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Applying the Revenue Standard to Cloud Conversion or Switching Rights

The Bottom Line

- As customers of software entities accelerate their digital transformation by moving many of their on-premise software solutions to the cloud, numerous software entities are enabling customers to convert their existing on-premise software licenses to cloud-based or hosted software solutions (e.g., software as a service [SaaS]).
- Software arrangements vary in the types of cloud conversion or switching rights provided to customers, and the accounting for a particular arrangement will depend on the specific complexities involved. This publication highlights potential accounting models that software entities may consider in accounting for certain cloud conversion or switching rights.
- If an entity's software arrangement provides (or is subsequently modified to provide) a customer with a nonexclusive on-premise term-based software license and a cloud conversion right, the entity may generally consider the guidance in the revenue standard (ASC 606[1]) on material rights or a right of return. On the other hand, if an entity's software arrangement provides a customer with a nonexclusive on-premise term-based software license without a cloud conversion right but is subsequently modified to convert the on-premise software license to a SaaS arrangement, the entity may generally consider whether the modification should be accounted for solely prospectively or as a return. Further, if an entity's software arrangement provides a customer with cloud mixing rights that allow the customer to use a nonexclusive licensed software product on both an on-premise basis and a cloud basis, subject to a cap on the total number of users (also referred to as "seats"), the entity may consider whether it has two performance obligations (i.e., a promise to provide the right to use on-premise software and a promise to stand ready to provide SaaS).

[1] For titles of *FASB Accounting Standards Codification* (ASC) references, see Deloitte's "Titles of Topics and Subtopics in the *FASB Accounting Standards Codification*."

Beyond the Bottom Line

This publication assumes that an entity has adopted the revenue standard (ASC 606). For public entities, ASC 606 is effective for annual reporting periods beginning after December 15, 2017. The standard is effective for all other entities for annual reporting periods beginning after December 15, 2018, or December 15, 2019.[2] Early adoption is permitted for annual reporting periods beginning after December 15, 2016.

While ASC 606 will affect organizations differently depending on their facts and circumstances, we have identified certain aspects of its application that are especially challenging for software entities. This *Technology Spotlight* is intended to help software entities better understand how to apply the revenue standard when accounting for arrangements that enable customers to convert their on-premise software licenses to cloud-based or hosted software solutions.

Background

Some entities in the software industry enter into contracts that include (or are subsequently modified to include) an option that allows the customer to convert from an on-premise license arrangement to a cloud-based arrangement under which the software is hosted (e.g., SaaS). This issue has become more prevalent because customers of software entities frequently migrate from on-premise software solutions to cloud-based platforms. Often, when a customer converts from an on-premise software arrangement to a SaaS arrangement, the customer will lose or forfeit its rights to the on-premise version of the software. Views differ on how to account for the revocation of the initial licensing rights and the conversion to a hosted solution.

At its May 8, 2019, meeting, the FASB decided to add to the technical agenda of its Emerging Issues Task Force (EITF or "Task Force") a project[3] on contract modifications of licenses of intellectual property. The Board included two issues within the scope of the project. One of those issues, which is the focus of this *Technology Spotlight*, is the accounting for situations in which licensing rights are revoked, including the conversion of on-premise term-based software licenses to cloud-based arrangements.[4] At the March 11, 2021, EITF meeting, the Task Force decided to remove the project from its agenda and refer the project back to the Board. On March 24, 2021, the Board decided to remove the project from its agenda and consider the project as part of its postimplementation review of ASC 606.

Interpretive Guidance

From inception or after modification, a software arrangement may include a feature that allows a customer to convert a nonexclusive on-premise term-based software license to a cloud-based or hosted software solution (e.g., a SaaS arrangement)[5] for the same software (i.e., software with the same functionality and features). An entity may also modify a nonexclusive on-premise term-based software arrangement to immediately convert it to a SaaS arrangement. Further, an entity's software arrangement may allow a customer to (1) deploy a certain number of licenses to software (e.g., 1,000 seats) and (2) use discretion to determine how many licenses to deploy on an on-premise basis or as SaaS at any point in time or at discrete points in time during the arrangement term. Cloud conversion or switching

[2] In June 2020, the FASB issued Accounting Standards Update (ASU) No. 2020-05, *Revenue From Contracts With Customers (Topic 606) and Leases (Topic 842): Effective Dates for Certain Entities*. The ASU permits nonpublic entities that have not yet issued their financial statements or made financial statements available for issuance as of June 3, 2020, to adopt ASC 606 for annual reporting periods beginning after December 15, 2019, and for interim reporting periods within annual reporting periods beginning after December 15, 2020. Since the deferral is not mandatory, nonpublic entities may still elect to adopt ASC 606 in accordance with previous guidance (i.e., for annual reporting periods beginning after December 15, 2018, and for interim reporting periods within annual reporting periods beginning after December 15, 2019).

[3] EITF Issue No. 19-B, "Revenue Recognition — Contract Modifications of Licenses of Intellectual Property."

[4] The other issue is the accounting for a contract modification in which the contract term for existing licensing rights is extended (i.e., renewed) and additional rights are purchased as part of that modification.

[5] In this publication, it is assumed that the SaaS arrangement is accounted for as a service contract because the customer does not have the ability to take possession of the underlying software on an on-premise basis in accordance with the requirements of ASC 985-20-15-5.

rights vary widely in practice, and the determination of the appropriate accounting for an arrangement that provides for such rights will depend on the particular complexities involved.

In accordance with the guidance in ASC 606, revenue from on-premise software licenses is typically recognized at the point in time when both (1) the entity provides (or otherwise makes available) a copy of the software to the customer and (2) the period in which the customer is able to use and benefit from the license has begun. Revenue from a SaaS arrangement is typically recognized over time because the performance obligation is likely to meet the conditions for such recognition, particularly if the SaaS is a stand-ready obligation. While ASC 606 includes guidance on contract modifications,[6] material rights,[7] and sales with a right of return,[8] it does not directly address transactions in which a nonexclusive software license is revoked or converted to a SaaS arrangement. As a result, there are diverse views on the accounting for such arrangements, particularly those in which a nonexclusive on-premise software license for which revenue is recognized at a point in time is converted to a SaaS arrangement for the same underlying software product for which revenue is recognized over time.

In the absence of additional standard setting, we believe that there could be more than one acceptable accounting model for certain types of cloud conversion or switching arrangements. The sections below provide illustrative examples of such arrangements and discuss views on how entities may account for them. However, the examples are not all-inclusive, and entities should carefully consider their specific facts and circumstances in determining the appropriate accounting model. In addition, the accounting views discussed for each example may not necessarily be the only methods that are acceptable.

Initial Contract Includes a Cloud Conversion Right

Example 1 below illustrates an initial nonexclusive on-premise term-based software license contract that includes the right to convert the on-premise software license to a SaaS arrangement.

Example 1

On January 1, 20X0, Entity A enters into a noncancelable two-year contract with a customer for an up-front fee of $1 million to provide a nonexclusive on-premise software license with maintenance or postcontract customer support (PCS) for 100 seats and a right to convert any of the on-premise license seats to a SaaS arrangement at the beginning of the second year (i.e., January 1, 20X1). The SaaS has the same functionality and features as the on-premise software but would be hosted by A instead of being provided on an on-premise basis. Upon exercise of the conversion right, the customer would be required to forfeit the on-premise software license seats and related PCS, and the conversion is irrevocable (i.e., the customer cannot convert back to an on-premise software license). Upon conversion, the customer would be required to pay an incremental fee of $500 per seat and would receive a credit for a pro rata portion of the "unused" on-premise software license and related PCS to apply to the price the customer would pay for the SaaS.

[6] See ASC 606-10-25-10 through 25-13.
[7] See ASC 606-10-55-41 through 55-45.
[8] See ASC 606-10-55-22 through 55-29.

Example 1 (continued)

Entity A has similar arrangements with other customers and expects the customer to convert 50 seats at the beginning of the second year. The stand-alone selling prices (SSPs) are as follows:

Performance Obligation	SSP
On-premise software license	$4,000 per seat per year
PCS	$1,000 per seat per year
SaaS	$5,500 per seat per year

Alternative 1A — Material Right Model (Preferred View)

Under this alternative, an entity should determine whether the conversion right represents a material right. ASC 606-10-55-42 through 55-44 state the following:

> **55-42** If, in a contract, an entity grants a customer the option to acquire additional goods or services, that option gives rise to a performance obligation in the contract only if the option provides a material right to the customer that it would not receive without entering into that contract (for example, a discount that is incremental to the range of discounts typically given for those goods or services to that class of customer in that geographical area or market). If the option provides a material right to the customer, the customer in effect pays the entity in advance for future goods or services, and the entity recognizes revenue when those future goods or services are transferred or when the option expires.
>
> **55-43** If a customer has the option to acquire an additional good or service at a price that would reflect the standalone selling price for that good or service, that option does not provide the customer with a material right even if the option can be exercised only by entering into a previous contract. In those cases, the entity has made a marketing offer that it should account for in accordance with the guidance in this Topic only when the customer exercises the option to purchase the additional goods or services.
>
> **55-44** Paragraph 606-10-32-29 requires an entity to allocate the transaction price to performance obligations on a relative standalone selling price basis. If the standalone selling price for a customer's option to acquire additional goods or services is not directly observable, an entity should estimate it. That estimate should reflect the discount that the customer would obtain when exercising the option, adjusted for both of the following:
>
> a. Any discount that the customer could receive without exercising the option
>
> b. The likelihood that the option will be exercised.

Under the material right guidance, an entity provides a material right if the customer has the option to purchase the SaaS at a discount that is incremental to the range of discounts typically provided for the SaaS to that class of customer in similar circumstances. Any incremental fee the customer is required to pay to exercise the conversion right is compared with the SSP of the SaaS. While the customer may receive a credit for the "unused" portion of the on-premise term-based software license and related PCS, only the incremental fee to exercise the right is considered. This is because under Alternative 1A, a nonexclusive on-premise term-based software license is not subject to the right of return guidance since the entity does not receive an asset back when the right is exercised (i.e., there is no return of an asset).[9] That is, the entity is not compensated with an asset of any value as a result of the conversion since it can replicate a nonexclusive software license for sale to any of its customers for a nominal cost. If the incremental fee that the customer is required to pay to convert to the SaaS reflects the SSP of the SaaS, no material right exists under ASC 606-10-55-43. Instead, the conversion right is accounted for only if and when it is exercised. On the other hand, if the conversion right represents a material right because the incremental fee

[9] This alternative view is consistent with the accounting for on-premise term-based software licenses that enable the customer to terminate the license agreement without penalty. For example, if a customer paid for a one-year on-premise term-based software license but had the ability to cancel the arrangement for a pro rata refund with 30 days' notice, the term of the initial arrangement would be 30 days, with optional renewals thereafter. In those circumstances, the right of return guidance would not be applied.

is less than the SSP of the SaaS, that material right would be accounted for as a separate performance obligation. In accordance with ASC 606-10-55-44, the entity would estimate the SSP of the material right as the discount the customer would obtain when exercising the material right, adjusted for any discount the customer could receive without exercising the option and the likelihood that the option will be exercised. If the conversion option is exercised, the amount allocated to the material right plus any incremental fee paid would generally be recognized over the remaining term of the SaaS (and the PCS if not all licenses are converted).

In Example 1 above, A would need to assess whether the option to receive the SaaS at a discount represents a material right. Because the incremental fee to be paid by the customer of $500 per seat per year is significantly less than the SSP for the SaaS of $5,500 per seat per year, A would conclude that a material right exists at contract inception. Entity A could estimate the material right's SSP as the $5,000 per seat per year discount ($5,500 SaaS SSP − $500 incremental fee to be paid), adjusted for the likelihood that the option will be exercised.[10] We believe that it would also be acceptable for A to estimate the SSPs of the on-premise software license and the PCS by applying a similar adjustment for the likelihood that the option will be exercised (which could truncate the term of the on-premise software license and the PCS). For example, A might estimate the SSPs of the on-premise software license and the PCS under the assumption that 50 seats of the license and related PCS will have only a one-year term if customers are expected to convert half the seats of the license to SaaS after one year.

Assume that A determines that the relative SSP allocation of the transaction price results in allocations to the on-premise software license, PCS for 20X0, PCS for 20X1, and the material right of $600,000, $100,000, $50,000, and $250,000, respectively.[11] Entity A will recognize $600,000 of revenue on January 1, 20X0, for the on-premise software license and $100,000 for PCS ratably over 20X0. Revenue is deferred for the $50,000 allocated to PCS for 20X1 and the $250,000 allocated to the material right, and those amounts are recognized as contract liabilities. If the customer elects to exercise the conversion right on 100 seats on January 1, 20X1, A would assess its policy for accounting for the exercise of an option that includes a material right and apply either of the following:

- *Separate contract model* — The remaining unrecognized revenue of $50,000 related to PCS is recognized immediately since PCS for all 100 seats is forfeited and therefore will not be provided in 20X1. Revenue of $300,000, which is calculated by adding the material right allocation of $250,000 and the incremental fee of $50,000 ($500 incremental fee × 100 seats), is recognized over the remaining one-year SaaS term.
- *Contract modification model* — Revenue of $350,000, which is calculated by adding the remaining unrecognized revenue of $50,000 related to PCS, the material right allocation of $250,000, and the incremental fee of $50,000, is recognized over the remaining one-year SaaS term.

Alternative 1A may be less costly to implement than Alternative 1B below because the SSP of the material right is estimated only at contract inception and is not subsequently revised. In addition, because the right of return model is not applied, the variable consideration constraint would likewise not be applicable. Therefore, revenue recognition could potentially be less volatile under the material right model than under the right of return model discussed below.

[10] While the material right's SSP could be adjusted for any discount the customer could receive without exercising the option, this example assumes that the customer could not receive a discount without exercising the option.

[11] The allocation of the transaction price based on relative SSP is included for illustrative purposes only and uses simplistic assumptions; judgment will be required to determine SSPs in this and similar fact patterns.

Alternative 1B — Right of Return Model (Acceptable View)

Under this alternative, an entity applies the right of return guidance when accounting for the potential that a nonexclusive on-premise term-based software license will be converted to a SaaS arrangement. ASC 606-10-55-22 through 55-26 state the following:

> **55-22** In some contracts, an entity transfers control of a product to a customer and also grants the customer the right to return the product for various reasons (such as dissatisfaction with the product) and receive any combination of the following:
>
> a. A full or partial refund of any consideration paid
>
> b. A credit that can be applied against amounts owed, or that will be owed, to the entity
>
> c. Another product in exchange.
>
> **55-23** To account for the transfer of products with a right of return (and for some services that are provided subject to a refund), an entity should recognize all of the following:
>
> a. Revenue for the transferred products in the amount of consideration to which the entity expects to be entitled (therefore, revenue would not be recognized for the products expected to be returned)
>
> b. A refund liability
>
> c. An asset (and corresponding adjustment to cost of sales) for its right to recover products from customers on settling the refund liability.
>
> **55-24** An entity's promise to stand ready to accept a returned product during the return period should not be accounted for as a performance obligation in addition to the obligation to provide a refund.
>
> **55-25** An entity should apply the guidance in paragraphs 606-10-32-2 through 32-27 (including the guidance on constraining estimates of variable consideration in paragraphs 606-10-32-11 through 32-13) to determine the amount of consideration to which the entity expects to be entitled (that is, excluding the products expected to be returned). For any amounts received (or receivable) for which an entity does not expect to be entitled, the entity should not recognize revenue when it transfers products to customers but should recognize those amounts received (or receivable) as a refund liability. Subsequently, at the end of each reporting period, the entity should update its assessment of amounts for which it expects to be entitled in exchange for the transferred products and make a corresponding change to the transaction price and, therefore, in the amount of revenue recognized.
>
> **55-26** An entity should update the measurement of the refund liability at the end of each reporting period for changes in expectations about the amount of refunds. An entity should recognize corresponding adjustments as revenue (or reductions of revenue).

Under Alternative 1B, an on-premise software license is generally treated like a tangible product, and the right of return guidance applies to the exchange of a product for another product in accordance with ASC 606-10-55-22(c). However, while an entity would generally record an asset for its right to recover a tangible product, an entity would not record an asset for its right to recover a nonexclusive software license in accordance with ASC 606-10-55-23(c) since the returned license has no value to the entity. Therefore, in applying the right of return guidance, the entity would estimate and recognize an adjustment to the transaction price (and reduce revenue) at contract inception to account for the potential conversion.[12] The right of return would be accounted for as variable consideration, subject to the constraint in ASC 606-10-32-11 and 32-12.[13] The estimate of the variable consideration associated with the right of return would be reassessed at the end of each reporting period in accordance with ASC 606-10-55-25 and 55-26, with changes in the estimate recognized as an adjustment to

[12] The variable consideration resulting from the right of return would generally be estimated on the basis of the transaction price allocated to the on-premise software and related PCS and the amount of that allocated transaction price that is expected to be refunded as a credit to the SaaS arrangement (i.e., the pro rata portion of the on-premise software and related PCS that is "unused"). If the credit plus any incremental fee required to convert to the SaaS arrangement is less than the SSP of the SaaS, the entity may need to consider whether a material right has also been granted.

[13] Under ASC 606-10-32-11, an entity includes variable consideration in the transaction price "only to the extent that it is probable that a significant reversal in the amount of cumulative revenue recognized will not occur when the uncertainty associated with the variable consideration is subsequently resolved."

revenue. If the conversion right is exercised, the amount previously deferred as a liability[14] plus the incremental fee paid would generally be recognized as revenue over the remaining term of the SaaS (and the PCS for any licenses that are not converted).

In Example 1 above, A would need to determine its estimate of variable consideration and how much of that consideration, if any, should be constrained. Assume that A determines that $500,000 of the $1 million transaction price is variable consideration, which is calculated as ($4,000 on-premise software license SSP + $1,000 PCS SSP) × 100 seats × 1 year. In addition, assume that A estimates variable consideration of $250,000 — calculated as ($4,000 on-premise software license SSP + $1,000 PCS SSP) × 50 seats × 1 year — and concludes that none of the estimated variable consideration should be constrained.[15] Therefore, A will recognize revenue of $600,000, or ($4,000 on-premise software license SSP × 100 seats × 1 year) + ($4,000 on-premise software license SSP × 50 seats × 1 year), on January 1, 20X0, for the on-premise software license and $100,000, or $1,000 PCS SSP × 100 seats × 1 year, for PCS ratably over 20X0. In addition, A will recognize a liability of $250,000, or $1 million − $500,000 fixed consideration − $250,000 variable consideration, for the credit that the customer is expected to receive for the on-premise software license and PCS that are expected to be forfeited. Entity A will reassess its estimate of variable consideration at the end of each reporting period.

Assume that on December 31, 20X0, A revises its estimate of the liability associated with the right of return to $500,000 because it now expects that the customer will convert all 100 seats to a SaaS arrangement. Entity A will reverse $200,000 of revenue for the incremental 50 seats of on-premise software expected to be forfeited ($4,000 on-premise software license SSP × 50 seats × 1 year) and reclassify the $50,000 PCS contract liability for the incremental PCS expected to be forfeited ($1,000 PCS SSP × 50 seats × 1 year) for a total increase in liability of $250,000 related to the credit expected to be granted to the customer. If the customer elects to exercise the conversion right on 100 seats on January 1, 20X1, revenue of $550,000, which is calculated by adding the liability of $500,000 and the incremental fee of $50,000 ($500 incremental fee × 100 seats × 1 year), is recognized over the remaining one-year SaaS term.

Because A's initial estimate of the liability for the credit expected to be granted to the customer was not sufficient, a significant amount of revenue ultimately had to be reversed in a subsequent reporting period. This example highlights the importance of critically evaluating how much revenue should be constrained to ensure that it is probable that a significant reversal in cumulative revenue recognized will not occur. Given the risk of overestimating the amount of variable consideration to which an entity can expect to be entitled for the on-premise software license and PCS, we believe that many software entities, particularly those that do not have sufficient historical data on conversion rates, may find it challenging to determine an appropriate estimate of variable consideration and constraint as required under Alternative 1B.

[14] A liability for a return right is typically recognized as a refund liability in accordance with ASC 606-10-55-23(b). However, we believe that if an entity's contract with a customer is noncancelable and consideration therefore would not be refunded to the customer, it would be acceptable to recognize the liability as a contract liability (e.g., deferred revenue) for the entity's expected performance associated with a SaaS arrangement.

[15] The amount of variable consideration to include in the transaction price is provided for illustrative purposes only and uses simplistic assumptions; judgment will be required to estimate variable consideration and the related constraint in this and similar fact patterns.

Tabular Summary of Alternatives 1A and 1B

The following table summarizes the timing of revenue recognition under Alternatives 1A and 1B:

	Alternative 1A (Material Right Model)		Alternative 1B (Right of Return Model)
	Separate Contract	Contract Modification	
Revenue recognized on January 1, 20X0	$ 600,000	$ 600,000	$ 600,000
Revenue recognized (reversed) from January 1 through December 31, 20X0	100,000	100,000	(100,000)*
Revenue recognized on January 1, 20X1	50,000	—	—
Revenue recognized from January 1 through December 31, 20X1	300,000	350,000	550,000
Total revenue recognized	$ 1,050,000	$ 1,050,000	$ 1,050,000

* This amount represents the $100,000 of revenue recognized for PCS less the $200,000 reversal of revenue for the change in the estimate of variable consideration.

Initial Contract Is Modified to Convert a Term-Based License to SaaS

Example 2 below illustrates a situation in which a nonexclusive on-premise term-based software license contract (1) initially *does not* include the right to convert the on-premise software license to a SaaS arrangement but (2) is subsequently modified to immediately convert the on-premise software license to a SaaS arrangement.

Example 2

On January 1, 20X0, Entity B enters into a noncancelable two-year contract with a customer for an up-front fee of $1 million to provide a nonexclusive on-premise software license with PCS for 100 seats. At contract inception, there is no explicit or implied right to convert any of the on-premise license seats to a SaaS arrangement.[16]

On January 1, 20X1, B and the customer modify the contract to convert 50 seats of the on-premise software license to a SaaS arrangement for the remaining term. The SaaS has the same functionality and features as the licensed software but would be hosted by B instead of being provided on an on-premise basis. The customer is required to forfeit the 50 on-premise software license seats and related PCS (but will retain the other 50 seats on an on-premise basis with the related PCS for the remaining term), and the conversion is irrevocable (i.e., the customer cannot convert back to an on-premise software license). Upon contract modification and conversion, the customer is required to pay an incremental fee of $500 per seat and receives a credit for the pro rata portion of the "unused" term-based license and related PCS to apply to the price the customer will pay for the SaaS.

The SSPs are as follows:

Performance Obligation	SSP
On-premise software license	$4,000 per seat per year
PCS	$1,000 per seat per year
SaaS	$5,500 per seat per year

[16] Note that if an entity's contract does not contain a cloud conversion right at contract inception, a practice of allowing customers to convert their on-premise software license to a SaaS arrangement may create an implied right that is similar to the explicit right provided to the customer in Example 1. Significant judgment will be required to determine when an implied right is created in these circumstances.

Alternative 2A — Prospective Model (Preferred View)

Under this alternative, an entity should evaluate the contract modification guidance since the contract has been modified (i.e., there is a change in the scope and price). ASC 606-10-25-12 and 25-13 state the following:

> **25-12** An entity shall account for a contract modification as a separate contract if both of the following conditions are present:
>
> a. The scope of the contract increases because of the addition of promised goods or services that are distinct (in accordance with paragraphs 606-10-25-18 through 25-22).
>
> b. The price of the contract increases by an amount of consideration that reflects the entity's standalone selling prices of the additional promised goods or services and any appropriate adjustments to that price to reflect the circumstances of the particular contract. For example, an entity may adjust the standalone selling price of an additional good or service for a discount that the customer receives, because it is not necessary for the entity to incur the selling-related costs that it would incur when selling a similar good or service to a new customer.
>
> **25-13** If a contract modification is not accounted for as a separate contract in accordance with paragraph 606-10-25-12, an entity shall account for the promised goods or services not yet transferred at the date of the contract modification (that is, the remaining promised goods or services) in whichever of the following ways is applicable:
>
> a. An entity shall account for the contract modification as if it were a termination of the existing contract, and the creation of a new contract, if the remaining goods or services are distinct from the goods or services transferred on or before the date of the contract modification. The amount of consideration to be allocated to the remaining performance obligations (or to the remaining distinct goods or services in a single performance obligation identified in accordance with paragraph 606-10-25-14(b)) is the sum of:
>
> 1. The consideration promised by the customer (including amounts already received from the customer) that was included in the estimate of the transaction price and that had not been recognized as revenue and
> 2. The consideration promised as part of the contract modification.
>
> b. An entity shall account for the contract modification as if it were a part of the existing contract if the remaining goods or services are not distinct and, therefore, form part of a single performance obligation that is partially satisfied at the date of the contract modification. The effect that the contract modification has on the transaction price, and on the entity's measure of progress toward complete satisfaction of the performance obligation, is recognized as an adjustment to revenue (either as an increase in or a reduction of revenue) at the date of the contract modification (that is, the adjustment to revenue is made on a cumulative catch-up basis).
>
> c. If the remaining goods or services are a combination of items (a) and (b), then the entity shall account for the effects of the modification on the unsatisfied (including partially unsatisfied) performance obligations in the modified contract in a manner that is consistent with the objectives of this paragraph.

The contract modification is accounted for as a termination of the existing contract and the creation of a new contract in accordance with ASC 606-10-25-13(a) because the modification does not solely add goods or services at their SSPs (i.e., goods and services are also forfeited, and any incremental fee paid for the SaaS is not at its SSP) and the remaining SaaS (and PCS for any licenses that are not converted) is distinct. The contract modification is accounted for prospectively, and any unrecognized revenue that was included in the transaction price from the original contract plus any additional consideration paid as part of the contract modification is recognized over the remaining term of the SaaS (and the PCS for any licenses that are not converted). There is no adjustment to or reversal of revenue for the "unused" portion of the on-premise software license since the modification is accounted for prospectively (i.e., revenue is not "recycled"). Further, the entity does not receive a "returned" asset since, as similarly noted in the discussion of Alternative 1A, the entity does not receive an asset of any value back. Therefore, none of the pro rata credit provided for the "unused" portion of the on-premise software license that has been forfeited would be included as part of the consideration allocated to the SaaS (and PCS for any licenses that are not converted).

In Example 2 above, B will recognize revenue of $800,000 ($4,000 on-premise software license SSP × 100 seats × 2 years) on January 1, 20X0, for the on-premise software license and $100,000 ($1,000 PCS SSP × 100 seats × 1 year) for PCS ratably over 20X0. When the contract is modified on January 1, 20X1, B has a contract liability related to PCS of $100,000 and receives incremental consideration of $25,000 ($500 incremental fee × 50 seats). Entity B will therefore recognize $125,000 ($100,000 + $25,000) for both PCS and the SaaS over the remaining one-year term.[17]

Alternative 2B — Return Model (Acceptable View)

Under this alternative, in a manner similar to that in Alternative 2A, the contract modification is accounted for as a termination of the existing contract and the creation of a new contract because the modification does not solely add goods or services at their SSPs (i.e., goods and services are also forfeited, and any incremental fee paid for the SaaS is not at its SSP) and the remaining SaaS (and PCS if not all licenses are converted) is distinct. However, unlike Alternative 2A, Alternative 2B treats the "unused" portion of the on-premise software license as being effectively returned for a credit that can be applied toward the purchase of the SaaS. Therefore, revenue associated with the unused portion of the returned on-premise software license is reversed. The amount of revenue reversed (i.e., the credit associated with the unused portion of the returned on-premise software license), together with any unrecognized revenue that was included in the transaction price from the original contract and any additional consideration paid as part of the contract modification, is recognized over the remaining term of the SaaS (and the PCS for any licenses that are not converted).

In Example 2 above, B will recognize revenue of $800,000 ($4,000 on-premise software license SSP × 100 seats × 2 years) on January 1, 20X0, for the on-premise software license and $100,000 ($1,000 PCS SSP × 100 seats × 1 year) for PCS ratably over 20X0. When the contract is modified on January 1, 20X1, B will reverse revenue of $200,000 ($4,000 on-premise software license SSP × 50 seats × 1 year) for the returned portion of the on-premise software license. Entity B also has a contract liability related to PCS of $100,000 and receives incremental consideration of $25,000 ($500 incremental fee × 50 seats). Entity B will therefore recognize revenue of $325,000 ($200,000 + $100,000 + $25,000) for both PCS and the SaaS over the remaining one-year term.[18]

Tabular Summary of Alternatives 2A and 2B

The following table summarizes the timing of revenue recognition under Alternatives 2A and 2B:

	Alternative 2A (Prospective Model)	Alternative 2B (Return Model)
Revenue recognized on January 1, 20X0	$ 800,000	$ 800,000
Revenue recognized from January 1 through December 31, 20X0	100,000	100,000
Revenue reversed on January 1, 20X1	—	(200,000)
Revenue recognized from January 1 through December 31, 20X1	125,000	325,000
Total revenue recognized	$ 1,025,000	$ 1,025,000

[17] Entity B would generally allocate the $125,000 between PCS and the SaaS on the basis of their relative SSPs if required to do so for presentation or disclosure purposes. However, because both PCS and the SaaS are stand-ready obligations that are recognized ratably over the same period, the $125,000 was not allocated between the two services for purposes of this illustration.

[18] Entity B would generally allocate the $325,000 between PCS and the SaaS on the basis of their relative SSPs if required to do so for presentation or disclosure purposes. However, because both PCS and the SaaS are stand-ready obligations that are recognized ratably over the same period, the $325,000 was not allocated between the two services for purposes of this illustration.

Initial Contract Is Modified to Add a Cloud Conversion Right

Example 3 below illustrates a situation in which a nonexclusive on-premise term-based software license contract (1) initially *does not* include the right to convert the on-premise software license to a SaaS arrangement but (2) is subsequently modified to add a right to convert the on-premise software license to a SaaS arrangement.

Example 3

On January 1, 20X0, Entity C enters into a noncancelable three-year contract with a customer for an up-front fee of $3 million to provide a nonexclusive on-premise software license with PCS for 100 seats. At contract inception, there is no explicit or implied right to convert any of the on-premise license seats to a SaaS arrangement.[19]

On January 1, 20X1, C and the customer modify the contract to add a right to convert any of the on-premise license seats to a SaaS arrangement at the beginning of the third year (i.e., January 1, 20X2). The SaaS has the same functionality and features as the on-premise software but would be hosted by C instead of being provided on an on-premise basis. As in Example 1, the customer would be required to forfeit the on-premise software license seats and related PCS upon exercise of the conversion right, and the conversion is irrevocable (i.e., the customer cannot convert back to an on-premise software license). Upon conversion, the customer would be required to pay an incremental fee of $1,000 per seat and would receive a credit for a pro rata portion of the "unused" on-premise software license and related PCS to apply to the price the customer would pay for the SaaS.

The SSPs are as follows:

Performance Obligation	SSP
On-premise software license	$8,000 per seat per year
PCS	$2,000 per seat per year
SaaS	$11,000 per seat per year

Alternative 3A — Prospective Material Right Model (Preferred View)

Under this alternative, in a manner similar to that under Alternative 2A, the contract modification is accounted for as a termination of the existing contract and the creation of a new contract because the modification does not solely add goods or services at their SSPs (i.e., a conversion right is added for no additional consideration, and any incremental fee to be paid for the SaaS is not at its SSP) and the remaining performance obligations (PCS and a material right) are distinct. The contract modification is accounted for prospectively, and any unrecognized revenue that was included in the transaction price from the original contract is allocated to the remaining performance obligations (PCS and a material right). If the conversion option is exercised, the amount allocated to the material right plus any incremental fee paid would generally be recognized over the remaining term of the SaaS (and the PCS for any licenses that are not converted).

In Example 3 above, C will recognize revenue of $2.4 million ($8,000 on-premise software license SSP × 100 seats × 3 years) on January 1, 20X0, for the software license and $200,000 ($2,000 PCS SSP × 100 seats × 1 year) for PCS ratably over 20X0. When the contract is modified on January 1, 20X1, C has a contract liability related to PCS of $400,000. Entity C will allocate that amount to the remaining PCS and the material right on the basis of their relative SSPs. The material right's SSP would be estimated as the $10,000 per seat per year discount ($11,000 SaaS SSP − $1,000 incremental fee to be paid), adjusted for the likelihood that the option will be exercised. We believe that it would also be acceptable for C to estimate the SSP of the PCS by applying a similar adjustment for the likelihood that the option will be exercised (which could truncate the term of the PCS).

[19] See footnote 16.

Assume that C determines that the relative SSP allocation of the transaction price results in allocations to the PCS for 20X1, the PCS for 20X2, and the material right of $100,000, $50,000, and $250,000, respectively.[20] Entity C will recognize $100,000 for PCS ratably over 20X1. If the customer elects to exercise the conversion right on 100 seats on January 1, 20X2, C would assess its policy for accounting for the exercise of an option that includes a material right and apply either of the following:

- *Separate contract model* — The remaining unrecognized revenue of $50,000 related to PCS is recognized immediately since PCS for all 100 seats is forfeited and therefore will not be provided in 20X2. Revenue of $350,000, which is calculated by adding the material right allocation of $250,000 and the incremental fee of $100,000 ($1,000 incremental fee × 100 seats), is recognized over the remaining one-year SaaS term.
- *Contract modification model* — Revenue of $400,000, which is calculated by adding the remaining unrecognized revenue of $50,000 related to PCS, the material right allocation of $250,000, and the incremental fee of $100,000, is recognized over the remaining one-year SaaS term.

Alternative 3A may be less costly to implement than Alternative 3B below because the SSP of the material right is estimated only upon contract modification and is not subsequently revised. In addition, because the right of return model is not applied, the variable consideration constraint would likewise not be applicable. Therefore, revenue recognition could potentially be less volatile under the prospective material right model than under the right of return model discussed below.

Alternative 3B — Right of Return Model (Acceptable View)

Under this alternative, in a manner similar to that under Alternative 3A, the contract modification is accounted for as a termination of the existing contract and the creation of a new contract because the modification does not solely add goods or services at their SSPs (i.e., a conversion right is added for no additional consideration, which could result in the forfeiture of goods and services, and any incremental fee to be paid for the SaaS is not at its SSP) and the remaining PCS is distinct. However, unlike Alternative 3A, Alternative 3B treats any "unused" portion of the on-premise software license as being effectively returned for a credit that can be applied toward the purchase of the SaaS. Therefore, revenue associated with the expected unused portion of the returned on-premise software license is reversed. The amount of revenue reversed (i.e., the credit associated with the potential unused portion of the returned on-premise software license), together with any unrecognized revenue that was included in the transaction price from the original contract, is accounted for prospectively over the remaining two-year term. In applying the right of return guidance, the entity would estimate and recognize an adjustment to the transaction price (and reduce revenue) upon contract modification to account for the potential conversion.[21] The right of return would be accounted for as variable consideration, subject to the constraint in ASC 606-10-32-11 and 32-12.[22] The estimate of variable consideration associated with the right of return would be reassessed at the end of each reporting period in accordance with ASC 606-10-55-25 and 55-26, with changes in the estimate recognized as an adjustment to revenue. If the conversion right is exercised, the amount previously deferred as a liability[23] plus the incremental fee paid would generally be recognized as revenue over the remaining term of the SaaS (and the PCS for any licenses that are not converted).

[20] See footnote 11.
[21] See footnote 12.
[22] See footnote 13.
[23] See footnote 14.

In Example 3 above, C will recognize revenue of $2.4 million ($8,000 on-premise software license SSP × 100 seats × 3 years) on January 1, 20X0, for the software license and $200,000 ($2,000 PCS SSP × 100 seats × 1 year) for PCS ratably over 20X0. When the contract is modified on January 1, 20X1, C would need to determine its estimate of variable consideration and how much of that consideration, if any, should be constrained. Assume that C determines that $1 million of the original transaction price of $3 million is variable consideration, which is calculated as ($8,000 on-premise software license SSP + $2,000 PCS SSP) × 100 seats × 1 year. In addition, assume that C estimates variable consideration of $500,000 — calculated as ($8,000 on-premise software license SSP + $2,000 PCS SSP) × 50 seats × 1 year — and concludes that none of the estimated variable consideration should be constrained.[24] Therefore, C will reverse revenue of $400,000 ($8,000 on-premise software license × 50 seats × 1 year) and reclassify $100,000 of the PCS contract liability for the PCS expected to be forfeited ($2,000 PCS SSP × 50 seats × 1 year) for a total liability of $500,000 for the credit the customer is expected to receive. Entity C also has a remaining contract liability related to PCS of $300,000 and recognizes $200,000 ($2,000 PCS SSP × 100 seats × 1 year) for PCS ratably over 20X1.

Assume that on December 31, 20X1, C revises its estimate of the liability associated with the right of return to $1 million because it now expects that the customer will convert all 100 seats to a SaaS arrangement. Entity C will reverse an additional $400,000 of revenue for the incremental 50 seats of on-premise software expected to be forfeited ($8,000 software license SSP × 50 seats × 1 year) and reclassify $100,000 of the remaining PCS contract liability for the incremental PCS expected to be forfeited ($2,000 PCS SSP × 50 seats × 1 year) for a total increase in liability of $500,000 related to the credit expected to be granted to the customer. If the customer elects to exercise the conversion right on 100 seats on January 1, 20X2, revenue of $1.1 million, which is calculated by adding the liability of $1 million and the incremental fee of $100,000 ($1,000 incremental fee × 100 seats × 1 year), is recognized over the remaining one-year SaaS term.

Because C's initial estimate of the liability for the credit expected to be granted to the customer was not sufficient, a significant amount of revenue ultimately had to be reversed in a subsequent reporting period. This example highlights the importance of critically evaluating how much revenue should be constrained to ensure that it is probable that a significant reversal in cumulative revenue recognized will not occur. Given the risk of overestimating the amount of variable consideration to which an entity can expect to be entitled for the on-premise software license and PCS, we believe that many software entities, particularly those that do not have sufficient historical data on conversion rates, may find it challenging to determine an appropriate estimate of variable consideration and constraint as required under Alternative 3B.

[24] See footnote 15.

Tabular Summary of Alternatives 3A and 3B

The following table summarizes the timing of revenue recognition under Alternatives 3A and 3B:

	Alternative 3A (Prospective Material Right Model)		Alternative 3B (Right of Return Model)
	Separate Contract	Contract Modification	
Revenue recognized on January 1, 20X0	$ 2,400,000	$ 2,400,000	$ 2,400,000
Revenue recognized from January 1 through December 31, 20X0	200,000	200,000	200,000
Revenue reversed on January 1, 20X1	—	—	(400,000)
Revenue recognized (reversed) from January 1 through December 31, 20X1	100,000	100,000	(200,000)*
Revenue recognized on January 1, 20X2	50,000	—	—
Revenue recognized from January 1 through December 31, 20X2	350,000	400,000	1,100,000
Total revenue recognized	$ 3,100,000	$ 3,100,000	$ 3,100,000

* This amount represents the $200,000 of revenue recognized for PCS less the $400,000 reversal of revenue for the change in the estimate of variable consideration.

Initial Contract Includes Cloud Mixing Rights With a Cap

Example 4 below illustrates an initial contract that gives the customer the right to use nonexclusive licensed software on both an on-premise basis and a cloud basis, subject to a cap on the total number of seats.

Example 4

On January 1, 20X0, Entity D enters into a noncancelable two-year contract with a customer for an up-front fee of $1 million to provide 1,000 nonexclusive software licenses. Under the terms of the contract, the customer has an option to deploy each of the 1,000 licenses as either on-premise software or SaaS throughout the two-year license term. That is, the customer can use any mix of on-premise software and SaaS at any point during the license term as long as the number of licenses used does not exceed 1,000 seats. The on-premise software license and the SaaS (1) are each fully functional on their own and (2) provide the same functionality and features (other than D's hosting of the SaaS). At contract inception, the customer decides to use 600 licenses as on-premise software and 400 licenses as SaaS. Six months later, the customer decides to use 500 licenses as on-premise software and 500 licenses as SaaS.

We believe that in Example 4 above, D may reasonably conclude that it has promised to (1) provide the right to use on-premise software and (2) stand ready to provide SaaS (i.e., to host the software license). Since each of the promises is likely to be distinct, there are two performance obligations to which the $1 million fee should be allocated on a relative SSP basis. We believe that it would be acceptable for D to estimate the SSP of each performance obligation by considering the expected mix of on-premise software and SaaS. The SSPs are determined at contract inception and should not be subsequently revised regardless of whether the mix of on-premise software and SaaS changes after the initial estimate. Consideration allocated to the on-premise software would be recognized once control of the license is transferred to the customer. In addition, since the performance obligation to provide SaaS is satisfied over time, consideration allocated to this performance obligation would be recognized as revenue over the two-year contract term (i.e., the period over which D is required to stand ready to provide SaaS).

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