Sullivan
SULLIVAN & WORCESTER

Sullivan & Worcester LLP
One Post Office Square
Boston, MA 02109

617 338 2800
sullivanlaw.com

October 24, 2019

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Internal Revenue Service
CC:PA:LPD:PR (REG-130700-14)
Room 5203
P.O. Box 7604
Ben Franklin Station
Washington, DC 20044

Re: Proposed Regulations, sections 1.861-18 and -19 (REG-130700-14):
Classification of Cloud Transactions and Transactions Involving Digital Content

Ladies and Gentlemen:

I am responding to the request for comments on the proposed regulations under Section 861 of the Internal Revenue Code, REG-130700-14, published on August 14, 2019 and corrected on October 2, 2019 (the "Proposed Regulations"). Thank you for this opportunity to comment.

The Proposed Regulations are a welcome articulation of legal principles as applied to modern business models, including cloud transactions, and they represent an excellent first draft. However, I believe that the Proposed Regulations can be improved in five significant respects, as discussed below and as reflected in my proposed markup of the Proposed Regulations (attached as Exhibit A).

The five comments below and the attached exhibits reflect my own view of the applicable federal income tax issues as a practitioner and commentator on federal income tax law, and do not represent the views of my law firm, any client, any law school at which I teach, or any other person or organization. The intent behind these five comments is not to impact the application of the Proposed Regulations to standard cloud transactions between social media, streaming, or e-commerce companies (such as Facebook, Amazon, Netflix, and Google ("FANG")) on the one hand, and their consumers or subscribers on the other hand. Instead, the comments are intended to pare back the Proposed Regulations so that they do not inadvertently apply to infrastructure providers who lease and otherwise make available real property and other infrastructure to FANG and similar commercial tenants.

I. Nonapplicability to sections outside of intended scope

First, the Proposed Regulations on cloud transactions (Proposed Regulations section 1.861-19) purport to be limited in application to only specific portions of the Internal

Revenue Code of 1986, as amended (the "Code"), *viz.*: subchapter N of chapter 1; sections 59A, 245A, 250, 267A, 367, 404A, 482, 679, and 1059A; chapters 3 and 4; sections 842 and 845 (to the extent involving a foreign person); and transfers to foreign trusts not covered by section 679. The Proposed Regulations on digital content (Proposed Regulations section 1.861-18) purport to have a similar scope. However, according to the preamble, the Proposed Regulations interpret and apply principles under Code section 7701(e), a section which potentially applies throughout all of chapter 1 of the Code. As the next three comments in this letter discuss, lease-versus-service principles have been interpreted and applied differently in parts of the Code that are not within the scope of the Proposed Regulations.

Code section 7701(e)(6) provides the Treasury and the Internal Revenue Service (the "Service") with the authority to "prescribe such regulations as may be necessary or appropriate to carry out the provisions of this subsection." Under this grant of legislative authority, Treasury regulations may selectively apply Code section 7701(e) interpretations to specific parts of section 1 of the Code yet not to others.[1] Accordingly, it would be helpful to have an explicit disclaimer in the preamble and in the application section of the Proposed Regulations that any purported interpretation and application of Code section 7701(e) principles in the Proposed Regulations do not apply outside of the intended scope of the Proposed Regulations, and thus for example do not apply to (and have no bearing on) lease-versus-service determinations under other chapter 1 provisions such as Code sections 163(j), 469, 512(b)(3), 542, 851-860, 7704, *etc.*[2]

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[1] Additional authority for this approach may also be grounded in section 7805(a) of the Code, a general grant by Congress of regulatory authority over the Code. Courts generally have applied a highly deferential standard of review to properly issued regulations, according them "controlling weight unless they are arbitrary, capricious, or manifestly contrary to the statute." *Chevron U.S.A., Inc. v. Natural Resources Defense Council, Inc.,* 467 U.S. 837, 844 (1984). The Supreme Court ruled that *Chevron* deference applies to tax regulations in *Mayo Found. v. United States*, 562 U.S. 44 (2011), and that the Administrative Procedures Act (**"APA"**) requires any administrative action undertaken under the authority of a regulatory project to be subject to the APA's notice-and-comment procedures and to have the reasoning underlying such regulations explicitly documented in the regulatory record. After all, "courts cannot perform executive duties, or treat them as being performed, when they have been neglected." *United States v. McLean*, 95 U.S. 750, 753 (1878). This project thus presents an opportunity to add substance to the regulatory mandate in section 7701(e)(6) and also to prevent the Proposed Regulations from being applied inappropriately.

[2] In total, some 46 different provisions in chapter 1 of the Code explicitly use the term "rent". Also, varying section 7701 definitions are currently deployed in the federal income tax law to suit the particularized purposes of varying Code sections. For example, disregarded entities under the federal "check-the-box regulations" in Treasury Regulations sections 301.7701-1 through 301.7701-3 are nevertheless regarded as corporations for purposes of employment taxes, as prescribed by Treasury Regulations section 301.7701-2(c)(2)(iv)(B) (generally, "an entity that is disregarded as an entity separate from its owner for any purpose under this section is treated as a corporation with respect to [employment] taxes"). *See* Brian E. Hammell, Caroline A. Kupiec, and Ameek Ashok Ponda, "'*Cogito, Ergo Sum': Is That Disregarded Entity In Fact Regarded*?", J. Passthrough Ent. (CCH) 53, 55 (July-August 2019), available at http://sitepilot06.firmseek.com/client/sullivan/www/assets/htmldocuments/JPTE_22-04_Hammell-Kupiec-Ponda.pdf.

II. Relevance and primacy of real estate location

Second, the implicit factual premise for many of the Proposed Regulations' examples is that the underlying real estate component is not explicitly or implicitly specified by the contractual relationship and is otherwise inconsequential to that contractual relationship. This premise should be made explicit, lest the examples be susceptible to an overbroad reading that impinges on long-established legal principles and business models regarding the rental of real estate in tandem with the rental of personal property.

For example, consider the case of an accountant, architect, or lawyer who provides services cross-border: although that professional must occupy some real estate somewhere, and although that real estate occupancy may represent a significant part of the professional's direct costs in delivering performance, it is nevertheless the case that the professional's underlying real estate component is not explicitly or implicitly specified by the contractual relationship and is in fact inconsequential to that contractual relationship. This "old economy" example is apposite to cloud transactions where the underlying real estate component is not explicitly or implicitly specified by the contractual relationship and is otherwise inconsequential to that contractual relationship, and the Proposed Regulations reach the right conclusions in respect of such fact patterns.

In contrast, however, there are a variety of co-location, space hosting, fiber supply, and cloud transactions where the customer contract specifies or contemplates performance at particular real estate (*e.g.*, a building, a campus, or a real estate network), or where particular real estate is otherwise consequential to that relationship, in order to address the customer's needs around latency, redundancy, reliability, or security. Examples of these location-based arrangements include:

- a customer so sensitive to distance (and the attendant latency that accompanies distance on account of the limited speed of light) that it wants its cloud transactions hosted within a particular data center or within a particular geography, in order to be as close as possible to other platforms, such as science or defense platforms;

- a customer so sensitive to geographical diversification of its infrastructure access that it wants its cloud transactions hosted in diverse geographies away from the customer's primary business location, in order to be as insulated as possible from location-based risks such as natural disasters or terrorism;

- a customer so sensitive to reliability and continuous availability of its infrastructure access (including the reliability of the underlying real estate) that it wants its cloud transactions hosted only in a particular data center network; and

- a customer so sensitive to security of its infrastructure access (including physical security of the underlying real estate) that it wants its cloud transactions hosted in one of the provider's secure locations where only the provider's cleared security personnel have physical access.

As the old cliché goes, the three most important considerations in real estate are location, location, and location. Because real estate location is the economic driver in all of the above arrangements, the essence of each of the above contractual relationships is real estate access and occupancy, which is consistent with a rental relationship, and the related personal property assets (whether accessed/occupied on an exclusive basis or on a shared basis) are part of that overall real estate rental relationship.[3] The resulting rental treatment of realty and tangential personalty is in accord with established legal precedent in various sections of the Code, as well as in established business and investment models of various taxpayers, including tax-exempt organizations, REITs, and individual investors subject to the passive activity loss rules, as discussed below and as illustrated by the examples in Exhibit B.[4] Any temporary or final regulations dealing

[3] *See*, *e.g.*, Code sections 512(b)(3)(A)(ii) and 856(d)(1)(C).

[4] Some arrangements may more appropriately be handled through the use of contracts styled as licenses or even as service contracts rather than as leases, but they still relate to the use of space rather than the performance of services and should be treated as rental arrangements, not services arrangements. This may be illustrated by the many sections of the Code that adopt a very expansive definition of the term "rental activity" that includes arrangements not designated as leases. For example, Treasury Regulations § 1.469-1T(e)(3)(i) provides:

> Except as otherwise provided in this paragraph (e)(3), an activity is a rental activity for a taxable year if—
>
> (A) During such taxable year, tangible property held in connection with the activity is used by customers or held for use by customers; and
>
> (B) The gross income attributable to the conduct of the activity during such taxable year represents (or, in the case of an activity in which property is held for use by customers, the expected gross income from the conduct of the activity will represent) amounts paid or to be paid principally for the use of such tangible property (without regard to whether the use of the property by customers is pursuant to a lease or pursuant to a service contract or other arrangement that is not denominated a lease).

See also Dirico v. Comm'r, 139 T.C. 396, 408-09 (2012) (licenses of space are rental activities under Code section 469); PLR 201423011 (Feb. 20, 2014) (taxpayer's use of agreements labeled as "master service agreements", "service agreements", or similar titles granting "customers" a license to use specific space nevertheless generated rents from real property under Code section 856, because "[a]lthough the labels are different, [these agreements] grant the tenants the same rights they would have under a traditional lease"). For a recent case concerning section 469 and the definition of leasing, *see Eger v. United States*, 124 AFTR 2d 2019-5717 (RIA) (N.D. Cal. 2019) (in which the gating question was whether a leasing arrangement should be evaluated using the standards that apply between the landlord and its intermediaries or between the landlord and the end users; the court decided to use the standards that apply between the landlord and the end users and disregard the intermediaries).

with cloud transactions containing a significant real estate component should therefore recognize and give proper weight to the real estate component.[5]

III. Economic possession is more important than physical possession

Third, the Proposed Regulations devote much attention to the physical possession and control of cloud infrastructure assets, while downplaying or ignoring the economic possession and control of such assets. This is fundamentally in error, because physical possession is significantly less relevant to this class of infrastructure assets. In particular, assets have value based on how they are used and deployed. Assets that are primarily physical (a shovel, a desk, a broom, *etc.*) have value based on who physically possesses and controls them. By contrast, cloud infrastructure assets (*e.g.*, a computer or a server) have value based on who economically possesses and controls them, which requires having the access to and control over the assets' usage and capacity. For many cloud infrastructure assets, particularly those rented on a multi-tenanted, shared-access basis, ranging for example from servers to long-distance fiber lines, the infrastructure provider may have physical possession and control, but one or more customers have economic possession and control; that is, the customers have access to the assets to send instructions and otherwise control the assets so as to "use up" their capacity, which is really where the value in such assets resides. These rental principles are particularly salient when the access to the cloud infrastructure asset is provided in tandem with an overall real estate rental, as discussed in the above data center examples. Thus, it is incorrect to say that a customer has no possession and control over cloud infrastructure assets simply because it does not have physical possession and control, when in fact it has the form of possession and control (*i.e.*, economic possession and control) that is most salient to the subject assets.[6]

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[5] A different, "super factor" approach to this issue would be to specifically exclude from the definition of "cloud transaction" in Proposed Regulations §1.861-19(b) any transactions in which the physical location of the property used in the transaction is either specified in the contract or consequential to the customer relationship. Yet another approach would be to employ a multi-tier system, such as the theoretical three-tier system proposed by the Organization for Economic Co-operation and Development (**"OECD"**) in its "Secretariat Proposal for a 'Unified Approach' under Pillar One" (issued on October 9. 2019), under which a share of deemed residual profit is allocated to market jurisdictions under a new taxing right but another share is allocated to traditionally-taxed functions, which would include the use of real property and rental space as well as related personalty and rental-related services, with a dispute prevention and resolution mechanism to be implemented to resolve disputes between the claims of various jurisdictions over these two different methods. *See* the OECD Public Consultation Document on this proposed approach, available at https://www.oecd.org/tax/beps/public-consultation-document-secretariat-proposal-unified-approach-pillar-one.pdf.

[6] For example, the city of Chicago, Illinois applies a personal property tax to "nonpossessory computer leases" that it deems are used within the city of Chicago but are located outside the city. It defines a "nonpossessory computer lease" as "a nonpossessory lease [previously defined as 'a lease or rental wherein use but not possession of the personal property is transferred'] in which the customer obtains access to the provider's computer and uses the computer and its software to input, modify, or retrieve data or information, in each case without the intervention (other than *de minimus* intervention) of personnel action on behalf of the provider.... In the case of a nonpossessory computer lease, the

Fairly applying the concept of economic possession and control, *i.e.,* alongside and with at least as much weight as the concept of physical possession and control, necessitates certain changes to the operative principles in Proposed Regulations § 1.861-19(c) and the examples in Proposed Regulations § 1.861-19(d), all as reflected in the attached Exhibit A. For example, the customer has neither physical possession and control nor economic possession and control in most of the examples presented in Proposed Regulations § 1.861-19(d), and thus no changes are needed. But as for *Example 1* in Proposed Regulations § 1.861-19(d)(1), *Example 2* in Proposed Regulations § 1.861-19(d)(2), and *Example 8* in Proposed Regulations § 1.861-19(d)(8), each provides the customer with significant to exclusive use of the designated servers, and thus the customers have economic possession and control that must be addressed both in context and with a more nuanced analysis. In these three examples, I recommend that other contextual factors become controlling, particularly the fact that the physical location of the servers is not a significant factor in the customer relationship between Corp A and Corp B. Cumulatively, these other factors then lead to the same final answer: the described transaction represents the provision of services rather than a lease of property. In brief, I recommend that the Proposed Regulations put the two types of possession and control—physical and economic—on a more equal and balanced footing, while keeping in mind that other factors (such as the presence of underlying real estate access) will be highly probative to dispositive where one party does not have both types of possession and control.

IV. Enumerated factors should be applied more realistically

Fourth, I have one comment that is not included in the attached Exhibit A markup of the Proposed Regulations but which may be among the most important of all.[7] I believe that some of the factors enumerated in Proposed Regulations § 1.861-19(c)(2) as "demonstrating that a cloud transaction is classified as the provision of services rather than a lease of property" are misapplied and/or overemphasized in that (as drafted and applied) the factors seem to sweep in multi-tenanted, shared-access rental arrangements. For example, the factor identified in Proposed Regulations § 1.861-

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location of the terminal or other device by which a user accesses the computer shall be deemed to be the place of lease or rental and the place of use of the computer for purposes of the tax imposed[.]" *See* City of Chicago, "Personal Property Lease Transaction Tax Ruling #12" (June 9, 2015), available at https://www.chicago.gov/content/dam/city/depts/rev/supp_info/TaxRulingsandRegulations/LeaseTaxRuling12-06092015.pdf; City of Chicago, "Information Bulletin: Nonpossessory Computer Leases", available at https://www.chicago.gov/content/dam/city/depts/rev/supp_info/TaxSupportingInformation/TransTaxInfoBulletinNonpossessoryComputerLeases.pdf. Accordingly, this Chicago tax is applied based on economic possession and control, not physical possession and control, as discussed in this section.

[7] Addressing this fourth comment would require significantly more edits to the Proposed Regulations, and the resulting redline would overwhelm and obscure the more surgical changes described in the prior three comments. For that reason, I have not marked up the Proposed Regulations to reflect this fourth comment, but I would be happy to do so upon request.

19(c)(2)(iv) (which my markup moves to -19(c)(2)(v))[8] is a factor that applies to most real estate landlords and other lessors of multi-tenanted property, because such lessors by definition must have "integrated operations" (including maintenance, replacement, and rental-related services) extending beyond the mere net lease of property in order to remain competitive in the leasing marketplace.[9] Thus, this factor, which is not one of the statutory factors enumerated in Code section 7701(e)(1), adds little if anything to the lease-versus-service determination.

Similarly, two statutory factors enumerated in Code section 7701(e)(1)(E) and (F), which are then replicated in the negative in Proposed Regulations § 1.861-19(c)(2)(vii) and (ix)[10] (and which my markup moves to -19 (ix) and (xi)), ignore the fact that shared rental arrangements for real property (and associated personal property) are legion throughout the Code. These two factors contend that if the provider uses the property to provide significant services for more than one entity or if the total contract price substantially exceeds the rental value of the property, then the contractual relationship is more likely a provision of services. Yet there are plenty of examples of multi-tenanted property (real and/or personal) throughout section 1 of the Code that are treated as leases and not services; by way of illustration but not limitation, Exhibit B provides a detailed list of administrative pronouncements by the Service analyzing such real-world business models of multi-tenanted assets.

More conceptually, the economic reality is that there is often more than one rental price for an asset, in that an asset owner can sometimes realize higher aggregate rents by renting out smaller amounts of capacity in a "retail" model rather than larger amounts in a "wholesale" model. This business reality in fact underlies almost all of the examples enumerated in Exhibit B and undercuts the lease-versus-service predictive value of these two factors, particularly in a case where human services have not been added to the mix in any significant measure. More telling, even if the asset provider reserves part of the asset's capacity for its own use in a service business, this does not dictate that the asset provider's contractual relationship with a lessee-customer is for the provision of services rather than a rental. For example, consider a boat repair business that owns a portable generator which it uses on weekdays for its boat repair activities and for selling excess electricity to the grid, but which also leases the portable generator on a long-term basis for weekend use to a nonprofit, religious organization. The fact that the generator

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[8] "The property is a component of an integrated operation in which the provider has other responsibilities, including ensuring the property is maintained and updated[.]"

[9] *See* Paul W. Decker, David H. Kaplan, & Ameek Ashok Ponda, *Non-Customary Services Furnished by Taxable REIT Subsidiaries*, 148 Tax Notes 413 (July 27, 2015), available at https://www.sullivanlaw.com/assets/htmldocuments/B1910892.pdf, for a history of landlord activities beyond the mere lease of property and their treatment under Code section 856.

[10] (vii): "The provider uses the property concurrently to provide significant services to entities unrelated to the customer[.]"; (ix): "The total contract price substantially exceeds the rental value of the property for the contract period[.]"

is primarily used by the boat repair business to provide significant services to others should have zero impact on the treatment of its weekend use as a rental.

Along the same lines, Proposed Regulations § 1.861-19(c)(2)(viii) (which my markup moves to -19(c)(2)(x)),[11] which is also not specifically enumerated in Code section 7701(e)(1), is another problematic factor, in that it treats pricing based on the level of the customer's use rather than the mere passage of time as indicative of services rather than a lease. However, even low-tech uses (such as leasing access to shared land areas or leasing building lobby space for an ATM machine) clearly provide for rent based on the level of use, and the fact that the analysis in the Proposed Regulations is performed on cloud transactions instead of physical transactions should not alter the well-established principle that revenues under long-term rental arrangements can be based on volume of use (*e.g.*, so-called "percentage rent") rather than mere lapse of time. That is, it is both commonplace and commercially sensible for a landlord to charge a tenant an amount of rent that is based on the amount or the volume of a tenant's actual or expected access to and use of common areas or other shared occupancy real estate (and tangential personalty), as decades of private letter rulings demonstrate.[12]

In short, the four enumerated factors discussed above that purport to militate toward services rather than rental, which factors are enumerated in Proposed Regulations § 1.861-19(c) and then superficially applied in Proposed Regulations § 1.861-19(d), fail to account for the complexity of many multi-tenanted rental relationships. A better approach may be to give these four factors less-to-no weight in the analysis, or perhaps relegate them to a secondary-and-less-impactful list of factors.

V. Landlord services are consistent with rental relationships

[11] "The provider's fee is primarily based on a measure of work performed or the level of the customer's use rather than the mere passage of time[.]"

[12] *See*, *e.g.*, PLR 201907001 (Nov. 16, 2018) (tenants share access to pipeline and to storage area, in which tenant goods are commingled, and each tenant pays for its own volume of use); PLR 201151013 (Sept. 13, 2011) (where landlord and tenant share access to surface, tenant pays landlord a rental charge based on the volume and amount of use by tenant of the surface, citing *Vest v. Comm'r*, 481 F.2d 238 (5th Cir. 1973), *cert. denied*); PLR 200428019 (Mar. 25, 2004) (warehouse REIT leased generally nondedicated storage space to food manufacturers, distributors, and retailers; all or substantially all of the leased space was shared by multiple tenants, such that tenants typically did not have reserved storage locations within a particular facility; finally, rents were based on the amount of space that customers used, which relates closely with storage volume (cubic footage)); PLR 200052031 (Sept. 29, 2000) (tenant pays landlord a rental charge based on the number of times that tenant's automated teller machine located in the lobby of landlord's building, *i.e.*, a common area of the building, is accessed); and PLR 200052021 (Sept. 28, 2000) (where landlord and tenant share access to surface, tenant pays landlord a rental charge on the volume of use by tenant, measured as the amount of timber severed). *See also* PLR 201250008 (Aug. 31, 2012) (where landlord and tenant share access to surface, tenant pays landlord a rental charge based on the amount of damage to the surface caused by tenant, which is a proxy for tenant's volume of use of the surface) and PLR 201250003 (Sept. 6, 2012) (on an oil drilling platform, rental charges are apportioned to tenants based on amount of production handling capacity used).

My last comment is in many ways a continuation of my prior comments,[13] but one that is directed squarely toward a fundamental premise of the Proposed Regulations that each transaction be "classified solely as either a lease of property or a provision of services".[14] This "all-or-nothing" or "either/or" approach simply does not reflect the reality of landlord/multi-tenant relationships, which customarily include *both* the provision of property *and* the provision of related services. Thus, for example, within the REIT industry and pursuant to leases and other occupancy agreements, landlords lease out to multiple tenants applicable real estate (and related personalty), and provide both customary and cutting-edge services to those tenants pursuant to such leases and occupancy agreements;[15] this same point is equally true for leasing by other landlords such as tax-exempt entities[16] and publicly traded partnerships.[17]

Much of the difficulty with the Proposed Regulations stems from the application of this false "all-or-nothing" dichotomy, in that typical landlord-provided services at multi-tenanted facilities become a "tail" that "wags away" (and obscures) the underlying rental relationship. If instead the Proposed Regulations accept the commercial reality that rental relationships (particularly multi-tenanted rental relationships) include landlord-provided services, and accordingly apply whatever cross-border treatment the Treasury

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[13] I separated this discussion from the previous comment and saved it for last, because the comment also appears to be a "super factor" that might require a fundamental rethinking of the scope, framework and architecture of the Proposed Regulations. As with my fourth comment, this fifth comment is not included in the Exhibit A markup because that would require significant edits to the Proposed Regulations, and the resulting redline would overwhelm and obscure the more surgical changes described in the first three comments.

[14] Preamble to the Proposed Regulations, "Explanation of Provisions", section I.B.1. The Preamble continues as follows:

> Certain cloud transactions may have characteristics of both a lease of property and the provision of services. Such transactions are generally classified in their entirety as either a lease or a service, and not bifurcated into a lease transaction and a separate services transaction.

This standard is then included in Proposed Regulations § 1.861-19(c)(1):

> A cloud transaction is classified solely as either a lease of computer hardware, digital content (as defined in § 1.861-18(a)(3)), or other similar resources, or the provision of services, taking into account all relevant factors[.]

[15] *See* Code section 856(d) and Rev. Rul. 2002-38, 2002-2 C.B. 4, and the approved REIT leasing models described in Exhibit B. *See also* Decker, Kaplan, and Ponda, *supra* note 9, at 414, for a discussion of a REIT landlord's responsibilities:

> As demonstrated by the requirements above, a REIT's primary function under the code is to hold and lease [out] real property for occupancy. As with all landlords, REITs must also provide a variety of related services to their tenants.

[16] *See* Code section 512(b)(3) and Treasury Regulations § 1.512(b)-1(c), and the approved tax-exempt leasing models described in Exhibit B.

[17] *See* Code section 7704(d), and the approved publicly traded partnership leasing models described in Exhibit B.

and the Service think best to handle the components of the overall rental-plus-services relationship, then these Proposed Regulations would conform more closely to the way that other Code sections treat such rental arrangements. For example, a REIT may earn service revenues related to its real estate rental relationship without repercussion for purposes of Code section 856 (provided that, in the case of cutting-edge services, the REIT subcontracts out such services either to a third party contractor or to a taxable C corporation subsidiary).[18] Of course, any bifurcation approach would require a fundamental rethinking of the scope, framework and architecture of the Proposed Regulations; but adopting such a bifurcation approach would align the Proposed Regulations with how other Code sections have treated rental-plus-service relationships over the decades.

VI. Conclusion

Each of the five comments above (as supported by the attached exhibits) represents an infirmity with the current draft of the Proposed Regulations, and adopting the various measures advocated herein would address those infirmities. I thus request that changes addressing these five comments should be adopted prior to the Proposed Regulations being finalized.

Thank you again for the opportunity to comment on the Proposed Regulations. Please feel free to contact me if you would like to discuss the attached comments or otherwise have any questions.

Respectfully submitted,

Ameek Ashok Ponda

Direct line: 617-338-2443
aponda@sullivanlaw.com

Attachment

[18] *See supra* note 15.

Exhibit A: Markup of Proposed Regulations

REG-130700-14
Classification of Cloud Transactions and Transactions Involving Digital Content

List of Subjects in 26 CFR Part 1

Income taxes, reporting, and recordkeeping requirements.

Proposed Amendments to the Regulations

Accordingly, 26 CFR Part 1 is proposed to be amended as follows:

PART 1-INCOME TAXES

Paragraph 1. The authority citation for part 1 continues to read in part as follows:

Authority: 26 U.S.C. 7805

Par. 2. Section 1.861-7 is amended by revising paragraph (c) to read as follows:

§1.861-7 Sale of personal property.

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(c) Country in which sold. For purposes of part I (section 861 and following), subchapter N, chapter 1 of the Code, and the regulations thereunder, a sale of personal property is consummated at the time when, and the place where, the rights, title, and interest of the seller in the property are transferred to the buyer. Where bare legal title is retained by the seller, the sale shall be deemed to have occurred at the time and place of passage to the buyer of beneficial ownership and the risk of loss. For determining the place of sale of copyrighted articles transferred in electronic medium, see §1.861-18(f)(2)(ii). However, in any case in which the sales transaction is arranged in a particular manner for the primary purpose of tax avoidance, the foregoing rules will not be applied. In such cases, all factors of the transaction, such as negotiations, the execution of the agreement, the location of the property, and the place of payment, will be considered, and the sale will be treated as having been consummated at the place where the substance of the sale occurred.

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Par. 3. Section 1.861-18 is amended as follows:

a. For each paragraph listed in the following table, removing the language in the "Remove" column and adding in its place the language in the "Add" column.

Paragraph	Remove	Add
(a)(1)	computer programs	digital content
(b)(1) introductory text	a computer program	digital content
(b)(1)(i)	computer program	digital content
(b)(1)(ii)	computer program	digital content
(b)(1)(iii)	computer program	digital content

(b)(1)(iv)	computer programming techniques	development of digital content
(b)(2), first sentence	Any transaction	Any arrangement
(b)(2), first sentence	computer programs	digital content
(b)(2), second sentence	overall transaction	overall arrangement
(c)(1)(i), first sentence	a computer program	digital content
(c)(1)(i), third sentence	a computer program	digital content
(c)(1)(i), third sentence	that program	that digital content
(c)(1)(ii)	a computer program	digital content
(c)(1)(ii)	the computer program	the digital content
(c)(2)(i)	computer program	digital content
(c)(2)(ii)	computer programs	digital content
(c)(2)(ii)	copyrighted computer program	digital content
(c)(3), first sentence	a computer program	digital content
(c)(3), second sentence	program	digital content
(c)(3), second sentence	the magnetic medium of a floppy disk, or in the main memory or hard drive of a computer, or in any other medium	any medium
(d)	a newly developed or modified computer program	newly developed or modified digital content
(d)	computer program	digital content
(e) introductory text	a computer program	digital content
(e)(1)	computer programming techniques	the development of digital content
(f)(3), subject heading	computer programs	digital content
(f)(3), first sentence	computer programs	digital content
(f)(3), second sentence	a computer program on disk	digital content on a disk
(f)(3), third sentence	program	digital content
(g)(2)	a computer program	digital content
(g)(3)(i), first sentence	a computer program	digital content
(g)(3)(i), first sentence	the program	the digital content
(g)(3)(i), first sentence	software	digital content
(g)(3)(ii), first sentence	a computer program	digital content
(g)(3)(ii), first sentence	the program	the digital content
(g)(3)(ii), second sentence	a computer program	digital content
(g)(3)(ii), second sentence	the program	the digital content

b. Amend paragraph (a)(1) by:

i. Adding before "367" sections "59A, 245A, 250, 267A,";

ii. Removing "551,"; and

iii. Removing "chapter 3, chapter 5" and adding in its place "chapters 3 and 4,".

c. Revising paragraphs (a)(3), (c)(2)(iii) and (iv), and (f)(2).

d. Redesignating Examples 1 through 18 of paragraph (h) as paragraphs (h)(1) through (18), respectively.

e. Adding paragraphs (h)(19) through (21).

f. Revising paragraphs (i) and (j).

g. Removing paragraph (k).

The revisions and additions read as follows:

§1.861-18 Classification of transactions involving digital content.

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(a) ***

(3) Digital content. For purposes of this section, digital content means a computer program or any other content in digital format that is either protected by copyright law or no longer protected by copyright law solely due to the passage of time. For example, digital content includes books in digital format, movies in digital format, and music in digital format. For purposes of this section, a computer program is a set of statements or instructions to be used directly or indirectly in a computer in order to bring about a certain result and includes any media, user manuals, documentation, data base, or similar item if the media, user manuals, documentation, data base, or other similar item is incidental to the operation of the computer program.

*****

(c) ***

(2) ***

(iii) The right to make a public performance of digital content, other than a right to publicly perform digital content for the purpose of advertising the sale of the digital content performed; or

(iv) The right to publicly display digital content, other than a right to publicly display digital content for the purpose of advertising the sale of the digital content displayed.

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(f)***

(2) Transfers of copyrighted articles--(i) Classification. The determination of whether a transfer of a copyrighted article is a sale or exchange is made on the basis of whether, taking into account all facts and circumstances, the benefits and burdens of ownership have been transferred. A transaction that does not constitute a sale or exchange because insufficient benefits and burdens of ownership of the copyrighted article have been transferred, such that a person other than the transferee is properly treated as the owner of the copyrighted article, will be classified as a lease generating rental income.

(ii) Source. Income from transactions that are classified as sales or exchanges of copyrighted articles will be sourced under section 861(a)(6), 862(a)(6), 863, or 865(a), (b), (c), or (e), as appropriate. When a copyrighted article is sold and transferred through an electronic medium, the sale is deemed to have occurred at the location of download or installation onto the end-user's device used to access the digital content for purposes of §1.861-7(c), subject to the tax avoidance provisions in §1.861-7(c). However, in the absence of information about the location of download or installation onto the end-user's device used to access the digital content, the sale will be deemed to have occurred at the location of the customer, which is determined based on the taxpayer's recorded sales data for business or financial reporting purposes. Income derived from leasing a copyrighted article will be sourced under section 861(a)(4) or 862(a)(4), as appropriate.

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(h) ***

(19) Example 19--(i) Facts. Corp A operates a website that offers electronic books for download onto end-users' computers or other electronic devices. The books offered by Corp A are protected by copyright law. Under the agreements between content owners and Corp A, Corp A receives from the content owners a digital master copy of each book, which Corp A downloads onto its server, in addition to the nonexclusive right to distribute for sale to the public an unlimited number of copies in return for paying each content owner a specified amount for each copy sold. Corp A may not transfer any of the distribution rights it receives from the content owners. The term of each agreement Corp A has with a content owner is shorter than the remaining life of the copyright. Corp A charges each end-user a fixed fee for each book purchased. When purchasing a book on Corp A's website, the end-user must acknowledge the terms of a license agreement with the content owner that states that the end-user may view the electronic book but may not reproduce or distribute copies of it. In addition, the agreement provides that the end-user may download the book onto a limited number of its devices. Once the end-user downloads the book from Corp A's server onto a device, the end-user may access and view the book from that device, which does not need to be connected to the Internet in order for the end-user to view the book. The end-user owes no additional payment to Corp A for the ability to view the book in the future.

(ii) Analysis. (A) Notwithstanding the license agreement between each end-user and content owner granting the end-user rights to use the book, the relevant transactions are the transfer of a master copy of the book and rights to sell copies from the content owner to Corp A, and the transfers of copies of books by Corp A to ~~endusers~~end-users. Although the content owner is identified as a party to the license agreement memorializing the end-user's rights with respect to the book, each end-user obtains those rights directly from Corp A, not from the content owner. Because the end-user receives only a copy of each book and does not receive any of the copyright

rights described in paragraph (c)(2) of this section, the transaction between Corp A and the end-user is classified as the transfer of a copyrighted article under paragraph (c)(1)(ii) of this section. See paragraphs (h)(1) and (2) of this section (Example 1 and Example 2). Under the benefits and burdens test of paragraph (f)(2) of this section, the transaction is classified as a sale and not a lease, because the end-user receives the right to view the book in perpetuity on its device.

(B) The transaction between each content owner and Corp A is a transfer of copyright rights. In obtaining a master copy of the book along with the right to sell an unlimited number of copies to customers, Corp A receives a copyright right described in paragraph (c)(2)(i) of this section. For purposes of paragraph (b)(2) of this section, the digital master copy is de minimis. Under paragraph (f)(1) of this section, there has not been a transfer of all substantial rights in the copyright rights to the content because each content owner retains the right to further license or sell the copyrights, subject to Corp A's interest; Corp A has acquired no right itself to transfer the copyright rights to any of the content; and the grant of distribution rights is for less than the remaining life of the copyright to each book. Therefore, the transaction between each content owner and Corp A is classified as a license, and not a sale, of copyright rights.

(20) Example 20--(i) Facts. Corp A offers end-users memberships that provide them with unlimited access to Corp A's catalog of copyrighted music in exchange for a monthly fee. In order to access the music, an end-user must download each song onto a computer or other electronic device. The end-user may download songs onto a limited number of its devices. Under the membership agreement terms, an end-user may listen to the songs but may not reproduce or distribute copies of them. Once the end-user stops paying Corp A the monthly membership fee, an electronic lock is activated so that the end-user can no longer access the music.

(ii) Analysis. The end-users receive none of the copyright rights described in paragraph (c)(2) of this section and instead receive only copies of the digital content. Therefore, under paragraph (c)(1)(ii) of this section, each download is classified as the transfer of a copyrighted article. Although an end-user will retain a copy of the content at the end of the payment term, the end-user cannot access the content after the electronic lock is activated. Taking into account the special characteristics of digital content as provided in paragraph (f)(3) of this section, the activation of the electronic lock is the equivalent of having to return the copy. Therefore, under paragraph (f)(2) of this section, each transaction is classified as a lease of a copyrighted article because the right to access the music is limited.

(21) Example 21--(i) Facts. Corp A offers a catalog of movies and TV shows, all of which are subject to copyright protection. Corp A gives end-users several options for viewing the content, each of which has a separate price. A "streaming" option allows an end-user to view the video, which is hosted on Corp A's servers, while

connected to the Internet for as many times as the end-user wants during a limited period. A "rent" option allows an end-user to download the video to its computer or other electronic device (which does not need to be connected to the Internet for viewing) and watch the video as many times as the end-user wants for a limited period, after which an electronic lock is activated and the end-user may no longer view the content. A "purchase" option allows an end-user to download the video and view it as many times as the end-user chooses with no end date. Under all three options, the end-user may view the video but may not reproduce or distribute copies of it. Under the "rent" and "purchase" options, the end-user may download the video onto a limited number of its devices.

(ii) Analysis. (A) With respect to the "rent" and "purchase" options, the end-user receives none of the copyright rights described in paragraph (c)(2) of this section but, rather, receives only copies of the digital content. Therefore, transactions under those two options are transfers of copyrighted articles. Transactions for which the end-user chooses the "purchase" option are classified as sales of copyrighted articles under the benefits and burdens test of paragraph (f)(2) of this section because the end-user receives the right to view the videos in perpetuity. Transactions under the "rent" option are classified as leases of copyrighted articles under paragraph (f)(2) of this section because the end-user's right to view the videos is for a limited period.

(B) For transactions under the "streaming" option, there is no transfer of any copyright rights described in paragraph (c)(2) of this section. There is also no transfer of a copyrighted article, because the content is not downloaded by an end-user, but rather is accessed through an on-demand network. The transaction also does not constitute the provision of services for the development of digital content or the provision of know-how under paragraph (b)(1) of this section. Therefore, paragraph (b)(1) of this section does not apply to such transaction. Instead, the transaction is a cloud transaction that is classified under §1.861-19. See §1.861-19(d)(9).

(i) Effective date. This section applies to transactions not subject to § 1.861-19 involving the transfer of digital content, or the provision of services or of know-how in connection with digital content, pursuant to contracts entered into in taxable years beginning on or after the date of publication of a Treasury decision adopting these rules as final regulations in the Federal Register. For transactions involving computer programs occurring pursuant to contracts entered into in taxable years beginning before the date of publication of a Treasury decision adopting these rules as final regulations in the Federal Register, see §1.861-18(i) as contained in T.D. 8785 and T.D. 9870.

(j) Change in method of accounting required by this section. In order to comply with this section, a taxpayer engaging in a transaction involving digital content pursuant to a contract entered into in taxable years beginning on or after the date described in paragraph (i) of this section may be required to change its method of accounting. If so required, the taxpayer must secure the consent of the Commissioner in accordance with the

requirements of §1.446-1(e) and the applicable administrative procedures for obtaining the Commissioner's consent under section 446(e) for voluntary changes in methods of accounting.

Par. 4. Section 1.861-19 is added to read as follows:

§1.861-19 Classification of cloud transactions.

(a) In general. This section provides rules for classifying a cloud transaction (as defined in paragraph (b) of this section) either as a provision of services or as a lease of property. The rules of this section apply only for purposes of Internal Revenue Code sections 59A, 245A, 250, 267A, 367, 404A, 482, 679, and 1059A; subchapter N of chapter 1; chapters 3 and 4; and sections 842 and 845 (to the extent involving a foreign person), and apply with respect to transfers to foreign trusts not covered by section 679. Pursuant to Code section 7701(e)(6), no inferences are intended with regard to other sections of the Internal Revenue Code, including for example Internal Revenue Code sections 163(j), 469, 512, 856, and 7704.

(b) Cloud transaction defined. A cloud transaction is a transaction through which a person obtains on-demand network access to computer hardware, digital content (as defined in §1.861-18(a)(3)), or other similar resources, other than on-demand network access that is de minimis taking into account the overall arrangement and the surrounding facts and circumstances. A cloud transaction does not include network access to download digital content for storage and use on a person's computer or other electronic device.

(c) Classification of transactions-(1) In general. A cloud transaction is classified solely as either a lease of computer hardware, digital content (as defined in §1.861-18(a)(3)), or other similar resources, or the provision of services, taking into account all relevant factors, including the factors set forth in paragraph (c)(2) of this section. The relevance of any factor varies depending on the factual situation, and one or more of the factors set forth in paragraph (c)(2) of this section may not be relevant in a given instance. For purposes of this paragraph (c), computer hardware, digital content, or other similar resources are referred to as "the property," and the party to the transaction making such property available to customers for use is referred to as "the provider."

(2) Factors demonstrating classification as the provision of services. Factors demonstrating that a cloud transaction is classified as the provision of services rather than a lease of property include the following factors—

(i) The customer is not in physical possession of the property;

(ii) The customer does not physically control the property, beyond the customer's network access to and use of the property;

(iii) The customer is not in economic possession or control of the property, directing its use;

(~~iii~~iv) The provider, without notice to or consent of the customer, has the right to determine the specific property used in the cloud transaction and replace such property with comparable property;

(~~iv~~v) The property is a component of an integrated operation in which the provider has other responsibilities, including ensuring the property is maintained and updated;

(~~v~~vi) The customer does not have a significant economic or possessory interest in the property;

(vii) The physical location of the specific property used in the cloud transaction is neither specified in the contract nor consequential to the customer relationship;

(~~vi~~viii) The provider bears any risk of substantially diminished receipts or substantially increased expenditures if there is nonperformance under the contract;

(~~vii~~ix) The provider uses the property concurrently to provide significant services to entities unrelated to the customer;

(~~viii~~x) The provider's fee is primarily based on a measure of work performed or the level of the customer's use rather than the mere passage of time; and

(~~ix~~xi) The total contract price substantially exceeds the rental value of the property for the contract period.

(3) Application to arrangements comprised of multiple transactions. An arrangement comprised of multiple transactions generally requires separate classification for each transaction. If at least one of the transactions is a cloud transaction, but not all of the transactions are cloud transactions, this section applies only to classify the cloud transactions. However, any transaction that is *de minimis*, taking into account the overall arrangement and the surrounding facts and circumstances, will not be treated as a separate transaction, but as part of another transaction.

(d) Examples. The provisions of this section may be illustrated by the examples in this paragraph (d). For purposes of this paragraph, unless otherwise indicated, Corp A is a domestic corporation; Corp B is a foreign corporation; end-users are individuals; and no rights described in §1.861-18(c)(2) (copyright rights) are transferred as part of the transactions described.

(1) Example 1: Computing capacity--(i) Facts. Corp A operates data centers on its premises in various locations. Corp A provides Corp B computing capacity on Corp A's servers in exchange for a monthly fee based on the amount of computing power made available to Corp B. Corp B provides its own software to run on Corp A's servers. Depending on utilization levels, the servers accessed by Corp B may also be used simultaneously by Corp A and by its other customers. The computing capacity provided to Corp B can be sourced from a variety of servers

in one or more of Corp A's data centers, and Corp A determines how its computing resources are allocated among ~~customers~~itself and its customers. The location of the Corp A servers utilized by Corp B is neither specified in the contract nor a central feature of the customer relationship. Corp A agrees to keep the servers operational, including by performing physical maintenance and repair, and may replace (without notice to or consent of Corp B) any server with another server of comparable functionality. Corp A agrees to provide Corp B with a payment credit for server downtime. Corp B has no ability to physically alter any server.

(ii) Analysis. (A) The computing capacity transaction between Corp A and Corp B is a cloud transaction described in paragraph (b) of this section because Corp B obtains a non-de minimis right to on-demand network access to computer hardware of Corp A.

(B) The fact that Corp A provides computing capacity to Corp B through its servers may indicate that Corp B has a significant amount of economic possession and control of the servers as part of an overall and wider rental relationship of real estate. However, Corp B has neither physical possession of nor control of the servers, beyond Corp B's right to access and use the servers. Corp A may replace (without notice to or consent of Corp B) any server with a functionally comparable server~~. The~~, and the specific location of the servers is neither specified nor consequential to the customer relationship between Corp A and Corp B. The servers are a component of an integrated operation in which Corp A has other responsibilities, including maintaining the servers. The transaction does not provide Corp B with a significant economic or possessory interest in the servers. The agreement provides that Corp A will provide Corp B with a payment credit for server downtime, such that Corp A bears risk of substantially diminished receipts in the event of contract nonperformance. The servers may, depending on utilization levels, be used by Corp A to provide significant ~~computing capacity~~services to itself or to entities unrelated to Corp B. Corp A is compensated according to the level of Corp B's use (that is, the amount of computing power made available) and not solely based on the passage of time. Taking into account all of the relevant factors, particularly the absence of real estate use and rental, the transaction between Corp A and Corp B is classified as the provision of services under paragraph (c) of this section.

(2) Example 2: Computing capacity on dedicated servers--(i) Facts. The facts are the same as in paragraph (d)(1)(i) of this section (the facts in Example 1), except that, in order to offer more security to Corp B, Corp A provides Corp B computing capacity exclusively through designated servers, which are owned by Corp A and located at Corp A's facilities. Corp A agrees not to use a designated server for itself or for any other customer for the duration of its arrangement with Corp B. Corp A's compensation reflects a substantial return for maintaining the servers in addition to the rental value of the servers.

(ii) Analysis. (A) As in paragraph (d)(1) of this section, the transaction between Corp A and Corp B is a cloud transaction described in paragraph (b) of this section because Corp B obtains a non-de minimis right to on-demand network access to computer hardware resources of Corp A.

(B) The fact that Corp A provides computing capacity to Corp B through designated servers indicates that such servers are not used concurrently by ~~other~~ Corp A and its other customers~~.~~, which indicates that Corp B has exclusive economic possession and control of the servers. However, Corp A retains physical possession of the servers. ~~In addition,~~ Corp A's sole responsibility for maintaining the servers, and its sole right (without notice to or consent of Corp B) to replace or physically alter the servers, indicate that Corp A physically controls the servers. Although Corp B obtains the exclusive right to use certain servers, Corp B does not have a significant economic or possessory interest in the servers because, among other things, Corp A retains the right (without notice to or consent of Corp B) to replace or relocate the servers, ~~Corp~~and the specific location of the servers is not consequential to the customer relationship between Corp A and Corp B. Further, Corp A bears the risk of damage to the servers, and Corp B does not share in cost savings associated with the servers because the fee paid by Corp B to Corp A does not vary based on Corp A's costs. The compensation to Corp A substantially exceeds the rental value of the servers. The other relevant factors are analyzed in the same manner as paragraph (d)(1) of this section. Taking into account all of these factors, the transaction between Corp A and Corp B is classified as a provision of services under paragraph (c) of this section.

(3) Example 3: Access to software development platform and website hosting--(i) Facts. Corp A provides Corp B a software platform that Corp B uses to develop and deploy websites with a range of features, including blogs, message boards, and other collaborative knowledge bases. The software development platform consists of an operating system, web server software, scripting languages, libraries, tools, and backend relational database software and allows Corp B to use in its websites certain visual elements subject to copyrights held by Corp A. The software development platform is hosted on servers owned by Corp A and located at Corp A's facilities. Corp B's finished websites are also hosted on Corp A's servers. The software development platform and servers are also used concurrently to provide similar functionality to Corp A customers unrelated to Corp B. Corp B accesses the software development platform via a standard web browser. Corp B has no ability to alter the software code. A small amount of scripting code is downloaded onto Corp B's computers to facilitate secure logins and access to the software development platform. All other functions of the software development platform execute on Corp A's servers, and no portion of the core software code is ever downloaded by Corp B or Corp B's customers. Corp A is solely responsible for maintaining the servers and software development platform, including ensuring continued functionality and compatibility with Corp B's browser, providing updates and fixes to the software for the duration

of the contract with Corp B, and replacing or upgrading the servers or software at any time with a functionally similar version. Corp B pays Corp A a monthly fee for the platform and website hosting that takes into account the storage requirements of Corp B's websites and the amount of website traffic supported, but there is no stand-alone fee for use of the software development platform. Corp B agrees to pay for Corp A's website hosting services for a minimum period, after which Corp B may continue to pay for Corp A's website hosting services or transfer its developed websites to a different hosting provider. Corp A agrees to provide Corp B with a payment credit for server downtime.

(ii) Analysis. (A) Corp A's provision to Corp B of access to the software platform is a cloud transaction described in paragraph (b) of this section because Corp B obtains a non-de minimis right to on-demand network access to computer hardware and software resources of Corp A. Corp A's hosting of Corp B's finished websites is part of the provision of access to the software platform and hardware.

(B) Corp B does not have physical or economic possession of the software platform or servers. Although Corp B uses Corp A's platform to develop and deploy websites, Corp B does not maintain the software platform or the servers on which it is hosted, and Corp B cannot alter the software platform. Accordingly, Corp B does not control the software platform or the servers. Corp A maintains the right to replace or upgrade the software platform and servers with functionally similar versions (without notice to or consent of Corp B), and the specific location of the servers is not consequential to the customer relationship between Corp A and Corp B. The servers and software platform are components of an integrated operation in which Corp A has various responsibilities, including maintaining the servers and updating the software. Corp B does not have a significant economic or possessory interest in Corp A's software platform or servers. Corp B may lose revenue with respect to the websites that it deploys on Corp A's servers when the servers are down; nonetheless, Corp A bears the risk of substantially diminished receipts in the event of contract nonperformance because Corp A will provide Corp B with a payment credit for server downtime. Corp A provides access to the servers and platform to Corp B and other customers concurrently. Corp A is compensated based on Corp B's level of use (that is, the amount of computing resources provided) and not solely by the passage of time. Taking into account all of the factors, the transaction between Corp A and Corp B is classified as a provision of services under paragraph (c) of this section.

(C) Although the download of a small amount of scripting code to facilitate logins and access to the software platform would otherwise constitute a transfer of a computer program, instead of a cloud transaction under paragraph (b) of this section, the download is *de minimis* in the context of the overall arrangement, and therefore, under paragraph (c)(3) of this section, there is no separate classification of the download. Similarly, the fact that Corp B receives rights to publicly display certain copyrighted visual elements resulting from Corp A's

software development platform on Corp B's own websites, which would otherwise constitute a transfer of copyright rights under § 1.861-18, instead of a cloud transaction under paragraph (b) of this section, does not require separate classification because the right to use such elements is also *de minimis*. Thus, under paragraph (c) of this section, the entire arrangement is classified as a service.

(4) Example 4: Access to software--(i) Facts. The facts are the same as in paragraph (d)(3)(i) of this section (the facts in Example 3), except that, instead of providing website development software, Corp A provides Corp B access to customer relationship management software under several options such as "entry-level," "midlevel," and "advanced-level," via a standard web browser, which Corp A hosts on its servers for a monthly subscription fee. Corp B has no ability to alter the software code, and Corp A agrees to make available new versions of the software as they are developed for the duration of Corp B's contract, and to ensure servers' uptime in accordance with the service level agreement.

(ii) Analysis. (A) As in paragraph (d)(3) of this section, the transaction between Corp A and Corp B is a cloud transaction described in paragraph (b) of this section because Corp B obtains a non-*de minimis* right to on-demand network access to computer hardware and software resources of Corp A.

(B) The relevant factors are analyzed in the same manner as in paragraph (d)(3) of this section, except that compensation due to Corp A is determined based on the option chosen and the passage of time rather than a measure of computing resources utilized. Although as a general matter compensation based on the passage of time is more indicative of a lease than a service transaction, that factor is outweighed by the other factors, which support classification as a service transaction. Taking into account all of the factors, the transaction between Corp A and Corp B is classified as a provision of services under paragraph (c) of this section.

(5) Example 5: Downloaded software subject to § 1.861-18--(i) Facts. Corp A provides software for download to Corp B that enables Corp B to create a scalable, shared pool of computing resources over Corp B's own network for use by Corp B's employees. Corp B downloads the software, which runs solely on Corp B's servers. Corp A provides Corp B with free updates for download as they become available. Corp B pays Corp A an annual fee, and, upon termination of the arrangement, an electronic lock is activated that prevents Corp B from further using the software.

(ii) Analysis. Under paragraph (b) of this section, the download of software for use with Corp B's computer hardware does not constitute on-demand network access by Corp B to Corp A's software. Accordingly, the transaction between Corp A and Corp B is not a cloud transaction described in paragraph (b) of this section.

Because the transaction involves the transfer of digital content as defined in § 1.861-18(a)(3), it is classified under § 1.861-18.

(6) Example 6: Access to online software via an application--(i) Facts. Corp A provides Corp B word processing, spreadsheet, and presentation software and allows employees of Corp B to access the software over the Internet through a web browser or an application ("app"). In order to access the software from a mobile device, Corp B's employees usually download Corp A's app onto their devices. To access the full functionality of the app, the device must be connected to the Internet. Only a limited number of features on the app are available without an Internet connection. Corp B has no ability to alter the software code. The software is hosted on servers owned by Corp A and located at Corp A's facilities and is used concurrently by other Corp A customers. Corp A is solely responsible for maintaining and repairing the servers and software (without notice to or consent of Corp B), and ensuring continued functionality and compatibility with Corp B's employees' devices and providing updates and fixes to the software (including the app) for the duration of the contract with Corp B. Corp B pays a monthly fee based on the number of employees with access to the software. Upon termination of the arrangement, Corp A activates an electronic lock preventing Corp B's employees from further utilizing the app, and Corp B's employees are no longer able to access the software via a web browser.

(ii) Analysis. (A) Corp A's provision to Corp B of a non-*de minimis* right to ondemand network access to Corp A's computer hardware and software resources for the purpose of fully utilizing Corp A's software is a cloud transaction described in paragraph (b) of this section.

(B) Corp B has neither physical or economic possession of nor control over Corp A's word processing, spreadsheet, and presentation software or computer hardware. Additionally, the servers and software are part of an integrated operation in which Corp A maintains the servers and updates the software. The specific location of the servers is not consequential to the customer relationship between Corp A and Corp B. Corp A makes available its word processing, spreadsheet, and presentation software and servers to Corp B and other customers concurrently. Corp A's compensation, though based in part on the passage of time, is also determined by reference to Corp B's level of use (that is, the number of Corp B employees with access to the software). Taking into account all of the factors, the transaction between Corp A and Corp B is classified as the provision of services under paragraph (c) of this section.

(C) The provision of the app to Corp B's employees by download onto their devices would be a transfer of a computer program rather than a cloud transaction subject to paragraph (b) of this section. However, under paragraph (c)(3) of this section, it is necessary to consider whether that transfer is *de minimis* in the context of the overall arrangement and in light of the surrounding facts and circumstances. Here, the significance of the download

of the app by Corp B's employees is limited by the fact that the device running the app must be connected to Corp A's servers via the Internet to enable most of the app's core functions. The software that enables such functionality remains on Corp A's servers and is accessed through an on-demand network by Corp B's employees. Therefore, the download of the app is *de minimis*, and under paragraph (c)(3) of this section, the entire arrangement is classified as a service.

(7) Example 7: Access to offline software with limited online functions--(i) Facts. Corp A provides Corp B word processing, spreadsheet, and presentation software that is functionally similar to the software in paragraph (d)(6) of this section (Example 6). The software is made available for access over the Internet but only to download the software onto a computer or onto a mobile device in the form of an app. The downloaded software contains all the core functions of the software. Employees of Corp B can use the software on their computers or mobile devices regardless of whether their computer or mobile device is online. When online, the software provides a few ancillary functions that are not available offline, such as access to document templates and data collection for diagnosing problems with the software. Whether working online or offline, Corp B employees can store their files only on their own computer or mobile device, and not on Corp A's data storage servers. Because the software provides near full functionality without access to Corp A's servers, it requires more computing resources on employees' computers and devices than the app in paragraph (d)(6) of this section. Corp B's employees can also download updates to the software as part of the monthly fee arrangement. Upon termination of the arrangement, an electronic lock is activated so that the software can no longer be accessed.

(ii) Analysis. The provision of the software constitutes a lease of a copyrighted article under § 1.861-18. See § 1.861-18(h)(4). The access to the online ancillary functions otherwise would constitute a cloud transaction under paragraph (b) of this section, but the access to these functions is *de minimis* in the context of the overall arrangement, considering that the core functions are available offline through the downloaded software. Because there is no cloud transaction described in paragraph (b) of this section, this section does not apply.

(8) Example 8: Data storage, separate from access to offline software--(i) Facts. The facts are the same as in paragraph (d)(7)(i) of this section (the facts in Example 7), except that Corp A also provides data storage to Corp B on Corp A's server systems in exchange for a monthly fee based on the amount of data storage used by Corp B. Under the data storage terms, Corp B employees may store files created by Corp B employees using Corp A's software or other software. Although Corp A's word processing software is compatible with Corp A's data storage systems, the core functionality of Corp A's software is not dependent on Corp B's purchase of the storage plan. Depending on utilization levels, the server systems providing data storage to Corp B may also be used simultaneously by Corp A or for ~~other~~its customers. The data storage provided to Corp B can be sourced from a

variety of server systems in one or more of Corp A's data centers, and Corp A determines how its computing resources are allocated among customers. The location of the Corp A server systems utilized by Corp B is neither specified in the contract nor consequential to the customer relationship. Corp A agrees to keep the server systems operational, including by performing physical maintenance and repair, and may replace (without notice to or consent of Corp B) any server system with another one of comparable functionality. Corp A agrees to provide Corp B with a payment credit for server downtime. Corp B has no ability to physically alter the server systems.

(ii) Analysis. (A) Corp A's provision of software and data storage capacity constitute separate transactions, and neither is de minimis. Therefore, under paragraph (c)(3) of this section, the transactions are classified separately.

(B) As in paragraph (d)(7), Corp B's download of fully functional software, along with on-demand network access to certain limited online features, does not constitute a cloud transaction, but rather constitutes a lease of a copyrighted article under §1.861-18.

(C) Corp A's provision of data storage constitutes a cloud transaction because Corp B obtains a non-de minimis right to on-demand network access to computer hardware of Corp A.

(D) The fact that Corp A provides data storage to Corp B through its server systems may indicate that Corp B has a significant amount of economic possession and control of the server systems. However, Corp B has neither physical possession of nor control of the server systems, beyond Corp B's right to access and use the ~~servers~~server systems. Corp A may replace (without notice to or consent of Corp B) any server with a functionally comparable server, and the specific location of the server systems is not consequential to the customer relationship between Corp A and Corp B. The server systems are a component of an integrated operation in which Corp A has other responsibilities, including maintaining the server systems. The transaction does not provide Corp B with a significant economic or possessory interest in the servers. The servers may, depending on utilization levels, be used by Corp A to provide significant services to entities unrelated to Corp B. Corp A is compensated according to the level of Corp B's use (that is, the amount of data storage used by Corp B) and not solely based on the passage of time. Because Corp A will provide Corp B with a payment credit for server downtime, Corp A bears risk of substantially diminished receipts in the event of contract nonperformance. Taking into account all of these factors, particularly the absence of real estate use and rental, the transaction for data storage is classified as a provision of services under paragraph (c) of this section.

(9) Example 9: Streaming digital content using third-party servers--(i) Facts. Corp A streams digital content in the form of videos and music to end-users from servers located in data centers owned and operated by Data

Center Operator. Data Center Operator's content delivery network facility services multiple customers. Each end-user uses a computer or other electronic device to access unlimited streaming video and music in exchange for payment of a flat monthly fee to Corp A. The end-user may select from among the available content the particular video or song to be streamed. Corp A continually updates its content catalog, replacing content with higher quality versions and adding new content at no additional charge to the end-user. Content that is streamed to the end-user is not stored locally on the end-user's computer or other electronic device and therefore can be played only while the ~~enduser's~~end-user's computer or other electronic device is connected to the Internet. Corp A pays Data Center Operator a fee based on the amount of data storage used and computing power made available in connection with Corp A's content streaming. The storage and computing power provided to Corp A can be sourced from a variety of servers in one or more of Data Center Operator's facilities, and Data Center Operator determines how computing resources are allocated among its customers. The location of the Data Center Operator's servers utilized by Corp A is neither specified in the contract nor consequential to the customer relationship. Data Center Operator covenants to keep the servers operational, including performing physical maintenance and repair. Corp A has no right or ability to physically alter the servers.

(ii) Analysis. (A) The relevant factors for classifying the transaction between Corp A and Data Center Operator are analyzed in the same manner as the computing capacity and data storage transactions in paragraphs (d)(1) and (8) of this section (Example 1 and Example 8), respectively, such that the transaction between Corp A and Data Center Operator is classified as a provision of services by Data Center Operator to Corp A under paragraph (c) of this section.

(B) A transaction between Corp A and an end-user is a cloud transaction described in paragraph (b) of this section because the end-user obtains a non-de minimis right to on-demand network access to digital content of Corp A.

(C) An end-user has neither physical or economic possession of nor control of the digital content. Additionally, Corp A has the right to determine the digital content used in the cloud transaction and retains the right to modify its selection of digital content. Digital content accessed by end-users is a component of an integrated operation in which Corp A's other responsibilities include maintaining and updating its content catalog. The specific location of the servers is not consequential to the customer relationship between Corp A and an end-user. Corp A's end-users do not obtain a significant economic or possessory interest in any of the digital content in Corp A's catalog. The digital content provided by Corp A may be accessed concurrently by multiple unrelated end-users. Although, as a general matter, compensation based on the passage of time is more indicative of a lease than a service transaction, that factor is outweighed by the other factors, which support a services classification. Taking

into account all of the factors, a transaction between an end-user and Corp A is classified as a provision of services under paragraph (c) of this section.

(10) Example 10: Downloaded digital content subject to § 1.861-18--(i) Facts. Corp A offers digital content in the form of videos and music solely for download onto end-users' computers or other electronic devices for a fee. Once downloaded, the ~~enduser~~end-user accesses the videos and songs from the end-user's computer or other electronic device, which does not need to be connected to the Internet in order to play the content. The end-user owes no additional payment to Corp A for the ability to play the content in the future.

(ii) Analysis. Under paragraph (b) of this section, the download of digital content onto an end-user's computer for storage and use on that computer does not constitute on-demand network access by the end-user to the digital content of Corp A. Accordingly, the transaction between the end-user and Corp A is not a cloud transaction described in paragraph (b) of this section, and this section does not apply to the transaction. Because the transaction involves the transfer of digital content as defined in § 1.861-18(a)(3), it will be classified under § 1.861-18. See § 1.861-18(h)(21).

(11) Example 11: Access to online database--(i) Facts. Corp A offers an online database of industry-specific materials. End-users access the materials through Corp A's website, which aggregates and organizes information topically and hosts a proprietary search engine. Corp A hosts the website and database on its own servers and provides multiple end-users access to the website and database concurrently. Corp A is solely responsible for maintaining and replacing the servers, website, and database (including adding or updating materials in the database). End-users have no ability to alter the servers, website, or database. Most materials in Corp A's database are publicly available by other means, but Corp A's website offers an efficient way to locate and obtain the information on demand. Certain materials in Corp A's database constitute digital content within the meaning of §1.861-18(a)(3), and Corp A pays the copyright owners a license fee for using them. Each end-user may download any of the materials to its own computer and keep such materials without further payment. The end-user pays Corp A a fee based on the number of searches or the amount of time spent on the website, and such fee is not dependent on the amount of materials the end-user downloads. The fee that the end-user pays is substantially higher than the stand-alone charge for accessing the same digital content outside of Corp A's system.

(ii) Analysis. (A) Corp A's provision to an end-user of access to Corp A's website and online database is a cloud transaction described in paragraph (b) of this section because the end-user obtains a non-*de minimis* right to on-demand access to Corp A's computer hardware and software resources.

(B) An end-user's downloading of the digital content would be classified as a sale of copyrighted articles under §1.861-18. Nonetheless, taking into account the entire arrangement, including that the primary benefit to the end-user is access to Corp A's database and its proprietary search engine, and that the stand-alone charge for accessing the digital content would be substantially less than the fee Corp A charges, the downloads are *de minimis*. Accordingly, under paragraph (c)(3) of this section, there is no separate classification of the downloads.

(C) The end-user has neither physical or economic possession of nor control of the database, software, or the servers that host the database or software. Corp A retains the right (without notice to or consent of the end-user) to replace its servers and update its software and database. The database, software, and servers are part of an integrated operation in which Corp A is responsible for curating the database, updating the software, and maintaining the servers. ~~Corp~~The specific location of the Corp A servers is not consequential to the customer relationship between Corp A and end-users. Corp A provides each end-user on-demand network access to its software and online database concurrently with other end-users. Certain end-users pay Corp A a fee based on time spent on Corp A's website, which could be construed as compensation based on the passage of time and thus be more indicative of a lease than a service transaction. However, the fee that the end-user pays is substantially higher than the stand-alone charge for accessing the same digital content outside of Corp A's system. Accordingly, on balance, the fee arrangement supports the classification of the transaction as a service transaction. Taking into account all of these factors, the arrangement between end-users and Corp A is treated as the provision of services under paragraph (c) of this section.

(e) Effective/applicability date. This section applies to cloud transactions occurring pursuant to contracts entered into in taxable years beginning on or after the date of publication of a Treasury decision adopting these rules as final regulations in the Federal Register.

(f) Change in method of accounting required by this section. In order to comply with this section, a taxpayer engaging in a cloud transaction pursuant to a contract entered into on or after the date described in paragraph (e) of this section may be required to change its method of accounting. If so required, the taxpayer must secure the consent of the Commissioner in accordance with the requirements of § 1.446-1(e) and the applicable administrative procedures for obtaining the Commissioner's consent under section 446(e) for voluntary changes in methods of accounting.

§1.937-3 [Amended]

Par. 5. Section 1.937-3 is amended by removing Examples 4 and 5 from paragraph (e).

Exhibit B: Leases of Shared Real and Personal Property*

1. GCM 36334 (July 2, 1975): under former Code section 863, payments to the holder of an indefeasible right of use for access to a communications medium (including the realty and personal property components therein), such as an underwater trans-Atlantic cable (inclusive of amplifiers), represented rent related to "an international leasing business".
2. PLR 9428002 (Mar. 29, 1994): under Code section 2032A(b)(2), family received rent for shared access to land pursuant to hunting leases.
3. PLR 9808011 (Oct. 14, 1997): shopping center REIT received rent for shared, nonexclusive easements granted to anchor store tenants.
4. PLR 199908023 (Nov. 27, 1998): office REIT owned and maintained office equipment that was available for shared use by all of a building's tenants.
5. PLR 200101012 (Sept. 30, 2000): student-housing REIT leased to students access rights to common areas (and the furnishings and consumer electronics therein).
6. PLR 200428019 (Mar. 25, 2004): warehouse REIT leased generally nondedicated storage space in temperature-controlled storage facilities.
7. PLR 200648031 (Sept. 6, 2006): under Code section 512(b)(3), exempt organization received rent for shared access to land pursuant to hunting leases.
8. PLR 201149003 (Aug. 31, 2011): tower REIT leased to tenants use of both exclusive and nonexclusive easements.
9. PLR 201206001 (Aug. 16, 2011): office REIT leased to tenants a shared master antenna (and related multiplexer and transmission equipment) atop a desirable broadcast location.
10. PLR 201250003 (Sept. 6, 2012): under Code section 7704(d), publicly traded partnership leased production handling capacity in both realty and associated personal property (machinery) to initial lessee and to other tenants to the extent of production handling capacity above the initial lessee's reserved amount.
11. PLR 201317001 (Jan. 16, 2013): prison REITs leased to governmental tenants nondedicated correctional facility space and associated common areas for prisoners.
12. PLR 201320007 (Feb. 11, 2013): same as PLR 201317001.
13. PLR 201423011 (Feb. 20, 2014): data center REIT leased nonexclusive access to the common area and shared infrastructure provided within a "meet-me" room.
14. PLR 201431018 (Apr. 22. 2014): billboard REIT leased to tenants shared access and use (on a temporal division basis) to tenants.
15. PLR 201431020 (Apr. 16, 2014): same as PLR 201431018.
16. PLR 201450017 (Aug. 29, 2014): tower REIT leased to tenants shared access to distributed antenna system, including extensive personal property components therein.
17. PLR 201503010 (July 9, 2014): warehouse REIT leased to tenants nondedicated warehouse space for document storage.
18. PLR 201522002 (Feb. 27, 2015): same as PLRs 201431018 and 020.
19. PLR 201537020 (May 22, 2015): data center REIT leased to tenants shared access rights to business recovery room and associated computer terminals and other personal property therein.
20. PLR 201741002 (July 12, 2017): same as PLR 201450017.

* Although prior PLRs may not be relied upon as precedent per Section 6110(k)(3), they provide meaningful insight into the thinking of the Internal Revenue Service with respect to issues that are not otherwise the subject of published authority. *See* Internal Revenue Manual section 4.10.7.2.10(3-4) (2006) ("A private letter ruling to a taxpayer . . . provide[s] insight with regard to the Service's position on the law and serve[s] as a guide. Existing private letter rulings and memorandums . . . may be used as a guide with other research material in formulating an area office position on an issue."). *See also Hanover Bank v. Comm'r*, 369 U.S. 672, 686 (1962) (private letter rulings "reveal the interpretation put upon the statute by the agency charged with the responsibility of administering the revenue laws"); *Rowan Cos. v. United States*, 452 U.S. 247, 261 n.17 (1981) (private letter rulings provide "evidence" about the application of the Code).

Exhibit B: Leases of Shared Real and Personal Property

21. PLR 201812009 (Dec. 14, 2017): luxury apartment REIT provided shared access to all tenants to several items of real and personal property, noting that, although services may be provided at the facilities, "the [facilities (inclusive of the personal property therein)] themselves are not services".
22. PLR 201901001 (July 10, 2018): fiber REIT leased wavelengths or capacity to tenants on existing fiber or cable; several revenue models do not give tenants an exclusive right to a specifically identified strand or wavelength within such a strand, but instead provide a prescribed throughput along a wave.
23. PLR 201907001 (Nov. 16, 2018): pipeline and storage tank REIT leased access for fungible products to pipelines and comingled storage areas, requiring prioritization in both storage and withdrawal as well as charges based on volume of use.