



# Hot Topic: ASC 350-40

## Customers' accounting for cloud computing arrangements after adopting ASU 2018-15



January 16, 2020 (updated September 17, 2021<sup>1</sup>)

**This Hot Topic addresses questions about customers' accounting for cloud computing arrangements after adopting ASU 2018-15.<sup>2</sup>**

### Applicability

This Hot Topic applies only to customers' accounting, after adopting ASU 2018-15, for 'hosting arrangements' that are service contracts. 'Hosting arrangements' refers to arrangements that allow the customer to access and use software it does not currently have possession of on an as-needed basis.

### Background

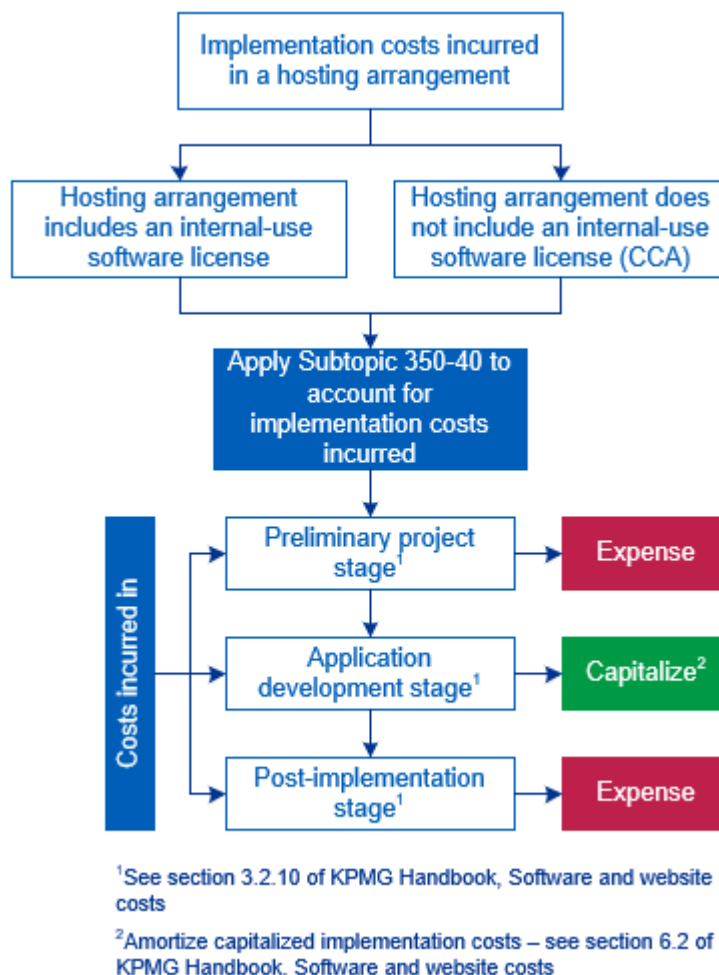
ASU 2018-15 was issued in August 2018 based on a consensus of the EITF. The effect of the ASU is to align the accounting for implementation costs incurred in a hosting arrangement that does not include a license to internal-use software (i.e. a cloud computing arrangement, or CCA) with one that does. It therefore requires companies to capitalize potentially significant implementation costs incurred in a CCA that were often expensed as incurred under legacy US GAAP and amortize them to expense over the 'term of the hosting arrangement'; this term includes the noncancellable period of the CCA plus any optional renewal periods (1) that are reasonably certain to be exercised by the customer or (2) for which exercise of the option is controlled by the vendor.

In addition to changing the timing of income statement recognition of these implementation costs, the new capitalized implementation costs will affect companies' financial ratios and deferred tax accounting.

<sup>1</sup> Other than Question 48, updates since May 2020 are only to conform certain language and terminology to KPMG Handbook, [Software and website costs](#)

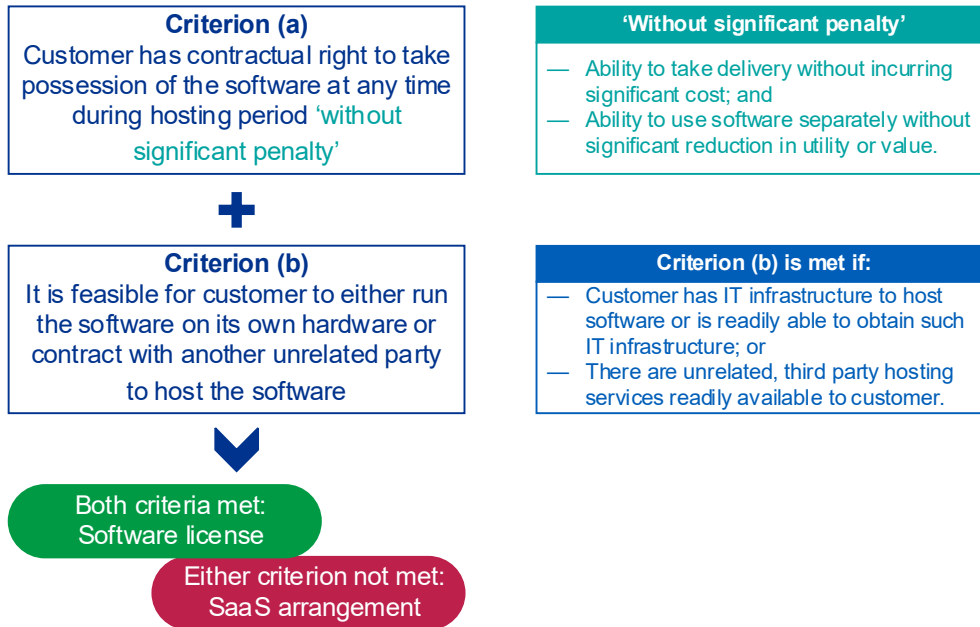
<sup>2</sup> ASU 2018-15, [Customer's Accounting for Implementation Costs Incurred in a Cloud Computing Arrangement That Is a Service Contract](#)

The following diagram summarizes the accounting for implementation costs incurred as part of a CCA after adopting ASU 2018-15.



A 'hosting arrangement' is an arrangement that allows customers to access and use software on an as-needed basis without having possession of it. [350-40 Glossary]

A hosting arrangement does not include a license to the hosted software unless it meets both of the criteria included in the following diagram. A hosting arrangement that does not meet both of those criteria is a service contract – i.e. a CCA [350-40-15-4A – 15-4C]



Section 3.2 of KPMG Handbook, [Software and website costs](#), discusses how the CCA implementation cost guidance in ASC 350-40 enacted by ASU 2018-15 differs from legacy US GAAP.

## Effective dates and transition

Effective dates	Public companies	All other companies
Annual periods – Fiscal years beginning after	Dec. 15, 2019	Dec. 15, 2020
Interim periods – In fiscal years beginning after	Dec. 15, 2019	Dec. 15, 2021
Early adoption allowed, including interim periods?	Yes	
Transition approaches		
<b>Prospective transition</b>	All CCA implementation costs for activities performed on or after the effective date, including costs for (1) new CCAs entered into on or after the effective date and (2) existing CCAs entered into before the effective date.	
<b>or</b>		
<b>Retrospective transition</b>	Apply the ASU as if it had always been effective (including in comparative periods).	

Chapter 9 of KPMG Handbook, [Software and website costs](#), discusses the effective dates and transition requirements of ASU 2018-15 in additional detail.



## Concepts and definitions

The following concepts and definitions span multiple questions in this Hot Topic. In addition, this Hot Topic considers in many places that the intended result of ASU 2018-15 was consistency between the accounting for CCA implementation costs and similar costs to develop and implement internal-use software. [ASU 2018-15.BC6]

Key concept or definition	Application in this Hot Topic
<b>Cloud service provider</b>	The entity that sells the CCA (i.e. the hosting services) to the customer. The cloud service provider may or may not be a party to implementation activities related to the CCA undertaken by the customer. The customer may undertake those activities itself or engage an unrelated third party to do so.
<b>Hosting service fees</b>	The fees paid to the cloud service provider for the hosting services (i.e. access to the cloud-based solution). If the cloud service provider also provides implementation and/or other services, the amount allocable to the hosting services on a relative stand-alone price basis is the hosting service fees. [350-40-30-4]
<b>Implementation activities</b>	The EITF decided not to define implementation activities in ASU 2018-15. However, while developing the ASU, the EITF and the FASB staff discussed these examples of implementation activities (not exhaustive): <sup>3</sup> <ul style="list-style-type: none"> <li>— integration (developing interfaces between the hosted software and the company's other systems);</li> <li>— customization of the company's other systems or the hosted software;</li> <li>— configuration, either of the company's other systems or of the hosted software;</li> <li>— installation;</li> <li>— architecture and design;</li> <li>— coding;</li> <li>— testing;</li> <li>— data conversion or migration;</li> <li>— training; and</li> <li>— business process reengineering.</li> </ul>
<b>Timing of implementation activities</b>	Frequently, CCA implementation activities – whether undertaken by the customer, the cloud-service provider, or a third party – are integral to the customer's intended use of the cloud-based solution such that the customer will not go live using the cloud-based solution for its intended purpose until the implementation activities are complete. In these circumstances, hosting service fees will often be incurred before the implementation activities are complete.
<b>Module</b>	US GAAP does not define 'module'. However, based on commonly available definitions of the term in relation to software, we believe 'module' is intended to describe a self-contained set of software functionality capable of performing a series of tasks (or procedures or functions) independent of other parts of the software program, which may contain numerous modules. 'Module' is often used interchangeably with 'component', but the two terms may not be synonymous.

<sup>3</sup> Issue Summary No. 1, Supplement No. 1, September 28, 2017

Key concept or definition	Application in this Hot Topic
<b>Component</b>	<p>US GAAP does not define 'component'. However, 'component' often refers to a related group of software functions, or a set of software code that can be independently added, removed or modified. A software program therefore might have numerous components, and those components may be able to be implemented or disengaged independent of other components.</p> <p>In cloud infrastructure scenarios, a 'service' is a component that can be deployed independently. An example of a service may be a securities pricing service that provides pricing data to the customer.</p> <p>'Component' is often used interchangeably with 'module', but the two terms may not be synonymous.</p>
<b>Go-live</b>	<p>US GAAP does not define or use this term. However, it is commonly used when discussing both software and cloud computing arrangements. Go-live generally refers to the point in time that software (hosted or on-premise) is available for users to initiate/process transactions or perform tasks. Generally, this means that testing of the application (or module/component) is complete and that it is in the company's production environment (i.e. operational for users).</p>



## Question 10

### What is the unit of account for CCA implementation costs?

**Interpretive response:** Initially, each individual CCA implementation cost is evaluated to determine whether it should be capitalized or expensed as incurred – i.e. it is its own unit of account. An entity must determine whether each cost is for implementation of a CCA and, if so, whether the cost must be capitalized (e.g. a configuration cost) or expensed as incurred (e.g. training or data migration costs). [350-40-25-18, 30-5]

After CCA implementation costs are capitalized, they are accounted for based on the module or component to which they relate, if the cloud-based solution subject to the CCA has multiple such modules or components. Specifically, capitalized implementation costs are: [350-40-35-12, 35-17]

- amortized from the point that the related module or component is substantially complete and ready for its intended use (i.e. when all substantial testing has been completed); and
- amortized on an accelerated basis if the related module or component is expected to be abandoned (see [Question 70](#)).

In addition, other than for certain exceptions, implementation cost capitalization generally should cease at go-live of the applicable module or component (see [Question 80](#)).

Therefore, after initial recognition, all capitalized CCA implementation costs that relate to a single module or component of a CCA are a single unit of account. It is not appropriate to:

- treat all capitalized implementation costs for a CCA as a single unit of account if the cloud-based solution has more than one module or component; or
- account for individual costs separately once capitalized.

An exception to accounting for capitalized implementation costs that relate to different modules or components as a single unit of account may arise if the modules/components will go live concurrently and have the same expected useful life – i.e. the company does not expect to abandon any module or component separate from the cloud-based solution as a whole.

## Multiple modules or components

If a cloud-based solution includes multiple modules or components, entities will need to identify the module or component to which development or implementation costs relate.

An entity that inappropriately treats a cloud-based solution as having a single module/component may not:

- appropriately identify and allocate implementation costs on a relative stand-alone price basis to modules or components that are substantially complete and ready for their intended use on different dates, or appropriately capitalize or expense development or implementation costs;
- begin amortizing capitalized costs at the right time or properly calculate the generally straight-line expense (see [Question 60](#)); or
- properly accelerate cost amortization when a module or component is planned for abandonment (see [Question 70](#)).



### Question 20

#### Are hosting service fees paid to the cloud service provider in a CCA before completion of implementation activities an implementation cost?

**Background:** The cloud service provider may initiate the hosting service (i.e. complete the user interface and activate the service) before the customer (or another party on its behalf) completes implementation activities (e.g. specific configurations, desired interfaces with other on-premise or cloud-based applications) that are necessary for the customer's intended use of the cloud-based solution.

In these scenarios, the question arises about whether the customer should capitalize the hosting service fees incurred before the cloud-based solution is ready for its intended use – i.e. during the application development stage of the CCA – as a CCA implementation cost.

**Interpretive response:** No. The hosting service fees are outside the scope of the 'Implementation Costs of a Hosting Arrangement That Is a Service Contract' subsections of ASC 350-40, and therefore are not an implementation cost. The hosting CCA itself is a service contract and the hosting service fees are expensed as the hosting services are provided, consistent with other service contracts (unless the fees can be capitalized as part of the cost of another asset). [350-40-15-4C, ASU 2018-15.BC7]

[Question 30](#) addresses the commencement of expense recognition for hosting service fees.



### Question 30

#### Should hosting service fees in a CCA begin to be recognized as expense if the arrangement term begins before go-live?

**Background:** Completion of implementation activities frequently requires access to the cloud-based solution – i.e. the implementation activities cannot occur before the customer can access the hosted software. For example, a customer cannot begin to migrate data from its existing system before it has access to the cloud-based solution. Access is also typically required to begin to implement and test interfaces. Therefore, go-live frequently occurs after the contractual CCA term commences and the customer has been provided access to the cloud-based solution.

If the CCA term begins before completion of implementation activities integral to going live with the cloud-based solution, the question arises about whether the customer should begin recognizing the costs of the CCA as expense before go-live.

Question 20 explains that hosting service fees due under the CCA are not 'implementation costs'. Instead, they are service fees.

**Interpretive response:** Yes. CCA hosting service fees should begin to be recognized as an expense when the customer (including third-party consultants working on the customer's behalf) obtains access to the cloud-based solution such that it can begin to undertake its implementation activities. The customer begins to consume and receive benefit from the CCA at that time.

For example, the cloud service provider initiates the CCA on January 1, Year 1, such that the customer has access to the hosted software to commence its implementation activities from that date. The customer should begin recognizing expense attributable to the CCA as of that date, even if it does not plan to go live until January 1, Year 2.

This is consistent with how lessees recognize lease cost when they install leasehold improvements (when they are the accounting owner of the improvements). In general, a lease commences (and lease cost begins to be recognized) when the lessee obtains access to the underlying asset to begin installing leasehold improvements to make the asset (e.g. retail space) ready for its intended use. Section 5.1 of KPMG Handbook, [Leases](#), discusses this in further detail.

In addition, we believe expensing the hosting service fees incurred during the implementation phase of a CCA is also supported by the accounting treatment for analogous website hosting fees incurred by a website developer during the application and infrastructure development stage of a website. Under ASC 350-50, website hosting fees are generally expensed over the period the hosting services are provided (see section 4.2.20 of KPMG Handbook, [Software and website costs](#)). [350-50-25-5]

### Cloud service provider performs the implementation activities

The timing of expense recognition for hosting service fees should not differ based on whether it is the customer (or a third party on its behalf) or the cloud service provider (or a third party on its behalf) that undertakes the implementation activities. While the customer may not be given access to the hosted software during the implementation period if the cloud service provider undertakes the activities, the customer is still consuming and receiving benefit from the CCA as the implementation activities specific to its needs (e.g. customer-requested configurations, customer data migration) are performed, just as if it had obtained access to undertake the activities itself.

This is consistent with the view a lease commences (and lease cost begins to be recognized) when lessee-owned leasehold improvements begin to be constructed even if it is the lessor that is constructing them (rather than the lessee or a third party engaged by the lessee). Example 5.1.10 in KPMG Handbook, [Leases](#), illustrates this.



## Question 40

### Are costs incurred to migrate internal-use software to a cloud service provider's hosting environment in the scope of ASC 350-40?

**Background:** Assume an entity currently hosts internal-use software it has licensed from a software vendor on its own servers. The entity decides it wants to migrate the software from its own IT environment to a third-party cloud service provider's hosting environment (e.g. Amazon Web Services or Microsoft Azure).

The entity incurs the following costs related to the migration:

- configuration of the hosting environment;
- installation of the software vendor's software into the cloud service provider's hosting environment;
- testing; and
- business process reengineering for IT management.

For purposes of this question, it is assumed there is no lease in the entity's hosting arrangement with the cloud service provider. See chapter 3 of KPMG Handbook, [Leases](#), for guidance about identifying a lease.

**Interpretive response:** Yes. We believe the 'Implementation Costs of a Hosting Arrangement That Is a Service Contract' subsections of ASC 350-40 apply. This is because the basis for conclusions to ASU 2018-15 lists infrastructure as a service (IaaS) as an example of a hosting arrangement subject to that guidance, and the example arrangement in the background is an example of IaaS. [\[ASU 2018-15.BC2\]](#)

In applying the guidance in ASC 350-40 to the background example, the entity's specific facts and circumstances, and the nature of the migration costs, will determine whether the specific costs are capitalizable or should be expensed as incurred.

### Alternative view

We are aware of an alternative view that the arrangement described in the background between the entity and cloud service provider is not in the scope of the 'Implementation Costs of a Hosting Arrangement That Is a Service Contract' subsections of ASC 350-40. This is based on the definition of a hosting arrangement as "an arrangement in which the customer of the software does not currently have possession of the software." [\[350-40 Glossary\]](#)

In the background example, the entity currently has possession of the vendor's software. Even after the migration, the entity will still have possession of the software because cloud service provider is hosting the software on the entity's behalf (not on the software vendor's behalf).

We do not believe the alternative view is appropriate given the discussion in the basis for conclusions to ASU 2018-15, and our observations of the deliberations of the EITF and the FASB discussions before issuing the ASU (and of previously issued ASU 2015-05).<sup>4</sup>

We further note that even if the alternative view were applied, it would appear that the referenced subsections of ASC 350-40 could still be applied by analogy. The basis for conclusions to ASU 2018-15 notes the EITF decided to stay silent about, and therefore not prohibit, analogies to this guidance. The public EITF discussion about analogies further suggested that neither the EITF, nor the FASB, wanted to limit the application of this guidance by analogy. Because of this, even if the alternative view were applied, we believe it would be acceptable (though not required) for the entity to apply the 'Implementation Costs of a Hosting Arrangement That Is a Service Contract' subsections of ASC 350-40 if no other US GAAP addressed the migration costs incurred. [\[ASU 2018-15.BC15\]](#)

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<sup>4</sup> ASU 2015-05, [Customer's Accounting for Fees Paid in a Cloud Computing Arrangement](#)





## Question 42

### Are implementation costs incurred to host customer-facing software in another cloud service provider's hosting environment in the scope of ASC 350-40?

**Background:** A cloud service (e.g. SaaS) provider may not host its customer-facing software (i.e. the software its customers obtain access to in CCAs) in its own IT environment. Instead, it might engage another cloud service provider (e.g. Amazon Web Services, Microsoft Azure) to host that software.

The question arises about whether the guidance in [Question 40](#) applies to the SaaS provider in the preceding paragraph.

**Interpretive response:** Yes. The SaaS provider in the background is the customer in a CCA (infrastructure as a service, or IaaS). Therefore, the guidance in [Question 40](#) applies even though the software that will be hosted by the IaaS provider is customer-facing software.



## Question 45

### Can costs be in the scope of both the general and CCA implementation cost guidance in ASC 350-40?

**Background:** Consider an example in which a customer in a CCA develops software that it will own for the purpose of interfacing the hosted software subject to the CCA with other, internal-use software it licenses or accesses through another CCA. In variations of this example, the developed interface may reside either on-premise or in the cloud service provider's hosting environment.

Questions arise about whether:

- the interface is itself internal-use software (subject to the general guidance subsections of ASC 350-40) or, instead, is an implementation cost of the new CCA (subject to the implementation costs of a hosting arrangement that is a service contract subsections of ASC 350-40); and
- costs required to be expensed as incurred under the internal-use software or CCA implementation cost guidance can be considered for capitalization under the other.

**Interpretive response:** No. Costs cannot be both internal-use software costs and CCA implementation costs; they are one or the other. This means that if an internal-use software cost or a CCA implementation cost is required to be expensed as incurred based on the internal-use software guidance or CCA implementation cost guidance, respectively, it cannot be re-considered for capitalization under the other. [\[350-40-15-3, 15-4D\]](#)

As a practical matter, we do not believe an entity would reach a different conclusion even if it did so because entities apply the same guidance to determine what costs are capitalizable. [\[350-40-30-5\]](#)

In the background example, because the customer owns the interface software IP, the software development costs incurred by the customer are internal-use software costs subject to the general guidance on internal-use software, rather than the implementation costs of a hosting arrangement that is a service contract guidance. Any of those costs required to be expensed as incurred under the internal-use software guidance cannot be reconsidered for capitalization as CCA implementation costs.

Because the customer owns the software IP, the conclusion that the software development costs are internal-use software costs, rather than CCA implementation costs, would be the same regardless of where the interface will reside when it is in production – i.e. on-premise or in the cloud service

provider's hosting environment. If the interface will reside in the cloud service provider's hosting environment, however, the software could be in the scope of ASC 985-20 if it is determined that it will be licensed to the cloud service provider.



## Question 48

### Can the term of the hosting arrangement include periods over which neither the customer nor vendor have a renewal option?

**Background:** CCAs may not include stated renewal options, even though the customer and the cloud service provider expect to agree on one or more renewals (e.g. through contract amendment).

**Interpretive response:** No. The amortization period for capitalized CCA implementation costs in these arrangements is expressly limited to the non-cancellable term of the CCA plus periods for which the entity or the cloud service provider has an option to extend. If the CCA does not include any renewal options, the amortization period for capitalized implementation costs in these arrangements is limited to the non-cancellable term of the CCA. [\[350-40-35-14\]](#)

Therefore, the term of the hosting arrangement may be shorter than either (1) the period over which the customer reasonably expects to benefit from the costs incurred, or (2) what the term of the hosting arrangement would have been if the CCA had included renewal options.

In this respect, the guidance on the term of the hosting arrangement is consistent with the following EITF conclusions.

- The CCA implementation costs 'attach to the [CCA] contract'. Because the CCA implementation cost asset attaches to the contract – i.e. versus another asset, such as developed internal-use software or an internal-use software license – its amortization period cannot extend beyond the enforceable period of the contract. [\[ASU 2018-15.BC8\]](#)
- The amortization period for the capitalized costs should be the 'term of the hosting arrangement' because the future economic benefit that will be derived from those costs is inextricably linked to the customer having the continued right to access the hosted software. [\[ASU 2018-15.BC11\]](#)



## Question 50

### When does an entity reassess the term of the hosting arrangement over which capitalized implementation costs are amortized?

**Background:** ASC 350-40 requires entities to amortize implementation costs over the 'term of the hosting arrangement'. The term of the hosting arrangement comprises the non-cancellable period of the CCA plus any optional renewal periods<sup>5</sup> (1) that are reasonably certain to be exercised by the customer or (2) for which exercise of the option is controlled by the vendor. [\[350-40-35-13 – 35-14\]](#)

An entity is required to 'periodically reassess' the estimated term of the hosting arrangement over which capitalized implementation costs are amortized. When doing so, the entity considers the same factors as it considered initially. [\[350-40-35-15 – 35-16\]](#)

A change in the amortization period is accounted for prospectively as a change in accounting estimate. However, ASC 350-40 does not provide guidance on: [\[350-40-35-15\]](#)

<sup>5</sup> Includes periods covered by an option to terminate the CCA.

- how often a company should reassess the term of the hosting arrangement; or
- what events or changes in circumstances should trigger a reassessment.

Therefore, the question arises about how often reassessment should occur, and whether, similar to lessees' reassessment of the lease term under ASC 842 (see section 6.6 of KPMG Handbook, [Leases](#)), reassessments should occur only on the occurrence of specified events or circumstances. [\[842-10-35-1, 55-28\]](#)

**Interpretive response:** We believe it is clear, although not explicitly stated, that the term of the hosting arrangement must be reassessed if the CCA is modified or the entity exercises a renewal or termination option that is not already included in that term.

Otherwise, we believe a plain reading of the guidance indicates entities should develop and maintain processes and controls to identify substantive changes to any of the factors expressly identified in ASC 350-40 (included in the bulleted list below) that are considered in determining or reassessing the hosting arrangement's term. To the extent there is a change to one or more of them, an entity should reassess the term of the hosting arrangement. [\[350-40-35-16\]](#)

- Obsolescence
- Technology
- Competition
- Other economic factors
- Rapid changes that may be occurring in the development of hosting arrangements or hosted software
- Significant implementation costs that are expected to have significant economic value for the entity (customer) when the option to extend or terminate the hosting arrangement becomes exercisable.

In addition, the term of the hosting arrangement should be revised if the entity commits to a plan to abandon (i.e. cease use of) the cloud-based solution. [Question 70](#) discusses abandonment, while section 6.2.30 of KPMG Handbook, [Software and website costs](#), provides additional guidance about abandoning a cloud-based solution.

In the absence of further amendments to US GAAP or guidance from the SEC staff, we do not believe entities should infer a 'triggering event' approach to reassessing the term of the hosting arrangement so as to reassess the term less frequently. The FASB's decision to adopt such an approach for lease term reassessments was specifically debated and codified in ASC 842; no such debate occurred when deliberating ASU 2018-15, and no similar guidance exists in ASC 350-40.



## Question 60

### Can capitalized CCA implementation costs be amortized based on expected usage of the hosted software?

**Interpretive response:** No. ASC 350-40 bases the amortization pattern for capitalized CCA implementation costs on the entity's access to the hosted software, not on its use thereof. [\[350-40-35-13\]](#)

Therefore, if the entity has equal access to the hosted software throughout the term of the hosting arrangement, amortization is on a straight-line basis. This applies even if the entity expects to use the hosted software on an uneven basis – e.g. more during certain periods of the year, or during certain years of the CCA.



## Question 70

### Does an entity recognize any effect of a planned abandonment before it ceases use of the cloud-based solution?

**Background:** Subtopic 350-40 requires capitalized CCA implementation costs to be accounted for as abandoned, consistent with the abandonment guidance in ASC 360 (property, plant and equipment), when the CCA (or module/component thereof) ceases to be used. [350-40-35-12, 360-10-35-47 – 35-49]

A long-lived asset to be abandoned is disposed of when it ceases to be used. If the company commits to a plan to abandon a long-lived asset before the end of its previously estimated useful life, depreciation estimates are revised under ASC 250 (accounting changes and error corrections). At the point when the asset ceases to be used, its carrying amount should not exceed its salvage value. [360-10-35-47 – 35-48]

**Interpretive response:** Yes. Consistent with the ASC 360 guidance applicable to other long-lived assets, amortization of a CCA implementation cost asset is accelerated from the point in time the entity commits to a plan to cease use of the related cloud-based solution (or module/component).

This applies to a CCA even if the cease-use date will precede the end of the CCA term. [360-10-35-47 – 35-48]

In our experience, it is rare for an abandoned CCA implementation cost asset to have salvage value. Therefore, it would generally not be appropriate to continue to recognize a CCA implementation cost asset beyond the cease-use date of the cloud-based solution (or module/component).

If the cloud-based solution has multiple modules or components and the entity commits to a plan to cease use of only one or some of them, amortization of the CCA implementation cost asset(s) related to that (those) module(s)/component(s) is accelerated, consistent with the entity's plan to cease use. The amortization of the CCA implementation cost assets for modules/components that will not be abandoned is not accelerated.

Because of this, entities may frequently need to identify separate CCA implementation cost assets for the modules/components within a larger cloud-based solution (see [Question 10](#)). It may be easiest to do this upfront (e.g. as the costs to implement the CCA are incurred), but otherwise entities will need to do this subsequently if they abandon only one or some modules/components of a cloud-based solution.



## Question 80

### Are costs for CCA implementation activities incurred after go-live capitalizable?

**Background:** Implementation activities are not necessarily undertaken only at or before go-live. Consider the following examples (not exhaustive).

- Customer implements cloud-based solution T in Year 1. Customer's implementation activities include significant configuration activities before go-live. In Year 2, Customer decides it wants to change the configuration of T, effectively overwriting the configuration effected in Year 1.
- Customer implements cloud-based solution Z in Year 1. Customer's implementation activities include configuration of Z, but not to a significant degree. In Year 2, Customer decides it can incrementally benefit from Z if it more significantly and specifically configures Z.

- Customer implements cloud-based solution X in Year 1. Customer’s implementation activities include configuring and interfacing X to work together with its on-premise HR application. In Year 3, Customer sunsets the on-premise HR application for cloud-based HR solution Y. As part of implementing Y, Customer reconfigures X and implements a new interface between X and Y.
- The same facts as the previous example except that Y is a new on-premise HR application.

In these (and similar) examples, the question arises about whether Customer should capitalize the costs to reconfigure T, Z and X and implement a new interface between X and Y under ASC 350-40.

**Interpretive response:** It depends. In general, consistent with the ASC 350-40 guidance applicable to internal-use software costs, we believe CCA implementation costs should not be capitalized after go-live. [350-40-25-14]

However, we believe exceptions arise if the related implementation activities:

- relate to a new CCA or new internal-use software application – e.g. Y in the last two background examples;
- create a new asset for which the incurred costs should be capitalized under ASC 350-40 or other US GAAP Topics – e.g. a new interface that meets the definition of internal-use software; or
- increase the functionality of the cloud-based solution.

#### Activities relate to a new CCA or internal-use software application

If the activities relate to a new CCA that is not yet live or an internal-use software application that is not yet ‘substantially complete and ready for its intended use’, the related costs that qualify are capitalized.

Judgment may be required to determine whether new activities relate to (1) an existing CCA or (2) a new CCA or on-premise application. However, just because the activities are being undertaken because of implementing a new CCA or internal-use software application, does not mean the new activities relate to that new CCA or application.

In general, we would not view changes specifically to the cloud-based software subject to the existing CCA (e.g. changes to its configuration) as related to another CCA or application – even if those changes are only being made because the entity is implementing the new CCA or application.

In contrast, it may require judgment to determine to which CCA or application a new interface (that is not itself an internal-use software asset – see ‘Create a new asset’ below) relates when it is implemented to connect the existing CCA with the new CCA or application. It may be relevant in those circumstances to consider where the interface will reside, because it will reside in the entity’s IT environment (or its own hosting environment – e.g. its own AWS or Azure instance) it may be a separate internal-use software asset.

- If the new interface will reside in the hosting environment of the existing CCA cloud service provider, this may indicate it relates to the existing CCA.
- Alternatively, if the new interface will reside in the hosting environment of the cloud service provider for the new CCA, this may indicate it relates to the new CCA.

#### Create a new asset

Some implementation activities create independent internal-use software or PP&E assets. For example, an interface may itself meet the definition of internal-use software, or implementation activities may include the acquisition or construction of assets that meet the definition of PP&E. In those cases, the entity should follow the US GAAP Topic applicable to the type of asset created (e.g. ASC 350-40 or ASC 360).

### Additional functionality or utility

Costs of upgrades and enhancements to internal-use software – i.e. costs that result in additional functionality in the software – are generally capitalized if those same costs would be capitalized for new software. [350-40-25-7 – 25-11]

While the 'Implementation Costs of a Hosting Arrangement That Is a Service Contract' subsections of ASC 350-40 do not contain equivalent guidance, ASC 350-40 explicitly directs entities to refer to the 'General' subsection of ASC 350-40-25 to determine when CCA implementation costs should be capitalized.

We believe implementation costs incurred to substantively increase the functionality or utility of the cloud-based solution – i.e. implementation costs incurred (e.g. configuration changes) to enable the entity to undertake additional tasks or perform additional functions using the hosted software – are analogous to the costs of upgrades and enhancements to internal-use software, and therefore should be capitalized. [350-40-25-18]

In contrast, costs incurred that do not result in the entity being able to undertake additional tasks or perform additional functions using the hosted software – e.g. costs incurred that merely change how an existing task or function is performed – should not be capitalized.

### Consideration of previous activities

Regardless of whether the costs of new implementation-type activities should be capitalized, we believe consideration should be given to whether those new activities indicate:

- a plan to abandon a module or component of a cloud-based solution (see [Question 70](#));
- a need to reassess the term of the hosting arrangement (see [Question 50](#)); and/or
- the asset group that includes the capitalized implementation costs is impaired.



## Question 90

### Do customers need to combine vendor contracts entered into at or near the same time with the same counterparty?

**Background:** Entities (customers) frequently engage a single service provider to perform multiple services.

For example, in a CCA, the entity and a cloud service provider may separately paper and execute contracts for access to the cloud-based solution (i.e. hosting services) and implementation services.

In other scenarios, implementation services for a cloud-based solution contracted for by the customer with a third party (e.g. a consultant) that is not the cloud service provider include more than one legal contract.

ASC 350-40 does not include explicit contract combination guidance. Therefore, the question arises about whether the entity must combine two or more contracts with the same counterparty when applying ASC 350-40.

If an entity does not combine two or more related contracts with the same counterparty and the prices in each contract do not reflect the stand-alone prices of the services contracted, the accounting will differ from what would result if the contracts were combined.

For example, an entity contracts with a third-party consultant to perform configuration and data migration services for a new CCA in two separate statements of work. The costs of the configuration services will generally be capitalized under ASC 350-40, while the data migration service costs will be expensed as incurred.

If the two statements of work are treated as a single contract, the entity will allocate the combined fees to the configuration and data migration services on a relative stand-alone price basis. In contrast, if the two contracts are not combined, the entity will follow the stated prices in the contract when determining the costs that should be capitalized and those that should be expensed as incurred.

**Interpretive response:** Yes. Although ASC 350-40 does not contain contract combination guidance, we believe it is appropriate to combine two or more contracts entered into at or near the same time that are in substance part of the same commercial arrangement – e.g. a CCA with related implementation services provided by the cloud service provider. An entity’s accounting for the elements of an arrangement should not differ based solely on how the arrangement is papered – i.e. in one contract or multiple contracts.

In addition, we note the following.

- ASU 2018-15 states that a conceptual basis for the CCA implementation cost guidance is the guidance for contract costs in ASC 340-40 (other assets and deferred costs—contracts with customers); the accounting for those contract costs is subject to the contract combinations guidance in ASC 606. [\[ASU 2018-15.BC9, BC15\]](#)
- Many of the amendments enacted by ASU 2018-15 use concepts from ASC 842. These include the cost allocation guidance for CCAs that have multiple elements, and the guidance about the period over which to amortize capitalized implementation costs. ASC 842 requires entities to combine contracts entered into at or near the same time as each other that meet one or more specified criteria.



## Question 100

### Do CCA implementation costs incurred by the acquiree give rise to an asset in a business combination or asset acquisition?

**Background:** Some implementation activities in CCAs give rise to assets that were recognized before the issuance of ASU 2018-15 – e.g. interfaces developed for use in the customer’s IT environment generally meet the definition of internal-use software. Such internal-use software assets will be recognized at fair value in acquisition accounting.

However, the question arises about whether costs previously incurred by an acquiree to implement a CCA give rise to an asset that should be recognized in acquisition accounting. Further, some question whether implementation costs that are required to be expensed as incurred under ASC 350-40 (e.g. data migration/conversion and training costs) can still give rise to assets in acquisition accounting.

**Interpretive response:** In general, yes to both.

#### Business combinations

The acquiree’s pre-acquisition implementation activities will typically permit a market participant to avoid incurring both:

- similar implementation costs to derive value from the CCA; and
- hosting service fees, stemming from the acquiree’s contract, during the period it would take to implement the cloud-based solution had the acquiree not already undertaken its implementation activities.

In this way, we believe the acquirer obtains a contractually based in-place CCA asset that is like an in-place lease asset, which reflects the value an acquirer lessor obtains from an in-place lease at the acquisition date. An in-place lease generally permits the acquirer lessor to avoid new lease origination and underlying asset holding costs; see Question 11.1.110 in KPMG Handbook, [Leases](#).

The fair value of an in-place CCA, which will depend on the facts and circumstances, should be recognized in the business combination on a CCA-by-CCA basis.

Consistent with our view about in-place lease assets, we believe in-place CCA assets recognized under ASC 805 (business combinations) generally should be reported separately (as an intangible asset) from:

- acquired technology assets (e.g. acquired internal-use software); and
- any favorable contract asset or unfavorable contract liability associated with the CCA arising from off-market hosting service fees.

### Asset acquisitions

We believe the above related to business combinations applies equally to asset acquisitions. However, because an entity does not recognize goodwill or a bargain purchase gain in an asset acquisition, the amounts recognized for the implementation costs intangible asset may be adjusted from what would have been recognized under ASC 805.

## For further information

For more information on customers' accounting for CCAs, see KPMG Handbook, [Software and website costs](#).

**This document highlights issues specific to the accounting for CCA implementation costs that are discussed in KPMG Handbook, [Software and website costs](#).**

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