TX-RAMP Certification Decision Matrix

UT Southwestern Medical Center will utilize the below matrix to make an initial determination as to whether a product, application, or service in question is subject to TX-RAMP certification, under Texas Government Code § 2054.0593(a).

Essential Characteristics of Cloud Computing Service

Does the product, application, or service in question meet the five essential characteristics of a cloud computing service, as described in NIST 800-145?

Characteristic	Guidance/Example	Y/N
On-demand self-service - A consumer can unilaterally provision computing capabilities, such as server time and network storage, as needed automatically without requiring human interaction with each service provider Please note: the consumer refers to UT Southwestern (per DIR)	Consumer (customer, entity) Platform	
Broad network access - Capabilities are available over the network and accessed through standard mechanisms that promote use by heterogeneous thin or thick client platforms (e.g., mobile phones, tablets, laptops, and workstations).		
Resource pooling - The provider's computing resources are pooled to serve multiple consumers using a multi-tenant model, with different physical and virtual resources dynamically assigned and reassigned according to consumer demand. There is a sense of location independence in that the customer generally has no control or knowledge over the exact location of the provided resources but may be able to specify location at a higher level of abstraction (e.g., country, state, or datacenter). Examples of resources include storage, processing, memory, and network bandwidth.	Example: data/servers in data center	
Rapid elasticity (real-time compute and storage elasticity) - Capabilities can be elastically provisioned and released, in some cases automatically, to scale rapidly outward and inward commensurate with demand. To the consumer, the capabilities available for provisioning often appear to be unlimited and can be appropriated in any quantity at any time.		
Measured service (licensing software v. licensing access to service/platform) - Cloud systems automatically control and optimize resource use by leveraging a metering capability at some level of abstraction appropriate to the type of service (e.g., storage, processing, bandwidth, and active user accounts). Resource usage can be monitored, controlled, and reported, providing transparency for both the provider and consumer of the utilized service.		

*Meeting these five essential characteristics is key to qualifying a service as cloud computing service under the NIST definition. If the service meets all five characteristics, move to Step 2.

TX-RAMP Certification Decision Matrix -Continued

In Scope – Level 1 or Level 2 (sensitive data)

Certain Cloud computing services are out of scope (see list below) of TX-RAMP certification provided the service is determined to be a low-impact system from a data perspective (based on type of data) that does not process or store confidential or sensitive state-controlled data other than as needed for login capability or that processes or stores a negligible quantity and quality of confidential or sensitive data.

Low Impact	Moderate Impact	High Impact
• a limited adverse effect on operations, assets, or individuals.	• a serious adverse effect on operations, assets, or individuals.	• a severe or catastrophic adverse effect on operations, assets, or individuals.
Such an event could:		
• cause a degradation in mission capability to an extent and duration that the organization can perform its primary functions, but the effectiveness of the functions is noticeably reduced, • result in minor damage to assets, • result in minor financial loss, or • result in minor harm to individuals.	• cause a significant degradation in mission capability to an extent and duration that the organization can perform its primary functions, but the effectiveness of the functions is significantly reduced, • result in significant damage to assets • result in significant financial loss, or • result in significant harm to individuals that does not involve loss of life or serious life-threatening injuries.	• cause a severe degradation in or loss of mission capability to an extent and duration the organization is not able to perform one of more of its primary functions, • result in major damage to assets, • result in major financial loss, or • result in severe or catastrophic harm to individuals involving loss of life or serious life-threatening injuries
Level I	Level II	

**The Impact level determination will be set by the Chief Data Officer

Additionally, if the primary purpose of the product, application, or service in question to procure cloud computing services (e.g., banks utilize cloud computing only in an ancillary capacity, the primary purpose is not to procure cloud computing services), or the cloud computing service includes unique characteristics that do not create, process, or store confidential state-controlled data (e.g., graphic design software), as described in the most current DIR TX-RAMP Manual, TX-RAMP certification is not required.