Let the Sunshine In:
The Age of Cloud Computing

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There are probably as many bad metaphors about the state and local tax implications of cloud computing as there are articles on the subject. Each article has in common the search for an analytical basis to determine both the taxability and sourcing of cloud computing. Each also has in common analysis of the taxation of cloud computing using the existing sales and use tax framework. This is reminiscent of the states’ attempts to apply their telecommunications statutes to Internet access and other online services.\(^1\) As was the case with telecommunications statutes and Internet access services, tax laws have not kept up with the development of services in our fast-changing economy. As a result, just as was the case for Internet services, states have been discussing plans to study, on a multistate basis, the taxation of cloud computing using the existing sales and use tax framework. This is reminiscent of the states’ attempts to apply their telecommunications statutes to Internet access and other online services.\(^1\) As was the case with telecommunications statutes and Internet access services, tax laws have not kept up with the development of services in our fast-changing economy. As a result, just as was the case for Internet services, states have been discussing plans to study, on a multistate basis, the taxation of cloud computing. Thus, a task force of the National Conference of State Legislatures has decided to study the tax implications of cloud computing and to develop a set of principles for the taxation of cloud computing.\(^2\)

In the interim, tax practitioners must be able to counsel their clients and companies concerning the state tax questions regarding cloud computing. Failure to analyze properly the tax implications of cloud computing can lead to significant liability for sales taxes that sellers of cloud computing services fail to bill customers. Without careful planning, providers can also miss the opportunity to use resale and other exemptions on their own purchases of equipment and software.

Companies providing cloud computing services should consider the following interrelated subjects:
- the nature of the service provided (including its taxonomy) and the service’s taxability;
- the sourcing by state and local jurisdiction for the particular service offered and the related question of whether a taxable sale of that service has occurred;
- the potential tax collection obligations as a result of nexus; and
- the exemption from use tax for providers’ purchases or leases of equipment and software used to provide the service.

We discuss these subjects below in the context of each type of cloud computing service and try to provide some sunshine to help clear up this cloudy area of state and local tax.

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\(^1\) See, e.g., 105 Cong. Rec. E1288 (July 14, 1998) (Internet Tax Freedom Act — U.S. Rep. Christopher Cox (Extension of Remarks — July 14, 1998)) (“Because none of the States presently taxing Internet access has a law on the books that expressly authorizes the taxation of Internet access, such taxes are being imposed as the result of decisions made by tax administrators rather than by legislators. For example, a tax administrator may decide that Internet access falls within the definition of existing telecommunications or other taxes, even though the Internet is nowhere referred to or described in the State’s law.”).

\(^2\) NCSL Task Force Opposes Contingency Fee Audits,” State Tax Notes, Oct. 10, 2011, p. 70, Doc 2011-20795, or 2011 STN 70-71
Background: Types of Cloud Computing Services

The starting point for analysis of the taxability and sourcing of a cloud computing service (and, indeed, for any service) is to determine the nature of the service that is being provided. In general, cloud computing involves an amalgam of services in which the purchaser, from the purchaser’s computer terminal or mobile device, is able to access on demand the IT resources, applications (that is, software), and computer data maintained remotely by the provider of the service. Rather than hosting its own IT infrastructure, including servers and software, the purchaser is able to access the provider’s equipment and software, in exchange for a usage-based charge. In other words, by obtaining cloud computing services, the purchaser does not have to incur the capital expense of equipment and software purchases. The purchaser can also avoid the expense of maintaining an in-house IT department for many types of cloud computing services.

Cloud computing is a generic term that covers a number of distinct categories of services that include:

- Infrastructure as a service (IaaS), which provides access to storage and IT computing resources on the provider’s computers. The servers are typically located at a data center maintained by the provider, often in a location outside the state of access by the customer;
- Software as a service (SaaS), which provides access to software and applications owned and housed on the provider’s computers that are also often located at data centers outside the customer’s state;
- Platform as a service (PaaS), which provides tools for the design, development, deployment, and management of the customer’s applications. For example, both Google, through its “Google App Engine,” and Amazon, through its “Elastic Compute Cloud” service, provide PaaS for software developers;
- Hosting and managing e-mail for the customer; and
- Miscellaneous services such as privacy protection for e-mail and other applications.

Is Cloud Computing a Taxable Service or the Provision of Tangible Personal Property?

The taxability of cloud computing services depends on the type and nature of the service billed to the customer. One size does not fit all. Nor does the designation of cloud computing as a “service” immunize it from sales tax, even though the lion’s share of states tax only tangible personal property and specified services. State tax departments will review the characteristics of the service to determine its taxability.

A prudent tax position for any provider of cloud computing services is to bill separately for the different categories of its services.

The states have differing bases of taxing cloud computing services, and the sourcing of the service is tied to the possible basis for taxing the service. We discuss in the following sections these interrelated issues by the various categories of services.

IaaS: Taxability and Sourcing

IaaS, in essence, is the use by customers of the provider’s servers and other infrastructure to perform computations, run programs, or store data. IaaS is likely to be analyzed as data processing or computer services, although a few jurisdictions have determined that one component of IaaS — data storage — is a lease of tangible personal property. With the possible exception of a recently enacted Washington statute, which we discuss below, there have been no reported decisions or laws regarding the taxability of IaaS. Thus, our analysis is based on how we anticipate states will apply the general provisions of their sales and use tax statutes and regulations to IaaS.

Each of the categories of services may have different sales and use tax treatment. Nevertheless, providers sometimes charge a single, bundled fee based on usage time that encompasses more than one category of cloud computing service. The question of various states’ treatment of bundled services in which some services are taxable and others are not is beyond the scope of this article. We note that the Streamlined Sales and Use Tax Agreement provides in section 330 for the unbundling of bundled transactions into their separate parts. But that provision on its face applies only to telecommunication services, ancillary services, Internet access service, audio or video programming service, and prewritten computer software when combined with an optional maintenance agreement. Some states permit unbundling of transactions as well, although it is unclear whether and to what extent those provisions apply to cloud computing services. Thus, a prudent tax position for any provider of cloud computing services is to bill separately for the different categories of its services.

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4See, e.g., 34 Texas Admin. Code section 3.330(d)(2) (permitting taxpayers to establish the portion of bundled charges related to taxable data processing services and nontaxable “unrelated services”).
Only a handful of states tax data processing services. Connecticut, for instance, imposes sales tax on computer and data processing services at the reduced rate of 1 percent if the object of the service is use of the provider's computer and storage. Connecticut sources computer and data processing services to the state only if the benefit of the services is received in Connecticut. Also, the District of Columbia, Ohio, and Texas each tax data processing service, although Texas provides for taxation of only 80 percent of the charges. Each of those jurisdictions appears to source the data processing service to its jurisdiction if the customer maintains terminals in the jurisdiction, rather than on the basis of where the provider's servers are located.

On the other hand, Florida treats charges for access to a provider's computer as a rental of the computer subject to sales tax. Since this is a tax on the "lease" of personal property, tax is due only if the provider's computer is located in Florida. Thus, if the customer's terminals are housed in Florida, but the provider's servers are maintained outside the state, Florida will not tax the services.

In another twist, under some circumstances, Chicago imposes its personal property lease transaction tax on the "lease" of computers if a provider's service consists of data storage and the provider's servers are located in the city. This is true regardless of where the customer's terminals are located. Also, Chicago imposes the tax on data processing services (other than storage) if a majority of the customer's terminals are located in Chicago, regardless of where the provider's servers are located.

The Utah Tax Commission appears to take a similar approach to Chicago's regarding storage. In a private letter ruling, the commission responded to a request concerning the taxability of remote data/information hosting services provided by a company from Utah-based servers. The services included "storage and backup of data and the tools to support the customer's information systems infrastructure." The commission deemed that service "to be the lease of disk space and server equipment and hardware" and, therefore, "taxable as a lease of tangible personal property" located in Utah.

By legislation enacted in 2009 and amended in 2010, Washington implemented its sales and use tax on digital products, which are defined to include digital goods, streamed and accessed digital goods, and digital automated services, as well as any services provided by the seller exclusively in connection with the foregoing. Digital automated services, in turn, are defined as "any service transferred electronically that uses one or more software applications." Data processing services, storage, webhosting services, and domain name services are excluded from the definition of digital automated services. Unlike the expansive definitions of data processing adopted in the District of Columbia, Ohio, and Texas, the Washington statute limits the definition of data processing, which it exempts from tax, to operations performed by the provider of the services. Thus, if the customer performs the operations, the data processing exception may not apply. Since some IaaS involves operations performed by the customer on the provider's equipment, it may be that those services are taxable as digital automated services in Washington.

Digital automated services are sourced to Washington based on the SSUTA general sourcing provisions. In other words, sourcing is based on the five steps of the SSUTA sourcing ladder. For example, if the first use of the service occurs at the provider's place of business, the services are sourced to that location. It is unclear if the "use" of IaaS occurs where the provider's infrastructure is located or where the customer's terminals are located. Since IaaS involves, in effect, the use by the customer of the vendor's equipment, a good argument can be made that the first use occurs at the vendor's place.

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13Wash. Rev. Code sections 82.04.050(8) and 82.08.020.

14Wash. Rev. Code section 82.04.192(3).


16In Special notice dated Nov. 2, 2010, the Washington Department of Revenue took the position that online searchable databases are digital automated services because they use one or more software applications and permit the customer to perform functions such as search and retrieve. Although the department did not address whether the data processing exclusion from digital automated services applies, we assume that the department determined that it does not because it is the customer, and not the provider, that performs the service.

17See section 310, SSUTA; Wash. Rev. Code section 82.32.730.
of business. Therefore, IaaS is arguably taxable in Washington only if the provider's equipment is located there.

Finally, we note that Hawaii, New Mexico, South Dakota, and West Virginia likely would tax IaaS under their broad, general taxes on services, to the extent that customers use the service in one of those states.

SaaS and PaaS: Deemed Tangible Personal Property

The essential feature of both SaaS and PaaS is that the user accesses software hosted by the provider via an Internet connection from the user's terminal or mobile device. The software itself is not downloaded onto the user's computer, as is the case in the traditional modes of software delivery, such as installation via a physical medium like a DVD or by electronic download. Providers of SaaS and PaaS are similar to, and often characterized as, application service providers, because for each of the services, the software is hosted on the provider's computer and made available to users through an Internet or computer network connection.

State tax agencies have issued several opinions and letter rulings addressing whether SaaS and PaaS and/or application service providers' services are taxable. Nevertheless, the law in this area is not as well defined, as is the taxability of pre-written software delivered on a physical medium or electronically for loading onto the customer's computer.

Most state tax agencies' letter rulings have compared SaaS with the sale of canned software, which under the states' statutes and regulations is treated as the sale of tangible personal property. The rulings state that under a true object test, the purchaser is buying access or the right to use the pre-written software, which is tangible personal property taxable under the applicable law.

In the 11 states that do not tax the electronic delivery of software, SaaS should not be taxable at all. In other words, if software is deemed intangible personal property if delivered over the Internet or other computer network to the customer's computer in electronic format, a customer's right to access the software by Internet or computer network should not be taxed either. For instance, in Virginia, although sales of canned software are taxable if the software is transferred via tangible medium, sales of software transferred electronically are considered the sale of a service not involving the transfer of tangible personal property. Although the Virginia Department of Revenue has yet to specifically address the issue, the broad language of the exemption appears to apply to SaaS as well, because SaaS also does not involve the transfer of tangible personal property.

Likewise, while California taxes sales of canned software transferred via tangible medium, it exempts sales and leases of canned software transferred remotely "to or through the purchaser's computer" if "the purchaser does not obtain possession of any tangible personal property." Although the Virginia Department of Revenue has yet to specifically address the issue, the broad language of the exemption appears to apply to SaaS as well, because SaaS also does not involve the transfer of tangible personal property.

Example:


New Mexico assesses a tax on gross receipts from performing services in New Mexico or performing services outside of New Mexico if the service is initially used in New Mexico. N.M. Stat. Ann. section 7-9-3.A; N.M. Admin. Code tit. 3, section 3.2.1.14A(4).

The South Dakota retail sales and service tax applies generally to all services performed in the state, unless specifically exempt from tax. S.D. Codified Laws sections 10-45-4, 10-46-2.1, 10-45-11.1, and 10-45-19.1. There is an outstanding question of whether the South Dakota retail sales and service tax would apply if the data center providing the service is located outside of South Dakota, since the services are not performed in South Dakota.

Virginia Ruling of Commissioner, P.D. 08-134, Virginia Department of Taxation, July 30, 2008.

V.A. Code Ann. section 58.1-609.5(1) (tax imposed does not apply to "services not involving an exchange of tangible personal property which provide access to or use of the Internet and any other related electronic communication service, including software, data, content, and other information services delivered electronically via the Internet.").

Cal. Code Regs. tit. 18, section 1502(f)(1); but see Nortel Networks, Inc. v. Cal. Bd. of Equalization, 191 Cal. App. 4th 1259, 119 Cal. Rptr. 3d 905 (Cal. App. 2011) (holding that much canned software may be exempt under the state's technology transfer agreement statute).

Application service providers, such as Webex and Salesforce.com, offer software services to customers using computer networks or the Internet as the mechanism to deliver the service. See http://compnetworking.about.com/od/internetaccessproviders/g/providers_asp.htm.
Moreover, even though electronically delivered pre-written software may be deemed to be tangible personal property in the remaining states, those states will not automatically tax SaaS. The taxation in those states depends on the answer to two additional sourcing-related questions raised in the SaaS model that distinguishes SaaS from electronically delivered software. First, is the transaction sourced to the state if SaaS is characterized as the transfer of tangible personal property? Second, does the customer actually purchase the software deemed tangible personal property in the SaaS model under the state law in which it is sourced, since the customer does not take possession of the software and has a right to access the software only in common with other customers? Thus, the analog to electronically downloaded software is not a perfect one and is only the starting point of the analysis. The proper tax analysis must go further and consider the critical differences between SaaS/PaaS and more traditional methods of sale of software; that is, in the cloud computing model, the software itself is not delivered to the user but is maintained by the provider for use by several customers.

SaaS and PaaS: State of Taxation of Services Characterized as Sale of Tangible Personal Property

The customer’s method of accessing software in the SaaS model is a material issue for sourcing SaaS. That is because under each of several states’ tax laws, the state is the proper location for taxing the sale only if the tangible personal property is located in that state when it is used. Thus, if the state from which the customer accesses the software is other than the state in which the software is housed, the sale may not be properly sourced to the state of the customer’s use when sourcing is based on the state’s theory that SaaS charges are taxable because there is a sale or transfer of tangible personal property.

For example, even though Kansas taxes the electronic delivery of pre-written software to customers located in Kansas, in a recent opinion letter, the Kansas Department of Revenue said that SaaS charges to a Kansas user are not taxable. This is because the customer receives no property in Kansas. Therefore, the Department of Revenue recognized that the sale cannot be properly sourced to Kansas.

In 2009 the Utah State Tax Commission issued a private letter ruling to similar effect. Utah deems pre-written software delivered electronically to be tangible personal property and taxes the software if it is delivered electronically and downloaded in Utah. In the letter ruling, the commission compared downloaded software with SaaS. Although the commission said the provider of SaaS makes a sale of tangible personal property, it noted that the service was not taxable in Utah because the service was provided to Utah customers from a server located outside Utah. Thus, the service was not properly sourced to Utah. The commission determined that while the Utah “customers possess the software” when they remotely access the software at the host server located outside Utah, “the customers do not possess the software in Utah and the sales transactions are not taxable by Utah.”

Similarly, in a recent letter ruling, the Pennsylvania Department of Revenue found that the taxpayer’s provision of SaaS, which enabled subscribers to obtain remote access to software permitting them to attend and participate in meetings and webinars online, and provided attended or unattended technical computer support to the taxpayer’s internal and external customers, was not taxable in Pennsylvania because the servers that hosted the software were not located in Pennsylvania. The department explained that although pre-written software is taxable as tangible personal property, there is not a taxable transfer of tangible personal property in Pennsylvania when software is accessed solely

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access service, and as such, is taxable. See Rev. Rul. 05-13, South Carolina Department of Revenue, Aug. 21, 2005 (“Software sold and delivered by electronic means via a modem and telephone from a remote location is not subject to the sales and use tax, provided no part of the software, including backup diskettes and tapes, is delivered by tangible means...”).\[A\] charge by Application Service Provider (ASP) that allows a customer to access the ASP website and use the software on that website [is] subject to the sales and use tax. \(\ldots\) Charges by an Application Service Provider are similar to charges by database access services and are therefore subject to the sales and use tax under the provisions of Code Sections 12-36-910(B)(3) and 12-36-1310(B)(3),\[22\]; see also discussion, above, concerning characterization of providers of SaaS and PaaS as application service providers; \(\ast\) but note that South Carolina does not tax interstate services.

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\[22\] Kan. Stat. Ann. sections 79-3602(pp) and 79-3603(s). See also Private Letter Ruling No. P-2007-006, Kansas Department of Revenue, Dec. 20, 2007 (sales of canned software downloaded in Kansas are taxable because the statutory definition of “tangible personal property” includes prewritten computer software).

\[29\] Kansas Private Letter Ruling 0-2010-005, Kansas Department of Revenue, June 22, 2010.

\[30\] Utah Private Letter Ruling 08-12, Utah State Tax Commission, Jan. 21, 2009.

\[31\] Utah Code Ann. sections 59-12-102(97) and 59-12-103(1)(m). See also Utah Streamlined Sales Tax Governing Board, section 328 Taxability Matrix, Library of Definitions (Rev’d Sept., 2011) (electronically transferred software is taxable).

\[32\] Utah Private Letter Ruling 08-12, at 3.

\[33\] Pennsylvania Legal Letter Ruling No. SUT-10-005, Pennsylvania Department of Revenue, Nov. 8, 2010.
through the Internet and the server or data center hosting the software is located outside of Pennsylvania.\(^34\)

On the other hand, the New York Department of Taxation and Finance has opined that New York sales tax is due on SaaS charges to New York customers who access software housed on a California server.\(^35\) In our view, the department’s position that those charges are taxable is inconsistent with the applicable regulations for sourcing of the sale.

The department first concluded that the charges were taxable under Tax Law section 1101(b)(6) because pre-written computer software is deemed to be tangible personal property subject to the sales tax “regardless of the means by which it is conveyed to a purchaser.”\(^36\) Although that statement is a straightforward application of the law, the department then concluded that the charges are properly sourced to New York based on the department’s interpretation of the applicable regulations. The department correctly notes that under the regulations, “a sale is taxable at the place where the tangible personal property or service is delivered or the point at which possession is transferred by the vendor to the purchaser,”\(^37\) and transfer of possession takes place when the purchaser has the “right to use, or control or direct the use of, tangible personal property.”\(^38\)

The department concluded that because the purchaser exercises the right to use the software in New York, the sale should be sourced to New York. But the department merged the distinct and separate tests under two separate sections. The location where the tangible personal property is transferred is determined under section 526.7(e)(1), while the question of when the tangible personal property is deemed to have been transferred and when the user acquires the “right to use” the software is determined under section 526.7(e)(4). Under those tests, software is transferred at the location of the out-of-state server hosting the software, but it is transferred when the New York user gains the right to access the software. Thus, we conclude, as did the Kansas and Pennsylvania revenue departments and the Utah Tax Commission, that the sale should not be taxable in New York, the state of the user, because the tangible personal property (the prewritten software) that the customer has acquired the right to use remains on the host server in California.

In a recent letter ruling, the New York tax department used its sourcing rule to determine the portion of charges for SaaS/application services that should be allocated to New York when prewritten computer software was accessed both within and outside of the state.\(^39\) Based on an opinion regarding the allocation of charges for electronically delivered taxable information services,\(^40\) the department stated that receipt of a letter or certificate from the provider’s customer attesting to the specific locations from which its employees accessed the service is a sufficient basis for an allocation between the portion of charges taxable in New York and those not taxable there. We discuss that opinion further in the context of SaaS and PaaS sourcing, below.

**SaaS and PaaS: Has a Taxable Sale of Tangible Personal Property Occurred?**

In determining whether SaaS and PaaS are taxable, one must also consider whether a sale has taken place under applicable state law. State law in this area is not uniform. The most expansive definition of the term sale is found in New York’s regulations, but other states have a more restrictive interpretation.

New York law defines a “sale” as “any transfer of title or possession or both [and any] lease or license to use.”\(^41\) The regulations, in turn, define transfer of possession as the “right to use.”\(^42\) Thus, SaaS can be taxed under New York law, provided all the other requirements are satisfied, because there has been a sale (transfer of the right to use) of tangible personal property, the remotely hosted pre-written software.

Other states have a narrower definition of the term “sale.” For instance, in a private letter ruling, the Utah Tax Commission stated that “if a customer goes to an Internet site to access software without downloading it on his or her own computer, the customer has not received possession of the tangible personal property; i.e., the canned software.”\(^43\) Since Utah law requires that a sale include the transfer of

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\(^{34}\)Id. Note that in Pennsylvania a sale of canned software, regardless of the method of delivery, is taxable. See 61 PA Code section 60.19(2)(i); see also Graham Packaging Co. L.P. v. Comm’n, 882 A.2d 1076 (PA 2005). (“A purchaser of canned computer software is acquiring more than incorporeal knowledge or an intangible right; rather, the purchaser is acquiring an electronic copy of a computer program that is stored on a computer’s hardware, takes up space on the hard drive and can be physically perceived by checking the computer’s files. It remains in the computer and operates the program each time it is used.”) But in the case of SaaS, the software is not downloaded on the customer’s computer, so any tangible personal property remains at the location of the host server.


\(^{36}\)Id.

\(^{37}\)N.Y. Comp. Codes R & Regs. section 526.7(e)(1) (emphasis added).

\(^{38}\)N.Y. Comp. Codes R & Regs. section 526.7(e)(4)(iii).


\(^{41}\)N.Y. Tax Law section 1101(b)(5).

\(^{42}\)N.Y. Comp. Codes R & Regs. section 526.7(e)(4)(iii).

actual possession in order to be taxable (unlike New York law, under which a sale occurs by the mere right to use), the SaaS or application service in question was not taxable in Utah.

Similarly, the Arizona Department of Revenue held in a private letter ruling, without further explanation, that a provider’s gross proceeds from sales or gross income derived from license fees to a customer that is not an Arizona resident are not subject to the transaction privilege tax, even though the licensed canned software was stored in Arizona. Although the department did not explain the basis for its opinion, we assume that the basis was that the out-of-state customer never takes possession of the software, which remains in Arizona. Under Arizona law, pre-written software is deemed tangible personal property regardless of the means of delivery.\(^{45}\)

Other states similarly may not tax SaaS because that service is not considered a sale under the states’ statutes, although those states have yet to provide definitive rulings on the issue. For instance, in Illinois, while the sale of canned software is taxable regardless of the method of delivery,\(^{46}\) the state does not tax the license of canned software if such license meets strict requirements, including a written agreement signed by the customer.\(^{47}\) SaaS appears to fall under the Illinois exemption for licenses of canned software in that the customer does not receive title to the program and the customer cannot duplicate or transfer to a third party the software residing on the provider’s servers.\(^{48}\)

Similarly, Rhode Island, which recently began taxing the sale of computer software transferred electronically (in addition to sales of software delivered via tangible medium),\(^{49}\) exempted SaaS-type service because that service “is not considered to be prewritten computer software delivered electronically.”\(^{50}\) Although the regulation describing the exemption provides no explanation, the reason for the state’s exemption of the service is likely that the state tax code’s definition of sale is limited to “any transfer of title or possession.”\(^{51}\) Because there is no “transfer” or delivery of software under SaaS, there is no “sale” of software.

SaaS and PaaS Deemed Taxable Services Where Used

We anticipate that those states that tax data processing services or computer services would tax SaaS and PaaS if the users of the services are located in the state. Thus far, Texas appears to have been the only state to address that issue.\(^{52}\) In a recent letter ruling, the Office of the Comptroller of Public Accounts took the position that SaaS is taxable in Texas as data processing when the user accesses the service from a terminal in Texas, even though the software is hosted on a server located in another state.\(^{53}\) Sourcing the sale to Texas is arguably correct, because what is being taxed is not the sale of the tangible personal property but rather the sale of the service. Although the tangible personal property addressed in the letter ruling is not transferred from out of state, the service itself is used in Texas.

As discussed above, the new Washington legislation taxes digital automated services, which are defined somewhat ambiguously as a service transferred

\(^{44}\)Arizona Private Taxpayer Ruling LR04-007, Arizona Department of Revenue, Aug. 31, 2004.

\(^{45}\)Ariz. Reg. 15-5-154.B. (“gross receipts derived from the sale of [canned] computer software programs are taxable, regardless of the method that a retail business uses to transfer the programs to its customers.”)

\(^{46}\)86 Ill. Admin. Code section 130.2105(a)(3) (“downloads of canned software . . . are subject to Retailers’ Occupation and Use Tax”).

\(^{47}\)86 Ill. Admin. Code section 130.1935(a)(1) (“A license of software is not a taxable retail sale if: (A) it is evidenced by a written agreement signed by the licensor and the customer; (B) it restricts the customer’s duplication and use of the software; (C) it prohibits the customer from licensing, sublicensing or transferring the software to a third party (except to a related party) without the permission and continued control or the licensor; (D) the licensor has a policy of providing another copy at minimal or no charge if the customer loses or damages the software, or of permitting the licensee to make and keep an archival copy, and such policy is either stated in the license agreement, supported by the licensor’s books and records, or supported by a notarized statement made under penalties of perjury by the licensor; and (E) the customer must destroy or return all copies of the software to the licensor at the end of the license period. This provision is deemed to be met, in the case of a perpetual license, without being set forth in the license agreement.”).

\(^{48}\)Note that Illinois may interpret the license requirements strictly. See Gen. Info. Ltr. ST 08-0179-GIL, Dec. 10, 2008.

\(^{49}\)R.I. Code R. SU11-25.7(2).

\(^{50}\)Id. at SU11-25.7(3) (“When an agreement exists for a vendor to host software from their equipment and may be accessed by a customer, the transaction is not considered prewritten computer software delivered electronically and therefore is not subject to tax, provided there is no downloading of prewritten computer software.”)


\(^{52}\)Please note that South Carolina taxes SaaS as if it were communications services. See Rev. Rul. 05-13, supra note 27. But because South Carolina appears to tax only intrastate communications services, arguably any SaaS in which either the provider or the customer is located outside of the state would not be taxable. See S.C. Code Ann. section 12-36-1920(3)(c).

electronically “that uses one or more software applications.” SaaS is provided electronically. Whether the customer’s right to use the pre-written software constitutes a service that “uses” a software application remains to be decided.

Sourcing of SaaS and PaaS for states that tax data processing services is generally based on the state of use of the services. It is difficult, however, for a service provider to determine the location of use; that is, the state in which the services are accessed. In a cloud computing model, which generally involves fewer long-term contracts than in an outsourcing model, the provider usually does not know the locations from which its customers access the service. In a typical transaction, the provider has only its customer’s billing address and does not know where the services are used. If the provider does not know the location from which the service is accessed, one approach is for the provider to presume that the service is used at the location of the billing address and that the transaction will be taxed accordingly. That is the approach taken by Ohio, which taxes data processing.

Another (safer) method of sourcing a transaction is for the provider to obtain an exemption certificate from a customer who asserts a multistate benefit. That is the method spelled out in the Texas regulations. Acceptance of the certificate in good faith by the provider relieves the provider of any liability, if the customer accepts responsibility for reporting and paying the tax on the portion of the data processing charge that will benefit the Texas location. Ohio has adopted a similar alternative to its billing address rule, permitting the acceptance of an exemption certificate by the vendor from a business consumer that purchases taxable services for use in more than one taxing jurisdiction. As in Texas, a vendor’s receipt of the certificate in good faith relieves it of any liability for tax. Washington, also like Texas, permits the customer to give the provider an exemption certificate claiming the digital automated service will be “concurrently available for use within and outside” Washington. The customer claiming an exemption is then responsible for paying any tax due on the services.

But there is no uniform exemption certificate, as is the case for resale certificates. Moreover, some states, such as New York, require the provider to collect tax from the customer for the portion of the service used in New York (based on users located in New York) and do not allow the provider to merely accept an exemption certificate and be relieved of all tax collection responsibility, as is the case in Ohio, Texas, and Washington. New York does permit a provider to be relieved of liability for service provided to out-of-state users, if a customer has multiple users in many states. To release the provider from liability for out-of-state use, the customer must provide a letter specifying the total number of employees with access by employee location, and the customer must acknowledge that it is furnishing the certificate for the purpose of allowing the provider to determine the appropriate amount of New York state and local sales and use taxes due. It is likely that the Ohio and Texas exemption certificate would satisfy the New York requirement, as long as the provider itself collects and remits to New York the tax based on the portion of customers using the service in New York and the exemption certificate states with specificity the locations of the authorized users.

**Taxability of Hosting and Managing E-Mail and Related Services**

Hosting has evolved from merely hosting an Internet site for a customer to hosting the customer’s e-mail, providing calendaring functions, and maintaining a contact list for the customer. States are generally prohibited from imposing tax on website hosting, because it is considered the provision of Internet access under the Internet Tax Freedom Act (ITFA). Of course, some states, such as Texas, are grandfathered under the ITFA, and so the prohibition does not apply. Few states have addressed whether the newer types of hosting services, including e-mail and calendaring, are taxable. E-mail hosting involves storage of e-mails (IaaS) as well as the use of pre-written software (SaaS) to transmit and receive e-mails, to calendar events, and to log and update contacts. In general, the analysis we describe above regarding IaaS and SaaS should apply. But in contrast to SaaS, e-mail hosting also includes the provision of management services by the provider, such as monitoring and troubleshooting problems. Thus, a test such as the “true object” test, should be invoked.

**Nexus of the Cloud Computing Services Provider and of Its Customers**

The constitutional standard of substantial nexus is set forth in the U.S. Supreme Court decisions of...
Quill Corp. v. North Dakota\textsuperscript{62} and National Bellas Hess, Inc. v. Illinois,\textsuperscript{63} in which the Court stated that unless a retailer has a physical presence in the state, a state may not require it to collect sales and use tax on its sales into the state. The Quill Court characterized the Bellas Hess opinion as establishing a bright-line rule to protect nonresident mail-order vendors.\textsuperscript{64} “Like other bright-line tests, the Bellas Hess rule appears artificial at its edges: Whether or not a state may compel a vendor to collect a sales or use tax may turn on the presence in the taxing state of a small sales force, plant or office.”\textsuperscript{65}

Clearly, a cloud computing service provider will not have nexus with the locations where its services are accessed solely on the basis of the access. Providers should have no obligation to collect and remit the sales and use taxes of the states in which the users are located, unless the provider has a data center or other physical presence in those states. For instance, if a provider maintains its data center in New York but serves customers located in Texas, it will not be obligated to collect and remit Texas use tax on data processing services.

Similarly, a customer should not have nexus with the state in which the provider’s data centers are located merely because it obtains services there. Access to IaaS and SaaS does not establish a physical presence where a data center is located. Although pre-written software may be deemed tangible personal property under the tax law of the state in which the server hosting the software is located, a state cannot create physical presence when none exists. The customer does not own physical property in the state (a possible basis for finding nexus under Quill), and, at most, the customer has a right to use the intellectual property that is part of the software.

Nor is there a basis for a finding of nexus under the test of Tyler Pipe Industries, Inc. v. Washington Department of Revenue.\textsuperscript{66} While in Tyler Pipe an out-of-state customer has nexus if the provider is deemed an agent or representative of the customer that performs activities in the state on behalf of the taxpayer that are “significantly associated with the taxpayer’s ability to establish and maintain a market in this state for the sales,” there is no basis for that finding when the provider is merely providing access to software or other cloud computing services.

We should also note that Texas recently adopted legislation that provides a nexus safe harbor for any customer that merely uses Internet hosting services provided from servers located in Texas.\textsuperscript{67} Internet hosting services include cloud computing services and customer storage and processing of data on the provider’s servers.\textsuperscript{68} Use of those services, alone, will not be sufficient for a finding of nexus.

**Exemptions for a Cloud Computing Service Provider’s Purchases of Equipment and Software**

Although there have been a number of articles about the taxability of cloud computing services, little has been written about the applicability of exemptions for a provider’s purchases of equipment and software. Exemptions should be available to a provider if the state in which the equipment will be housed treats the cloud computing service as taxable because it is the sale of tangible personal property.

For instance, Florida and Utah characterize the furnishing of IaaS, to the extent they involve storage, as a lease of tangible personal property owned by the provider.\textsuperscript{69} A provider, therefore, should be able to provide a resale certificate to its equipment supplier for its purchases or leases of equipment delivered in the state to provide these services. Similarly, a provider’s lease or purchase of property to be housed in Chicago and used to provide IaaS should be exempt from the Chicago tax on leased property.\textsuperscript{70}

As to software used in providing SaaS and PaaS, a provider should be entitled to the benefit of the resale exemption on its purchases or leases from its suppliers. New York, for instance, taxes SaaS because it considers the service to be a sale of tangible personal property.\textsuperscript{71} Since New York exempts from tax purchases of tangible personal property for resale, SaaS providers’ purchases of software for resale should be exempt.\textsuperscript{72} Likewise, while South Carolina taxes SaaS as communications service,\textsuperscript{73} it

\textsuperscript{63}386 U.S. 753 (1967).
\textsuperscript{64}504 U.S. at 315.
\textsuperscript{65}Id. (emphasis added).
\textsuperscript{66}483 U.S. 232, 251 (1987).
\textsuperscript{67}Texas Tax Code Ann. section 151.108(b).
\textsuperscript{68}Id. at section 151.108(a). (Internet hosting is defined as “providing to an unrelated user access over the Internet to computer services using property that is owned or leased and managed by the provider and on which the user may store or process the user’s own data or use software that is owned, licensed, or leased by the user or provider.”)
\textsuperscript{71}See TSB-A-11(17)S, supra note 35; see also supra text accompanying note 35.
\textsuperscript{72}N.Y. Comp. Code R. & Regs. tit. 20, section 526.6(c)(1).
\textsuperscript{73}See supra notes 27 and 52.
permits providers of communications services to use exemption certificates for its purchases for resale.\textsuperscript{74}

\textbf{Conclusion: The Analytical Framework}

To summarize, while few states have expressly addressed whether IaaS, SaaS, and other cloud computing services are taxable, taxpayers must answer the question based on a thorough and sound analysis of the states' general sales and use tax laws in light of the nature of these services and the way in which they are provided. Service providers should ask:

- What type of service is being provided?
- Are there separate charges for each type of service or is there one charge for the bundle of services?
- From where is the service provided?
- Where are the users of the service located and what kind of documentation should the provider receive to indicate the state of use and to minimize its own tax exposure?
- Does the state in which the equipment is located or in which the service is used tax data processing or other services?
- Does the state or locality in which the provider maintains the equipment treat electronic storage of data as a lease of tangible personal property?
- Do the states in which the service is provided or received treat the electronic delivery of software as the sale of tangible personal property and, if so, how does the state determine the location of where the sale takes place?
- Does the state where the service is provided or received require a physical transfer of the property to be taxable as a sale or is the mere license to use the property sufficient to establish a taxable sale?
- Are there any opinions of tax agencies in the states in which the service is provided or received regarding the taxation of IaaS, SaaS, or other cloud computing service?
- Are there any exemptions available to a provider for its acquisition of equipment and software?

Careful review of the services provided and the relevant states' tax laws through the framework we have suggested in this article should assist taxpayers and their advisers in piercing through the cloudiness surrounding the taxation of cloud computing and should allow some sunlight to shine on their particular tax situation.

\textsuperscript{74}South Carolina Rev. Proc. #08-2, South Carolina Department of Revenue, May 5, 2008. ("The MTC certificate may also be used by a purchaser of services that are subject to the sales and use tax, such as communications ... that will be resold, leased or rented in the normal course of the purchaser's retail business.")