1,200 bps increase in the subscription mix.



Q4'19 and FY'19 Financial Guidance – ASC 605, Continued⁽¹⁾

In millions	Q4'19 Low	Q4'19 High	FY'19 Low	FY'19 High	Management Comment
Operating Expense:					
GAAP	\$219	\$220	\$897	\$899	<ul style="list-style-type: none"> GAAP Operating Expense guidance has been decreased by \$16M at the midpoint primarily due to lower charges related to stock-based compensation. We maintained FY'19 non-GAAP operating expense guidance. FY'19 non-GAAP operating expense guidance is up 3% YoY CC. Our long-term model targets non-GAAP operating expense growth at about half of bookings growth, FY'19 growth is below that range.
Non-GAAP	\$189	\$191	\$740	\$742	
Operating Margin:					
GAAP	9%	11%	7%	8%	<ul style="list-style-type: none"> We are maintaining the high end of our FY'19 non-GAAP guidance range but decreased the low end of our FY'19 non-GAAP operating margin guidance by 100 bps. FY'19 non-GAAP operating margin guidance is up ~400 to 500 bps YoY, despite an 800 bps increase in subscription mix.
Non-GAAP	21%	22%	22%	23%	
Tax Rate:					
GAAP	50%	50%	50%	50%	<ul style="list-style-type: none"> Both GAAP and non-GAAP guidance are based on current estimates.
Non-GAAP	17%	16%	18%	18%	
Shares Outstanding:	116	116	118	118	<ul style="list-style-type: none"> Based on current estimates
EPS:					
GAAP	\$0.09	\$0.11	\$0.23	\$0.25	<ul style="list-style-type: none"> We are decreasing our FY'19 non-GAAP EPS guidance by \$0.05 at the midpoint based on Q3'19 performance and current estimates. FY'19 non-GAAP EPS guidance is up 22% to 26% YoY CC. Q4'19 non-GAAP EPS guidance is flat at the midpoint of the guidance range compared to Q3'18, despite the 1,200 bps higher subscription mix.
Non-GAAP	\$0.42	\$0.47	\$1.73	\$1.78	
Free Cash Flow			\$235	\$245	<ul style="list-style-type: none"> We are decreasing our FY'19 Free Cash Flow guidance by \$30M based on our year-to-date bookings performance and revised outlook for fiscal '19. We expect free cash flow to accelerate significantly in fiscal '20 as the subscription model matures.
Adjusted Free Cash Flow			\$260	\$270	

⁽¹⁾ The fourth quarter and fiscal 2019 non-GAAP operating expense, 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 workforce realignment and headquarters relocation.



<i>In millions</i>	Q4'19	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⁾	\$0	\$45
Intangible asset amortization expense	\$13	\$51
Stock-based compensation expense	\$27	\$98
Total Estimated Pre-Tax GAAP adjustments	\$40	\$196

⁽¹⁾ Includes \$16 million related to our workforce realignment recorded in the first quarter of 2019 and \$29 million recorded in the first and second quarters of 2019 related to lease commitments and 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.

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

Given our year-to-date performance and our revised outlook for the fourth fiscal quarter, we believe it is prudent to reset our long-term financial targets. We remain committed to delivering \$850M in free cash flow, but now expect to achieve this target in fiscal 2024. We will provide more detail around our FY'20 and long-range targets under ASC 606 following the end of this fiscal year.

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 chose to pay for ongoing support, which includes the right to software upgrades and technical support and attach rates on support were 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 Q2 FY'15, and as of January 1, 2019, we 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 (as subscription bookings includes cloud services bookings).



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 and without regard to contractual termination options) 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 subscriptions 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, (3) multiple other contractual factors with the customer including other elements sold with the subscription or support contract, and (4) the impact of currency fluctuations. These factors can cause disclosed ARR to vary.

Navigate Allocation -- Revenue and bookings for our Navigate™ 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.

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 operating 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 and other transactional charges included in general and administrative costs, restructuring and headquarters relocation 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" on page 35 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 geopolitical environment, including 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) 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		
	June 29, 2019	June 29, 2019	June 30, 2018
	ASC 606	ASC 605	ASC 605
GAAP revenue	\$ 295,486	\$ 322,410	\$ 314,777
Fair value adjustment of acquired deferred subscription revenue	-	-	75
Fair value adjustment of acquired deferred services revenue	124	124	225
Non-GAAP revenue	<u>\$ 295,610</u>	<u>\$ 322,534</u>	<u>\$ 315,077</u>
GAAP gross margin	\$ 212,781	\$ 241,177	\$ 233,144
Fair value adjustment of acquired deferred revenue	124	124	300
Fair value adjustment to deferred services cost	(58)	(58)	(93)
Stock-based compensation	2,564	2,564	2,419
Amortization of acquired intangible assets included in cost of revenue	6,873	6,873	6,798
Non-GAAP gross margin	<u>\$ 222,284</u>	<u>\$ 250,680</u>	<u>\$ 242,568</u>
GAAP operating income	\$ 9,305	\$ 32,370	\$ 21,547
Fair value adjustment of acquired deferred revenue	124	124	300
Fair value adjustment to deferred services cost	(58)	(58)	(93)
Stock-based compensation	15,234	15,234	16,658
Amortization of acquired intangible assets included in cost of revenue	6,873	6,873	6,798
Amortization of acquired intangible assets	5,920	5,920	7,850
Acquisition-related and other transactional charges included in general and administrative costs	424	424	1,578
Restructuring and other charges, net	(9)	(9)	1,627
Non-GAAP operating income ⁽¹⁾	<u>\$ 37,813</u>	<u>\$ 60,878</u>	<u>\$ 56,265</u>
GAAP net income (loss)	\$ (14,758)	\$ 11,705	\$ 16,997
Fair value adjustment of acquired deferred revenue	124	124	300
Fair value adjustment to deferred services cost	(58)	(58)	(93)
Stock-based compensation	15,234	15,234	16,658
Amortization of acquired intangible assets included in cost of revenue	6,873	6,873	6,798
Amortization of acquired intangible assets	5,920	5,920	7,850
Acquisition-related and other transactional charges included in general and administrative costs	424	424	1,578
Restructuring and other charges, net	(9)	(9)	1,627
Income tax adjustments ⁽²⁾	13,121	1,683	(9,657)
Non-GAAP net income	<u>\$ 26,871</u>	<u>\$ 41,896</u>	<u>\$ 42,058</u>
GAAP diluted earnings (loss) per share	\$ (0.13)	\$ 0.10	\$ 0.14
Fair value adjustment of acquired deferred revenue	-	-	-
Stock-based compensation	0.13	0.13	0.14
Amortization of acquired intangibles	0.11	0.11	0.12
Acquisition-related and other transactional charges	-	-	0.01
Restructuring and other charges, net	-	-	0.02
Income tax adjustments	0.11	0.01	(0.08)
Non-GAAP diluted earnings per share	<u>\$ 0.23</u>	<u>\$ 0.36</u>	<u>\$ 0.36</u>
GAAP diluted weighted average shares outstanding	116,133	117,019	117,500
Dilutive effect of stock-based compensation plans	886	-	-
Non-GAAP diluted weighted average shares outstanding	<u>117,019</u>	<u>117,019</u>	<u>117,500</u>

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

	Three Months Ended		
	June 29, 2019	June 29, 2019	June 30, 2018
	ASC 606	ASC 605	ASC 605
GAAP operating margin	3.1%	10.0%	6.8%
Fair value adjustment of acquired deferred revenue	0.0%	0.0%	0.1%
Fair value adjustment to deferred services cost	0.0%	0.0%	0.0%
Stock-based compensation	5.2%	4.7%	5.3%
Amortization of acquired intangibles	4.3%	4.0%	4.7%
Acquisition-related and other transactional charges	0.1%	0.1%	0.5%
Restructuring and other charges, net	0.0%	0.0%	0.5%
Non-GAAP operating margin	<u>12.8%</u>	<u>18.9%</u>	<u>17.9%</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 also excluded a tax charge of \$0.9M relating to the change in the functional currency of a wholly owned foreign subsidiary.