



PTC PREPARED REMARKS
SECOND QUARTER FISCAL 2019
April 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.

Q2’19 ASC 605 Results vs. January 23, 2019 Guidance

Operating Measures	Guidance		Results
In millions	Q2’19 Low	Q2’19 High	Actual ⁽¹⁾
License and Subscription Bookings	\$107	\$120	\$112
Subscription ACV	\$50	\$55	\$51
Subscription % of Bookings	93%	93%	91%

Financial Measures	GAAP Guidance		GAAP Results	Non-GAAP Guidance		Non-GAAP Results
	Q2’19 Low	Q2’19 High		Q2’19 Low	Q2’19 High	
In millions, except per share amounts						
Subscription Revenue	\$156	\$160	\$162	\$156	\$160	\$162
Perpetual Support Revenue	\$106	\$106	\$104	\$106	\$106	\$104
Total Recurring Revenue	\$262	\$266	\$266	\$262	\$266	\$266
Perpetual License Revenue	\$9	\$10	\$11	\$9	\$10	\$11
Total Software Revenue	\$271	\$276	\$277	\$271	\$276	\$277
Professional Services Revenue	\$39	\$39	\$39	\$39	\$39	\$39
Total Revenue	\$310	\$315	\$315	\$310	\$315	\$316
Operating Expense	\$238	\$241	\$239	\$179	\$182	\$182
Operating Margin	(3%)	(2%)	0%	19%	20%	21%
Tax Rate	30%	30%	(1%)	19%	18%	19%
EPS	(\$0.13)	(\$0.10)	(\$0.10)	\$0.31	\$0.36	\$0.38

⁽¹⁾ Our bookings include a \$7.5 million IoT booking for which the contract terms were approved on March 30, but for which the electronic signature process was not fully complete until the morning of March 31.



Key Highlights of Operating Measures

Operating Measures remain the same under ASC 605 and 605.

In millions	Q2'19	YoY	YoY CC	Management Comments
License and Subscription Bookings ⁽¹⁾	\$112	13%	18%	<ul style="list-style-type: none"> Q2'19 bookings of \$112M was around the midpoint of our guidance range and represents 18% YoY CC growth. Q2 was an exceptionally strong quarter for IoT, surpassing bookings for CAD and PLM for the first time. IoT bookings grew much faster than the market growth rate of 30-40%, even without including the \$7.5M IoT deal. We saw solid growth in PLM sequentially, driven by large deals. Geographically, we saw strength in Europe due to broad based strength in our core business with continued acceleration in IoT. In Q2, we closed approximately 65% of the \$20M of slipped bookings dollars from Q1'19.
Subscription ACV ⁽¹⁾	\$51	32%	38%	<ul style="list-style-type: none"> Q2'19 new subscription ACV of \$51M was within our guidance range and represents strong growth of 38% YoY CC due to broad-based strength across the portfolio.
Subscription % of Bookings ⁽¹⁾	91%			<ul style="list-style-type: none"> Q2'19 subscription mix of 91% was up 1,300 bps from last year and slightly below the guidance of 93% due to modest over achievement on perpetual bookings associated with Kepware. Our subscription transition was completed on 1/1/19.

⁽¹⁾ Our bookings include a \$7.5 million IoT booking for which the contract terms were approved on March 30, but for which the electronic signature process was not fully complete until the morning of March 31.



Q2'19 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	\$135	\$162	(\$27)	<ul style="list-style-type: none"> \$48M of in-quarter revenue acceleration associated with the license portion of subscriptions, offset by \$73M of acceleration of the license portion of subscriptions from prior periods (~\$58M of which impacted retained earnings upon the adoption of ASC 606) and \$2M of activity related to revenue reallocations.
Perpetual Support Revenue	\$104	\$104	-	<ul style="list-style-type: none"> No variance
Perpetual License Revenue	\$10	\$11	(\$1)	<ul style="list-style-type: none"> Not material
Software Revenue	\$250	\$277	(\$27)	<ul style="list-style-type: none"> \$48M of in-quarter revenue acceleration associated with the license portion of subscriptions, offset by \$73M of acceleration of the license portion of subscriptions from prior periods (~\$58M of which impacted retained earnings upon the adoption of ASC 606) and \$2M of activity related to revenue reallocations.
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	\$290	\$315	(\$25)	<ul style="list-style-type: none"> \$48M of in-quarter revenue acceleration associated with the license portion of subscriptions, offset by \$73M of acceleration of the license portion of subscriptions from prior periods (~\$58M of which impacted retained earnings upon the adoption of ASC 606).
<u>Cost of Revenue:</u>				
GAAP	\$80	\$78	\$2	<ul style="list-style-type: none"> Related primarily to 606 professional services deferred costs.
Non-GAAP	\$70	\$68	\$2	
<u>Gross Margin:</u>				
GAAP	72%	75%	(300 bps)	<ul style="list-style-type: none"> Reflects the above differences.
Non-GAAP	76%	78%	(200 bps)	
<u>Operating Expense:</u>				
GAAP	\$233	\$239	(\$6)	<ul style="list-style-type: none"> Reflects pre-10/1/19 commission amortization under 606, offset by deferral of current commission payments under 606.
Non-GAAP	\$176	\$182	(\$6)	
<u>Operating Margin:</u>				
GAAP	(8%)	0%	800 bps	<ul style="list-style-type: none"> Reflects the above differences.
Non-GAAP	15%	21%	(600 bps)	
<u>Tax Rate:</u>				
GAAP	(30%)	(1%)	2900 bps	<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	24%	19%	500 bps	
Shares Outstanding	118	118	-	<ul style="list-style-type: none"> No variance
<u>EPS:</u>				
GAAP	(\$0.37)	(\$0.10)	\$0.27	<ul style="list-style-type: none"> Reflects the differences above.
Non-GAAP	\$0.22	\$0.38	(\$0.16)	
Free Cash Flow	\$120	\$120	-	<ul style="list-style-type: none"> No variance
Adjusted Free Cash Flow	\$130	\$130	-	



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	Q2'19	YoY	YoY CC	Management Comments
Software Revenue	\$277	6%	8%	<ul style="list-style-type: none"> Software revenue growth of 8% YoY CC was driven by 14% CC growth in recurring software revenue. Software revenue was negatively impacted by the 1,300 bps increase in subscription mix YoY, which negatively impacted software revenue growth rates by ~500 bps.
Total Revenue	\$315	2%	6%	<ul style="list-style-type: none"> Total revenue growth of 6% YoY CC was impacted by the subscription mix shift referenced above as well as our strategy of leveraging our services partner ecosystem, which led to a 15% decline in professional services revenue YoY.
EPS: GAAP	(\$0.10)	NM	NM	<ul style="list-style-type: none"> GAAP EPS declined by \$0.17 YoY in Q2'19 due to an increase in stock compensation and restructuring charges. Non-GAAP EPS increased by \$0.04 YoY in Q2'19, due to the combination of revenue growth and disciplined expense management. Non-GAAP EPS was negatively impacted by the 1,300 bps increase in subscription mix, which negatively impacted EPS by approximately \$0.11 YoY.
Non-GAAP	\$0.38	11%	18%	
Free Cash Flow	\$120	13%	NA	<ul style="list-style-type: none"> Free cash flow was \$120M, as expected, and included \$10M of cash payments for the quarter under our restructuring plan inclusive of our headquarters relocation. Adjusted free cash flow excludes the \$10M of cash payments for the quarter under our restructuring plan inclusive of our headquarters relocation.
Adjusted Free Cash Flow	\$130	21%	NA	



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	Q2'19	YoY	YoY CC	Management Comments
Solutions Software Revenue	\$240	3%	6%	<ul style="list-style-type: none"> Total Solutions software revenue growth of 6% YoY CC was driven by strength in recurring software revenue, which grew 12% YoY CC, representing 3 quarters of continued acceleration. A 1,600 bps increase in subscription mix partially offset the growth in recurring software revenue.
IoT Software Revenue	\$37	27%	30%	<ul style="list-style-type: none"> IoT software revenue grew 30% CC YoY, driven by 48% YoY CC growth in IoT subscription revenue. A 1,000 bps increase in subscription mix partially offset the growth in recurring software revenue. Recurring IoT software revenue growth reflects continued strong IoT bookings growth over the past several years. Q2'19 was a very strong quarter for new IoT bookings, which surpassed CAD and PLM bookings for the first time.

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	Q2'19	YoY	YoY CC	Management Comments
Americas Software Revenue	\$126	11%	11%	<ul style="list-style-type: none"> Software revenue grew 11% with notable strength in subscription revenue.
Europe Software Revenue	\$104	6%	12%	<ul style="list-style-type: none"> Software revenue grew 12% YoY CC; driven by notable strength in subscription revenue.
APAC Software Revenue	\$47	(8%)	(5%)	<ul style="list-style-type: none"> APAC software revenue declined 5% YoY CC due to an 85% decline in perpetual license revenue following the end of life of perpetual licenses on 1/1/19. APAC recurring software revenue grew 22% 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	Q2'19	Management Comments
<u>Operating Expense:</u> GAAP Non-GAAP	 \$239 \$182	<ul style="list-style-type: none"> • GAAP and Non-GAAP operating expenses were within our guidance range. • GAAP operating expenses included a \$27 million restructuring charge related to exiting our headquarters in Needham.
<u>Operating Margin:</u> GAAP Non-GAAP	 0% 21%	<ul style="list-style-type: none"> • GAAP operating margin and Non-GAAP operating margin were 200 bps and 100 bps, respectively, above the high end of our guidance range due to higher revenue and tighter spending control in both COGS and Opex. • Adjusting mix to the Q2'18 level (1,300 bps lower), non-GAAP operating margin would have been 25%, up over 700 bps YoY CC.
<u>Tax Rate:</u> GAAP Non-GAAP	 (1%) 19%	<ul style="list-style-type: none"> • GAAP tax rate of (1%) vs. guide of 30%. • Non-GAAP tax rate was within the guidance range.



Other Highlights in Quarterly and Annual Operating Performance

- For Q2'19, ASC 605 annualized recurring revenue (ARR) was approximately \$1,065 million, which grew 11% or \$104 million year-over-year and grew 15% year over year on a constant currency basis. ASC 605 ARR has now grown double-digits for nine consecutive quarters.
- Total deferred revenue consists of billed deferred revenue and unbilled deferred revenue. In Q2'19, total deferred revenue grew \$61 million year over year, despite a 400 bps Fx headwind. 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 the majority of our renewals have been for a one-year term, in anticipation of the 10/1/18 subscription price increase – the first such increase since the beginning of our subscription transition in FY'16. Renewing a multi-year subscription contract with a 1-year renewal term reduces the growth in total deferred revenue. We intend to begin multi-year renewals as we exit this fiscal year; such renewals will still have annual up-front cash remittances. 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.

(in millions)	Q2'19 3/30/19	Q1'19 12/29/18	Q2'18 3/31/18
ASC 605 Billed Deferred Revenue	\$554	\$493	\$498
ASC 605 Unbilled Deferred Revenue	\$769	\$864	\$765
ASC 605 Total Deferred Revenue	\$1,323	\$1,357	\$1,262

- Billed deferred revenue grew 11% year-over-year, despite a 400 bps Fx headwind. 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. Q2'19 ended on March 30th while Q2'18 ended on March 31st.
- Unbilled deferred revenue grew 1% year-over-year, despite a 400 bps Fx headwind. 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 majority of our renewals have been for a one-year term, in anticipation of the 10/1/18 subscription price increase – the first such increase since the beginning of our subscription transition in fiscal'16. Renewing a multi-year subscription contract with a 1-year renewal term reduces the growth in unbilled deferred revenue. We intend to begin multi-year renewals as we exit this fiscal year; such renewals will still have annual up-front cash remittances. Also, 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 \$351 million as of March 30, 2019. In Q2, we used \$65 million to repurchase 725,000 shares at an average price of \$89.60.
- As of March 30, 2019, gross borrowings totaled \$743 million, including \$500 million of senior notes and \$243 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 Q2'19 was 2.1. As of March 30, 2019, we had approximately \$441 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.



Q3'19 and FY'19 Guidance

Our Q3'19 and FY'19 guidance includes the following general considerations:

- 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 bps headwind to our reported bookings and revenue growth for the full year. Currency movements since we last provided guidance on January 24, 2019 have negatively impacted our full year bookings guidance by \$1.4 million.
- As part of our go-to-market transformation, we had planned for a certain level of new IOT and AR sales capacity to support accelerating market demand. Given the extremely tight labor market, particularly within enterprise software, competition for top sales talent is extending recruitment times, which has put us a bit behind on our hiring plans by about 30 quota-carrying sales reps, and thereby modestly impacting our bookings plans for the back half of FY'19. However, we still forecast IoT bookings to grow at the high end of the 30-40% market growth rate.
- At the beginning of the fiscal year we made the strategic decision to begin managing several more of our smaller mature businesses within our Productivity Zone. Businesses in the Productivity Zone are managed 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 set of targeted 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.
- Our FY'19 bookings guidance growth range of 7% to 11% YoY CC assumes the following:
 - IoT (inclusive of AR), which comprised approximately 25% of our FY'18 bookings, are expected to be at or near the high-end of the estimated market growth rate of 30-40%.
 - CAD and Core PLM, which together comprised approximately 60% of our FY'18 bookings, are expected to grow in the 6-8% range YoY CC.
 - Our Productivity Zone businesses, which now include ALM and parts of SLM, which in total comprised a mid-teens percentage of our FY'18 bookings, are expected to be down about 35% YoY CC in FY'19. We had planned bookings in the Productivity Zone to be down materially in FY'19, as part of our portfolio management process. We now expect a larger decline of approximately \$8 million. We now expect our Productivity Zone businesses will represent only a high-single digit percentage of our total FY'19 bookings.
 - Note that our second-half estimated growth rates approximate our first-half performance, where core CAD and PLM grew in the high single digits YoY CC, IoT, inclusive of AR, grew at the higher end of the 30-40% market growth rate YoY CC, and our Productivity Zone businesses declined just above the mid-30% range YoY CC.

Q3'19 and FY'19 Operating Guidance-ASC 606 and ASC 605

Operating Measures remain the same under ASC 605 and 605

In millions	Q3'19 Low	Q3'19 High	FY'19 Low	FY'19 High	Management Comments
Subscription ACV	\$51	\$55	\$207	\$217	<ul style="list-style-type: none"> • We decreased FY'19 guidance by ~8M at the midpoint, based on sales capacity headwinds described above and slightly lower bookings from parts of our mature SLM and ALM businesses where our strategy has changed.
Total Bookings	\$110	\$120	\$485	\$505	<ul style="list-style-type: none"> • We are decreasing our total booking guidance for FY'19 by \$15M. About ½ of the decrease is due to less sales capacity headwinds above and ½ slightly lower bookings from parts of our mature SLM and ALM businesses where our strategy has changed. • Fx since providing guidance on 1/24/19 negatively impacted our full year FY'19 guidance by \$1.4 million. • FY'19 bookings guidance is up 7% to 11% YoY CC compared to FY'18.
Subscription % of Bookings	92%	92%	86%	86%	<ul style="list-style-type: none"> • We continue to expect 86% 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 94% in Q4.



Q3 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⁾	Q3'19 Low	Q3'19 High	FY'19 Low	FY'19 High
Total Subscription Revenue	\$138	\$147	\$596	\$616
Perpetual Support Revenue	\$100	\$103	\$419	\$424
Total Recurring Revenue	\$238	\$250	\$1,015	\$1,040
Perpetual License Revenue	\$9	\$10	\$70	\$73
Total Software Revenue	\$247	\$260	\$1,084	\$1,112
Professional Services Revenue	\$41	\$43	\$166	\$168
Total Revenue	\$288	\$303	\$ 1,250	\$ 1,280
Operating Expense (GAAP)	\$211	\$212	\$ 886	\$ 890
Operating Expense (Non-GAAP)	\$180	\$182	\$715	\$718
Operating Margin (GAAP)	(1%)	4%	3%	6%
Operating Margin (Non-GAAP)	13%	17%	20%	22%
Tax Rate (GAAP)	(50%)	(50%)	(60%)	(60%)
Tax Rate (Non-GAAP)	18%	18%	19%	18%
Shares Outstanding	118	118	118	118
EPS (GAAP)	(\$0.15)	\$0.03	\$ 0.02	\$ 0.44
EPS (Non-GAAP)	\$0.20	\$0.30	\$1.45	\$ 1.70
Free Cash Flow			\$ 265	\$ 275
Adjusted Free Cash Flow			\$ 290	\$ 300

⁽¹⁾The third 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. From a cash perspective, the free rent and estimated sublease income over the first 18 months on our Seaport headquarters total approximately \$30 million, as compared to the estimated cash outflows of \$34 million on the Needham headquarters facility, which will be incurred over the next 44 months.

<i>In millions</i>	Q3'19	FY'19
Effect of acquisition accounting on fair value of acquired deferred revenue	\$0	\$1
Acquisition-related charges	-	1
Restructuring and headquarters relocation charges ⁽¹⁾	-	45
Intangible asset amortization expense	13	51
Stock-based compensation expense	28	114
Total Estimated Pre-Tax GAAP adjustments	\$41	\$212

⁽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.



Q3'19 and FY'19 Financial Guidance – ASC 605

In millions	Q3'19 Low	Q3'19 High	FY'19 Low	FY'19 High	Management Comments
Subscription Revenue	\$166	\$170	\$664	\$670	<ul style="list-style-type: none"> We decreased guidance by ~\$6M at the midpoint, \$2M driven by Fx, with the remainder driven by lower subscription bookings guidance. FY'19 guidance is up 42% to 44% YoY CC compared to FY'18. Q3'19 guidance is up 34% to 37% YoY CC compared to Q3'18.
Perpetual Support Revenue	\$105	\$105	\$424	\$425	<ul style="list-style-type: none"> We decreased FY'19 guidance by \$7M at the midpoint, driven by support conversions and ~\$2M Fx.
Total Recurring Software Revenue	\$271	\$275	\$1,088	\$1,095	<ul style="list-style-type: none"> We decreased FY'19 guidance by \$13M at the midpoint to reflect ~\$4M of Fx and slightly lower expected subscription bookings FY'19 guidance is up 14% to 15% YoY CC compared to FY'18. Recurring software revenue is expected to be 94% of total software revenue for the year. Q3'19 guidance is up 11% to 13% YoY CC compared to Q3'18.
Perpetual License Revenue	\$9	\$10	\$70	\$73	<ul style="list-style-type: none"> We increased FY'19 guidance by \$3M, driven by Kepware. FY'19 guidance is down 33% YoY CC at the midpoint compared to FY'18 due to the end of life of perpetual licenses. Q3'19 guidance is down 65% YoY CC at the midpoint compared to Q3'18 due to the end of life of perpetual licenses as of January 1, 2019, with Kepware being the primary exception.
Software Revenue	\$280	\$285	\$1,158	\$1,168	<ul style="list-style-type: none"> We decreased the FY'19 guidance by \$10M at the midpoint, driven by Fx of \$4M and based upon our outlook for the remainder of the year for bookings. FY'19 guidance is up 9% to 10% YoY CC compared to FY'18 despite a higher subscription mix of 1,000 bps, and recurring software revenue is expected to be up 14% to 15% YoY CC compared to FY'18. Q3'19 guidance is up 4% to 6% YoY CC compared to Q3'18, despite a 1400 bps higher subscription mix, and expected recurring software revenue is up 11% to 13% YoY CC compared to Q3'18.
Professional Services Revenue	\$40	\$40	\$155	\$157	<ul style="list-style-type: none"> We decreased the FY'19 guidance by \$3M, based on Q2'19 performance and our outlook for the remainder of the year. FY'19 guidance is down ~5% YoY CC 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. Q3'19 guidance is down ~4% YoY compared to Q3'18.
Total Revenue	\$320	\$325	\$1,313	\$1,325	<ul style="list-style-type: none"> We decreased FY'19 guidance by \$12M-\$15M, driven by Fx of \$4M, lower professional services of \$3M, and the remainder is lower expected software revenue as described above. FY'19 guidance is up 7% to 8% YoY CC compared to FY'18, despite a 1,000 bps increase in the subscription mix. Q3'19 guidance is up 3% to 5% YoY CC compared to Q3'18, despite a 1,400 bps increase in the subscription mix.



Q3'19 and FY'19 Financial Guidance – ASC 605, Continued⁽¹⁾

In millions	Q3'19 Low	Q3'19 High	FY'19 Low	FY'19 High	Management Comment
Operating Expense: GAAP Non-GAAP	\$221	\$223	\$912	\$917	<ul style="list-style-type: none"> GAAP Operating Expense guidance has been decreased by \$11M due to effective cost discipline. We decreased FY'19 non-GAAP operating expense guidance by \$8M, due to effective cost discipline. FY'19 non-GAAP operating expense guidance is up 3% YoY CC compared to FY'18. Our long-term model targets non-GAAP operating expense growth about half of bookings growth, FY'19 growth is below that range.
	\$190	\$192	\$740	\$745	
Operating Margin: GAAP Non-GAAP	5%	7%	6%	7%	<ul style="list-style-type: none"> In Q2'19, we recorded a restructuring charge related to our Needham, MA facility of \$27M. 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 outflow of \$34 million on the Needham facility. We are maintaining our FY'19 non-GAAP operating margin guidance. FY'19 non-GAAP operating margin guidance is up ~400 bps YoY, despite a 1,000 bps increase in subscription mix.
	18%	19%	23%	23%	
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.
	19%	18%	19%	18%	
Shares Outstanding:	118	118	118	118	<ul style="list-style-type: none"> Both GAAP and non-GAAP guidance are based on current estimates.
EPS: GAAP Non-GAAP	\$0.03	\$0.07	\$0.25	\$0.32	<ul style="list-style-type: none"> We are maintaining our FY'19 non-GAAP EPS guidance based on Q2'19 performance and current estimates. FY'19 non-GAAP EPS guidance is up 25% to 32% YoY CC compared to FY'18. Q3'19 non-GAAP EPS guidance is flat at the high end of the guidance range compared to Q3'18, despite the 1,400 bps higher subscription mix.
	\$0.31	\$0.36	\$1.75	\$1.85	
Free Cash Flow Adjusted Free Cash Flow			\$265	\$275	<ul style="list-style-type: none"> FY'19 Free Cash Flow remains unchanged. We continue to expect capex of around \$40 million, net of tenant improvement reimbursements on our Boston HQ and we expect overall capex to decline back down to historical levels of around \$30M in FY'20. Guidance also includes approximately \$25M of cash payments for restructuring, ~\$16M related to workforce realignment and ~\$9M of net cash payments related to our Needham facility lease, all of which are excluded from Adjusted Free Cash Flow guidance.
			\$290	\$300	



The third 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. From a cash perspective, the free rent and estimated sublease income over the first 18 months on our Seaport headquarters total approximately \$30 million, as compared to the estimated cash outflows of \$34 million on the Needham headquarters facility, which will be incurred over the next 44 months.

<i>In millions</i>	Q3'19	FY'19
Effect of acquisition accounting on fair value of acquired deferred revenue	\$0	\$1
Acquisition-related charges	-	1
Restructuring and headquarters relocation charges ⁽¹⁾	-	45
Intangible asset amortization expense	13	51
Stock-based compensation expense	28	114
Total Estimated Pre-Tax GAAP adjustments	\$41	\$212

⁽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 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 Q1'19 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 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 transaction (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) 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 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 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" 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) business and Augmented Reality business, 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		
	March 30, 2019	March 30, 2019	March 31, 2018
	ASC 606	ASC 605	ASC 605
GAAP revenue	\$ 290,451	\$ 315,499	\$ 307,883
Fair value adjustment of acquired deferred subscription revenue	-	-	75
Fair value adjustment of acquired deferred services revenue	198	198	233
Non-GAAP revenue	<u>\$ 290,649</u>	<u>\$ 315,697</u>	<u>\$ 308,191</u>
GAAP gross margin	\$ 210,547	\$ 237,532	\$ 224,175
Fair value adjustment of acquired deferred revenue	198	198	308
Fair value adjustment to deferred services cost	(77)	(77)	(96)
Stock-based compensation	3,112	3,112	2,767
Amortization of acquired intangible assets included in cost of revenue	6,842	6,842	6,556
Non-GAAP gross margin	<u>\$ 220,622</u>	<u>\$ 247,607</u>	<u>\$ 233,710</u>
GAAP operating income (loss)	\$ (22,858)	\$ (1,572)	\$ 22,210
Fair value adjustment of acquired deferred revenue	198	198	308
Fair value adjustment to deferred services cost	(77)	(77)	(96)
Stock-based compensation	26,967	26,967	17,026
Amortization of acquired intangible assets included in cost of revenue	6,842	6,842	6,556
Amortization of acquired intangible assets	5,930	5,930	7,895
Acquisition-related and other transactional charges included in general and administrative costs	372	372	133
Restructuring and other charges, net	26,980	26,980	114
Non-GAAP operating income ⁽¹⁾	<u>\$ 44,354</u>	<u>\$ 65,640</u>	<u>\$ 54,146</u>
GAAP net income (loss)	\$ (43,513)	\$ (12,030)	\$ 7,922
Fair value adjustment of acquired deferred revenue	198	198	308
Fair value adjustment to deferred services cost	(77)	(77)	(96)
Stock-based compensation	26,967	26,967	17,026
Amortization of acquired intangible assets included in cost of revenue	6,842	6,842	6,556
Amortization of acquired intangible assets	5,930	5,930	7,895
Acquisition-related and other transactional charges included in general and administrative costs	372	372	133
Restructuring and other charges, net	26,980	26,980	114
Income tax adjustments ⁽²⁾	2,138	(10,399)	(80)
Non-GAAP net income	<u>\$ 25,837</u>	<u>\$ 44,783</u>	<u>\$ 39,778</u>
GAAP diluted earnings (loss) per share	\$ (0.37)	\$ (0.10)	\$ 0.07
Fair value adjustment of acquired deferred revenue	-	-	-
Stock-based compensation	0.23	0.23	0.14
Amortization of acquired intangibles	0.11	0.11	0.12
Acquisition-related and other transactional charges	-	-	-
Restructuring and other charges, net	0.23	0.23	-
Income tax adjustments	0.02	(0.09)	-
Non-GAAP diluted earnings per share	<u>\$ 0.22</u>	<u>\$ 0.38</u>	<u>\$ 0.34</u>
GAAP diluted weighted average shares outstanding	118,461	118,461	117,905
Dilutive effect of stock-based compensation plans	881	881	-
Non-GAAP diluted weighted average shares outstanding	<u>119,342</u>	<u>119,342</u>	<u>117,905</u>

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

	Three Months Ended		
	March 30, 2019	March 30, 2019	March 31, 2018
	ASC 606	ASC 605	ASC 605
GAAP operating margin	-7.9%	-0.5%	7.2%
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	9.3%	8.5%	5.5%
Amortization of acquired intangibles	4.4%	4.0%	4.7%
Acquisition-related and other transactional charges	0.1%	0.1%	0.0%
Restructuring and other charges, net	9.3%	8.6%	0.0%
Non-GAAP operating margin	<u>15.3%</u>	<u>20.8%</u>	<u>17.6%</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.